Planning Commission
Regular Meeting Amended Agenda

March 18, 2020 - 6:30 PM

City Council Chambers - Yucaipa City Hall
34272 Yucaipa Blvd., Yucaipa, California

THE CITY OF YUCAIPA COMPLIES WITH THE AMERICANS WITH DISABILITIES ACT OF 1990. IF YOU REQUIRE SPECIAL ASSISTANCE TO ATTEND OR PARTICIPATE IN THIS MEETING, PLEASE CALL THE CITY CLERK'S DEPARTMENT AT (909) 797-2489 AT LEAST 48-HOURS PRIOR TO THE MEETING.

ANY PUBLIC WRITINGS DISTRIBUTED BY THE CITY TO AT LEAST A MAJORITY OF THE COUNCILMEMBERS REGARDING ANY ITEM ON THIS REGULAR MEETING AGENDA WILL BE MADE AVAILABLE AT THE PUBLIC RECEPTION COUNTER AT CITY HALL, LOCATED AT 34272 YUCAIPA BOULEVARD, DURING NORMAL BUSINESS HOURS.

IF YOU WISH TO ADDRESS THE COMMISSION DURING THE MEETING, PLEASE COMPLETE A SPEAKERS FORM AND RETURN IT TO THE PLANNING COMMISSION SECRETARY PRIOR TO THE BEGINNING OF THE MEETING. THERE IS A THREE-MINUTE TIME LIMIT FOR SPEAKING.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC COMMENT

CONSENT AGENDA

The following Consent Agenda items are expected to be routine and non-controversial. The Planning Commission will act upon them, at one time, without discussion. Any Councilmember or staff member may request removal of an item from the Consent Agenda for discussion.

The title is deemed to be read and further reading waived on any ordinance listed on the Consent Agenda for second reading and adoption.

1. **SUBJECT**: APPROVE PLANNING COMMISSION MINUTES OF JANUARY 15, 2020

RECOMMENDATION: That the Commission approve the minutes.

PUBLIC HEARINGS

The order of Business for the Public Hearing Shall Be:

A. Staff Presentation
B. Applicant/Representative Presentation
C. Public Comments
D. Applicant Rebuttal (if necessary)
E. Public Hearing Closed
F. Commission Discussion

2. **SUBJECT**: Chris & Caitlin Redden (Case No. 19-102/SUP/ARC): A Special Use Permit for the Architectural Review of a proposed 21.5-foot tall, 3,000 square-foot detached metal garage/workshop to be located on a single-family residential property at 13461 Fremont Street; APN: 1242-222-05.

RECOMMENDATION:

1. That the Planning Commission conduct a public hearing, and:

    A. Review the architectural design of the proposed metal structure, and if it is acceptable, approve the design subject to the Conditions of Approval; and

    B. Adopt the Special Use Permit Findings as contained in the Agenda Report; and

    C. Adopt a Categorical Exemption pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended, Section 15303 (Class 3); and

    D. Direct staff to file a Notice of Exemption

2. That the Planning Commission close the public hearing, and;

    A. Provide guidance to staff regarding the design requirements for future Special Use Permits for Architectural Review involving large metal accessory structures.

3. **SUBJECT:** Scherry LaMarche (Case No. 19-131/SUP/ARC): A Special Use Permit and Architectural Review of a proposed 17.5-foot tall, 760 square foot detached metal garage to be located on a single-family residential property within the Custom Home Overlay District at 35860 Holly Avenue; APN: 0320-211-76.

RECOMMENDATION: That the Planning Commission conduct a public hearing and,

A) Review the architectural design of the proposed metal garage, and if it is acceptable, approve the design subject to the Conditions of Approval; and

B) Adopt the Special Use Permit Findings as contained in the Agenda Report; and

C) Adopt a Categorical Exemption pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended, Section 15303 (Class 3); and

D) Direct staff to file a Notice of Exemption

4. **SUBJECT: City of Yucaipa** (Case No. 19-105/CUP): A Conditional Use Permit for the development of the Five Winds Ranch – El Dorado Park facility, which includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities; Located at 37216 Oak Glen Road, on the north side of Oak Glen Road, east of Pendleton Avenue and south of Carter Street; APNs 0321-121-43, 0321-121-44, and 0321-111-03.

RECOMMENDATION: That the Planning Commission conduct a public hearing and,

A) Approve the Conditional Use Permit, subject to the Conditions of Approval as contained in the Agenda Report; and

B) Adopt the Findings as contained in this Agenda Report; and

C) Adopt a Mitigated Negative Declaration finding the mitigation measures and standard measures and procedures will reduce the potential level of environmental impact to less than significant; and,

D) Direct Staff to file a Notice of Determination.

5. **SUBJECT: City of Yucaipa** (Case No. 20-031/DCA); Consideration of Ordinance No. Ordinance No. 388 regarding small wireless facilities and amending the Yucaipa Development Code regarding the same and adopting environmental findings in connection therewith.

RECOMMENDATION:

That the Planning Commission conduct a public hearing and recommend that the City Council:

A) Approve first reading, by title only, as read by staff, of Ordinance No. 388 regarding small wireless facilities and amending the Yucaipa Development Code regarding the same and;

B) Approve Resolution No. 2020-09 establishing the regulations and policies governing small wireless facilities, and;

C) Find that the ordinance is exempt from Environmental Review pursuant to Public Resources Code Section 15061(b)(3)

6. **SUBJECT: City of Yucaipa** (Case No. 20-032/DCA); Consideration of Ordinance No. 389, amending Development Code Section 88.0405 of Chapter 4 of Division 8 and Section 83.041120 of Chapter 4 of Division 3 of the Yucaipa Development Code related to underground utility requirements and adopting environmental findings in connection therewith.

RECOMMENDATION:

That the Planning Commission conduct a public hearing and recommend that the City Council:

A) Approve first reading, by title only, as read by staff, of Ordinance No. 389, amending Development Code Section 88.0405 of Chapter 4 of Division 8 and Section 83.041120 of

Chapter 4 of Division 3 of the Yucaipa Development Code related to underground utility requirements, and;

B) Find that the ordinance is exempt from Environmental Review pursuant to Public Resources Code Section 15061(b)(3).

7. **SUBJECT:** State Housing Related Legislation Update

RECOMMENDATION:

That Planning Commission conduct a study session regarding updates to State Housing Related Legislation as a precursor to the beginning of the Housing Element Update Process.

ANNOUNCEMENTS:

PLANNING COMMISSION ADJOURNED:

Agenda Item No. 1

City of Yucaipa
PLANNING COMMISSION MINUTES
Regular Meeting of January 15, 2020

A Regular meeting of the Planning Commission of the City of Yucaipa, California was called to order in the Community Meeting Room, 34272 Yucaipa Boulevard, Yucaipa, California, on January 15, 2020 at 6:30 PM.

PRESENT: Bart Brizzee, Chair
Denise Work, Commissioner
Christopher Markarian, New Commissioner
J.R. Allgower, Commissioner
Kathy Fellenz, Commissioner
Lloyd Rekstad, Commissioner
Benjamin Matlock, Associate Planner
Fermin Preciado, Director of Public Works/City Engineer
Travis Heaps, Development Services Technician
Katrina Jaimes, Assistant Engineer
Chris Mee, Planning Commission Assistant

ABSENT: Aron Wolfe, Commissioner

CONVENE PLANNING COMMISSION

The meeting was opened by Chair Brizzee, with the Pledge of Allegiance led by Commissioner Work.

ROLL CALL

1. OATH OF OFFICE: Planning Commission Assistant Chris Mee administered the Oath of Office to Christopher Markarian, new Commissioner to the Planning Commission.

2. ELECTION OF OFFICERS:

a. Commissioner Work made a motion to nominate JR Allgower to serve in the position of Chair. Motion was seconded by Commissioner Fellenz. Motion passed 6-0-0-1. The new Chair of the Planning Commission is JR Allgower.
b. Commissioner Rekstad made a motion to nominate Commissioner Work to serve in the position of Vice Chair. Motion was seconded by Commissioner Fellenz. Motion passed 6-0-0-1. The new Vice Chair of the Planning Committee is Denise Work.

PUBLIC COMMENT:

Diane Stuart of 37885 Marondi Dr, Calimesa, CA 92320 spoke. Her son, Robert Stuart, recently died in a high-speed car crash on Calimesa Blvd, just before Oak Glen Rd. She came to voice her

concerns about the high speed at which cars enter the curve just before Oak Glen Road and wondered if maybe there could be signs, lights, or speed bumps installed before the curve to warn drivers to slow down. Commissioner Work and Rekstad asked if Fermin Preciado could explore speed dots. Fermin Preciado said he would investigate.

CONSENT AGENDA

The following Consent Agenda items are expected to be routine and non-controversial. The Planning Commission will act upon them, at one time, without discussion. Any Councilmember or staff member may request removal of an item from the Consent Agenda for discussion.

The title is deemed to be read, and further reading waived on any ordinance listed on the Consent Agenda for second reading and adoption.

1. **SUBJECT**: APPROVE PLANNING COMMISSION MINUTES OF DECEMBER 18, 2019

   RECOMMENDATION: That the Commission approve the minutes.

   ACTION: MOTION BY COMMISSIONER FELLENZ, SECOND BY CHAIR BRIZZEE TO APPROVE REGULAR PLANNING COMMISSION MINUTES OF NOVEMBER 6, 2019. MOTION CARRIED 4-0-2-1. COMMISSIONER REKSTAD AND COMMISSIONER MARKARIAN ABSTAINED (NOT PRESENT ON NOVEMBER 6). COMMISSIONER WOLFE WAS ABSENT.

PUBLIC HEARINGS

2. **SUBJECT**: AT&T Wireless (Case No. 19-156/CUP); A Conditional Use Permit to construct an unmanned telecommunications facility within a 768 square-foot fences lease area for AT&T Wireless, which consists of ground-mounted equipment cabinets and a 65-foot tall tower designed as a Eucalyptus tree to house antennas at 13700 Calimesa Boulevard; APN: 0318-212-14.

   RECOMMENDATION: That the Planning Commission take the following actions:

   A) Review the design and location of the proposed telecommunications facility, and if it is acceptable, approve Conditional Use Permit No. 19-156, subject to the Conditions of Approval as contained in the Agenda Report; and

   B) Adopt the Findings as contained in the Agenda Report; and

   C) Adopt a Categorical Exemption pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended, Section 15303 (Class 3); and

   D) Direct staff to file a Notice of Exemption.

   DISCUSSION: Travis Heaps, Development Services Technician, presented the project. Chris Doheny of Smart Link LLC spoke at the podium, stating that the facility will close a coverage gap in that area. He responded to Commissioner Brizzee's question stating that co-location would

enable another carrier to co-exist in that location, and they will remove the tower within 60 days of termination if the facility/tower is decommissioned, per the Conditions of Approval.

ACTION: MOTION BY COMMISSIONER WORK, SECOND BY COMMISSIONER MARKARIAN TO APPROVE STAFF RECOMMENDATIONS. MOTION CARRIED 6-0-0-1. COMMISSIONER WOLFE WAS ABSENT.

3. **SUBJECT:** City of Yucaipa (Case No. 20-001/DCA); Consideration of Ordinance No. 385, amending Divisions 3 and 4 of the Yucaipa Development Code, and to update regulations pertaining to accessory dwelling units to ensure compliance with State law (including AB 881, AB 68, and SB 13). Among other things, the proposed Ordinance will update the permitting requirements, development standards, and size restrictions for accessory dwelling units.

RECOMMENDATION: That the Planning Commission conduct a public hearing and recommend that the City Council:

A) Approve first reading, by title only, as read by staff, of Ordinance No. 385 amending Divisions 3 and 4 of the Yucaipa Development Code, and to update regulations pertaining to accessory dwelling units to ensure compliance with State law (including AB 881, AB 68, and SB 13)

B) Find that the ordinance is exempt from Environmental Review pursuant to Public Resources Code Section 21080.17.

DISCUSSION: Benjamin Matlock, Associate Planner, presented the project and provided an overview of the changes to the State Law regulating Accessory Dwelling Units (ADU), and that the draft Ordinance No. 385 is consistent with new California laws. Commissioners asked if the ADUs will count towards affordable housing, and Benjamin replied in the affirmation. The Commission noted their concern over the new State mandates, and therefore did not want the Ordinance to not be more permissive than State law.

ACTION: MOTION BY COMMISSIONER WORK, SECOND BY COMMISSIONER MARKARIAN TO APPROVE STAFF RECOMMENDATIONS. MOTION CARRIED 6-0-0-1. COMMISSIONER WOLFE WAS ABSENT.

ANNOUNCEMENTS: The February 5th Planning Commission may be canceled. Commissioner Work noted she will not be in attendance on that day. Chris will send the Commissioners information about the Planning Commissioners Academy Conference.

PLANNING COMMISSION ADJOURNED: 7:33 PM

Submitted by:

Chris Mee,
Planning Commission Assistant

Approved by:

Benjamin Matlock
Planning Manager, City Planner

Agenda Item 2

CITY OF YUCAIPA
DEVELOPMENT SERVICES DEPARTMENT
AGENDA REPORT

TO: Honorable Chairman and Planning Commissioners

FROM: Travis Heaps, Assistant Planner

FOR: Planning Commission Meeting of March 18, 2019

SUBJECT: Chris & Caitlin Redden (Case No. 19-102/SUP/ARC): A Special Use Permit for the Architectural Review of a proposed 21.5-foot tall, 3,000 square-foot detached metal garage/workshop to be located on a single-family residential property at 13461 Fremont Street; APN: 1242-222-05.

RECOMMENDATION:

1. That the Planning Commission conduct a public hearing, and:

   A. Review the architectural design of the proposed metal structure, and if it is acceptable, approve the design subject to the Conditions of Approval; and

   B. Adopt the Special Use Permit Findings as contained in the Agenda Report; and

   C. Adopt a Categorical Exemption pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended, Section 15303 (Class 3); and

   D. Direct staff to file a Notice of Exemption

2. That the Planning Commission close the public hearing, and;

   A. Provide guidance to staff regarding the design requirements for future Special Use Permits for Architectural Review involving large metal accessory structures

BACKGROUND:

Area Land Use Designations; Improvement Levels; and Existing Land Uses:

Site:	RS-10M	IL-1	Single family residence
North:	RS-10M	IL-1	Single family residence
South:	RS-10M	IL-1	Vacant
East:	RS-10M	IL-1	Vacant
West:	RS-10M	IL-1	Single family residences

DISCUSSION:

Special Use Permit for Architectural Review:

The applicant has submitted a Special Use Permit Application for the Architectural Review of the proposed accessory structure consisting of a 21.5-foot tall, 3,000 square foot detached metal garage/workshop building. Pursuant to Development Code Section 84.0645(a), any detached structure larger than 1,200 sq. ft., more than 20 feet in height, or of an unconventional design, such as a metal garage, would first be required to obtain a Special Use Permit for approval of the architectural design from the Planning Commission.

The metal structure is to be constructed on the subject 0.85-acre parcel located at 13461 Fremont Street in the RS-10M (Single-Residential, 10,000 sq. ft. minimum lot size) Land Use District. The site is improved with a single-family residence that was expanded and refurbished in June of 2018 to include 2,660 square feet of living space and a 530 square-foot detached garage. The proposed metal structure will be 40 feet wide and 75 feet long for a total of 3,000 square feet, which is larger than the 2,660 square-foot residence. To support the required Finding that the proposed structure is subordinate in size to the primary dwelling unit, the applicant is proposing to increase the size of the residence by constructing a 540 square-foot patio cover, which would bring the footprint of the residence to 3,200 square-feet.

The metal structure will feature a pitched, vertical ribbed steel roof, vertical ribbed steel siding, 12-inch eaves, three (3) roll-up doors on the south side of the structure, and brick veneer along the bottom of the western elevation and a portion of the southern elevation. The pitched roof has 14 feet of vertical clearance along the perimeter of the structure, and pitches to 21.5 feet at its center. With the intention of matching the colors of the existing residence, the roof and trim will be painted "Charcoal Gray", and all siding, doors, and brick veneer will be painted "Polar White." The intended use of the proposed metal garage is for storage of the applicant's personal and recreational vehicle collection.

The structure is to be located toward the eastern portion of the property behind the residence, approximately 155 feet from the front/west property line along Fremont Street, 75 feet from the south/side property line, 20 feet from the north/side property line, and 45 feet from rear/east property line. There will be a 70-foot separation between the proposed garage and existing residence. The location of the proposed structure meets all setback requirements for the RS-10M Land Use District. The attached plans include a site plan, floor plan, elevations, site photos, and a brochure from the building manufacturer.

There is an existing accessory structure on the neighboring property to the north that is approximately 7,000 square feet; however, it should be noted that this structure was built prior to 1989, the year the City of Yucaipa incorporated, and therefore, would not have been required to obtain a Special Use Permit. If the northern neighbor were to build the structure today, it would be required to obtain approval by the Planning Commission through the Special Use Permit process, and be subject to the Findings listed in Section 84.0645 of the Development Code.

Processing and Procedural Actions:

Notices of the Project were sent to all surrounding contiguous property owners, and no comments were received.

Staff is recommending that the Project is Categorically Exempt from the California Environmental Quality Act (CEQA), pursuant to Section 15303 of the CEQA Guidelines (Class 3 – Small Structures), as the Project consists of a metal garage to be used as an accessory structure.

Guidance for Staff:

On March 8, 2004, City Council adopted Ordinance No. 227, which established special design review procedures for certain uses that are accessory to primary residential uses. Ordinance No. 227 created the required Findings for which the Planning Commission may approve a Special Use Permit for an accessory structure. Recently, the City has received an influx of public inquiries and Special Use Permit applications for large detached metal structures, with some proposals containing structures close to, and in some cases exceeding, the size of the primary structure. As the proposals increase in size, the threshold for what is acceptable to satisfy Finding #2 for an accessory structure has become blurred. To provide more effective direction to applicants, staff is requesting direction from the Planning Commission for what elements to consider as "subordinate" for future Special Use Permit applications that are related to large accessory structures.

CONCLUSION:

The Project meets the standards for access and site design. The required findings for approval of the Special Use Permit for Architectural Review have been provided and are attached, as well as the Conditions of Approval.

Attachments: Findings for Special Use Permit
Land Use & Location Map
Conditions of Approval
Site Photos
Site Plan and Building Elevations

Approved by:

Benjamin Matlock, Planning Manager/City Planner
Development Services Department

FINDINGS: SPECIAL USE PERMIT NO. 19-102/SUP/ARC

1. The site for the proposed use is adequate in size and shape to accommodate said use and all yards, building coverage, parking area, and other requirements of the Code, because the subject property is 37,057 square-feet in size and is adequate in area to accommodate the proposed metal structure.

2. The proposed garage will be subordinate in size, location, and appearance to the primary use because the proposed structure will be located along the eastern portion of the property and will have a greater side-yard setback than the residence, which reduce the visibility of the proposed structure from the public Right-Of-Way along Fremont Street. The residence is currently 2,660 square feet and the proposed accessory structure is 3,000 square feet, which is larger than the residence; however, the applicant has proposed to construct a 540 square-foot attached patio cover, which would bring the overall footprint of the residence to 3,200 square feet. With the addition of the proposed patio cover, the proposed accessory structure would be subordinate in size to the primary dwelling unit.

3. Issuance of the permit shall not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and district in which the use is located, because the lawful conditions and building code requirements required for this structure to be built will ensure adequate circulation, drainage, and fire protection.

4. The appearance of the detached accessory structure and the method of construction are compatible with the surrounding built environment, because the building is compatible in size and height with surrounding houses and accessory structures, will be required to obtain a building permit, ensuring that it is built consistent with conceptual plans, and all colors will be compatible with the existing single-family residence onsite.

LAND USE: SINGLE-RESIDENTIAL (RS-10M)

SITE LOCATION

CONDITIONS OF APPROVAL

ON-GOING CONDITIONS/GENERAL REQUIREMENTS:

PLANNING DIVISION (909) 797-2489 EXT. 224

1. This Special Use Permit is for the Architectural Review of a 21.5-foot tall, 3,000 square foot detached metal garage to be located on a single-family residential property at 13461 Fremont Street; APN: 1242-221-14. Any alteration or expansion of these facilities or increase in the developed area of the site from that shown on the approved site plan, may require the submission of a new application or an additional application for Revisions for review and approval.

2. The applicant shall defend, indemnify, and hold harmless the City, its agents, officers, and employees from any claim, action or proceeding attacking or seeking to set aside, void or annul the approval of all or part of the matters applied for, or any other claim, action or proceeding relating to or arising out of such approval. This obligation includes the obligation to reimburse the City, its agents, officers and employees for any court costs or attorney fees which the City, its agents, officers, or employees are required by a court to pay as a result of such claim, action or proceeding. The City agrees to notify the applicant of any such claim, action or proceeding promptly after the City becomes aware of it. The City may participate in the defense of the claim, action or proceeding, but such participation will not relieve the applicant of applicant's defense and indemnification obligations, including City expenses.

3. This Special Use Permit shall become null and void if all conditions have not been complied with and the occupancy or use of the land has not taken place within three (3) years of the date of approval. One extension of time, not to exceed three (3) years, may be granted upon written request and submittal of the appropriate fee not less than 30 days prior to the date of expiration. **PLEASE NOTE:** this will be the only notice given for the above specified expiration date. **The applicant is responsible for the initiation of an extension request.**

4. A Categorical Exemption is being issued for this project, pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended. The applicant/owner shall deliver a $50.00 administrative handling fee to the Planning Division within five (5) days after the effective date of conditional approval. **Payments shall be made with a Check, Money Order or Cashier's Check for $50.00 made payable to the "Clerk of the Board".** The Planning Division shall then file the Notice of Exemption with the Clerk. Proof of fee payment will be required prior to issuance of building permit.

5. All conditions of this Special Use Permit are continuing conditions. Failure of the applicant and/or operator to comply with any or all of said conditions at any time may result in the revocation of the permit granted to use the property.

6. Commercial uses within the Single Residential Land Use District are strictly prohibited. The detached metal garage shall not be used for commercial purposes.

ENGINEERING DIVISION (909) 797-2489 EXT. 228

7. Applicant shall demonstrate that the site does not create concentrated discharges to adjacent properties and/or public right-of-way in excess of historical flows. If project does create concentrated or sheet flows off-site that are greater than historical, the applicant shall demonstrate that the downstream facilities can accommodate flows; otherwise, applicant shall provide on-site detention for excess flows in accordance with the approved WQMP.

8. Final improvement plans and profiles shall indicate the location of any existing utility facility which would affect construction. Existing utility poles shall be shown on the improvement plans and relocated as necessary without cost to the City.

9. Continuous water spraying or other approved methods must be used during grading operations to control fugitive dust.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

10. This project is protected by the Yucaipa Fire Department/California Department of Forestry and Fire Protection. Prior to any construction occurring on any parcel, the applicant shall contact the Fire Marshall for verification of current fire protection development requirements. All new construction shall comply with the adopted Uniform Fire Code and all applicable statutes, codes, ordinances, standards and policies of the Yucaipa Fire Department/CDF.

11. Fire Department access roads and/or public/private streets and residential driveways shall have a minimum vertical clearance of thirteen (13) feet and six (6) inches.

12. Fire Department access roads and/or public/private streets and driveways shall not exceed 12% grade (please note: Engineering requirements may be more restrictive).

13. Approved fire hydrants capable of supplying required fire flow shall be provided to all premises upon which facilities, buildings or portions of buildings are constructed or moved within the jurisdiction. When any portion of the facility or building protected is in excess of 400 feet from a fire hydrant on a public street, as measured by an approved route around the exterior of the facility or building, additional fire hydrants, meeting the required fire flow, shall be provided.

14. Fire hydrants shall be installed at locations to be determined by the California Fire Code Appendix “C”. Required fire flow to be determined by the California Fire Code Appendix “B”. Minimum fire flow shall not be less than 1500 gpm.

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF A GRADING PERMIT:

ENGINEERING DIVISION (909) 797-2489 EXT. 228

15. The applicant's plans indicated approximately 28% of the site to be improved with impervious surfaces. Design features shall be included to direct storm water run-off flows into landscaped pervious areas before any run-off flows into public rights-of-way.

16. In addition to the drainage, traffic related, or other requirements stated herein, other "on-site" or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to the City Engineer.

17. Please note that the City of Yucaipa Engineering standards requirement state that "on a single lot when more than one driveway approach is to be constructed, the minimum distance between driveway approaches shall be 10 feet."

18. Fire hydrants shall be installed at locations to be determined by the California Fire Coded (2013) Appendix "C". Required fire flow to be determined by the California Fire Code (2013) Appendix "B". Minimum fire flow shall not be less than 1500 gpm.

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF A BUILDING PERMIT:

PLANNING DIVISION (909) 797-2489 EXT. 224

19. Proof of fee payment of Fish and Game fees and/or County Administrative handling fees pursuant to California State Assembly Bill 3158 shall be submitted.

20. Provide detailed building elevations including materials, finishes, colors, and signage for all buildings for Planning Division review and approval prior to issuance of building permits. Building elevations shall be consistent with those approved by the Planning Commission.

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

21. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

22. Separate submittals and permits are required for all accessory structures such as, but not limited to, patios, block walls, and storage buildings.

23. The building(s) shall comply with all structural and nonstructural provisions of the California Building Code.

24. Pursuant to California Business and Professions Code Section 6737, this project is required to be designed by a California licensed architect or engineer.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

25. A fuel break of one hundred (100) feet (brush and weed clearance) is required prior to construction. The clearance shall be maintained on a year-round basis.

26. Fire hydrants shall be installed and operational as per approved water system delivery plans prior to any framing, construction, or delivery of combustible materials to project site.

SUBJECT PROPERTY SHALL NOT BE OCCUPIED AND/OR USED FOR PURPOSES APPLIED FOR UNTIL THE FOLLOWING CONDITIONS HAVE BEEN MET:

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

27. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

28. Separate submittals and permits are required for all accessory structures such as but not limited to, trash enclosures, patios, block walls and storage buildings.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

29. Residential driveways shall be paved (asphalt/concrete) and shall have a minimum width of twelve (12) feet. Driveways of this standard shall serve no more than two single family dwellings and shall not exceed 12% in grade.

30. Fire Department access roadways and/or public/private streets exceeding one hundred fifty (150) feet in length shall have a Fire Department approved turnaround at the terminus (cul-de-sac). Minimum radius shall be not less than 40 Feet.

31. Driveways exceeding 150 feet shall have a Fire Department approved turn-around at the terminus (hammer-head tee).

32. Fire Department access roadways and/or public/private streets and driveways shall extend to within one hundred fifty (150) feet of and shall give reasonable access to all portions of the exterior walls of the first story of any building. An access road, approved by the Fire Department, shall be provided to within fifty

(50) feet of all structures when the natural grade between access road and structure is in excess of 30%. Where an approved access road cannot be provided, a fire protection system shall be required and approved by the Fire Department.

33. Manual operated gates across Fire Department access roadways, public and/or private streets and driveways, shall be equipped with approved emergency key-operated ("Knox" type) locks. For automatic gates, a "Knox" keyed emergency access switch shall be installed at location determined by Fire Department, and shall over-ride all command functions and open gate automatically upon activation. All automatic gates shall have a manual over-ride for use during loss of electric power. "Knox box" request forms are available from the Fire Department.

34. Address numbers shall be placed on all new and existing residential structures in such a manner as to be plainly visible and legible from the access roadway or street. Single family dwellings shall have numbers of 4" height, 3/8" stroke on contrasting background. Address numbers shall be low voltage, automatically electrically illuminated. Where structure setback exceeds one hundred (100) feet from the access roadway or street, additional non-illuminated numbers 4" in height, 3/8" stroke, on contrasting background shall be displayed at property access entrance.

35. Approved fire hydrant pavement markers shall be installed.

36. Smoke detectors, hard wired in series with battery back-up, shall be installed in all sleeping areas and in all hallways and area/rooms leading to sleeping areas. Smoke detectors shall be installed at the top of all stairways. At least on smoke detector shall be installed on the first-floor level.

37. Carbon Monoxide detectors shall be installed pursuant to manufacturer specifications.

38. For each chimney used in conjunction with any fireplace or heating appliance in which solid or liquid fuel is used, an approved spark arrester shall be installed and visible from the ground. Spark arrester shall be of stainless steel, copper or brass, woven galvanized wire mesh, twelve (12) gauge, and minimum of 3/8" to ½" maximum openings.

39. A class "A" roof covering structure with "bird stops" shall be installed.

40. The main electrical panel and all sub-panels shall be labeled on inside cover for all circuits.

41. Water heater (fuel fired) shall be properly vented to exterior of structure. Water heater shall be seismic strapped to wall and be located 18" above a garage floor.

PLANNING DIVISION (909) 797-2489 EXT. 224

42. Any lights used to illuminate the site shall be hooded and designed so as to reflect away from adjoining properties and public thoroughfares.

43. The applicant shall obtain a Building Permit Final for the proposed patio cover prior to a Building Permit Final for the metal accessory structure.

44. The proposed structure shall be painted to match the colors of the approved color palette and shall be materially consistent with the approved Building Elevations.

COMMERCIAL/INDUSTRIAL COLOR CHART

- **Final color selection should be made from actual color chips.**
- See the product selection chart for gauge and finish availability.
- All products are available in smooth or embossed finish.
- Trim is available in all colors.
- Review the sample warranty for complete performance attributes and terms and conditions.

SIGNATURE® 200 Standard Colors

26- AND 24- GAUGE MATERIAL

SILICONIZED POLYESTER
Polar White is a Straight Polyester.

* Also available in 29-gauge
** Minimum quantities and/or extended lead times required for 24 gauge. Please inquire.

HAWAIIAN BLUE *** | CRIMSON RED *** | FERN GREEN *** | BURNISHED SLATE *** | ASH GRAY *

SADDLE TAN * | DESERT SAND * | KOKO BROWN * | CHARCOAL GRAY *** | COBALT BLUE ***

RUSTIC RED * | LIGHT STONE * | POLAR WHITE ** | SOLAR WHITE ***

* Color swatches available @ P.C. Hearing

SIGNATURE® 300 Standard Colors

26-GAUGE MATERIAL PBR, PBU, AVP, PBC, PBD PANELS ONLY

* Also available in 24-gauge
** Minimum quantities and/or extended lead times required for 24-gauge. Please inquire.
† Minimum quantities and/or extended lead times required for all gauges. Please inquire.

MEDIUM BRONZE ** | SNOW WHITE ** | SLATE GRAY *** | ALMOND ** | CLASSIC GREEN ***

BROWNSTONE ** | BRITE RED *† | HARBOR BLUE *** | BONE WHITE ***

ENERGY STAR PARTNER

* ENERGY STAR® Qualified Color through our Energy Star partner MBCI.

This chart is a digital reproduction: coloration may show slight variations from the actual colors. Final color selection should be made from actual color chips. For SR and SRI values please consult with your sales representative.

Descriptions and specifications contained herein were in effect at the time the publication was approved for printing. In a continuing effort to refine and improve products, we reserve the right to discontinue products at any time or change specifications and to design without prior notice.

- We are a factory direct wholesaler of the highest quality pre-engineered steel building systems.
- All of our components are pre-cut, pre-drilled and pre-engineered under one roof.
- Our buildings start with standard upgrades including factory welded girt clips, PBR roof panels, salt spray tested zinc capped fasteners and sculptured eave trim.

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At Empire Steel Buildings our philosophy is simple: Provide the best product at the best price and service our builders every step of the way.

Just ask our customers how they feel about us:
"I couldn't have asked for better service than I received from Empire Steel. They were always available for any questions I had and the building came out great. I have had a great experience with Empire Steel and would not hesitate to use them again."
- Joe Kuser, Tulare, CA

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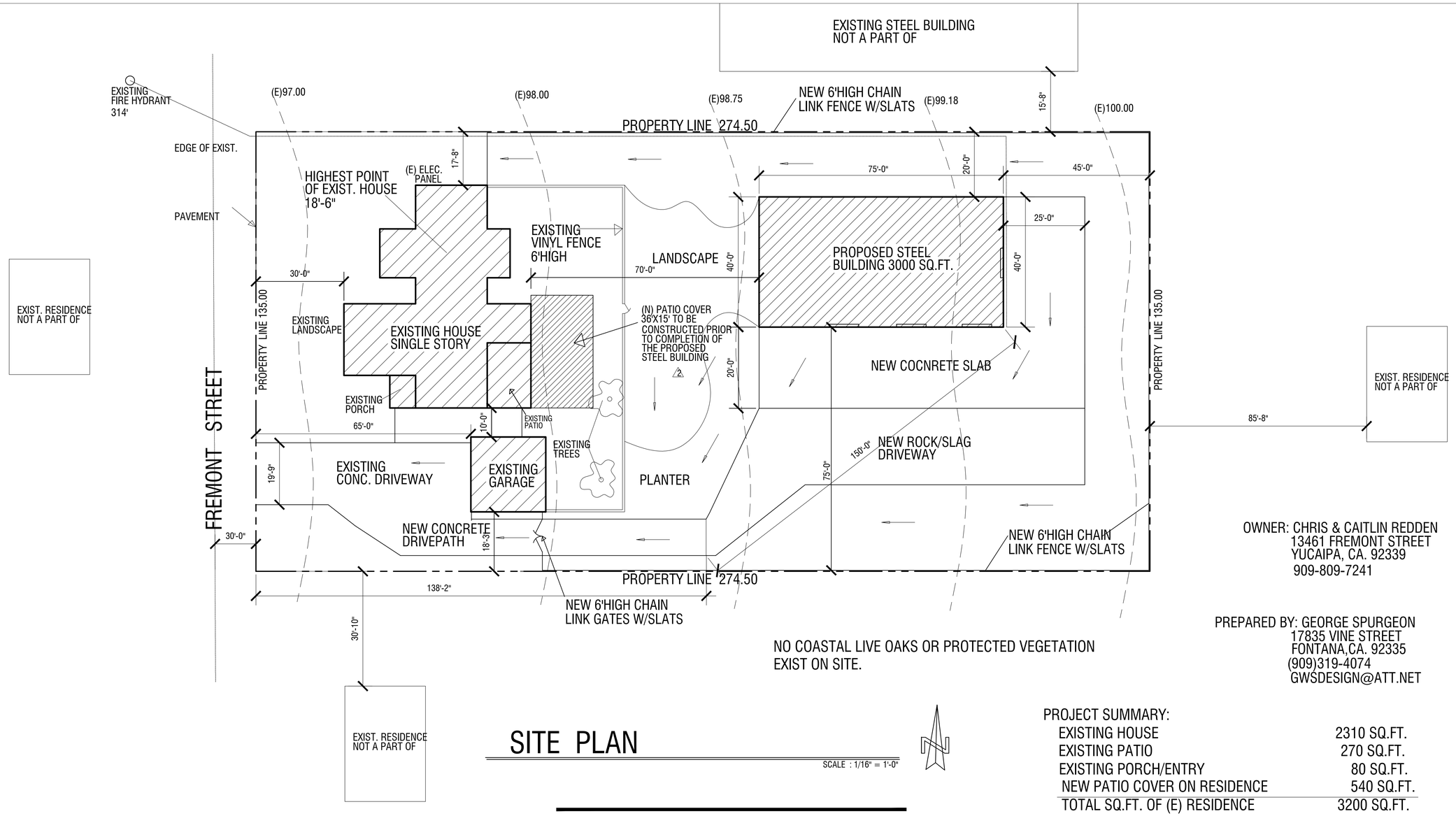


OWNER: CHRIS & CAITLIN REDDEN
13461 FREMONT STREET
YUCAIPA, CA. 92339
909-809-7241

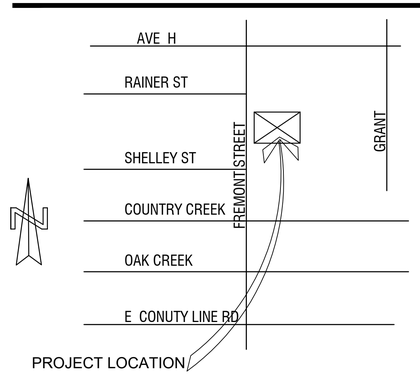
NO COASTAL LIVE OAKS OR PROTECTED VEGETATION
EXIST ON SITE.

PREPARED BY: GEORGE SPURGEON
17835 VINE STREET
FONTANA,CA. 92335
(909)319-4074
GWSDESIGN@ATT.NET

SITE PLAN

SCALE : 1/16" = 1'-0"

VICINITY MAP



PROJECT SUMMARY:

EXISTING HOUSE	2310 SQ.FT.
EXISTING PATIO	270 SQ.FT.
EXISTING PORCH/ENTRY	80 SQ.FT.
NEW PATIO COVER ON RESIDENCE	540 SQ.FT.
TOTAL SQ.FT. OF (E) RESIDENCE	3200 SQ.FT.
EXISTING DETACHED GARAGE	530 SQ.FT.
PROPOSED BARN STYLE GARAGE	3000 SQ.FT.
TOTAL	6,730 SQ.FT.
LOT SIZE	37,057 SQ.FT.
BILDING COVERAGE	18%
IMPERVOUS SURFACE	10,315 SQ.FT.
LOT COVERAGE	28%

SCOPE OF WORK:

PROPOSED 3,000 SQ.FT. DETACHED METAL BARN STYLE GARAGE

NO PLUMBING OR ELECTRICAL

GEORGE SPURGEON DESIGNS
17835 VINE STREET,FONTANA, CA. 92335
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EMAIL-GWSDESIG@ATT.NET

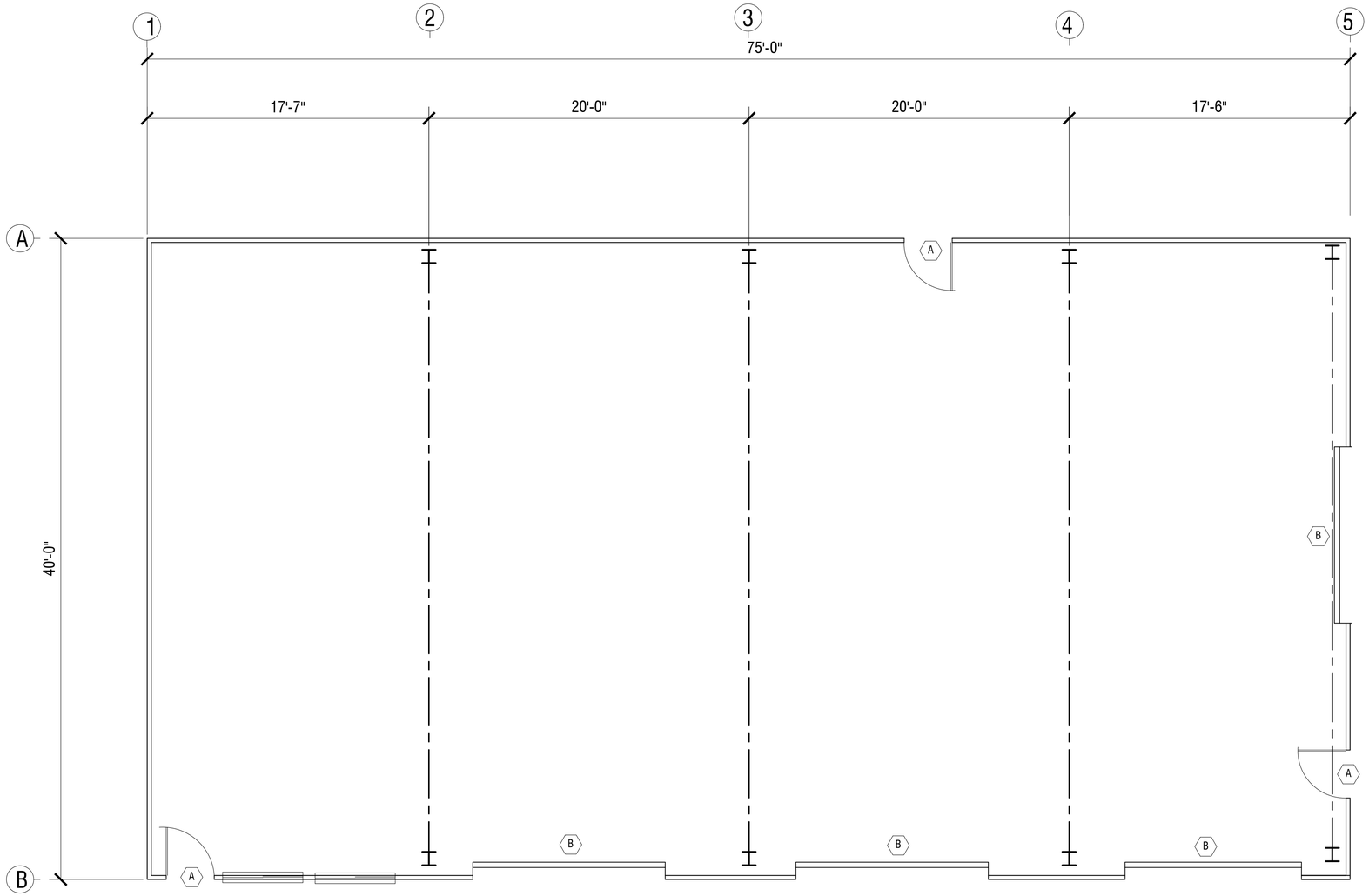
NEW BARN-STYLE GARAGE
EXISTING RESIDENCE
13461 FREMONT STREET
YUCAIPA, CA. 92339

ISSUE	ISSUE DESCRIPTION	DATE
1	1 PLANNING	10-11-19
2	2 PLANNING	3-5-2020
3		

STAMP:

DRAWN BY:	GWS
SHEET	
SCALE	AS NOTED

SP-1



FLOOR PLAN

SCALE: 1/4"=1'-0"

DOOR SCHEDULE

MK.	SIZE	DESCRIPTION
A	3'-0" X 7'-0"	METAL DOOR
B	12'-0" X 12'-0"	STEEL ROLL UP DOOR

WINDOW SCHEDULE

MK.	SIZE	DESCRIPTION	QTY.
1	5040	RIGHT SLIDING	4

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OFFICE (909) 319-4074
EMAIL-GWSDESIG@ATT.NET

NEW BARN-STYLE GARAGE
EXISTING RESIDENCE
133461 FREMONT STREET
YUCAIPA, CA. 92339

ISSUE	ISSUE DESCRIPTION	DATE
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2		
3		

STAMP:

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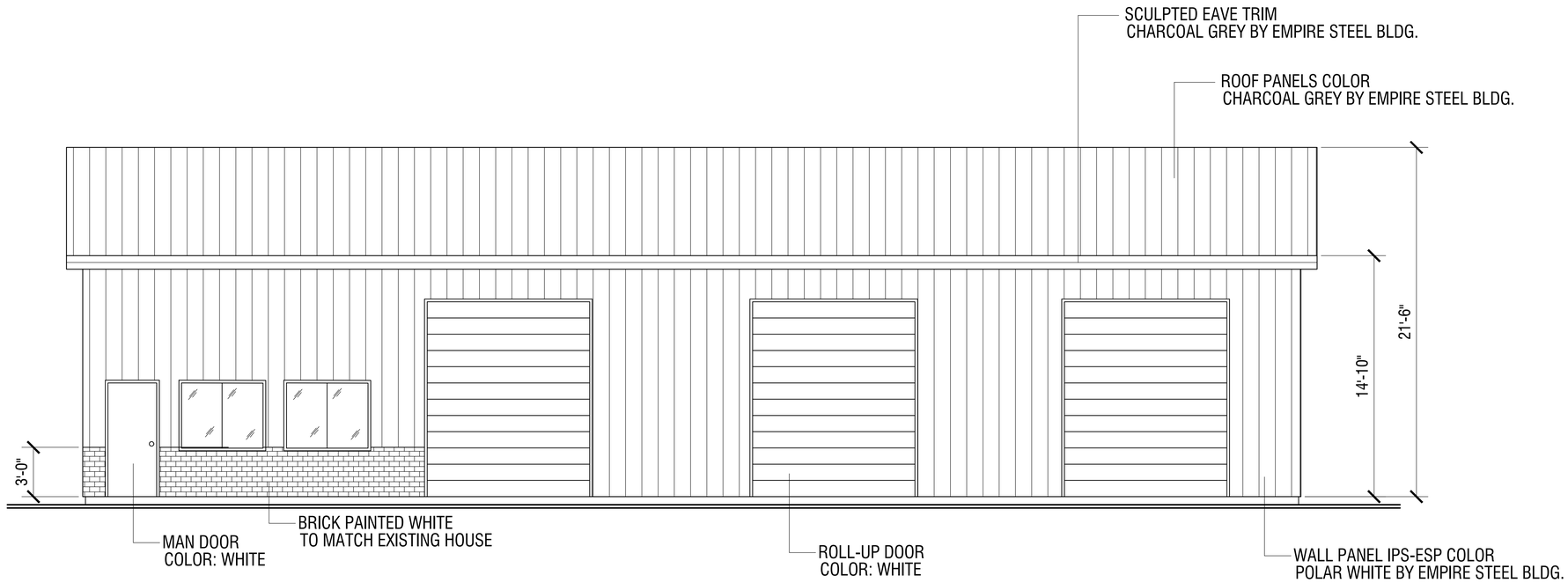
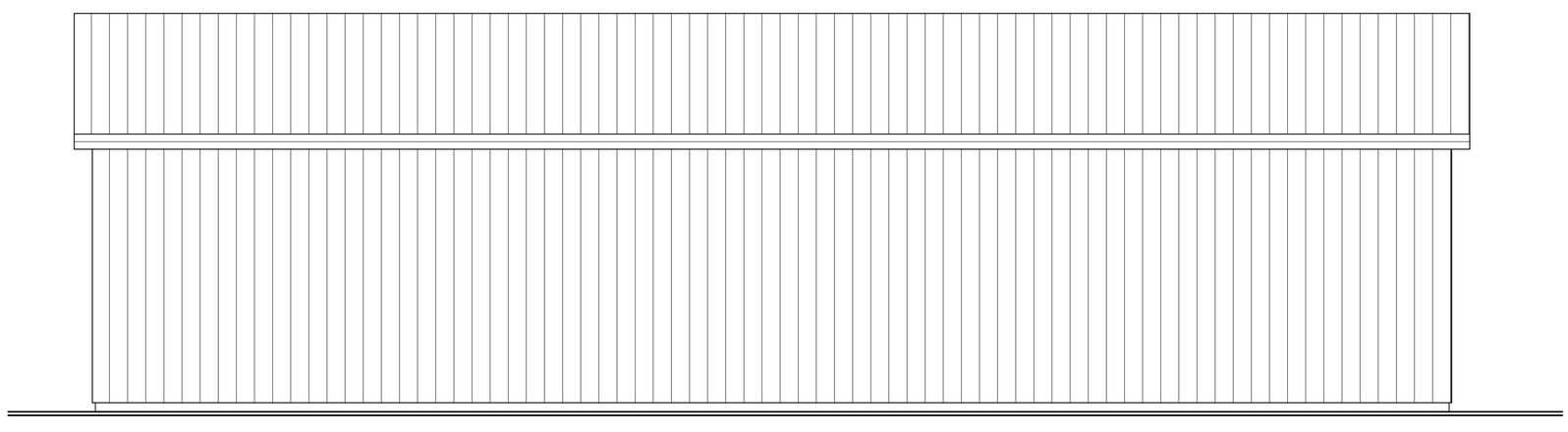
SCALE	AS NOTED

A-1



SOUTH ELEVATION

SCALE: 1/4"=1'-0"



NORTH ELEVATION

SCALE: 1/4"=1'-0"

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OFFICE (909) 319-4074
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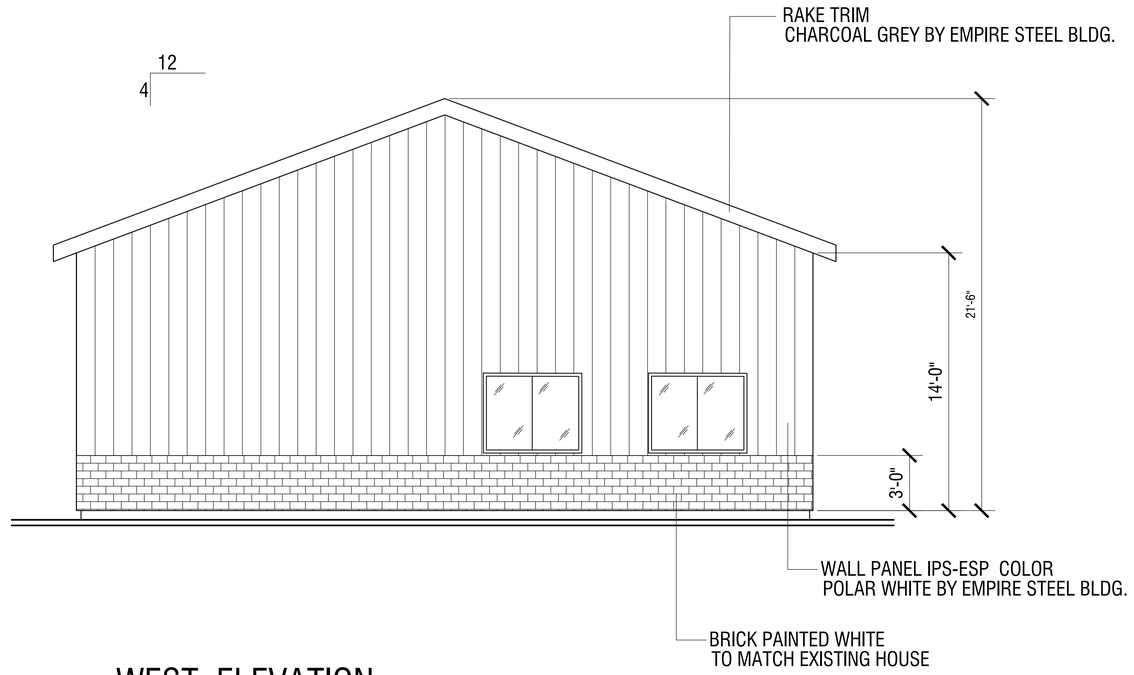
NEW BARN-STYLE GARAGE
EXISTING RESIDENCE
133461 FREMONT STREET
YUCAIPA, CA. 92339

ISSUE	ISSUE DESCRIPTION	DATE
1		
2		
3		

STAMP:

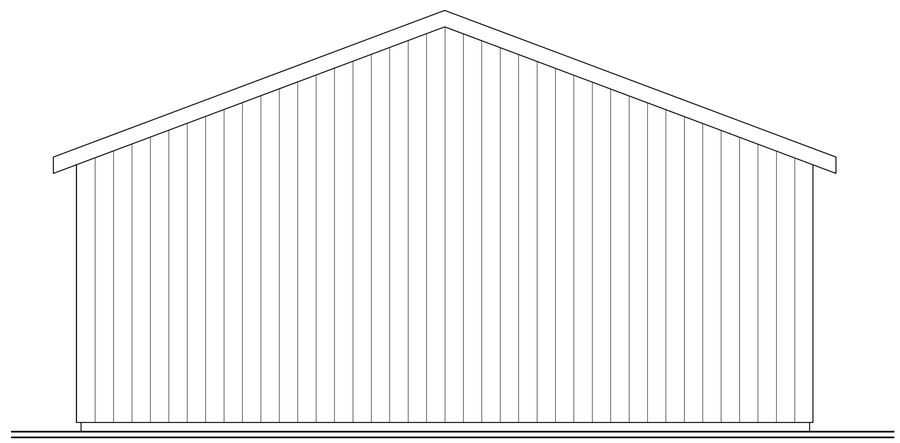
DRAWN BY:	GWS
SHEET	
SCALE	AS NOTED

A-2



WEST ELEVATION

SCALE: 1/4"=1'-0"



EAST ELEVATION

SCALE: 1/4"=1'-0"

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NEW BARN-STYLE GARAGE
EXISTING RESIDENCE
133461 FREMONT STREET
YUCAIPA, CA. 92339

ISSUE	ISSUE DESCRIPTION	DATE
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STAMP:

DRAWN BY:	GWS
SHEET	
SCALE	AS NOTED

A-3

Agenda Item 3

CITY OF YUCAIPA
DEVELOPMENT SERVICES DEPARTMENT
AGENDA REPORT

TO: Honorable Chairman and Planning Commissioners

FROM: Travis Heaps, Assistant Planner

FOR: Planning Commission Meeting of March 18, 2020

SUBJECT: Scherry LaMarche (Case No. 19-131/SUP/ARC): A Special Use Permit and Architectural Review of a proposed 17.5-foot tall, 760 square foot detached metal garage to be located on a single-family residential property within the Custom Home Overlay District at 35860 Holly Avenue; APN: 0320-211-76.

RECOMMENDATION: That the Planning Commission conduct a public hearing, and:

A) Review the architectural design of the proposed metal garage, and if it is acceptable, approve the design subject to the Conditions of Approval; and

B) Adopt the Special Use Permit Findings as contained in the Agenda Report; and

C) Adopt a Categorical Exemption pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended, Section 15303 (Class 3); and

D) Direct staff to file a Notice of Exemption.

BACKGROUND:

Area Land Use Designations; Improvement Levels; and Existing Land Uses:

Site:	RL-1 (Rural-Living, one gross acre minimum); CH (Custom Home Overlay)	IL-3	Single-family residence
North:	RL-1	IL-3	Single-family residence
South:	RL-1	IL-3	Single-family residences
East:	RL-1	IL-3	Single-family residence
West:	RL-1	IL-3	Single-family residence

DISCUSSION:

Special Use Permit for Architectural Review:

The applicant has submitted a Special Use Permit Application for the Architectural Review of the accessory str consisting of a 17.5-foot tall, 760 square-foot detached metal garage. Pursuant to Development Code Section 84.0645(a), any detached structure larger than 1,200 sq. ft., more

than 20 feet in height, or of an unconventional design, such as a metal garage, would first be required to obtain a Special Use Permit for approval of the architectural design from the Planning Commission.

The metal garage is to be constructed on the subject 1.14-acre property located at 35860 Holly Avenue in the RL-1 (Rural-Living, one [1] gross-acre minimum lot size) Land Use District and within the CH (Custom Home) Overlay District. The site is improved with a 3,448 square foot single-family residence and attached three-car garage. The proposed metal structure will be 36 feet wide and 26 feet long, with a height of 12 feet at the eaves, and pitches to a peak of 17.5 feet at the center of the structure. The metal garage will feature a pitched, ribbed galvanized roof with 6-inch boxed eaves, vertical-ribbed galvanized siding, two (2) white roll-up doors and one (1) man door on the southern elevation, and two (2) windows on the eastern elevation. To match the colors of the existing residence, the applicant is proposing "Sahara Tan" for the roof and siding, "Cocoa Brown" for the trim, and "White" for the doors.

The structure is to be located on the western portion of the property, approximately 200 feet from the front/south property line along Holly Avenue, 60 feet from the rear/north property line, 20 feet from the side/west property line, and 110 feet from side/east property line. A 100-foot wide fault trace spans across the northern property line; the northwest corner of the proposed structure will encroach two (2) feet into the fault trace area. Detached accessory structures may be built within an existing fault trace as long as the structure is uninhabitable, such as a garage. The location of the proposed structure meets all setback requirements for the CH Overlay and RL-1 Land Use District. The attached exhibits include a site plan, building elevations, a color palette, and photo examples of a similar-style structure from the building manufacturer.

Processing and Procedural Actions:

Notices of the Project were sent to all contiguous property owners, and one (1) comment was received. The main concern of the neighbor was that the proposed structure would obstruct the view from their neighboring property. It should be noted that there are no ordinances or sections within the Development Code that protect private views, and the proposed structure complies with all setback and height requirements for the subject property.

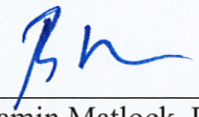
Staff is recommending that the Project is Categorically Exempt from the California Environmental Quality Act (CEQA), pursuant to Section 15303 of the CEQA Guidelines (Class 3 – Small Structures), as the Project consists of a metal garage to be used as an accessory structure.

CONCLUSION:

The Project meets the standards for access and site design. The required findings for approval of the Special Use Permit for Architectural Review have been made and are attached, as well as the Conditions of Approval.

Attachments: Findings for Special Use Permit
Land Use & Location Map
Conditions of Approval
Site Photos
Site Plan and Building Elevations

Approved by:



Benjamin Matlock, Planning Manager/City Planner
Development Services Department

FINDINGS: SPECIAL USE PERMIT NO. 19-131/SUP/ARC

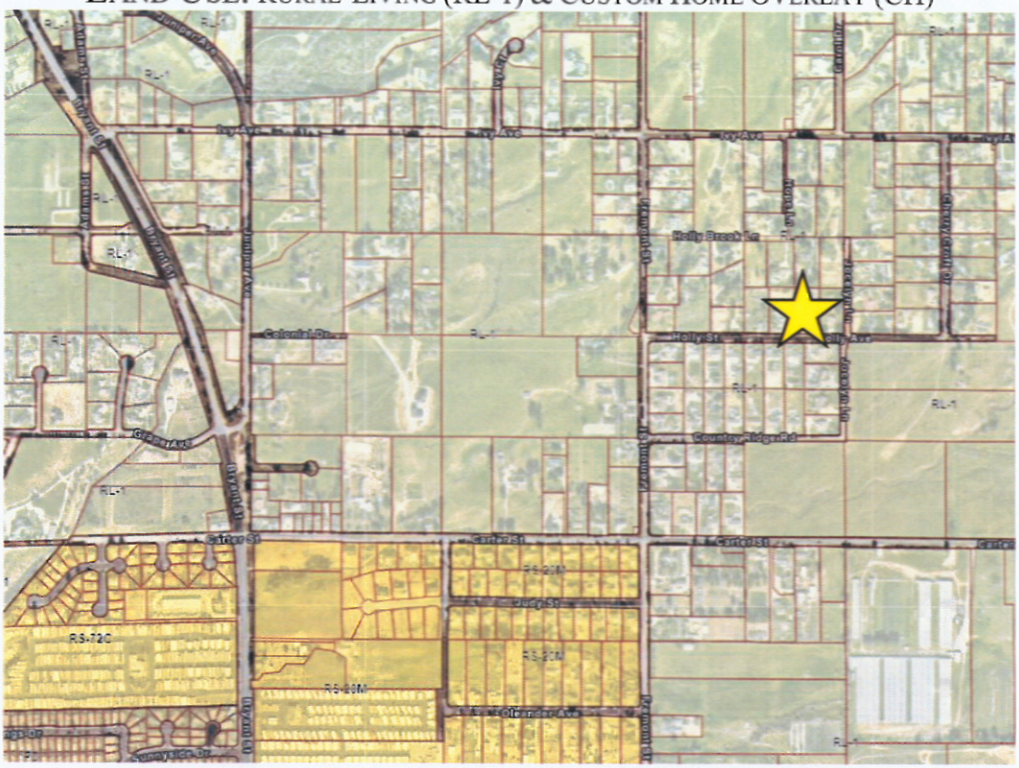
1. The site for the proposed use is adequate in size and shape to accommodate said use and all yards, building coverage, parking area, and other requirements of the Code, because the subject property is 49,500 square-feet in size and is adequate in area to accommodate the proposed metal garage.

2. The proposed garage will be subordinate in size, location, and appearance to the use because the building is to be located 80 feet behind the residence at the western portion of the property, northwest from the residence. The residence is 3,448 square feet and the proposed accessory structure is 760 square feet, which is smaller than the residence.

3. Issuance of the permit shall not be detrimental to the public health, safety, or welfare, or injurious to the property or improvements in the vicinity and district in which the use is located, because the lawful conditions and building code requirements required for this structure to be built will ensure adequate circulation, drainage, and fire protection.

4. The appearance of the detached accessory structure and the method of construction are compatible with the surrounding built environment, because the building is compatible in size and height with surrounding houses and accessory structures, will be required to obtain a building permit, ensuring that it is built consistent with conceptual plans, and all colors of the proposed building will be painted to match the colors of the residence.

LAND USE: RURAL-LIVING (RL-1) & CUSTOM HOME OVERLAY (CH)



SITE LOCATION

CONDITIONS OF APPROVAL

ON-GOING CONDITIONS/GENERAL REQUIREMENTS:

PLANNING DIVISION (909) 797-2489 EXT. 224

1. This Special Use Permit is for the Architectural Review of a 17.5-foot tall, 760 square-foot detached metal garage to be located on a single-family residential property within the Custom Home Overlay District at 35860 Holly Avenue; APN: 0320-211-76. Any alteration or expansion of these facilities, or increase in the developed area of the site from that shown on the approved site plan, may require the submission of a new application or an additional application for Revisions for review and approval.

2. The applicant shall defend, indemnify, and hold harmless the City, its agents, officers, and employees from any claim, action or proceeding attacking or seeking to set aside, void or annul the approval of all or part of the matters applied for, or any other claim, action or proceeding relating to or arising out of such approval. This obligation includes the obligation to reimburse the City, its agents, officers and employees for any court costs or attorney fees which the City, its agents, officers, or employees are required by a court to pay as a result of such claim, action or proceeding. The City agrees to notify the applicant of any such claim, action or proceeding promptly after the City becomes aware of it. The City may participate in the defense of the claim, action or proceeding, but such participation will not relieve the applicant of applicant's defense and indemnification obligations, including City expenses.

3. This Special Use Permit shall become null and void if all conditions have not been complied with and the occupancy or use of the land has not taken place within three (3) years of the date of approval. One extension of time, not to exceed three (3) years, may be granted upon written request and submittal of the appropriate fee not less than 30 days prior to the date of expiration. **PLEASE NOTE:** this will be the only notice given for the above specified expiration date. **The applicant is responsible for the initiation of an extension request.**

4. A Categorical Exemption is being issued for this project, pursuant to the California Environmental Quality Act of 1970 and the CEQA Guidelines, as amended. The applicant/owner shall deliver a $50.00 administrative handling fee to the Planning Division within five (5) days after the effective date of conditional approval. **Payments shall be made with a Check, Money Order or Cashier's Check for $50.00 made payable to the "Clerk of the Board".** The Planning Division shall then file the Notice of Exemption with the Clerk. Proof of fee payment will be required prior to issuance of building permit.

5. All conditions of this Special Use Permit are continuing conditions. Failure of the applicant and/or operator to comply with any or all of said conditions at any time may result in the revocation of the permit granted to use the property.

6. The detached accessory structure is located within close proximity to an existing fault line and, therefore, cannot be converted to a habitable structure.

ENGINEERING DIVISION (909) 797-2489 EXT. 228

7. Applicant shall demonstrate that the site does not create concentrated discharges to adjacent properties and/or public right-of-way in excess of historical flows. If project does create concentrated or sheet flows off-site that are greater than historical, the applicant shall demonstrate that the downstream facilities can accommodate flows; otherwise, applicant shall provide on-site detention for excess flows in accordance with the approved WQMP.

8. Final improvement plans and profiles shall indicate the location of any existing utility facility which would affect construction. Existing utility poles shall be shown on the improvement plans and relocated as necessary without cost to the City.

9. Continuous water spraying or other approved methods must be used during grading operations to control fugitive dust.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

10. This project is protected by the Yucaipa Fire Department/California Department of Forestry and Fire Protection. Prior to any construction occurring on any parcel, the applicant shall contact the Fire Marshall for verification of current fire protection development requirements. All new construction shall comply with the adopted Uniform Fire Code and all applicable statutes, codes, ordinances, standards and policies of the Yucaipa Fire Department/CDF.

11. This project is in a Fire Safety Review Area 2. This is a high fire hazard brush area. This project shall comply with the construction and development standards for a FR-2 Area. Contact the City Building & Safety Division for FR-2 Area construction and development standards.

12. Fire Department access roads and/or public/private streets and residential driveways shall have a minimum vertical clearance of thirteen (13) feet and six (6) inches.

13. Fire Department access roadways and/or public/private streets and driveways shall not exceed 12% grade (please note: Engineering Division requirements may be more restrictive).

14. Required fire flow for this project, as determined by I.S.O. Formula, is as follows: gpm = 1,500, at 20 psi residual; for 2 hour duration. System shall be looped with

minimum eight (8) inch mains; six (6) inch laterals; six (6) inch risers; six (6) inch diameter hydrants with one 2 ½" outlet and one 4" outlet.

15. Approved fire hydrants capable of supplying required fire flow shall be provided to all premises upon which facilities, buildings or portions of buildings are constructed or moved within the jurisdiction. When any portion of the facility or building protected is in excess of 400 feet from a fire hydrant on a public street, as measured by an approved route around the exterior of the facility or building, additional fire hydrants meeting the required fire flow shall be provided.

16. Fire hydrants shall be installed at locations to be determined by the California Fire Code Appendix "C". Required fire flow to be determined by the California Fire Code Appendix "B". Minimum fire flow shall not be less than 1500 gpm.

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF A GRADING PERMIT:

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

17. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

18. Separate submittals and permits are required for all accessory structures such as, but not limited to, patios, block walls, and storage buildings.

19. The building(s) shall comply with all structural and nonstructural provisions of the California Building Code.

20. Pursuant to California Business and Professions Code Section 6737, this project is required to be designed by a California licensed architect or engineer.

ENGINEERING DIVISION (909) 797-2489 EXT. 228

21. The applicant's plans indicate approximately 12% of the site to be improved with impervious surfaces. Design features shall be included to direct storm water run-off flows into landscaped pervious areas before any run-off flows into public rights-of-way.

22. In addition to the drainage, traffic related, or other requirements stated herein, other "on-site" or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to the City Engineer.

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF A BUILDING PERMIT:

PLANNING DIVISION (909) 797-2489 EXT. 224

23. Proof of fee payment of Fish and Game fees and/or County Administrative handling fees pursuant to California State Assembly Bill 3158 shall be submitted.

24. Provide detailed building elevations including materials, finishes, colors, and signage for all buildings for Planning Division review and approval prior to issuance of building permits. Building elevations shall be consistent with those approved by the Planning Commission.

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

25. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

26. Separate submittals and permits are required for all accessory structures such as, but not limited to, patios, block walls, and storage buildings.

27. The building(s) shall comply with all structural and nonstructural provisions of the California Building Code.

28. Pursuant to California Business and Professions Code Section 6737, this project is required to be designed by a California licensed architect or engineer.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

29. A fuel break of one hundred (100) feet (brush and weed clearance) is required prior to construction. The clearance shall be maintained on a year-round basis.

30. Fire hydrants shall be installed and operational as per approved water system delivery plans prior to any framing, construction, or delivery of combustible materials to project site.

SUBJECT PROPERTY SHALL NOT BE OCCUPIED AND/OR USED FOR PURPOSES APPLIED FOR UNTIL THE FOLLOWING CONDITIONS HAVE BEEN MET:

PLANNING DIVISION (909) 797-2489 EXT. 224

31. Any lights used to illuminate the site shall be hooded and designed so as to reflect away from adjoining properties and public thoroughfares.

32. The proposed structure shall be painted to match the colors of the approved color palette and shall be materially consistent with the approved Building Elevations.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

33. Residential driveways shall be paved (asphalt/concrete) and shall have a minimum width of twelve (12) feet. Driveways of this standard shall serve no more than two single family dwellings and shall not exceed 12% in grade.

34. Fire Department access roadways and/or public/private streets and driveways shall extend to within one hundred fifty (150) feet of and shall give reasonable access to all portions of the exterior walls of the first story of any building. An access road, approved by the Fire Department, shall be provided to within fifty (50) feet of all structures when the natural grade between access road and structure is in excess of 30%. Where an approved access road cannot be provided, a fire protection system shall be required and approved by the Fire Department.

35. Manual operated gates across Fire Department access roadways, public and/or private streets and driveways, shall be equipped with approved emergency key-operated ("Knox" type) locks. For automatic gates, a "Knox" keyed emergency access switch shall be installed at location determined by Fire Department, and shall over-ride all command functions and open gate automatically upon activation. All automatic gates shall have a manual over-ride for use during loss of electric power. "Knox box" request forms are available from the Fire Department.

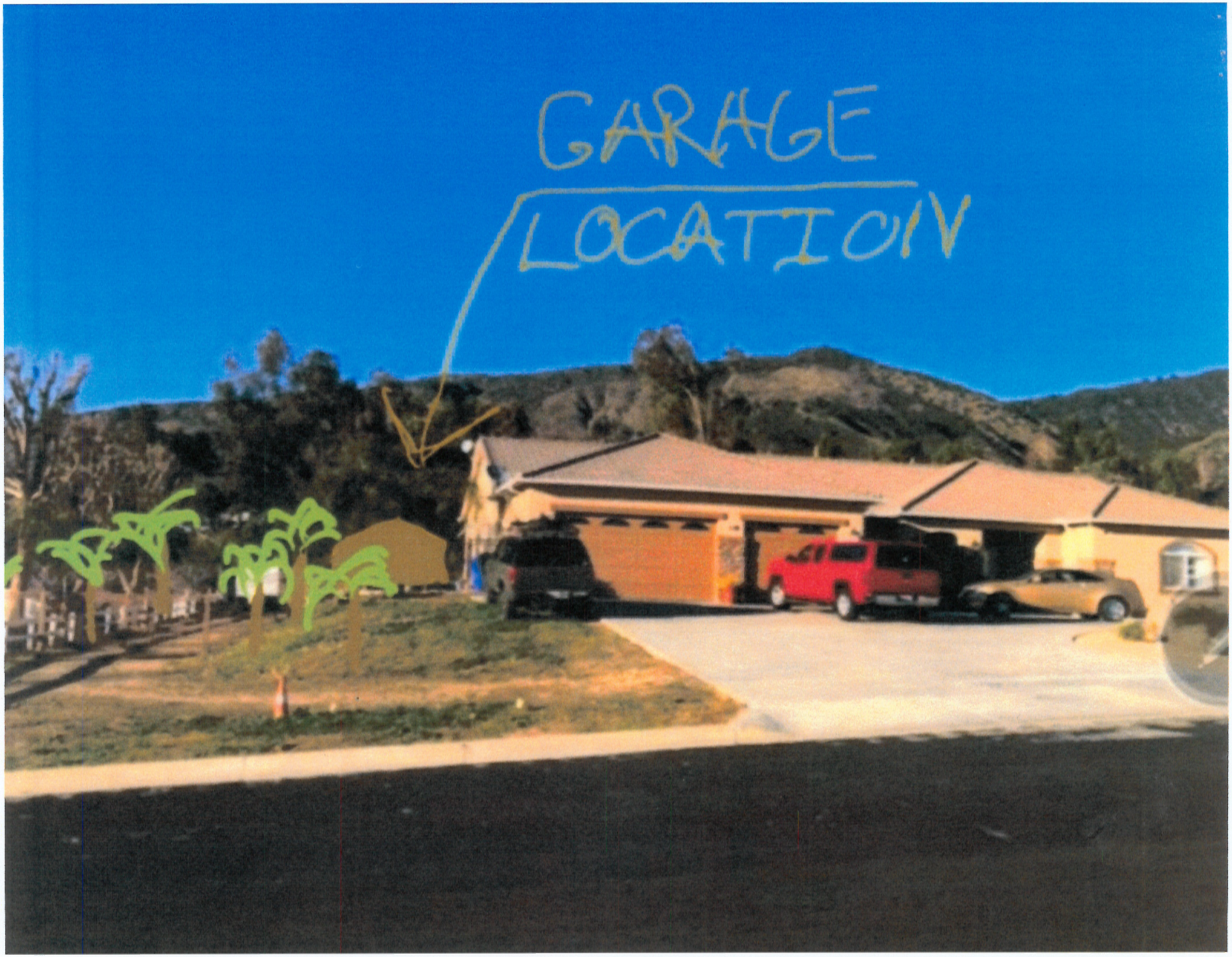
36. Address numbers shall be placed on all new and existing residential structures in such a manner as to be plainly visible and legible from the access roadway or street. Single family dwellings shall have numbers of 4" height, 3/8" stroke on contrasting background. Address numbers shall be low voltage, automatically electrically illuminated. Where structure setback exceeds one hundred (100) feet from the access roadway or street, additional non-illuminated numbers 4" in height, 3/8" stroke, on contrasting background shall be displayed at property access entrance.

37. High Fire Hazard Areas FR-1 & FR-2: one-hour fire resistive construction is required for exterior walls. Contact Fire Marshall or City Building Official for more information.

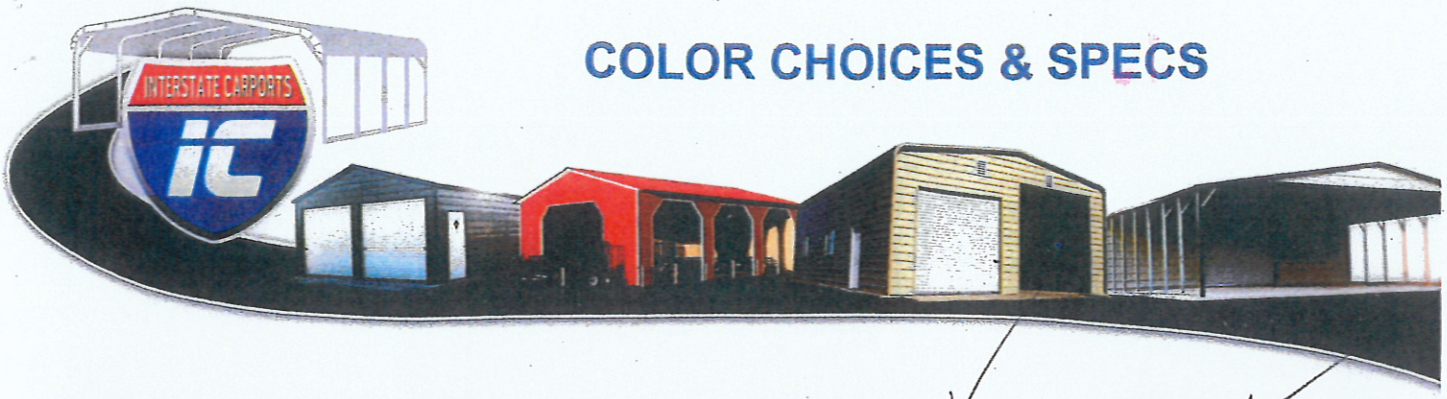
38. The main electrical panel and sub-panels shall be labeled on inside cover for all circuits.

35860

35860


GARAGE
LOCATION

COLOR CHOICES & SPECS



WHITE

IVORY

LIGHT STONE

SEA WOLF

SAHARA TAN

TERRA COTTA

COUNTRY RED

COCOA BROWN

ASH GRAY

OLD TOWN GRAY

CHARCOAL

BURNISHED SLATE

BURGUNDY

HAWAIIAN BLUE

TAHOE BLUE

PATINA GREEN

DENALI GREEN

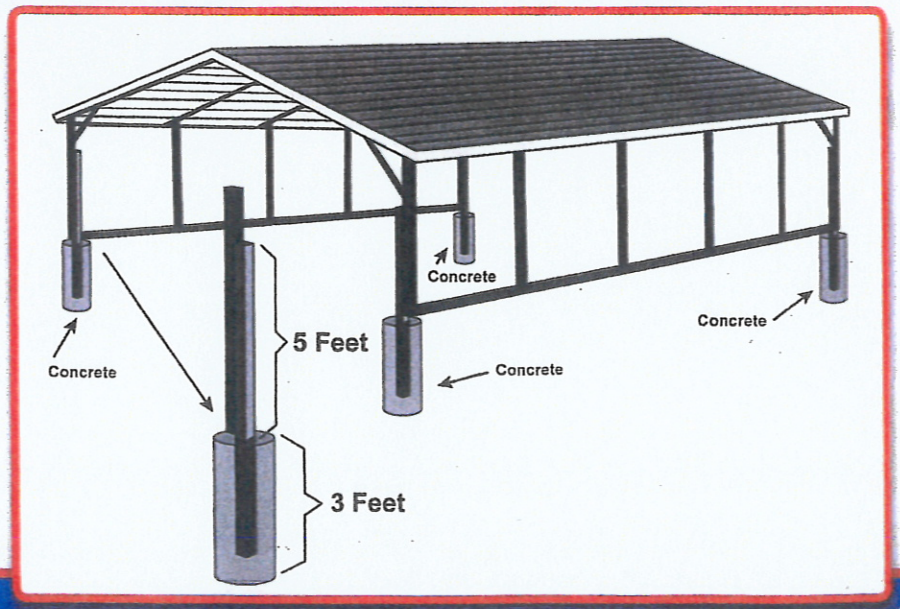
EMERALD GREEN

COPPER PENNY

OPTIONAL GROUND CONCRETE SUPPORT

Recommended For Carports Taller Than 8 ft.

$100.00 Each



SAN BERNARDINO COUNTY

Land Use Services Department

Building & Safety Division

CERTIFICATE OF APPROVAL

THIS CERTIFIES THAT

Interstate Steel Structures Inc.

Fabricator License Number: AFAB-2018-00001

385 W. Esplanade Ave., San Jacinto, CA 92583

IS APPROVED BY THE LAND USE SERVICES DEPARTMENT UNDER THE PROVISIONS OF THE CALIFORNIA BUILDING CODE, VOLUME 2, SECTION 1704.2.2, AS A:

STEEL FABRICATOR

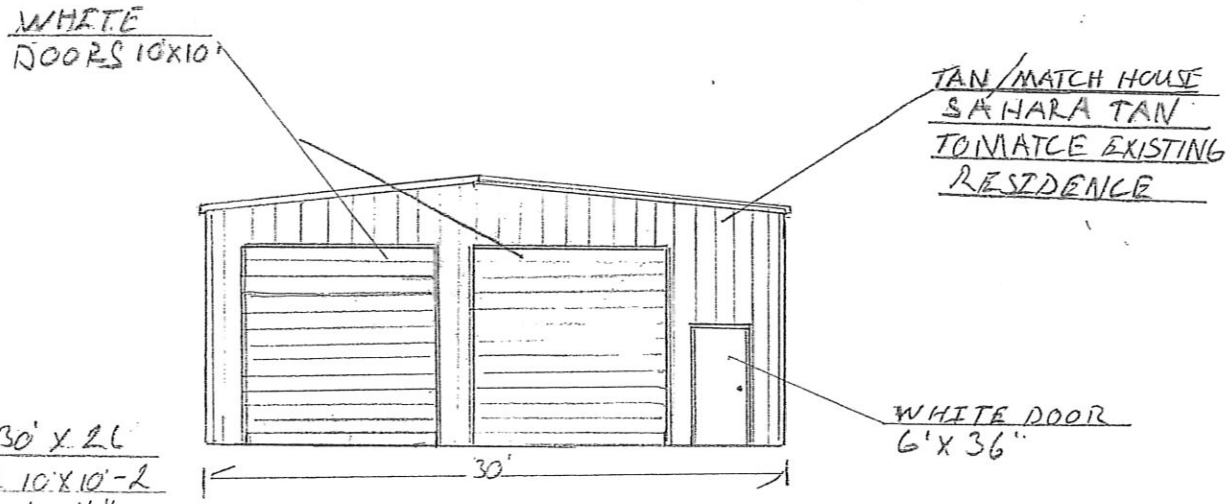
APPROVAL DATE: 07/13/2018

EXPIRATION DATE: 07/13/2019

Building Official: Jack T. Leonard

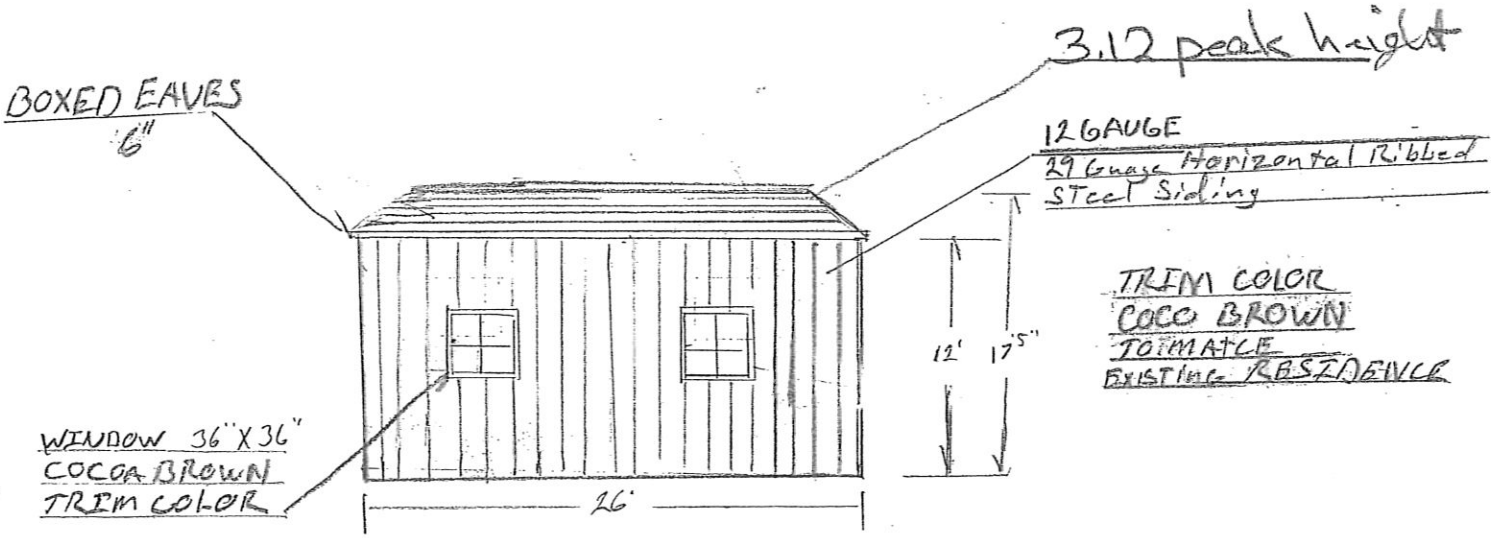
THIS CERTIFICATE IS THE PROPERTY OF THE COUNTY OF SAN BERNARDINO AND MAY BE REVOKED FOR JUST CAUSE

Noroo Coating
Paint Coil Company



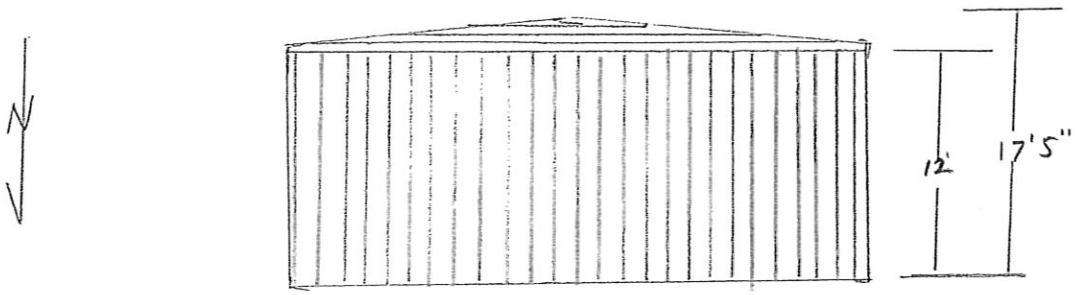
Front (Facing-S)

Building 30' X 26'
GRAGE DOOR 10'X10'-2
VAN DOOR 3'X 6½"
MANUFACTURE
NTERSTATE STEEL'

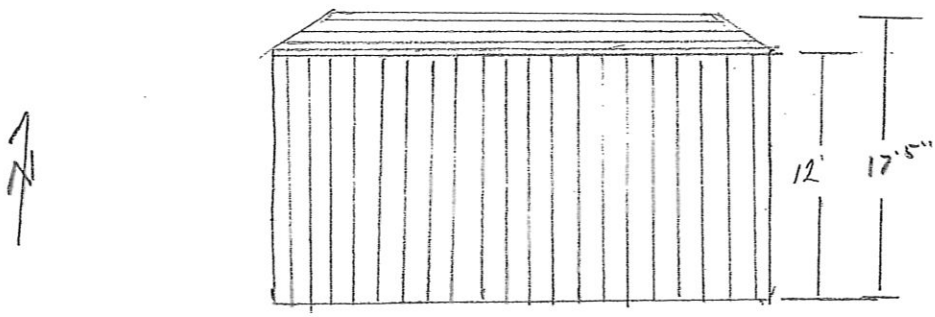


Side (Facing E)

30
Scale



Back (Facing S)



Side (Facing W)

30
Scale

160

6' CHAIN LINK

P/L

10'

FAULT TRACE

N

5' RANCH RAIL FENCING

48'

50'

86'

5' RANCH RAIL FENCING

20'

30'

PROPOSED LOCATION

PANEL

110'

Uninhabitable
No Restrooms
Steel Storage

26'

780 SF

"Private Road"
15' EASEMENT"

55'

Concrete Driveway
To be installed

4'

15'

4' PLANTER

80'

FUTURE ELECTRICAL LINE

P/L

P/L

N

20'

5' RANCH RAIL FENCING

43'

39'

D/W

SCHERRY LAMARCHE
35860 HOLLY AVE
909-790-7283
PARCEL NUMBER 2
0320 2176

PARCEL AREA	49,500 SF
FOOTPRINT	3,448 SF
ADDITION	780 SF
TOTAL FOOTPRINT NEW + EXISTING	4,228 SF
LOT COVER	12 %

3,448 SF

12'

6' WROUGHT IRON FENCING

4

PANEL

4" CLAY SEWER

THREE CAR GARAGE

EXTRA PARKING ON DRIVEWAY

6' WROUGHT IRON FENCING

PROPOSED LOCATION

P/L

20'

12'

57'

P/L

30'

38'

HOLLY AVE

F/H

FIRE HYDRANT DETAIL

C/F

P/L

C/F

18'

36'

NOT TO SCALE

200' N/O PL

35860 HOLLY AVE

30'

A1

CITY OF YUCAIPA
DEVELOPMENT SERVICES DEPARTMENT
AGENDA REPORT

TO: Honorable Chairman and Planning Commissioners

FROM: Benjamin J. Matlock, Planning Manager/City Planner

FOR: Planning Commission Meeting of March 18, 2020

SUBJECT: **City of Yucaipa** (Case No. 19-105/CUP): A Conditional Use Permit for the development of the Five Winds Ranch – El Dorado Park facility, which includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities; Located at 37216 Oak Glen Road, on the north side of Oak Glen Road, east of Pendleton Avenue and south of Carter Street; APNs 0321-121-43, 0321-121-44, and 0321-111-03.

RECOMMENDATION:

That the Planning Commission conduct a public hearing and:

A) Approve the Conditional Use Permit, subject to the Conditions of Approval as contained in the Agenda Report; and

B) Adopt the Findings as contained in this Agenda Report; and

C) Adopt a Mitigated Negative Declaration finding the mitigation measures and standard measures and procedures will reduce the potential level of environmental impact to less than significant; and,

D) Direct Staff to file a Notice of Determination.

BACKGROUND:

Area Land Use Designations; Improvement Levels; and existing Land Uses:

Site:	P (Parks) and OS (Openspace)	IL-4	Existing El Dorado Park facility, and Five Winds Ranch building
North:	County of San Bernardino - OG/RL-10	N/A	Single family residential unit
South:	County of San Bernardino - OG/RL-5	N/A	Single family residential units
East:	County of San Bernardino - OG/RL-5 and OG/AG-AP	N/A	Vacant
West:	RL-1 (Rural Living – 1 acre minimum)	IL-3	Vacant

Prior Actions:

On October 26, 2009, City Council approved a Memorandum of Understanding (MOU) with the Yucaipa Valley Conservancy (YVC) and the Wildlands Conservancy to transfer two parcels (APNs. 0321-111-03 and 0321-121-44), approximately 334 acres in area, to the City of Yucaipa for the purpose of preserving the property as permanent open space and habitat mitigation, as well as to allow for other public uses. On January 25, 2016, City Council approved a MOU between the YVC and the City for the acquisition of the 10.78 acre property (located at 37076 Oak Glen Road - Five Winds Ranch). The subject property is located north of Oak Glen Road and south of El Dorado Ranch Park and includes an Adobe house, a newer house addition and a barn structure.

On September 26, 2016, City Council approved the creation of the Five Winds Ranch Improvement Advisory Council Committee and approved the following group representative appointments: Trails and Open Space Committee; Youth Advisory Committee; Planning Commission; Economic Development Advisory Committee; and Parks and Recreation Commission.

On April 10, 2017, City Council approved and authorized the Mayor to execute a contract with Architerra Inc., A California Corporation - Architerra Design Group (ADG), to provide professional services for Landscape and Architectural Conceptual Plans, a Market Feasibility Study and Community Outreach for the Five Winds Ranch Park Project.

On June 11, 2018, the City Council reviewed the conceptual plan prepared for the Five Winds Ranch Park that was developed based on the input from the outreach efforts and the Five Winds Ranch Improvement Advisory Council Committee, and provided directed staff to proceed with the development of a Conditional Use Permit for the site based on the approved concept plan.

DISCUSSION:

Location and Setting:

The Project site is located within a 350 acre site along the north side of Oak Glen Road, east of Pendleton Avenue, in Yucaipa, California. Improvements are proposed to 48.5 acres of the site to

create the proposed Park facility, which encompasses the southern portion of Assessor's Parcel Number (APN) 0321-151-44 as well as APN 0321-121-43 (Five Winds Ranch). Currently there are restroom facilities and parking lot improvements are located near the eastern boundary of the site as part of the El Dorado Park site. The existing Five Winds Ranch, including the Adobe house, barn, and outlying structures, is located on approximately 10.78 acres in the western half of the park site. Past agricultural uses have occurred on portions of the site.

The Five Winds Ranch portion of the project is designated as Park (P) in the City of Yucaipa (City) General Plan. The City's General Plan assigns the Open Space (OS) designation to the balance of the site. Property directly north of the project site is designated as OS by the City. The City has designated the undeveloped land located directly west of the park site as Rural Living. The City has approved development of residential uses (Tentative Tract Map 19974 (Wilson Creek Estates) and Tentative Tract Map 18593) on the properties west of the project site. Rural single-family residences located to the south (across Oak Glen Road) and open space east of the site are located in unincorporated County of San Bernardino and designated OG/RL-5 (Oak Glen/Rural Living) and OG/AG (Oak Glen/Agriculture) by the County.

Project Design and Description:

The proposed Project consists of a Conditional Use Permit for the development of the Five Winds Ranch/El Dorado Park facility ("Park") on an approximately 48.5 acres of a 347 acre site. Currently, the El Dorado Park is established as an open space area with hiking, equestrian, and mountain bike trails, and includes an existing restroom facility, parking lot which can accommodate horse trailers, and trail access. The proposed Five Winds Ranch site would be further developed to connect with the existing El Dorado Park, and integrate the two different sites as one unified park facility location. The proposed Park would include a variety of recreational, including the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, sites for group and individual camping facilities, and other outdoor recreational amenities. Specifically, the Project includes the following features:

Proposed Phase I Improvements:

- Exterior modifications to an existing structures: The modifications to the exterior of the Adobe house at Five Winds Ranch will include development of a veranda area with a temporary shelter/tent for events, a courtyard area with a hardscape surface that will be colored concrete (tan) or pavers and a lawn area (150' x 150') for multi-use functions, as well as construction of a permanent storage building for maintenance.

- The existing barn will be relocated and repurposed to include a kitchenette and counters. The barn will include a gaming room with arcade games. The games will be youth friendly such as ping pong, board games and arcade games.

- Interior modifications to the existing structures: The modifications to the interior of the Adobe house and newer house addition will include a welcome center/market area, a meeting/lounge areas, ADA compliance improvements in the current living room area, remodel and expansion of the existing breezeway (reorient roof line). Improvements to the

newer addition area include the development of dressing rooms, restrooms, and a new kitchen, upgraded with catering equipment and ADA compliance improvements.

- Park Ranger cabin with signage for visitors as to where to check in depending on the time of arrival.

- Parking area and roadways – road surface will be asphalt where needed for maintenance and fire access. The asphalt roads will be limited to 20 foot wide (two directions) and 12 foot wide (one direction), paraffin-stay lock decomposed granite (d.g.) with colored concrete (tan) or paraffin d.g. for the ADA parking area.

- Acceleration, deceleration lane and turn pocket improvements on Oak Glen Road and entry monument/gateway signage at Oak Glen Road.

- Multi-use non-motorized d.g. trails with rail fencing: The trails will connect with the existing El Dorado Ranch Park trails to the east and future master plan trails to the west.

- An information/public outreach kiosk will be added along with water fountains for trail users.

- Group/individual campsite areas with amenities (equestrian and other groups): Equestrian amenities include pipe corrals/pins, warm up pin, wash rack with pea gravel, and hydrant/spigots. Campsites will also include back in double wide trailer camp units. A low-ropes course (par course) is also proposed. The group/individual campsite area has been modified to minimize parking, but will require drop off areas for loading/unloading and ADA parking.

- Overnight cabin units will be installed, each with a shower and small bathroom. One or more cabins will be ADA compliant with accessible pathway and parking.

- The camping areas will include a group gathering area and propane fueled fire pit area. Dual propane tanks will be used for the service areas. Areas to barbeque individually and as a group are also included.

- Archery range with hay bale markers and 10-foot wide target lanes.

- Restroom building at the group camping area. Enhanced improvements to existing El Dorado restroom will also be provided.

- Drainage swales and pedestrian bridges with enhanced boulder placements and pedestrian foot bridges. Vegetative barriers along the west, east and south edge of the park.

- Temporary shelter/tent for special events and receptions.

- Additional parking stalls will be added to the existing parking lot area at the El Dorado parking facility.

Proposed Phase II Improvements:

- Additional parking area (paraffin –stay lock d.g.) westerly trails and roadways.

- Five to ten additional overnight cabin units will be installed, each with a shower and bathroom. One or more cabins will be ADA compliant with accessible pathways and parking.

- Wetland pond area with a dock and wood duck, owl and bat boxes. The pond will include a waterfall inlet with a natural boulder aesthetic. This area will include picnic table seating with areas along with decomposed granite pathways.

- Native landscaped areas will include:
    - Native grass meadows with views from the terrace.
    - Native wildflower garden highlighting the existing California Poppies at Five Winds Ranch.
    - Native habitat restoration areas with native landscaping on the slopes.

- Additional trails to connect trails from the adobe house to the west and through the gardens.

The Park development will also include the planting of additional landscaping and trees within the park area in addition to those that have been previously planted during the City's annual "Make a Difference Day" events. As part of these landscape features, an ornamental vineyard may be planted west of the ranch building and/or near Oak Glen Road to integrate the agricultural theme proposed by the Yucaipa Valley Wine Alliance's American Viticulture Area (AVA) petition, and the associated visioning that is occurring within the City for the AVA implementation.

Consistency with the General Plan and Development Code:

The proposed project consists of the development of a unified Park facility. The proposed Project has the following characteristics:

CRITERIA	PROPOSAL	COMPLIANCE WITH GENERAL PLAN AND DEVELOPMENT CODE
Land Use	Park facility, including the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities.	**Yes.** The Parks and Open Space Land Use District allows for publicly owned parks, playgrounds, recreational uses and facilities, as well as publicly owned picnic areas, publicly owned restroom facilities and parking areas, and publicly owned fixed accommodation campgrounds, including cabins, cottages, and yurts.
Building Height	The site would utilize existing buildings, and also include the construction of overnight cabins. None of existing or future buildings would exceed one story.	**Yes.** The maximum structure height permitted is 45 feet.
Building Coverage	0.06%	**Yes.** The Maximum Building Coverage is 40%
Open Space and Landscaping	The site provides 98.9% of landscaping/open space.	**Yes.** The minimum amount of Open space shall exceed 60%
Building Setback	• Existing Five Winds Ranch is 490 feet to Oak Glen Road • Existing Five Winds Ranch is 750 feet to western property line	**Yes.** The Parks Land Use District has the following setbacks: • Front yard setback- 15 feet • Side Yard Setback - 10 feet
Parking Spaces	194 parking spaces, including 9 accessible spaces.	**Yes.** 177 parking spaces are required to provide for the peak demand of the site.

The project meets or exceeds the City's General Plan and Development Code standards for the above referenced items as well as for access, site design, and setbacks.

The proposed Project is located within the Parks and Open Space Land Use District. Pursuant to the General Plan, the P District is designed to provide "areas for recreational and park facilities for the general public. This includes active and passive uses such as parks, trails within parks, campgrounds, athletic fields, playgrounds, sports complexes, and equestrian facilities. Ancillary public facilities for recreational opportunities may be permitted." The development of the Five Winds Ranch is referenced as a future park, and its development is also included within the City's Parks Master Plan. The project design also integrates the facility with the existing El Dorado Park facility, and augments the existing recreational features for that site. Therefore, the proposed use and site improvements are consistent with the General Plan. In addition, the proposed Project supports a number of General Plan policies. These include the following:

- CDL-1.4 Places for Recreation and Conservation. Provide parks, recreational facilities, and multi-functional open spaces in sufficient quantities and in a manner that is consistent with the Emerald Collar articulated in the Parks, Recreation, Trails, and Open Space Element.
- PR-1.2 Park Design. Provide a variety of park types (e.g., local, community, special use) and mix of amenities that are tailored to meet the active and passive recreational needs of Yucaipa residents of all ages and abilities.
- PR-1.3 Park Distribution. Locate parks to allow convenient access to appropriate park facilities; seek sites to locate additional neighborhood parks in the Central Core and Dunlap Acres area south of Yucaipa Boulevard.
- PR-1.5 Shared Use Facilities. Maintain and strengthen partnerships with the school district, college, and other entities for the shared use, maintenance, and development of parks and recreational facilities.
- PR-2.1 Responsive Programs. Provide a broad and flexible range of recreation services, programs, activities, and opportunities that are responsive to the needs and interests of the community.
- PR-2.2 Community Partnerships. Collaborate with public, nonprofit, and private organizations to develop health, wellness, and recreation programs and services that meet the needs of the community.
- PR-3.1 Trail Development. Develop a multipurpose trail system for hiking, biking, and equestrians throughout Yucaipa, focusing on drainage channels, hillsides, parks, and other public use areas.

Prior to adoption of the General Plan update in April 2016, most of the City parks were designated Institutional "IN" by the official Land Use Map. In keeping with best practices and to accurately depict and describe allowable land uses, a "P" (Park) land use designation was established by the General Plan. As part of the Parks Land Use designation, publicly-owned parks, playgrounds, recreational uses and facilities, and such buildings and structures that are accessory thereto, are permitted within the Land Use Designation. However, a Conditional Use Permit has historically been the entitlement used for public facilities and to complete any necessary environmental review process for a public park project. As such, the proposed Project is provided for the Commission's input and review, and to formally adopt a Mitigated Negative Declaration are part of the environmental review process.

Processing and Procedural Actions:

Notices of the project were sent to surrounding property owners within a 1,300-foot radius of the project site, and one (1) written response and one (1) request for a Notice of Decision were received. The written response noted concerns about the Project and potential impacts to wildlife. A Biological Resources Assessment Report was prepared for the Project, and found that no significant impacts would occur with the proposed Project, and the sensitive habitat within the El Dorado park site would be completely avoided with the Project design. In addition, a Traffic Impact Assessment was prepared for the Project, and found that no significant traffic impacts would occur.

Environmental Review:

An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared pursuant to the California Environmental Quality Act (CEQA) for this Project, and considers the potential environmental impacts that could occur as a result of the development of this Project. All available evidence indicates that any potentially significant impacts can be mitigated to a less-than-significant level, and these mitigation measures have been incorporated into the Conditions of Approval that are proposed for this project. The IS/MND was circulated for the required 20-day public review starting October 21, 2019 and ending on November 12, 2019. No comments were received during the public review process.

The IS/MND assessed all of the 21 topical areas, as identified by Appendix G of the CEQA Guidelines, To provide additional information, an Air Quality and Greenhouse Gas Analysis, Cultural Resources Evaluation, Noise and Vibration Impact Analysis, Biological Resources Assessment Report, and a Focused Traffic Impact Analysis was prepared for the Project. Based on the evaluation, a total of three (3) mitigation measures are proposed, relating to biological and cultural resource impacts. The cultural resource mitigation measures were derived through consultation with the San Manuel Band of Mission Indians and the Soboba Band of Luiseno Indians, and identify the standard protocol to be used should there be any inadvertent discoveries. The biological measure requires a preconstruction survey to ensure that there are no impacts to burrowing owls.

CONCLUSION:

The proposed Conditional Use Permit is consistent with the P and OS Land Use District and the General Plan and Development Code standards for the District. The Project is a permitted use, and meets standards for access, lot size and dimension, setbacks, and site design. Appropriate conditions of approval have been applied to the project to ensure compliance with City, state, and federal regulations, and to mitigate any potentially significant environmental impacts The required findings for approval of the Conditional Use Permit have been made and are attached.

FISCAL IMPACT:

The proposed project would be generally funded through the General Fund and Development Impact Fees; however, the City has been working to successfully secure grants to help support the construction cost of the facility.

Attachments:
- Conditional Use Permit Findings
- Land Use District & Location Map
- Site Photos
- Conditions of Approval
- Project Comment Letters
- Mitigated Negative Declaration (Appendices provided with online packet located at http://yucaipa.org/government/meeting-agendas/)
- Site Plan

Approved by:

Benjamin J. Matlock, Planning Manager/City Planner
Development Services Department

FINDINGS: CONDITIONAL USE PERMIT NO. 19-105

1. The proposed project will not have a significant impact on the environment because the required mitigation measures will reduce the potential level of impact to less than significant.

2. The site for the proposed use is adequate in size and shape to accommodate the proposed use and all yards, open spaces, setbacks, walls and fences, parking areas, landscaping, and other features pertaining to the application, because the site is large enough and the design is configured to accommodate the proposed Project and accompanying features.

3. The site for the proposed use has adequate access, meaning that the site design incorporates street and highway limitations, because the site has adequate access from Oak Glen Road, a City maintained road. A Traffic Impact Analysis was completed LSA Associates, Inc. in May, 2019, to examine the potential circulation impacts from could result from the Project. The Analysis noted that the Project will include roadway improvements at the Five Winds Ranch entrance, including a deceleration lane, acceleration lane, and turn-in lane that has been designed pursuant to the American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highway and Streets manual (AASHTO Manual), and that these improvements would ensure safe ingress and egress to the site.

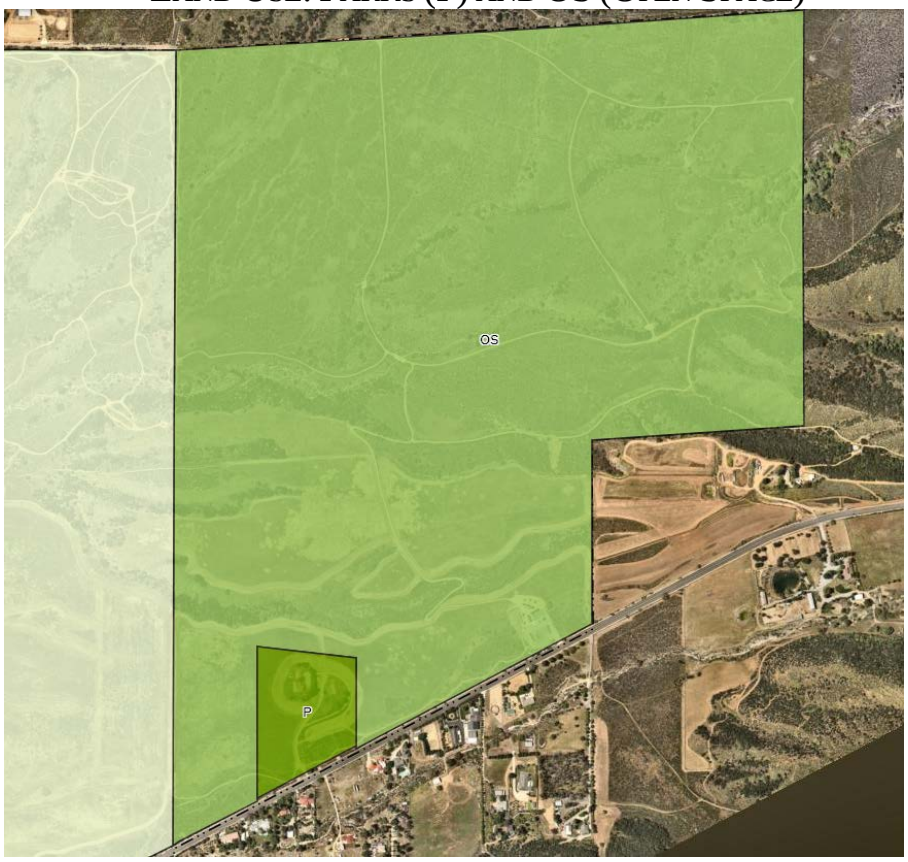
4. The proposed use will not have a substantial adverse effect on abutting property or the permitted use thereof, meaning that the use will not generate excessive noise, vibration, traffic, or other disturbances, because: 1) The project design and conditions of approval have addressed these concerns; 2) Improvements will be conditioned to occur prior to completion of the site development, including compliance with the City's Development Code and its provisions for commercial and industrial development projects; 3) The buildings locations relative to the property lines meets or exceeds the setback requirements in the P and OS Land Use District, and the distance of the proposed uses from adjoining properties would not create potential impacts, including those related to noise, as assessed from the Technical Noise and Vibration Impact Analysis Memorandum was completed LSA Associates, Inc. in May, 2019; 4) mitigation measures and standard conditions of approval are included to reduce impacts of the Project; 5) Adequate internal circulation and parking is available for Fire Department access and parking for all of the structures; 6) Adequate on-site retention of storm water run-off will occur. In addition, the use will not substantially interfere with the present or future ability to use solar energy systems because the height of the existing and proposed buildings will not substantially hinder the use of such devices on surrounding properties.

5. The proposed use is consistent with the goals, policies, standards, and maps of the General Plan and any applicable plan, because the proposed Park is permitted in the P and OS Land Use Districts, per Yucaipa Development Code Section 84.0375 and 84.0395, respectively, and its development is contemplated in the General Plan and the City's Parks Master Plan, and was supported by substantial community outreach, including the input received from the Five Winds Ranch Improvement Advisory Council Committee.

6. The lawful conditions stated in the approval are deemed necessary to protect the public health, safety, and general welfare, because they ensure adequate circulation, drainage, and compatibility with surrounding land uses.

7. The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities, because there are no obstructions to the collection of solar energy or the natural movement of wind toward or around surrounding properties.

LAND USE: PARKS (P) AND OS (OPEN SPACE)



LOCATION

City of
Yucaipa
El Dorado Ranch Park
37216 Oak Glen Road

CONDITIONAL USE PERMIT

ON-GOING CONDITIONS/GENERAL REQUIREMENTS:

PLANNING DIVISION (909) 797-2489 EXT. 224

1. This Conditional Use Permit is for the development of the Five Winds Ranch – El Dorado Park facility, which includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities, located at 37216 Oak Glen Road; APNs: 0321-121-43, 0321-121-44, and 0321-111-03. Any alteration or expansion of these facilities, or increase in the developed area of the site from that shown on the approved site plan, may require the submission of a new application or an additional application for Revisions for review and approval.

2. The applicant shall defend, indemnify, and hold harmless the City, its agents, officers, and employees from any claim, action or proceeding attacking or seeking to set aside, void or annul the approval of all or part of the matters applied for, or any other claim, action or proceeding relating to or arising out of such approval. This obligation includes the obligation to reimburse the City, its agents, officers and employees for any court costs or attorney fees which the City, its agents, officers, or employees are required by a court to pay as a result of such claim, action or proceeding. The City agrees to notify the applicant of any such claim, action or proceeding promptly after the City becomes aware of it. The City may participate in the defense of the claim, action or proceeding, but such participation will not relieve the applicant of applicant's defense and indemnification obligations, including City expenses.

3. This Conditional Use Permit is for a phased project**.**

4. The applicant/owner shall pay a fee of $2,406.75, pursuant to Senate Bill 1535. This fee shall be submitted to the Planning Division within three (3) days after the effective date of conditional approval along with a $50.00 administrative handling fee required by the Clerk. **Payments shall be made with a Check, Money Order or Cashier's Check for $2,465.75 made payable to the "Clerk of the Board".** The Planning Division shall then file the Notice of Determination within three (3) days after the effective date of conditional approval. The applicant should be aware that Section 21089(b) of the Public Resources Code provides that any project approved under CEQA is not operative, vested or final until the required fee is paid. Proof of fee payment will be required prior to issuance of building permits.

5. All conditions of this Conditional Use Permit are continuing conditions. Failure of the applicant and/or operator to comply with any or all of said conditions at any time may result in the revocation of the permit granted to use the property.

6. The applicant/owner shall maintain in good condition at all times all permanent plantings as identified on the approved landscape plan.

7. Mail delivery shall be by neighborhood boxes or other delivery as approved by the U.S. Postal Service.

8. All signs proposed by this project may only be lit by steady, stationary, shielded light directed at the sign, by light inside the sign, by direct stationary neon lighting or by an alternating lighting system that changes no more than once per hour. The glare from the luminous source shall not exceed one-half (0.5) foot candle.

9. Parking and on-site circulation requirements shall be maintained at all times.

10. Noise levels shall not exceed City Standards as required by Development Code Section 87.0905(b). Amplified music shall be prohibited between 10pm and 7 am.

11. The septic system shall be maintained so as not to create a public nuisance and shall be serviced by a County permitted pumper.

12. All refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that visual and public health nuisances are minimized.

13. The applicant shall implement the approved “Solid Waste Recycling Plan” for any new commercial, industrial, or institutional uses located on the property. The developer and all occupants of the property shall make a good faith effort to fully comply with each component of the approved Plan. Any proposed revision to this Plan shall be subject to the review and approval of Yucaipa Disposal, Inc. (909) 797-9125.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

14. This project is protected by the Yucaipa Fire Department/California Department of Forestry and Fire Protection. Prior to any construction occurring on any parcel, the applicant shall contact the Fire Marshall for verification of current fire protection development requirements. All new construction shall comply with the adopted California Fire Code and all applicable statutes, codes, ordinances, standards and policies of the Yucaipa Fire Department/CalFire.

15. This project is in a Fire Safety Review Area 1. This is a high fire hazard area. This project shall comply with the construction and development standards for a FR-1 Area. Contact the Building & Safety Division for FR-1 Area construction and development standards.

16. Fire Department access roads and/or public/private streets shall meet the Fire Department minimum width standard of twenty-four (24) feet. Within FR-1 zone minimum width shall be twenty-six (26) feet. Access roads shall be paved (asphalt/concrete) and in place prior to placement of combustible material on site. Fire Department minimum paving thickness shall be no less than four (4) inches. This standard shall not lessen other agency requirements.

17. Fire Department access roadways and/or public/private streets and driveways shall not exceed 12% grade (please note: Engineering Division requirements may be more restrictive).

18. Cul-de-sac and dead-end streets shall not exceed 350 feet in FR-1 areas, and in all other areas, cul-de-sacs shall not exceed six hundred (600) feet in total length, unless otherwise approved by the Fire Marshall.

19. Required fire flow for this project, is determined by California Fire Code Appendix 'B'. System shall be looped with minimum eight (8) inch mains; six (6) inch laterals; six (6) inch risers; six (6) inch diameter hydrants with one 2 ½" outlet and one 4" outlet.

20. Approved fire hydrants capable of supplying required fire flow shall be provided to all premises upon which facilities, buildings or portions of buildings are constructed or moved within the jurisdiction. When any portion of the facility or building protected is in excess of 400 feet from a fire hydrant on a public street, as measured by an approved route around the exterior of the facility or building, additional fire hydrants, meeting the required fire flow, shall be provided.

21. Fire hydrants shall be installed at locations to be determined by the California Fire Code Appendix "C". Required fire flow to be determined by the California Fire Code Appendix "B". Minimum fire flow shall not be less than 1500 gpm.

ENGINEERING DIVISION (909) 797-2489 EXT. 228

22. Submit WQMP Plan for Approval.

23. The natural drainage courses traversing the site shall not be occupied or obstructed.

24. Applicant shall demonstrate that the site does not create concentrated discharges to adjacent properties and/or public right-of-way in excess of historical flows. If project does create concentrated or sheet flows off-site that are greater than historical, the applicant shall demonstrate that the downstream facilities can accommodate flows; otherwise, applicant shall provide on-site detention for excess flows in accordance with the approved WQMP.

25. Adequate provisions shall be made to intercept and conduct the tributary drainage flows around or through the site in a manner which will not adversely affect adjacent or downstream properties at the time the site is developed.

26. Road sections within and/or bordering the project shall be designed and constructed with curbs, gutters, and sidewalks to City Road Standards, and in accordance with the General Plan Circulation Element.

27. Final improvement plans and profiles shall indicate the location of any existing utility facility which would affect construction. Existing utility poles shall be shown on the improvement plans and relocated as necessary without cost to the City.

28. Non-vehicular access shall be indicated on the Site Plan on Carter Street and along the rear of double frontage lots.

29. Continuous water spraying or other approved methods must be used during grading operations to control fugitive dust.

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF A GRADING PERMIT:

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

30. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

31. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warnings, signage, gates, lifts and walking surface material. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site. California Building Code (CBC) 11A and 11B.

    a. City of Yucaipa enforces the State of California provisions of the California Building Code disabled access requirements. The Federal ADA standards differ in some cases from the California State requirements. It is the building owner's responsibility to be aware of those differences and comply accordingly.

    b. Disabled access parking shall be located on the shortest accessible route. Relocate parking spaces accordingly.

32. Buildings on the site shall be accessible per California Building Code (CBC) 11B.

33. The building(s) shall meet all exiting requirements of Chapters 10 and 11 of the California Building Code.

34. Site Facilities such as parking (open and covered), recreation facilities, and trash dumpsters, shall be accessible per California Building Code (CBC) 11A, 11B and 31B.

35. Separate submittals and permits are required for all accessory structures such as but not limited to, trash enclosures, patios, block walls and storage buildings.

36. Pursuant to California Business and Professions Code Section 6737, this project is required to be designed by a California licensed architect or engineer. Based on change of use and potential exiting and fire life safety improvements.

37. A tree removal plan, permit and preconstruction inspection, in compliance with the City's Plant Protection and Management Ordinance, shall be approved prior to any land disturbance and/or removal of any trees or plants.

38. Any change of occupancy will require submission of plans for approval to Building and Safety. It is the applicant's responsibility to contact the local Building and Safety Division for a pre-construction inspection prior to occupancy of the building(s).

ENGINEERING DIVISION (909) 797-2489 EXT. 228

39. Applicant shall submit a Notice of Intent and comply with the requirements of the General Construction Activity Storm Water Permit from the State Water Resources Control Board if the project site is 1 acre or greater. In addition, the Storm Water Pollution Prevention Plan (SWPPP) is required to be submitted to the City Engineer for review and approval.

40. Prior to the alteration of any wetland habitats, the required permits or authorized clearance shall be obtained from the Department of Fish and Game in accordance with the Section 1600 et. seq. of the State Fish and Game Code, from the United States Army Corps of Engineers in accordance with Section 404 of the Clean Water Act, and from the California Regional Water Quality Control Board Santa Ana Region in accordance with Section 401 of the Clean Water Act.

41. Groundwater pollution from urban run-off water generated by the project shall be mitigated using various structural and non-structural best management practices (BMPs), per the requirements of the California Regional Water Quality Control Board, Santa Ana Region and/or as indicated in the "New Development/Redevelopment Guidelines." All provisions of the Water Quality Management Plan (WQMP) consistent with the 2010 MS4 permit and most

recent regulatory mandates shall be met, including but not limited to approval of a Preliminary WQMP.

42. The applicant shall provide documentation indicating that the WQMP, grading plan, erosion control plan and landscape plan are consistent with each other. The documentation shall indicate that each document has been reviewed by the applicant for consistency.

43. The applicant's plans indicate approximately 1.1% of the site to be improved with impervious surfaces. Design features shall be included to direct storm water run-off flows into landscaped pervious areas before any run-off flows into public rights-of-way.

44. In addition to the drainage, traffic related, or other requirements stated herein, other "on-site" or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to the City Engineer.

45. A thorough evaluation of the structural road section, to include parkway improvements, from a qualified materials engineer, shall be submitted to the Engineering Division.

46. Existing City roads which will require reconstruction shall remain open for traffic at all times, with adequate detours, during actual construction. A cash deposit may be required to cover the cost of grading and paving. Upon completion of the grading and paving to the satisfaction of the Engineering Division, the cash deposit will be refunded.

47. Prior to signing of the improvement plans, any proposed grading within the road right-of-way shall be done under the direction of a Soils Testing Engineer, hired by the applicant. Compaction tests of embankment construction, trench backfill, and all subgrades shall be performed at no cost to the City. Prior to placement of any base materials, and/or paving, a written report shall be submitted by the applicant's engineer to the City Engineer for review and approval.

48. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities at the time the site is developed.

49. Additional 3 foot dedication is required to provide for a 33 foot half-width right-of-way. A copy of the Grant Deed for all properties affected by this requirement must be submitted to the City Engineer prior to document preparation.

50. Oak Glen Road shall be designed as a water-carrying street and its water carrying capacity shall be maintained.

51. Three (3) copies of the grading plan shall be submitted to the Engineering Division for review and approval. A copy of the grading plan shall be submitted

to the Planning Division when graded slopes exceed five (5) feet in height. All on-site cut and fill slopes shall:

A. Be a part of the downhill lot when between individual lots, or as approved by the City Planner and City Engineer.

B. Incorporate recommendations of the approved geology and soils reports.

C. Be contour graded to blend with existing natural contours.

D. Be limited to a maximum slope ratio of two-to-one (2:1) and a maximum vertical height of thirty (30) feet. Setbacks from the top and bottoms of slopes shall be a minimum of one-half (1/2) the slope height or per CBC.

E. Preclude damage to the site and downstream properties during heavy storm run-off, especially during the construction stage by including a stringent slope, erosion, and sediment control program on the proposed grading plan. Any such damage allowed to occur will be the responsibility of the applicant.

PLANNING DIVISION (909) 797-2489 EXT. 224

52. Prior to grading, arrangements acceptable to the County Museum shall be made to have present during grading a qualified vertebrate paleontologist to monitor in the event paleontologic resources are encountered during rough grading. The monitor shall have the authority to temporarily suspend grading operations in the vicinity of such resources until they have been evaluated and appropriate data recovery measures implemented. The results of the monitoring shall be documented in writing and submitted to the County Museum for review prior to issuance of building permits. For more information, contact the County Museum at 909-307-2669.

53. **Mitigation Measure BIO-1:** There is moderate potential for burrowing owl to occur within the project area. A preconstruction survey prior to ground disturbance or vegetation clearing is recommended to avoid adverse effects to burrowing owl. The project area contains suitable habitat for nesting birds protected by the Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. LSA recommends that removal of vegetation be conducted between September 1 and January 31 (outside the nesting season) to avoid any impacts to nesting raptors or other birds protected by the Fish and Game Code and the MBTA. If vegetation removal is to occur during the nesting season (February 1 through August 31), a pre-construction nesting survey is recommended to be conducted by a qualified biologist prior to vegetation removal.

54. **Mitigation Measure TRI-1:** Treatment and Disposition of Cultural Resources.

In the event that Native American cultural resources are inadvertently discovered during the course of any ground disturbing activities, including but not limited to brush clearance, grading, trenching, archaeological testing, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

A. Avoidance and Preservation in Place: Avoidance and preservation in place shall be the preferred treatment for any and all discoveries of archaeological materials. Should the resource not be a candidate for avoidance or preservation in place, a resource-specific mitigation plan shall be developed, reviewed by all Parties, and implemented following the guidelines within item C below.

B. Temporary Curation and Storage for Removed Resources: For resources that cannot be left in place, they shall be temporarily curated in a secure location onsite at an agreed to location that is secure and accessed only by a limited number of on-site supervisors, specified Tribal monitors, and the archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversite of the process; and

C. Treatment and Final Disposition of Removed Resources: For resources that cannot be left in place, the landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Yucaipa with evidence of same:

    i. Accommodate the process for onsite reburial of the discovered items with the Consulting Tribes. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing, basic analysis, and other analyses as recommended by the project archeologist and approved by the Consulting Tribes have been completed, all documents should be at a level of standard professional practice to allow the writing of a report of professional quality;

    ii. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study, should the resources not be candidates for reburial. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be

accompanied by payment of the fees necessary for permanent curation;

iii. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the San Bernardino County Museum by default.

D. At the completion of all ground disturbing activities on the site, a Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City and Consulting Tribes. Should the resources be placed within a curation facility as a final treatment, copies of all reports will be provided to the facility to remain with the collection.

55. **Mitigation Measure TRI-2:** Inadvertent Discoveries of Human Remains/Funerary Objects

In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify the County Coroner, the landowner/Lead Agency, and SMBMI regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD and landowner/Lead Agency agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

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

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

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF A BUILDING PERMIT:

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

56. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

57. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warnings, signage, gates, lifts and walking surface material. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site. California Building Code (CBC) 11A and 11B.

    a. City of Yucaipa enforces the State of California provisions of the California Building Code disabled access requirements. The Federal ADA standards differ in some cases from the California State requirements. It is the building owner's responsibility to be aware of those differences and comply accordingly.

    b. Disabled access parking shall be located on the shortest accessible route. Relocate parking spaces accordingly.

58. Buildings on the site shall be accessible per California Building Code (CBC) 11B.

59. The building(s) shall meet all exiting requirements of Chapters 10 and 11 of the California Building Code.

60. Site Facilities such as parking (open and covered), recreation facilities, and trash dumpsters, shall be accessible per California Building Code (CBC) 11A, 11B and 31B.

61. Separate submittals and permits are required for all accessory structures such as but not limited to, trash enclosures, patios, block walls and storage buildings.

62. Pursuant to California Business and Professions Code Section 6737, this project is required to be designed by a California licensed architect or engineer. Based on change of use and potential exiting and fire life safety improvements.

63. A tree removal plan, permit and preconstruction inspection, in compliance with the City's Plant Protection and Management Ordinance, shall be approved prior to any land disturbance and/or removal of any trees or plants.

64. Any change of occupancy will require submission of plans for approval to Building and Safety. It is the applicant's responsibility to contact the local Building and Safety Division for a pre-construction inspection prior to occupancy of the building(s).

65. Three copies of a Landscape Documentation Package shall be submitted for Building & Safety Division review and approval.

ENGINEERING DIVISION (909) 797-2489 EXT. 228

66. Submit engineered road improvement plans to the City Engineer.

67. The WQMP shall be approved and the developer shall provide a financial mechanism for the maintenance of the detention basins which shall be set in place and approved by the City Engineer. The WQMP maintenance agreement shall be executed and recorded by the applicant.

PLANNING DIVISION (909) 797-2489 EXT. 224

68. The applicant/owner shall process a Condition Compliance Review through the City for verification of conditions prior to the issuance of building permits.

69. Water service shall be by Yucaipa Valley Water District. The Yucaipa Valley Water District letter dated July 29, 2019 is included as a Condition of Approval.

Submit evidence of service to Building and Safety at time of Condition Compliance review.

70. Sewage disposal shall be by Yucaipa Valley Water District. The Yucaipa Valley Water District letter dated July 29, 2019 is included as a Condition of Approval. Submit evidence of service to Building and Safety at time of Condition Compliance review.

71. In lieu of sewers, if connection and service is unavailable, then septic system(s) may be allowed pursuant to the following conditions:

    A. Soil percolation reports for private sewage disposal systems shall be approved by San Bernardino County Public Health Department, Environmental Health Services Division (909) 387-4666. An approved report shall be submitted to the City of Yucaipa Building and Safety Division at time of Plan Check.

    B. Compliance with the City's Local Agency Management Plan requirements.

    C. Dry sewers shall be installed at time of septic system installation. Within 3 months of sewer line availability, the project shall hook-up to sewer and abandon the use of the septic system.

72. Plans for food establishments shall be reviewed and approved by the S.B. County Public Health Department, Division of Environmental Health Services (909) 387-4608.

73. Verification of application for sign registration and plot plan approval by the Planning Division must be submitted prior to the issuance of a building permit for the installation, wiring, remodeling or reconstruction of any sign or portion thereof which requires a building permit.

74. The applicant shall submit a "Solid Waste Recycling Plan" for review and approval. This Plan shall address two (2) principal recycling programs: 1) the recycling of construction waste/debris during the demolition and/or development phase of the project, and 2) the recycling of the solid waste that is generated daily by each proposed use during the operational phase of the project. The construction waste component shall include: complete information on the individual or firm that will be responsible for implementing the recycling plan; complete information on all proposed recycling facilities that will receive waste products; and estimates of the volume or weight of each type of material that will be recycled. The operational waste component shall include: complete information on the location, access, sizes, and numbers of solid waste and recycling bins needed to serve each proposed use that is located within the project. For information on the types of waste disposal services that are

available, you may contact Yucaipa Disposal, Inc. at (909) 797-9125 for assistance.

75. Proof of fee payment of Fish and Game fees and/or County Administrative handling fees pursuant to California State Assembly Bill 3158 shall be submitted.

76. Provide detailed building elevations including materials, finishes, colors, and signage for all buildings for Planning Division review and approval prior to issuance of building permits. Building elevations shall be consistent with those approved by the Planning Commission.

77. **Mitigation Measure BIO-1:** There is moderate potential for burrowing owl to occur within the project area. A preconstruction survey prior to ground disturbance or vegetation clearing is recommended to avoid adverse effects to burrowing owl. The project area contains suitable habitat for nesting birds protected by the Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. LSA recommends that removal of vegetation be conducted between September 1 and January 31 (outside the nesting season) to avoid any impacts to nesting raptors or other birds protected by the Fish and Game Code and the MBTA. If vegetation removal is to occur during the nesting season (February 1 through August 31), a pre-construction nesting survey is recommended to be conducted by a qualified biologist prior to vegetation removal.

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

78. A greenbelt or fuel modification zone plan shall be required and bonded for this project. Fuel modification plan requirements shall be site specific to this project. The applicant shall submit a fuel modification plan to the Fire Department for review and comments or approval. Maintenance provisions of the fuel modification zone shall be approved by the Fire Department. Maintenance of the fuel modification zone, located in designated open space, and enforcement of the fuel modification zone, within the property of individual property owners, shall be the responsibility of a homeowners' association or other approved maintenance authority that is acceptable to the Fire Department.

79. Two sets of water delivery system plans, designed to meet the required fire flow for this project and/or development shall be submitted to the Fire Department for approval.

80. Applicant-developer shall provide the Fire Department with a letter from the water company serving the project-development, verifying that financial arrangements have been made and bonds posted for the required Fire Department approved water improvements.

81. Prior to any construction, the entire fuel modification zone required and approved by the Fire Department shall be completed. Any phased implementation of the required fuel modification zone shall be done only with prior approval of the Fire Department.

82. A fuel break of one hundred (100) feet (brush and weed clearance) is required prior to construction. The clearance shall be maintained on a year-round basis.

83. An additional fuel modification zone of 100 feet shall be provided on all side(s) of the proposed structure(s). Fuels in this zone are to be thinned and/or removed or otherwise modified to provide a reasonable level of fire defense protection to the proposed structure(s).

84. Fire hydrants shall be installed and operational as per approved water system delivery plans prior to any framing, construction, or delivery of combustible materials to project site.

85. A water storage and delivery system for temporary use during construction and meeting Fire Department fire flow requirements shall be installed prior to framing, construction, or delivery of combustible materials to project site.

86. An alternative type of construction providing a higher level of fire resistance is required. Contact the Fire Marshall or City Building Official for more information.

SUBJECT PROPERTY SHALL NOT BE OCCUPIED AND/OR USED FOR PURPOSES APPLIED FOR UNTIL THE FOLLOWING CONDITIONS HAVE BEEN MET:

BUILDING AND SAFETY DIVISION (909) 797-2489 EXT. 225

87. The site shall be developed in compliance with all current model codes. All plans shall be designed in compliance with the latest editions of the California Building Codes as adopted by the City of Yucaipa.

88. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warnings, signage, gates, lifts and walking surface material. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site. California Building Code (CBC) 11A and 11B.

    a. City of Yucaipa enforces the State of California provisions of the California Building Code disabled access requirements. The Federal ADA standards differ

in some cases from the California State requirements. It is the building owner's responsibility to be aware of those differences and comply accordingly.

b. Disabled access parking shall be located on the shortest accessible route. Relocate parking spaces accordingly.

89. Buildings on the site shall be accessible per California Building Code (CBC) 11B.

90. The building(s) shall meet all exiting requirements of Chapters 10 and 11 of the California Building Code.

91. Site Facilities such as parking (open and covered), recreation facilities, and trash dumpsters, shall be accessible per California Building Code (CBC) 11A, 11B and 31B.

92. Separate submittals and permits are required for all accessory structures such as but not limited to, trash enclosures, patios, block walls and storage buildings.

93. Pursuant to California Business and Professions Code Section 6737, this project is required to be designed by a California licensed architect or engineer. Based on change of use and potential exiting and fire life safety improvements.

94. A tree removal plan, permit and preconstruction inspection, in compliance with the City's Plant Protection and Management Ordinance, shall be approved prior to any land disturbance and/or removal of any trees or plants.

95. Any change of occupancy will require submission of plans for approval to Building and Safety. It is the applicant's responsibility to contact the local Building and Safety Division for a pre-construction inspection prior to occupancy of the building(s).

CDF FIRE DEPARTMENT (909) 797-2489 EXT. 246

96. Residential driveways shall be paved (asphalt/concrete) and shall have a minimum width of twelve (12) feet. Driveways of this standard shall serve no more than two single family dwellings and shall not exceed 12% in grade.

97. Fire Department access roadways and/or public/private streets exceeding one hundred fifty (150) feet in length shall have a Fire Department approved turn-around at the terminus (cul-de-sac). Minimum radius shall be not less than 40 feet.

98. Driveways exceeding 150 feet shall have a Fire Department approved turn-around at the terminus (hammer-head tee).

99. Fire Department access roadways and/or public/private streets and driveways shall extend to within one hundred fifty (150) feet of and shall give reasonable

access to all portions of the exterior walls of the first story of any building. An access road, approved by the Fire Department, shall be provided to within fifty (50) feet of all structures when the natural grade between access road and structure is in excess of 30%. Where an approved access road cannot be provided, a fire protection system shall be required and approved by the Fire Department.

100. The Development and/or project, and each phase thereof, shall have a minimum of two (2) remote points of access, including a secondary access, for fire and other emergency equipment and for routes of escape which will safely handle evacuations.

101. Street name signs shall be installed with approved names.

102. Manual operated gates across Fire Department access roadways, public and/or private streets and driveways, shall be equipped with approved emergency key-operated ("Knox" type) locks. For automatic gates, a "Knox" keyed emergency access switch shall be installed at location determined by Fire Department, and shall over-ride all command functions and open gate automatically upon activation. All automatic gates shall have a manual over-ride for use during loss of electric power. "Knox box" request forms are available from the Fire Department.

103. Address numbers shall be placed on all new and existing commercial and multi-family residential structures in such a manner as to be plainly visible and legible from the access roadway or street. Structures shall have numbers of 8" height, 3/8" stroke on contrasting background. Address numbers shall be illuminated so as to be visible and legible from access roadway or street. Industrial occupancies shall have address numbers of 12" height, ½" stroke and shall be illuminated so as to be visible and legible from access roadway or street. Where structure setback exceeds one hundred (100) feet from the access roadway or street, additional non-illuminated numbers 6" in height, 3/8" stroke, on contrasting background shall be displayed at property access entrance.

104. Commercial retail structures with rear access shall place address numbers on rear entry doorways, 4" in height, 3/8" stroke, on contrasting background.

105. Prior to final inspection, there shall be posted at each entrance of the complex an illuminated diagrammatic representation of the complex showing the locations of the viewer, the unit designations within the complex, and the locations of fire hydrants. The developer shall submit a drawing detail to the Fire Department for approval.

106. "No Parking – Fire Lane" signs shall be posted at locations designated by Fire Department. Fire lane curbs shall be painted red with white letters stating "No Parking – Fire Lane".

107. On-site fire hydrants capable of supplying the required fire flow shall be installed at locations identified by the Fire Marshall. System shall be looped with minimum eight (8) inch mains; six (6) inch laterals; six (6) inch risers; six (6) inch diameter hydrants with one 2 ½" outlet and one 4" outlet.

108. Approved fire hydrant pavement markers shall be installed.

109. A minimum of one 2A-10BC fire extinguisher shall be installed for each 3,000 sq. ft. of floor area. Travel distance to any one fire extinguisher shall not exceed 75 feet. Additional fire extinguishers, size and class to be determined by Fire Department, may be required. Fire extinguishers shall be serviced annually and shall have a current SFM service tag attached.

110. For each chimney used in conjunction with any fireplace or heating appliance in which solid or liquid fuel is used, an approved spark arrester shall be installed and visible from the ground. Spark arrester shall be of stainless steel, copper or brass, woven galvanized wire mesh, twelve (12) gauge, and minimum of 3/8" to ½" maximum openings.

111. A class "A" roof covering structure with "bird stops" shall be installed.

112. High Fire Hazard Areas FR-1 & FR-2: one-hour fire resistive construction is required for exterior walls. Contact Fire Marshall or City Building Official for more information.

113. The main electrical panel and all sub-panels shall be labeled on inside cover for all circuits.

114. Water heater (fuel fired) shall be property vented to exterior of structure. Water heater shall be seismic strapped to wall and be located 18" above a garage floor.

115. A one-hour fire rated, solid core, self closing door shall be installed between an attached garage and living space.

116. Commercial and industrial structures/occupancies and gated complexes shall have a "Knox box" system installed on the exterior of the buildings or complex. Location of device to be determined by the Fire Department. The box shall contain keys necessary to gain access and may contain pre-plans and MSDS information as required by the Fire Department.

117. Commercial exit requirements:

A. Required exit doors shall be maintained in an operable condition at all times.

B. Required exit doors shall swing outward and away in the direction of exit travel.

C. Obstructions shall not be placed in the required width of an exit. Exits shall not be blocked or locked shut or obstructed in any manner during business hours.

D. Exit paths shall be illuminated when structure is occupied.

E. Exit path illumination shall be supplied from two (2) sources of power when occupant load is one hundred (100) persons or more.

F. When exit way/exit pathway and/or exit doorway is not easily identified, additional exit signs shall be installed.

G. Exit signs shall be internally or externally illuminated by two lamps or shall be of the self-luminous type.

118. Submit to Fire Marshal's office building and/or structure plans for Fire Department Review.

ENGINEERING DIVISION (909) 797-2489 EXT. 228

119. Construct curb and gutter (with match-up paving) 22 feet from centerline.

120. Construct multi-purpose trail adjacent to site.

121. Construct driveway approach/entrance. Commercial driveways require radius type approaches.

122. Developer shall be required to place construction traffic control in public right-of-way during the construction of off-site improvements. Traffic control devices shall be maintained 24 hours a day 7 days a week as directed by the City Engineer.

123. The Applicant shall submit the signed original Water Quality Management Plan (WQMP) Certification form to verify consistency of the BPMs shown on the as-built grading plans and landscape plans. In case of inconsistency, the Applicant shall revise the WQMP to match the as-built plans.

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124. Parking and on-site circulation requirements shall be provided for as identified on the approved site plan.

125. All access drives shall be a minimum of 24 feet wide to facilitate two-way traffic.

126. Any lights used to illuminate the site shall be hooded and designed so as to reflect away from adjoining properties and public thoroughfares.

127. Provide a bicycle parking rack in a suitable location.

128. A video surveillance and recording system shall be installed that is capable of covering all exterior portions of the subject property, including parking areas and service alleys.

CITY OF YUCAIPA PLANNING DIVISION
PROJECT NOTICE

RECEIVED OCT 1 1 2019

DATE: October 03, 2019

CASE NUMBER: PL20190000105
APPLICANT: City of Yucaipa
PROPOSAL: Case No. 19-105/CUP: A Conditional Use Permit for the development of the Five Winds Ranch – El Dorado Park facility, which includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities, located at 37076 and 37216 Oak Glen Road
LOCATION: 37076 and 37216 OAK GLEN RD **APN:** 0321-121-43; 0321-121-44

ATTENTION PROPERTY OWNERS AND REVIEWING AGENCIES: The development proposal listed above has been filed with the City Planning Division. You are invited to comment because your property is near the proposed project. Your comments must be received by this office no later than October 17, 2019. Comments received after this date might not be considered in the decision. Please refer to this project by the applicant's name and case number indicated above. If you have no comment, no reply is necessary. If you have any questions regarding this proposal, please contact Benjamin Matlock at (909) 797-2489, ext. 261. You may send your comments to the City of Yucaipa Planning Division, 34272 Yucaipa Boulevard, Yucaipa, CA 92399, or via FAX to (909) 790-9203.

If you want to be notified of the project decision, print your name clearly and legibly on this form and mail it to the address above along with a self-addressed, stamped envelope. All decisions are subject to an appeal period of ten (10) calendar days after an action is taken.

COMMENTS (If you need additional space, please attach additional pages):

We are concerned about the impact to the wildlife. This area is a wildlife corridor; the increase in traffic will negatively impact the wildlife that is up here. These animals are the reason we moved up here. Also - Oak Glen Rd is already busy enough. We are not in support of this proposal

10/9/19

SIGNATURE [signature] DATE 10/9/19 AGENCY homeowner

PRINT NAME Irma Louise Fazenbake ADDRESS 36963 Lan Franc Rd

IF YOU CHALLENGE ANY DECISION REGARDING THE ABOVE PROPOSAL IN COURT, YOU MAY BE LIMITED TO RAISING ONLY THOSE ISSUES YOU OR SOMEONE ELSE RAISED IN WRITTEN CORRESPONDENCE DELIVERED TO THE PLANNING DIVISION AT, OR PRIOR TO, THE TIME IT MAKES ITS DECISION ON THE PROPOSAL OR, IF A PUBLIC HEARING IS HELD ON THE PROPOSAL, YOU OR SOMEONE ELSE MUST HAVE RAISED THOSE ISSUES AT THE PUBLIC HEARING OR IN WRITTEN CORRESPONDENCE DELIVERED TO THE HEARING BODY AT, OR PRIOR TO, THE HEARING.

DUE TO TIME CONSTRAINTS AND THE NUMBER OF PERSONS WISHING TO GIVE ORAL TESTIMONY, TIME RESTRICTIONS MAY BE PLACED ON ORAL TESTIMONY AT ANY PUBLIC HEARING ABOUT THIS PROPOSAL. YOU MAY WISH TO MAKE YOUR COMMENTS IN WRITING TO ASSURE THAT YOU ARE ABLE TO EXPRESS YOURSELF ADEQUATELY.

cc: Surrounding Property Owners
Yucaipa Valley Water District
Fire Department
Engineering Division
Building & Safety Division

CITY OF YUCAIPA PLANNING DIVISION
PROJECT NOTICE

DATE: October 03, 2019

CASE NUMBER: PL20190000105
APPLICANT: City of Yucaipa
PROPOSAL: Case No. 19-105/CUP: A Conditional Use Permit for the development of the Five Winds Ranch – El Dorado Park facility, which includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities, located at 37076 and 37216 Oak Glen Road
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If you want to be notified of the project decision, print your name clearly and legibly on this form and mail it to the address above along with a self-addressed, stamped envelope. All decisions are subject to an appeal period of ten (10) calendar days after an action is taken.

COMMENTS (If you need additional space, please attach additional pages):

RECEIVED OCT 11 2019

SIGNATURE Devona Lawrence DATE 10-8-19 AGENCY _____

PRINT NAME DEVONA LAWRENCE ADDRESS 37112 Chagall Road, Yucaipa

IF YOU CHALLENGE ANY DECISION REGARDING THE ABOVE PROPOSAL IN COURT, YOU MAY BE LIMITED TO RAISING ONLY THOSE ISSUES YOU OR SOMEONE ELSE RAISED IN WRITTEN CORRESPONDENCE DELIVERED TO THE PLANNING DIVISION AT, OR PRIOR TO, THE TIME IT MAKES ITS DECISION ON THE PROPOSAL OR, IF A PUBLIC HEARING IS HELD ON THE PROPOSAL, YOU OR SOMEONE ELSE MUST HAVE RAISED THOSE ISSUES AT THE PUBLIC HEARING OR IN WRITTEN CORRESPONDENCE DELIVERED TO THE HEARING BODY AT, OR PRIOR TO, THE HEARING.

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cc: Surrounding Property Owners
Yucaipa Valley Water District
Fire Department
Engineering Division
Building & Safety Division

5 WINDS RANCH
EL DORADO PARK

MITIGATED NEGATIVE DECLARATION (MND)

October, 2019

City of Yucaipa
Community Development Department
34272 Yucaipa Boulevard
Yucaipa, CA 92399

CITY OF YUCAIPA
INITIAL STUDY

ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Case No. 19-105/CUP 5 Winds Ranch – El Dorado Park

2. Lead Agency Name and Address: City of Yucaipa, 34272 Yucaipa Blvd., Yucaipa, CA 92399

3. Contact Person and Phone Number: Benjamin Matlock, (909) 797-2489 x 261

4. Project Location: 37216 Oak Glen Road, on the north side of Oak Glen Road, east of Pendleton Avenue and south of Carter Street; APNs 0321-121-43, 0321-121-44, and 0321-111-03.

5. Project Sponsor's Name and Address: City of Yucaipa, 34272 Yucaipa Boulevard

6. General Plan Designation: P (Parks) and OS (Openspace)

7. Description of the Project: Case No. 19-105/CUP: A Conditional Use Permit for the development of the Five Winds Ranch – El Dorado Park facility, which includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities.

8. Surrounding Land Uses and Setting: There are existing single-family residences to the south of the project site across Oak Glen Road. There as an approved residential development to the west of the project site, although none of the residences are currently constructed. Land to the east and north is undeveloped.

9. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement): None, although the City will pursue grant applications to support the funding of the Project development from other agencies.

Introduction

This section explains the background and purpose of this Mitigated Negative Declaration (MND), which is the environmental review document prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) for the development of a to establish the Five Winds Ranch facility, and to expand the El Dorado Park facility to integrate with the Five Winds Ranch, which will result in a unified recreational amenity within the City. The development includes the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, group and individual camping facilities, and other outdoor recreational amenities ("Project"). It establishes the context and scope for the MND, and outlines the process for reviewing the Draft MND and issuing the Final MND. The City of Yucaipa is the lead agency under CEQA. A "lead agency" is defined by Section 21067 of CEQA as "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment."

Environmental Review Process

This Initial Study and Notice of Intent (NOI) to adopt a MND is being circulated for agency and public review and comment for 20 days beginning October 21, 2019. All written comments must be received by 5:30 p.m. on November 12, 2019. Written comments or questions concerning this document should be directed to:

City of Yucaipa
ATTN: Benjamin Matlock
34272 Yucaipa Boulevard
Yucaipa, CA 92399

Detailed Project Description

Project Setting

The Project site is located within a 350 acre site along the north side of Oak Glen Road, east of Pendleton Avenue, in Yucaipa, California (Figure 1). Improvements are proposed to 48.5 acres of the site to create the proposed Park facility, which encompasses the southern portion of Assessor's Parcel Number (APN) 0321-151-44 as well as APN 0321-121-43 (Five Winds Ranch). Currently there are restroom facilities and parking lot improvements are located near the eastern boundary of the site as part of the El Dorado Park site. The existing Five Winds Ranch, including the Adobe house, barn, and outlying structures, is located on approximately 10.78 acres in the western half of the park site. Past agricultural uses have occurred on portions of the site.

The Five Winds Ranch portion of the project is designated as Park (P) in the City of Yucaipa (City) General Plan. The City's General Plan assigns the Open Space (OS) designation to the balance of the site. Property directly north of the project site is designated as OS by the City (Figure 2). The City has designated the undeveloped land located directly west of the park site as Rural Living. The City has approved development of residential uses (Tentative Tract Map 19974 (Wilson Creek Estates) and Tentative Tract Map 18593) on the properties west of the project site. Rural single-family residences located to the south (across Oak Glen Road) and open space east of the site are located in unincorporated

County of San Bernardino and designated OG/RL-5 (Oak Glen/Rural Living) and OG/AG (Oak Glen/Agriculture) by the County.

Project Description

The proposed Project consists of a Conditional Use Permit for the development of the Five Rinds Ranch/El Dorado Park facility ("Park") on an approximately 48.5 acres of a 350 acre site. Currently, the El Dorado Park is established as an open space area with hiking, equestrian, and mountain bike trails, and includes an existing restroom facility, parking lot which can accommodate horse trailers, and trail access. The proposed Five Winds Ranch site would be further developed to connect with the existing El Dorado Park, and integrate the two different sites as one unified park facility location. The proposed Park would include a variety of recreational, including the adaptive reuse of the existing Five Winds Ranch adobe house as an event center area, relocation of the existing barn for a youth-oriented gaming room, sites for group and individual camping facilities, and other outdoor recreational amenities (Figure 3). Specifically, the Project includes the following features:

<u>Proposed Phase I Improvements:</u>

1) Exterior modifications to an existing structures: The modifications to the exterior of the Adobe house at Five Winds Ranch will include development of a veranda area with a temporary shelter/tent for events, a courtyard area with a hardscape surface that will be colored concrete (tan) or pavers and a lawn area (150' x 150') for multi-use functions, as well as construction of a permanent storage building for maintenance.

   The existing barn will be relocated and repurposed to include a kitchenette and counters. The barn will include a gaming room with arcade games. The games will be youth friendly such as ping pong, board games and arcade games.

2) Interior modifications to the existing structures: The modifications to the interior of the Adobe house and newer house addition will include a welcome center/market area, a meeting/lounge areas, ADA compliance improvements in the current living room area, remodel and expansion of the existing breezeway (reorient roof line). Improvements to the newer addition area include the development of dressing rooms, restrooms, and a new kitchen, upgraded with catering equipment and ADA compliance improvements.

3) Park Ranger cabin with signage for visitors as to where to check in depending on the time of arrival.

4) Parking area and roadways – road surface will be asphalt where needed for maintenance and fire access. The asphalt roads will be limited to 20 foot wide (two directions) and 12 foot wide (one direction), paraffin-stay lock decomposed granite (d.g.) with colored concrete (tan) or paraffin d.g. for the ADA parking area.

5) Acceleration, deceleration lane and turn pocket improvements on Oak Glen Road and entry monument/gateway signage at Oak Glen Road.

6) Multi use non-motorized d.g. trails with rail fencing: The trails will connect with the existing El Dorado Ranch Park trails to the east and future master plan trails to the west.

7) An information/public outreach kiosk will be added along with water fountains for trail users.

8) Group/individual campsite areas with amenities (equestrian and other groups): Equestrian amenities include pipe corrals/pins, warm up pin, wash rack with pea gravel, and hydrant/spigots. Campsites will also include back in double wide trailer camp units. A low ropes course (par course) is also proposed. The group/individual campsite area has been modified to minimize parking, but will require drop off areas for loading/unloading and ADA parking.

9) Five overnight cabin units will be installed, each with a shower and small bathroom. One or more cabins will be ADA compliant with accessible pathway and parking.

10) The camping areas will include an amphitheater and propane fueled fire pit area. Dual propane tanks will be used for the service areas. Areas to barbeque individually and as a group are also included.

11) Archery range with hay bale markers and 10 foot wide target lanes.

12) Restroom building at the group camping area. Enhanced improvements to existing El Dorado restroom will also be provided.

13) Drainage swales and pedestrian bridges with enhanced boulder placements and pedestrian foot bridges. Vegetative barriers along the west, east and south edge of the park.

14) Temporary shelter/tent for special events and receptions.

<u>Proposed Phase II Improvements</u>

1) Additional parking area (paraffin –stay lock d.g.) westerly trails and roadways.

2) Five to ten additional overnight cabin units will be installed, each with a shower and bathroom. One or more cabins will be ADA compliant with accessible pathways and parking.

3) Wetland pond area with a dock and wood duck, owl and bat boxes. The pond will include a waterfall inlet with a natural boulder aesthetic. This area will include picnic table seating with areas along with decomposed granite pathways.

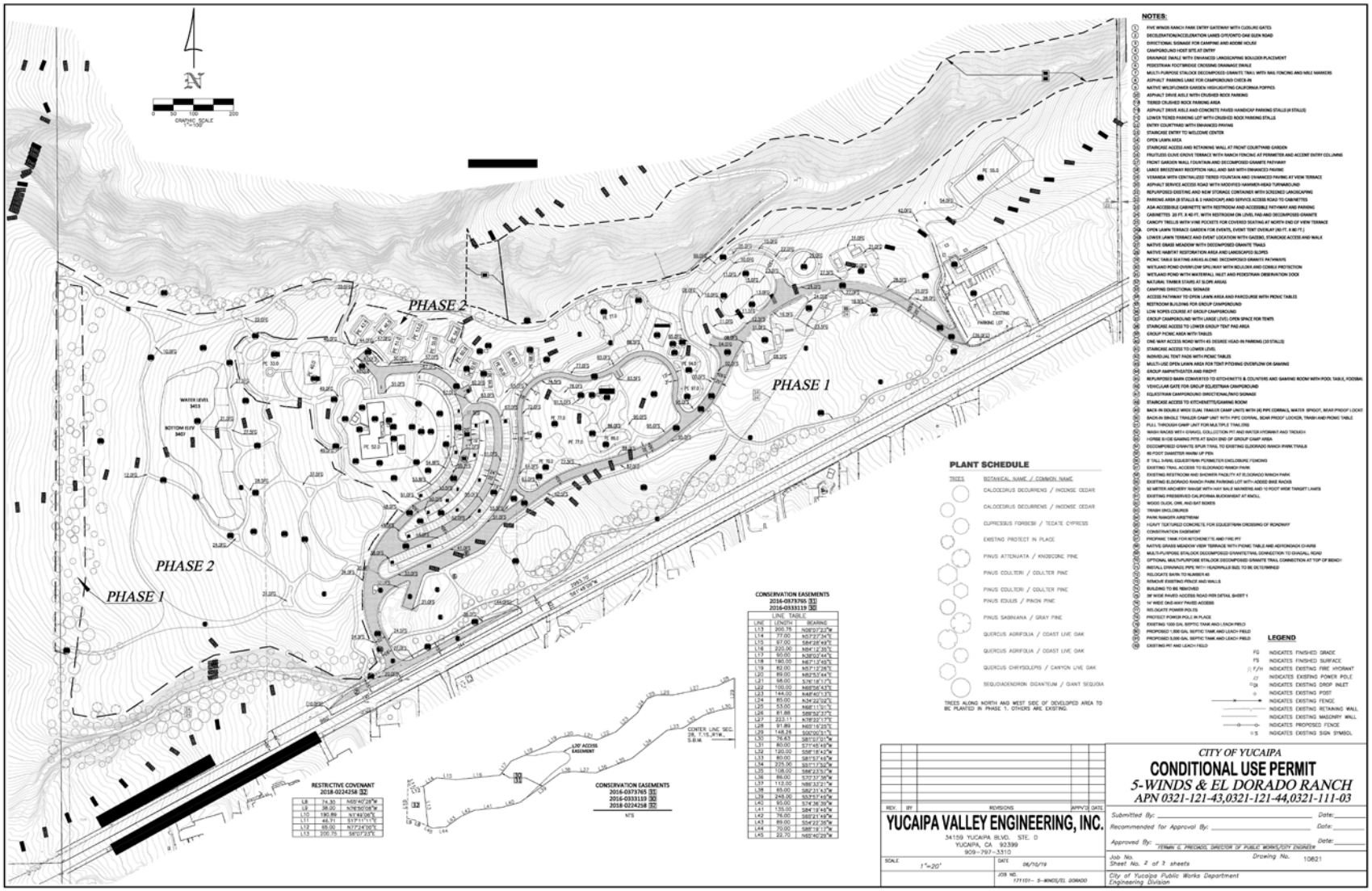
4) Native landscaped areas will include:
   a. Native grass meadows with views from the terrace.
   b. Native wildflower garden highlighting the existing California Poppies at Five Winds Ranch.
   c. Native habitat restoration areas with native landscaping on the slopes.

5) Additional trails to connect trails from the adobe house to the west and through the gardens.

Figure 1 – Aerial Image of Site

Figure 2 – Existing Land Use Designations

Figure 3 – Conditional Use Permit Exhibit



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below (■) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Greenhouse Gases		Public Services
	Agricultural Resources		Hazards & Hazardous Materials		Recreation
	Air Quality		Hydrology/Water Quality		Transportation/Traffic
	Biological Resources		Land Use/Planning		Tribal Resources
	Cultural Resources		Mineral Resources		Utilities/Service Systems
	Energy		Noise		Wildfire
	Geology/Soils		Population/Housing		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

Signature — Date: 10-17-19

Benjamin MATLOCK — For: City of Yucaipa

Printed Name

1) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

2) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3) Must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analysis," may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. **AESTHETICS.** Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

a) **Less Than Significant Impact**

Policy PR-4.7, Scenic Resources, of the City's 2016 General Plan states that the City will "Protect Yucaipa's scenic resources, including scenic corridors along roads and views of the hillsides, prominent ridgelines, canyons, and other significant natural features, to the extent practical." Resources identified in the General Plan includes the City's designated Scenic Corridors (Bryant Street, Yucaipa Boulevard, Wildwood Canyon Road, and Oak Glen Road) and the prominent hillsides, ridgelines, and open space areas that surround the City, including Crafton Hills and the San Bernardino National Forest. The Project site generally features gentle rolling hills, and is located adjacent Oak Glen Road, a City-designed scenic corridor. Due to the site elevations, views of the Yucaipa Valley are afforded from the project site; however, the site is not within the City's Hillside Overlay District and does not feature any Prominent Ridgelines (Ordinance 81) identified in Figure CDL-4 of the General Plan. Each year, ornamental trees common to the foothill areas within Yucaipa are also planted onsite to develop the visual landscape in an "organic" fashion through volunteer efforts from the "Make a Difference Day" projects, Eagle Scout projects, and other similar volunteer efforts, which further enhance the visual character. As such, the proposed Project would have a less than significant effect on scenic vistas.

b) **No Impact**

According to Caltrans Scenic Highway Program, there are no official state designated scenic highways that exist within the City of Yucaipa. A portion of State Route 38 passes through the City of Yucaipa, and is an eligible state scenic highway that has not been officially designated; however, this section of roadway is located approximately five miles north from the proposed Project site. The City of Yucaipa has designated Bryant Street, Yucaipa Boulevard, Wildwood Canyon Road, and Oak Glen Road as scenic corridors within the City. The proposed Project is located at the southwest corner of Oak Glen Road and Avenue E, and therefore has frontage along a City-designated Scenic Corridor. The frontage of the Project site along Oak Glen Road, and as part of the Park design, ornamental trees common to the foothill areas within Yucaipa will continue to be planted along the street frontage to enhance the visual quality of the site and support the Oak Glen Road scenic corridor design. As such, there would be no adverse impacts to resources along a scenic route as a result of the proposed Project.

c) **Less Than Significant Impact**

The Project is located within the rural outskirts of the City of Yucaipa, and is the final area before travelers on Oak Glen Road reach the unincorporated community of Oak Glen. The site is mostly vacant, with the exception of the existing El Dorado bathroom and parking lot facility, and the existing Five Winds Ranch adobe structure and detached barn structure. The gentle rolling hillside of the site, existing vegetation and landscaping, and the views towards the Yucaipa Valley creates an attractive visual character for the site. Photos of the site are provided by Figures 4 through 17, taken at focal length ranges of 18mm and 50mm. Photos were taken with a 50mm focal length to provide the greatest approximation of what a human will see, and the 18mm focal length was used for reference and additional context of the site, as the wider angle provides a greater view of the entire area into the picture frame.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 4 – Photo Locations

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 5: South edge looking northeast, 50mm

Figure 6: South edge looking north, 50mm

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 7: South edge looking northeast, 18mm

Figure 8: At Ranch looking north, 50mm

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 8: At Ranch entrance looking north, 50mm

Figure 9: At Ranch looking northwest, 50mm

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 10: At Ranch looking northwest, 18mm

Figure 11: El Dorado restroom, 50mm

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 12: El Dorado looking west, 50mm

Figure 13: El Dorado looking north, 50mm

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 14: El Dorado looking southwest, 50mm

Figure 15: El Dorado looking southwest, 18mm

Figure 16: Oak Glen Road at El Dorado looking west, 50mm

Figure 17: Oak Glen Road at El Dorado looking west, 18mm

The conceptual plan for the Project was developed through community input and the City's Five Winds Ranch Improvement Advisory Council. The input that was provided included efforts to create a site design that would have limited impacts to the visual quality of the site, and to also leverage the visual quality to provide a community benefit. The existing Five Winds Ranch adobe structure would be adapted for the community service functions, and will include a

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

welcome/market area, a meeting/lounge areas, ADA compliance improvements in the current living room area, and the development of dressing rooms, restrooms, a new kitchen with catering equipment, and other ADA compliance improvements. The site would also feature the planting of additional native landscaping along Oak Glen Road to maintain and augment the visual quality of the area. Therefore, development of the proposed Project would have a less than significant impact to the visual quality by creating additional design elements that would enhance Project site consistent with the Park and Open Space Land Use Designations, and would not conflict with applicable zoning and other regulations governing scenic quality.

d) **Less Than Significant Impact**

Additional lighting will occur due to the development of the Park. However, a core theme of the City's Five Winds Ranch Improvement Advisory Council development for the park design was to limit the total amount of improvements to the facility, and limited outdoor lighting to support the parking lot, building, and outdoor amenities areas are proposed, but will result in new sources of nighttime lighting, including, but not limited to: street lighting, building-mounted lights, recreational area lighting, and ornamental landscaping and pathway lights. Due the generous setbacks from adjoining uses, and the proposed design theme to limit lighting onsite, it is not expected that significant sources of light or glare will occur. Further, the Project will be required to comply with the City's Development Code, which contains general design standards that ensure new development and expansions of existing development will not have a negative impact upon surrounding land uses. As a Condition of Approval, all lights used to illuminate the site shall be hooded and designed so as to reflect away from adjoining properties and public thoroughfares. Therefore, impacts related to light and glare will be less than significant through compliance with the Development Code and the City's standard Condition of Approval.

2. **AGRICULTURE RESOURCES**: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project?				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (PRC 12220(g)), or Timberland zoned Timberland Production (GC 51104(g))				X
d) Result in the loss of forest land or conversion of forest lane to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X

a-b) **No Impact**

According to the State Dept. of Conservation Important Farmland Map, San Bernardino County 2012, Sheet 2 of 2, the proposed Project site is designated as "grazing land" and "farmland of local importance" and does not contain any prime, statewide, or unique farmland. The Project site is mostly vacant with the exception of a public restroom facility and an existing, uninhabited residence, and does not feature any current agricultural activities occurring onsite, but had been dry-farmed in the past. In addition, there are no active Williamson Act contracts within the City of Yucaipa. The City of Yucaipa utilizes a "one map system" in which the General Plan Land Use Designations and Zoning Categories are the same and combined onto one map. The subject properties have two land use designations as P (Park) and OS (Open Space). These designations include uses dedicated to public services such as campground and picnic areas, restrooms, trails and roads. The proposed development would be consistent with the P and OS Land Use Designations and would

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

not conflict with zoning for an agricultural use or a Williamson Act contract, and would not convert prime, statewide, or unique farmland to a non-agricultural use.

c-d) **No Impact**

No forest land or timberland is located within the Project site. The surrounding Project area is generally undisturbed natural open space with an uninhabited residence and public restroom facility.

e) **No Impact**

As noted in items a-d above, the area is designated "grazing land" and "farmland of local importance," and no portions of the site are currently farmed nor are they subject to Williamson Act contracts. In addition, no portion of the area is located within a forest area. As such, the proposed Project would not affect these resources.

3. **AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?.			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

An Air Quality and Greenhouse Gas (GHG) Analysis was prepared for the Project by LSA Associates, Inc. in May, 2019, to assess the potential air quality and GHG-related impacts from the Project. This report is summarized below and is included as Appendix A of this Initial Study.

a) **Less Than Significant Impact**

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of the air quality plans is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the applicable air quality plan.

The proposed Project is within the South Coast Air Basin (Basin), and the South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the Basin. SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources, and responded to this requirement by preparing the 2016 Air Quality Management Plan (AQMP), an air quality management plan covering all portions of the Basin.

The regional emissions inventory for the South Coast Air Basin was compiled by SCAQMD, the San Bernardino Association of Governments (SANBAG), and the Southern California Association of Governments (SCAG), and is used for the AQMP. Regional population, housing, and employment projections are based, in part, on the City's General Plan land use designations. The Project site is currently features P (Parks) and OS (Open Space) Land Use Designations pursuant to the General Plan. As such, the proposed Project would have been considered in the assumptions used for the AQMP for the growth expected within the City and consistent with the land use designation of the General Plan. Therefore, the Project will not conflict with or obstruct the implementation of the 2016 AQMP.

b) **Less Than Significant Impact**

The proposed Project would result in the development of the Five Winds Ranch/El Dorado park facility. The Analysis includes an evaluation of project-related impacts by utilizing the California Emissions Estimator Model (CalEEMod) version 2016.3.2 air quality modeling program. SCAQMD published its Final Localized Significance Threshold Methodology in June 2003 and updated it in July 2008 (SCAQMD 2008a), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. While improvements would occur on 48.5 acres of the project site, the construction would only occur on small portions at any one time (less than one acre), progressing in phases around the total site. The California Emissions Estimator Model (CalEEMod) includes guidance on modeling this concept for localized impacts analyses. Therefore, localized significance thresholds (LSTs) screening thresholds for 1 acre were used in the construction analysis in addition to the overall air quality thresholds from SCAQMD.

The construction analysis includes estimating the construction equipment that would be used during each construction activity, the hours of use for that construction equipment, the quantities of earth and debris to be moved, and on-road vehicle trips (worker, soil hauling, and vendor trips). CalEEMod data and defaults are assumed for the construction activities, off-road equipment, on-road construction fleet mix, and trip lengths. The assessment used a very conservative approach for the assessment of construction impacts, with longer periods of construction and site grading activities than what will likely occur.

Operational air pollutant emission impacts are those associated with stationary sources and mobile sources involving any Project-related activities. This Project would result in both stationary and mobile-source emissions, including a trip generation factors provided in the CalEEMod model. Additionally, there would be emissions from area sources, such as landscape maintenance, and energy sources, such as building heating and cooling and solid waste handling.

The results are as follows:

Construction – Maximum Daily Emissions

	VOC	Nox	CO	SO2	PM 10	PM 2.5
Year	**LB/Day**					
Peak Daily	5	21	179	<1	4	2
SCAQMD Threshold	75	100	550	150	150	55
Exceed?	**No**	**No**	**No**	**No**	**No**	**No**

Construction – Localized Impacts Analysis

	Nox	CO	PM 10	PM 2.5
	LB/Day			
On-site Emissions	19	9	3	2
LSTs	115	715	6	4
Exceed?	**No**	**No**	**No**	**No**

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Operation - Maximum Daily Emissions

	VOC	NOx	CO	SO2	PM 10	PM 2.5
Category	**LB/Day**					
Area	<1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	4	10	<1	3	<1
Total	1	4	10	<1	3	<1
SCAQMD Threshold	55	55	550	150	150	55
Exceed?	**No**	**No**	**No**	**No**	**No**	**No**

Operation - Localized Impacts Analysis

	NOx	CO	PM 10	PM 2.5
On-site Emissions	<1	<1	<1	<1
LSTs	270	2,075	4	3
Exceed?	**No**	**No**	**No**	**No**

The construction and operation of the Project would not exceed any air quality thresholds. Construction related impacts would be reduced by the appropriate dust control measures implemented during each phase of development, as required by SCAQMD Rule 403 - Fugitive Dust. The requirements for Rule 403 include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the lots, and maintaining effective cover over exposed areas. Engineering Department specific Conditions of Approval for any future development proposals would include provisions for Rule 403 that will apply during grading and building activities to minimize fugitive dust. Operational impacts would be minimized by adherence to the Building Code and Title 24 requirements. As such, impacts would be less than significant.

c, d) **Less Than Significant Impact**

The Project site is adjacent to several residences, which are considered to be sensitive receptors by the City's General Plan. During site improvement construction activities associated with the future park development, there may be some level of odor exposure resulting from asphalt paving for the all-weather surfacing as part of the drive aisles for the parking lot and exhaust from heavy-duty equipment. However, the limited duration and area involved in construction and paving activities would not result in significant levels of odors affecting a substantial number of people. In addition, the operation of a park does not include materials or uses that create substantial odors. As such, impacts would be less than significant.

4. **BIOLOGICAL RESOURCES**. 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 Wildlife or U. S. Fish and Wildlife Service?				X
b) Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U. S. Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands				X

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		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 Conservation Community Plan, other approved local, regional, or state habitat conservation plan?				X

A Biological Resources Assessment Report was prepared for the Project by LSA Associates, Inc. in January, 2019, to assess the potential biological impacts from the Project. This report is summarized below and is included as Appendix B of this Initial Study.

a) **No Impact**

No threatened or endangered species are expected to occur within the Project site. The project area is outside of the known range of Stephens' kangaroo rat (Dipodomys stephensi) and the San Bernardino kangaroo rat (Dipodomys merriami parvus). Raptor species such as the white-tailed kite (Elanus leucurus) and golden eagle (Aquila chrysaetos) may potentially forage in the project area, but no nesting habitat is available on-site for these species, The Project design would include the installation of new nesting boxes and platforms within the park facility to provide for future opportunities to support raptor species.

b) **No Impact**

Riparian habitat or other special-status natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service do not occur within the Project area. Natural communities are located within the over 350 acre site, and are currently under conservation easements. The improvements that constitute the Project, which are located on only 48.5 acres of the entire property, are located outside of the conservation easements, and have been designed to not encroach within conservation areas in order to have complete avoidance of those natural communities. Therefore, the project will not adversely affect any riparian habitat or other sensitive natural community.

c) **No Impact**

There are no wetland waters of the United States within the project area. As noted previously, the improvements that constitute the Project, which are located on only 48.5 acres of the entire property, are located outside of the conservation easements and have been designed to not encroach within conservation areas, and will result in the complete avoidance of those natural communities. Therefore, the project will not adversely affect any federally-protected wetlands.

d) **Less than Significant Impacts with Mitigation Incorporated**

Native resident wildlife movement may be temporarily disrupted during the vegetation removal and construction activities, but this effect would be localized and short term, and is therefore not considered significant. No native wildlife nursery sites occur within the project area. Marginally suitable burrowing owl habitat is present throughout the grassland habitat, vacant land areas, and rock piles in Areas A and B. However, the risk of avian predation from larger raptors is high across the Project area due to the installation of nesting boxes and platforms across the existing park, and there is moderate potential for burrowing owl to occur within the project area. A preconstruction survey prior to ground disturbance or vegetation clearing is recommended to avoid adverse effects to burrowing owls. Mitigation Measure BIO-1 is included to reduce potential impacts to less than significant. The Project would result in a net benefit by including the

installation of new nesting boxes and platforms within the park facility to provide for future opportunities to support migratory bird species.

e) **No Impact**

Division 9, Chapter 5 of the Municipal Code (Oak Tree Conservation) provides for the protection of coastal live oaks (Quercus agrifolia) within the City. Removal or encroachment to a coastal live oak would require a permit and would be subject to the conditions identified under Section 89.0525. The on-site oak and heritage trees will not be affected by the Project. No other local policies or ordinances are applicable to the Project. As part of the Park design, ornamental trees common to the foothill areas within Yucaipa, including coastal live oak trees, will be added along the street frontage.

f) **No Impact**

The project does not occur within the plan areas of any NCCP or HCP (USFWS 2011). Therefore, the project will not conflict with provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

Mitigation Measure:

BIO-1: There is moderate potential for burrowing owl to occur within the project area. A preconstruction survey prior to ground disturbance or vegetation clearing is recommended to avoid adverse effects to burrowing owl.

The project area contains suitable habitat for nesting birds protected by the Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. LSA recommends that removal of vegetation be conducted between September 1 and January 31 (outside the nesting season) to avoid any impacts to nesting raptors or other birds protected by the Fish and Game Code and the MBTA. If vegetation removal is to occur during the nesting season (February 1 through August 31), a pre-construction nesting survey is recommended to be conducted by a qualified biologist prior to vegetation removal.

5. **CULTURAL RESOURCES**. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

A Cultural Resources Assessment was prepared by LSA Associates, Inc. in February, 2019, to assess the potential impacts to cultural and tribal resources that could result of the Project. This report is summarized below and is included as Appendix C of this Initial Study.

a) **No Impact**

The proposed Project is located on a partially developed site that features the City's existing El Dorado Park Facility and the existing Five Winds Ranch adobe house and outbuildings along Oak Glen Road at the far east end of the City of Yucaipa. The report assessed the existing Five Winds Ranch adobe brick house and other structures located onsite as part of the built environment. The assessment noted that the historic-period residence was either greatly expanded or newly constructed in 1946 and was owned by Leon Arnold Atwood, Jr. until his death in 1995. The research found that there is no indication that Leon or Five Winds Ranch made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of the community to qualify as a significant historic resource. Further, the number of additions to the existing ranch has impacted the potential integrity of the site. It should be noted that the Project would provide for the adaptive reuse of the ranch adobe brock residence, and the structure would be retained with the Park development. No other significant resources, including tribal resources, have been discovered onsite, and was reaffirmed

by a survey that was conducted onsite. As such, the site is not considered historic, and no impacts to historic resources would occur as part of development of the Project.

b) **Less than Significant Impacts with Mitigation Incorporated (Tribal Resource Mitigation)**

Figure PR-6 of the City's General Plan identifies portions of the subject site being located within a Cultural Sensitivity Area. Consultation with local tribes, pursuant to AB 52, is required for the proposed Project, and additional details are included within the Tribal resources section of this MND. In accordance with AB 52 requirements, the City sent invitation letters to representatives of the Native American contacts on August 31, 2019, formally inviting tribes to consult with the City on the GPA. The intent of the consultations is to provide an opportunity for interested Native American contacts to work together with the City during the project planning process to identify and protect tribal cultural resources. A response letter was received from the San Manuel Band of Mission Indians and the Soboba Band of Luiseno Indians requesting consultation. The Cultural Resources Assessment did not identify any significant resources to be onsite. However, information received during consultation noted that that the site is considered sensitive and their records indicate some level of tribal history near the Project site. Based on the terrain and topography of the site, modifications to the Project plans were made to avoid potential areas that might be more likely to uncover resources. Further, mitigation measures were recommended to address the procedure should any inadvertent discoveries be made. As a result of the consultation efforts, tribal-related Mitigation Measures TRI-1 and TRI-2 have been developed for the Project and are included as part of the proposed Project's Condition of Approval. Incorporation of the mitigation measures will ensure a less than significant impact.

c) **Less than Significant Impacts with Mitigation Incorporated (Tribal Resource Mitgation)**

There are no known human remains on the site. A review of historic aerial photos and maps at Netronline.com was conducted and did not identify possible cemeteries in the area, and therefore a low likelihood exists that human remains could be uncovered during ground-disturbing activities. However, there is always a possibility that unidentified human remains could be discovered during Project construction. Consistent with State law, if at any time during grading human remains are found, the Project is to be conditioned to halt work and contact made with the San Bernardino County Coroner's Office. Standard Conditions of Approval are included pertaining to State Health and Safety Code Section 7050.5. In addition, any discoveries of remains would also be assessed to determine if they are of Native American origin, which is further discussed within the tribal resources section of this MND. Measure TRI-2 is included to reduce impacts to a less than significant level.

Mitigation Measures:

TRI-1: Treatment and Disposition of Cultural Resources.

In the event that Native American cultural resources are inadvertently discovered during the course of any ground disturbing activities, including but not limited to brush clearance, grading, trenching, archaeological testing, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

- Avoidance and Preservation in Place: Avoidance and preservation in place shall be the preferred treatment for any and all discoveries of archaeological materials. Should the resource not be a candidate for avoidance or preservation in place, a resource-specific mitigation plan shall be developed, reviewed by all Parties, and implemented following the guidelines within item C below.
- Temporary Curation and Storage for Removed Resources: For resources that cannot be left in place, they shall be temporarily curated in a secure location onsite at an agreed to location that is secure and accessed only by a limited number of on-site supervisors, specified Tribal monitors, and the archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversite of the process; and
- Treatment and Final Disposition of Removed Resources: For resources that cannot be left in place, the

landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Yucaipa with evidence of same:

- Accommodate the process for onsite reburial of the discovered items with the Consulting Tribes. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing, basic analysis, and other analyses as recommended by the project archeologist and approved by the Consulting Tribes have been completed, all documents should be at a level of standard professional practice to allow the writing of a report of professional quality;
- A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study, should the resources not be candidates for reburial. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;
- If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the San Bernardino County Museum by default.

- At the completion of all ground disturbing activities on the site, a Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City and Consulting Tribes. Should the resources be placed within a curation facility as a final treatment, copies of all reports will be provided to the facility to remain with the collection.

TR2-1: Inadvertent Discoveries of Human Remains/Funerary Objects

In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify the County Coroner, the landowner/Lead Agency, and SMBMI regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD and landowner/Lead Agency agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

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

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

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

6. **Energy**. Would the Project?				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

a, b) **Less than Significant Impacts**

During construction, the Project would result in energy consumption through the combustion of fossil fuels used for worker vehicles and construction equipment, and through the use of electricity to provide power for temporary construction buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, limits idling from both on-road and off-road diesel-powered equipment and is enforced by the California Air Resources Board. These limitations on idling of vehicles and equipment, and the requirements that equipment be properly maintained, would result in fuel savings. Idling limitation are also included as Best Management Practices to reduce noise-related impacts. Also, due to the cost of fuel, contractors and owners have a practical financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the Project would not result in wasteful, inefficient, and unnecessary consumption of energy. Further, there are no policies at the local level applicable to energy conservation specific to the construction phase. Therefore, it is anticipated that the construction phase of the Project would not conflict with State or local renewable or energy efficiency objectives

The operational phase of the Project would consume energy as part of building operations and transportation activities. Building operations for the Project would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, lighting, and electronics, as well as parking lot lighting. This project consists of modifications to existing park and open space area. New park buildings would be built to meet or exceed all California Green Building Standards Codes (CALGreen) resulting in lower energy use and GHG emissions compared to older buildings, and modifications to the existing adobe building, to meet the new building load occupancy, will occur and result in an energy-usage improvement over its existing conditions. Based on CalEEMod output files used to estimate GHG emissions, building operations would consume approximately 159,632 kilowatt hours of electricity per year, and an estimated 1.44 kilo-British Thermal Units (kBTU) per year of natural gas. Operational energy would also be consumed during vehicle trips associated with the Project. Based on the CalEEMod output files, the Project would result in approximately 572 daily vehicle miles traveled. The Project consists of the development of the park facility that has access to trails and features a variety of recreational amenities that are walkable. Therefore, the Project would not result in an inefficient, wasteful, or unnecessary use of energy. Operational energy impacts would be less than significant.

Further, the Project would provide consistency with the City's locally adopted GHG Reduction Plan, including compliance with applicable CAP measures:

- State-2: Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen)
- State-3: AB 1109 (Huffman) Lighting Efficiency and Toxics Reduction Act

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

- Wastewater-3: Encourage Water-Efficient Landscaping Practices such as drought-tolerant landscaping

The landscaping would be low water-tolerant and energy-efficient, thus minimizing landscape water usage, and ensuring compliance with CAP measure Water-3. Thus, the Project would not Conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Operational energy impacts would be less than significant.

7. **GEOLOGY AND SOILS**. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
(ii) Strong seismic ground shaking?			X	
(iii) Seismic-related ground failure, including liquefaction?				X
(iv) Landslides?				X
(b) Result in substantial soil erosion or the loss of topsoil?			X	
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

a)

i, ii. **Less than Significant Impact**

The northeast corner of the Project site is located within the boundaries of an Earthquake Fault Zone as defined by the State of California Alquist-Priolo Earthquake Fault Zoning Act. Within the portion of the site that is designated by the Alquist-Priolo Fault Zone Map, a concealed fault is projected to cross along the northeastern corner of the Project with a degree of uncertainty. However, the site has been designed to ensure no structures would be located within the Fault Zone area; the portion of the Project scope located within the Fault Zone boundary, but away from the demarcated fault, consists of an unimproved remote camp site. Further, Southern California is a seismically active area. As such, seismic shaking may occur, and seismic ground shaking and ground rupture due to movement of faults is a potential hazard throughout Yucaipa. The Project will be required to comply with the Yucaipa Municipal Code and the California Building Code, which addresses earthquake hazards.

iii. **No Impact**

Based on San Bernardino County hazard maps and the City's Geologic Hazards Map, the Project site is not located in a zone of liquefaction susceptibility. Due to the information provided by the County and City overlay maps, the potential for liquefaction near the subject area is considered minimal.

iv. **No Impact**

According to the City's Geologic Hazard Overlay Map, a portion along the southeast corner of the Project site is located within an area

deemed as generally susceptible to landslides; however, no structures or development will be located within this zone. The Project site is also located on and surrounded by relatively flat land, and is therefore not susceptible to seismically induced landslides.

b) **Less than Significant Impact**

Development within the City is required to prepare an erosion control plan to minimize erosion during grading and construction, and such plan is required to be prepared in compliance with the Regional Water Quality Control Board (RWQCB) standards. In addition, the Project's excavation and grading activities will be required to be carried out pursuant to a National Pollutant Discharge Elimination System (NPDES) permit that requires adoption of an appropriate Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) to reduce erosion from storm water runoff. With the intent of minimizing soil erosion, preventing off-site discharge of pollutants, and reducing potential impacts to "less than significant", all developments over one (1) acre in size are required to provide the SWPPP and comply with a Water Quality Management Plan (WQMP).

c-d) **Less than Significant Impact**

See above items 6 (a) and (b). The Geologic Map of the Yucaipa 7.5' Quadrangle, prepared by the United States Geologic Survey (2003) identifies the Project site to contain four (4) different types of surficial deposits (Figure 18), which include: young axial-valley deposits Unit 3 (middle Holocene), very old axial-valley deposits Unit 3 (mid-early Pleistocene), old axial-valley deposits Unit 2 (late-middle Pleistocene), and old alluvial fan deposits Unit 2 (late-middle Pleistocene). These four (4) surficial deposits are comprised of consolidated sand silt, and clay, moderately-to-well indurated dissected gravel, sand silt, and clay bearing alluvium, and moderately-to-well consolidated brownish sand, gravelly sand, and granule-boulder gravel. The City's General Plan Exhibit S-1 has identified the site to be within the City's Geologic Hazard Overlay due to the general susceptibility for landslides and the Alquist-Priolo fault zone along the northern portion of the Project site (Figure 19). No construction is proposed to occur within the area susceptible to landslides or within the Alquist-Priolo fault zone. Due to the depth of groundwater and soil composition, as supported by the General Plan, the potential for liquefaction is minimal. Foundations for the Project would be required to comply with the California Building Code requirements, as implemented by the City's Municipal Code, and would be completed through the plan check and permitting process. Thus, impacts due to expansive soils are less than significant and no mitigation measures are required.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 18: Excerpt from Geologic Map of the Yucaipa 7.5' Quandrangle

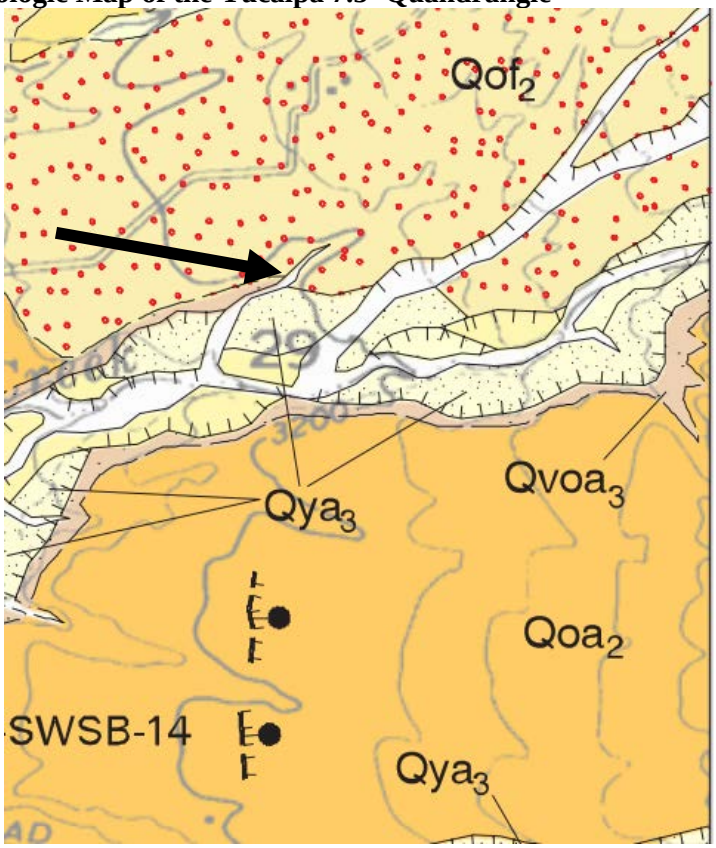
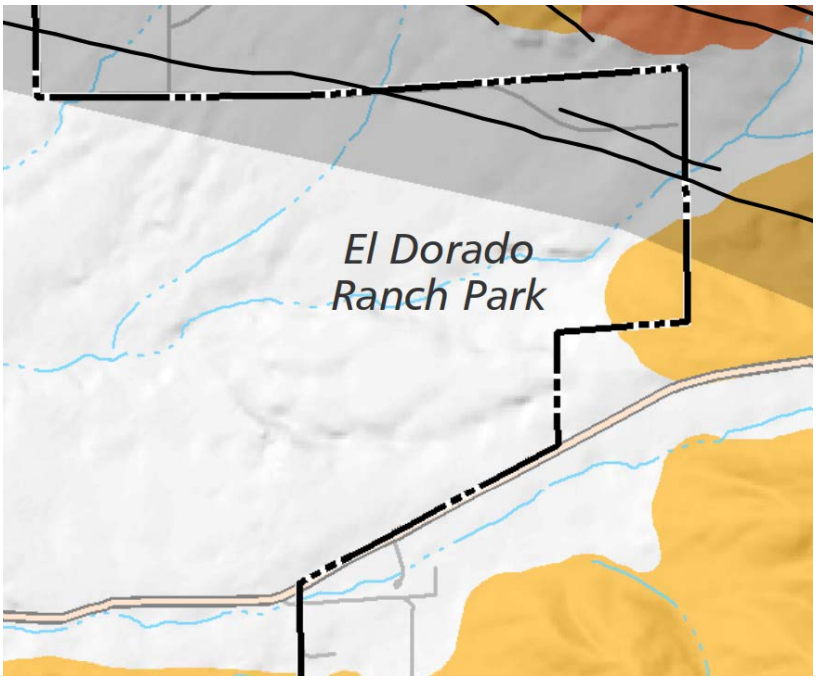


Figure 18: Excerpt from General Plan Exhibit S-1



Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

e) **Less than Significant Impact**

The Project will continue to utilize an existing 1,000-gallon septic tank that services the existing El Dorado Park restroom facility, and will include the installation of new 1,500 gallon and 3,000 gallon septic tanks. Pursuant to AB 885, the City of Yucaipa has established a Local Agency Management Program (LAMP) to regulate and establish standards for new onsite wastewater treatment systems (OWTS). The LAMP is intended to protect groundwater sources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual OWTS. Adherence to this program will ensure the new septic systems will be installed in locations with the appropriate soil composition.

f) **Less than Significant Impact**

Figure PR-6 of the City's General Plan identifies portions of Project site is located within a Paleontological Resource Sensitivity Area. The proposed Project consists of the development of the Five Winds Ranch, which will include the existing public restroom facility, parking lot, and trail systems at El Dorado Park. Prior site disturbance have occurred at the subject site, and no unique paleontological resources or unique geologic features have been discovered; however, there may be a potential for new resources to be discovered. Due to the possibility of further discoveries, the City's Standard Condition of Approval will apply to the Project, which states:

> "Prior to grading, arrangements acceptable to the County Museum shall be made to have present during grading a qualified vertebrate paleontologist to monitor in the event paleontologic resources are encountered during rough grading. The monitor shall have the authority to temporarily suspend grading operations in the vicinity of such resources until they have been evaluated and appropriate data recovery measures implemented. The results of the monitoring shall be documented in writing and submitted to the County Museum for review prior to issuance of building permits. For more information, contact the County Museum at 909-307-2669."

8. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

a, b) **Less than Significant Impacts**

In September 2015, the City of Yucaipa adopted a Climate Action Plan (CAP) that includes GHG emission inventories, identifies the effectiveness of California initiatives to reduce GHG emissions, and identifies local measures to reduce GHG emissions. The City has selected a goal to reduce community-wide GHG emissions by 15 percent below 2008 baseline levels by the year 2020, consistent with AB 32, and ensures that the City is providing GHG reductions locally that will complement the state and international efforts of stabilizing climate change.

The proposed Project would result in the improvements to approximately 48.5 acres for the Five Winds Ranch / El Dorado Park facility. An Air Quality and Greenhouse Gas (GHG) Analysis was prepared by LSA Associates, Inc. in May, 2019, to assess the potential air quality and GHG-related impacts from the Project. The Analysis is included evaluation of project-related impacts by utilizing the CalEEMod version 2016.3.2 air quality modeling program. The total Project emissions is 681 MT CO_2e.

GHG emissions significance is determined by considering "Consistency with a locally adopted GHG Reduction Plan." The Project consists of the development of the park facility that has access to trails and features a variety of recreational

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

amenities that are walkable, and would provide consistency with the City's locally adopted GHG Reduction Plan, including compliance with applicable CAP measures:

- State-2: Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and CALGreen)
- State-3: AB 1109 (Huffman) Lighting Efficiency and Toxics Reduction Act
- Wastewater-3: Encourage Water-Efficient Landscaping Practices such as drought-tolerant landscaping

The landscaping would be low water-tolerant and energy-efficient, thus minimizing landscape water usage, and ensuring compliance with CAP measure Water-3. Thus, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs.

9. **HAZARDS AND HAZARDOUS MATERIALS.** Would the project?				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

a) The proposed Project consists of the development of a Park and would not directly involve the routine transport of hazardous materials. However, equipment used at the site during construction activities could utilize substances considered by regulatory bodies as hazardous, such as diesel fuel and gasoline from typical construction equipment and would therefore have the potential to discharge hazardous materials during construction. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state requirements, which the project construction activities are required to strictly adhere to. These regulations include: the federal Occupational Safety and Health Act and Hazardous Materials Transportation Act; Title 8 of the California Code of Regulations (CalOSHA), and the state Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. This amount of hazardous material discharge during construction is expected to be less than significant, and the Project would be required to comply with applicable laws, ordinances and procedures, and impacts would be less than significant through compliance with the aforementioned laws and requirements, and also through the implementation of a SWPPP and the WQMP requirements to prevent the off-site discharge of pollutants during construction and operation of the Project

During operation of the Project, potential hazardous materials would be limited to routine elements associated with an institutional development, including the use of yard fertilizers, and general-purpose cleaners and solvents, which would not represent a significant hazard. Further, no hazardous materials will be transported to or from the site during Project

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

construction or operation. The site is also not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

b-d) **No Impact**

There are no known hazardous materials located onsite, and no hazardous materials will be transported to or from the site during Project construction or operation. Therefore, it is unlikely that the Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. The Project site is also not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, nor is it within a quarter mile from a school facility.

e) **No Impact**

The Project site is not within two (2) miles of an airport of any type. The nearest airport is Redlands Municipal Airport (REI), which is located over 8.2 miles northwest from the Project site. In addition, the Project is not within the Redlands Airport Land Use Compatibility Plan. No impacts would occur with the Project.

f) **No Impact**

The proposed Project site is adjacent to Oak Glen Road, which is an existing paved roadway, and development of the site would not impact access to users traveling along the public right-of-way. Figure S-5 of the Yucaipa General Plan does designate Oak Glen Road as a regional evacuation route, which would not be impacted by the development of a Park or Public Use Facility on the subject parcel. Ingress and egress for the proposed Project is provided by two different driveway locations along Oak Glen Road. The access route for the development has been designed to comply with the California Fire Code. As such, the proposed Project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

g) **No Impact**

The Project site is located within an urbanized area, adjacent to existing residential development to the south, and is also adjacent to wildland areas. With its proximity to wildland area, the Project site is within the Fire Safety Review Area 1 & 2, which have been identified by the California Department of Forestry (CALFIRE) and US Forest Service as very high and high fire hazard areas. To reduce the risk of loss, injury or death involving wildland fires, no structures would be constructed within the Fire Safety Review Area 1, and development within this review area will be limited to existing trails, a fishing pond, and a remote campsite. Due to the fire hazard sensitivity, the Project would be subject to Fire Department conditions of approval to reduce fire related risks. In addition, the City has also adopted the most recent version of the California Building and Fire Codes, which includes sections on fire-resistant construction material requirements based on building use and occupancy. The construction requirements are a function of building size, purpose, type, materials, location, proximity to other structures, and the type of fire suppression systems installed. Many of these requirements are also included as part of the Project's Conditions of Approval as a uniformly applicable development policy, which includes provisions for adequate fire access, sprinkler water systems within indoor spaces, and placement of new fire hydrants at applicable intervals that meet the water flow requirements of the Fire Code. Through these standard requirements, impacts from fire-related hazards would be less than significant.

10. **HYDROLOGY AND WATER QUALITY**. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

a) The proposed Project has the potential to release water pollutants during the construction and operation phases, which would have the potential to violate water quality standards.

Construction:

Three general sources of potential short-term, construction-related stormwater pollution associated with the proposed Project include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earthmoving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment.

The proposed Project consists of improvements within 48.5 acres of the site to create the proposed Park facility and therefore would be subject to the NPDES permit requirements during construction activities. Prior to issuance of building permits, the Project would be required to comply with all applicable NPDES requirements through adoption and implementation of a submitted SWPPP and WQMP during the construction and operational phases of the Project. The SWPPP shall identify erosion control BMPs to minimize pollutant discharges during construction activities, and would include stabilized construction entrances, sand bagging, designated concrete washout, tire wash racks, silt fencing, and curb cut/inlet protection. The structural and nonstructural BMPs, and other measures included in the SWPPP and WQMP, would address water quality and waste discharge concerns associated with the Project. Compliance with these requirements is included as standard Conditions of Approval for the Project. As part of the review process for these documents, the City also verifies that there is a financial mechanism in place to ensure the continued maintenance of the measures proposed as part of the WQMP. Further, documentation will be provided to ensure all construction-related plans are consistent with each other. Impacts associated with construction would be less than significant with the implementation of existing regulations.

Operation:

The development of the Project would increase the amount of impervious areas onsite by constructing a public use facility and recreation area within 48.5 acres of the subject 347 acre property, which includes the building footprint of the existing residence and barn, a 133 space parking lot, a paved access road, and pedestrian-related pathways throughout the site. Landscaping is proposed as part of Project design near the proposed Project improvements. To address water quality issues, a drainage swale with enhanced landscaping boulder placement is proposed along the southern portion of the Project site to receive and filtrate the runoff generated from the impervious surfaces. In addition, permeable pavers are also proposed within the parking lot. Compliance with existing federal, State, and local regulations related to water quality, implementation of BMPs included in the Project construction SWPPP, and design recommendations in the WQMP, would result in less than significant impacts.

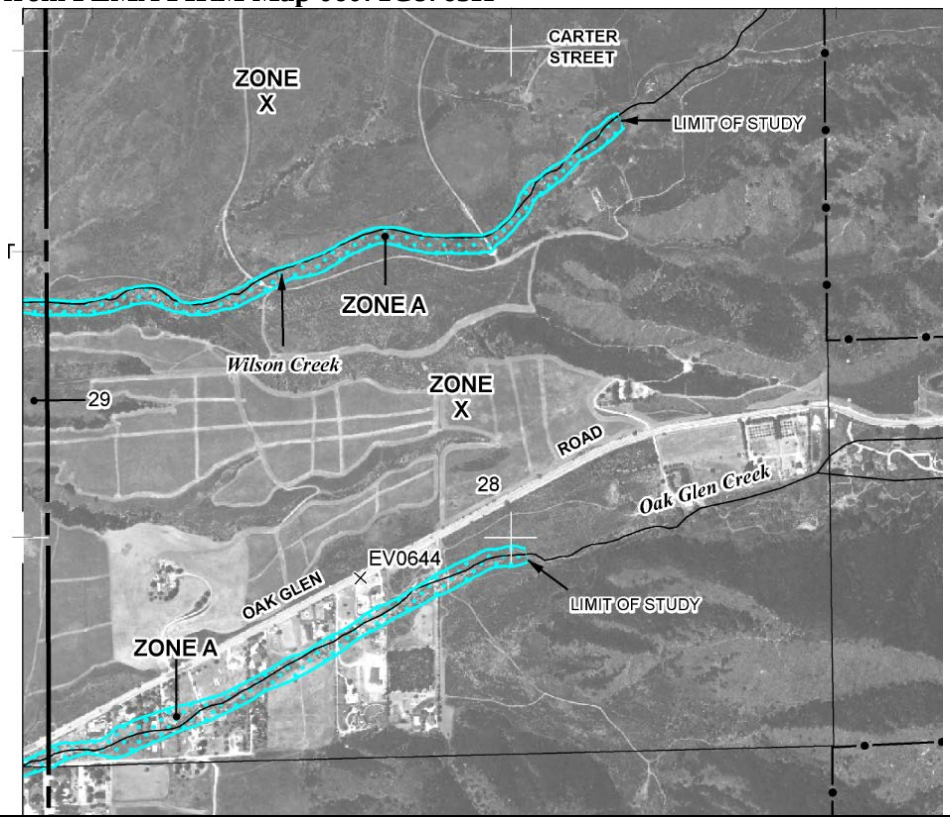
Impacts to groundwater are also discussed in section “Geology and Soils (e)”. The Project will continue to use an

existing 1,000 gallon septic tank that services the existing El Dorado Park restroom facility, and will include the installation of new 1,500 gallon and 3,000 gallon septic tanks. Pursuant to AB 885, the City of Yucaipa has established a Local Agency Management Program (LAMP) to regulate and establish standards for new onsite wastewater treatment systems (OWTS). The LAMP is intended to protect groundwater resources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual OWTS. The proposed Project would not generate hazardous wastewater or require any special waste discharge permits. The LAMP regulations would ensure the impacts of new the OWTS would be less than significant.

b) The subject site is currently serviced with potable water by the YVWD, and a Preliminary Service Evaluation letter has been provided by the YVWD indicating they will be able to serve the Project. No hazardous materials or other materials will be injected into groundwater supplies. Phase 1 of the Project includes the utilization of the existing water well to construct a fishing pond toward the center of the property. Power will be provided to the northwest corner of the subject property to provide a means of control over the pond's water levels and to ensure proper groundwater recharge for the water well. No wells are proposed for the Project which would have the potential to draw from the groundwater table. Further, the Project would not impact any existing groundwater recharge areas, or substantially reduce runoff to which recharge facilities would no longer be able to operate. Impacts would be less than significant.

c) The proposed Project is located within a 347 acre property at the north side Oak Glen Road, between Chagall Road and Potato Canyon Road. Upon review of the latest FEMA Flood Insurance Rate Map (FIRM) Map, 06071C8765H, revised August 28, 2006 (Figure 20) and as identified in the General Plan, a 100-year flood plain traverses along the central portion of the site. The 100-year flood is the flood that has a 1% chance of being equaled or exceeded in any given year. The proposed public use facility and recreation area have been designed to avoid the 100-year flood plain and would not impede or redirect flood flows.

Figure 20: Excerpt from FEMA FIRM Map 06071C8765H



Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Construction and operation of the proposed Project would result in the increase of the net area of impermeable surfaces on the site because the site is primarily vacant and unimproved. The Project will be conditioned to ensure the amount of historical runoff through the property will not be adversely affected by the construction and operation of the site. As noted above, the Project would be subject to the NPDES permit requirements and a SWPPP and WQMP would be implemented during the construction and operational phases of the Project. To meet the Conditions of Approval pertaining to storm water runoff, the Project will install a drainage swale along the southern boundary of the Project site and a drainage pipe west of the existing restroom facility to direct water flow to the drainage swale. This swale is designed to minimize runoff and capture storm water within the property, and would prevent substantial erosion or siltation on- or off-site, or any increase in the rate or amount of surface runoff that would create flood-related hazards caused by the proposed development. Various structural and non-structural BMPs from the SWPPP and WQMP would be implemented to make certain that runoff water does not exceed the capacity of the stormwater drainage systems or cause significant pollution.

d) Based on review of the 2016 General Plan and recent aerial photo maps, the proposed Project is not subject to the potential effects of a seiche, tsunami, or mudflows caused by such due to lack of upstream water bodies. The City of Yucaipa is located just northeast of the I-10 freeway and is over 55 miles east of the Pacific Ocean. As such, the City is not under threat of a tsunami, otherwise known as a seismic sea wave. Similarly, the potential for a seiche to occur is remote, given the limited number of large water bodies within Yucaipa and its sphere of influence. Therefore, no impacts are expected to occur.

e) On May 22, 2017, the City Council, adopted Resolution 2017-18, approving a Memorandum of Agreement (MOA) to form the Yucaipa Sub-Basin Groundwater Sustainability Agency (YGSA) with the Cities of Calimesa and Redlands; the South Mesa Water Company; the South Mountain Water Company; the Western Heights Water Company; the Yucaipa. Valley Water District; the San Bernardino Valley Municipal Water District; and the San Gorgonio Pass Water Agency. The MOA was formally adopted by all agencies party to the Agreement, and was submitted to the State Department of Water Resources by the San Bernardino Valley Municipal Water District.

The Sustainable Groundwater Management Act (SGMA) provides the YSGA broad powers in the implementation of the YGSP and collaborative management of the Yucaipa Groundwater Sub-Basin. This includes the adoption of rules, regulations, ordinances and resolutions as may be necessary to manage and protect the basin. One of the many goals of the YSGA is the development of groundwater recharge projects. The City, in cooperation with the San Bernardino County Flood Control District, San Bernardino Valley Municipal Water District, and other partners and stakeholders have developed and constructed projects that capture and recharge storm flows for replenishment of the Yucaipa Basin. Future projects will also be developed to allow for active groundwater recharge opportunities. The proposed Project would not conflict with or obstruct implementation of the efforts of the YGSA.

The City is a municipal separate storm sewer system (MS4) stormwater permittee and participates with 20 other municipal agencies in the San Bernardino Valley region to establish Best Management Practices (BMPs) for residents, businesses, students, and governments in preventing and reducing stormwater pollution. Keeping pollutants out of stormwater is an integral component of a sustainable groundwater management program. Under the MS4 permit, the City requires new development to design and implement WQMPs that meet the San Bernardino County Technical Guideline threshold. As part of this project, a WQMP will be required to be reviewed and approved as part of the City's standard Condition of Approval. Implementation of the various structural and non-structural BMPs for the WQMP, and demonstrating that Low Impact Development (LID) concepts have been utilized, the Project would not conflict with or obstruct implementation of a water quality control plan.

11. **LAND USE AND PLANNING**. Would the project:				
a) Physically divide an established community?				X
b) Conflict with an applicable land use plan, policy or regulation of an agency			X	

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				

a) **No Impact**

Dividing an established community typically involves creating a physical barrier that changes the connectivity between areas of the community. The Project site is located along the north side of Oak Glen Road, and will have access from the existing entrance for the El Dorado facility and existing entrance for the Five Winds Ranch facility. As part of the project design, roadway improvements along the Five Winds Ranch entrance will be provided to support visitors to the site. The Project does not propose any action that would physically divide an established community.

b) **Less than Significant Impact**

The proposed use is consistent with the General Plan and zoning. The parcel that encompasses the Five Winds Ranch site is currently designated as Parks (P), and the site associated with El Dorado is currently designated as Open Space (OS).). Institutional uses, such as a City Park, are permitted within these Districts, and the activities that are proposed as part of the Project, including group campgrounds and picnic areas, are permitted within both Land Use Districts. The proposed Project has been designed so that the El Dorado and Five Winds Ranch site operate as one unified park facility, and result in a cohesive and well-designed recreational facility for the City. Improvements to the Project site are to occur consistent with adopted development standards and good planning practices. Grading and subsequent improvements would be undertaken consistent with appropriate City standards and drainage design criteria. No policies or plans exist for avoiding or mitigating an environmental effect that have not been taken into consideration.

12. **MINERAL RESOURCES.** Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a-b) **No Impact**

The City General Plan indicates the entire City is within an MRZ-3 (Mineral Resource Zone 3) classification, in which the significance of mineral deposit cannot be evaluated. No mining activities currently occur in the area, and no significant mineral resources are known to exist within the City of Yucaipa. Due to the close proximity of residential uses to the south, the site is unlikely to be considered a viable site for mineral extraction.

13. **NOISE.** Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

A Technical Noise and Vibration Impact Analysis Memorandum was completed LSA Associates, Inc. in May, 2019, to examine the potential impacts from noise and vibration that could result from the Project. This report is summarized below and is included as Appendix D of this Initial Study.

a) **Less than Significant Impact**

The Project site is adjacent to low-density residential and vacant land uses, and the primary existing noise sources in the project area from the traffic on Oak Glen Road is a steady source of ambient noise. The residential land uses are considered noise sensitive land uses in the City General Plan. The General Plan and Municipal Code identify noise levels for various types of land uses, certain activities, and how noise levels are to be measured. The noise-related impacts for the Project have been assessed by those that would occur during construction and those that would occur during the operation of the Park.

Construction:

Section 87.0905(e) of the Municipal Code allows for "Temporary construction, repair, or demolition activities between 7am and 7pm, except Sundays and Federal holidays." While construction activities will periodically raise noise levels above their current levels, the level of noise increase is not expected to be substantial and will only occur during the limited time associated with these activities. Two types of short-term noise impacts would occur during project construction: 1) equipment delivery and construction worker commutes; and 2) project construction operations.

The first type of short-term construction noise would result from transport of construction equipment and materials to the Project site and construction worker commutes. These activities would incrementally raise noise levels on access roads leading to the site, however, the transportation of the heavy equipment to be used for grading and construction activities would be moved on site just one time and would remain on site for the duration of each construction phase. This one-time trip occurrence would not significantly add to the daily traffic noise in the Project vicinity. The total number of daily vehicle trips for workers visiting the site would also be minimal when compared to existing traffic volumes on Oak Glen Road or Avenue E, and the long-term noise level change associated with these trips would not be perceptible. Therefore, equipment transport noise and construction-related worker commute impacts would be short term and would not result in a noticeable noise increase.

The second type of short-term noise impact is related to noise generated during the site preparation, grading, building construction, architectural coating, and paving activities that would occur on the Project site. Based on the analysis completed, it is expected that noise levels during construction at the nearest noise-sensitive receptor would approach 82 dBA Leq. While construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the Project area under existing conditions, the noise impacts would no longer occur once Project construction is completed. As stated above, noise impacts associated with construction activities are regulated by the City's Municipal Code. In addition, construction-related noise impacts would remain below the 90 dBA Leq 1-hour construction noise level criteria as established by the FTA.

The following best management practices should be implemented to reduce short-term construction noise impacts.

The Project contractor shall implement the following measures during construction of the Project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. Equipment should also utilize the best available noise control techniques (e.g., use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible).
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.
- Prohibit extended idling time of internal combustion engines.

Operation:

Noise impacts associated with the long-term operation of the Project must comply with the standards presented in the City's Municipal Code, described above. Noise associated with the new Project features includes HVAC equipment, parking lot activities, camping and event activities, and events at the new amphitheater.

Amphitheater. The amphitheater activities, which would include people conversing, acoustic instruments, and singing, could result in increased noise levels. The Project does not include any programming of specific events and no amplified sound is proposed at this location. The nearest noise sensitive receptors to the amphitheater are the residences located approximately 550 feet south of the amphitheater location. Based on the City's standards, daytime noise level impacts are required to remain below the 55 dBA Leq and 75 dBA Lmax daytime standard. As a result of the distance to the residences, the noise levels generated by ampitheater would be 40 dBA Leq, and would remain below the City's noise standard for residential uses; therefore, the proposed Project would comply with the City's standards.

Parking Lot Activities. Parking lot noise, including engine sounds, car doors slamming, car alarms, loud music, and people conversing, would occur as a result of the proposed Project at the Project site and on nearby streets. The existing sensitive receptors located approximately 140 feet south from the proposed parking areas could be exposed to a noise level of up to 61 dBA Lmax. It is not expected that the parking lot activities would occur during the more sensitive nighttime hours and the potential noise levels would remain below the City's 75 dBA Lmax noise standard for residential uses; therefore, the proposed Project would comply with the City's standards.

HVAC Equipment. HVAC equipment could be a primary noise source associated with the adobe house and barn that will be subject to an adaptive reuse for the facility. HVAC equipment is often mounted on rooftops, located on the ground, or located within mechanical rooms. Based on the analysis completed, it is expected that the nearest off-site noise-sensitive receptors, located 440 feet to the west of the existing adobe building location, could be exposed to a noise level of 32 dBA Leq from the HVAC equipment. This level is well below the City's noise level standards.

Camping Activities. Implementation of the proposed Project would permit camping activities, including tents and yurts, with the project site. Camping activities, which include people conversing, music, and children playing would potentially impact adjacent noise-sensitive land uses, and would be located 260 feet north of the residences located along Oak Glen Road. Based on the analysis completed, the nearest off-site receptor would be subject to a noise level of approximately 40 dBA Leq. This level is well below the City's noise level standards.

Event Activities. The event activities, located on the terraces northwest of the Adobe house, will include a space for a temporary shelter/tent and an area for hosting weddings, receptions, quiñceaneras, reunions and similar events that would generate noise associated with musical instruments, and loudspeakers. The closest residences in the County to the south and the approved future residences in the City to the west are located approximately 530 ft from event activities. Based on the analysis completed, the nearest off-site receptor would be subject to a noise level of approximately 51 dBA Leq from the park users. This level is well below the City's noise level standards, and no events would occur after 10pm.

b) **Less than Significant Impact**

Vibration related impacts would occur during the construction of the Project, as heavy equipment to be used for grading and construction activities traverse within the Project site. The nearest structures to the Project site are the existing residential uses located 90 feet to the south. Based on the analysis completed, the operation of typical construction equipment would generate groundborne vibration levels of 0.013 in/sec PPV, which is below the City's 0.2 in/sec PPV vibration standards.

c) **No Impact**

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The Project site is not within two miles of an airport of any type. The nearest airport is Redlands Municipal Airport (REI), which is located approximately 8.2 miles northwest from the Project site. In addition, the Project is not within the Redlands Airport Land Use Compatibility Plan. No impacts would occur with development of the Project.

14. **POPULATION AND HOUSING.** Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing or housing, necessitating the construction of replacement housing elsewhere?				X

a) **No Impact**

The proposed Project site is located within an area that is generally undeveloped with some single-family residences and vacant residential parcels to the south and west, and the San Bernardino National Forest areas to the north and east of the Project site. The Project would result in the development of a new park facility to serve residents within the City and surrounding areas. The proposed Project is consistent with the Park and Open Space land use designations for the site and was considered in the City's build-out envisioned by the General Plan. As such, impacts are expected to be less than significant.

b) **No Impact**

There is one (1) residence located on the subject site for the Project; however, the existing residence has been uninhabited, and the development of the Project would not result in any displacements of people or would necessitate the replacement of housing elsewhere within the city limits.

15. **PUBLIC SERVICES**. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?			X	

a) **Less than Significant Impact**

The City of Yucaipa is currently served by the California Department of Forestry (CAL FIRE). The Project site is accessible from Oak Glen Road, which is an improved street, and which includes an existing 19 space parking lot at El Dorado Park and a new 133 space parking area at the Visitors Reception Area, which has been designed consistent with existing City Engineering and Fire Department standards. The Project does not require unique or altered fire protection services to provide service to the site. The proposed Project would have a less than significant impact on fire protection services and would not affect fire department service ratios or response times, nor would it require the construction of any new fire facilities.

b) **Less than Significant Impact**

The San Bernardino County Sheriff's Department currently serves the Project site and surrounding area. The proposed Project would not require unique police protection services, since the site has been and will continue to be accessible from surrounding streets. The facility would be operated by the City of Yucaipa Community Services Department and

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

would provide recreational programming to the community which include, but are not limited to: archery, wedding ceremonies, public campgrounds and equestrian activities.

c) **No Impact**

The Yucaipa-Calimesa Joint Unified School District (YCJUSD) would serve future development in the area. The subject site is not located in a land use district that would provide the opportunity for residential growth; therefore, the Project will not result in additional students that would increase demand to the YCJUSD. No impacts would therefore occur.

d) **No Impact**

The proposed Project is to establish a Public Use Facility and Park, which would provide recreational opportunities to residents within the City of Yucaipa. The Project would not establish any additional residential uses and would not result in an increased demand on other area parks. However, the City of Yucaipa has adopted a development impact fee program for commercial and residential developments to off-set the potential impact of more residents using the park facilities caused by that new development. One of the funding sources for the Project would be from the construction of new dwelling units that are required to pay these development impact fees. The Project would provide various recreation amenities to serve the City, and therefore no impacts would therefore occur.

e) **Less than Significant Impact**

Public facilities are typically provided to serve a residential population. The Project would not establish any additional residential uses as it is a park project, and thus, would not result in an increase in demand for other public facilities. Therefore, impacts to libraries, parks, and other public facilities would be less than significant.

16. **RECREATION.**				
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a-b) **No Impact**

See response to 15d. The Project consists of a new Public Use Facility and Park for the residents of the City of Yucaipa and would reduce the demand for other parks in the area. The implementation of development impact fees for residential and commercial projects will provide a funding source for future maintenance of the proposed Project. In addition, the facility would provide an archery range, which the City of Yucaipa does not currently have at any City park facilities.

17. **TRANSPORTATION/TRAFFIC.** Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic				X

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
levels or a change in location that results in substantial safety risks?				
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			X	
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

A Traffic Impact Analysis was completed LSA Associates, Inc. in May, 2019, to examine the potential circulation impacts from could result from the Project. This report is summarized below and is included as Appendix E of this Initial Study.

a, b) **Less than Significant Impact**

The proposed Project is consistent with the City's General Plan Land Use Map, and the Transportation Element of the City's General Plan identifies the transportation needs to meet the land use pattern described within the General Plan. The land use pattern will not change the projected increase in vehicle trips that has been provided for within the General Plan. Based on the analysis of the proposed Project demand, and the existing and future conditions, the Project would not have any significant impacts to the roadway capacity. Based on the ITE Trip Generation Manual, this Project is anticipated to generate 573 daily trips, with 28 trips occurring in the a.m. peak hour, and 58 trips in the p.m. peak hour. Vehicular access for the site would be provided the driveway for the existing El Dorado Park restroom facility and parking lot area and at the existing entrance to the Five Winds Ranch. The driveway locations would Level of Service (LOS) A, and the intersection of Bryant Street and Oak Glen Road would remain at an LOS B, which exceed the City's requirements. No significant impacts would occur as a result.

c) **No Impact**

Project site is not within close proximity to an airport of any type. The nearest airport is Redlands Municipal Airport (REI), which is located 8.2 miles northwest from the Project site. The maximum height permitted within the P Land Use District Development is 45 feet, and the distance of the Project from airports would mean that structures would not impact any flight patterns.

d) **Less than Significant Impact**

Final project site plans would be subject to City review and approval, which would ensure that Project driveway intersections and internal circulation are safe, with adequate sight distance, driveway widths and stop signs where necessary for entering and exiting the site. Vehicular access for the site would be provided the driveway for the existing El Dorado Park restroom facility and parking lot area, and at the existing entrance to the Five Winds Ranch. The Project will include roadway improvements at the Five Winds Ranch entrance, including a deceleration lane, acceleration lane, and turn-in lane that has been designed pursuant to the American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highway and Streets manual (AASHTO Manual). This design would ensure safe ingress and egress to the site. The Project site is also surrounded by residential uses, and the development of a Park would not create hazards due to incompatible uses, as the park would provide a local amenity for the neighboring residents. Impacts would therefore be less than significant.

e) **No Impact**

The proposed Project is located adjacent to the existing paved two-lane street of Oak Glen Road. Vehicular access for the site would be provided the driveway for the existing El Dorado Park restroom facility and parking lot area and at the existing entrance to the Five Winds Ranch. The proposed parking lot drive aisles have been designed to provide adequate access to facilitate the ingress and egress for fire vehicles, with a 20 foot paved section to meet the all-weather surface

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

requirements of the Fire Department. In addition, a fire truck turnaround is provided within the site to meet the Yucaipa Fire Department requirements.

f) **No Impact**

The proposed Project will not affect future opportunities to provide alternative transportation modes. As part of the Project, enhanced pedestrian features would be provided onsite for park users. In addition, the site provides a connection to an existing trial network for the El Dorado park, and its parking improvements would provide greater accessibility to those trails.

18. **TRIBAL RESOURCES.** Would the project:				
a) Cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

A Cultural Resources Assessment was prepared by LSA Associates, Inc. in February, 2019, to assess the potential impacts to cultural and tribal resources that could result of the Project. This report is summarized below and is included as Appendix C of this Initial Study

i) **No Impact**

The proposed Project is located on a partially developed site that features the City's existing El Dorado Park Facility and the existing Five Winds Ranch adobe house and outbuildings along Oak Glen Road at the far east end of the City of Yucaipa. The report assessed the existing Five Winds Ranch adobe brick house and other structures located onsite as part of the built environment. The assessment noted that the historic-period residence was either greatly expanded or newly constructed in 1946 and was owned by Leon Arnold Atwood, Jr. until his death in 1995. The reasearch found that there is no indication that Leon or Five Winds Ranch made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of the community to qualify as a significant historic resource. Further, the number of additions to the existing ranch has impacted the potential integrity of the site. It should be noted that project also intends the adaptive reuse of the ranch adobe brock residence, and the structure would be retained with the Park development. No other significant resources, including tribal resources, have been discovered onsite, and was reaffirmed by a survey that was conducted onsite.. As such, the site is not considered historic, and no impacts to resources eligible for listing in the California Register of Historical Resources, or in a local register of historical resources would occur as part of development of the Project

ii) **Less Than Significant with Mitigation Incorporated**

Conducting consultation early in the CEQA process allows tribal governments, public lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process.

In accordance with AB 52 requirements, the City sent invitation letters to representatives of the Native American contacts

on August 31, 2019 formally inviting tribes to consult with the City on the Project. The intent of the consultations is to provide an opportunity for interested Native American contacts to work together with the City during the project planning process to identify and protect tribal cultural resources. A response letter was received from the San Manuel Band of Mission Indians and the Soboba Band of Luiseno Indians requesting consultation.

Archaeological research in the area indicates the Project area appears to have been inhabited by the Mountain Serrano, but is also within the boundaries of traditional Cahuilla territory, which lies within the geographic center of Southern California and the Cocopa-Maricopa Trail, a major prehistoric trade route that linked the Colorado Desert with the Pacific Coast. Further, the name "Yucaipa" is a form of the Serrano word, "Yucaipat." Given the territory's close proximity to the Cocopa-Maricopa Trail, interactions with surrounding tribes were extensive. Due to this history, Figure PR-6 of the City's General Plan identifies that the subject site is located within a Cultural Sensitivity Area.

The Cultural Resources Assessment did not identify any significant resources to be onsite. However, information received during consultation noted that that the site is considered sensitive and their records indicate some level of tribal history near the Project site. Based on the terrain and topography of the site, modification to the Project plans were made to avoid potential areas that might be more likely to uncover resources. Further, mitigation measures were recommended to address the procedure should any inadvertent discoveries be made. As a result of the consultation efforts, tribal-related Mitigation Measures TRI-1 and TRI-2 have been developed for the Project and are included as part of the proposed Project's Condition of Approval. Incorporation of the mitigation measures will ensure a less than significant impact.

Mitigation Measures:

TRI-1: Treatment and Disposition of Cultural Resources.

In the event that Native American cultural resources are inadvertently discovered during the course of any ground disturbing activities, including but not limited to brush clearance, grading, trenching, archaeological testing, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

- Avoidance and Preservation in Place: Avoidance and preservation in place shall be the preferred treatment for any and all discoveries of archaeological materials. Should the resource not be a candidate for avoidance or preservation in place, a resource-specific mitigation plan shall be developed, reviewed by all Parties, and implemented following the guidelines within item C below.
- Temporary Curation and Storage for Removed Resources: For resources that cannot be left in place, they shall be temporarily curated in a secure location onsite at an agreed to location that is secure and accessed only by a limited number of on-site supervisors, specified Tribal monitors, and the archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversite of the process; and
- Treatment and Final Disposition of Removed Resources: For resources that cannot be left in place, the landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Yucaipa with evidence of same:
    - Accommodate the process for onsite reburial of the discovered items with the Consulting Tribes. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing, basic analysis, and other analyses as recommended by the project archeologist and approved by the Consulting Tribes have been completed, all documents should be at a level of standard professional practice to allow the writing of a report of professional quality;
    - A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study, should the resources not be candidates for reburial. The collections and associated records shall be transferred, including title, to an appropriate curation

facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation;

- If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the San Bernardino County Museum by default.

- At the completion of all ground disturbing activities on the site, a Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City and Consulting Tribes. Should the resources be placed within a curation facility as a final treatment, copies of all reports will be provided to the facility to remain with the collection.

TR2-1: Inadvertent Discoveries of Human Remains/Funerary Objects

In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify the County Coroner, the landowner/Lead Agency, and SMBMI regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD and landowner/Lead Agency agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

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

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

19. **UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably			X	

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
foreseeable future development during normal, dry and multiple dry years?				
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

a-c) **Less than Significant Impact**

The YVWD provides potable water and wastewater treatment facilities for the Project site. The District is in a controlled overdraft condition since the water table has dropped due to drought. However, infrastructure improvements have been developed to increase their storage capabilities to meet the demand of future residents and businesses based on the City's General Plan. This includes several recharge facilities developed by the City of Yucaipa. Sewer connectivity is also available through the YVWD. As part of the Project application, the City of Yucaipa had obtained a Preliminary Service Evaluation letter from YVWD noting that they would be able to accommodate the required water and sewer needs of the proposed Project. The Project would not require the expansion of their facilities. As such, impacts will be less than significant.

The proposed Project will result in an incremental increase in the amount of storm water runoff from the property. The proposed development will require new storm water drainage facilities to capture the additional runoff that is generated, which will be provided for by an on-site drainage detention basin along the southern edge of the sites. As a condition of Project approval and prior to this issuance of grading permits, the Project is required to submit a SWPPP and WQMP that describes BMPs and site design measures that will be implemented to minimize site runoff that is created. Therefore, the impact would be less than significant.

Other utilities, including electric power, natural gas, or telecommunications facilities, are provided along Oak Glen Road, and no substantive changes are necessary to connect to those utilities.

d, e) **Less than Significant Impact**

Solid waste services in the City of Yucaipa are provided through a contract with Burrtec, and disposed of within the San Timoteo Sanitary Landfill. As a part of the contract, the disposal service company is required to comply with all appropriate regulations. According to information from the CalRecycle website, operated by the State of California, this landfill has an average annual capacity of 500,000 to 749,999 tons per year, and has a remaining capacity of over 13 million cubic yards and a daily landfill capacity is 2,000 tons per day. The proposed Project consists of the development of the Five Winds Ranch / El Dorado Park facility, and would not be a substantive generator of waste projects; the majority of the waste would come from paper and other recyclables goods from the administrative functions within the adapted adobe brick building. A trash enclosure would be constructed, and would feature a recycling bin to facilitate solid waste reduction goals. Based on the proposed park operations, the landfill capacity, and efforts to reduce solid waste, the Project impacts would be less than significant.

20. **WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

a) **No Impact**

The proposed Project site is adjacent to Oak Glen Road, which is an existing paved roadway, and development of the site would not impact access to users traveling along the public right-of-way. Figure S-5 of the Yucaipa General Plan does designate Oak Glen Road as a local evacuation route. However, this route would not be impacted by the Project. Vehicular access for the site would be provided the driveway for the existing El Dorado Park restroom facility and parking lot area and at the existing entrance to the Five Winds Ranch. Fire department access within the Project has also been designed to comply with the California Fire Code. As such, the proposed Project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

b-d) **Less than Significant Impact**

The areas proposed for development as part of the Project are located on a relatively flat areas that have been previously farmed, and does not feature substantial brush that would pose as a wildfire hazard, and areas where more native habitat is located would be avoided. The Project site subject to development is within the Fire Safety Review Area 2 according to the City General Plan, and would be subject to Fire Department conditions of approval to reduce fire related risks. In addition, the City has also adopted the most recent version of the CBC, which includes sections on fire-resistant construction material requirements based on building use and occupancy. The construction requirements are a function of building size, purpose, type, materials, location, proximity to other structures, and the type of fire suppression systems installed. Many of these requirements are also included as part of the Project's Conditions of Approval as a uniformly applicable development policy. Through these standard requirements, impacts from fire-related hazards would be less than significant. There are no other factors onsite that would exacerbate wildfire risks, or slopes that would pose significant risks, such as post-fire slope instability, or downstream flooding or landslides. As a result of the development of the Project.

21. **MANDATORY FINDINGS OF SIGNIFICANCE.**				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

a) **Less than Significant Impact**

The proposed Project will not result in significant impacts that have the potential to degrade the quality of the environment. The Project designs avoids any critical natural habitat, and would not cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, the site has been designed to avoid any significant cultural resources were identified onsite, and the Project would therefore not eliminate important examples of the major periods of California history or prehistory. However, there is also a potential for cultural resources to be discovered during site grading activities, and a mitigation measure is included to address the procedures should any inadvertent discovery be made.

b) **Less than Significant Impact**

The proposed Project is consistent with the City's General Plan. As such, the cumulative effects were evaluated as part of the City's General Plan EIR. Therefore, development of the proposed Project would be consistent with the assumptions of current long-range planning for the provision of utilities, service systems and public services in the City of Yucaipa. The evaluation of proposed Project utilized a variety of topical sections, including: agriculture, biology, cultural, air quality, geology/soils, greenhouse gases, hydrology, land use, noise, land use, mineral resources, population and housing, recreation, traffic, utilities and services. The analysis of the Project did not identify potential significant or cumulative impacts that could not be mitigated to a level that is less than significant.

c) **Less than Significant Impact**

The proposed Project will be constructed consistent with existing City regulations, standards, and processes, and those of other agencies. The topical issues discussed within this document did not identify the potential for adverse effects due, in part, to the incorporation of mitigation measures that would reduce the potential impact to less than significant.

SUPPORTING INFORMATION SOURCES:

1. City of Yucaipa General Plan, 2016
2. City of Yucaipa General Plan EIR, 2016
3. City of Yucaipa Development Code (as amended)
4. Caltrans Web Site for Scenic Highways, www.dot.ca.gov.
5. California State Department of Conservation for farmland mapping, www.consrv.ca.gov.
6. California Department of Toxic Substances Control, www.dtsc.ca.gov.
7. State Water Resources Control Board.
8. Cal Fire Mapping, www.fire.ca.gov.
9. Yucaipa, CA U.S.G.S. Map

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Appendix List:

Appendix A – Air Quality and Greenhouse Gas Analysis
Appendix B – Biological Resources Assessment Report
Appendix C – Cultural Resources Assessment
Appendix D – Noise and Vibration Impact Analysis
Appendix E – Traffic Impact Analysis

LSA

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: May 24, 2019

TO: Michael R. Seal, City of Yucaipa

FROM: Amy Fischer, Principal
Daniel Kaufman, Air Quality and Noise Specialist

SUBJECT: Air Quality and Greenhouse Gas Assessments for Five Winds Ranch/El Dorado Ranch Park

INTRODUCTION

This Air Quality and Greenhouse Gas Impact Technical Memorandum for the proposed Five Winds Ranch/El Dorado Ranch Park project (project) has been prepared using methods and assumptions recommended in the air quality impact assessment guidelines of the South Coast Air Quality Management District (SCAQMD) in its *CEQA Air Quality Handbook* (1993) and associated updates. Figure 1 (all figures provided in Attachment B) shows the regional and project locations. This analysis follows the guidelines within the SCAQMD's *CEQA Air Quality Handbook,* including an assessment of criteria pollutant emissions, an assessment of carbon monoxide (CO) hot-spot impacts, and an assessment of the project's greenhouse gas (GHG) emissions consistent with the City of Yucaipa Climate Action Plan (CAP) (2015). Citations for references used in this analysis are provided in Attachment A.

REGIONAL PROJECT LOCATION AND DESCRIPTION

The 58.5-acre (ac) project site is located in the along the north side of Oak Glen Road, east of Pendleton Avenue, in Yucaipa, California. Improvements are proposed to the 48.5 ac park site, which encompasses the southern portion of Assessor's Parcel Number (APN) 0321-151-44 as well as APN 0321-121-43 (Five Winds Ranch). Currently restroom and parking facilities' lot improvements are located near the eastern boundary of the site. The existing Five Winds Ranch, including the Adobe house, barn, and outlying structures, is located on approximately 10.78 ac in the western half of the park site. Past agricultural use has occurred on portions of the site.

The Five Winds Ranch portion of the project is designated as Park (P) in the City of Yucaipa (City) General Plan. The City's General Plan assigns the Open Space (OS) designation to the balance of the site. Property directly north of the project site is designated as OS by the City and is dedicated as a conservation easement/mitigation site. The City has designated the undeveloped land located directly west of the park site as RL, Rural Living. The City has approved development of residential uses (Wilson Creek Estates and Tentative Tract Map (TTM) 18593) on the properties west of the project site. Rural single-family residences located to the south (across Oak Glen Road) and open space east of the site are located in unincorporated County of San Bernardino and designated OG/RL-5 (Oak Glen/Rural Living) and OG/AG (Oak Glen/Agriculture by the County. Figure 2 illustrates the conceptual site plan.

The proposed two-phase development of park facilities includes the following features:

1. **Proposed Phase I Improvements:**

    a. **Exterior Modifications to Existing Structures:** The modifications to the exterior of the Adobe house at Five Winds Ranch will include development of a veranda area with a temporary shelter/tent for events, a courtyard area with a hardscape surface that will be colored concrete (tan) or pavers and a lawn area (150 feet x 150 feet) for multi-use functions, as well as construction of a permanent storage building for maintenance.

    The existing barn will be relocated and repurposed to include a kitchenette and counters. The barn will include a gaming room with arcade games. The games will be youth-friendly (e.g., ping pong, board games, and arcade games).

    b. **Interior Modifications to the Existing Structures:** The modifications to the interior of the Adobe house and its veranda and courtyard areas will include a welcome/market area, a meeting/lounge area, Americans with Disabilities Act (ADA) compliant improvements in the current living room area, modifying portions of and expanding the existing breezeway (reorienting the roof line). Other improvements to the addition area include the development of dressing rooms, restrooms, a new kitchen upgraded with catering equipment, and ADA-compliant improvements.

    c. **Park Ranger Cabin:** Construct a cabin with signage for visitors as to where to check in depending on their time of arrival.

    d. **Parking Area and Roadways:** The road surface will be asphalt where needed for maintenance and fire access. The asphalt roads will be limited to widths of 20 feet (ft) in two directions and 12 ft in one direction, with paraffin-stay lock decomposed granite (d.g.) and colored concrete (tan), or just paraffin-stay lock d.g., for the ADA parking area.

    e. **Oak Glen Road Improvements:** Acceleration and deceleration lanes, and turn-pocket improvements on Oak Glen Road and entry monument/gateway signage at Oak Glen Road.

    f. **Multi-Use Non-Motorized Decomposed Granite Trails with Rail Fencing:** The trails will connect with the existing El Dorado Ranch Park trails to the east and future Master Plan trails to the west.

    g. **Information/Public Outreach Kiosk:** A kiosk will be added along with water fountains for trail users.

    h. **Group/Individual Campsite Areas with Amenities (Equestrian and Other Groups):** Equestrian amenities include pipe corrals/pens, small warm-up pen, wash rack with pea gravel, and hydrant/spigots. Campsites will also include back-in double-wide trailer camp units. A low ropes course (par course) is also proposed. The group/individual campsite area has been modified to minimize parking, but will require drop-off areas for loading/unloading and ADA parking.

i. **Cabin Units:** Five overnight cabin units will be installed, each with a shower and small bathroom. One or more cabins will be ADA compliant with accessible pathway and parking.

j. **Camping Area:** The camping areas will include an amphitheater and a propane-fueled fire pit area. No amplified sound would occur at the amphitheater and no amphitheater activities would occur during nighttime hours. Dual propane tanks will be used for the service areas. Areas for barbequing individually and as a group are also included.

k. **Archery Range:** The archery range will include hay bale markers and 10 ft wide target lanes.

l. **Restroom Buildings:** Restrooms will be constructed at the group camping area. Enhanced improvements to the existing El Dorado restroom will also be provided.

m. **Landscape Improvements:** Drainage swales and pedestrian bridges with enhanced boulder placements and pedestrian footbridges. Vegetative barriers will be located along the west, east, and south edges of the park.

n. **Temporary Shelter/Tent:** Temporary shelters/tents will be provided for special events and receptions. Regarding the event venue, the tented feature will host up to 250 persons for weddings, receptions, quinceañeras, reunions, and similar events.

2. **Proposed Phase II Improvements:**

a. **Parking:** Additional parking area (paraffin-stay lock d.g.) to be provided along westerly trails and roadways.

b. **Cabins:** From 5 to 10 additional overnight cabin units will be installed, each with a shower and bathroom. One or more cabins will be ADA compliant with accessible pathways and parking.

c. **Pond:** A wetland pond area that includes a dock and wood duck, owl, and bat boxes will be developed. The pond will include a waterfall inlet with a natural boulder aesthetic. This area will include picnic table seating with areas along with decomposed granite pathways.

d. **Native Landscaped Areas:**

1) Native grass meadows with views from the terrace.
2) A native wildflower garden highlighting the existing California poppies at Five Winds Ranch.
3) Native habitat restoration areas with native landscaping on the slopes.

e. **Trails:** New trails will be added to connect trails from the Adobe house to the west and through the gardens.

Sensitive Receptors

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the South Coast Air Basin (Basin), and the prevailing meteorological

conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of adverse air quality conditions. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The people most likely to be affected by air pollution, as identified by the California Air Resources Board (CARB), may include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors may include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes.

There are existing single-family residences to the south of the project site across Oak Glen Road. There as an approved residential development to the west of the project site, although none of the residences are currently constructed. Land to the east and north is undeveloped.

The closest existing residential building is located approximately 90 ft from the construction boundary. The approved residential development to the west of the project site will have residential parcels immediately adjacent to the western project boundary. It is assumed that the approved residences will not be inhabited during construction of the project because they have not been built yet. It is also assumed that the approved residences adjacent to the western project boundary will be inhabited during operation of the project, and that residential buildings could be located within 82 ft (25 meters [m]) of the project site.

REGULATORY REQUIREMENTS

Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the United States Environmental Protection Agency (EPA) established the national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed "criteria" pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM) (which includes particulate matter less than 10 microns in size [PM_{10}] and particulate matter less than 2.5 microns in size [$PM_{2.5}$]), and lead. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards (AAQS), or criteria, for outdoor concentrations in order to protect public health. The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin.

The United States has historically had a voluntary approach to reducing GHG missions. However, on April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate carbon dioxide (CO_2) emissions, a principal GHG, under the CAA. On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six GHGs (i.e., CO_2, methane [CH_4], nitrous oxide [N_2O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]) constitute a threat to public health and welfare and that the combined emissions from motor vehicles cause and contribute to global climate change.

State Regulations/Standards

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board), to establish the California Air Resources Board (CARB). Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems. CARB is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air quality districts that regulate stationary-source emissions and develop local nonattainment plans.

California adopted the California Clean Air Act (CCAA) in 1988. CARB administers the California ambient air quality standards (CAAQS) for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the federal CAA as well as four others: visibility-reducing particulates, hydrogen sulfide (H_2S), sulfates, and vinyl chloride.

California Climate Action Milestones

California started developing climate action regulations in 1988 with Assembly Bill (AB) 4420 (State of California 2017). In 2002, California adopted AB 1493 directing CARB to adopt regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles. Senate Bill (SB) 1078 requires California electric utilities to use renewable energy sources for 33 percent of the total by 2020. In 2006, the State Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multiyear program to reduce GHG emissions in California.

The initiatives, Executive Orders (EOs), and statutes established since 1988 comprise the major milestones in California's efforts to address climate change through coordinated action on climate research, GHG mitigation, and climate change adaptation. Numerous other related efforts have been undertaken by State agencies and departments to address specific questions and programmatic needs. The Climate Action Team coordinates these efforts and others, which comprise the California Climate Adaptation Strategy (State of California 2018).

South Coast Air Quality Management District

The 1976 Lewis Air Quality Management Act established SCAQMD and other air quality districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the State.

Applicable SCAQMD Rules and Regulations

- **Rule 402 – Nuisance:** Air contaminants shall not cause injury, detriment, nuisance, or annoyance to any considerable number of persons.

- **Rule 403 - Fugitive Dust:** Fugitive dust from any active operation, open storage pile, or disturbed surface area shall not remain visible in the atmosphere beyond the property line of the emission source.

Regional Air Quality Management Plan

SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) (SCAQMD 2017) for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every 3 years, updating the previous plan and 20-year horizon.

The latest plan is the 2016 AQMP, which incorporates the latest scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2016 AQMP included the integrated strategies and measures needed to meet the NAAQS, implementation of new technology measures, and demonstrations of attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards. Key elements of the 2016 AQMP include:

- Calculation and credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation);
- A strategy with fair-share emission reductions at the federal, State, and local levels;
- Investment in strategies and technologies meeting multiple air quality objectives;
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero technologies;
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis;
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures;
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the ozone strategy;
- Attainment of the 1-hour ozone standard by 2022 with no reliance on “black box” future technology (CAA Section 182(e)(5) measures).

Local Policies

City of Yucaipa General Plan and Climate Action Plan

The City of Yucaipa adopted its General Plan in April 2016. The City also adopted a CAP in September 2015 to address requirements under the California Global Warming Solutions Act of 2006. The CAP includes strategies to achieve the GHG targets for Yucaipa and identifies local measures to reduce GHG emissions under the City’s jurisdictional control to achieve the City’s identified GHG reduction target. The City of Yucaipa participated in the San Bernardino County Regional Greenhouse Gas Reduction Plan, which presents the collective results of all local efforts to reduce GHG emissions consistent with the statewide GHG targets expressed in AB 32.

The CAP includes a goal to reduce the City’s GHG emissions to a level that is 15 percent below its 2008 GHG emissions level by 2020. The City will meet this goal through a combination of State

(approximately 81 percent) and local (approximately 19 percent) efforts. The Pavley vehicle standards, the State's low carbon fuel standard, the Renewable Portfolio Standard, and other State measures will reduce GHG emissions in Yucaipa's on-road and building energy sectors by 2020. An additional reduction of 17,126 metric tons (MT) of carbon dioxide equivalent (CO_2e) will be achieved primarily through the following local measures, in order of importance:

- Implementation of SB X7-7 (Water-4);
- GHG Performance Standard for New Development (PS-1); and
- Solar Installations for Existing Housing (Energy-7).

The following CAP measures would be applicable to the project:

- **State-2:** Title 24 Standards for Non-Residential and Residential Buildings (Energy Efficiency Standards and California Green Building Standards Code [CALGreen]) requires that building shells and building components be designed to conserve energy and water.

- **State-3:** AB 1109 (Huffman) Lighting Efficiency and Toxics Reduction Act is structured to reduce statewide electricity consumption by at least 50 percent from 2007 levels for indoor residential lighting, and at least 25 percent from 2007 levels for indoor commercial and outdoor lighting by 2018.

- **Wastewater-3:** Encourage Water-Efficient Landscaping Practices such as drought-tolerant landscaping.

ENVIRONMENTAL SETTING

Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The proposed project is located in Yucaipa, San Bernardino County, and is within the jurisdiction of SCAQMD, which regulates air quality in the Basin.

The Basin comprises approximately 10,000 square miles and covers all of Orange County and the urban parts of Los Angeles, Riverside, and San Bernardino Counties. The Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east, forming the inland perimeter.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the EPA to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable NAAQS. Nonattainment areas are

imposed with additional restrictions as required by the EPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. As shown in Table A, the Basin is designated as nonattainment for O_3 and $PM_{2.5}$ by federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ by State standards.

Table A: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	N/A
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Unclassified/Attainment (1-hour) Attainment/Maintenance (Annual)
SO_2	Attainment	Unclassified/Attainment
Lead	Attainment[1]	Unclassified/Attainment[1]
All Others	Attainment/Unclassified	Attainment/Unclassified

Source 1: NAAQS and CAAQS Attainment Status for South Coast Air Basin (SCAQMD 2016). Website: www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf (accessed May 2019).
Source 2: Nonattainment Areas for Criteria Pollutants (Green Book) (EPA 2019). Website: https://www.epa.gov/green-book (accessed May 2019).
[1] Only the Los Angeles County portion of the South Coast Air Basin is in nonattainment for lead.

CAAQS = California ambient air quality standards
CO = carbon monoxide
EPA = United States Environmental Protection Agency
N/A = not applicable
NAAQS = national ambient air quality standards
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide

Ozone levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the SCAQMD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Basin still exceeds the State standard for 1-hour and 8-hour ozone levels. The EPA lowered the 1997 0.80 parts per million (ppm) national 8-hour ozone standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The Basin is classified nonattainment for the 1-hour and 8-hour ozone standards at the State and federal level. During the 2016-2018 time period, the Redlands-Dearborn Air Monitoring Station (the closest monitoring station to the project site) recorded the following exceedances of the State and federal 1-hour and 8-hour ozone standards (EPA 2019, CARB 2019).

- 97 exceedances of the State and federal 8-hour ozone standard in 2016, 114 in 2017, and 94 in 2018;
- 55 exceedances of the State 1-hour ozone standard in 2016 and 79 in 2017.

National and State standards have also been established for $PM_{2.5}$ over 24-hour and yearly averaging periods. $PM_{2.5}$, because of the small size of individual particles, can be especially harmful to human

health. $PM_{2.5}$ is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On December 17, 2006, the EPA strengthened the 24-hour $PM_{2.5}$ NAAQS from 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$, and the Basin was subsequently designated "moderate" nonattainment for 2006 24-hour $PM_{2.5}$ NAAQS on December 14, 2009. The Basin is also considered a nonattainment area for the $PM_{2.5}$ standard at the State level. The following $PM_{2.5}$ exceedances were recorded at the San Bernardino-4th Street Air Monitoring Station (the closest station monitoring $PM_{2.5}$ to the project site):

- 1 exceedance of the federal 24-hour $PM_{2.5}$ standard in 2016, 1 exceedance in 2017, and 0 exceedance in 2018.

The Basin is classified as a PM_{10} nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal PM_{10} standard on July 26, 2013. Because the Basin was redesignated from nonattainment to attainment, a PM_{10} maintenance plan was adopted in 2013 and is required to be updated every 10 years. The State 24-hour PM_{10} standard was exceeded four times in 2016 and two times in 2017 at the Redlands-Dearborn Air Monitoring Station (the closest station monitoring PM_{10} to the project site). No exceedances of the federal 24-hour PM_{10} standard were measured at the Redlands-Dearborn Air Monitoring Station during the 2016-2018 time period.

All areas of the Basin have continued to remain below the federal CO standards (35 ppm 1-hour and 9 ppm 8-hour) since 2003. The EPA redesignated the Basin to attainment of the federal CO standards, effective June 11, 2017. The Basin is also well below the State CO standards (20 ppm 1-hour CO and 9 ppm 8-hour CO).

Greenhouse Gas and Global Climate Change Background

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases (e.g., water vapor) are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation).

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of

heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or metric tons of "CO_2 equivalents".

THRESHOLDS OF SIGNIFICANCE

The State *CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or state ambient air quality standards (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (SCAQMD 2017), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Pollutants with Regional Effects

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (SCAQMD 2017), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Regional Emissions Thresholds

Table B lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

Projects in the Basin with construction-related emissions or operational-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it would be considered to have a project-specific and cumulative impact.

Table B: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOC	NO_x	CO	PM_{10}	$PM_{2.5}$	SO_x
Construction	75	100	550	150	55	150
Operational	55	55	550	150	55	150

Source: South Coast Air Quality Management District Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed May 2019).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SO_X = sulfur oxides
VOC = volatile organic compounds

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local concentration standards for CO:

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

Localized Impacts Analysis

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008 (SCAQMD 2008a), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. Localized significance thresholds (LSTs) represent the maximum emissions from a project site of up to 5 ac that are not expected to result in an exceedance of the NAAQS or CAAQS or for CO, NO_2, PM_{10}, and $PM_{2.5}$. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA is the East San Bernardino Valley area (SRA 35). Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. During construction of the nearest sensitive receptor is a single-family residence 90 ft to the south of the project site boundary (across Oak Glen Road), as measured to the structure of the residential building. During operation of the project, the nearest sensitive receptor would be the approved residences that would be built on parcels adjacent to the western project site boundary. While the precise locations of the residential structures are unknown, they would likely be built closer than 82 ft (25 m) from the project boundary. Because 82 ft is the minimum distance for LSTs, a distance of 82 ft was used for the operational LST Analysis.

While improvements would occur on 48.5 ac of the project site, the construction would only occur on small portions at any one time, progressing in phases around the total site. The California Emissions Estimator Model (CalEEMod) includes guidance on modeling this concept for localized impacts analyses. The premise is that, based on the planned construction equipment type and numbers, the amount of area disturbed in 1 day can be estimated. The CalEEMod guidance provides the method to approximate the amount of acres disturbed per day. For this project, approximately

0.5 ac would be disturbed per day during the site preparation and grading phases, and less during other phases. Thus, LST screening thresholds for 1 ac were used in this analysis. For operational emissions, the challenge is that CalEEMod does not distinguish on-site emissions from off-site emissions. By design, the LST analysis only includes on-site sources; however, CalEEMod does not separate on-site and off-site emissions for operational sources. Thus, the operational LST analysis includes all on-site, project-related stationary sources, and a percentage of the project-related mobile sources that estimates the amount of project-related vehicle traffic that would occur on site. Table C lists the emissions thresholds that would apply during project construction and operation.

Table C: SCAQMD Localized Significance Thresholds (lbs/day)

Emissions Source Category	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (1 acre, 90-foot distance)	121	817	5	4
Operations (5 acres, 82-foot distance)	270	2,075	4	3

Source: *Localized Significance Threshold Methodology* (SCAQMD 2008a). Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (accessed May 2019).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

Consistency with Greenhouse Gas Reduction Plans

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Appendix G of the *State CEQA Guidelines* includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

On December 30, 2009, the Natural Resources Agency adopted amendments to the *State CEQA Guidelines* that became effective on March 18, 2010. The amendments to the *State CEQA Guidelines* include new requirements to evaluate GHG emissions. Pursuant to the amended *State CEQA Guidelines*, a lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

While individual projects are unlikely to measurably affect GHGs, each project incrementally contributes toward the potential for GHGs on a cumulative basis, in concert with all other past, present, and probable future projects. However, despite this, the CEQA statutes, the Office of Planning and Research (OPR) guidelines, and the draft proposed changes to the *State CEQA Guidelines* do not currently prescribe thresholds of significance or a particular methodology for performing an impact analysis. As with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency.

The City has adopted a CAP. Thus, the appropriate threshold for the City is demonstrating consistency with a locally adopted CAP.

AIR QUALITY IMPACTS

Air pollutant emissions associated with the project would occur over the short term from construction activities. Substantial long-term operational emissions would not occur because the project would construct bike and pedestrian paths and would not be an emissions source. The sections below describe project consistency with applicable air quality plans, estimated project emissions, and the level of impacts with respect to SCAQMD thresholds.

Construction Impacts

Equipment Exhausts and Related Construction Activities

Construction activities can generate a substantial amount of air pollution. While construction activities are considered temporary, the short-term impacts can still contribute to exceedances of air quality standards. Construction activities would include site preparation, grading, building construction, architectural coating (painting), and paving and surface improvement.

Table D lists the tentative project construction schedule for the proposed project based on a start date in 2019 and probable sub-phase durations.

Table D: Tentative Project Construction Schedule

Phase Name	Phase Start Date	Phase End Date	Number of Days
Site Preparation	7/1/2019	7/12/2019	10
Grading	7/13/2019	8/9/2019	20
Building Construction	8/10/2019	6/26/2020	230
Paving	6/27/2020	7/24/2020	20
Architectural Coating	7/25/2020	8/21/2020	20

Source: CalEEMod estimates based on information from the *Five Winds Ranch/El Dorado Ranch Park Conceptual Site Plan* (City of Yucaipa 2018).

The most recent version of CalEEMod (Version 2016.3.2) was used to calculate the construction emissions. The construction analysis includes estimating the construction equipment that would be used during each construction activity, the hours of use for that construction equipment, the quantities of earth and debris to be moved, and on-road vehicle trips (worker, soil hauling, and

vendor trips). CalEEMod data and defaults are assumed for the construction activities, on-road construction fleet mix, and trip lengths. For off-road equipment, the amount of rubber-tired dozers and tractors/loaders/backhoes used for the site preparation phase were reduced from the CalEEMod defaults and excavators and graders were removed from the grading phase because the project site would not require extensive site preparation and mass grading. There would be no soil import or export.

Table E lists the estimated construction equipment that would be used during project construction as estimated by CalEEMod. Table F shows the construction emissions. The emissions rates shown in the table are from the CalEEMod output tables listed as "Mitigated Construction", even though the only measures that have been applied to the analysis are the required construction emissions control measures, or standard conditions. Standard measures are discussed later in this report. They are also the combination of the on- and off-site emissions and only show the higher of the summer and winter emissions.

Table E: Diesel Construction Equipment Used by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber-Tired Dozers	1	8	247	0.4
	Tractors/Loaders/Backhoes	1	8	97	0.37
Grading	Rubber-Tired Dozers	1	8	247	0.4
	Tractors/Loaders/Backhoes	3	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	130	0.42
	Paving Equipment	2	8	132	0.36
	Rollers	2	8	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

Source: Compiled by LSA Associates, Inc. (2019).

Table F: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOC	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Site Preparation	1	14	7	<1	2	<1	1	<1
Grading	2	19	12	<1	3	1	1	<1
Building Construction	2	21	17	<1	<1	1	<1	1
Paving	2	14	15	<1	<1	<1	<1	<1
Architectural Coating	5	2	2	<1	<1	<1	<1	<1
Peak Daily	**5**	**21**	**17**	**<1**	**4**		**2**	
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**		**55**	
Emissions Exceed Threshold?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by LSA Associates, Inc. (2019).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

As shown in Table F, the proposed project's regional construction emissions would all be lower than their respective SCAQMD thresholds. Attachment C includes CalEEMod output, detailing the emission factors and other assumptions.

Fugitive Dust

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The proposed project will be required to comply with SCAQMD Rule 403 to control fugitive dust. Table F lists total construction emissions (i.e., fugitive dust emissions and construction equipment exhausts) that have incorporated the following Rule 403 measures that would be implemented to significantly reduce PM_{10} emissions from construction. The Rule 403 measures that were incorporated in the CalEEMod analysis are as follows:

- Water active sites at least three times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 ft (0.6 m) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.

Localized Impacts Analysis

Table G shows the on-site localized emissions during construction. Results indicated that the construction emission rates would not exceed the LSTs for the existing residence south of the project site boundary (across Oak Glen Road). Therefore, the project would not result in significant localized impacts during project construction.

Table G: Construction Localized Impacts Analysis

Emission Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	19	9	3	2
LSTs	115	715	6	4
Emissions Exceed Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA Associates, Inc. (2019).
Note: Source Receptor Area: East San Bernardino Valley, 1 acre, receptors at 90 feet
CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Odors

Heavy-duty equipment in the project area during construction would emit odors primarily from equipment exhaust. However, the construction activity would cease to occur after individual

construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors affecting a substantial number of people would not occur as a result of the proposed project.

Naturally Occurring Asbestos

The proposed project is in San Bernardino County, which is among the counties found to have serpentine and ultramafic rock in their soils (USGS 2019). However, according to the United States Geological Survey (USGS), no such rock has been identified in the project vicinity. Therefore, the potential risk for naturally occurring asbestos (NOA) during project construction is small.

However, in the event NOA is found on site, the project would be required to comply with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) standards. An Asbestos NESHAP Notification Form would be required to be completed and submitted to the CARB immediately upon discovery of the NOA. The project would be required to follow NESHAP standards for emissions control during site renovation, waste transport, and waste disposal. If NOA is found, a person certified in asbestos removal procedures would be required to supervise on-site activities.

Construction Emissions Conclusions

Tables F and G show that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by SCAQMD and that there would be no locally significant impacts during construction.

Operational Impacts

Long-Term Project Operational Emissions

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related activities. The proposed project would result in both stationary and mobile-source emissions.

The operational emissions shown in Table H include the total project. Based on trip generation provided in the *Traffic Impact Analysis* for the project, the park would generate 573 daily trips on a peak day, which were applied to all days of the week for the purposes of this analysis (LSA 2019). CalEEMod default trip lengths were assumed. Table H shows the long-term peak operational emissions associated with the proposed project. Additionally, there would be emissions from area sources, such as landscape maintenance, and energy sources, such as building heating and cooling, cabin heating and cooling, propane fire pits, and solid waste handling. As shown in Table H, project-related criteria pollutant emissions would not exceed the corresponding SCAQMD daily emission thresholds for any criteria pollutant.

Table H: Opening Year Regional Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	<1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	4	10	<1	3	<1
Total Project Emissions	**1**	**4**	**10**	**<1**	**3**	**<1**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Emissions Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA Associates, Inc. (2019).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

Localized Impacts Analysis

Table I shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, while CalEEMod does separate on-site and off-site emissions for construction, it does not do so for operations. For a worst-case scenario assessment, it was assumed all area and energy source emissions shown in Table H would occur on site, and a portion of the mobile sources would occur on site. The average trip lengths assumed by CalEEMod are 16.6 miles (mi), 8.4 mi, and 6.9 mi for various types of trips. The average on-site distance driven is estimated to be no more than 1,000 ft, which is approximately 2 percent of the total miles traveled. To be conservative, 5 percent was used for this LST analysis.

Table I: Long-Term Operational Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	<1	<1	<1	<1
LSTs	270	2,075	4	3
Emissions Exceed Threshold?	**No**	**No**	**No**	**No**

Compiled by LSA Associates, Inc. (2019).
Note: Source Receptor Area = East San Bernardino Valley, 5 acres, receptors within 82 feet (25 meters), on-site traffic 5 percent of total.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Table I shows that the localized operational emissions would not exceed the LSTs for the approved residences to be constructed within 82 ft (25 m) of the western boundary of the project site; therefore, the proposed operational activity would not result in a locally significant air quality impact.

In addition, the project's propane fire pits would not expose nearby residences to the smoke that typical wood-burning fire pits produce.

Air Quality Management Plan Consistency

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans. The applicable air quality plan is the 2016 AQMP.

Consistency with the 2016 AQMP would be achieved if the project is consistent with the goals, objectives, and assumptions in this plan to achieve the federal and State air quality standards. Per the SCAQMD *CEQA Air Quality Handbook* (1993), there are two main indicators of a project's consistency with the AQMP: (1) whether the project would increase the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the 2016 AQMP; and (2) whether the project would exceed the 2016 AQMP's assumptions for 2040 or yearly increments based on the year of project build out and phasing.

According to the City of Yucaipa General Plan Land Use Element, the Five Winds Ranch portion of the project is designated as Park (P). The City's General Plan land use map assigns the Open Space (OS) designation to the majority of the site. It would not affect population and would have a very small effect on employment. As shown in Tables F through I, the project would not produce sufficient emissions to increase the frequency or severity of existing air quality violations. Thus, it can be concluded that the proposed project would be consistent with the projections in the 2016 AQMP. Based on the consistency analysis presented above, the proposed project is consistent with the City's General Plan and the regional AQMP.

Greenhouse Gas Emissions

This section evaluates potential significant impacts to global climate change that could result from implementation of the proposed project. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's GHG emissions.

Construction and operation of the proposed project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation (as opposed to during its construction). Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During project construction, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs (e.g., CO_2, CH_4, and N_2O). Furthermore, CH_4 is emitted during the fueling of heavy equipment.

- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use

can result in GHG production if the electricity is generated by combusting fossil fuels. California's water conveyance system is energy intensive.

- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. However, landfill-generated CH_4 can also be a source of energy.

- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Table J lists the annual CO_2e emissions for each of the planned construction phases (from CalEEMod).

Table J: Construction Greenhouse Gas Emissions

Construction Phase		Greenhouse Gas Emissions (MT/yr)			
		CO_2	CH_4	N_2O	CO_2e
2019	Site Preparation	5	<1	0	6
	Grading	18	<1	0	18
	Building Construction	125	<1	0	126
2020	Building Construction	155	<1	0	155
	Paving	22	<1	0	22
	Architectural Coating	3	<1	0	3
Total Construction Emissions		**327**	**<1**	**0**	**330**
Amortized over 30 years		**11**	**<1**	**0**	**11**

Compiled by LSA Associates, Inc. (2019).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

Per SCAQMD guidance (SCAQMD 2008b), due to the long-term nature of the GHGs in the atmosphere, instead of determining significance of construction emissions alone, the total construction emissions are amortized over 30 years (an estimate of the life of the proposed project), and are added to the operational emissions for comparison to the applicable GHG significance threshold.

The GHG emission estimates presented in Table K show the emissions associated with the level of operation envisioned by the proposed project at opening.

As shown in Table K, the project would result in GHG emissions of 681 MT CO_2e per year.

Table K: Operational Greenhouse Gas Emissions

Source	Greenhouse Gas Emissions (MT/yr)					
	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction emissions amortized over 30 years	0	11	11	<1	0	11
Operational Emissions						
Area Sources	0	<1	<1	0	0	<1
Energy Sources	0	79	79	<1	<1	79
Mobile Sources	0	585	585	<1	0	586
Waste Sources	1	0	1	<1	0	3
Water Usage	<1	1	2	<1	<1	2
Total Project Emissions	**1**	**676**	**678**	**0**	**0**	**681**

Compiled by LSA Associates, Inc. (2019).
Bio-CO_2 = biologically generated carbon dioxide
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated carbon dioxide

For this project, GHG emissions significance is determined by considering consistency with a locally adopted GHG Reduction Plan. This project consists of modifications to existing park and open space area. The new park buildings would be built to meet or exceed all California Green Building Standards Codes (CALGreen) resulting in lower energy use and GHG emissions compared to older buildings. This would ensure project compliance with applicable CAP Measures State-2 and State-3. The landscaping would be drought tolerant and energy efficient, thus minimizing landscape water usage and ensuring compliance with CAP Measure Water-3. Thus, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Long-Term Microscale (Carbon Monoxide Hot-Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the San Bernardino-4th Street Monitoring Station showed a highest recorded 1-hour concentration of 2.7 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 2.8 ppm (the State standard is 9 ppm) during the past 3 years. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts

calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

According to the *Traffic Impact Analysis* for the project, intersections in the vicinity of the project currently operate at a satisfactory level of service and would continue to do so with the project under existing year, opening year (2022), and cumulative opening year (2022) conditions (LSA 2019).

Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any surrounding intersections, project-related vehicles are not expected to contribute significantly to CO concentrations exceeding the State or federal CO standards. Because no CO hot-spot would occur, there would be no project-related impacts on CO concentrations.

Assessment of Project-Related, Health-Related Impacts

Although the project is not expected to exceed the SCAQMD's numeric regional mass daily emission thresholds, this does not in itself constitute a less than significant health impact to the population adjacent to the project site and within the Basin.

The SCAQMD's numeric regional thresholds are based in part on Section 180(e) of the federal CAA. It should be noted that the numeric regional mass daily thresholds have not changed since their adoption as part of the *CEQA Air Quality Handbook* published by SCAQMD in 1993 (over 20 years ago). The numeric regional mass daily thresholds are also intended to provide a means of consistency in significance determination within the environmental review process.

Notwithstanding, simply exceeding the SCAQMD's numeric regional mass daily thresholds would not constitute a particular health impact to an individual nearby. The reason for this is that the mass daily thresholds are in pounds per day emitted into the air whereas health effects are determined based on the concentration of emissions in the air at a particular location (e.g., parts per million by volume of air, or micrograms per cubic meter of air). State and federal ambient air quality standards were developed to protect the most susceptible population groups from adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions.

For this reason, SCAQMD developed a methodology to assist lead agencies in analyzing localized air quality impacts from a proposed project as they relate to CO, NO_X, $PM_{2.5}$, and PM_{10}.

This air quality analysis evaluated the project's localized impact to air quality for emissions of CO, NO_X, $PM_{2.5}$, and PM_{10} by comparing the project's on-site emissions to the SCAQMD's applicable LST thresholds. As shown in Tables F and H, the project would not result in emissions that exceed the SCAQMD's LSTs. Therefore, the project would not be expected to exceed the most stringent applicable NAAQS or CAAQS for emissions of NO_X, $PM_{2.5}$, and PM_{10}. It should be noted that the AAQS are developed and represent levels at which the most susceptible persons (children and the elderly) are protected. In other words, the AAQS are purposefully set low to protect children, elderly, and those with existing respiratory problems.

Furthermore, air quality trends for emissions of NO_X, VOCs, and O_3 (which is a byproduct of NO_X and VOCs) have been trending downward within the Basin even as development has increased over the

last several years. Therefore, since the project will not exceed SCAQMD's applicable numeric thresholds, the project would not result in any Basin-wide increase in health effects.

STANDARD CONDITIONS

Construction

The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source (SCAQMD 2005). In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus, the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors. As shown in Table D, with the implementation of Rule 403 measures, dust emissions would be below SCAQMD thresholds.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 ft (0.6 m) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Pave construction access roads at least 100 ft (30 m) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

These measures would result in reduced emissions during the construction phases of the proposed project.

Cumulative Impacts

The cumulative impacts analysis is based on projections in the regional AQMP. As described in the consistency analysis presented above, the proposed project is consistent with the growth assumptions in the City's General Plan and the regional AQMP. Further, the project would not increase the frequency or severity of an air quality standards violation or cause a new violation. Because the project would be consistent with the City's CAP, the proposed project would result in less than significant cumulative impacts related to global climate change. Therefore, the proposed project would not result in a significant cumulative impact.

CONCLUSION

Based on the analysis presented above, construction of the proposed project with implementation of the SCAQMD Rule 403 measures would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. The proposed project's construction emissions of criteria pollutants are estimated to all be below their respective emissions thresholds established for the region. The proposed project would not result in a cumulatively considerable contribution to regional air quality impacts. The proposed project is also not expected to produce significant emissions that would affect nearby sensitive receptors or result in objectionable odors affecting a substantial number of people.

Attachments: A – References
B – Figures
C – CalEEMod Printouts

ATTACHMENT A

REFERENCES

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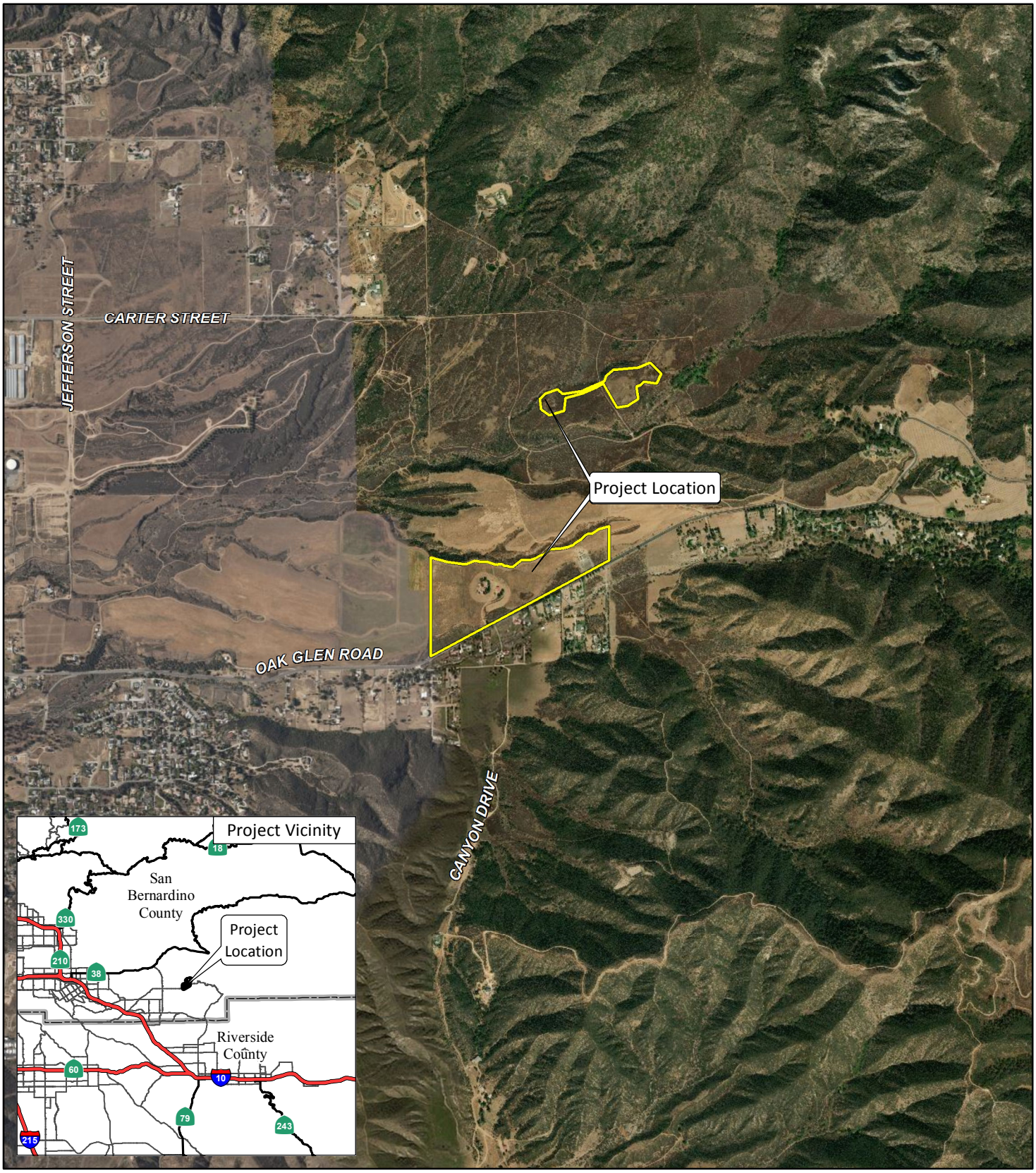
ATTACHMENT B

FIGURES



LSA

FIGURE 1

N

0 1000 2000
FEET

SOURCE: ESRI Streetmap, 2013; Bing Map, 2015.

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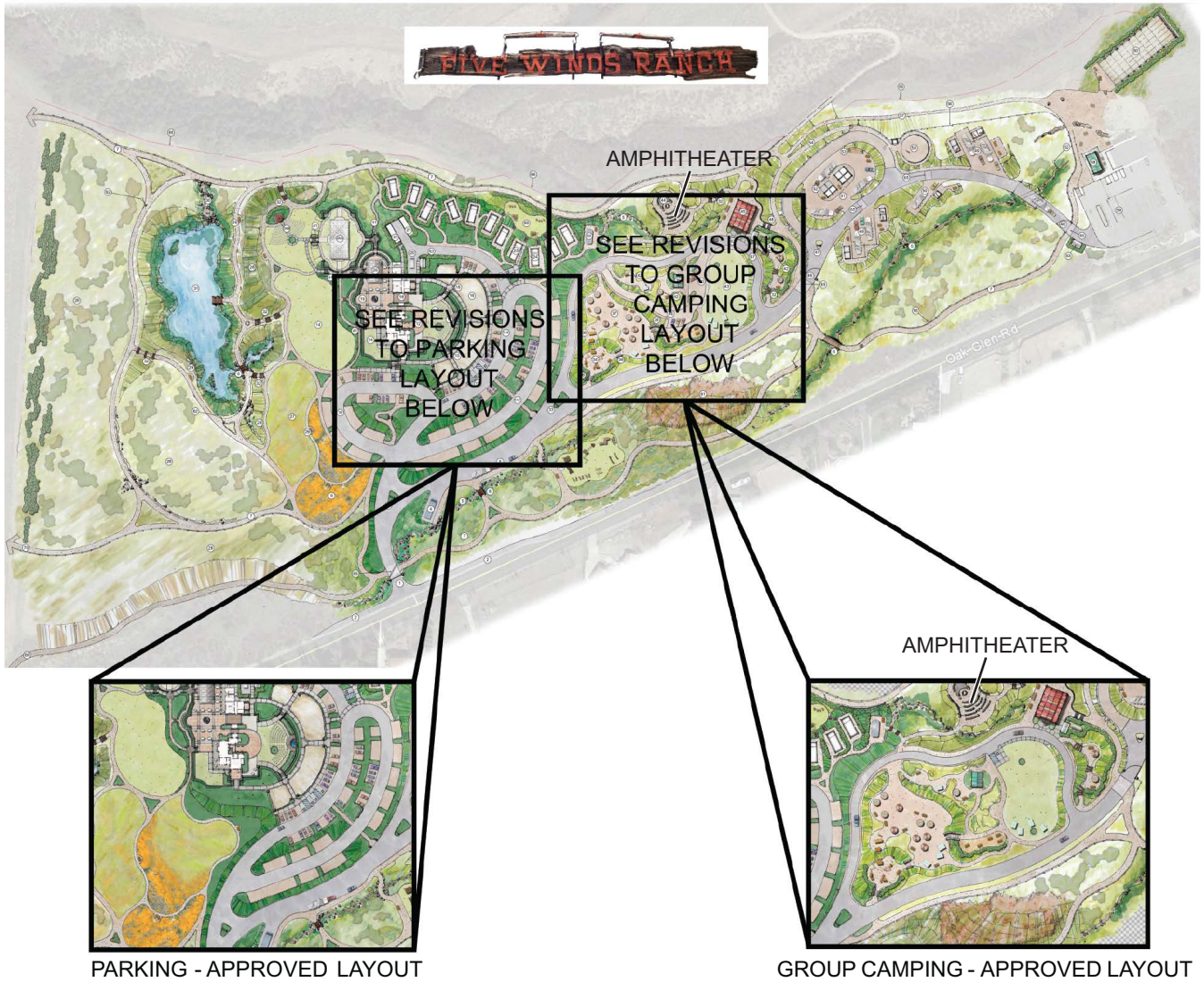
Five Winds Ranch/ El Dorado Ranch Park Project

Regional and Project Location



LSA

FIGURE 2

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Five Winds Ranch/
El Dorado Ranch Park Project
Conceptual Site Plan

SOURCE: Architerra Design Group, 2018

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ATTACHMENT C

CALEEMOD PRINTOUTS

Five Winds Ranch/El Dorado Ranch Park

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.52	Acre	2.52	0.00	0
Parking Lot	2.29	Acre	2.29	0.00	0
City Park	0.05	Acre	0.05	2,060.00	0
Motel	11.00	Room	0.20	8,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of paving was estimated from site plan. New buildings include Guest Cabins, Ranger & Welcome Cabins, & new restrooms.

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project site would not require mass grading.

Off-road Equipment -

Off-road Equipment - Proect site would not require extensive site preparation.

Trips and VMT -

Grading -

Vehicle Trips - Total trip generation from Traffic Impact Analysis is 573 daily trips.

Road Dust -

Land Use Change -

Construction Off-road Equipment Mitigation - Dust control measures required by SCAQMD Rule 403.

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	AcresOfGrading	0.00	10.00
tblLandUse	LandUseSquareFeet	109,771.20	0.00
tblLandUse	LandUseSquareFeet	99,752.40	0.00
tblLandUse	LandUseSquareFeet	2,178.00	2,060.00
tblLandUse	LandUseSquareFeet	21,562.20	8,800.00
tblLandUse	LotAcreage	0.50	0.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.63	52.09
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.63	52.09
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.63	52.09

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1481	1.3515	1.0411	1.6800e-003	0.1010	0.0802	0.1812	0.0517	0.0751	0.1268	0.0000	148.0806	148.0806	0.0363	0.0000	148.9869
2020	0.2109	1.4007	1.2647	2.0700e-003	6.0700e-003	0.0802	0.0863	1.6300e-003	0.0754	0.0770	0.0000	178.7009	178.7009	0.0432	0.0000	179.7804
Maximum	**0.2109**	**1.4007**	**1.2647**	**2.0700e-003**	**0.1010**	**0.0802**	**0.1812**	**0.0517**	**0.0754**	**0.1268**	**0.0000**	**178.7009**	**178.7009**	**0.0432**	**0.0000**	**179.7804**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1481	1.3515	1.0411	1.6800e-003	0.0427	0.0802	0.1229	0.0210	0.0751	0.0961	0.0000	148.0805	148.0805	0.0363	0.0000	148.9867
2020	0.2109	1.4007	1.2647	2.0700e-003	6.0700e-003	0.0802	0.0863	1.6300e-003	0.0754	0.0770	0.0000	178.7006	178.7006	0.0432	0.0000	179.7802
Maximum	**0.2109**	**1.4007**	**1.2647**	**2.0700e-003**	**0.0427**	**0.0802**	**0.1229**	**0.0210**	**0.0754**	**0.0961**	**0.0000**	**178.7006**	**178.7006**	**0.0432**	**0.0000**	**179.7802**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.48**	**0.00**	**21.81**	**57.48**	**0.00**	**15.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2019**	**9-30-2019**	0.7187	0.7187
2	**10-1-2019**	**12-31-2019**	0.7794	0.7794
3	**1-1-2020**	**3-31-2020**	0.7008	0.7008
4	**4-1-2020**	**6-30-2020**	0.6930	0.6930
5	**7-1-2020**	**9-30-2020**	0.2082	0.2082
		Highest	0.7794	0.7794

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0443	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Energy	2.8500e-003	0.0259	0.0217	1.6000e-004		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	79.0430	79.0430	2.6400e-003	9.5000e-004	79.3924
Mobile	0.1461	0.7963	1.7257	6.3300e-003	0.5178	5.0700e-003	0.5228	0.1388	4.7300e-003	0.1435	0.0000	585.0905	585.0905	0.0294	0.0000	585.8262
Waste						0.0000	0.0000		0.0000	0.0000	1.2220	0.0000	1.2220	0.0722	0.0000	3.0275
Water						0.0000	0.0000		0.0000	0.0000	0.0885	1.4783	1.5668	9.1500e-003	2.3000e-004	1.8634
Total	**0.1933**	**0.8222**	**1.7476**	**6.4900e-003**	**0.5178**	**7.0400e-003**	**0.5248**	**0.1388**	**6.7000e-003**	**0.1455**	**1.3105**	**665.6122**	**666.9227**	**0.1134**	**1.1800e-003**	**670.1098**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0443	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Energy	2.8500e-003	0.0259	0.0217	1.6000e-004		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	79.0430	79.0430	2.6400e-003	9.5000e-004	79.3924
Mobile	0.1461	0.7963	1.7257	6.3300e-003	0.5178	5.0700e-003	0.5228	0.1388	4.7300e-003	0.1435	0.0000	585.0905	585.0905	0.0294	0.0000	585.8262
Waste						0.0000	0.0000		0.0000	0.0000	1.2220	0.0000	1.2220	0.0722	0.0000	3.0275
Water						0.0000	0.0000		0.0000	0.0000	0.0885	1.4783	1.5668	9.1500e-003	2.3000e-004	1.8634
Total	**0.1933**	**0.8222**	**1.7476**	**6.4900e-003**	**0.5178**	**7.0400e-003**	**0.5248**	**0.1388**	**6.7000e-003**	**0.1455**	**1.3105**	**665.6122**	**666.9227**	**0.1134**	**1.1800e-003**	**670.1098**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/13/2019	8/9/2019	5	20	
3	Building Construction	Building Construction	8/10/2019	6/26/2020	5	230	
4	Paving	Paving	6/27/2020	7/24/2020	5	20	
5	Architectural Coating	Architectural Coating	7/25/2020	8/21/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,290; Non-Residential Outdoor: 5,430; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8400e-003	0.0721	0.0329	6.0000e-005		3.7200e-003	3.7200e-003		3.4300e-003	3.4300e-003	0.0000	5.2298	5.2298	1.6500e-003	0.0000	5.2712
Total	**6.8400e-003**	**0.0721**	**0.0329**	**6.0000e-005**	**0.0301**	**3.7200e-003**	**0.0338**	**0.0166**	**3.4300e-003**	**0.0200**	**0.0000**	**5.2298**	**5.2298**	**1.6500e-003**	**0.0000**	**5.2712**

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.0000e-004	1.0400e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2548	0.2548	1.0000e-005	0.0000	0.2550
Total	**1.2000e-004**	**1.0000e-004**	**1.0400e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2548**	**0.2548**	**1.0000e-005**	**0.0000**	**0.2550**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0117	0.0000	0.0117	6.4500e-003	0.0000	6.4500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8400e-003	0.0721	0.0329	6.0000e-005		3.7200e-003	3.7200e-003		3.4300e-003	3.4300e-003	0.0000	5.2298	5.2298	1.6500e-003	0.0000	5.2712
Total	**6.8400e-003**	**0.0721**	**0.0329**	**6.0000e-005**	**0.0117**	**3.7200e-003**	**0.0155**	**6.4500e-003**	**3.4300e-003**	**9.8800e-003**	**0.0000**	**5.2298**	**5.2298**	**1.6500e-003**	**0.0000**	**5.2712**

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.0000e-004	1.0400e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2548	0.2548	1.0000e-005	0.0000	0.2550
Total	**1.2000e-004**	**1.0000e-004**	**1.0400e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2548**	**0.2548**	**1.0000e-005**	**0.0000**	**0.2550**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.1909	0.1119	1.8000e-004		0.0106	0.0106		9.7200e-003	9.7200e-003	0.0000	16.0395	16.0395	5.0700e-003	0.0000	16.1664
Total	**0.0183**	**0.1909**	**0.1119**	**1.8000e-004**	**0.0655**	**0.0106**	**0.0761**	**0.0337**	**9.7200e-003**	**0.0434**	**0.0000**	**16.0395**	**16.0395**	**5.0700e-003**	**0.0000**	**16.1664**

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2500e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5289	1.5289	5.0000e-005	0.0000	1.5301
Total	**7.2000e-004**	**5.8000e-004**	**6.2500e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5289**	**1.5289**	**5.0000e-005**	**0.0000**	**1.5301**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0256	0.0000	0.0256	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.1909	0.1119	1.8000e-004		0.0106	0.0106		9.7200e-003	9.7200e-003	0.0000	16.0395	16.0395	5.0700e-003	0.0000	16.1664
Total	**0.0183**	**0.1909**	**0.1119**	**1.8000e-004**	**0.0256**	**0.0106**	**0.0361**	**0.0131**	**9.7200e-003**	**0.0229**	**0.0000**	**16.0395**	**16.0395**	**5.0700e-003**	**0.0000**	**16.1664**

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2500e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5289	1.5289	5.0000e-005	0.0000	1.5301
Total	**7.2000e-004**	**5.8000e-004**	**6.2500e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5289**	**1.5289**	**5.0000e-005**	**0.0000**	**1.5301**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1204	1.0750	0.8754	1.3700e-003		0.0658	0.0658		0.0619	0.0619	0.0000	119.9031	119.9031	0.0292	0.0000	120.6334
Total	**0.1204**	**1.0750**	**0.8754**	**1.3700e-003**		**0.0658**	**0.0658**		**0.0619**	**0.0619**	**0.0000**	**119.9031**	**119.9031**	**0.0292**	**0.0000**	**120.6334**

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0119	2.9800e-003	3.0000e-005	6.4000e-004	8.0000e-005	7.2000e-004	1.9000e-004	7.0000e-005	2.6000e-004	0.0000	2.5252	2.5252	1.7000e-004	0.0000	2.5296
Worker	1.2300e-003	9.8000e-004	0.0106	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5992	2.5992	8.0000e-005	0.0000	2.6012
Total	**1.6300e-003**	**0.0129**	**0.0136**	**6.0000e-005**	**3.4400e-003**	**1.0000e-004**	**3.5400e-003**	**9.3000e-004**	**9.0000e-005**	**1.0200e-003**	**0.0000**	**5.1244**	**5.1244**	**2.5000e-004**	**0.0000**	**5.1308**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1204	1.0750	0.8754	1.3700e-003		0.0658	0.0658		0.0619	0.0619	0.0000	119.9030	119.9030	0.0292	0.0000	120.6332
Total	**0.1204**	**1.0750**	**0.8754**	**1.3700e-003**		**0.0658**	**0.0658**		**0.0619**	**0.0619**	**0.0000**	**119.9030**	**119.9030**	**0.0292**	**0.0000**	**120.6332**

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0119	2.9800e-003	3.0000e-005	6.4000e-004	8.0000e-005	7.2000e-004	1.9000e-004	7.0000e-005	2.6000e-004	0.0000	2.5252	2.5252	1.7000e-004	0.0000	2.5296
Worker	1.2300e-003	9.8000e-004	0.0106	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5992	2.5992	8.0000e-005	0.0000	2.6012
Total	**1.6300e-003**	**0.0129**	**0.0136**	**6.0000e-005**	**3.4400e-003**	**1.0000e-004**	**3.5400e-003**	**9.3000e-004**	**9.0000e-005**	**1.0200e-003**	**0.0000**	**5.1244**	**5.1244**	**2.5000e-004**	**0.0000**	**5.1308**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1357	1.2279	1.0783	1.7200e-003		0.0715	0.0715		0.0672	0.0672	0.0000	148.2304	148.2304	0.0362	0.0000	149.1345
Total	**0.1357**	**1.2279**	**1.0783**	**1.7200e-003**		**0.0715**	**0.0715**		**0.0672**	**0.0672**	**0.0000**	**148.2304**	**148.2304**	**0.0362**	**0.0000**	**149.1345**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0137	3.3800e-003	3.0000e-005	8.1000e-004	7.0000e-005	8.7000e-004	2.3000e-004	6.0000e-005	3.0000e-004	0.0000	3.1482	3.1482	2.1000e-004	0.0000	3.1534
Worker	1.4300e-003	1.1000e-003	0.0121	3.0000e-005	3.5100e-003	3.0000e-005	3.5400e-003	9.3000e-004	2.0000e-005	9.6000e-004	0.0000	3.1605	3.1605	9.0000e-005	0.0000	3.1628
Total	**1.8600e-003**	**0.0148**	**0.0155**	**6.0000e-005**	**4.3200e-003**	**1.0000e-004**	**4.4100e-003**	**1.1600e-003**	**8.0000e-005**	**1.2600e-003**	**0.0000**	**6.3087**	**6.3087**	**3.0000e-004**	**0.0000**	**6.3162**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1357	1.2279	1.0783	1.7200e-003		0.0715	0.0715		0.0672	0.0672	0.0000	148.2302	148.2302	0.0362	0.0000	149.1343
Total	**0.1357**	**1.2279**	**1.0783**	**1.7200e-003**		**0.0715**	**0.0715**		**0.0672**	**0.0672**	**0.0000**	**148.2302**	**148.2302**	**0.0362**	**0.0000**	**149.1343**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3000e-004	0.0137	3.3800e-003	3.0000e-005	8.1000e-004	7.0000e-005	8.7000e-004	2.3000e-004	6.0000e-005	3.0000e-004	0.0000	3.1482	3.1482	2.1000e-004	0.0000	3.1534
Worker	1.4300e-003	1.1000e-003	0.0121	3.0000e-005	3.5100e-003	3.0000e-005	3.5400e-003	9.3000e-004	2.0000e-005	9.6000e-004	0.0000	3.1605	3.1605	9.0000e-005	0.0000	3.1628
Total	**1.8600e-003**	**0.0148**	**0.0155**	**6.0000e-005**	**4.3200e-003**	**1.0000e-004**	**4.4100e-003**	**1.1600e-003**	**8.0000e-005**	**1.2600e-003**	**0.0000**	**6.3087**	**6.3087**	**3.0000e-004**	**0.0000**	**6.3162**

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	6.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0199**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.1000e-004	5.6800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4815	1.4815	4.0000e-005	0.0000	1.4826
Total	**6.7000e-004**	**5.1000e-004**	**5.6800e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4815**	**1.4815**	**4.0000e-005**	**0.0000**	**1.4826**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	6.3000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0199**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.1000e-004	5.6800e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4815	1.4815	4.0000e-005	0.0000	1.4826
Total	**6.7000e-004**	**5.1000e-004**	**5.6800e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4815**	**1.4815**	**4.0000e-005**	**0.0000**	**1.4826**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**0.0528**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	0.0000	0.0000	0.0988
Total	**4.0000e-005**	**3.0000e-005**	**3.8000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**0.0000**	**0.0000**	**0.0988**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**0.0528**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	0.0000	0.0000	0.0988
Total	**4.0000e-005**	**3.0000e-005**	**3.8000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0988**	**0.0988**	**0.0000**	**0.0000**	**0.0988**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1461	0.7963	1.7257	6.3300e-003	0.5178	5.0700e-003	0.5228	0.1388	4.7300e-003	0.1435	0.0000	585.0905	585.0905	0.0294	0.0000	585.8262
Unmitigated	0.1461	0.7963	1.7257	6.3300e-003	0.5178	5.0700e-003	0.5228	0.1388	4.7300e-003	0.1435	0.0000	585.0905	585.0905	0.0294	0.0000	585.8262

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Motel	572.99	572.99	572.99	1,362,634	1,362,634
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	572.99	572.99	572.99	1,362,634	1,362,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Motel	16.60	8.40	6.90	19.00	62.00	19.00	58	38	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Motel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	50.8622	50.8622	2.1000e-003	4.3000e-004	51.0441
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	50.8622	50.8622	2.1000e-003	4.3000e-004	51.0441
NaturalGas Mitigated	2.8500e-003	0.0259	0.0217	1.6000e-004		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	28.1808	28.1808	5.4000e-004	5.2000e-004	28.3483
NaturalGas Unmitigated	2.8500e-003	0.0259	0.0217	1.6000e-004		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	28.1808	28.1808	5.4000e-004	5.2000e-004	28.3483

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Motel	528088	2.8500e-003	0.0259	0.0217	1.6000e-004		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	28.1808	28.1808	5.4000e-004	5.2000e-004	28.3483
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8500e-003**	**0.0259**	**0.0217**	**1.6000e-004**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**28.1808**	**28.1808**	**5.4000e-004**	**5.2000e-004**	**28.3483**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Motel	528088	2.8500e-003	0.0259	0.0217	1.6000e-004		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	28.1808	28.1808	5.4000e-004	5.2000e-004	28.3483
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.8500e-003**	**0.0259**	**0.0217**	**1.6000e-004**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**28.1808**	**28.1808**	**5.4000e-004**	**5.2000e-004**	**28.3483**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Motel	159632	50.8622	2.1000e-003	4.3000e-004	51.0441
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**50.8622**	**2.1000e-003**	**4.3000e-004**	**51.0441**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Motel	159632	50.8622	2.1000e-003	4.3000e-004	51.0441
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**50.8622**	**2.1000e-003**	**4.3000e-004**	**51.0441**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0443	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Unmitigated	0.0443	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0392					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Total	**0.0443**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.9000e-004**	**3.9000e-004**	**0.0000**	**0.0000**	**4.2000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0392					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.9000e-004	3.9000e-004	0.0000	0.0000	4.2000e-004
Total	**0.0443**	**0.0000**	**2.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.9000e-004**	**3.9000e-004**	**0.0000**	**0.0000**	**4.2000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5668	9.1500e-003	2.3000e-004	1.8634
Unmitigated	1.5668	9.1500e-003	2.3000e-004	1.8634

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.0595741	0.2109	1.0000e-005	0.0000	0.2116
Motel	0.279034 / 0.0310038	1.3559	9.1400e-003	2.3000e-004	1.6517
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.5668**	**9.1500e-003**	**2.3000e-004**	**1.8634**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.0595741	0.2109	1.0000e-005	0.0000	0.2116
Motel	0.279034 / 0.0310038	1.3559	9.1400e-003	2.3000e-004	1.6517
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.5668**	**9.1500e-003**	**2.3000e-004**	**1.8634**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.2220	0.0722	0.0000	3.0275
Unmitigated	1.2220	0.0722	0.0000	3.0275

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Motel	6.02	1.2220	0.0722	0.0000	3.0275
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.2220**	**0.0722**	**0.0000**	**3.0275**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Motel	6.02	1.2220	0.0722	0.0000	3.0275
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.2220**	**0.0722**	**0.0000**	**3.0275**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Five Winds Ranch/El Dorado Ranch Park

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.52	Acre	2.52	0.00	0
Parking Lot	2.29	Acre	2.29	0.00	0
City Park	0.05	Acre	0.05	2,060.00	0
Motel	11.00	Room	0.20	8,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of paving was estimated from site plan. New buildings include Guest Cabins, Ranger & Welcome Cabins, & new restrooms.

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project site would not require mass grading.

Off-road Equipment -

Off-road Equipment - Proect site would not require extensive site preparation.

Trips and VMT -

Grading -

Vehicle Trips - Total trip generation from Traffic Impact Analysis is 573 daily trips.

Road Dust -

Land Use Change -

Construction Off-road Equipment Mitigation - Dust control measures required by SCAQMD Rule 403.

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	AcresOfGrading	0.00	10.00
tblLandUse	LandUseSquareFeet	109,771.20	0.00
tblLandUse	LandUseSquareFeet	99,752.40	0.00
tblLandUse	LandUseSquareFeet	2,178.00	2,060.00
tblLandUse	LandUseSquareFeet	21,562.20	8,800.00
tblLandUse	LotAcreage	0.50	0.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.63	52.09
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.63	52.09
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.63	52.09

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.3934	21.3247	17.4438	0.0280	6.7200	1.2918	7.7782	3.4120	1.2146	4.3855	0.0000	2,705.8735	2,705.8735	0.6368	0.0000	2,721.7944
2020	5.2803	19.4111	17.1029	0.0280	0.1677	1.1185	1.1872	0.0445	1.0517	1.0702	0.0000	2,665.1736	2,665.1736	0.7190	0.0000	2,680.8723
Maximum	**5.2803**	**21.3247**	**17.4438**	**0.0280**	**6.7200**	**1.2918**	**7.7782**	**3.4120**	**1.2146**	**4.3855**	**0.0000**	**2,705.8735**	**2,705.8735**	**0.7190**	**0.0000**	**2,721.7944**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.3934	21.3247	17.4438	0.0280	2.7231	1.2918	3.7812	1.3578	1.2146	2.3313	0.0000	2,705.8735	2,705.8735	0.6368	0.0000	2,721.7944
2020	5.2803	19.4111	17.1029	0.0280	0.1677	1.1185	1.1872	0.0445	1.0517	1.0702	0.0000	2,665.1736	2,665.1736	0.7190	0.0000	2,680.8723
Maximum	**5.2803**	**21.3247**	**17.4438**	**0.0280**	**2.7231**	**1.2918**	**3.7812**	**1.3578**	**1.2146**	**2.3313**	**0.0000**	**2,705.8735**	**2,705.8735**	**0.7190**	**0.0000**	**2,721.7944**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**58.03**	**0.00**	**44.58**	**59.43**	**0.00**	**37.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Energy	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Mobile	0.8690	4.2474	9.8673	0.0362	2.8974	0.0278	2.9252	0.7752	0.0259	0.8012		3,687.5425	3,687.5425	0.1785		3,692.0057
Total	**1.1274**	**4.3892**	**9.9881**	**0.0370**	**2.8974**	**0.0386**	**2.9360**	**0.7752**	**0.0367**	**0.8120**		**3,857.7597**	**3,857.7597**	**0.1818**	**3.1200e-003**	**3,863.2346**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Energy	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Mobile	0.8690	4.2474	9.8673	0.0362	2.8974	0.0278	2.9252	0.7752	0.0259	0.8012		3,687.5425	3,687.5425	0.1785		3,692.0057
Total	**1.1274**	**4.3892**	**9.9881**	**0.0370**	**2.8974**	**0.0386**	**2.9360**	**0.7752**	**0.0367**	**0.8120**		**3,857.7597**	**3,857.7597**	**0.1818**	**3.1200e-003**	**3,863.2346**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/13/2019	8/9/2019	5	20	
3	Building Construction	Building Construction	8/10/2019	6/26/2020	5	230	
4	Paving	Paving	6/27/2020	7/24/2020	5	20	
5	Architectural Coating	Architectural Coating	7/25/2020	8/21/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,290; Non-Residential Outdoor: 5,430; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.3674	14.4118	6.5868	0.0116		0.7448	0.7448		0.6852	0.6852		1,152.9703	1,152.9703	0.3648		1,162.0900
Total	**1.3674**	**14.4118**	**6.5868**	**0.0116**	**6.0221**	**0.7448**	**6.7669**	**3.3102**	**0.6852**	**3.9954**		**1,152.9703**	**1,152.9703**	**0.3648**		**1,162.0900**

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0245	0.0170	0.2247	5.9000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		59.0495	59.0495	1.8500e-003		59.0956
Total	**0.0245**	**0.0170**	**0.2247**	**5.9000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**59.0495**	**59.0495**	**1.8500e-003**		**59.0956**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	1.3674	14.4118	6.5868	0.0116		0.7448	0.7448		0.6852	0.6852	0.0000	1,152.9703	1,152.9703	0.3648		1,162.0900
Total	**1.3674**	**14.4118**	**6.5868**	**0.0116**	**2.3486**	**0.7448**	**3.0934**	**1.2910**	**0.6852**	**1.9762**	**0.0000**	**1,152.9703**	**1,152.9703**	**0.3648**		**1,162.0900**

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0245	0.0170	0.2247	5.9000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		59.0495	59.0495	1.8500e-003		59.0956
Total	**0.0245**	**0.0170**	**0.2247**	**5.9000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**59.0495**	**59.0495**	**1.8500e-003**		**59.0956**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8330	19.0865	11.1921	0.0178		1.0569	1.0569		0.9723	0.9723		1,768.0541	1,768.0541	0.5594		1,782.0389
Total	**1.8330**	**19.0865**	**11.1921**	**0.0178**	**6.5523**	**1.0569**	**7.6092**	**3.3675**	**0.9723**	**4.3398**		**1,768.0541**	**1,768.0541**	**0.5594**		**1,782.0389**

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	**0.0735**	**0.0511**	**0.6740**	**1.7800e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**177.1484**	**177.1484**	**5.5400e-003**		**177.2869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	1.8330	19.0865	11.1921	0.0178		1.0569	1.0569		0.9723	0.9723	0.0000	1,768.0541	1,768.0541	0.5594		1,782.0389
Total	**1.8330**	**19.0865**	**11.1921**	**0.0178**	**2.5554**	**1.0569**	**3.6123**	**1.3133**	**0.9723**	**2.2856**	**0.0000**	**1,768.0541**	**1,768.0541**	**0.5594**		**1,782.0389**

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	**0.0735**	**0.0511**	**0.6740**	**1.7800e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**177.1484**	**177.1484**	**5.5400e-003**		**177.2869**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.7100e-003	0.2289	0.0553	5.2000e-004	0.0128	1.5200e-003	0.0143	3.6900e-003	1.4500e-003	5.1400e-003		55.2439	55.2439	3.6600e-003		55.3353
Worker	0.0245	0.0170	0.2247	5.9000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		59.0495	59.0495	1.8500e-003		59.0956
Total	**0.0322**	**0.2459**	**0.2800**	**1.1100e-003**	**0.0687**	**1.9500e-003**	**0.0706**	**0.0185**	**1.8500e-003**	**0.0204**		**114.2934**	**114.2934**	**5.5100e-003**		**114.4309**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.7100e-003	0.2289	0.0553	5.2000e-004	0.0128	1.5200e-003	0.0143	3.6900e-003	1.4500e-003	5.1400e-003		55.2439	55.2439	3.6600e-003		55.3353
Worker	0.0245	0.0170	0.2247	5.9000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		59.0495	59.0495	1.8500e-003		59.0956
Total	**0.0322**	**0.2459**	**0.2800**	**1.1100e-003**	**0.0687**	**1.9500e-003**	**0.0706**	**0.0185**	**1.8500e-003**	**0.0204**		**114.2934**	**114.2934**	**5.5100e-003**		**114.4309**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.5700e-003	0.2099	0.0500	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6900e-003	9.9000e-004	4.6800e-003		54.8897	54.8897	3.4500e-003		54.9759
Worker	0.0226	0.0152	0.2044	5.7000e-004	0.0559	4.2000e-004	0.0563	0.0148	3.9000e-004	0.0152		57.2209	57.2209	1.6500e-003		57.2620
Total	**0.0292**	**0.2251**	**0.2544**	**1.0800e-003**	**0.0687**	**1.4600e-003**	**0.0702**	**0.0185**	**1.3800e-003**	**0.0199**		**112.1106**	**112.1106**	**5.1000e-003**		**112.2379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.5700e-003	0.2099	0.0500	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6900e-003	9.9000e-004	4.6800e-003		54.8897	54.8897	3.4500e-003		54.9759
Worker	0.0226	0.0152	0.2044	5.7000e-004	0.0559	4.2000e-004	0.0563	0.0148	3.9000e-004	0.0152		57.2209	57.2209	1.6500e-003		57.2620
Total	**0.0292**	**0.2251**	**0.2544**	**1.0800e-003**	**0.0687**	**1.4600e-003**	**0.0702**	**0.0185**	**1.3800e-003**	**0.0199**		**112.1106**	**112.1106**	**5.1000e-003**		**112.2379**

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.6301					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9867**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		171.6626	171.6626	4.9400e-003		171.7860
Total	**0.0679**	**0.0456**	**0.6132**	**1.7200e-003**	**0.1677**	**1.2700e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**171.6626**	**171.6626**	**4.9400e-003**		**171.7860**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.6301					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9867**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		171.6626	171.6626	4.9400e-003		171.7860
Total	**0.0679**	**0.0456**	**0.6132**	**1.7200e-003**	**0.1677**	**1.2700e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**171.6626**	**171.6626**	**4.9400e-003**		**171.7860**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**5.2758**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.5200e-003	3.0400e-003	0.0409	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.4442	11.4442	3.3000e-004		11.4524
Total	**4.5200e-003**	**3.0400e-003**	**0.0409**	**1.1000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0400e-003**		**11.4442**	**11.4442**	**3.3000e-004**		**11.4524**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**5.2758**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.5200e-003	3.0400e-003	0.0409	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		11.4442	11.4442	3.3000e-004		11.4524
Total	**4.5200e-003**	**3.0400e-003**	**0.0409**	**1.1000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0400e-003**		**11.4442**	**11.4442**	**3.3000e-004**		**11.4524**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8690	4.2474	9.8673	0.0362	2.8974	0.0278	2.9252	0.7752	0.0259	0.8012		3,687.5425	3,687.5425	0.1785		3,692.0057
Unmitigated	0.8690	4.2474	9.8673	0.0362	2.8974	0.0278	2.9252	0.7752	0.0259	0.8012		3,687.5425	3,687.5425	0.1785		3,692.0057

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Motel	572.99	572.99	572.99	1,362,634	1,362,634
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	572.99	572.99	572.99	1,362,634	1,362,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Motel	16.60	8.40	6.90	19.00	62.00	19.00	58	38	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Motel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
NaturalGas Unmitigated	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Motel	1446.82	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0156**	**0.1418**	**0.1192**	**8.5000e-004**		**0.0108**	**0.0108**		**0.0108**	**0.0108**		**170.2137**	**170.2137**	**3.2600e-003**	**3.1200e-003**	**171.2252**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Motel	1.44682	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0156**	**0.1418**	**0.1192**	**8.5000e-004**		**0.0108**	**0.0108**		**0.0108**	**0.0108**		**170.2137**	**170.2137**	**3.2600e-003**	**3.1200e-003**	**171.2252**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Unmitigated	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2150					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Total	**0.2428**	**1.0000e-005**	**1.6200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.4700e-003**	**3.4700e-003**	**1.0000e-005**		**3.7000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2150					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Total	**0.2428**	**1.0000e-005**	**1.6200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.4700e-003**	**3.4700e-003**	**1.0000e-005**		**3.7000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Five Winds Ranch/El Dorado Ranch Park

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.52	Acre	2.52	0.00	0
Parking Lot	2.29	Acre	2.29	0.00	0
City Park	0.05	Acre	0.05	2,060.00	0
Motel	11.00	Room	0.20	8,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Area of paving was estimated from site plan. New buildings include Guest Cabins, Ranger & Welcome Cabins, & new restrooms.

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Project site would not require mass grading.

Off-road Equipment -

Off-road Equipment - Proect site would not require extensive site preparation.

Trips and VMT -

Grading -

Vehicle Trips - Total trip generation from Traffic Impact Analysis is 573 daily trips.

Road Dust -

Land Use Change -

Construction Off-road Equipment Mitigation - Dust control measures required by SCAQMD Rule 403.

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	AcresOfGrading	0.00	10.00
tblLandUse	LandUseSquareFeet	109,771.20	0.00
tblLandUse	LandUseSquareFeet	99,752.40	0.00
tblLandUse	LandUseSquareFeet	2,178.00	2,060.00
tblLandUse	LandUseSquareFeet	21,562.20	8,800.00
tblLandUse	LotAcreage	0.50	0.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.63	52.09
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	5.63	52.09
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.63	52.09

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.3959	21.3265	17.4281	0.0280	6.7200	1.2918	7.7782	3.4120	1.2146	4.3855	0.0000	2,700.4762	2,700.4762	0.6370	0.0000	2,716.4009
2020	5.2807	19.4123	17.0883	0.0280	0.1677	1.1185	1.1872	0.0445	1.0517	1.0702	0.0000	2,659.8839	2,659.8839	0.7186	0.0000	2,675.5862
Maximum	**5.2807**	**21.3265**	**17.4281**	**0.0280**	**6.7200**	**1.2918**	**7.7782**	**3.4120**	**1.2146**	**4.3855**	**0.0000**	**2,700.4762**	**2,700.4762**	**0.7186**	**0.0000**	**2,716.4009**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.3959	21.3265	17.4281	0.0280	2.7231	1.2918	3.7812	1.3578	1.2146	2.3313	0.0000	2,700.4762	2,700.4762	0.6370	0.0000	2,716.4009
2020	5.2807	19.4123	17.0883	0.0280	0.1677	1.1185	1.1872	0.0445	1.0517	1.0702	0.0000	2,659.8839	2,659.8839	0.7186	0.0000	2,675.5862
Maximum	**5.2807**	**21.3265**	**17.4281**	**0.0280**	**2.7231**	**1.2918**	**3.7812**	**1.3578**	**1.2146**	**2.3313**	**0.0000**	**2,700.4762**	**2,700.4762**	**0.7186**	**0.0000**	**2,716.4009**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**58.03**	**0.00**	**44.58**	**59.43**	**0.00**	**37.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Energy	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Mobile	0.8232	4.2992	9.3691	0.0342	2.8974	0.0280	2.9255	0.7752	0.0261	0.8014		3,488.6133	3,488.6133	0.1802		3,493.1172
Total	**1.0815**	**4.4411**	**9.4898**	**0.0351**	**2.8974**	**0.0388**	**2.9363**	**0.7752**	**0.0369**	**0.8122**		**3,658.8305**	**3,658.8305**	**0.1834**	**3.1200e-003**	**3,664.3461**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Energy	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Mobile	0.8232	4.2992	9.3691	0.0342	2.8974	0.0280	2.9255	0.7752	0.0261	0.8014		3,488.6133	3,488.6133	0.1802		3,493.1172
Total	**1.0815**	**4.4411**	**9.4898**	**0.0351**	**2.8974**	**0.0388**	**2.9363**	**0.7752**	**0.0369**	**0.8122**		**3,658.8305**	**3,658.8305**	**0.1834**	**3.1200e-003**	**3,664.3461**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/13/2019	8/9/2019	5	20	
3	Building Construction	Building Construction	8/10/2019	6/26/2020	5	230	
4	Paving	Paving	6/27/2020	7/24/2020	5	20	
5	Architectural Coating	Architectural Coating	7/25/2020	8/21/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,290; Non-Residential Outdoor: 5,430; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.3674	14.4118	6.5868	0.0116		0.7448	0.7448		0.6852	0.6852		1,152.9703	1,152.9703	0.3648		1,162.0900
Total	**1.3674**	**14.4118**	**6.5868**	**0.0116**	**6.0221**	**0.7448**	**6.7669**	**3.3102**	**0.6852**	**3.9954**		**1,152.9703**	**1,152.9703**	**0.3648**		**1,162.0900**

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0267	0.0187	0.2027	5.5000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		55.2328	55.2328	1.7300e-003		55.2759
Total	**0.0267**	**0.0187**	**0.2027**	**5.5000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**55.2328**	**55.2328**	**1.7300e-003**		**55.2759**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	1.3674	14.4118	6.5868	0.0116		0.7448	0.7448		0.6852	0.6852	0.0000	1,152.9703	1,152.9703	0.3648		1,162.0900
Total	**1.3674**	**14.4118**	**6.5868**	**0.0116**	**2.3486**	**0.7448**	**3.0934**	**1.2910**	**0.6852**	**1.9762**	**0.0000**	**1,152.9703**	**1,152.9703**	**0.3648**		**1,162.0900**

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0267	0.0187	0.2027	5.5000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		55.2328	55.2328	1.7300e-003		55.2759
Total	**0.0267**	**0.0187**	**0.2027**	**5.5000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**		**55.2328**	**55.2328**	**1.7300e-003**		**55.2759**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8330	19.0865	11.1921	0.0178		1.0569	1.0569		0.9723	0.9723		1,768.0541	1,768.0541	0.5594		1,782.0389
Total	**1.8330**	**19.0865**	**11.1921**	**0.0178**	**6.5523**	**1.0569**	**7.6092**	**3.3675**	**0.9723**	**4.3398**		**1,768.0541**	**1,768.0541**	**0.5594**		**1,782.0389**

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**0.0800**	**0.0560**	**0.6081**	**1.6600e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**165.6984**	**165.6984**	**5.1800e-003**		**165.8278**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	1.8330	19.0865	11.1921	0.0178		1.0569	1.0569		0.9723	0.9723	0.0000	1,768.0541	1,768.0541	0.5594		1,782.0389
Total	**1.8330**	**19.0865**	**11.1921**	**0.0178**	**2.5554**	**1.0569**	**3.6123**	**1.3133**	**0.9723**	**2.2856**	**0.0000**	**1,768.0541**	**1,768.0541**	**0.5594**		**1,782.0389**

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**0.0800**	**0.0560**	**0.6081**	**1.6600e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**		**165.6984**	**165.6984**	**5.1800e-003**		**165.8278**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.0500e-003	0.2290	0.0616	5.0000e-004	0.0128	1.5400e-003	0.0143	3.6900e-003	1.4700e-003	5.1600e-003		53.6633	53.6633	3.9300e-003		53.7615
Worker	0.0267	0.0187	0.2027	5.5000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		55.2328	55.2328	1.7300e-003		55.2759
Total	**0.0347**	**0.2477**	**0.2643**	**1.0500e-003**	**0.0687**	**1.9700e-003**	**0.0707**	**0.0185**	**1.8700e-003**	**0.0204**		**108.8960**	**108.8960**	**5.6600e-003**		**109.0374**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.0500e-003	0.2290	0.0616	5.0000e-004	0.0128	1.5400e-003	0.0143	3.6900e-003	1.4700e-003	5.1600e-003		53.6633	53.6633	3.9300e-003		53.7615
Worker	0.0267	0.0187	0.2027	5.5000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		55.2328	55.2328	1.7300e-003		55.2759
Total	**0.0347**	**0.2477**	**0.2643**	**1.0500e-003**	**0.0687**	**1.9700e-003**	**0.0707**	**0.0185**	**1.8700e-003**	**0.0204**		**108.8960**	**108.8960**	**5.6600e-003**		**109.0374**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.8800e-003	0.2097	0.0557	5.0000e-004	0.0128	1.0600e-003	0.0139	3.6900e-003	1.0100e-003	4.6900e-003		53.3026	53.3026	3.7000e-003		53.3951
Worker	0.0247	0.0167	0.1840	5.4000e-004	0.0559	4.2000e-004	0.0563	0.0148	3.9000e-004	0.0152		53.5183	53.5183	1.5300e-003		53.5566
Total	**0.0316**	**0.2263**	**0.2398**	**1.0400e-003**	**0.0687**	**1.4800e-003**	**0.0702**	**0.0185**	**1.4000e-003**	**0.0199**		**106.8208**	**106.8208**	**5.2300e-003**		**106.9517**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.8800e-003	0.2097	0.0557	5.0000e-004	0.0128	1.0600e-003	0.0139	3.6900e-003	1.0100e-003	4.6900e-003		53.3026	53.3026	3.7000e-003		53.3951
Worker	0.0247	0.0167	0.1840	5.4000e-004	0.0559	4.2000e-004	0.0563	0.0148	3.9000e-004	0.0152		53.5183	53.5183	1.5300e-003		53.5566
Total	**0.0316**	**0.2263**	**0.2398**	**1.0400e-003**	**0.0687**	**1.4800e-003**	**0.0702**	**0.0185**	**1.4000e-003**	**0.0199**		**106.8208**	**106.8208**	**5.2300e-003**		**106.9517**

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.6301					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9867**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	**0.0740**	**0.0500**	**0.5521**	**1.6100e-003**	**0.1677**	**1.2700e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**160.5547**	**160.5547**	**4.6000e-003**		**160.6699**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.6301					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9867**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	**0.0740**	**0.0500**	**0.5521**	**1.6100e-003**	**0.1677**	**1.2700e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**160.5547**	**160.5547**	**4.6000e-003**		**160.6699**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**5.2758**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.9300e-003	3.3300e-003	0.0368	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.7037	10.7037	3.1000e-004		10.7113
Total	**4.9300e-003**	**3.3300e-003**	**0.0368**	**1.1000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0400e-003**		**10.7037**	**10.7037**	**3.1000e-004**		**10.7113**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**5.2758**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.9300e-003	3.3300e-003	0.0368	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9600e-003	8.0000e-005	3.0400e-003		10.7037	10.7037	3.1000e-004		10.7113
Total	**4.9300e-003**	**3.3300e-003**	**0.0368**	**1.1000e-004**	**0.0112**	**8.0000e-005**	**0.0113**	**2.9600e-003**	**8.0000e-005**	**3.0400e-003**		**10.7037**	**10.7037**	**3.1000e-004**		**10.7113**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8232	4.2992	9.3691	0.0342	2.8974	0.0280	2.9255	0.7752	0.0261	0.8014		3,488.6133	3,488.6133	0.1802		3,493.1172
Unmitigated	0.8232	4.2992	9.3691	0.0342	2.8974	0.0280	2.9255	0.7752	0.0261	0.8014		3,488.6133	3,488.6133	0.1802		3,493.1172

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Motel	572.99	572.99	572.99	1,362,634	1,362,634
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	572.99	572.99	572.99	1,362,634	1,362,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Motel	16.60	8.40	6.90	19.00	62.00	19.00	58	38	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Motel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
NaturalGas Unmitigated	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Motel	1446.82	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0156**	**0.1418**	**0.1192**	**8.5000e-004**		**0.0108**	**0.0108**		**0.0108**	**0.0108**		**170.2137**	**170.2137**	**3.2600e-003**	**3.1200e-003**	**171.2252**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Motel	1.44682	0.0156	0.1418	0.1192	8.5000e-004		0.0108	0.0108		0.0108	0.0108		170.2137	170.2137	3.2600e-003	3.1200e-003	171.2252
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0156**	**0.1418**	**0.1192**	**8.5000e-004**		**0.0108**	**0.0108**		**0.0108**	**0.0108**		**170.2137**	**170.2137**	**3.2600e-003**	**3.1200e-003**	**171.2252**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Unmitigated	0.2428	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2150					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Total	**0.2428**	**1.0000e-005**	**1.6200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.4700e-003**	**3.4700e-003**	**1.0000e-005**		**3.7000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0276					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2150					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.4700e-003	3.4700e-003	1.0000e-005		3.7000e-003
Total	**0.2428**	**1.0000e-005**	**1.6200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.4700e-003**	**3.4700e-003**	**1.0000e-005**		**3.7000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

BIOLOGICAL RESOURCES ASSESSMENT REPORT

EL DORADO RANCH PARK AND FIVE WINDS RANCH PROJECT

CITY OF YUCAIPA

SAN BERNARDINO COUNTY, CALIFORNIA

LSA

January 2019

BIOLOGICAL RESOURCES ASSESSMENT REPORT

EL DORADO RANCH PARK AND FIVE WINDS RANCH PROJECT

CITY OF YUCAIPA

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

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LSA Project No. YCA1801

LSA

January 2019

EXECUTIVE SUMMARY

LSA was retained by the City of Yucaipa to prepare a Biological Resources Assessment (Assessment) for compliance with the California Environmental Quality Act (CEQA). The Assessment evaluates the proposed improvements to El Dorado Ranch Park and Five Winds Ranch located within the City of Yucaipa, San Bernardino County, California.

No threatened or endangered species are expected to occur within the project site. The project area is outside of the known range of Stephens' kangaroo rat (*Dipodomys stephensi*) and the San Bernardino kangaroo rat (*Dipodomys merriami parvus*). Raptor species such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*) may potentially forage in the project area, but no nesting habitat is available on site for these species.

Marginally suitable habitat for burrowing owl (*Athene cunicularia*), a species of special concern (SSC) for the State of California, is present within the project area. A pre-construction burrowing owl survey using an accepted protocol (as determined in coordination with the Permittees and the Wildlife Agencies) led by a qualified biologist is recommended prior to vegetation clearing or ground disturbance.

The project area contains suitable habitat for nesting birds protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. LSA recommends that removal of vegetation be conducted between September 1 and January 31 (outside the nesting season) to avoid any impacts to nesting raptors or other birds protected by the Fish and Game Code and the MBTA. If vegetation removal is to occur during the nesting season (February 1 through August 31), a pre-construction nesting survey is recommended to be conducted by a qualified biologist prior to vegetation removal.

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A: PLANT AND ANIMAL SPECIES OBSERVED
B: SPECIAL-STATUS SPECIES SUMMARY

INTRODUCTION

LSA has prepared this Biological Resources Assessment (Assessment) for compliance with the California Environmental Quality Act (CEQA). This Assessment evaluates the proposed improvements to El Dorado Ranch Park and Five Winds Ranch Project (project) located north of Oak Glen Road between James Birch Road and Potato Canyon Road in the City of Yucaipa (City), San Bernardino County, California. The Assessor's Parcel Numbers (APNs) that make up the project area are 0321-121-43, 0321-121-44, and 0321-111-03. Specifically, the project area is located in Section 28, Township 1 South, Range 1 West, as depicted on the United States Geological Survey (USGS) *Forest Falls, California* 7.5-minute topographic quadrangle map (Figure 1).

PROJECT DESCRIPTION

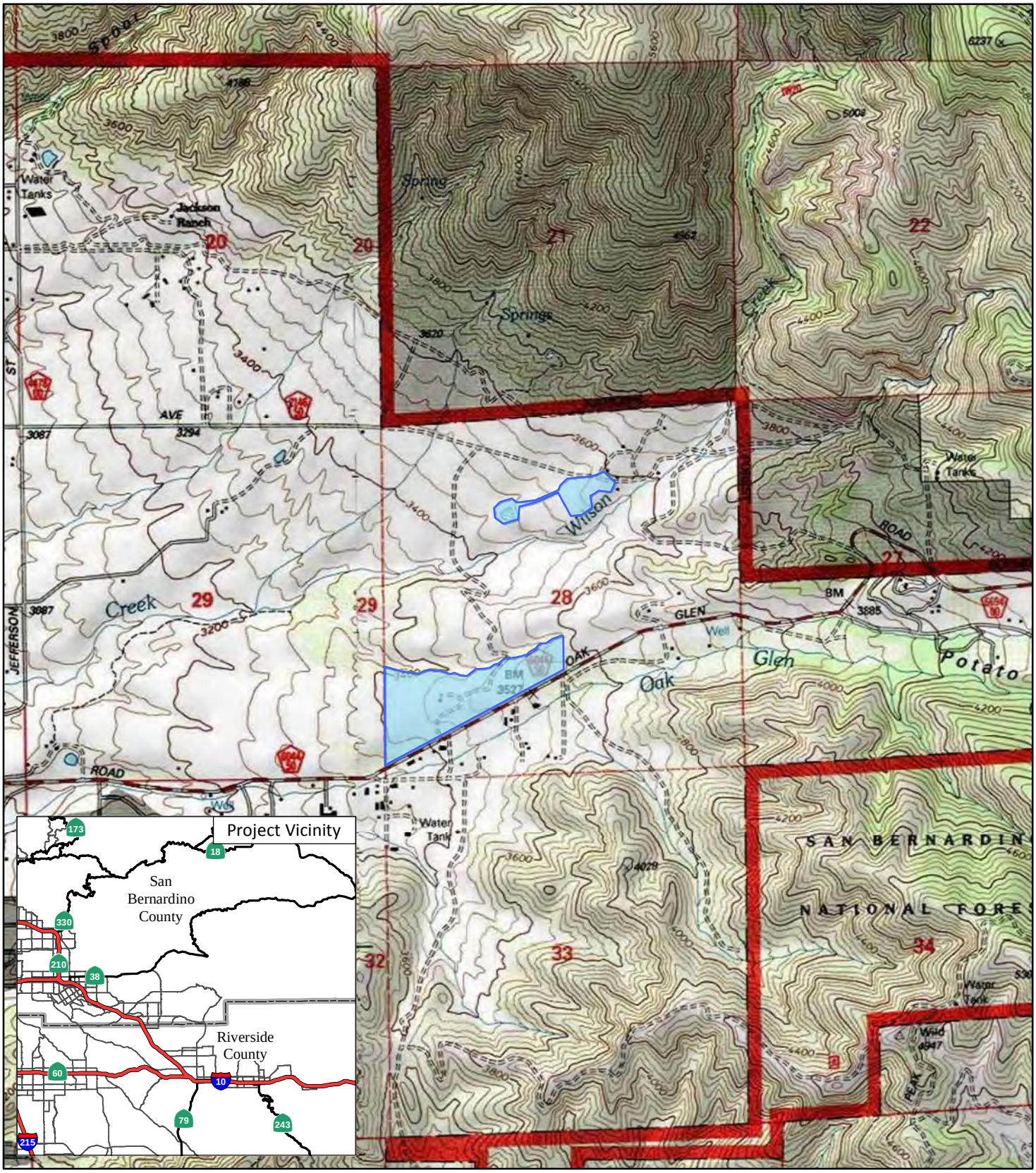
El Dorado Ranch Park (Park) is located at 37216 Oak Glen Road on the north side of Oak Glen Road east of Pendleton Avenue and south of Carter Street, and encompasses nearly 350 acres. The southern proposed improvements (Area A) to the park are on 48.50 acres of park property and include the southern portion of APN 0321-151-44 as well as APN 0321-121-43 (Five Winds Ranch). The northern proposed improvements (Area B) will occur on 10.00 acres in the northeastern portion of APN 0321-111-03.

The Five Winds Ranch portion of the project is designated as Park (P) in the City's General Plan. The City's General Plan assigns the Open Space (OS) designation to the balance of the park property, including APN 0321-111-03 to the north. The lands north of Area A are dedicated as a conservation easement/mitigation site.

This City proposes numerous improvements to the park. Current restroom and parking facilities are located near the southeastern corner of the park. The existing Five Winds Ranch, including the adobe (house), barn, and outlying structures are located on approximately 10.78 acres in the southwestern area.

Proposed improvements to Area A include, but are not limited to, exterior and interior modifications to existing structures, relocation of an existing barn, a new park ranger cabin, an archery range, new trails, new restrooms, new camping areas, and associated parking and roadways. The project landscape will be revegetated with native vegetation and bioswales will be created to promote positive drainage across the project. A wetland pond area will be enhanced with bat, duck, and owl boxes.

Area B, comprising approximately 10 acres in the northeast portion of APN 0321-111-03, will be minimally improved to include a group camp area and a walking path to a restored pond. A dry livestock pond, measuring approximately 0.65 acre, will be restored with water from a local well located within the park (approximately 0.35 mile west of the proposed pond). Figure 2 shows the project limits, vegetation, and preliminary site plans.



LSA

LEGEND

Project Site

FIGURE 1

N

0 1000 2000

FEET

El Dorado Ranch Park – Five Winds Ranch Project

Regional and Project Location

SOURCE: USGS 7.5' Quad., *Yucaipa, CA* (1988); *Forest Falls, CA* (1994); ESRI Streetmap (2013).

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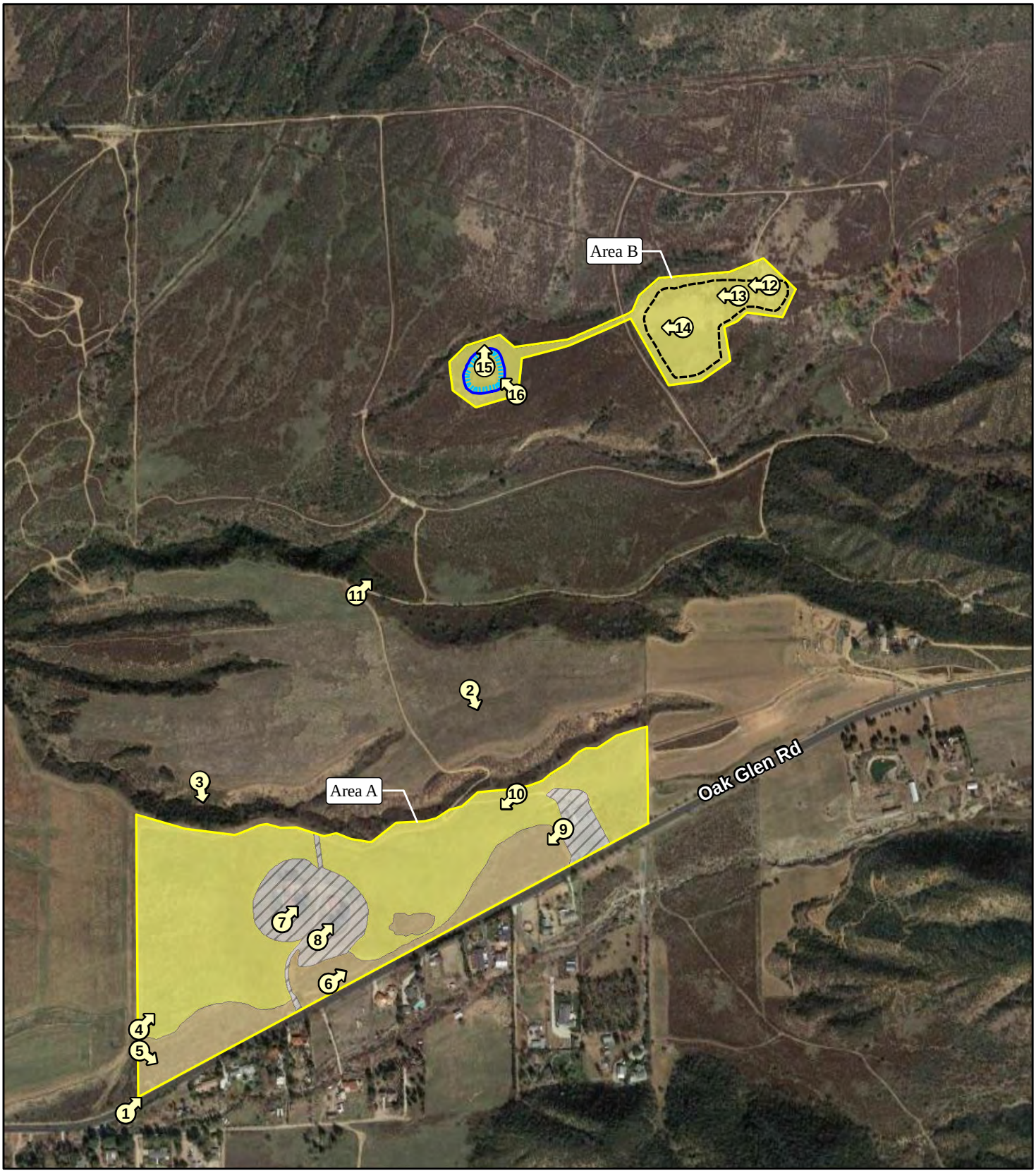

LSA

FIGURE 2

LEGEND

Project Limits

PhotoPoint

Group Camping Area

Proposed Pond

Vegetation

Developed

California Buckwheat Scrub

Grassland

N

0 350 700

FEET

SOURCE: Google (2018)

El Dorado Ranch Park – Five Winds Ranch Project

Project Limits, Vegetation, Land Use and Photgraph Key Location

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METHODS

Literature Review

A literature review was conducted to assist in determining the existence or potential occurrence of special-status plant and animal species within the project area and in the project vicinity. A records search of the California Department of Fish and Wildlife (CDFW) Natural Diversity Data Base (CNDDB) *Rarefind 5* (2018) and California Native Plant Society's *Online Inventory of Rare and Endangered Plants* (California Native Plant Society [CNPS] v7-18) for the *Forest Falls, California* USGS 7.5-minute quadrangle and relevant neighboring quadrangles was conducted on December 3, 2018. The Natural Resources Conservation Service Web Soil Survey was researched in advance of the field work to determine potential soil types and stream locations on December 3 and 18, 2018. Geographic Information System (GIS) software was used to map the project location, habitat types, land uses, etc.

Field Survey

A general reconnaissance-level field survey was conducted on December 4, 2018, and January 4, 2019, by LSA Biologist Andrea Haller. Weather conditions consisted of clear skies, temperatures ranging from 53 to 61 degrees Fahrenheit, and winds ranging from 0 to 3 miles per hour. Notes were taken on general site conditions, vegetation, and suitability of habitat for various special-status elements. All plant and animal species observed or otherwise detected during this field survey were noted and are listed in Appendix A. Appendix B summarizes the special-status plant and animal species potentially present within the project area.

RESULTS

Existing Site Conditions

The project area is generally located between James Birch Road and Potato Canyon Road east of Interstate 10 near the base of the Yucaipa Ridge of the San Bernardino Mountains. Past livestock, agricultural, and ranch/residential uses have occurred on portions of the park property. Current uses are walking/hiking trails, horseback riding trails, and picnic areas. The park has recently also improved the southern border along Oak Glen Road with the planting of native landscaping, including 200 trees and other native species on both sides of a dirt walking path. Land uses surrounding the project area include residential development (mostly to the south of Oak Glen Road), agricultural uses to the fields east and west, and preserved open space to the north.

Topography and Soils

Topography is generally flat in Area A at approximately 3,600 feet above mean sea level (amsl) on the east end, gently sloping down to the west to 3,370 feet amsl. Area B is also generally flat and gradually slopes downward from 3,610 feet amsl at the east end to 3,481 feet amsl at the pond to the west.

A mosaic of soils occurs within the project area and is mapped by the Soil Conservation Service (Knecht 1980) as the following types, listed in order of most to least common in Table A, below:

Table A: Soils

Soil Type	Percentage Slope
Oak Glen gravelly sandy loam (OgD)	9 to 15
Greenfield sandy loam (GtC)	2 to 9
Saugus sandy loam (ShF)	30 to 50
Soboba gravelly loamy sand (SoC)	0 to 9
Oak glen sandy loam (OaC)	2 to 9

Source: Natural Resource Conservation Service (2006).

Oak Glen gravelly sandy loam is dark grayish-brown, gravelly, sandy loam that is well-drained and found in Area B. The Oak Glen gravelly sandy loams are found on the moderate to steep slopes. The Oak Glen series of soils is moderately rapidly permeable and is slightly acidic.

Greenfield sandy loams are well-drained soils formed on gentle to moderate slopes and found in Area A. They are slightly acidic in the surface layer and subsoil and neutral in the underlying material. They are moderately rapidly permeable.

Saugus sandy loam is well drained and is slightly acidic below the surface layer and neutral in the surface layer. Saugus sandy loam is made of soft granitic or sedimentary material. If the soils are left bare, the hazard of erosion is moderate to high. This soil type is in Area A.

Soboba gravelly loamy sands are well drained soils formed on alluvial fans in granitic alluvium and are slightly acidic. Found on almost level to moderate slopes, these soils are very rapidly permeable. This soil type is found in Area A.

Vegetation

The natural vegetation communities present in Area A have been altered by past agricultural uses, residential development, and park development. The current vegetation community in the majority of Area A is annual grassland with areas of scattered California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) (CNPS). Species observed within the *Eriogonum fasciculatum* Shrubland Alliance are California buckwheat, distant phacelia (*Phacelia distans*), ripgut brome (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), tarragon (*Artemisia dracunculus*), and horehound (*Marrubium vulgare*). The southern edge of Area A as well as around the restroom building and parking lot have been improved with plantings of native trees and shrubs, such as sycamore trees (*Plantanus racemosa*), incense cedar (*Calocedrus decurrens*), pine trees (*Pinus* sp.), California rose (*Rosa californica*), and oaks (*Quercus* sp.). Area A is mostly undeveloped space aside from the small parking lot and restroom building at the southeastern area at the main park entrance, and the vacant single-family residential structure (adobe) on the Five Winds Ranch. Five Winds Ranch includes ornamental trees and shrubs such as Chinaberry tree (*Melia azedarach*), large cedar trees (*Cedrus deodora*), eucalyptus (*Eucalyptus* spp.), and olive trees (*Olea europaea*).

The vegetation communities that occur in Area B are also annual grassland and California buckwheat scrub. Species observed are California buckwheat, chaparral yucca (*Hesperoyucca whipplei*), bigberry manzanita (*Arctostaphylos glauca*), hairy yerba santa (*Eriodictyon trichocalyx*), and chamise (*Adenostoma fasciculatum*).

Previously referenced Figure 2 shows vegetation, land use, and photograph key locations. Figure 3 (Sheets 1 through 4) shows site photographs. Appendix A lists all species observed during the field surveys.

Wildlife

Wildlife observed in the park included raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), dark-eyed junco (*Junco hyemalis*), spotted towhee (*Pipilo maculatus*), Anna's hummingbird (*Calypte anna*), and western bluebird (*Sialia mexicana*). Appendix A provides a complete list of animal species observed.

Special-Status Species

This section discusses special-status species observed or potentially occurring within the limits of the project area. Legal protection for special-status species varies widely, from the comprehensive protection extended to listed threatened/endangered species, to no legal status at present. The CDFW, United States Fish and Wildlife Service (USFWS), local agencies, and special-status groups such as the CNPS, publish watch lists of declining species. Species on watch lists can be included as part of the special-status species assessment. Species that are candidates for State and/or Federal listing and species on watch lists are included in the special-status species list. Inclusion of species described in the special-status species analysis is based on the following criteria:

- Direct observation of the species or its sign in the survey area or immediate vicinity during previous biological studies;
- Sighting by other qualified observers;
- Record reported by the CNDDB, published by the CDFW;
- Presence or location information for specific species provided by private groups (e.g., CNPS); and/or
- Survey area lies within known distribution of a given species and contains appropriate habitat.

The special-status species analysis revealed 90 special-status species with the potential to occur within the limits of the project area. Appendix B lists these species with a data summary and determination of the likelihood of each species occurring within the project area.

Threatened/Endangered Species

The following 16 federally/State listed species and candidates for listing were identified as potentially present (Appendix B) in the project vicinity:

1. San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*): Federally listed endangered species.
2 Mojave tarplant (*Deinandra mohavensis*): State-listed endangered species.
3. Slender-horned spineflower (*Dodecahema leptoceras*): Federally listed endangered and State-listed endangered species.

Photo 1. Aerial view of whole project area in foreground looking northeast.

Photo 2. Aerial view of Area A looking south.

Photo 3. Aerial view of Five Winds Ranch and west end of Area A looking south.

Photo 4. View of grassland habitat and rock piles in Area A looking northeast with Five Winds Ranch in the background.

LSA

FIGURE 3
(Page 1 of 4)

El Dorado Ranch Park – Five Winds Ranch Project
Site Photographs

Photo 5. View of California buckwheat scrub habitat in Area A looking southeast.

Photo 6. View of improved trail and native landscaping looking east.

Photo 7. View of adobe and shed looking northeast.

Photo 8. Deodor cedar and Five Winds Ranch barn looking northeast.

LSA

FIGURE 3
(Page 2 of 4)

El Dorado Ranch Park – Five Winds Ranch Project

Site Photographs

Photo 9. View of buckwheat scrub habitat in Area A looking southwest.

Photo 10. View of grassland habitat in Area A looking southwest.

Photo 11. View of Area B looking northeast.

Photo 12. View into Area B from existing picnic area looking west.

LSA

FIGURE 3
(Page 3 of 4)

El Dorado Ranch Park – Five Winds Ranch Project

Site Photographs

Photo 13. View into proposed group campsite in Area B looking west.

Photo 14. View of grassland habitat in Area B looking west.

Photo 15. Inside the proposed pond looking north.

Photo 16. View of proposed pond looking northwest.

LSA

FIGURE 3
(Page 4 of 4)

El Dorado Ranch Park – Five Winds Ranch Project
Site Photographs

4. Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*): Federally listed endangered and State-listed endangered species.
5. Parish's checkerbloom (*Sidalcea hickmanii* ssp. *parishii*): State-listed rare species.
6. Southern steelhead—South/Central California (*Oncorhynchus mykiss irideus*): Federally listed threatened species.
7. Sierra Madre yellow-legged frog (*Rana muscosa*): Federally listed endangered and State-listed endangered species.
8. Southern rubber boa (*Charina umbratica*): State-listed threatened species.
9. Tricolored blackbird (*Agelaius tricolor*): State-listed candidate for endangered species.
10. Golden eagle (*Aquila chrysaetos*): State-listed fully protected species.
11. White-tailed kite (*Elanus leucurus*): State-listed fully protected species.
12. Southwestern willow flycatcher (*Empidonax traillii extimus*): Federally listed endangered and State-listed endangered species.
13. Least Bell's vireo (*Vireo bellii pusillus*): Federally listed endangered and State-listed endangered species.
14. Lesser long-nosed bat (*Leptonycteris yerbabuenae*): Federally listed endangered species.
15. San Bernardino kangaroo rat (*Dipodomys merriami parvus*): Federally listed endangered species.
16. Stephens' kangaroo rat (*Dipodomys stephensi*): Federally listed endangered and State-listed threatened species.

Habitat within the project area is generally not suitable for these 16 species. Raptor species such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*) may potentially forage in the project area; however, there is no suitable nesting habitat for these species. The project area is outside of the known range of Stephens' kangaroo rat (SKR) and San Bernardino kangaroo rat (SBKR).

Non-Listed Special-Status Species

Of the 72 other non-listed special-status species identified and discussed in Appendix B, 42 are considered absent based on lack of suitable habitat, 24 are considered to have a low probability of occurrence, and 6 species are considered to have a moderate probability for occurrence. The following non-listed special-status species have a moderate probability to occur within the project area:

- Plummer's mariposa-lily (*Calochortus plummerae*);
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*);
- Cooper's hawk (*Accipiter cooperii*);
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*);
- Burrowing owl (*Athene cunicularia*); and

- Loggerhead shrike (*Lanius ludovicianus*).

Nesting bird species, including special-status species identified in Appendix B, with potential to occur are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the Migratory Bird Treaty Act (MBTA) (16 USC 703–711). These laws regulate the take, possession, or destruction of the nest or eggs of any migratory bird or bird of prey. However, the USFWS has recently determined that the MBTA should apply only to "… affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" and will not be applied to incidental take of migratory birds pursuant to otherwise lawful activities.

Critical Habitat

The project area does not lie within any federally designated critical habitat.

Jurisdictional Waters

No potentially jurisdictional waters were identified on site during the field survey. Furthermore, the examination of current and historic topographic maps and historic aerial photographs did not show any evidence of present or historic drainage features on the project site.

IMPACTS AND RECOMMENDATIONS

The following is a discussion of potential disturbances and recommendations for avoidance, minimization, and mitigation measures per applicable local, State, and federal policy.

Threatened and Endangered Species

No threatened or endangered species are expected to occur within the project site. The project area is outside of the known range of SKR and SBKR. Raptor species such as the white-tailed kite and golden eagle may potentially forage in the project area, but no nesting habitat is available on site for these species.

Non-Listed Special-Status Species

The 30 special-status species identified in Appendix B as having a low to moderate probability of occurrence in the project area have limited population distribution in Southern California and development is further reducing their ranges and numbers. These species have no official State or federal protection status, but they merit consideration under CEQA. The project is not anticipated to have a substantial effect on these non-listed special-status species.

In addition, to ensure compliance with California Fish and Game Code and to avoid potential impacts to nesting birds, it is recommended that the vegetation removal activities be conducted outside the general bird nesting season (January 31 through August 31). If vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is recommended prior to vegetation removal.

Burrowing Owl

Marginally suitable burrowing owl habitat is present throughout the grassland habitat, vacant land areas, and rock piles in Areas A and B. However, the risk of avian predation from larger raptors is high across the project area due to the installation of nesting boxes and platforms across the existing park. A pre-construction burrowing owl survey would be recommended using an accepted protocol (as determined in coordination with the Permittees and the Wildlife Agencies). Prior to construction, a qualified biologist will survey the construction area including a 500-foot buffer, or to the edge of the property if less than 500 feet, for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine whether an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season or a 250-foot buffer during the breeding season or a buffer to the edge of the property boundary if less than 500 feet will be established around the burrow. The buffer will be staked and flagged. No development activities will be permitted within the buffer until the young are no longer dependent on the burrow.

Jurisdictional Waters

No potential jurisdictional features subject to regulation by U.S. Army Corps of Engineers, CDFW, or Regional Water Quality Control Board were found to be present on the project site.

Habitat Fragmentation and Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing effects to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas such that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another. An example is the fragmentation of habitats within and around “checkerboard” residential development. Habitat fragmentation can also occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning or other disturbances.

Local wildlife movement may be temporarily disrupted during the vegetation removal and construction processes, but this effect would be localized and short term. Therefore, it is not considered significant.

Local Policies and Ordinances

City and County General Plans and development ordinances were reviewed to determine if there are any regulations or policies governing natural resources. For example, policies may include tree preservation, locally designated species survey areas, local species of interest, or significant ecological areas. Although the City of Yucaipa requires a permit to remove oak trees from within City limits (Oak Tree Conservation Ordinance YDC Section 89.0501) and heritage trees (living native tree with a six-inch or greater stem diameter, measured at 4.5 feet above the average ground level of the tree base; YDC Section 89.0315 Subject Trees), the on-site oak and heritage trees will not be affected by project development. If any unanticipated impacts to oak or heritage trees are required for project implementation, City approval and permitting may be required. No other local policies or ordinances that would affect development of the project site are applicable to the project.

CEQA Environmental Checklist

a) Would the project 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 Wildlife or U.S. Fish and Wildlife Service?

No Impact. No threatened or endangered species are expected to occur within the project site. The project area is outside of the known range of Stephens' kangaroo rat (*Dipodomys stephensi*) and the San Bernardino kangaroo rat (*Dipodomys merriami parvus*). Raptor species such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*) may potentially forage in the project area, but no nesting habitat is available on-site for these species.

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

No Impact. Riparian habitat or other special-status natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service do not occur within the project area. Therefore, the project will not adversely affect any riparian habitat or other sensitive natural community.

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

No Impact. There are no wetland waters of the United States within the project area. Therefore, the project will not adversely affect any federally protected wetlands.

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

Less than Significant with Mitigation Incorporated. Native resident wildlife movement may be temporarily disrupted during the vegetation removal and construction processes, but this effect would be localized and short term; therefore, it is not considered significant. No native wildlife nursery sites occur within the project area.

There is moderate potential for burrowing owl to occur within the project area. A pre-construction survey prior to ground disturbance or vegetation clearing is recommended to avoid adverse effects to burrowing owl.

The project area contains suitable habitat for nesting birds protected by the Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. LSA recommends that removal of vegetation be conducted between September 1 and January 31 (outside the nesting season) to avoid any impacts to nesting raptors or other birds protected by the Fish and Game Code and the MBTA. If vegetation removal is to occur during the nesting season (February 1 through August 31), a pre-construction nesting survey is recommended to be conducted by a qualified biologist prior to vegetation removal.

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

No Impact. Although the City of Yucaipa requires a permit to remove oak trees from within City limits, and City Approval to remove Heritage Trees, the on-site oak and heritage trees will not be affected by the project. No other local policies or ordinances are applicable to the project.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan?

No Impact. The project does not occur within the plan areas of any NCCP or HCP (USFWS 2011). Therefore, the project will not conflict with provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

CUMULATIVE IMPACTS

According to Section 15130 of the *CEQA Guidelines*, "cumulative impacts" refers to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. Due to the minimal proposed ground disturbance, improvements through native vegetation landscaping, installation of components for the purpose of attracting native wildlife (including bird/bat boxes, wetland pond, and restored pond), project impacts are not considered to be cumulatively significant and project implementation could be considered beneficial for native plants and wildlife.

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APPENDIX A

PLANT AND ANIMAL SPECIES OBSERVED

Plant and Animal Species Observed

Scientific Name	Common Name
MAGNOLIOPHYTA: MAGNOLIOPSIDA	**DICOT FLOWERING PLANTS**
Anacardiaceae	**Sumac family**
Toxicodendron diversilobum	Poison oak
Apiaceae	**Carrot family**
*Anthriscus caucalis**	Bur chervil
Asteraceae	**Sunflower family**
Artemisia californica	California sagebrush
Artemisia dracunculus	Tarragon
Baccharis salicifolia	Mule fat
Encelia farinosa	Brittlebush
Ericameria palmeri var. *pachylepis*	Palmer's rabbitbrush
Heterotheca grandiflora	Telegraphweed
Pseudognaphalium californicum	Ladies tobacco
Stephanomeria sp.	Wirelettuce
Tetradymia comosa	Hairy horsebrush
Boraginaceae	**Borage family**
Amsinckia menziesii	Common fiddleneck
Eriodictyon trichocalyx	Hairy yerba santa
Brassicaceae	**Mustard family**
*Hirschfeldia incana**	Shortpod mustard
Boechera sp.	Rock cress
Cactaceae	**Cactus family**
Opuntia littoralis	Coastal pricklypear
Caprifoliaceae	**Honeysuckle family**
Sambucus nigra cerulea	Blue elderberry
Chenopodiaceae	**Saltbush family**
*Salsola tragus**	Russian thistle
Cupressaceae	**Cypress family**
Calocedrus decurrens	Incense cedar
Hesperocyparis sp.	Western cypress tree
Ericaceae	**Heather family**
Arctostaphylos glauca	Bigberry manzanita
Euphorbiaceae	**Spurge family**
Croton californicus	California croton
Fagaceae	**Beech family**
Quercus wislizeni	Interior live oak
Quercus berberidifolia	Scrub oak
Geraniaceae	**Geranium family**
Erodium sp.	Stork's bill

Plant and Animal Species Observed

Scientific Name	Common Name
Hydrophyllaceae	**Waterleaf family**
Phacelia distans	Distant phacelia
Eriodictyon trichocalyx	Hairy yerba santa
Lamiaceae	**Mint family**
Marrubium vulgare	Horehound
Salvia apiana	White sage
Malvaceae	**Mallow family**
Malva parviflora	Cheeseweed mallow
Meliaceae	**Mahogany family**
Melia azedarach (non-native species)	Chinaberry tree
Myrtaceae	**Myrtle family**
Eucalyptus sp.	Eucalyptus
Platanaceae	**Sycamore family**
Platanus racemosa	Western sycamore
Oleaceae	**Olive family**
Olea europaea (non-native species)	Olive tree
Pinaceae	**Pine family**
Pinus jeffreyi	Jeffrey pine tree
Cedrus deodara	Deodor cedar tree
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Rhamnaceae	**Buckthorn family**
Rhamnus californica	California coffeeberry
Rosaceae	**Rose family**
Rosa californica	California rose
Heteromeles arbutifolia	Toyon
Adenostoma fasciculatum	Chamise
Salicaceae	**Willow family**
Populus fremontii	Fremont cottonwood
Solanaceae	**Nightshade family**
Datura wrightii	Sacred thorn-apple
Viscaceae	**Christmas Mistletoe family**
Phoradendron leucarpum	Oak mistletoe
MAGNOLIOPHYTA: LILIOPSIDA	**MONOCOT FLOWERING PLANTS**
Agavaceae	**Century plant family**
Hesperoyucca whipplei	Chaparral yucca
Poaceae	**Grass family**
Avena sativa (non-native species)	Cultivated oats
Bromus diandrus (non-native species)	Ripgut brome
Bromus hordeaceus (non-native species)	Soft chess

Plant and Animal Species Observed

Scientific Name	Common Name
Bromus madritensis (non-native species)	Foxtail chess
Bromus tectorum (non-native species)	Cheatgrass
Eragrostis cilianensis (non-native species)	Stinkgrass
Hordeum murinum (non-native species)	Foxtail barley
Melica imperfecta	Coast range melic
Triticum aestivum (non-native species)	Wheat
Vulpia myuros (non-native species)	Rat-tail fescue
REPTILIA	**REPTILES**
Crotaphytidae	**Collared and Leopard Lizards**
Uta stansburiana	Common side-blotched lizard
AVES	**BIRDS**
Accipitridae	**Hawks and Eagles**
Buteo lineatus	Red-shouldered hawk
Buteo jamaicensis	Red-tailed hawk
Circus hudsonius	Northern harrier
Corvidae	**Crows and Ravens**
Aphelocoma californica	California scrub-Jay
Corvus corax	Common raven
Falconidae	**Falcons**
Falco sparverius	American kestrel
Motacillidae	**Wagtails and Pipits**
Junco hyemalis	Dark-eyed junco
Fringillidae	**Finches**
Carpodacus mexicanus	House finch
Odontophoridae	**New World quail**
Callipepla californica	California quail
Paridae	**Titmice**
Baeolophus inornatus	Oak titmouse
Parulidae	**Wood warblers**
Setophaga coronata	Yellow-rumped warbler
Passerellidae	**New World sparrows**
Melozone crissalis	California towhee
Pipilo maculatus	Spotted towhee
Zonotrichia leucophrys	White-crowned sparrow
Piciformes	**Woodpeckers**
Colaptes auratus	Northern flicker
Polioptilidae	**Gnatcatchers**
Polioptila caerulea	Blue-gray gnatcatcher
Sylviidae	**Sylviid Warblers**
Chamaea fasciata	Wrentit

Plant and Animal Species Observed

Scientific Name	Common Name
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Turdidae	**Thrushes**
Sialia mexicana	Western bluebird
Tyrannidae	**Tyrant flycatchers**
Polioptila caerulea	Blue-gray gnatcatcher
Sayornis saya	Say's phoebe

APPENDIX B

SPECIAL-STATUS SPECIES SUMMARY

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Plants				
Abronia villosa var. *aurita* **Chaparral sand-verbena**	US: – CA: 1B.1	Sandy areas (generally flats and benches along washes) in chaparral and coastal sage scrub, and improbably in desert dunes or other sandy areas, below 1,600 meters (5,300 feet) elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura Counties. Believed extirpated from Orange County. Also reported from Arizona and Mexico (Baja California). Plants reported from desert communities are likely misidentified.	Blooms mostly March through August (annual or perennial herb)	**Low**. Marginally suitable habitat (sandy areas in scrub) is present within the project area.
Allium marvinii **Yucaipa onion**	US: – CA: 1B.2	Openings in clay soils in chaparral. Known only from the Yucaipa and Beaumont areas of the San Bernardino Mountains; 760 to 1,065 meters (2,500 to 3,500 feet) elevation.	Blooms April through May (perennial bulbiferous herb)	**Absent**. No suitable habitat (clay soils) is present within the project area.
Arenaria lanuginosa ssp. *saxosa* **Rock sandwort**	US: – CA: 2B.3	Mesic sandy soils in upper montane and subalpine coniferous forest at 1,800 to 2,600 meters (5,900 to 8,500 feet) elevation. Known in California only from San Bernardino County.	Blooms July through August (perennial herb)	**Absent**. The project is out of the species known elevation range.
Astragalus lentiginosus var. *borreganus* **Borrego milk-vetch**	US: – CA: 4.3	Sandy flats and semi-stabilized dunes in desert scrub at 30 to 270 meters (100 to 900 feet) elevation. In California, known from Imperial, Riverside, San Bernardino, and San Diego Counties. Also occurs in Arizona, Nevada, and Mexico.	Blooms February through May	**Absent**. The project is out of the species known elevation range.
Astragalus lentiginosus var. *coachellae* **Coachella Valley milk-vetch**	US: FE CA: 1B.2	Sandy areas, typically in coarse sands in active sand fields, adjacent to dunes, along roadsides in dune areas, or along the margins of sandy washes, in Sonoran Desert scrub at 60 to 655 meters (200 to 2,150 feet) elevation. Known only from Riverside County in the Coachella Valley between Cabazon and Indio, and in the Chuckwalla Valley northeast of Desert Center.	Blooms February through May (annual or perennial herb)	**Absent**. No suitable habitat (active sand fields) is present within the project area.
Astragalus pachypus var. *jaegeri* **Jaeger's milk-**	US: – CA: 1B.1	Sandy or rocky sites in chaparral, coastal sage scrub, grassland, and oak; known from northern San Diego and western Riverside	Blooms December through June (perennial shrub)	**Low**. Marginally suitable habitat (sandy areas in grassland, scrub) is

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
vetch		Counties, from 365 to 915 meters (1,200 to 3,000 feet) elevation.		present within the project area.
Atriplex coronata var. *notatior* **San Jacinto Valley crownscale**	US: FE CA: 1B.1	Alkaline flats in playas, chenopod scrub, valley and foothill grasslands, vernal pools at 365 to 520 meters (1,200 to 1,700 feet) elevation. Endemic to the San Jacinto River Valley area of western Riverside County.	Blooms April through May (annual herb)	**Absent**. The project is out of the species known elevation range.
Atriplex serenana var. *davidsonii* **Davidson's saltscale**	US: – CA: 1B.2	Alkaline soils in scrub and herbaceous communities from 10 to 460 meters (30 to 1,500 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, and Ventura Counties. Believed extirpated from Santa Barbara and perhaps Los Angeles Counties. Also occurs in Mexico.	Blooms April through October (annual herb)	**Absent**. The project is out of the species known elevation range.
Botrychium crenulatum **Scalloped moonwort**	US: – CA: 2B.2	Bogs, moist meadows and seeps, marshes, and swamps of lower montane coniferous forest; 1,500 to 3,280 meters (4,900 to 10,800 feet). Scattered but not common anywhere in California.	Fertile June through July (perennial herb)	**Absent**. The project is out of the species known elevation range.
Calochortus palmeri var. *palmeri* **Palmer's mariposa-lily**	US: – CA: 1B.2	Mesic sites in chaparral and lower montane coniferous forest at 600 to 2,400 meters (2,000 to 7,900 feet) elevation. Known from Riverside, San Bernardino, Santa Barbara, Los Angeles, Ventura, Kern, and San Luis Obispo Counties.	Blooms April through July (perennial herb)	**Absent**. No suitable habitat (mesic sites) is present within the project area.
Calochortus plummerae **Plummer's mariposa-lily**	US: – CA: 4.2	Rocky sites of granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest, at 100 to 1,700 meters (300 to 5,600 feet) elevation. Known from Riverside, San Bernardino, Orange, Los Angeles, and Ventura Counties, California. In the western Riverside County area, this species is known from the foothills of the San Bernardino Mountains, northeastern Santa Ana Mountains, Box Springs Mountains, and from the Lake Skinner area (*The Vascular Plants of Western Riverside County*, California. F.M. Roberts et al.,	Blooms May through July (perennial herb)	**Moderate.** Moderately suitable habitat (rocky sites in grassland) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		2004). Appears to intergrade with *Calochortus weedii* var. *intermedius,* which is mostly from Santa Ana Mountains eastward.		
Castilleja lasiorhyncha **San Bernardino Mountains owl's-clover**	US: – CA: 1B.2	Mesic to drying soils in open areas of stream and meadow margins or margins of vernally wet areas in meadows, chaparral, pebble plains, and upper montane coniferous forest at 1,300 to 2,400 meters (4,300 to 7,900 feet) elevation. Known from San Bernardino County, and historically from Riverside County.	Blooms June through August (annual herb)	**Absent**. The project is out of the species known elevation range.
Caulanthus simulans **Payson's jewel-flower**	US: – CA: 4.2	Recently burned areas or disturbed sites such as streambeds in chaparral, coastal sage scrub, riparian areas, and grassland at 60 to 2,200 meters (200 to 7,200 feet) elevation. Known from San Diego County (Collections in western Riverside County misidentified, are *C. heterophyllus* var. *pseudosimulans*).	Blooms March through June (annual herb)	**Low.** Marginally suitable habitat (disturbed areas in scrub, grassland) is present within the project area.
Centromadia pungens ssp. *laevis* **Smooth tarplant**	US: – CA: 1B.1	Generally alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland below 480 meters (1,600 feet) elevation. Known from Riverside and San Bernardino Counties, extirpated from San Diego County.	Blooms April through November (annual herb)	**Absent**. No suitable habitat (chenopod scrub) is present within the project area.
Chorizanthe parryi var. *parryi* **Parry's spineflower**	US: – CA: 1B.1	Sandy or rocky soils in chaparral, coastal scrub, oak woodlands, and grassland at 40 to 1,705 meters (100 to 5,600 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June (annual herb)	**Low.** Marginally suitable habitat (sandy soils in scrub, grassland) is present within the project area.
Chorizanthe xanti var. *leucotheca* **White-bracted spineflower**	US: – CA: 1B.2	Sandy to gravelly places in Mojave desert scrub, pinyon and juniper woodland, or coastal scrub in the Transverse and Peninsular Ranges and desert edge foothills at 300 to 1,200 meters (980 to 3,900 feet) elevation in coastal southern California and adjacent desert areas. Known only from Los Angeles, Riverside, San Bernardino, and San Diego Counties, California.	Blooms April through June (annual herb)	**Low.** Marginally suitable habitat (sandy scrub areas) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Deinandra mohavensis **Mojave tarplant**	US: – CA: SE/1B.3	Seeps, drainages (including low areas along roads), ponds, and similar mesic areas, generally in sandy alluvial soil, in openings in riparian scrub, coastal scrub, and chaparral at 640 to 1,600 meters (2,100 to 5,300 feet) elevation. Known only from California from the San Jacinto Mountains in Riverside County, the Sierra Nevadas in Kern County, the north edge of the San Bernardino Mountains in San Bernardino County (believed extirpated), and around Palomar Mountain in San Diego County. (A 1997 Connie Rutherford collection is mapped by the Jepson eFlora in open desert near Palmdale, but should be mapped in the Sierra Nevada foothills according to the collection's locality description.)	Blooms (May) June through October (January) (annual herb)	**Absent**. Outside species known range.
Delphinium parishii ssp. *subglobosum* **Colorado Desert larkspur**	US: – CA: 4.3	Chaparral, cismontane woodland, pinyon and juniper woodland, Sonoran desert scrub. Occurs at 600 to 1,800 meters (1,965 to 5,905 feet) elevation.	Blooms March through June (perennial herb)	**Absent.** No suitable habitat (chaparral or desert scrub) is present within the project area.
Delphinium parryi ssp. *purpureum* **Mt. Pinos larkspur**	US: – CA: 4.3	Chaparral, Mojave desert scrub woodland, pinyon and juniper woodland, Sonoran desert scrub. Occurs at 1,000 to 2,600 meters (3,280 to 8,530 feet) elevation.	Blooms May through June (perennial herb)	**Absent.** No suitable habitat (chaparral or desert scrub) is present within the project area.
Diplacus johnstonii **Johnston's monkeyflower**	US: – CA: 4.3	Lower montane coniferous forest (scree, disturbed areas, rocky or gravelly, roadside). Occurs at 975 to 2,920 meters (3,195 to 9,580 feet) elevation. Known only from the San Gabriel and San Bernardino mountains. Hybridizes with *D. constrictus* in the Western Transverse Ranges.	Blooms April through August (annual herb)	**Absent.** No suitable habitat (lower montane forest) is present within the project area.
Dodecahema leptoceras **Slender-horned spineflower**	US: FE CA: SE/1B.1	In the Vail Lake area, occurs in gravel soils of Temecula arkose deposits in openings in chamise chaparral. In other areas, occurs in sandy cobbly riverbed alluvium in alluvial fan sage scrub (usually late seral stage), on floodplain terraces and benches that receive infrequent	Blooms April through June (annual herb)	**Absent**. The project is out of the species known elevation range.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		overbank deposits from generally large washes or rivers, where it is most often found in shallow silty depressions dominated by leather spineflower (*Lastarriaea coriacea*) and other native annual species, and is often associated with cryptogamic soil crusts composed of bryophytes, algae and/or lichens. Occurs at 200 to 760 meters (600 to 2,500 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties, California.		
Eriastrum densifolium ssp. *sanctorum* **Santa Ana River woollystar**	US: FE CA: SE/1B.1	Riversidean alluvial fan sage scrub and chaparral in sandy or gravelly soils of floodplains and terraced fluvial deposits of the Santa Ana River and larger tributaries (Lytle and Cajon Creeks, lower portions of City and Mill Creeks) at 90 to 625 meters (300 to 2,100 feet) elevation in San Bernardino and Riverside Counties.	Blooms May through September (perennial herb)	**Absent**. The project is out of the species known elevation range.
Galium johnstonii **Johnston's bedstraw**	US: – CA: 4.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland. Occurs at 1,220 to 2,300 meters (4,000 to 7,545 feet) elevation.	Blooms June through July (perennial herb)	**Absent**. No suitable habitat (lower montane forest) is present within the project area.
Gilia leptantha ssp. *leptantha* **San Bernardino gilia**	US: – CA: 1B.3	Sandy or gravelly soils in lower montane coniferous forest; sandy or gravelly soils of the San Bernardino Mountains; 1,500 to 2,350 meters (4,900 to 7,700 feet) elevation.	Blooms June through August (annual herb)	**Absent**. The project is out of the species known elevation range.
Heuchera parishii **Parish's alumroot**	US: – CA: 1B.3	Rocky areas in coniferous forests in Riverside and San Bernardino Counties at 1,500 to 3,800 meters (4,900 to 12,500 feet) elevation.	Blooms June through August (perennial herb)	**Absent**. The project is out of the species known elevation range.
Hordeum intercedens **Vernal barley**	US: – CA: 3.2	Vernal pools and saline flats and depressions below 1,000 meters (3,300 feet) elevation. Known from many California Counties. Also occurs in Mexico.	Blooms March through June (annual herb)	**Absent**. No suitable habitat (saline flats) is present within the project area.
Horkelia cuneata ssp. *puberula* **Mesa horkelia**	US: – CA: 1B.1	Sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub at 70 to 825 meters (200 to 2,700 feet) elevation. Known only from San Luis Obispo, Santa Barbara, Ventura, Los	Blooms February through July (sometimes to September) (perennial herb)	**Low**. Marginally suitable habitat (sandy soils in scrub areas) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		Angeles, Orange, and San Bernardino Counties, California. Believed extirpated from Riverside and San Diego Counties.		
Imperata brevifolia **California satintail**	US: – CA: 2B.1	Springs, meadows, streambanks, moist canyons, canals, alkaline sinks, and similar wet areas below 1,220 meters (4,000 feet) elevation. Known from Butte, Fresno, Imperial, Inyo, Kern, Lake, Los Angeles, Orange, Riverside, San Bernardino, Tehama, Tulare, and Ventura Counties, though many collections are old and the populations likely extirpated. Also occurs in other areas of the western U.S. and Mexico.	Blooms September through May (perennial grass)	**Absent**. No suitable habitat (wet areas or canyons) is present within the project area.
Juglans californica **Southern California black walnut**	US: – CA: 4.2	Primarily alluvial areas in chaparral, coastal sage scrub, and cismontane woodland at 50 to 900 meters (160 to 3,000 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties, California.	Blooms March through August (deciduous tree)	**Low**. Marginally suitable habitat (alluvial scrub) is present within the project area.
Lasthenia glabrata ssp. *coulteri* **Coulter's goldfields**	US: – CA: 1B.1	Vernal pools and alkaline soils in marshes, playas, and similar habitats below 1,220 meters (4,000 feet) elevation. Known from Colusa, Merced, Tulare, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, Tehama, Ventura, and Yolo Counties. Believed extirpated from Kern, Los Angeles, and San Bernardino Counties, and possibly also from Tulare County. Also occurs in Mexico.	Blooms February through June (annual herb)	**Absent**. No suitable habitat (vernal pools) is present within the project area.
Lepidium virginicum var. *robinsonii* **Robinson's pepper-grass**	US: – CA: 4.3	Dry soils in coastal sage scrub and chaparral below 885 meters (2,900 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino and San Diego Counties, and Santa Cruz Island. Also occurs in Mexico.	Blooms January through July (annual herb)	**Absent**. The project is out of the species known elevation range.
Lilium humboldtii ssp. *ocellatum* **Ocellated**	US: – CA: 4.2	Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland at 30 to 1,800 meters (100 to 5,900 feet)	Blooms March through August (perennial herb)	**Low**. Marginally suitable habitat (openings in scrub) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Humboldt lily		elevation. Known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, Santa Cruz Island, San Diego, Santa Rosa Island, and Ventura Counties, California.		
Lilium parryi **Lemon lily**	US: – CA: 1B.2	Bulbiferous perennial herb of wet areas in meadows and riparian and montane coniferous forests at 1,220 to 2,790 meters (4,000 to 9,200 feet) elevation. In California, known from Los Angeles, Riverside, San Bernardino, and San Diego Counties. Also occurs in Arizona and Mexico.	Blooms July through August (perennial herb)	**Absent**. No suitable habitat (meadows or riparian forest) is present within the project area.
Mentzelia tricuspis **Spinyhair blazing star**	US: – CA: 2B.1	Sandy or gravelly slopes and washes at 150 to 1,280 meters (500 to 4,200 feet) elevation in desert scrub. In California, known from Inyo, Riverside, San Bernardino, and San Diego Counties. Also occurs in Arizona, Nevada, and Utah.	Blooms March through May (annual herb)	**Absent**. No suitable habitat (desert scrub) is present within the project area.
Monardella macrantha ssp. *hallii* **Hall's monardella**	US: – CA: 1B.3	Dry slopes and ridges in openings in chaparral, woodland, and forest at 695 to 2,195 meters (2,280 to 7,200 feet) elevation. Known only from Los Angeles, San Diego, Orange, Riverside, and San Bernardino Counties, California. In the western Riverside County area, known only from higher elevations in the Santa Ana and Agua Tibia Mountains (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	Blooms June through August (sometimes to October) (perennial herb)	**Low**. Marginally suitable habitat (dry slopes in chaparral) is present within the project area.
Muilla coronata **Crowned muilla**	US: – CA: 4.2	Historically distributed from the eastern side of the High Sierra south to the western Mojave Desert. Occurs in heavy soils in open desert scrub and Joshua tree woodland; 975 to 1,600 meters (3,200 to 5,200 feet) elevation.	Blooms March through April	**Absent**. No suitable habitat (desert scrub or Joshua tree woodland) is present within the project area.
Nama stenocarpa **Mud nama**	US: – CA: 2B.2	Lake shores, riverbanks, and similar intermittently wet areas at 5 to 500 meters (20 to 1,600 feet) elevation. Known in California from San Diego, Orange, and Riverside Counties and from San Clemente Island. Believed extirpated from Los Angeles and Imperial Counties. Known also from Baja California and Arizona.	Blooms January through July (annual or perennial herb)	**Absent**. The project is out of the species known elevation range.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Oxytropis oreophila var. *oreophila* **Rock-loving oxytrope**	US: – CA: 2B.3	Gravelly or rocky soils in alpine boulder and rock fields, and subalpine coniferous forest at 3,350 to 3,950 meters (11,000 to 13,000 feet) elevation. Known in California only from San Bernardino County.	Blooms June through September (perennial herb)	**Absent**. The project is out of the species known elevation range.
Parnassia cirrata var. *cirrata* **San Bernardino grass-of-Parnassus**	US: – CA: 1B.3	Mesic sites in lower and upper montane coniferous forest at 2,135 to 3,000 meters (7,000 to 9,800 feet) elevation. Known in California only from the San Gabriel and San Bernardino Mountains.	Blooms August through September (perennial herb)	**Absent**. The project is out of the species known elevation range.
Petalonyx linearis **Narrow-leaf sandpaper-plant**	US: – CA: 2B.3	Sandy or rocky canyons in Mojavean desert scrub, Sonoran desert scrub; generally in creosote-bush scrub. Occurs at 30 to 1,090 meters (98 to 3,576 feet).	Blooms March through May (perennial herb)	**Absent**. No suitable habitat (desert scrub) is present within the project area.
Piperia leptopetala **Narrow-petaled rein orchid**	US: – CA: 4.3	Chaparral, foothill woodland, yellow pine forest, red fir forest, northern coastal scrub, closed-cone pine forest; generally dry sites, scrub, woodland. Occurs at 100 to 2,200 meters elevation (328 to 7,218 feet).	Blooms May through July (perennial herb)	**Low**. Marginally suitable habitat (dry scrub areas) is present within the project area.
Sidalcea hickmanii ssp. *parishii* **Parish's checkerbloom**	US: – CA: SR/1B.2	Burned or cleared areas on rocky slopes, and along roads in chaparral, cismontane woodland, and lower montane coniferous forest at 1,000 to 2,135 meters (3,300 to 7,000 feet) elevation. Known only from in Santa Barbara, San Bernardino and San Luis Obispo Counties, California.	Blooms May through June (perennial herb)	**Low**. Marginally suitable habitat (cleared areas, roadsides) is present within the project area.
Sidalcea neomexicana **Salt Spring checkerbloom**	US: – CA: 2B.2	Alkaline springs and brackish marshes below 1,530 meters (5,000 feet) elevation. In California, known only from Kern, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Believed extirpated from Los Angeles County. Also known from Arizona, New Mexico, Nevada, Utah, and Mexico.	Blooms March through June (perennial herb)	**Absent**. No suitable habitat (springs or marshes) is present within the project area.
Streptanthus bernardinus **Laguna Mountains jewel-flower**	US: – CA: 4.3	Chaparral and lower montane coniferous forest at 670 to 2,500 meters (2,200 to 8,200 feet) elevation. In California, known only from Riverside, San Bernardino, and San Diego Counties. May also occur in Mexico.	Blooms May through August (perennial herb)	**Absent**. No suitable habitat (chaparral or forest) is present within the project area.
Streptanthus	US: –	Open rocky areas in chaparral,	Blooms May through	**Low**. Marginally

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
campestris **Southern jewel-flower**	CA: 1B.3	lower montane coniferous forest and pinyon-juniper woodland at 600 to 2,400 meters (2,000 to 7,800 feet) elevation. In California, known from Riverside, San Bernardino, and San Diego Counties.	July (perennial herb)	suitable habitat (chaparral) is present within the project area.
Symphyotrichum defoliatum **San Bernardino aster**	US: – CA: 1B.2	Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 meters (6,700 feet) elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties. May also occur in San Luis Obispo County. In the western Riverside County area, this species is scarce, and documented only from Temescal and San Timoteo Canyons (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	Blooms July through November(perennial herb)	**Absent**. No suitable habitat (vernally wet sites) is present within the project area.
Trichocoronis wrightii var. *wrightii* **Wright's trichocoronis**	US: – CA: 2B.1	Alkali soils in meadows, riverbeds, vernal pools, and lakes at 5 to 435 meters (20 to 1,430 feet) elevation. In California, known from the Central Valley and Riverside County. Also occurs in Texas and Baja California.	Blooms May through September (annual or perennial herb)	**Absent**. The project is out of the species known elevation range.
Invertebrates				
Halictus harmonius **Halictid bee**	US: – CA: SA	Habitat is not well understood. Known only from the foothills of the San Bernardino and (with less certainty) the San Jacinto Mountains in Southern California.	Spring and Summer	**Low**. Marginally suitable habitat (foothills) is present within the project area.
Fish				
Oncorhynchus mykiss irideus **Southern steelhead—South/Central California**	US: FT CA: SA	Federal listing refers to runs in coastal basins from the Pjaro River south to, but not including, the Santa Maria River.	Year-round	**Absent**. No suitable habitat (aquatic sites) is present within the project area.
Rhinichthys osculus ssp. *3* **Santa Ana speckled dace**	US: – CA: SSC	Found in the headwaters of the Santa Ana and San Gabriel River drainages. Found in riffles in small streams and shore areas with abundant gravel and rock.	Year-round	**Absent**. No suitable habitat (aquatic sites) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Amphibians				
Rana muscosa **Sierra Madre yellow-legged frog**	US: FE CA: SE	Ponds, lakes, and streams at moderate to high elevation; appears to prefer bodies of water with open margins and gently sloping bottom. Transverse Ranges in southern California from 370 to 2,290 meters (1,200 to 7,500 feet) elevation. Restricted to streams in ponderosa pine, montane hardwood-conifer, and montane riparian habitats.	March through June	**Absent**. No suitable habitat (ponds, lakes, streams) is present within the project area.
Spea hammondii **Western spadefoot**	US: – CA: SSC	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.	October through April (following onset of winter rains)	**Low**. Marginally suitable habitat (grasslands) is present within the project area.
Reptiles				
Arizona elegans occidentalis **California glossy snake**	US: – CA: SSC	Scrub and grassland habitats, often with loose or sandy soils. Patchily distributed from the eastern portion of San Francisco Bay to southern San Joaquin Valley and in non-desert areas of southern California. Also occurs in Baja California, Mexico.	Most active March through June (nocturnal)	**Low**. Marginally suitable habitat (sandy soils, scrub, grasslands) is present within the project area.
Aspidoscelis hyperythra **Orangethroat whiptail**	US: – CA: SA	Prefers washes and other sandy areas with patches of brush and rocks, in chaparral, coastal sage scrub, juniper woodland, and oak woodland from sea level to 915 meters (3,000 feet) elevation. Perennial plants required. Occurs in Riverside, Orange, San Diego Counties west of the crest of the Peninsular Ranges, in extreme southern San Bernardino County near Colton, and in Baja California.	March through July with reduced activity August through October	**Low**. Marginally suitable habitat (sandy areas in scrub) is present within the project area.
Aspidoscelis tigris stejnegeri **Coastal western whiptail**	US: – CA: SSC	Woodlands, riparian areas, and sparsely vegetated areas in a wide variety of habitats including coastal sage scrub and sparse grassland. Occurs in valleys and foothills from Ventura County to Baja California.	April through August	**Moderate.** Moderately suitable habitat (scrub, grassland) is present within the proposed project area.

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Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Charina umbratica **Southern rubber boa**	US: – CA: ST	Montane oak or conifer forest near rock outcrops and woody debris, from about 1,500 to 2,400 meters (5,000 to 8,000 feet) elevation. Occurs in the San Bernardino and San Jacinto Mountains, with an intergrading population (with northern rubber boa) in the Mount Pinos and Tehachapi Mountain areas.	April through October (nocturnal)	**Absent**. The project is out of the species known elevation range.
Diadophis punctatus modestus **San Bernardino ringneck snake**	US: – CA: SA	Under surface objects along drainage courses, preferring mesic chaparral and oak and walnut woodland communities. Moist habitats of southwestern California from about Ventura to Orange Counties.	Diurnal. Crepuscular and nocturnal during warmer periods.	**Absent**. No suitable habitat (drainage courses) is present within the project area.
Lampropeltis zonata (parvirubra) **California mountain kingsnake (San Bernardino population)**	US: – CA: SSC	Occurs in well-illuminated canyons with rocky outcrops or rock talus in association with bigcone spruce and various canyon chaparral species at lower elevations, and with black oak, incense cedar, Jeffrey pine, and ponderosa pine at higher elevations. Known only from the San Bernardino, San Gabriel, and San Jacinto Mountains. Generally occurs above 1,500 meters (4,900 feet) elevation in inland areas, but documented from elevations as low as 370 meters (1,200 feet).	Active diurnally throughout most of the year. Nocturnal in warm weather.	**Absent**. No suitable habitat (canyons with rock talus) is present within the project area.
Phrynosoma blainvillii (coronatum) **Coast horned lizard**	US: – CA: SSC	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 feet) elevation.	April through July with reduced activity August through October	**Absent**. No suitable habitat (open sandy areas in washes) is present within the project area.
Salvadora hexalepis virgultea **Coast patch-nosed snake**	US: – CA: SSC	Coastal chaparral, washes, sandy flats and rocky areas. Widely distributed throughout lowlands, up to 2,130 meters (7,000 feet) elevation, of Southern California from coast to the eastern border.	Active diurnally throughout most of the year	**Absent**. No suitable habitat (coastal chaparral) is present within the project area.
Thamnophis	US: – CA: SSC	Highly aquatic. Only in or near permanent sources of water.	Diurnal Year-round	**Absent**. No suitable habitat (permanent

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Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
hammondii **Two-striped garter snake**		Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.		water sources) is present within the project area.
Birds				
*Accipiter cooperii (*nesting*)* **Cooper's hawk**	US: – CA: SA	Forages in a wide range of habitats, but primarily in forests and woodlands. These include natural areas as well as human-created habitats such as plantations and ornamental trees in urban landscapes. Usually nests in tall trees (20 to 60 feet) in extensive forested areas (generally woodlots of 4 to 8 hectares with canopy closure of greater than 60 percent). Occasionally nests in isolated trees in more open areas.	Year-round	**Moderate**. Moderately suitable habitat (tall trees) is present within the project area.
*Agelaius tricolor (*nesting colony*)* **Tricolored blackbird**	US: – CA: SCE/SSC (breeding)	Open country. Forages in grassland and cropland habitats. Nests in large groups near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, or tall herbs. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs. Occurs in western Oregon, California, and northwestern Baja California.	Year-round	**Absent**. No suitable nesting habitat (fresh water sources, wetlands) is present within the project area.
Aimophila ruficeps canescens **Southern California rufous-crowned sparrow**	US: – CA: SA	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	Year-round, diurnal activity	**Moderate.** Moderately suitable habitat (scrub, grassland) is present within the project area.
*Aquila chrysaetos (*nesting & wintering*)* **Golden eagle**	US: – CA: CFP	Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California.	Year-round diurnal	**Low.** Marginally suitable habitat (open grassland, near mountains) is present within the project area.
*Athene cunicularia (*burrow sites*)* **Burrowing owl**	US: – CA: SSC (breeding)	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf	Year-round	**Moderate.** Moderately suitable habitat (open grassland, ground squirrel burrows, debris/rock piles) is

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Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. They avoid thick, tall vegetation, brush, and trees, but may occur in areas where brush or tree cover is less than 30 percent.		present within the project area.
Buteo swainsoni (nesting) **Swainson's hawk**	US: – CA: ST	Open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Breeds and nests in western North America; winters in South America. Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. In Southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range.	Spring and fall (in migration)	**Absent.** No suitable nesting habitat (juniper-sage flats, riparian areas, and in oak savannah in the Central Valley) within the project area.
Cypseloides niger (nesting) **Black swift**	US: – CA: SSC (breeding)	Most frequently seen in the air feeding on tiny airborne insects. Usually seen near cliffs in mountainous regions; occasionally coastal. Nests in crevices in deep canyon cliffs near waterfalls or in sea cliffs. In California, breeds very locally in the Sierra Nevada and Cascade Range, the San Gabriel, San Bernardino, and San Jacinto Mountains, and in coastal bluffs and mountains from San Mateo County south to probably San Luis Obispo County.		**Low**. Marginally suitable foraging habitat (near mountainous area) is present within the project area. No nesting habitat (near waterfalls or in sea cliffs) within the project area.
Elanus leucurus (nesting) **White-tailed kite**	US: – CA: CFP	Typically nests in riparian trees such as oaks, willows, and cottonwoods at low elevations. Forages in open country. Found in South America and in southern areas and along the western coast of North America.	Year-round	**Low**. Marginally suitable foraging and nesting habitat (open country; cottonwood and oak trees) is present

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
				within the project area.
Empidonax traillii extimus **Southwestern willow flycatcher**	US: FE CA: SE	Rare and local breeder in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern U.S. and possibly extreme northwestern Mexico. Winters in Central and South America.	May through September	**Absent**. No suitable foraging and nesting habitat are present within the project area.
Eremophila alpestris actia **California horned lark**	US: – CA: SA	Open grasslands and fields, agricultural area, open montane grasslands. This subspecies is resident from northern Baja California northward throughout non-desert areas to Humboldt County, including the San Joaquin Valley and the western foothills of the Sierra Nevada (north to Calaveras County). Prefers bare ground such as plowed or fall-planted fields for nesting, but may also nest in marshy soil. During the breeding season, this is the only subspecies of horned lark in non-desert southern California; however, from September through April or early May, other subspecies visit the area.	Year-round interior (inland areas)	**Low**. Marginally suitable foraging and nesting habitat (open grasslands, fields) is present within the project area.
*Icteria virens (*nesting*)* **Yellow-breasted chat**	US: – CA: SSC (breeding)	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	April through September	**Absent**. No suitable nesting habitat (riparian thickets) is present within the project area.
*Lanius ludovicianus (*nesting*)* **Loggerhead shrike**	US: – CA: SSC (breeding)	Prefers open habitats with scattered small trees and with fences, utility lines, or other perches. Inhabits open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Found in open country in much of North America.	Year-round	**Low.** Moderately suitable habitat (open habitat with many perches, cropland) is present within the project area.

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Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
*Plegadis chihi (*nesting colony*)* **White-faced ibis**	US: – CA: SA	Winters locally in wet meadows, shallow freshwater marshes, ponds, lakes, rivers, flooded fields, and estuaries. May frequent brackish areas or feed in flooded fields. Known rookery in western Riverside County. In the Coachella Valley and Imperial Valley, this species primarily occurs in irrigated agricultural lands, particularly alfalfa and wheat.	Year-round	**Absent**. No suitable nesting habitat (meadows, ponds, marshes) is present within the project area.
*Progne subis (*nesting*)* **Purple martin**	US: – CA: SSC (breeding)	Open agricultural areas, towns, and marsh edges. Nesting habitat consists of old sycamores and pines, often within oak woodland or open coniferous forest. Breeds throughout much of North America, but rare and local in southern California. Winters in South America.	Summer resident, Year-round rare transient	**Low.** Marginally suitable habitat (agricultural areas, pines) is present within the project area.
*Setophagia petechia (*nesting*)* **Yellow warbler**	US: – CA: SSC (breeding)	Riparian woodland while nesting in the western U.S. and northwestern Baja California; more widespread in brushy areas and woodlands during migration. Occurs from western Mexico to northern South America in winter. Migrants are widespread and common. Three subspecies breed in California: *morcomi, brewsteri,* and *sonorana.* (Sonoran yellow warbler nests along the Colorado River.)	Summer, winter, or Year-round, depending on locale	**Absent**. No suitable nesting habitat (riparian woodland) is present within the project area.
Vireo bellii pusillus **Least Bell's vireo**	US: FE CA: SE	Riparian forests and willow thickets. The most critical structural component of Least Bell's Vireo habitat in California is a dense shrub layer 0.6–3.0 meter (2 to 10 feet) above ground. Nests from central California to northern Baja California. Winters in southern Baja California.	April through September	**Absent**. No suitable nesting habitat (riparian forest) is present within the project area.
Mammals				
Lasiurus xanthinus **Western yellow bat**	US: – CA: SSC	Found mostly in desert and desert riparian areas of the southwest U.S., but also expanding its range with the increased usage of native and non-native ornamental palms in landscaping. Individuals typically roost amid dead fronds of palms in desert oases, but have also been	Year-round; nocturnal	**Absent**. No suitable habitat (riparian, desert, palms) is present within the project area.

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Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		documented roosting in cottonwood trees. Forages over many habitats.		
Leptonycteris yerbabuenae **Lesser long-nosed bat**	US: FE CA: SA	Occurs in Sonoran desert scrub, semi-desert grasslands and lower oak woodlands from Arizona and New Mexico to El Salvador, and has been recorded in southwestern California. Frugivorous and nectivorous; highly associated with plants such as agave, saguaro, and ocotillo as a source of food. Roosts in caves and mines; not known to use bridges for roosting. Capable of migrating long distances.		**Absent**. No suitable habitat (Sonoran desert scrub, semi-desert grasslands) is present within the project area.
Lepus californicus bennettii **San Diego black-tailed jackrabbit**	US: – CA: SSC	Variety of habitats including herbaceous and desert scrub areas, early stages of open forest and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain ranges.	Year-round, diurnal and crepuscular activity	**Low.** Marginally suitable habitat (open areas) is present within the project area.
Chaetodipus californicus femoralis **Dulzura pocket mouse**	US: – CA: SSC	Found in a variety of habitats including coastal sage scrub, chaparral and grassland in northern Baja California, San Diego and extreme southwestern and western Riverside Counties. Limit of range to northwest (at interface with *C. c. dispar*) unclear.	Year-round	**Low.** Marginally suitable habitat (grasslands, scrub) is present within the project area.
Chaetodipus fallax fallax **Northwestern San Diego pocket mouse**	US: – CA: SSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego Counties to northern Baja California.	Year-round	**Low.** Marginally suitable habitat (sandy areas in grasslands) is present within the project area.
Dipodomys merriami parvus **San Bernardino kangaroo rat**	US: FE CA: SSC	Gravelly and sandy soils of alluvial fans, braided river channels, active channels and terraces; San Bernardino Valley (San Bernardino County) and San Jacinto Valley (Riverside County). In San Bernardino County, this species occurs primarily in the Santa Ana	Nocturnal, active year-round	**Absent**. Outside species known range. No suitable habitat (alluvial fans, braided river channels) is present within the project area.

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Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		River and its tributaries north of Interstate 10, with small remnant populations in the Etiwanda alluvial fan, the northern portion of the Jurupa Mountains in the south Bloomington area, and in Reche Canyon. In Riverside County, this species occurs along the San Jacinto River east of approximately Sanderson Avenue, and along Bautista Creek. Remnant populations may also occur within Riverside County in Reche Canyon, San Timoteo Canyon, Laborde Canyon, the Jurupa Mountains, and the Santa Ana River Wash north of State Route 60.		
Dipodomys stephensi **Stephens' kangaroo rat**	US: FE CA: ST	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50 percent. Most commonly associated with *Artemisia tridentata, Eriogonum fasciculatum,* and *Erodium.* Requires well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy, less than 50 centimeters (20 inches) deep, or heavily alkaline or clay, or in areas exceeding 25 percent slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 feet) elevation. In northwestern Riverside County, known only from east of Interstate 15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.	Year-round, nocturnal	**Absent**. Outside species known range.
Glaucomys sabrinus californicus **San Bernardino flying squirrel**	US: – CA: SSC	Inhabits a wide variety of woodland habitats primarily consisting of conifers, mixed coniferous-deciduous forest and occasionally broad-leaf-deciduous forest. Commonly found in white fir,		**Absent**. No suitable habitat (woodland, forest) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		coulter pine, Jeffrey pine, sugar pine, lodgepole pine forests, and ponderosa pine forest. May occur in hardwoods where old or dead trees have numerous woodpecker-type nesting holes. Requires nearby water. Occurs at elevations between 1,200 to 2,560 meters (4,000 to 8,400 feet) in the San Bernardino and San Jacinto Mountains.		
Neotamias speciosus speciosus **Lodgepole chipmunk**	US: – CA: SA	Occurs in open-canopy forests of mixed conifer, Jeffrey pine, lodgepole and limber pine, chinquapin and occasionally in chaparral (manzanita and whitethorn). Generally found in areas of mixed trees, shrubs, large boulders, and open ground above 1,950 meters (6,400 feet). Lodgepole chipmunks are more arboreal than most other species of chipmunks, using trees for refuge, observation posts, and nests. Known from the summits of the Piute, San Bernardino, San Gabriel, San Bernardino, and San Jacinto Mountains in Kern, Los Angeles, San Bernardino, and Riverside Counties. Apparently extirpated from the San Jacinto Mountains.	Warmer months, diurnal	**Absent**. No suitable habitat (conifer forest) is present within the project area.
Neotoma lepida intermedia **San Diego desert woodrat**	US: – CA: SSC	Found in desert scrub and coastal sage scrub habitat, especially in association with cactus patches. Builds stick nests around cacti, or on rocky crevices. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	Year-round, mainly nocturnal, occasionally crepuscular and diurnal	**Absent**. No suitable habitat (desert scrub, cactus patches) is present within the project area.
Onychomys torridus ramona **Southern grasshopper mouse**	US: – CA: SSC	Believed to inhabit sandy or gravelly valley floor habitats with friable soils in open and semi-open scrub, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, preferring low to moderate shrub cover. More susceptible to small- and large-scale habitat loss and fragmentation than most other rodents, due to its low fecundity, low population density,	Nocturnal, active year-round	**Low.** Marginally suitable habitat (sandy areas in grasslands) is present within the project area.

Special-Status Species Summary

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
		and large home range size. Arid portions of southwestern California and northwestern Baja California.		
Perognathus longimembris brevinasus **Los Angeles pocket mouse**	US: – CA: SSC	Prefers sandy soil for burrowing, but has been found on gravel washes and stony soils. Found in coastal sage scrub in Los Angeles, Riverside, and San Bernardino Counties.	Nocturnal. Active late spring to early fall.	**Absent**. Outside known range.
Taxidea taxus **American badger**	US: – CA: SSC	Primary habitat requirements seem to be sufficient food and friable soils in relatively open uncultivated ground in grasslands, woodlands, and desert. Widely distributed in North America.	Year-round	**Low.** Marginally suitable habitat (friable soils in open grassland) is present within the project area.

LEGEND	
US: Federal Classifications	
–	No applicable classification
FE	Taxa listed as Endangered.
FT	Taxa listed as Threatened.
CA: State Classifications	
SE	Taxa State-listed as Endangered.
ST	Taxa State-listed as Threatened.
SR	Taxa State-listed as Rare.
SCE	Candidate for State-listing as Endangered.
SSC	California Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
CFP	California Fully Protected. Refers to animals protected from take under Fish and Game Code Sections 3511, 4700, 5050, and 5515.
SA	Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or protection status.
1B	California Rare Plant Rank 1B: Rare, threatened, or endangered in California and elsewhere.
2B	California Rare Plant Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.
3	California Rare Plant Rank 3: A review list of plants about which more information is needed.
4	California Rare Plant Rank 4: A watch list of plants of limited distribution.
	CRPR Extensions
	0.1 Seriously endangered in California (greater than 80% of occurrences threatened/high degree and immediacy of threat).
	0.2 Fairly endangered in California (20 to 80% occurrences threatened).
	0.3 Not very endangered in California (less than 20% of occurrences threatened).
California Rare Plant Ranks are assigned by a committee of government agency and non-governmental botanical experts and are not official State designations of rarity status.	

CULTURAL RESOURCES ASSESSMENT

EL DORADO PARK/FIVE WINDS RANCH PROJECT

CITY OF YUCAIPA

SAN BERNARDINO COUNTY, CALIFORNIA

LSA

February 2019

CULTURAL RESOURCES ASSESSMENT

EL DORADO PARK/FIVE WINDS RANCH PROJECT

CITY OF YUCAIPA

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, California 92399

Prepared by:

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LSA Project No. YCA1801

National Archaeological Data Base Information:

Type of Study: Records Search, Archaeological Survey, Architectural Evaluation
Sites: CA-SBR-013406, H El Dorado Ranch/CA-SBR-6197H (update); LSA-YCA1801-S-1
USGS Quadrangle: *Forest Falls, California* 7.5'
Acreage: 58.5

LSA

February 2019

MANAGEMENT SUMMARY

LSA conducted a cultural resources assessment for the El Dorado Park/Five Winds Ranch Project (project) located in the City of Yucaipa (City), San Bernardino County, California. The assessment included a records search, archival research, field surveys, and this report. The project area, which was annexed to the City in 2010, is approximately 58.5 acres and consists of two separate areas. The southern project area comprises approximately 10 acres (Assessor's Parcel Number [APN] 0321-121-43) currently developed with a historic-period residence and related modern buildings (the Five Winds Ranch at 37076 Oak Glen Road) and the surrounding approximately 48.5 acres (a southern portion of APN 0321-151-44) that includes El Dorado Park and former agricultural fields. The northern project area comprises approximately 10 acres of APN 0321-111-103 on the "North Bench." The project consists of phased development of park improvements within El Dorado Ranch Park including modifications to the interior and exterior of the Five Winds Ranch residence, relocation and adaptive reuse of the Five Winds Ranch barn, and construction of a number of park/ camping related features such as trails, a park ranger's cabin, campground areas, cabins, restrooms, drinking fountains, an archery range, and a pond. The City as Lead Agency for the project required this study as part of the environmental review process to comply with the California Environmental Quality Act (CEQA).

The purpose of the study is to provide the City with the necessary information and analysis to determine, as mandated by CEQA, whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area. In order to identify and evaluate such resources, LSA conducted a historical/archaeological resources records search, pursued historical background research, and carried out intensive-level field surveys.

Background research indicates that the Five Winds Ranch residence (APN 0321-121-43, 37076 Oak Glen Road) was either greatly expanded or constructed in 1946 and the related property was used for farming. From the mid-1940s to 1995, the property was owned by Leon A. Atwood, Jr. who also resided there at least part-time throughout those years. Atwood was the grandson of George A. Atwood, a pioneer in the development of Yucaipa, and also owned/managed Casa Blanca Ranch, which in the early 1940s included more than 1,100 acres. The residence has sustained a number of alterations and the setting has been subjected to minimal impacts by construction of modern buildings on site.

A minimal prehistoric milling feature was identified, documented, and tested in the southern project area. Although the testing produced negative results, the presence of the milling feature along with the severely limited visibility of the project surface (due to vegetation) indicates some sensitivity for undocumented prehistoric cultural resources.

What became known as the El Dorado Ranch in the northern project area was established as a homestead the 1880s by pioneer Thomas Johnathan Wilson. Its era of operations spanned approximately five decades under a succession of property owners. A remnant earthen reservoir and a segment of related access road alignment remain on the surface of the northern project area where historic-period buildings once stood. Therefore, there is a high sensitivity for historic-period subsurface archaeological resources.

Through the various avenues of research, this study did not encounter any built environment "historical resources," as defined by CEQA, within the project area. Therefore, LSA recommends to the City of Yucaipa a finding of *No Impact* regarding historic-period built environment resources. No further investigation and no mitigation measures are recommended for the project's built environment.

Due to the presence of cultural resources within both the northern and southern project areas and almost total lack of surface visibility, there is some potential for undocumented prehistoric and historic-period cultural resources. Therefore, archaeological monitoring of earthmoving activities in both areas is recommended.

In the event buried cultural materials are encountered during earthmoving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

In the event human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

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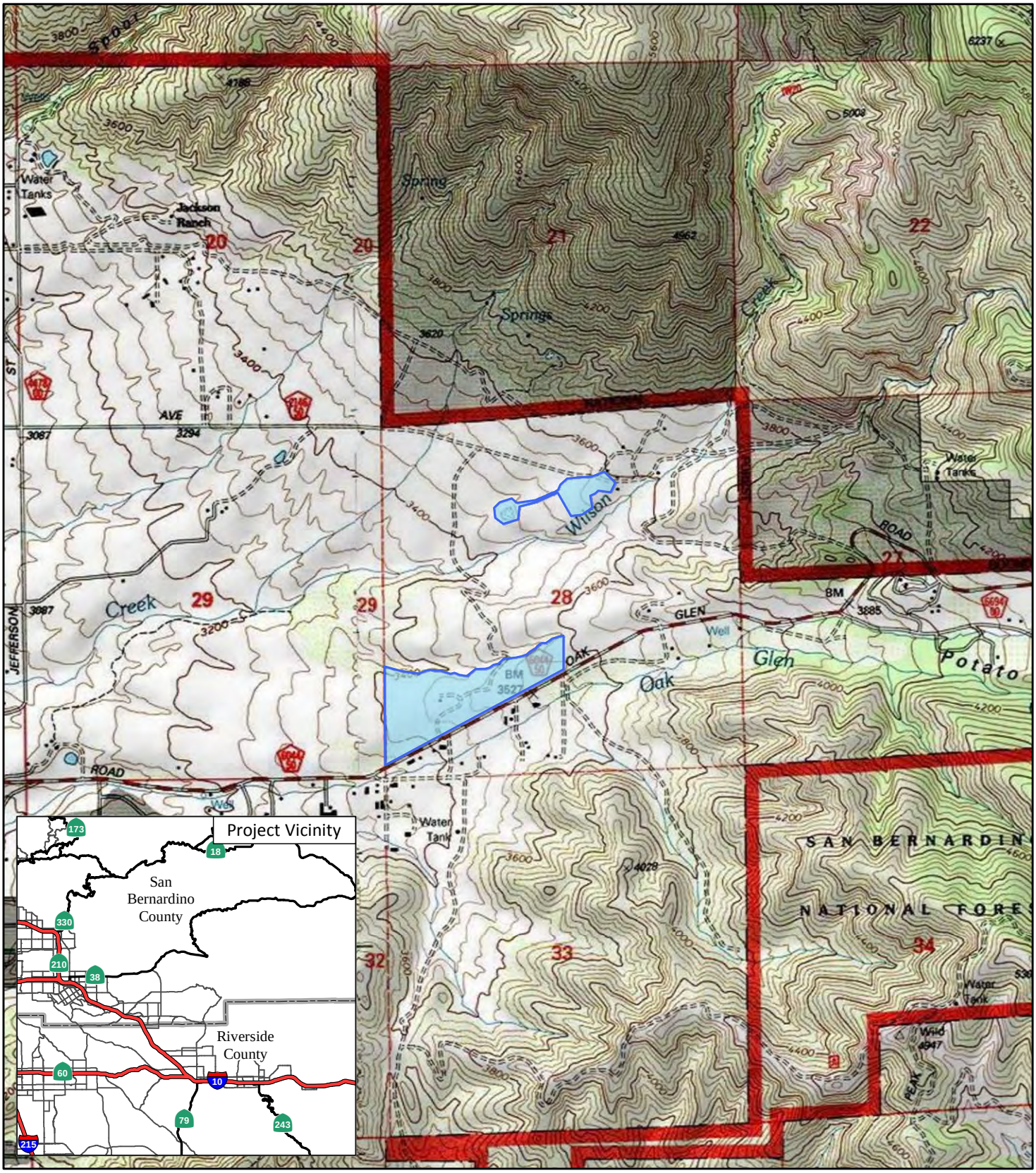
INTRODUCTION

LSA performed a cultural resources study on approximately 58.5 acres of land in the City of Yucaipa, San Bernardino County, California (Figures 1 and 2). The subject property of the study, APN 0321-121-43 (Five Winds Ranch, 37076 Oak Glen Road) and the southern portion of APN 0321-151-44, is located in Township 1 South, Range 1 West, Section 28, San Bernardino Baseline and Meridian, as depicted on the United States Geological Survey (USGS) *Forest Falls, California* 7.5-minute topographic quadrangle map. The study is part of the environmental review process for proposed improvements to El Dorado Ranch Park. The City, as Lead Agency for the project, required the study in compliance with CEQA (PRC § 21000, et seq.).

LSA performed the present study to provide the City with the necessary information and analysis to determine, as mandated by CEQA, whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area. In order to identify and evaluate such resources, LSA conducted a historical/archaeological resources records search, pursued historical background research, and carried out intensive-level field surveys. This report is a complete account of the methods, results, and final conclusion of the study.



LSA

LEGEND

Project Site

FIGURE 1

0 1000 2000

FEET

Five Winds Ranch/El Dorado Park Project

Regional and Project Location

SOURCE: USGS 7.5' Quad., *Yucaipa, CA* (1988); *Forest Falls, CA* (1994); ESRI Streetmap (2013).

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LSA

LEGEND

Project Limits

FIGURE 2

N

0 400 800

FEET

SOURCE: Google Earth (2018)

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El Dorado Park/Five Winds Ranch Project
Cultural Resources Assessment

Project Area

SETTING

CURRENT NATURAL SETTING

The natural setting of the project vicinity is presented based on the underlying theoretical assumption that humans and human societies are in continual interaction with the physical environment. Being an integral and major part of the ecological system, humans adapt to the environment through technological and behavioral changes. Locations of archaeological sites are based on the constraints of these adaptations, whether it is proximity to a particular resource, topographical restrictions, or shelter and protection. Sites will also contain an assemblage of artifacts and ecofacts consistent with the particular interaction.

Hydrology

The project region is characterized by a temperate climate, with dry, hot summers and moderate winters. Rainfall ranges from 12 to 16 inches annually (Beck and Haase 1974). Precipitation usually occurs in the form of winter rain, with warm monsoonal showers in summer. The nearest natural source of water was an ephemeral drainage, which formerly drained west along the south side of the project area.

Biology

At an average elevation of approximately 3,500 feet above mean sea level (amsl), the project is within the Lower Sonoran Life Zone of California (Schoenherr 1992), which ranges from below sea level to 3,500 feet amsl. Plant species within the project area include poison oak, Russian thistle, buckwheat, jimsonweed, scrub oak, yerba santa, chamise, white sage, mountain mahogany, ceanothus, prickly pear, sugarbush, mule fat, manzanita, and willow. Trees observed include cottonwood, sycamore, elderberry, and oak.

Extensive fauna are known locally, including many endemic species of reptiles, birds, mammals, and insects. Common animals of this region include rodents, rabbits, coyotes, deer, raptors, and vultures.

Geology

The project area is located at the northern end of the Peninsular Ranges Geomorphic Province, which extends from the Transverse Ranges to the tip of Baja California and includes the Los Angeles Basin (California Geological Survey 2002; Norris and Webb 1976). This region is characterized by a series of mountain ranges separated by northwest-trending valleys subparallel to faults branching from the San Andreas Fault. The geology of this province is similar to that of the Sierra Nevada, with numerous rock outcroppings useful to the Native Americans for resource milling, shelter, and ceremonial art.

CULTURAL SETTING

Prehistory

Chronologies of prehistoric cultural change in the southern California area have been attempted numerous times, and several are reviewed in Moratto (2004). No single description is universally accepted as the various chronologies are based primarily on material developments identified by researchers familiar with sites in a particular region and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted.

Currently, two primary regional culture chronology syntheses are commonly referenced in the archaeological literature. The first, Wallace (1955), describes four cultural horizons or time periods: Horizon I – Early Man (9000–6000 BC), Horizon II – Milling Stone Assemblages (6000–3000 BC), Horizon III – Intermediate Cultures (3000 BC–AD 500), and Horizon IV – Late Prehistoric Cultures (AD 500–historic contact). This chronology was refined (Wallace 1978) using absolute chronological dates obtained after 1955.

The second cultural chronology (Warren 1968) is based broadly on Southern California prehistoric cultures and was also revised (Warren 1984; Warren and Crabtree 1986). Warren's (1984) chronology includes five periods in prehistory: Lake Mojave (7000–5000 BC), Pinto (5000–2000 BC), Gypsum (2000 BC–AD 500), Saratoga Springs (AD 500–1200), and Protohistoric (AD 1200–historic contact). Changes in settlement pattern and subsistence focus are viewed as cultural adaptations to a changing environment, which begins with gradual environmental warming in the late Pleistocene, continues with the desiccation of the desert lakes, followed by a brief return to pluvial conditions, and concludes with a general warming and drying trend, with periodic reversals that continue to the present (Warren and Crabtree 1986).

After AD 500, there was an influx of Native American groups from the eastern deserts into southern California. These groups brought changes in subsistence focus and associated technologies, as well as burial practices. These cultural changes along with the group migrations are known as the Shoshonean Intrusion or Shoshonean Wedge (Kroeber 1925; Koerper 1979) and the Takic Wedge (Bergin and Ferraro 1999). The term Takic Wedge refers to the wedge of Takic culture groups that moved to the coast, displacing tribes of the Hokan and Yuman language stocks to the north and south (Shipley 1978). The ethnographically recorded Luiseño, Juaneño, and Gabrielino are thought to be the descendants of prehistoric Takic populations that settled along the coast during the Late Prehistoric Period, or perhaps even earlier. The Serrano and Cahuilla, more distant from the coast, are also Takic-speaking tribes within this wedge.

Ethnography

The project is within the traditional territory of the Serrano (Kroeber 1925; Bean and Smith 1978). Like other Native American groups in Southern California, the Serrano were semi-nomadic hunter-gatherers who subsisted by exploitation of seasonably available plant and animal resources. They were first encountered by Spanish missionaries in the late 18th century and the first written accounts of these groups are attributed to mission fathers. Ethnographies of the Serrano were by Gifford (1918), Benedict (1924), Kroeber (1925), Strong (1929), and others.

According to the Serrano origin story, the Serrano people came from another world—*Maara'*—and they "landed" at what is today the Oasis of Mara in Joshua Tree National Park near Twentynine Palms (Ramon and Elliott 2000). From there, they expanded or migrated in a westerly direction into the San Bernardino Mountains and desert valleys east of the mountains. Eventually they came into the San Bernardino and Yucaipa Valley region, which includes the project area.

Typically, native culture groups in coastal, central, and southern California were named after the mission ecclesiastical jurisdiction in which they lived. For instance, the Gabrielino are named after Mission San Gabriel Arcangel. Farther inland, tribes such as the Cahuilla and Serrano are not named after missions, since there were no local missions, and Spanish influence was not as great. The term "Serrano" is a Spanish word that means mountaineer or highlander (Bean and Smith 1978) and is reflective of their use of the surrounding mountains as part of their traditional territory.

Like the Gabrielino and Cahuilla, the Serrano spoke a language of the Uto-Aztecan family, more specifically the Takic subgroup of that family (Bean and Smith 1978; Moratto 1984).

The Serrano lived in the area occupying much of present-day San Bernardino County and northeastern Los Angeles County. The northern boundary of Riverside County is the approximate boundary between the Serrano and the Cahuilla, but there is some overlap in the perceived culture areas. The Yucaipa area is generally attributed to the Serrano people.

Most Serrano lived in small villages near water, usually perennial seeps, streams, and small lakes; the availability of water largely determined the nature, duration, and distribution of Serrano settlements (Benedict 1924). Like the Cahuilla and Gabrielino, the basic Serrano settlement units were villages and small satellite camps. The Serrano had a patrilineal social organization that was composed of clans and families linked by both ancestry and ceremony; ceremonial houses and sweat houses were incorporated into their settlements for religious activities. Kroeber reported that the Serrano were divided into bands that are "not so much clans" but more "village communities" or political groups; he attributes the Yucaipa area to the *Wa'cham* band of Serrano (Kroeber 1925). *Wa'cham* is a derivative of the Serrano word for juniper, many of which can be found growing in the Santa Ana River drainage today.

One large village site (CA-SBR-1000) was located on today's Oak Glen Road near "E" Street in the City. It was known as *Yucaipa't* (one of numerous spellings), which became Anglicized for the City's name. Inhabitants of this village and surrounding areas likely utilized resources in the project vicinity, a fact evidenced by the prehistoric sites near the project boundaries.

The primary flora exploited by the Serrano depended on the area they inhabited, but generally speaking, they collected acorns, piñon nuts, honey, mesquite, yucca, and cactus fruits, in addition to various seeds, bulbs, and roots. Fauna favored by Serrano hunters were antelope, deer, mountain sheep, rabbits, and rodents.

History

In the early 1800s, during the Spanish/Mission Period (1769–1821), small ranchos were established at various points among the missions in order to provide additional supervision and services for the

Native Americans (Beattie and Beattie 1951). In conjunction with Mission San Gabriel, around 1819, ranchos were established in the San Bernardino and Yucaipa Valleys (Ibid.). In the Mexican/Rancho Period (1821–1848), Jose del Carmen Lugo, whose grandparents had immigrated from Spain and whose father (Antonio Lugo) was born in California in 1775, began making plans with his brothers Jose Maria and Vicente and cousin Diego Sepulveda to colonize the San Bernardino and Yucaipa Valleys (Whitehead 1978). In 1939, Governor Alvarado issued a permit to Jose del Carmen Lugo to occupy the valleys with colonists and the Lugos built their home on land that is now developed with the San Bernardino County Courthouse (Beattie and Beattie 1951). Sepulveda, who was given land in what would become west Yucaipa, built his home in an area that later became known as Dunlap Acres (Beattie and Beattie 1951; Yucaipa Valley Historical Society 2018). During this period, land in the valleys was mostly used for livestock and farming and water was obtained primarily from Mill Creek. The 1844 Census showed 18 adults and children in what is now Yucaipa (Beattie and Beattie 1951). These were likely Sepulveda's family and employees.

In 1846, the United States attacked California and Diego Sepulveda and Jose del Carmen Lugo served on the side of the Californians until the conflict ended in 1847 (Beattie and Beattie 1951). Once it was clear that California was under United States control, Lugo claims to have assisted in establishing friendly relations between the Americans and Californians (Ibid.). In 1850, California was admitted to the Union as the 31st state.

After the Mexican-American War (1846–1848), former soldiers of the Mormon Battalion settled in Utah (Beattie and Beattie 1951). By 1850, however, many of them expressed an interest in moving back to California. It was soon clear that it would be beneficial for the Mormons to establish a wagon route from Utah to the Pacific in order to secure supplies and facilitate travel by missionaries and converts (Ibid.). In March 1851, a group of missionaries in 150 wagons left Salt Lake in Utah for southern California (Ibid.). The route they followed was approximately the Spanish Trail of the 1830s and 1840s and the group reached the San Bernardino Valley in June 1851 (Ibid.). Later that year, the Mormons bought Rancho San Bernardino from the Lugo family and in 1853, when the land was surveyed, it was determined that it included rancho land in Yucaipa (Ibid.; Yucaipa Valley Historical Society 2007). In 1853–1854, John Brown, a trapper who was unaffiliated with the Mormons, settled in Yucaipa (Yucaipa Valley Historical Society 2007). In 1857, his friend James W. Waters, another non-Mormon, also settled in Yucaipa (Ibid.). Waters "ran cattle and swine up to Pine Bench in Oak Glen [approximately two miles east of the project area] and introduced pigs to the eastern area of Yucaipa," which became known as Hog Canyon [later Wildwood Canyon, approximately 2.5 miles south of the project area] (Yucaipa Valley Historical Society 2007:16). It is rumored that Waters moved the indigenous people from their village to the Morongo area so that he could take full advantage of the area's resources (Ibid.).

Throughout the 1860s, concerns were expressed that in the San Bernardino and Yucaipa Valleys laws were not being enforced and criminals were going unpunished (Beattie and Beattie 1951). Specific examples of livestock thefts in Yucaipa were cited. In 1869, John Dunlap, a Texas cattleman, and his partner William Riley Standifer bought the Waters property, 3,840 acres, which the deed identified as the "Yukypa Rancho" (Yucaipa Valley Historical Society 2007:18). Three generations of the Dunlap family operated a dairy farm there for more than 40 years (Ibid.). Franklin Pierce Dunlap, one of John Dunlap's sons, built a two-story brick home on James Birch Road (now Oak Glen Road)

in the early 1880s (Ibid.). Dunlap's home and ranch became "the center of local society" since the post office and first school were located in the house (Ibid.).

"The second half of the 1800s also saw the planting of grain on the lower benches and fruit, mainly apples and cherries, higher up on the North Bench and Oak Glen, where the first real settlement took place. In 1887, the Pass school was built on the North Bench, the first permanent school in the valley" (Yucaipa Valley Historical Society 2018). Thomas Johnathan Wilson, a teacher, tax assessor, apiarist, and rancher settled in upper Yucaipa on the North Bench (an outbuilding of his homestead was documented as Site CA-SBR-6197H, see below) and was an important member of the community in the 1880s and 1890s (Yucaipa Valley Historical Society 2007). Wilson Creek, which is located in the North Bench between the two project areas, is named for him.

Wilson's holdings (480 acres, which included the 10-acre northern project area) changed hands several times over the years. Messrs. Peters and Evans bought the property in the 1910s, added improvements and planted apple orchards there, which were a mainstay of Yucaipa farming/ agriculture in the early 1900s (Brown 1922; Goodman and Swanson 1988). Rubin Most acquired the ranch in the 1930s, gave it the name "El Dorado," and leased it to brothers Cleo and Leo Stater who would go on to found the Stater Bros. grocery market chain in 1936 in Yucaipa (Goodman and Swanson 1988). During the latter half of the 1930s, the ranch was a hog farm and was briefly run by the WPA/SERA as the State Hog Farm around the end of the decade. In the 1940s, Most sold the property to Baruch, a "wealthy Los Angeles native", who raised turkeys and hogs, used a few of Wilson's buildings and constructed many of the ranch structures on the north side of Wilson Creek, possibly including the earthen reservoir (Goodman and Swanson 1988; Teeter 2019). In the 1950s, Paul Whittier obtained the property and ran cattle on the ranch. In the early 1960s, he allowed the Yucaipa Gun Club to operate a gun range on the property. The property continued to change hands several times over the ensuing years until it was acquired by the City.

"More than anyone else, George A. Atwood was responsible for initiating Yucaipa Valley's development" (Yucaipa Valley Historical Society 2007). Born in 1853 in Iowa, George moved to the San Bernardino area with his family in 1860 where they acquired a farm (Ibid.). As an adult, "Atwood lived in San Bernardino at a time when the only known route into the [Yucaipa] valley was to follow the Santa Ana River, cross the Redlands plain to Reservoir Canyon, then up the hill to Dunlap Ranch" (Ibid.). In 1884, he was the first to try farming in the valley, working 5,000 acres leased from the Houghton Estate of San Francisco (Ibid.). In 1909, Atwood, James N. Neeland of the Pan-American Railroad, and M.N. Newmark of the Newmark Grain Company in Los Angeles, formed the Redlands and Yucaipa Land Company (Ibid.). By July 1909 they had bought the Dunlap brothers' 1,600-acre property and approximately 10,400 additional acres in the valley (Ibid.). In 1910, after real estate agents Andrew N. Dike and John H. Logie of Redlands had laid out the town site, they made their first sale (Ibid.). This was the beginning of large-scale development in Yucaipa, which was originally four by seven blocks roughly centered on the intersection of California Street and Yucaipa Boulevard, about 2.5 miles as the crow flies from the southern part of the project area (Ibid.). The land was advertised as ideal for growing apples and was divided into small (5–20-acre) farms (Ibid.).

George gave the Dunlap house (approximately 1.25 miles west of the project area) and some of the acreage to his son Leon A. Atwood and his wife Frances as a wedding present (*San Bernardino County Sun* 1978). Leon remodeled the house, painted the brick white, and christened it "Casa

Blanca" (Ibid.). In 1917, the Atwoods moved to San Bernardino where Leon was a beloved member of the community as evidenced by the hundreds of people who attended his funeral in 1926 (*San Bernardino County Sun* 1926). Although the family moved to San Bernardino, they maintained their home and acreage in the Yucaipa area for more than 100 years. In 1934, Leon, Jr. returned to Casa Blanca to work the ranch and in 1936, his mother joined him (*San Bernardino County Sun* 1978). In the early 1940s, Leon Atwood, Jr. began acquiring property in the valley, increasing the Casa Blanca Ranch holdings from 260 acres to more than 1,100 acres (*San Bernardino County Sun* 1941a). In 1940, he bought the 10.78 acres at 37076 Oak Glen Road in the project area from the Henry Webster estate (Yucaipa Valley Historical Society 2019). Webster, who died in 1936, reportedly built a small adobe house on the hilltop, which Leon Atwood later expanded (Ibid.). Aerial photographs from 1938 show a small building and groves on the hilltop, but that building appears to have been located a little south of where the existing residence is today, making it uncertain whether any part of the Webster house remains (Historicaerials.com var.).

As it turned out, apples were not well suited to the lower elevations in the valley and those areas were later planted with peaches, plum, and walnuts (Yucaipa Valley Historical Society 2007). In the post-World War II (WWII) years, fruit production declined and trailer parks and chicken and egg ranches took the place of many of the orchards (Ibid.). By 1960, there were 50 trailer parks (Ibid.). The community incorporated in 1989 and less than 10 years later approximately 1,000 acres of citrus groves were replaced by about 3,000 homes, removing much of the area's agricultural past (Ibid.). Today, Yucaipa has a more suburban than rural character.

METHODS

RECORDS SEARCH

On December 3, 2018, the cultural resources records search was conducted for the project area by the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. It included a review of all recorded historic and prehistoric archaeological sites within one mile of the project, as well as a review of known cultural resource survey and excavation reports. In addition, the California State Historic Property Data File (HPD), which includes the National Register of Historic Places (National Register), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI), was searched.

ARCHIVAL RESEARCH

LSA completed archival research that focused on the review of a variety of primary and secondary source materials relating to the history and development of the project area. Sources included, but were not limited to, online sources, published literature in local and regional history, news articles, historic aerial photographs, and historic maps. Primary historical themes included the Atwood family and ranching in the Yucaipa Valley. A complete list of all references is included as Appendix A.

ARCHAEOLOGICAL FIELD SURVEY

On January 4, 11, and 14, 2019, LSA Archaeologist Riordan Goodwin conducted a pedestrian survey of all accessible areas of the project parcels. The property was surveyed in systematic parallel transects spaced by approximately 10 meters (approximately 35 feet). Special attention was paid to areas of exposed soil for surface artifacts and features and rodent burrows for evidence of archaeosols. The purpose of this survey was to identify and document, prior to the beginning of ground-disturbing activities, any cultural resources and thus also to identify any area(s) that might be sensitive for buried cultural resources.

ARCHITECTURAL SURVEY

On December 4, 2018, LSA conducted a drone survey of the project area. During that survey, aerial photographs were taken of the project area including the buildings. On January 4, 2019, under the supervision of LSA architectural historian Casey Tibbet, Riordan Goodwin conducted the intensive-level architectural survey. During the survey, Mr. Goodwin took numerous photographs of the exterior of the historic-period building, as well as detail shots of specific architectural features, overviews of the setting, and related construction. In addition, he made detailed notations regarding the structural and architectural characteristics and current conditions of the building and associated features.

RESULTS

RECORDS SEARCH

Results of the December 3, 2018, records search at the SCCIC indicate there have been 10 previous cultural resources studies conducted within a one-mile radius of the project, four of which included portions of the project area as discussed below (Jenkins 1988; Goodman and Swanson 1988; Velasquez 2009; Wilson and Duke 2010). One resource (36-020798, a segment of historic-period dirt road) transects a portion of the project area) and five others have been documented within one mile. Three of them are prehistoric resources (36-002305 and 36-022238, bedrock milling sites; and an isolated artifact, 36-020797), and two are historic period resources (36-006197, ruins of the Wilson Carriage House; and 36-026762, the Casa Blanca/Dunlap Ranch agricultural complex).

Previous Studies

In the late 1980s, Research Associates surveyed the entirety of the 280-acre APN 0321-111-103 (including the northern project area) and using a 100-year threshold of significance, documented one extant ruin (collapsed 1890s carriage house) and adjacent standing structure (turkey or hog shed) related to the Baruch era activities of the 1940s as site CA-SBR-6179H (Goodman 1988). Although the ruin of the Wilson residence (standing concrete walls) was noted to the east, it was outside the Tentative Tract 11226 project area and along with remnants (i.e., standing walls and foundations) of Baruch era (1940s) ranch buildings, were noted, designated “modern resources” and approximately mapped, but not listed as features of the site (Goodman 1988; Goodman and Swanson 1988). Several of the 1940s buildings were formerly located at the east end of the current northern project area.

During this same time, the U.S. Forest Service conducted a survey of APN 0321-111-103 and noted “building remains, earthen terraces, roads, water and drainage systems, and debris piles or dumps” related to Site CA-SBR-6179H within what was designated a sensitive area for historic period resources (Jenkins 1988).

In 2009, the California Department of Forestry conducted a survey that included the entirety of APN 0321-111-103, and recorded sites 36-020797 and 36-020798. With the exception of the Wilson residence, all building remnants (including the carriage house) associated with Wilson Homestead/El Dorado Ranch (CA-SBR-6179H) had been removed (Velasquez 2009).

In 2010, LSA conducted a cultural resources assessment for the current project that included the entirely of APNs 0321-111-10 and 0321-121-44, but excluded the parcel of the Five Winds Ranch residence (APN 0321-121-43)(Wilson and Duke 2010). Although the earthen reservoir was noted within the northern project area, no temporal data were available and it was not documented.

Additional Research

Review of historic-period aerial photographs indicated buildings were present on the eastern portion of the northern project area in the late 1930s (Historicaerials.com var.)

ARCHIVAL RESEARCH

Research indicates that the historic-period residence located on the 10.78-acre portion of the project area was either greatly expanded or newly constructed in 1946 and was owned by Leon Arnold Atwood, Jr. until his death in 1995 (San Bernardino County n.d.; Ancestry.com var.). Atwood was born on October 9, 1909, and was the grandson of George Arnold Atwood, one of the pioneer developers of Yucaipa (Ancestry.com var.; *San Bernardino County Sun* 1996). In 1908, George purchased the Franklin Pierce Dunlap ranch as a wedding present for his son Leon A. Atwood, Sr. (*San Bernardino County Sun* 1996). Atwood, Sr. and his wife remodeled the 1883, two-story brick house on the property and christened it Casa Blanca (Ibid.). After about five years, the family relocated to San Bernardino, but they kept Casa Blanca and the related ranch lands.

Atwood, Sr. met an untimely death in 1926 and in the mid-1930s his wife moved back to Casa Blanca and his oldest son Atwood, Jr. began managing the ranch (ibid.). Based on listings in City directories, it appears that young Leon had a day job in 1936 and 1937, but by the time he married Phyllis E. Guthrie in 1939, he was a San Bernardino City Councilman and ranching appears to have been his main occupation (*San Bernardino County Sun* 1939). In 1940, a news article announced that Leon Atwood, a San Bernardino City Councilman and "grandson of G.A. Atwood, pioneer Yucaipa developer, and" the "owner of widely known Casa Blanca ranch" was elected to President of the Yucaipa Valley Chamber of Commerce (*San Bernardino County Sun* 1940a). A follow-up article listed some of Leon's goals for the Chamber as the extension of 2nd Avenue to Highway 99, making Yucaipa the primary entrance to the San Bernardino Valley, getting a C.C.C. camp in Yucaipa Valley to help with erosion control, and beautifying and publicizing the Valley (*San Bernardino County Sun* 1940b). The Atwoods also had a baby daughter, Prudence Sue, and purchased the property at 37076 Oak Glen Road in the project area in 1940 (*San Bernardino County Sun* 1940c; Yucaipa Valley Historical Society 2019).

The year 1941 promised to be very profitable for grain farmers in the Yucaipa Valley thanks to the combination of heavy production and higher prices that resulted from the government's wheat quota program (*San Bernardino County Sun* 1941b). In June 1941, approximately 4,000 acres in the Valley were planted with barley (about 3,000 acres) and oat hay (about 1,000 acres) and the Valley's largest single grain planting at that time was the 350-acre ranch owned by Redlands & Yucaipa Land Company, with Leon Atwood's acreage second largest (*San Bernardino County Sun* 1941b). In mid-August 1941, it was reported that through a series of purchases and leases Leon had increased the 260-acre Casa Blanca ranch to more than 1,100 acres, making him the "largest individual operator of ranch land in the entire valley"(*San Bernardino County Sun* 1941a).

In 1942, Leon had the largest grain planting including 100 acres of oats for hay, 50 acres of oats, and 350 acres in barley (*San Bernardino County Sun* 1942a). He planted two acres of onion for the purpose of shipping onion seed to Russia as part of the lend-lease agreement between Russia and the United States (Ibid.). In addition, he rejuvenated 20 acres of olive trees and anticipated producing 24 tons of olives all of which would be processed for olive oil since olive oil could no longer be obtained from foreign countries (Ibid.). Atwood also had 12 acres of peaches, including the largest planting of Nectar peaches south of Bakersfield, Rio Oso Gems (peaches), and 40 head of Hereford cattle (*San Bernardino County Sun* 1942b). Ultimately, that year he shipped 450 pounds of onion seed to Russia, 300 tons of oat hay to the United States cavalry, and produced other products

for domestic consumption, including olives, peaches, livestock, and 5,400 sacks of barley (*San Bernardino County Sun* 1942c).

After WWII, Atwood continued ranching and farming and either greatly expanded or built the small house in the project area at 37076 Oak Glen Road or Oak Glen Road, Route 1 as it was apparently addressed at the time (Ancestry.com var.). In 1952, Leon is listed at Oak Glen Road, Route 1, box 943, but in 1954 the address is given as Oak Glen Road, Route 4, box 1020 (Ancestry.com var.). In 1960, voter registration records list him (and wife Lois) at 37076 Oak Glen Road (Ibid.). In 1967, a news article refers to the property as Five Winds Ranch, a 24-acre property owned by Leon Atwood where a glider club was hoping to establish a glider airport (*Redlands Daily Facts* 1967). Subsequent articles indicate that a flight strip was indeed established on the property, but no evidence of it was found during the field surveys. In 1978, an article reported that Leon divided his time between Five Winds Ranch and Greyling Ranch in Montana (*San Bernardino County Sun* 1978). Leon died in 1995 in Yucaipa (Ancestry.com var.).

ARCHAEOLOGICAL FIELD SURVEY

Visibility was exceptionally poor in both project areas (approximately 10 percent) with virtually complete obstruction by vegetation. The southern margin of the southern project area has been severely disturbed by landscaping activities, including displacement of boulder outcrops and grading of a dirt access road. One previously recorded and two undocumented resources were identified within the project area.

36-020798

This linear resource (dirt road alignment) associated with the Wilson Carriage House/homestead (CA-SBR-6197H) that transects the northwest corner of the northern project area was recorded by Cal Fire in the late 2000s (Velasquez 2009). This approximately 240-foot segment of its alignment is now a dirt trail and lacks any associated artifacts or features.

CA-SBR-6179H

An earthen reservoir identified at the west end of the northern project area was previously noted, but its association with the historic-period continuity of activities at the White Homestead/El Dorado Ranch was not perceived and it was not formally recorded until the current study.

LSA-YCA-1801-S-1

This prehistoric bedrock milling feature with a single milling surface and no associated artifacts was identified on the southern project area on the eastern side of the driveway of the Five Winds Ranch residence near Oak Glen Road (see site record in Appendix B). Phase II testing was conducted comprising three shovel tests, which reached a maximum depth of 29 centimeters with negative results (no artifacts were recovered).

DISCUSSION

Although the remnants of Wilson's residence and the former location of the associated carriage house (the latter recorded as CA-SBR-6179H) are just beyond the eastern boundary of the northern

project area, his ranch lands extended to the west, including the entire northern project area. The ranch was run by a succession of owners from the 1910s into the 1950s, during which time it became known as the El Dorado Ranch (Goodman and Swanson 1988). A segment of 19th century access road alignment (36-020798) and an earthen reservoir associated with the later WPA/SERA (1930s) or Baruch era (1940s) hog and turkey operation are visible on the surface of the northern project area, and buildings dating from the 1930s to 1940s once stood there. While the extant features are not significant per se, they represent a continuity of historic period agricultural activities and related land improvements on the same ranch from the 1880s to the 1950s. Therefore, a site record update for CA-SBR-6179H was prepared.

While the prehistoric site within the southern project area is marginal and also not significant, along with the prehistoric sites that bracket the project areas, it is an indicator of Native American presence.

ARCHITECTURAL SURVEY

During the field survey, one historic-period building, the Leon A. Atwood, Jr. residence at 37076 Oak Glen Road, was observed in the project area. The one-story, wood-frame and adobe brick residence is situated atop a hill in a semi-rural area and is surrounded by acres of undeveloped land (Figures 3 through 12). The residence is irregular in plan and is surmounted by a moderately-pitched, multi-level, cross-gable roof sheathed with red tile and composition sheets. The eaves vary in width and feature some exposed rafter tails. The exterior walls are covered with stucco with exposed adobe blocks below the gable ends.

The articulated east elevation (from south to north) includes a recessed notch with a metal-framed casement window in a projecting wing that has a pair of metal-framed, multi-paned casement windows with a heavy wood lintel and sill and two north-facing pairs of metal-framed, multi-paned casement windows with heavy wood lintels and sills; a recessed addition with a flat roof, a vinyl-framed window, a large modern projecting box window centered under the chimney, and a vinyl-framed single-hung window and modern wood and glass door in a slightly projecting bay; a projecting wing with a metal-framed, multi-paned south-facing casement window with a heavy wood lintel and sill, an east-facing metal-framed, multi-paned ribbon window with end vent casements with a heavy wood lintel and sill, and a pair of multi-paned, metal-framed casement windows that are set lower than the other windows and have a heavy wood lintel and sill; a breezeway with a heavy wood lintel and low brick walls partially enclosing the opening; the former garage, which has been remodeled to include a modern wood and glass door flanked by two projecting, slightly rounded bays with modern windows; and a modern addition that includes a vinyl-framed sliding window. One of the lower panes in the low window immediately south of the breezeway has been removed and filled in with wood. An exterior metal pipe pierces the wood and connects to something inside the house. A small vent has also been installed next to the pipe in the wood panel.

Figure 3: 37076 Oak Glen Road, aerial view of east elevation (12/4/18).

Figure 4: Southeast corner of the residence. Note notch with window (behind pine tree) and split rail and block fence. View to the northwest (1/4/19).

Figure 5: South end of the east elevation. Note remodeled section below chimney. View to the southwest (1/4/19).

Figure 6: Detail of the breezeway. Note north-facing wooden door and heavy wood lintels and sills. View to the southwest (1/4/19).

Figure 7: East elevation, north end. Note portion of the breezeway, remodeled section with modern windows and doors, and addition (far right). View to the west (1/4/19).

The west elevation (from north to south) includes a modern addition with French doors and a small, vertical rectangular vinyl-framed sliding window; the former garage with a pair of French doors, a vinyl-framed sliding window with a heavy wood lintel and sill, and a patio cover supported by several narrow wood posts; a breezeway with a heavy wood lintel and a north-facing wooden door; a small north-facing metal-framed casement window with a heavy wood lintel and sill in a slightly projecting (to the north) bay; a large, north-facing, multi-paned, metal-framed ribbon window with casement end vents; and a wide patio cover supported by heavy wood posts that shelters a metal-framed, multi-paned bay window atop a low brick wall, a wooden Dutch door, a multi-paned, metal-framed ribbon window with casement end vents with a heavy wood lintel and wood sill, and French doors (in the addition at the southwest corner of the house).

Figure 8: 37076 Oak Glen Road, aerial view of west elevation (12/4/18).

Figure 9: West elevation, northern end. View to the northeast (1/4/19).

Figure 10: Detail of bay window and wooden Dutch door below the patio cover. View to the east (1/4/19).

Figure 11: Southwest corner of the house. View to the northeast (1/4/19).

Figure 12: Northwest corner of the house/addition. Note four vinyl-framed windows and a pair of attic vents on the northern elevation. View to the southeast (1/4/19).

The south elevation (from west to east) includes an addition with four pairs of modern windows, as well as the original house with a metal-framed, multi-paned ribbon window with end vent

casements and a heavy lintel and sill and a small window with a wood lintel and sill set high in the wall near the southeast corner of the building (Figures 13 and 14). Inside the addition, the original exterior door, porch light, and windows are visible (Figure 14).

Figure 13: South elevation. View to the north (1/4/19).

Figure 14: Interior of addition at the southwest corner of the house. Note original windows, door, and concrete floor. View to the east (1/4/19).

A split rail and block fence encloses the yard area on the east side of the original house. Related features include a small freestanding building situated approximately 25 feet west of the house, a cargo container/building located approximately 25 feet east of the house, and a freestanding barn approximately 170 feet east of the house. Each of these is modern.

The residence is in fair condition and has moderate to low integrity. Alterations include the addition at the north end, remodeling of portions of the east elevation, the small patio cover behind on the west elevation, and the patio enclosure at the southwest corner of the house. In addition, the setting has been minimally changed by modern construction including three free standing buildings and a modern masonry wall with pilasters that encloses the yard areas around the house.

SIGNIFICANCE EVALUATION

Based on the research results discussed above, the following sections present the historical significance evaluation the historic-period residence, 37076 Oak Glen Road (APN 0321-121-43) and the conclusion on whether it qualifies as a "historical resource" as defined by CEQA.

DEFINITIONS

CEQA (PRC Chapter 2.6, Section 21083.2 and CCR Title 145, Chapter 3, Article 5, Section 15064.5) calls for the evaluation and recordation of historical resources. The criteria for determining the significance of impacts to historical resources are based on Section 15064.5 of the *CEQA Guidelines* and *Guidelines for the Nomination of Properties to the California Register*. Properties eligible for listing in the California Register of Historical Resources (California Register) and subject to review under CEQA are those meeting the criteria for listing in the California Register, National Register, or designation under a local ordinance.

California Register of Historical Resources

The California Register criteria are based on National Register criteria. For a property to be eligible for inclusion in the California Register, one or more of the following criteria must be met:

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method or construction, or represents the work of a master, or possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the Nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resource." Fifty years is used as a general estimate of time needed to develop the perspective to understand the resource's significance (CCR 4852 [d][2]).

The California Register also requires that a resource possess integrity, which is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (California Office of Historic Preservation 1999:2). To retain integrity, a resource should have its original location, design, setting, materials, workmanship, feeling, and association. Which of these factors is most important depends on the particular criterion under which the resource is considered eligible for listing (California Office of Historic Preservation 1999).

The City of Yucaipa does not have a preservation ordinance or any local criteria for evaluating historic significance; therefore, the residence is being evaluated under the California Register criteria only.

EVALUATION

37076 Oak Glen Road

In summary, the property at 37076 Oak Glen Road is developed with a historic-period residence that Leon Arnold Atwater, Jr. reportedly purchased from Henry Webster in 1940. Atwood owned the property throughout the historic period and beyond and expanded and lived in the residence, a portion of which may have been built by Webster prior to his death in 1936. Atwood was born in 1909 and was the grandson of George A. Atwood, a pioneering developer of Yucaipa. In the 1930s, he was a San Bernardino City Councilman, President of the Yucaipa Valley Chamber of Commerce, and manager of the Atwood family ranch known as Casa Blanca Ranch in Yucaipa. In the early 1940s, Atwood greatly expanded the Casa Blanca land holdings and became the largest ranching enterprise in Yucaipa Valley. During the war years, Casa Blanca Ranch supported the war effort with production of onion seed, barley, and oat hay, as well as producing products for domestic consumption such as olive oil, peaches, and beef. After the war, Atwood apparently built the house in the project area and made it his primary residence, naming it Five Winds Ranch. His influence in the community appears to have diminished after the war and in the 1970s it was reported that he divided his time between Greyling Ranch in Montana and Five Winds Ranch in Yucaipa. His mother remained in the Casa Blanca home until her death in the 1970s and Leon continued to spend time at Five Winds until his death in 1995.

Under Criterion 1, a portion of this this residence may have been built in the 1920s or early 1930s by Henry Webster. Records indicate that Leon Atwood, Jr. bought it in 1940 and either greatly expanded the house or built a new house in 1946 and lived there at least part time until his death in the 1990s. The house is therefore most closely associated with Atwood and ranching in the valley. Ranching and farming were the primary enterprises of the area well into the 20th century and this small 10.78-acre site was part of the Atwood family's vast ranching operation (Casa Blanca Ranch). George A. Atwood, Leon's grandfather, was an important figure in local history and Leon himself was actively involved in the community. However, there is no indication that Leon or Five Winds Ranch made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of the community. The property is not significant under this criterion.

Under Criterion 2, as discussed above, the residence is closely associated with Leon A. Atwood, Jr. who was a locally prominent individual and the grandson of George A. Atwood who is significant for his role in the early development of Yucaipa. Research indicates that Leon's most productive years in terms of his impact on the community occurred generally from about the mid-1930s to the end of World War II and, even then, he does not appear to have done anything that changed the course of the community in a significant way. After the war, Atwood moved to the project area and appears to have played a lesser role in the community, eventually splitting his time between California and Montana. The property is not significant under this criterion.

Under Criterion 3, the residence has sustained several alterations (remodeling, additions, and modern windows and doors). It does not embody the distinctive characteristics of an architectural style and no evidence was found indicating it is the work of a master. Although it has some interesting characteristics such as the adobe construction and heavy wood lintels and sills, it does not possess high artistic values. It is not significant under this criterion.

Under Criterion 4, the residence was built in the 20th century using wood-frame and adobe construction, neither of which was new or innovative. It does not have the potential to yield important historical information and is not significant under this criterion.

For these reasons, the property at 37076 Oak Glen Road does not appear to meet the criteria for listing in the California Register. In addition, the property does not appear to be part of a potential historic district and is not a "historical resource" as defined by CEQA.

CA-SBR-6179H (Wilson Homestead/El Dorado Ranch)

In the late 1980s, Research Associates evaluated one ruin (collapsed 1890s carriage house adjacent to an extant 1940s shed) related to the Wilson homestead as not significant using a 100-year threshold, which is no longer appropriate (Goodman and Swanson 1988). Also, the 1940s Baruch-era activities were considered a disturbance of the original homestead, detracting from the site's integrity, which is now open to varying interpretation (Goodman and Swanson 1988). Although the extant site features (which include the currently documented earthen reservoir within the northern project area and undocumented Wilson residence ruins to the east of the project area) are not significant per se, they represent a continuity of historic period agricultural activities at the same ranch complex (including building reuse and land improvements) from the 1880s to the 1950s that came to be known as the El Dorado Ranch (Goodman and Swanson 1988). The site has not been tested or even completely documented, and it retains potential for archaeological data required for proper evaluation under CEQA criteria.

36-020798 (Wilson Homestead Road)

This approximately 240-foot segment of linear resource (dirt road alignment) lacks any associated artifacts or features and lacks integrity; it is now a dirt trail. It does not meet any of the CEQA criteria per se, but it is related to CA-SBR-6197H.

Prehistoric Site LSA-YCA1801-S-1

This is a typical example of a common resource type: an isolated food-processing station lacking any associated surface artifacts, likely utilized once and representing the most transient of subsistence activities. Phase II test excavations produced negative results, the site appears to have little to no potential to yield information important to prehistory of local area, state, or nation and therefore does not meet the criteria of a "unique archaeological resource" or a "historical resource" per CEQA.

RECOMMENDATIONS

The foregoing report has provided background information on the project area, outlined the methods used in the current study, and presented the results of the various avenues of research. Throughout the course of the study, no built environment "historical resources," as defined by CEQA, were encountered within or adjacent to the project area. Therefore, the City may reach a finding of *No Impact* regarding historic-period built environment resources. No mitigation measures are recommended for historic-period built environment resources.

Due to the presence of cultural resources within both the northern and southern project areas and almost total lack of surface visibility, there is some potential for undocumented prehistoric and historic-period cultural resources. Therefore, archaeological monitoring of earthmoving activities in both areas is recommended.

STANDARD CONDITIONS

In the event that archaeological materials are encountered during construction, all construction work should be halted and a qualified archaeologist consulted to determine the appropriate treatment of the discovery (California Code of Regulations, Title 14, Chapter 3, Section 15064.5(f)).

In the event human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD will have the opportunity to offer recommendations for the disposition of the remains.

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1940b Annual Dinner Meeting Held by Civic Body. March 2, page 13.
1940c Councilman Atwood Father of Baby Girl. June 19, page 11.
1941a Leon Atwood Purchaser of 170-Acre Clyde Ranch in Yucaipa District. Casa Blanca's Owner Adds to Vast Acreage. August 15, page 15.
1941b Heavy Crop is Combined with Higher Prices. June 27, page 13.

1942a Production is Shorter than Last Season's. May 20, page 13.
1942b Russia to get Onion Seed at Yucaipa Farm. Atwood Also Stresses Its Production of Olives from Rejuvenated Old Grove. May 23, page 13.
1942c Hay for Army Cavalry Also Being Shipped. October 20, page 13.
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APPENDIX A

RECORDS SEARCH BIBLIOGRAPHY

Report List

YCA1801

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-00533	NADB-R - 1060533; Voided - 77-8.4A	1977	HEARN, JOSEPH E.	ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF SECS. 20, 21 AND 27 IN THE OAK GLEN AREA	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-00534	NADB-R - 1060534; Voided - 77-8.4B	1977	SMITH, GERALD A.	CLARIFICATION AND SUPPLEMENTAL SURVEY FOR CULTURAL RESOURCES OF GIVEN DESCRIPTION	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	
SB-01445	NADB-R - 1061445; Voided - 84-7.4	1984	RECTOR, CAROL H.	CULTURAL RESOURCES INVENTORY FOR THE 1984 AND PART OF 1985 CALIFORNIA METROPOLITAN PROJECT AREA PUBLIC LANDS SALE PROGRAM		
SB-01653	NADB-R - 1061653; Voided - 87-3.7	1987	YOHE II, ROBERT M.	ENVIRONMENTAL IMPACT EVALUATION: ARCHAEOLOGICAL ASSESSMENT OF TENTATIVE TRACT 13484 NEAR YUCAIPA IN SAN BERNARDINO COUNTY, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, UCR	
SB-01816	NADB-R - 1061816; Voided - 88-7.7	1988	JENKINS, RICHARD C.	VEGETATION AND WATERSHED MANAGEMENT: ARCHEOLOGICAL REVIEW, WILSON CREEK VMP		36-002305
SB-01817	NADB-R - 1061817; Voided - 88-7.8A-B	1988	GOODMAN II, JOHN D. and MARK T. SWANSON	CULTURAL RESOURCES SURVEY OF TENTATIVE TRACT 11226 - EL DORADO RANCH, 238 ACRES NORTHEAST OF YUCAIPA, SAN BERNARDINO COUNTY, CALIFORNIA	RESEARCH ASSOCIATES	36-002305, 36-006197
SB-02060	NADB-R - 1062060; Voided - 90-1.7	1990	BARTEL, BRAD	ARCHAEOLOGICAL SURVEY REPORT: LANDS OF PISGAH PEAK CONTROLLED BURN PROJECT, SAN BERNARDINO COUNTY, CALIFORNIA		
SB-02305	NADB-R - 1062305; Voided - 84-0.10	1984	SMITH, GERALD A. and MICHAEL K. LERCH	CUPULE PETROGLYPHS IN SOUTHERN CALIFORNIA	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION QUARTERLY 32 (1-2):1-17	36-000051, 36-000101, 36-000142, 36-000145, 36-000163, 36-000176, 36-000193, 36-000194, 36-000291, 36-000294, 36-000310, 36-000325, 36-000342, 36-000421, 36-000443, 36-000501, 36-000716, 36-001308, 36-001603, 36-001627, 36-002577, 36-002750, 36-004947, 36-004949, 36-005227, 36-005275
SB-02427	NADB-R - 1062427; Voided - 91-6.4	1991	BROWN, JOAN C.	CULTURAL RESOURCES RECONNAISSANCE OF A ONE MILE ROAD FROM THE BIRMINGHAM RANCH TO OAK GLEN ROAD IN SAN BERNARDINO COUNTY, CALIFORNIA	RMW PALEO ASSOCIATES	

Report List

YCA1801

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-03376	NADB-R - 1063376	1997	DIGREGORIO, LEE	PISGAH PEAK LAND EXCHANGE. 9PP	SBNF	
SB-03377	NADB-R - 1063377	1997	DIGREGORIO, LEE	WATER CANYON LAND EXCHANGE. 9PP]	SBNF	
SB-04847	NADB-R - 1064847	2005	White, Robert S. and Laura S. White	A Cultural Resources Assessment of the 317.59-Acre Cherrycroft Project Site, Southeast Corner of Carter Avenue and Jefferson Street, City of Yucaipa, San Bernardino County.		
SB-06191	NADB-R - 1066191	2008	Jordan, Stacey C.	Archaeological Survey Report for Southern California Edison Company Deteriorated Pole Replacement Project for a Total of Ten Poles on IDA 12kV (#4579978E & #4744631E), Oak Glen 12kV (#4744626E), Bryn Mawr 12kV (#4744645E), Stewart 4kV (#4760030E), Boulder 12kV (#4714250E), Lapins 12kV (#4759904E), Mesa Grande 12kV (#4759915E), Conine 12kV (#4759921E) and Preseton 12kV (#4759658E) Circuits and Removal of One Pole on Bench 12kV (#782504H) Circuit on Private Lands in Riverside and San Bernardino Counties, California.		
SB-06197	NADB-R - 1066197	2009	Wlodarski, Robert J.	Record Search and Field Reconnaissance Phase for the Proposed Bechtel Wireless Telecommunications Site LAC489 (Black Metal Mountain), located at Parker Dam, California 92267.		
SB-06415						
SB-06498	NADB-R - 1066498	2004	Northwest Economic Associates and Cultural Systems Research, Inc	Ethnographic Overview of the Northern San Bernardino Forest.		
SB-06660	NADB-R - 1066660	2010	Dallas, Jr, Herb and Stephanie Velazquez	An Archaeological Survey Report for the Oak Glen and Pendleton Fires in San Bernardino, California.		
SB-06830	NADB-R - 1066830	2004	Northwest Economic Associates and Topanga Anthropological Consultants	Ethnographic Overview of the Angeles National Forest, Tatavium and San Gabriel Mountain Serrano Ethnohistory.		
SB-08105		2014	Brunzell, David	Cultural Resources Assessment of the Chagall Project, Yucaipa, San Bernardino County, California (BCR Consulting Project No. TRF1415)	BCR Consulting LLC	

APPENDIX B

DEPARTMENT OF PARKS AND RECREATION (DPR) 523 FORMS

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial CA-SBR-6179H (update)
NRHP Status Code _____
Other Listings _____
Review Code _____ **Reviewer** _____ **Date** _____

 Resource Name or #: El Dorado Ranch

P1. Other Identifier: Wilson Homestead, State Hog Farm

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** San Bernardino **and** (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** *Forest Falls, CA* **Date:** 1988 **T**1S; **R** 1W; in Section 28, S.B.**B.M.**

c. Address: Carter Street **City:** Yucaipa **Zip:** 92399

d. UTM: Zone: 11; Reservoir: 500603mE/ 3768725mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate): APN 0321-111-103; located at the east end of Carter Street.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This resource was originally recorded by Research Associates as the ruins of the Wilson's 1890s homestead carriage house. During the current survey, an earthen reservoir associated with the WPA/SERA State Hog Farm (late 1930s) or Baruch (1940s) eras of the El Dorado Ranch was identified along with a segment of the old Wilson Homestead access road (CA-RIV-020798) within the new provisional site boundary (see Archaeological Site Record, Site Map and separate CA-RIV-020798 site record update for details).

***P3b. Resource Attributes:** (List attributes and codes) AH6-Water Conveyance Feature; AH16-Standing Structures(foundation/walls)

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

See Continuation Sheet for additional photos.

P5b. Description of Photo: (View, date, accession #) View northeast of the North Bench - former site of the Wilson Homestead/El Dorado Ranch complex (1/11/19). Reservoir is at the center of left edge of the photo.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both
1890s -1940s
Goodman and Swanson 1988, Claire Teeters 2019

***P7. Owner and Address:**
City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, California 9239

***P8. Recorded by:** (Name, affiliation, and address)
Riordan Goodwin
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, CA 92507

***P9. Date Recorded:** January 11, 2019

***P10. Survey Type:** (Describe) Intensive pedestrian

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Cultural Resources Assessment, El Dorado Park/Five Winds Ranch Project, City of Yucaipa, San Bernardino County, California, February 2019. Prepared by LSA Associates, Inc.

***Attachments:** ☐NONE ☒Location Map ☒Sketch Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

***Resource Name or #:** El Dorado Ranch

***A1. Dimensions: a. Length:** ~2550 feet × **Width:** ~1250 feet

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ■ Other: Electronically mapped

Method of Determination (Check any that apply.): ☐ Artifacts ■ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ■ Other (Explain): Existing features and former building locations.

Reliability of Determination: ☐ High ■ Medium ☐ Low Explain:

Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ■Site limits incompletely defined ☐ Disturbances ■ Vegetation ■ Other (Explain): Surface almost completely obscured.

A2. Depth: ☐ None ■ Unknown Method of Determination: Previous studies and current survey.

***A3. Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): There is no historical information indicating burials.

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.): Foundation remmnants/walls of 1890s residence and (formerly) carriage house, segment of 1890s homestead access road (CA-SBR-6179H), and a 1930s or 1940s earthen reservoir.

***A5. Cultural Constituents (**Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.): None visible.

***A6. Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** ☐ Good ☐ Fair ■ Poor (Describe disturbances.): With exception of the residence, building remnants have been removed.

***A8. Nearest Water** (Type, distance, and direction.)**:** The site is on the north bank of Wilson Creek.

***A9. Elevation:** approximately 3,500 feet AMSL

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)**:** The site is on the "North Bench" of Yucaipa Canyonwith an approximate 5% slope down to the west. Plant species observed included Russian thistle, buckwheat, scrub oak, chamise, white sage, mule fat, manzanita, cottonwood, sycamore, willow, oak, and others.

A11. Historical Information: Locally renouned pioneer and apiarist Thomas Jonathan Wilson established a homestead in the 1890s and sold it to Messrs. Peters and Evans in the 1910s, who planted apple orchards and added improvements to the properties, In the early 1930s, Evans and Peters sold it to Rubin Most, who gave it the name "El Dorado Ranch" and leased it to Cleo and Leo Stater (of Stater Bros. grocery market fame). During the latter half of the 1930s, the ranch was a hog farm that was briefly run by the WPA/SERA as the "State Hog Farm" at the end of the decade. In the 1940s, Most sold the property to Baruch who raised turkeys and hogs, used a few of Wilson's buildings (including the residence and carriage house) and constructed many of the ranch structures on the north side of Wilson Creek, possibly including the earthen reservoir (which was excavated some time between 1937 and approximately 1950). In the 1950s, Baruch sold the ranch to Paul Whittier who ran cattle on the ranch and allowed the Yucaipa Gun Club to operate a range from the early 1960s, The property continued to change hands several times over the ensuing years until it was acquired by the City (for more detail see Goodman and Swanson 1988).

***A12. Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ■ 1880-1914 ■ 1914-1945 ■ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:** 1880s to 1950s.

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations): While the site features are not significant per se, they represent a continuity of historic period agricultural activities on the same ranch complex (including related land improvements) from the 1880s to the 1950s. The site has not been tested or even cohesively documented, its surface is almost comlteley obscured, and it retains some potential for archaeological data necessary to evaluate the site.

A14. Remarks: In the late 1980s, Research Associates surveyed the entirety of 238-acre APN 0321-111-103 using a 100-year threshold, and therefore documented only the collapsed Wilson era (1890s) carriage house and standing Baruch era (1940s) turkey/hog shed as the site, but generally mapped other surrounding extant 1940s remnant features. Focused survey has not been conducted for the majority of the site area and the site boundary is provisional, based upon existing features and extent of previous locations of buildings and structures from aerial photographs. It does not include the full extent of agriculrtural fields.

A15. References (Documents, informants, maps, and other references):

Goodman, John D.
1988 Site record for CA-SBR-6197H
Goodman, John D. and Mark T. Swanson; 1988 Cultural Resources Survey of Tentative Tract 11226 - El Dorado Ranch, 238 Acres Northeast Of Yucaipa, San Bernardino County, California.
Historic Aerials, 1938, 1959: historic aerial photographs of the site and vicinity.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): Frames 2035-2038, 2048-2055,

Original Media/Negatives Kept at: LSA Associates, Inc., 1500 Iowa Avenue, Suite 200, Riverside, CA 92507

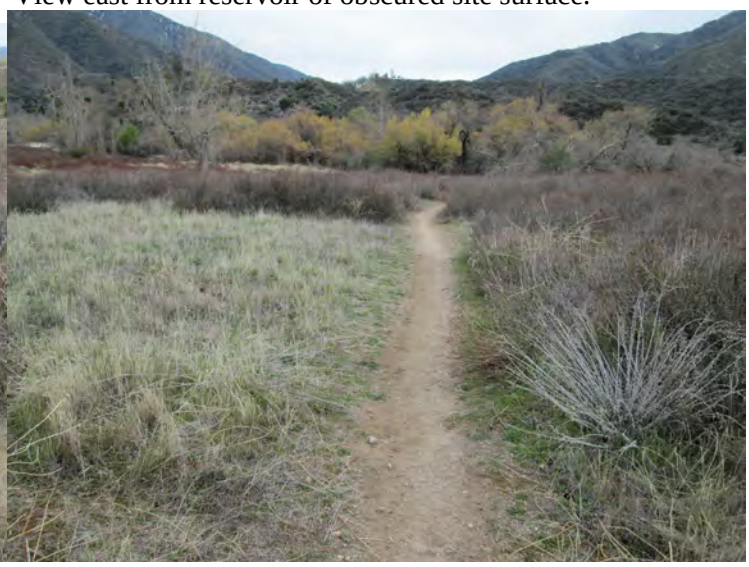
***A17. Form Prepared by:** Riordan Goodwin **Date:** 2/14/17

Affiliation and Address: LSA Associates, Inc., 1500 Iowa Avenue, Suite 200, Riverside, CA 92507

View west-northwest of earthen reservoir.

View east from reservoir of obscured site surface.

View west-northwest of Wilson Homestead road alignment (CA-SBR-6179H) through northern portion of site.



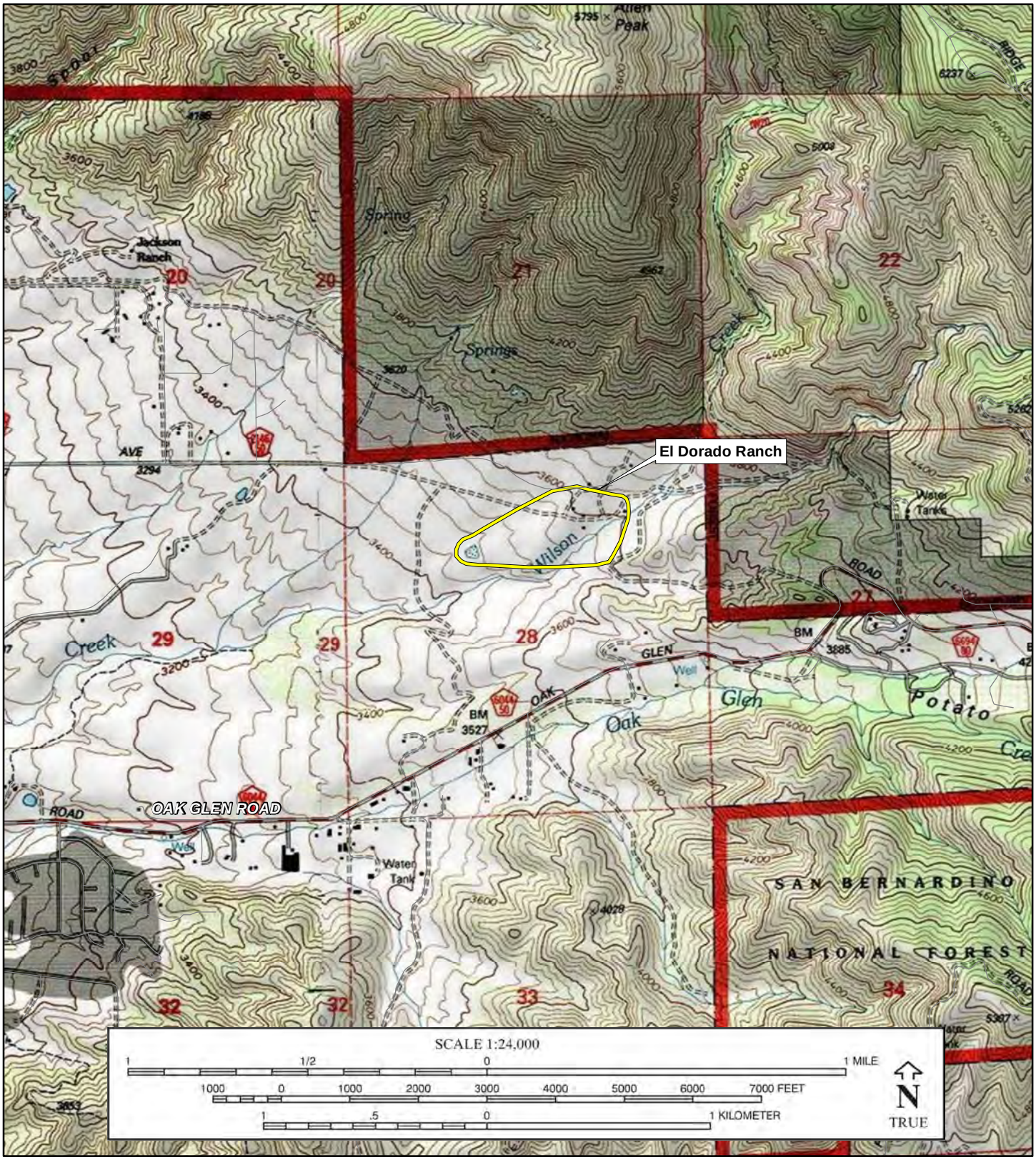
View east from survey area along CA-SBR-6179H alignment towards Wilson Homestead ruins.

State of California - Resource Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial CA-SBR-6179H

*Resource Name or # (Assigned by recorder) El Dorado Ranch

*Map Name: USGS 7.5' Quad, Yucaipa & Forest Falls *Scale: 1:24000 *Date of Map: 1988



I:\YCA1801\Reports\Cultural\LocationMap_2.mxd (2/14/2019)

DPR 523J (1/95) ***Required Information**

State of California - The Resources Agency

DEPARTMENT OF PARKS AND RECREATION

SITE MAP

Primary # _____

HRI # _____

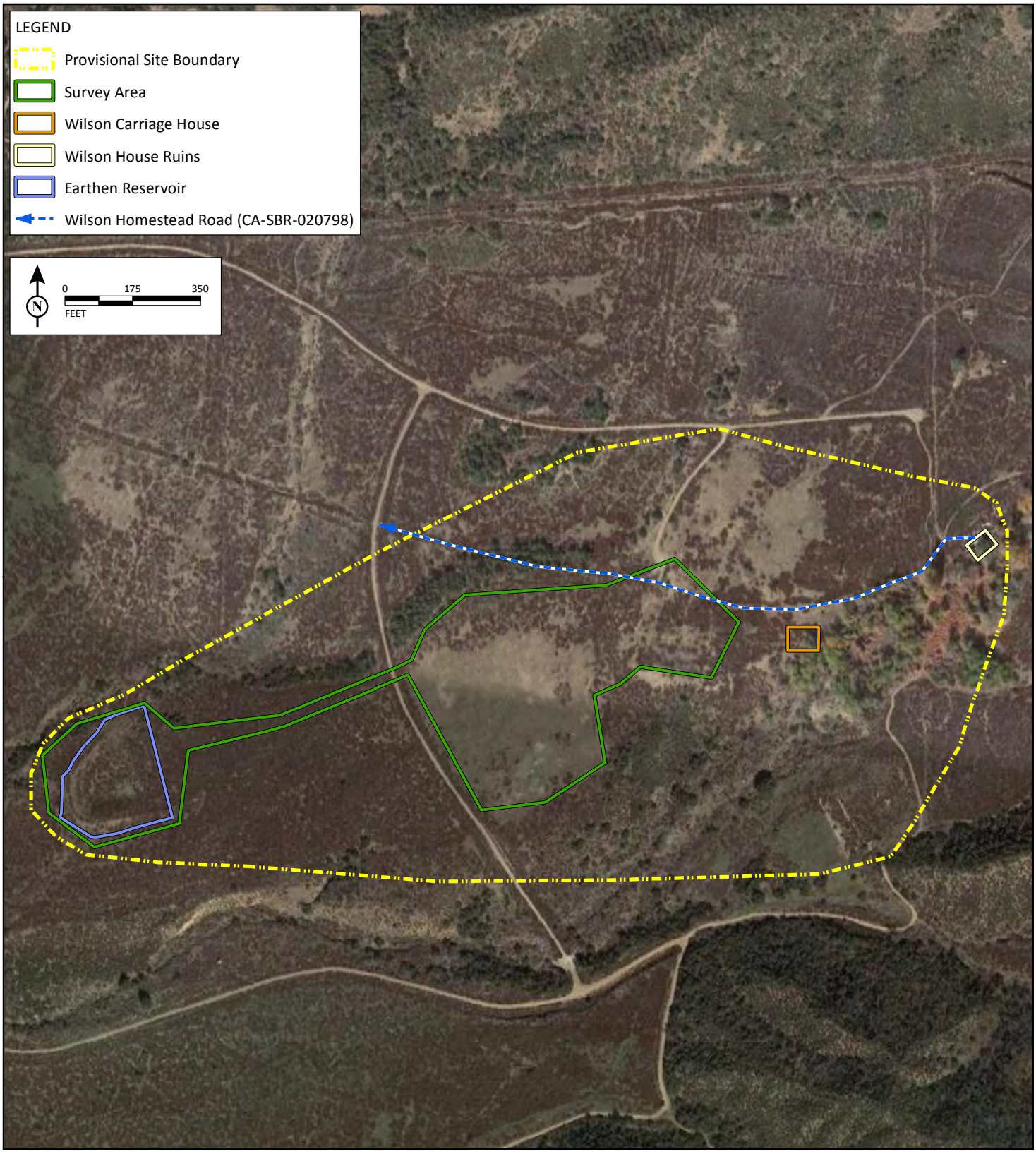
Trinomial CA-SBR-6179H

Page 5 of 5

***Resource Name or** # (Assigned by recorder) El Dorado Ranch

*Drawn By: R. Goodwin

*Date: February 14, 2019



I:\YCA1801\Reports\Cultural\DPR_SiteSketchMap2.mxd (2/15/2019)

* Required Information

DPR 523K (1/95)

State of California C The Resources Agency

DEPARTMENT OF PARKS AND RECREATION

CONTINUATION SHEET

Primary # 36-020798 (UPDATE)

HRI #

Trinomial CA-SBR-013406H

Page 1 of 1 *Resource Name or #: (Assigned by recorder) Wilson Homestead road

*Recorded by Riordan Goodwin *Date: 2/4/19 ____ Continuation X Update

This linear resource (dirt road alignment) associated with the Wilson Homestead (CA-SBR-6197H) was recorded by Cal Fire in the late 2000s (Velasquez 2009). This approximately 240-foot segment of its alignment lacks any associated artifacts or features and is consistent with the description and conditions of the original site record: ephemeral (now a dirt trail) and lacking integrity.

View East along alignment of 36-020797.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____
Other Listings _____
Review Code _____ **Reviewer** _____ **Date** _____

 Resource Name or #: LSA-YCA1801-S-1

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** San Bernardino **and** (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** *Forest Falls, CA* **Date:** 1988 **T**1S; **R** 1W; in Section 28, S.B.**B.M.**

c. Address: 37076 Oak Glen Road **City:** Yucaipa **Zip:** 92399

d. UTM: Zone: 11; 500323 mE/ 3767765 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate): APN 0321-121-43; Access to this site from Interstate 10 is via Oak Glen Road; it is located approximately one mile east of Casa Blanca (approximately 28 meters north of the road)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This site consists of a single milling surface on a small granitic boulder (BMF 'A') within a cluster of small boulders and rocks. No artifacts were noted in association with the feature and Phase II testing produced negative results (*see Archaeological Site Record and Milling Station Record for details*).

***P3b. Resource Attributes:** (List attributes and codes) AP4 – Bedrock Milling Feature

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

View northeast of site, BMF 'A' in approximate lower center.

P5b. Description of Photo: (View, date, accession #) View northeast of east (1/11/18)

***P6. Date Constructed/Age and Sources:** ☒Historic ☒Prehistoric ☐Both

***P7. Owner and Address:**
City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, California 9239

***P8. Recorded by:** (Name, affiliation, and address)
Riordan Goodwin
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, CA 92507

***P9. Date Recorded:** January 11, 2019

***P10. Survey Type:** (Describe) Intensive-pedestrian

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Tibbet, Casey and Riordan Goodwin 2019: Cultural Resources Assessment, El Dorado Park/Five Winds Ranch Project, City of Yucaipa, San Bernardino County, California, February Prepared by LSA.

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

***A1. Dimensions: a. Length:** Indeterminate × **Width:** Indeterminate
Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ■ Other: Electronically mapped (GPS)
Method of Determination (Check any that apply.): ☐ Artifacts ■ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain):

Reliability of Determination: ■ High ☐ Medium ☐ Low Explain:

Limitations (Check any that apply): ■ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ■ Vegetation ☐ Other (Explain): Ground surface obscured by vegetation.

A2. Depth: ■ None ☐ Unknown Method of Determination: Phase II test excavtion

***A3. Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): There is was no subsurface indication of human remains, no trace was recovered from testing, and they are very unlikely at this type of site.

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.): This site consists of a single milling surface on a small granitic boulder (BMF 'A') within a cluster of small boulders and rocks. within a bedrock outcrop of boulders.

***A5. Cultural Constituents (**Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
No artifacts were noted on the surface in association with this milling feature and none were recovered from 3 shovel test pits.

***A6. Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** ☐ Good ■ Fair ☐ Poor (Describe disturbances.): The surface of the bedrock boulder is good, The site is within an area that has incurred severe disturbance from landscaping activies and weed-abatement discing.

***A8. Nearest Water** (Type, distance, and direction.)**:** The site is bracketed by ephemeral drainages - the largest is an unnamed tributary to Wilson Creek located approximately 280 meters to the north.

***A9. Elevation:** approximately 1,130 feet AMSL

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)**:** The site is in on an eastern terrace of the Yucaipa Valley with a south-facing slope of approximately 10% (see Location Map). Riversidian sage scrub vegetation is present; rabbits, crows, raptors and insects were noted. Soil is silty loam.

A11. Historical Information: The site is adjacent to the driveway of the mid-1940s Five Winds Ranch adobe house at 37067 Oak Glen Road.

***A12. Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
☐ Post 1945 ■ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**
See A14 for age discussion.The site is near the territorial boundary between the Cahuilla and Serrano, which was fluid and changed over time.

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations):
This is a typical example of a common resource type: an isolated food-processing station lacking any associated surface artifacts, likely utilized once and representing the most transient of susbsistence activities. Phase II test excavations were shallow (due to rocks) and produced negative results,the site appears to have little to no subsurface data potential, and therefore does not meet the crtiera of a "unique archaeological resource" or a "historical resource" per CEQA.

A14. Remarks: This site is one of several similar bedrock milling stations in the area, but due to the temporal ambiguity of this type of feature and lack of associated artifacts, its age and relationship with other nearby prehistoric resources is indeterminate. Although it is a minimal locus of resource processing activity, it is also the basic unit of an expansive subsitence pattern that optimally exploited the landscape for many millennia and continued into the historic era.

A15. References (Documents, informants, maps, and other references):

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):
Frames 2056-2059, 2099-2104

Original Media/Negatives Kept at: LSA Associates, Inc., 1500 Iowa Avenue, Suite 200, Riverside, CA 92507

***A17. Form Prepared by:** Riordan Goodwin **Date:** 2/12/19
Affiliation and Address: LSA Associates, Inc., 1500 Iowa Avenue, Suite 200, Riverside, CA 92507

State of California — The Resources Agency **Primary #** 36-??????
DEPARTMENT OF PARKS AND RECREATION **Trinomial** CA-SBR-??????

MILLING STATION RECORD

 Resource Name or # (Assigned by Recorder): LSA-YCA1801-S-1

Form Prepared by: Riordan Goodwin **Date:** 2/12/2019

Feature	Outcrop Dimensions (m) and Orientation				Bedrock Type and Condition
A	0.59	x 0.48	**x Height**	0.12	granitic, good condition

Feature #	Milling Surface #	Type	Length (cm)	Width (cm)	Depth (cm)	Contents	Remarks
A	1	MS	35	31	.1	none	lightly worn

Type Key:	**Contents Key:**
MS Milling slick	

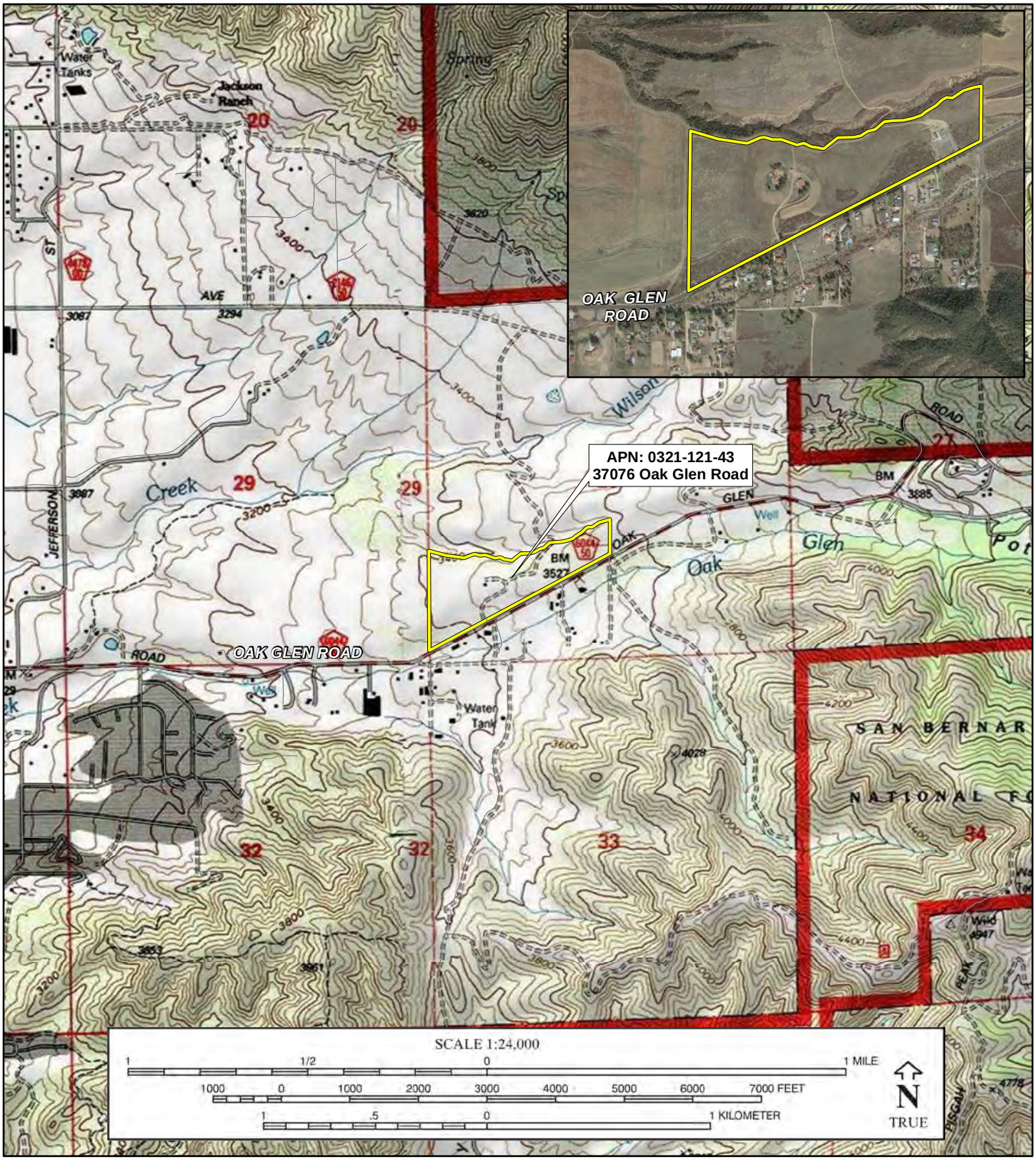
 NOTE: Attach plan(s) of milling stations.

State of California - Resource Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

*Resource Name or # (Assigned by recorder) 37076 Oak Glen Road

*Map Name: USGS 7.5' Quad, Yucaipa & Forest Falls; Google Earth *Scale: 1:24000 *Date of Map: 1988; 2018



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DPR 523J (1/95) ***Required Information**

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SITE MAP

Primary # _____
HRI # _____
Trinomial _____

Page 5 of 5

***Resource Name or** # (Assigned by recorder) LSA - YCA180 - S-1

*Drawn By: R. Goodwin

*Date: February 13, 2019

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* Required Information

DPR 523K (1/95)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 6Z
Other Listings _____
Review Code _____ Reviewer _____ Date _____

 Resource Name or #: 37076 Oak Glen Road

P1. Other Identifier: Five Winds Ranch

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** San Bernardino **and** (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** *Forest Falls, CA* **Date:** 1988 **T**1S; **R** 1W; in Section 28, S.B.**B.M.**

c. Address: 37076 Oak Glen Road **City:** Yucaipa **Zip:** 92399

d. UTM: Zone: 11; _____mE/ _____mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate): APN 0321-121-43; located on the north side of Oak Glen Road approximately one mile east of Casa Blanca Avenue

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The one-story, wood-frame and adobe brick residence is situated atop a hill in a semi-rural area and is surrounded by acres of undeveloped land formerly planted to grain. The residence is irregular in plan and is surmounted by a moderately-pitched, multi-level, cross-gable roof sheathed with red tile and composition sheets. The eaves vary in width and feature some exposed rafter tails. The exterior walls are covered with stucco with exposed adobe blocks below the gable ends. *See Continuation Sheet*

***P3b. Resource Attributes:** (List attributes and codes) HP2-Single-family property; HP33-Farm/Ranch

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

See Continuation Sheet and related report for additional photos.

P5b. Description of Photo: (View, date, accession #) Aerial view of east elevation taken by drone (12/4/18)

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both
1946 (San Bernardino County Property Information Management System)

***P7. Owner and Address:**
City of Yucaipa
34272 Yucaipa Boulevard
Yucaipa, California 9239

***P8. Recorded by:** (Name, affiliation, and address)
Riordan Goodwin
Casey Tibbet, M.A.
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, CA 92507

***P9. Date Recorded:** January 2019

***P10. Survey Type:** (Describe) Intensive-level CEQA compliance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Cultural Resources Assessment, El Dorado Park/Five Winds Ranch Project, City of Yucaipa, San Bernardino County, California, February 2019. Prepared by LSA Associates, Inc.

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** (Assigned by recorder) 37076 Oak Glen Road

B1. Historic Name: _____

B2. Common Name: Five Winds Ranch

B3. Original Use: Single-family residence **B4. Present Use:** Vacant

***B5. Architectural Style:** Vernacular

***B6. Construction History:** (Construction date, alterations, and date of alterations)

1938 – Aerial photographs show a small building on the property just south of where the existing house is today (Historicaerials.com var.).

1946 – Year built according to San Bernardino County Property Information Management System.

1959 – Aerial photographs show a roughly U-shaped house and what appears to be an L-shaped detached garage (Historicaerials.com var.). Later aerials are not clear enough to accurately identify changes to the residence.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** _____ **Original Location:** _____

***B8. Related Features:**

Three modern accessory structures.

B9a. Architect: Unknown **b. Builder:** Unknown

***B10. Significance: Theme:** Development of Yucaipa Valley; Residential Architecture **Area:** City of Yucaipa/Yucaipa Valley

Period of Significance: 1946 **Property Type:** Single-family residence **Applicable Criteria:** NA

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This vernacular residence, which was either greatly expanded or newly built in 1946, is not eligible for listing in the California Register of Historical Resources (California Register) under any criteria and the City of Yucaipa does not have any local criteria. The residence is not a historical resource for purposes of the California Environmental Quality Act (CEQA).

Historic Context. Refer to the related report for detailed context information (see P11 on page 1). In summary, the property was owned by Leon Arnold Atwater, Jr. from 1940 to 1995. Atwood was born in 1909 and was the grandson of George A. Atwood, a pioneering developer of Yucaipa. In the 1930s, he was a San Bernardino City Councilman, President of the Yucaipa Valley Chamber of Commerce, and manager of the Atwood family ranch known as Casa Blanca ranch in Yucaipa. In the early 1940s, Atwood greatly expanded the Casa Blanca land holdings and became the largest ranching enterprise in Yucaipa Valley. During the war years Casa Blanca ranch supported the war effort with production of onion seed, barely, and oat hay, as well as producing products for domestic consumption such as olive oil, peaches, and beef. After the war, Atwood apparently either expanded the house or built a new house on the property and made it his primary residence, naming it Five Winds Ranch. His influence in the community appears to have diminished after the war and in the 1970s it was reported that he divided his time between Greyling Ranch in Montana and Five Winds Ranch in Yucaipa. His mother remained in the Casa Blanca home until her death in the 1970s and Leon continued to spend time at Five Winds until his death in 1995.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

Historicaerials.com
var. Accessed online in January and February 2019 at: https://www.historicaerials.com/viewer
San Bernardino County Property Information Management System
n.d. Accessed online in January 2019 at: https://www.sbcounty.gov/assessor/pims/(S(udokpt1bxxvf2mky1ajpomvm))/PIMSINTERFACE.ASPX

B13. Remarks:

***B14. Evaluator:** Casey Tibbet, M.A., LSA Associates, Inc., 1500 Iowa Avenue, Suite 200, Riverside, CA 92507

***Date of Evaluation:** February 2019

(Sketch Map with north arrow required.)

Refer to Location Map

(This space reserved for official comments.)

***P3a. Description:** (continued from page 1)

The articulated east elevation (from south to north) includes: a recessed notch with a metal-framed casement window in a projecting wing that has a pair of metal-framed, multi-paned casement windows with a heavy wood lintel and sill and two, north-facing pairs of metal-framed, multi-paned casement windows with heavy wood lintels and sills; a recessed addition with a flat roof, a vinyl-framed window, a large modern projecting box window centered under the chimney, and a vinyl-framed single-hung window and modern wood and glass door in a slightly projecting bay; a projecting wing with a metal-framed, multi-paned south-facing casement window with a heavy wood lintel and sill, an east-facing metal-framed, multi-paned ribbon window with end vent casements with a heavy wood lintel and sill, and a pair of multi-paned, metal-framed casement windows that are set lower than the other windows and have a heavy wood lintel and sill; a breezeway with a heavy wood lintel and low brick walls partially enclosing the opening; the former garage which has been remodeled to include a modern wood and glass door flanked by two projecting, slightly rounded bays with modern windows; and a modern addition that includes a vinyl-framed sliding window. One of the lower panes in the low window immediately south of the breezeway has been removed and filled in with wood. An exterior metal pipe pierces the wood and connects to something inside the house. A small vent has also been installed next to the pipe in the wood panel.

The west elevation (from north to south) includes: a modern addition with French doors and a small, vertical-rectangular vinyl-framed sliding window; the former garage with a pair of French doors, a vinyl-framed sliding window with a heavy wood lintel and sill, and a patio cover supported by several narrow wood posts; a breezeway with a heavy wood lintel and a north-facing wooden door; a small north-facing metal-framed casement window with a heavy wood lintel and sill in a slightly projecting (to the north) bay; a large, north-facing, multi-paned, metal-framed ribbon window with casement end vents; and a wide patio cover supported by heavy wood posts that shelters a metal-framed, multi-paned bay window atop a low brick wall, a wooden Dutch door, a multi-paned, metal-framed ribbon window with casement end vents with a heavy wood lintel and wood sill, and French doors (in the addition at the southwest corner of the house).

The north elevation has four vinyl-framed windows and a pair of attic vents. The south elevation (from west to east) includes what an addition with four pairs of modern windows, as well as the original house with a metal-framed, multi-paned ribbon window with end vent casements and a heavy lintel and sill and a small window with a wood lintel and sill set high in the wall near the southeast corner of the building. Inside the addition, the original exterior door, porch light, and windows are visible.

A split rail and block fence encloses the yard area on the east side of the original house. Related features include a small freestanding building situated approximately 25 feet west of the house, a cargo container/building located approximately 25 feet east of the house, and a freestanding barn located approximately 170 feet east of the house. Each of these is modern.

The residence is in fair condition and has moderate to low integrity. Alterations include the addition at the north end, remodeling of portions of the east elevation, the small patio cover behind on the west elevation, and the patio enclosure at the southwest corner of the house. In addition, the setting has been minimally changed by modern construction including three free standing buildings and a modern masonry wall with pilasters that encloses the yard areas around the house.

P5a. Photo or Drawing (continued from page 1)

Aerial view of west elevation taken by drone (12/4/18)

See Continuation Sheet

P5a. Photo or Drawing (continued from page 3)

Southwest corner of the house. View to the northeast (1/4/19).

***B10. Significance:** (continued from page 2)

In compliance with CEQA, this residence is being evaluated under the California Register criteria. There are no local criteria for significance.

Under Criterion 1, a portion of this this residence may have been built in the 1920s or early 1930s by Henry Webster. Records indicate that Leon Atwood, Jr. bought it in 1940 and either greatly expanded the house or built a new house in 1946 and lived there at least part time until his death in the 1990s. The house, is therefore, most closely associated with Atwood and ranching in the valley. Ranching and farming were the primary enterprises of the area well into the 20th century and this small 10.78 acre site was part of the Atwood family's vast ranching operation (Casa Blanca Ranch). George A. Atwood, Leon's grandfather, was an important figure in local history and Leon himself was actively involved in the community. However, there is no indication that Leon or Five Winds Ranch made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of the community. The property is not significant under this criterion.

Under Criterion 2, as discussed above, the residence is associated with Leon A. Atwood, Jr. who was a locally prominent individual and the grandson of George A. Atwood who is significant for his role in the early development of Yucaipa. Research indicates that Leon's most productive years in terms of his impact on the community occurred generally from about the mid-1930s to the end of World War II and even then he does not appear to have done anything that changed the course of the community in a significant way. After the war, Atwood moved to the project area and appears to have played a lesser role in the community, eventually splitting his time between California and Montana. The property is not significant under this criterion.

Under Criterion 3, the residence has sustained several alterations (remodeling, additions, and modern windows and doors). It does not embody the distinctive characteristics of an architectural style and no evidence was found indicating it is the work of a master. Although it has some interesting characteristics such as the adobe construction and heavy wood lintels and sills, it does not possess high artistic values. It is not significant under this criterion.

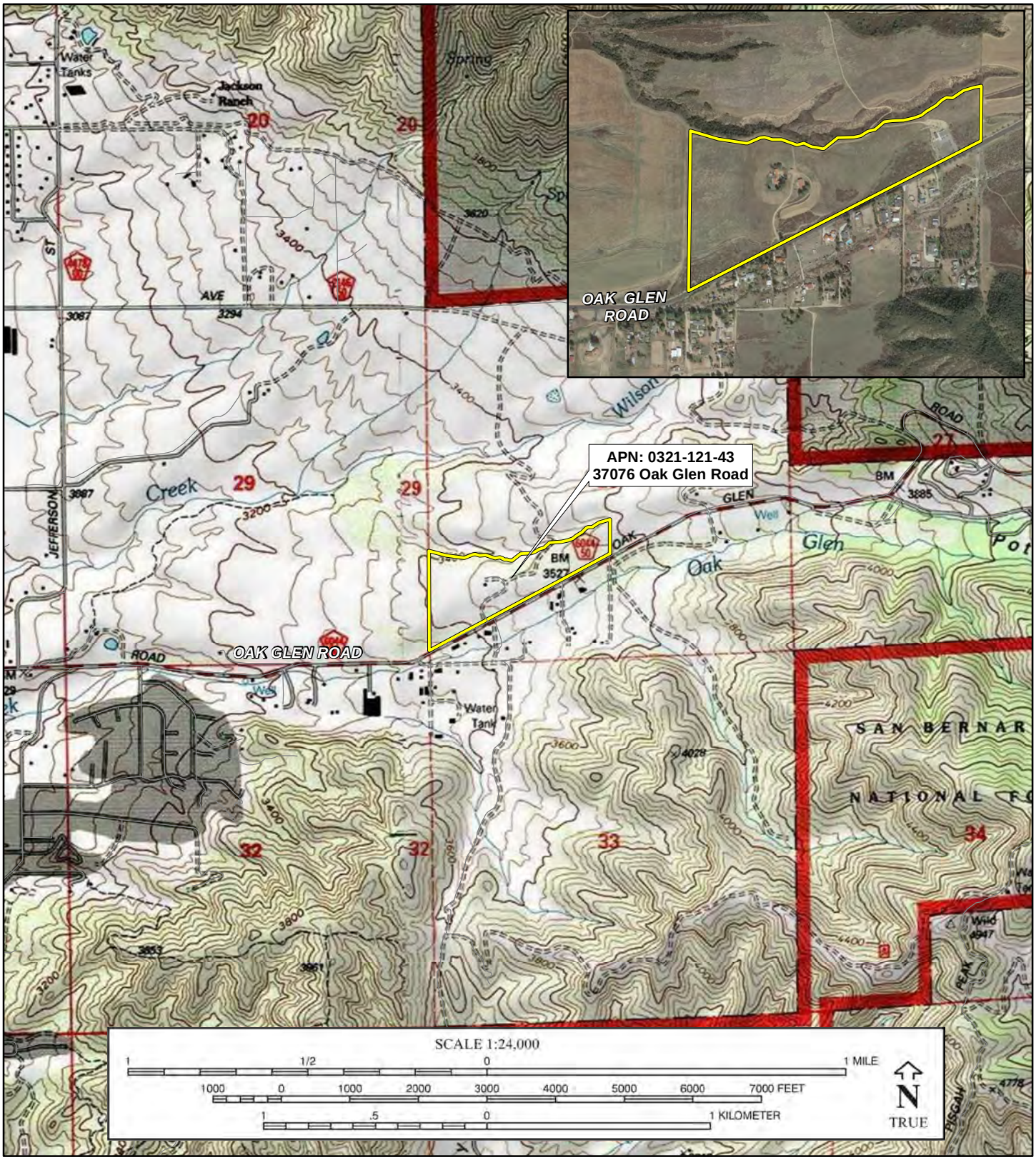
Under Criterion 4, the residence was built in the 20th century using wood-frame and adobe construction, neither of which was new or innovative. It does not have the potential to yield important historical information and is not significant under this criterion.

State of California - Resource Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

*Resource Name or # (Assigned by recorder) 37076 Oak Glen Road

*Map Name: USGS 7.5' Quad, Yucaipa & Forest Falls; Google Earth *Scale: 1:24000 *Date of Map: 1988; 2018



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DPR 523J (1/95) ***Required Information**

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: May 24, 2019

TO: Michael R. Seal, City of Yucaipa

FROM: Jason Lui, Associate/Senior Noise Specialist

SUBJECT: Technical Noise and Vibration Impact Analysis for the Five Winds Ranch/El Dorado Ranch Park Project

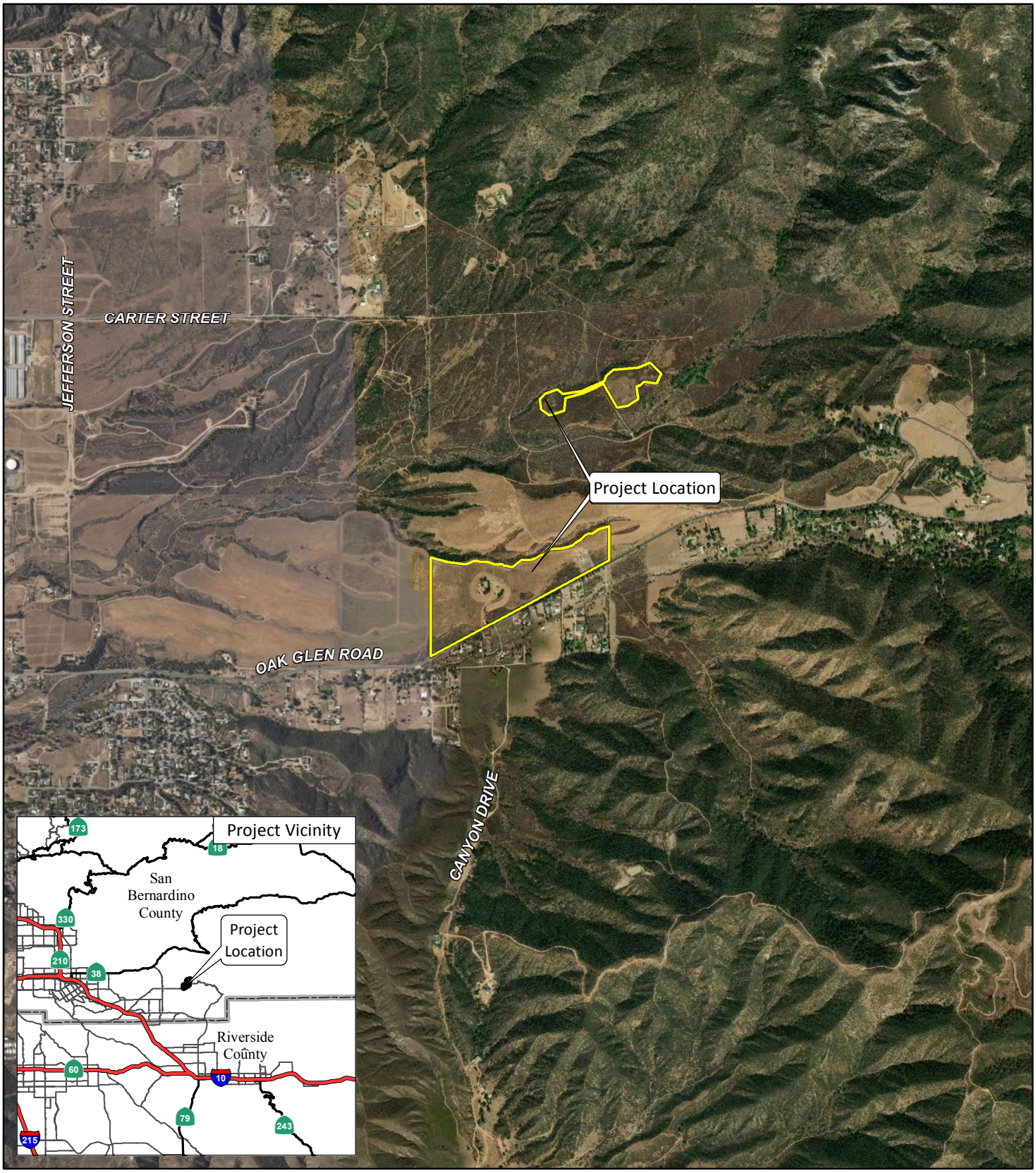
INTRODUCTION

This Technical Noise and Vibration Impact Analysis Memorandum has been prepared to evaluate the potential noise and vibration impacts as well as identify reduction measures associated with the proposed improvements for the Five Winds Ranch/El Dorado Ranch Park Project (project) in Yucaipa, California. This technical memorandum is intended to satisfy the City of Yucaipa's (City's) requirement for a project-specific noise and vibration impact analysis by examining the impacts of the proposed uses on the project site and whether measures would be required to reduce impacts. All reference citations are provided in Attachment A.

PROJECT DESCRIPTION

The 58.5-acre (ac) project site is located along the north side of Oak Glen Road east of Pendleton Avenue. Improvements are proposed to the 48.5 ac park site, which encompasses the southern portion of Assessor's Parcel Number (APN) 0321-151-44 as well as APN 0321-121-43 (Five Winds Ranch). Restroom and parking facilities lot improvements are currently located near the eastern boundary of the site. The existing Five Winds Ranch, including the Adobe, barn, and outlying structures are located on approximately 10.78 ac on the western half of the park site. Past agricultural use has occurred on portions of the site.

The Five Winds Ranch portion of the project is designated as Park (P) in the City's General Plan. The City's General Plan assigns the Open Space (OS) designation to the balance of the site. Property directly north of the project site is designated as Open Space by the City and is dedicated as a conservation easement/mitigation site. The City has designated the undeveloped land located west of the park site as RL-1, Rural Living. The City has approved development of residential uses (Wilson Creek Estates and TTM 18593) on the properties west of the project site. Rural single-family residences located to the south (across Oak Glen Road) and open space east of the site are designated OG/RL-5 (Oak Glen/Rural Living) by the County of San Bernardino. The regional and project locations are shown on Figure 1. Figure 2 illustrates the conceptual site plan.



LSA

FIGURE 1

N

0 1000 2000
FEET

SOURCE: ESRI Streetmap, 2013; Bing Map, 2015.

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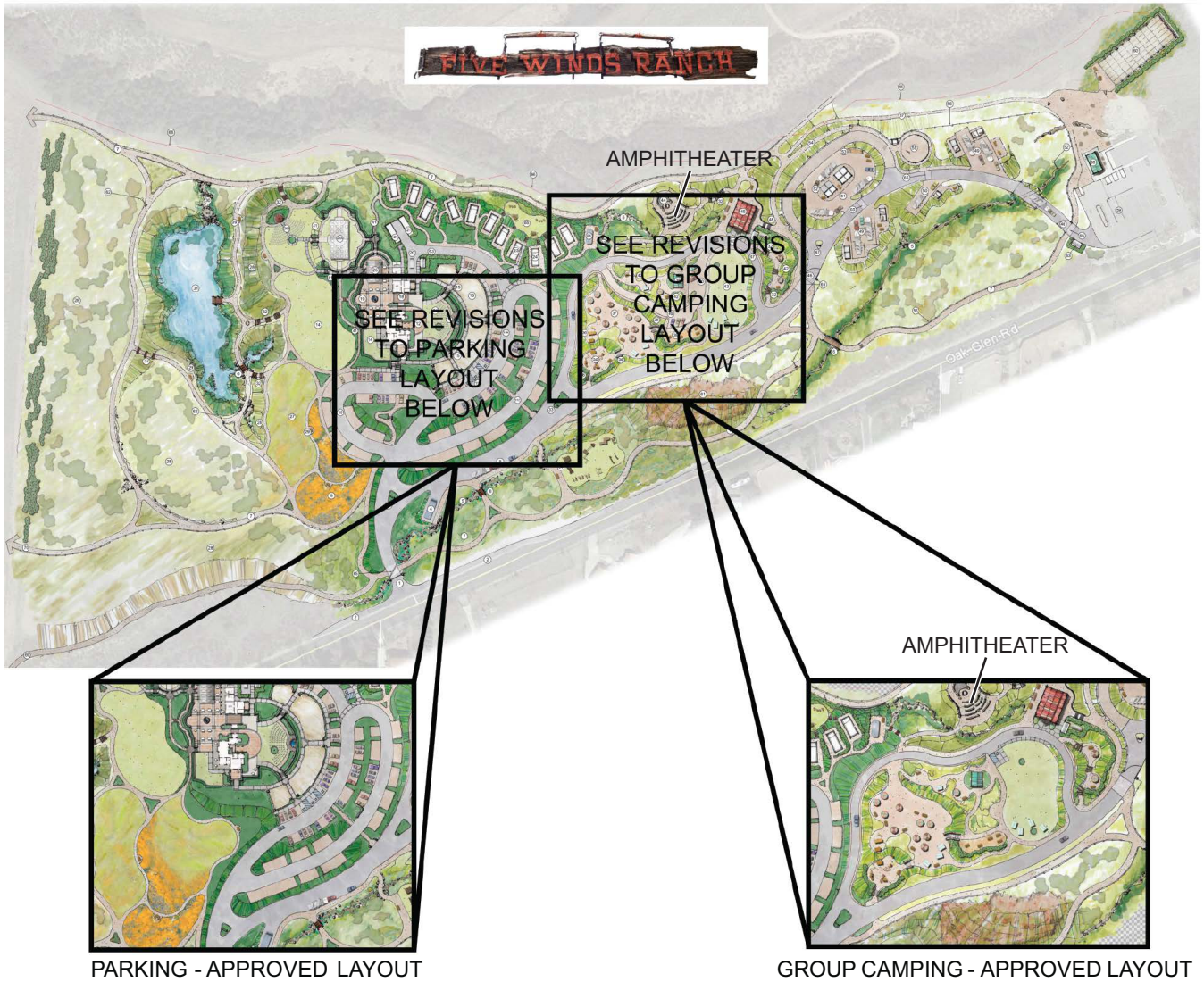
Five Winds Ranch/ El Dorado Ranch Park Project

Regional and Project Location



LSA

FIGURE 2

N

Five Winds Ranch/
El Dorado Ranch Park Project
Conceptual Site Plan

SOURCE: Architerra Design Group, 2018

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The proposed two-phase development of park facilities includes the following features:

1. **Proposed Phase I Improvements:**

    a. **Exterior Modifications to an Existing Structures:** The modifications to the exterior of the Adobe house at Five Winds Ranch will include development of a veranda area with a temporary shelter/tent for events, a courtyard area with a hardscape surface that will be colored concrete (tan) or pavers and a lawn area (150 feet x 150 feet) for multi-use functions as well as construction of a permanent storage building for maintenance.

    The existing barn will be relocated and repurposed to include a kitchenette and counters. The barn will include a gaming room with arcade games. The games will be youth-friendly (e.g., ping pong, board games, and arcade games).

    b. **Interior Modifications to the Existing Structures:** The modifications to the interior of the Adobe house and newer house addition will include a welcome/market area, a meeting/ lounge area, Americans with Disabilities Act (ADA) compliant improvements in the current living room area, modifying portions of and expanding the existing breezeway (reorienting the roof line). Other improvements to the house addition area include the development of dressing rooms, restrooms, a new kitchen upgraded with catering equipment, and ADA-compliant improvements.

    c. **Park Ranger Cabin:** Construct a cabin with signage instructing visitors as to where to check in depending on their time of arrival.

    d. **Parking Area and Roadways:** The road surface will be asphalt where needed for maintenance and fire access. The asphalt roads will be limited to widths of 20 feet (ft) in two directions and 12 ft in one direction, with paraffin-stay lock decomposed granite (d.g.) and colored concrete (tan), or just paraffin-stay lock d.g., for the ADA parking area.

    e. **Oak Glen Road Improvements:** Acceleration and deceleration lanes, and turn-pocket improvements on Oak Glen Road and entry monument/gateway signage at Oak Glen Road.

    f. **Multi-Use Non-Motorized Decomposed Granite Trails with Rail Fencing:** The trails will connect with the existing El Dorado Ranch Park trails to the east and future Master Plan trails to the west.

    g. **Information/Public Outreach Kiosk:** A kiosk will be added along with water fountains for trail users.

    h. **Group/Individual Campsite Areas with Amenities (Equestrian and Other Groups):** Equestrian amenities include pipe corrals/pens, small warm-up pen, wash rack with pea gravel, and hydrant/spigots. Campsites will also include back-in double-wide trailer camp units. A low ropes course (par course) is also proposed. The group/individual campsite area has been modified to minimize parking, but will require drop-off areas for loading/unloading and ADA parking.

i. **Cabin Units:** Five overnight cabin units will be installed, each with a shower and small bathroom. One or more cabins will be ADA compliant with accessible pathway and parking.

j. **Camping Area:** The camping areas will include an amphitheater and a propane-fueled fire pit area. No amplified sound would occur at the amphitheater and no amphitheater activities would occur during nighttime hours. Dual propane tanks will be used for the service areas. Areas for barbequing individually and as a group are also included.

k. **Archery Range:** The archery range will include hay bale markers and 10 ft wide target lanes.

l. **Restroom Buildings:** Restrooms will be constructed at the group camping area. Enhanced improvements to the existing El Dorado restroom will also be provided.

m. **Landscape Improvements:** Drainage swales and pedestrian bridges with enhanced boulder placements and pedestrian foot bridges. Vegetative barriers will be located along the west, east, and south edges of the park.

n. **Temporary Shelter/Tent:** Temporary shelters/tents will be provided for special events and receptions. Regarding the event venue, the tented feature will host up to 250 persons for weddings, receptions, quiñceaneras, reunions, and similar events.

2. **Proposed Phase II Improvements:**

a. **Parking:** Additional parking area (paraffin-stay lock d.g.) to be provided along westerly trails and roadways.

b. **Cabins:** From 5 to 10 additional overnight cabin units will be installed, each with a shower and bathroom. One or more cabins will be ADA compliant with accessible pathways and parking.

c. **Pond:** A wetland pond area that includes a dock and wood duck, owl, and bat boxes will be developed. The pond will include a waterfall inlet with a natural boulder aesthetic. This area will include picnic table seating with areas along with decomposed granite pathways.

d. **Native Landscaped Areas:**

1) Native grass meadows with views from the terrace.
2) A native wildflower garden highlighting the existing California poppies at Five Winds Ranch.
3) Native habitat restoration areas with native landscaping on the slopes.

e. **Trails:** New trails will be added to connect trails from the Adobe house to the west and through the gardens.

CHARACTERISTICS OF SOUND

Sound is increasing to such disagreeable levels in the environment that it can threaten quality of life. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

Measurement of Sound

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units (e.g., inches or pounds) decibels are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 decibels (dB) is 10 times more intense than 1 dB, 20 dB is 100 times more intense than 1 dB, and 30 dB is 1,000 times more intense than 1 dB. Thirty decibels (30 dB) represents 1,000 times as much acoustic energy as 1 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations) the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source (noise in a relatively flat environment with absorptive vegetation) decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on A

weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours), and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable.

Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear (the threshold of pain). A sound level of 160–165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less developed area. Table A lists definitions of acoustical terms, and Table B shows common sound levels and their sources.

Table A: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of measurement that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter deemphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted, unless reported otherwise.)
L_{01}, L_{10}, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1%, 10%, 50%, and 90% of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dBA to sound levels occurring in the evening from 7:00 PM to 10:00 PM and after the addition of 10 dBA to sound levels occurring in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 PM and 7:00 AM.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time; usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content, as well as the prevailing ambient noise level.

Source: *Handbook of Acoustical Measurements and Noise Control* (Harris 1991).

Table B: Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	—
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	—
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	—
Near Freeway Auto Traffic	70	Moderately Loud	—
Average Office	60	Quiet	One-half as loud
Suburban Street	55	Quiet	—
Light Traffic; Soft Radio Music in Apartment	50	Quiet	One-quarter as loud
Large Transformer	45	Quiet	—
Average Residence without Stereo Playing	40	Faint	One-eighth as loud
Soft Whisper	30	Faint	—
Rustling Leaves	20	Very Faint	—
Human Breathing	10	Very Faint	Threshold of Hearing
—	0	Very Faint	—

Source: Compiled by LSA Associates, Inc. (2015).

CHARACTERISTICS OF GROUND-BORNE VIBRATION

Vibration is the result of rapidly fluctuating motions that have the potential to be perceptible. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible, but there is less adverse reaction without the effects associated with the shaking of a building. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise, otherwise referred to as ground-borne noise. Typically, sources that have the potential to generate ground-borne noise are likely to produce airborne noise levels that mask the radiated ground-borne noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment) and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 ft of the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft (FTA 2018). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. For most projects, it is assumed that the roadway surface would be smooth enough that ground-borne vibration from street traffic would not exceed the impact criteria; however, construction of the project could result in ground-borne vibration that may be perceptible and annoying.

Ground-borne vibration has the potential to disturb people and damage buildings. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). RMS is best for characterizing human response to building vibration and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as:

$$L_v = 20 \log10 [V/V_{ref}]$$

where L_v is the vibration velocity in decibels (VdB), “V” is the RMS velocity amplitude, and “V_{ref}” is the reference velocity amplitude, or 1×10^{-6} inches per second (in/sec) used in the United States.

Factors that influence ground-borne vibration and noise include the following:

- **Vibration Source:** Vehicle suspension, wheel types and condition, railroad track/roadway surface, railroad track support system, speed, transit structure, and depth of vibration source.
- **Vibration Path:** Soil type, rock layers, soil layering, depth to water table, and frost depth.
- **Vibration Receiver:** Foundation type, building construction, and acoustical absorption.

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of ground-borne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock.

Experience with ground-borne vibration indicates (1) vibration propagation is more efficient in stiff clay soils than in loose sandy soils; and (2) shallow rock seems to concentrate the vibration energy close to the surface and can result in ground-borne vibration problems at large distances from a railroad track. Factors including the layering of the soil and the depth to the water table can have substantial effects on the propagation of ground-borne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

REGULATORY SETTING

Federal Regulations

Federal Transit Administration

Vibration standards included in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) are used in this analysis for ground-borne vibration impacts on human annoyance, as shown in Table C. The criteria presented in Table C account for variation in project types, as well as the frequency of events, which differ widely among projects. It is intuitive that when there will be fewer events per day, it should take higher vibration levels to evoke the same community response. The frequency of events is accounted for in the criteria by distinguishing between projects with frequent and infrequent events, in which the term "occasional events" is defined as between 30 and 70 events per day.

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. Table D lists the potential vibration building damage criteria associated with construction activities, as suggested in the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). FTA guidelines show that a vibration level of up to 102 VdB (equivalent to 0.5 PPV [in/sec]) (FTA 2018) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction building vibration damage criterion is 94 VdB (0.2 PPV [in/sec]).

Local Regulations

City of Yucaipa

General Plan. The noise standards shown in Table S-3 in the Public Safety chapter (Chapter 7) in the City's General Plan (shown in Table E of this document) are used as a guideline to evaluate the acceptability of the noise levels generated by traffic. These standards are for assessment of long-term vehicular traffic noise impacts. The City has an exterior noise standard of 65 dBA CNEL for outdoor areas associated with park uses. Indoor areas of the park associated with the proposed cabinettes were evaluated as transient lodging, with an interior noise standard of 45 dBA CNEL.

Table C: Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 µin/sec)			Ground-Borne Noise Impact Levels (dB re 20 µPa)		
	Frequent[1] Events	Occasional[2] Events	Infrequent[3] Events	Frequent[1] Events	Occasional[2] Events	Infrequent[3] Events
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[5]	N/A[5]	N/A[5]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

[1] Frequent events are defined as more than 70 events per day.

[2] Occasional events are defined as between 30 and 70 events per day.

[3] Infrequent events are defined as fewer than 30 events per day.

[4] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

[5] Vibration-sensitive equipment is not sensitive to ground-borne noise.

µin/sec = microinches per second
µPa = micropascals
dB = decibels
dBA = A-weighted decibels
FTA = Federal Transit Administration
HVAC = heating, ventilation, and air conditioning
N/A = Not Applicable
VdB = vibration velocity decibels

Table D: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Approximate L_V (VdB)[1]
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

[1] RMS vibration velocity in decibels (VdB) re 1 µin/sec.

µin/sec = inches per second
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

Table E: Interior/Exterior Noise Level Compatibility Standards for Land Uses

Land Uses		L_{dn} (or CNEL), dB	
Categories	**Uses**	**Interior[1]**	**Exterior[2]**
Residential	Single & Multi-Family Duplex	45	60[3]
	Mobile Home	45	60[3]
	Hotel, Motel, Transient Lodging	45	60[3]
Commercial	Commercial Retail, Bank, Restaurant	50	---
	Office Building, R&D, Offices	45	65
	Amphitheater, Hall, Auditorium, Theater	45	---
Institutional / Public	Hospital, School, Church, Library	45	65
Open Space	Park	---	65

Source: Table S-3, City of Yucaipa General Plan (2016).

[1] Interior living environment excluding bathrooms, kitchens, toilets, closets, and corridors.

[2] Outdoor environment limited to private yards of single-family dwellings, multi-family private patios or balconies, mobile home parks, hospital/office building patios, park picnic areas, school playgrounds, and hotel and motel and recreation areas.

[3] An exterior noise level of up to 65 dB L_{dn} (or CNEL) will be allowed, provided exterior noise levels have been substantially mitigated through a reasonable use of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB L_{dn} (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed will necessitate the use of air conditioning or mechanical ventilation.

dB = decibels CNEL = Community Noise Equivalent Level L_{dn} = day-night average noise level

Municipal Code. Section 87.0905(b) of the City's Municipal Code limits noise from emanating from any source that affects adjacent properties, as shown in Table F. If the measured ambient level exceeds any of the 30-, 15-, 5-, or 1-minute noise limits in Table F, the allowable noise exposure standard shall be increased to reflect said ambient noise level. If the ambient noise level exceeds the maximum noise limit in Table F at any time, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level. Additionally, if the alleged offense consists entirely of impact noise or simple tone noise, each of the noise levels shall be reduced by 5 dBA.

Table F: Noise Standards for Emanations from Any Source (dBA)

Affected Land Use (Receiving Land Use)	Time Period	L_{50} (30 min)[1]	L_{25} (15 min)[1]	L_8 (5 min)[1]	L_2 (1 min)[1]	L_{max} (Any Time)[1]
Residential	7:00 AM to 10:00 PM (daytime)	55	60	65	70	75
	10:00 PM to 7:00 AM (nighttime)	55	60	65	70	75
Professional Services	Anytime	55	60	65	70	75
Other Commercial	Anytime	60	65	70	75	80
Industrial	Anytime	70	75	80	85	90

Source: City of Yucaipa, Municipal Code, Section 87.0905(b).

[1] Although the noise standards in Section 87.0905(b) are reported as an L_{dn} noise level, it is assumed the noise standards and the allowed exceedances provided in Section 87.0905 shall be interpreted as 1 hour L_{eq}.

dBA = A-weighted decibels L_{max}= maximum instantaneous noise level
L_{dn} = day-night average noise level L_{XX} = percentile-exceeded sound level
L_{eq} = equivalent continuous sound level min = minute(s)

Section 87.0905(e) of the Municipal Code exempts noise sources associated with temporary construction, repair, or demolition activities from the City noise standards in Section 87.0905(b) between 7:00 a.m. and 7:00 p.m., except on Sundays and federal holidays.

Section 87.0910 of the Municipal Code states no ground vibration shall be allowed that can be felt without the aid of instruments at or beyond the lot line nor any vibration be permitted that produces a particle velocity greater than or equal to 0.2 in/sec measured at or beyond the lot line.

County of San Bernardino

County Code. Section 83.01.080(c) of the County Code (County of San Bernardino 2018) limits noise emanating from any source that affects adjacent properties, as shown in Table G. If the measured ambient level exceeds any of the 30-, 15-, 5-, or 1-minute noise limits in Table G, the allowable noise exposure standard shall be increased to reflect said ambient noise level. If the ambient noise level exceeds the maximum noise limit (L_{max}) in Table G at any time, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level. Additionally, if the alleged offense consists entirely of impact noise or simple tone noise, each of the noise levels shall be reduced by 5 dBA.

Table G: County of San Bernardino Noise Standards for Stationary Noise Sources (dBA)

Affected Land Uses (Receiving Noise)	Time Period	L_{50} (30 min)	L_{25} (15 min)	L_8 (5 min)	L_2 (1 min)	L_{max} (Any Time)
Residential	7:00 AM to 10:00 PM (daytime)	55	60	65	70	75
	10:00 PM to 7:00 AM (nighttime)	45	50	55	60	65
Professional Services	7:00 AM to10: 00 PM (daytime)	55	60	65	70	75
	10:00 PM to 7:00 AM (nighttime)	55	60	65	70	75
Other Commercial	7:00 AM to 10: 00 PM (daytime)	60	65	70	75	80
	10:00 PM to 7:00 AM (nighttime)	60	65	70	75	80
Industrial	7:00 AM to 10: 00 PM (daytime)	70	75	80	85	90
	10:00 PM to 7:00 AM (nighttime)	70	75	80	85	90

Source: County of San Bernardino Development Code (2018).
L_{xx} = percentile-exceeded sound level L_{max} = maximum instantaneous noise level min = minute(s)

Section 83.01.080(g) of the County Code (2018) exempts noise sources associated with temporary construction, repair, or demolition activities from the City noise standards in Section 83.01.080(c) between 7:00 a.m. and 7:00 p.m., except on Sundays and federal holidays.

EXISTING SETTING

Overview of the Existing Noise Environment

The primary existing noise sources in the project area are transportation facilities. Traffic on Oak Glen Road is a steady source of ambient noise.

Sensitive Land Uses in the Project Vicinity

The project site is surrounded primarily by residential uses and vacant land. The areas adjacent to the project site include the following uses:

- **South:** Single-family residences
- **East:** Vacant land
- **North:** Vacant land
- **West:** Approved future residences (Wilson Creek Estates and Tentative Tract Map (TTM) No. 18593)

Ambient Noise Measurements

Short-Term Noise Measurements

Short-term noise measurements were conducted on May 2, 2019 using a Larson Davis Model 824 Type 1 sound level meter. Table H shows the results of the short-term noise level measurements along with a description of the measurement location and noise sources that occurred during the measurement. As shown in Table H, the measured average noise levels in the project vicinity ranged from 53.0 to 57.0 dBA L_{eq} and the measured maximum noise levels ranged from 70.5 to 77.4 dBA L_{max}. Figure 3 shows the short-term monitoring locations.

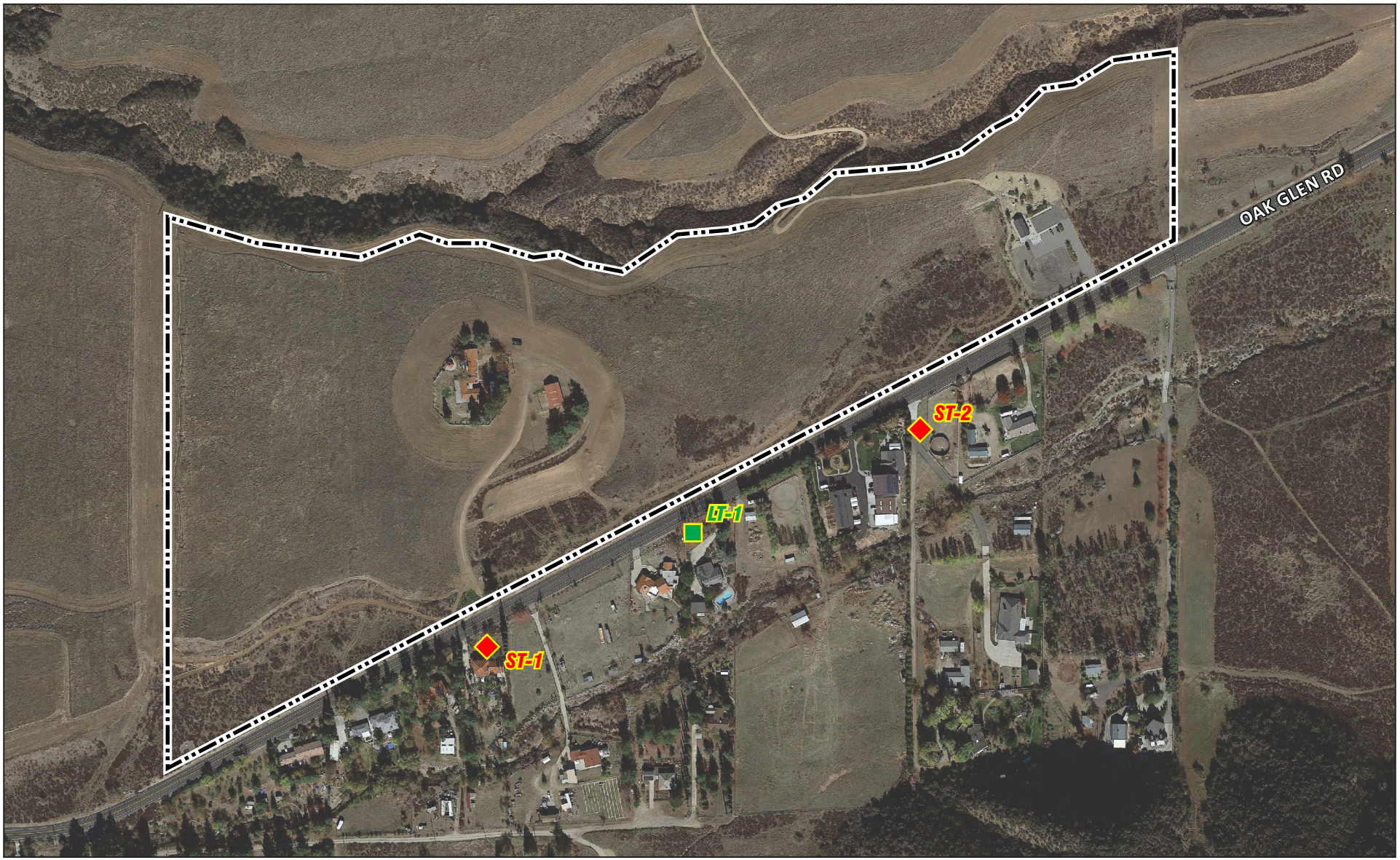
Table H: Short-Term Ambient Noise Monitoring Results

Monitoring No.	Location	Date	Start Time	Duration (min)	Measured Noise Level			Noise Source(s)
					dBA L_{eq}	dBA L_{min}	dBA L_{max}	
ST-1	South of project site, in the front yard of 37037 Oak Glen Road.	5/2/19	9:56 AM	20	53.0	28.6	70.5	Light traffic on Oak Glen, faint lawn mower noise at nearby residence, and bird noise.
ST-2	South of the project site, between 37201 and 37212 Oak Glen Road, approximately 50 ft south of Oak Glen Road.	5/2/19	10:53 AM	20	57.0	35.9	77.4	Traffic on Oak Glen and bird noise

Source: Compiled by LSA Associates, Inc. (2019).
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level
L_{min} = minimum sound level
L_{max} = maximum sound level
min = minutes

Long-Term Noise Measurement

The long-term (24-hour) noise level measurement was conducted from May 2 through May 3, 2019, using a Larson Davis Type 2 Spark 706RC dosimeter. Table I shows hourly L_{eq} results from the long-term noise level measurement, and Table J shows the calculated CNEL level from the long-term noise level measurement. As shown in Table J, the calculated CNEL level is 71 dBA CNEL. Figure 3 shows the long-term monitoring location.



LSA

FIGURE 3

LEGEND

Project Site

Monitoring Locations:

LT - Long-Term

ST - Short-Term

N

0 185 370

FEET

SOURCE: Google Earth

Five Winds Ranch/
El Dorado Ranch Park Project
Noise Monitoring Locations

I:\YCA1801\G\MonitoringLocations.cdr (5/17/2019)

Table I: Long-Term (24-Hour) Noise Level Measurement Results at LT-1

	Start Time	Date	Noise Level (dBA L_{eq})
1	10:00 AM	5/2/19	68
2	11:00 AM	5/2/19	69
3	12:00 PM	5/2/19	68
4	1:00 PM	5/2/19	68
5	2:00 PM	5/2/19	68
6	3:00 PM	5/2/19	69
7	4:00 PM	5/2/19	69
8	5:00 PM	5/2/19	70
9	6:00 PM	5/2/19	69
10	7:00 PM	5/2/19	68
11	8:00 PM	5/2/19	67
12	9:00 PM	5/2/19	66
13	10:00 PM	5/2/19	65
14	11:00 PM	5/2/19	63
15	12:00 AM	5/3/19	59
16	1:00 AM	5/3/19	56
17	2:00 AM	5/3/19	36[1]
18	3:00 AM	5/3/19	56
19	4:00 AM	5/3/19	60
20	5:00 AM	5/3/19	65
21	6:00 AM	5/3/19	69
22	7:00 AM	5/3/19	70
23	8:00 AM	5/3/19	68
24	9:00 AM	5/3/19	68

Source: Compiled by LSA (2019).
dBA L_{eq} = equivalent continuous sound level measured in A-weighted decibels
[1] There was no traffic along Oak Glen Road during this hour.

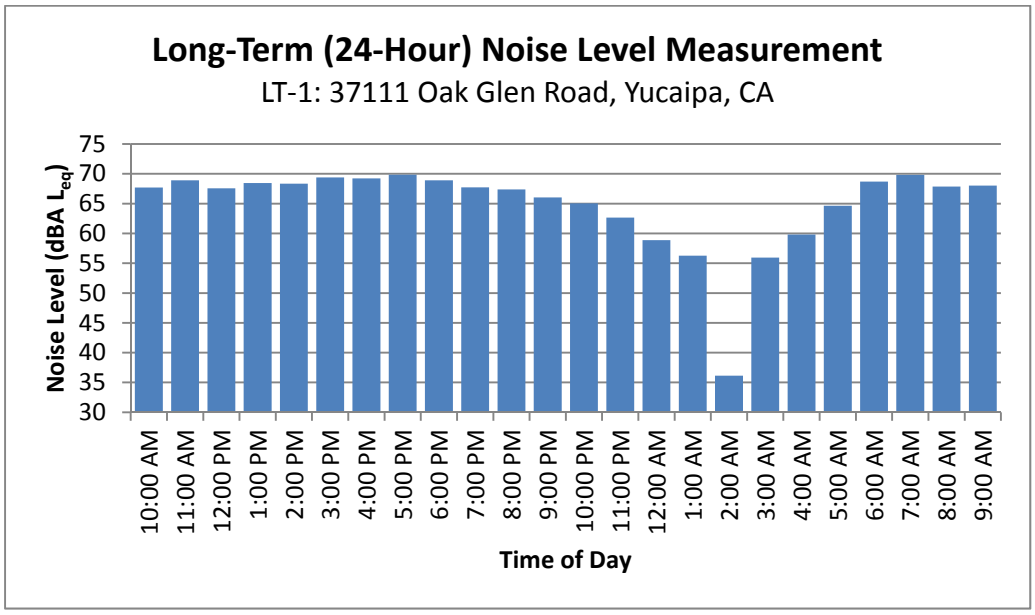


Table J: Long-Term Ambient Noise Monitoring Results

Monitoring No.	Location	Start Date	Start Time	Duration (hours)	Noise Level (dBA L_{eq})			Average Daily Noise Level (dBA CNEL)
					Daytime	Evening	Nighttime	
LT-1	South of the project site on utility pole on the south side of Oak Glen Road.	5/2/19	10:00 AM	24	67.6–69.9	66.0–67.7	36.1–68.7	71

Source: Compiled by LSA Associates, Inc. (2018).
[1] Daytime Noise Levels = noise levels during the hours of 7:00 AM to 7:00 PM
[2] Evening Noise Levels = noise levels during the hours of 7:00 PM to 10:00 PM
[3] Nighttime Noise Levels = noise levels during the hours of 10:00 PM to 7:00 AM
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level

Existing Aircraft Noise

Airport-related noise levels are primarily associated with aircraft engine noise during taking off, landing, or running their engines while still on the ground. The closest source of aircraft noise is the Redlands Municipal Airport, which is located approximately 8.2 miles northwest of the project site. The project site is located outside of the 60 dBA CNEL noise contours of the Redlands Municipal Airport based on the Noise Compatibility Contours in the Redlands Municipal Airport Land Use Compatibility Plan (Redlands City Council 2003).

Existing Traffic Noise

The guidelines included in the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) were used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry, to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. Traffic volumes were obtained from the *Traffic Impact Analysis* (LSA 2019) for the project. The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. Table K provides the existing traffic noise levels in the project vicinity. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. As shown in Table K, traffic noise levels along Oak Glen Road directly adjacent to the project site are relatively low. The 70 and 65 dBA CNEL noise contours extend to less than 50 ft from the roadway centerline within the project area, while the 60 dBA CNEL noise contours extend up to 60 ft from the roadway centerline.

IMPACTS

Short-Term Construction Noise Impacts

The first type of short-term construction noise would result from transport of construction equipment and materials to the project site and construction worker commutes. These transportation activities would incrementally raise noise levels on access roads leading to the site. It is expected that larger trucks used in equipment delivery would generate higher noise impacts than

Table K: Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Oak Glen Road West of Bryant Street	11,984	< 50	84	181	67.7
Oak Glen Road East of Bryant Street	5,428	< 50	59	127	65.4
Oak Glen Road West of West Park Entrance	1,739	< 50	< 50	60	60.4
Oak Glen Road Between Park Entrances	1,705	< 50	< 50	59	60.4
Oak Glen Road East of East Park Entrances	1,631	< 50	< 50	57	60.2
Bryant Street South of Oak Glen Road	10,835	< 50	79	169	67.2
Bryant Street North of Oak Glen Road	12,529	< 50	103	222	69.0

Source: Compiled by LSA Associates, Inc. (2019).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

trucks associated with worker commutes. The single-event noise from equipment trucks passing at a distance of 50 ft from a sensitive noise receptor would reach a maximum level of 84 dBA L_{max}. However, the pieces of heavy equipment for grading and construction activities would be moved on site just one time and would remain on site for the duration of each construction phase. This one-time trip, when heavy construction equipment is moved on and off-site, would not add to the daily traffic noise in the project vicinity. The paving phase would generate an estimated 21 daily project construction vehicle trips, which is the most trips out of all of the construction phases based on the California Emission Estimator Model (CalEEMod; Version 2016.3.2) output, shown in Appendix C of the *Air Quality and Greenhouse Gas Assessments for Five Winds Ranch/El Dorado Ranch Park* (LSA 2019). Hourly vehicle trips were estimated by dividing the daily project construction vehicle trips by two, which would represent the highest number of vehicles travelling to and from the project site in each hour. All construction trips would travel on Oak Glen Road to access the project site. It was assumed as a worst-case that all of the daily and hourly project construction vehicle trips would come from either direction on Oak Glen Road. Oak Glen Road has an existing hourly/ADT volume of 174/1,739 west of the first project driveway and 163/1,631 east of the second project driveway. Construction-related traffic would increase traffic noise levels by up to 0.3 dBA along Oak Glen Road from either direction. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term construction-related impacts associated with worker commutes and equipment transport to the project site would not be substantial.

The second type of short-term noise impact is related to noise generated during site preparation, grading, building construction, architectural coating, and paving on the project site. Construction is undertaken in discrete steps, each of which has its own mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table L lists the maximum noise levels recommended for noise impact assessments for typical

Table L: Typical Construction Equipment Noise Levels (dBA)

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 ft[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: FHWA Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
dBA = A-weighted decibels
ft = feet
L_{max} = maximum instantaneous sound level

construction equipment based on a distance of 50 ft between the equipment and a noise receptor. Typical operating cycles for these types of construction equipment may involve 1 to 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings.

Typical noise levels range up to 88 dBA L_{max} at 50 ft during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Project construction is expected to require the use of scrapers, bulldozers, and water trucks/pickup trucks. Noise associated with the use of construction equipment is estimated to be between 55 dBA L_{max} and 85 dBA L_{max} at a distance of 50 ft from the active construction area for the site preparation phase. As shown in Table L, the maximum noise level generated by each scraper is assumed to be approximately 85 dBA L_{max} at 50 ft. Each bulldozer would generate approximately 85 dBA L_{max} at 50 ft. The maximum noise level generated by water trucks/pickup trucks is approximately 55 dBA L_{max} at 50 ft from these vehicles. Each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at

some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 88 dBA L_{max} at a distance of 50 ft from the active construction area. Based on a usage factor of 40 percent, the worst-case combined noise level during this phase of construction would be 84 dBA L_{eq} at a distance of 50 ft from the active construction area.

The property line of the closest residence to the project site is located south of Oak Glen Road is located approximately 60 ft from the project construction boundary and would be exposed to construction noise levels of 86 dBA L_{max} (82 dBA L_{eq}). The implementation of measures that include compliance with the construction hours and days specified in the City's Municipal Code and the County Code (i.e., using construction equipment with noise mufflers that are properly operating and maintained, placing construction staging area away from off-site sensitive uses, and placing all stationary construction equipment so that the emitted noise is directed away from sensitive receptors) would minimize noise impacts from construction equipment. Therefore, no construction noise impacts would occur with implementation of the measures described above. No additional noise reduction measures are required.

Short-Term Construction Vibration Impacts

This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and will assess the potential for building damage using vibration levels in PPV (in/sec) because vibration levels calculated in RMS are best for characterizing human response to building vibration, whereas vibration levels in PPV are best used to characterize potential for damage. As shown in Table D, the FTA guidelines indicate that a vibration level up to 102 VdB (equivalent to 0.5 PPV [in/sec]) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage (FTA 2018). For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 PPV [in/sec]). For a fragile building, the construction vibration damage criterion is 90 VdB (0.12 PPV [in/sec]).

Table M shows the PPV and VdB values at a distance of 25 ft from the construction vibration source. As shown in Table M, , bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 87 VdB (0.089 PPV [in/sec]) of ground-borne vibration when measured at 25 ft, based on the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Outdoor site preparation for the project is expected to use a large bulldozer or similar equipment and a loaded truck. The greatest levels of vibration are anticipated to occur during the site preparation phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary) because vibration impacts normally occur within the buildings.

The formula for vibration transmission is provided below:

$$L_v dB\ (D) = L_v dB\ (25\ ft) - 30\ Log\ (D/25)$$

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

Table M: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks[2]	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
[2] Equipment shown in **bold** is expected to be used on site.
µin/sec = microinches per second
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity in decibels

Table N lists the projected vibration level from various construction equipment expected to be used on the project site at the nearest buildings in the project vicinity. For typical construction activity, the equipment with the highest vibration generation potential is the large bulldozer and loaded truck, each of which would generate 87 VdB (0.089 PPV [in/sec]) and 86 VdB (0.076 PPV [in/sec]) at 25 ft, respectively. The closest residential buildings to the south are located approximately 90 ft from the project construction boundary. As shown in Table N, the closest residences to the south would experience vibration levels of up to 70 VdB (0.013 PPV [in/sec]). This vibration level would not result in community annoyance because the vibration levels would be below the FTA's community annoyance threshold of 72 VdB. In addition, this vibration level would not result in building damage because vibration levels would not exceed the City's vibration standard and the FTA's vibration damage threshold of 94 VdB (0.2 PPV [in/sec]) for residential structures constructed of non-engineered timber. No vibration impacts from project construction would occur west of the project because it was assumed that the construction of the approved future residences would not be completed before the construction of the project. Therefore, no construction vibration impacts would occur. No vibration reduction measures are required.

Table N: Summary of Construction Vibration Levels

Land Use	Direction	Equipment/Activity	Reference Vibration Level at 25 ft		Distance (ft)	Maximum Vibration Level	
			VdB	PPV (in/sec)		VdB	PPV (in/sec)
Residential	South	Large bulldozers	87	0.089	90	70	0.013
		Loaded trucks	86	0.076	90	69	0.011

Source: Compiled by LSA Associates, Inc. (2019).
Note: Adjacent residential buildings were evaluated using the FTA-recommended building damage threshold of 0.2 PPV (in/sec) (i.e., approximately 94 VdB) because these structures are constructed with non-engineered timber and masonry.
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity
VdB = vibration velocity decibels

Long-Term Airport Noise Impacts

The closest source of aircraft noise is the Redlands Municipal Airport, which is located approximately 8.2 miles (mi) northwest of the project site. The project site is located outside of the 60 dBA CNEL noise contours of the Redlands Municipal Airport based on the Noise Compatibility Contours in the *Redlands Municipal Airport Land Use Compatibility Plan* (Redlands City Council 2003). Therefore, the project would not expose people residing or working in the project area to excessive noise levels from aircraft noise.

Long-Term Traffic Noise Impacts

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. The traffic volumes on Oak Glen Road and Bryant Street were obtained from the *Traffic Impact Analysis* (LSA 2019). Tables O, P, and Q provide the traffic noise levels for the Existing (2019) Without and With Project, Opening Year 2022 Without and With Project, and Cumulative Year 2022 Without and With Project, respectively. These noise levels represent the worst-case scenario, which assumes no shielding is provided between the traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and the model printouts are provided in Attachment B.

Table O shows that the project-related traffic noise level increases would be up to 1.2 dBA. This noise increase is less than 3 dBA and would not be perceptible to the human ear in an outdoor environment. Therefore, no project-related traffic noise impacts for off-site land uses would occur. No noise reduction measures are be required.

Land Use Compatibility

Exterior Noise Assessment

The land use compatibility of the project site was assessed based on the Land Use – Noise Compatibility Standards contained in the Public Safety chapter (Chapter 7) in the City's General Plan. Outdoor active use areas associated with the proposed project include the ropes course area, camp sites/picnic areas, veranda area at the Adobe house, temporary shelter/tent for events area, courtyard area, and the amphitheater. Indoor living areas associated with the proposed project include cabinettes. Traffic noise levels for on-site exterior and interior areas along Oak Glen Road were assessed using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108).

Table O: Existing Traffic Noise Levels Without and With Project

Roadway Segment	Existing Without Project					Existing With Project					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Oak Glen Road West of Bryant Street	11,984	< 50	84	181	67.7	12,334	< 50	86	184	67.8	0.1
Oak Glen Road East of Bryant Street	5,428	< 50	59	127	65.4	5,958	< 50	63	135	65.8	0.4
Oak Glen Road West of West Park Entrance	1,739	< 50	< 50	60	60.4	2,259	< 50	< 50	71	61.6	1.2
Oak Glen Road Between Park Entrances	1,705	< 50	< 50	59	60.4	1,765	< 50	< 50	60	60.5	0.1
Oak Glen Road East of East Park Entrances	1,631	< 50	< 50	57	60.2	1,691	< 50	< 50	59	60.3	0.1
Bryant Street North of Oak Glen Road	12,529	< 50	87	186	67.9	12,649	< 50	87	187	67.9	0.0
Bryant Street South of Oak Glen Road	10,835	< 50	94	202	68.4	10,895	< 50	94	202	68.4	0.0

Source: Compiled by LSA Associates, Inc. (2019).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

Table P: Opening Year 2022 Traffic Noise Levels Without and With Project

Roadway Segment	2022 Cumulative Without Project					2022 Cumulative With Project					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Oak Glen Road West of Bryant Street	12,104	< 50	85	182	67.7	12,450	< 50	86	185	67.8	0.1
Oak Glen Road East of Bryant Street	5,488	< 50	60	128	65.4	6,010	< 50	63	136	65.8	0.4
Oak Glen Road West of West Park Entrance	1,759	< 50	< 50	60	60.5	2,280	< 50	< 50	72	61.6	1.1
Oak Glen Road Between Park Entrances	1,725	< 50	< 50	60	60.4	1,785	< 50	< 50	61	60.6	0.2
Oak Glen Road East of East Park Entrances	1,651	< 50	< 50	58	60.2	1,710	< 50	< 50	59	60.4	0.2
Bryant Street North of Oak Glen Road	12,659	< 50	87	187	67.9	12,780	< 50	88	189	67.9	0.0

Source: Compiled by LSA Associates, Inc. (2019).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

Table Q: Cumulative 2022 Traffic Noise Levels Without and With Project

Roadway Segment	2022 Cumulative Without Project					2022 Cumulative With Project					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Oak Glen Road West of Bryant Street	13,844	< 50	93	199	68.3	14,190	< 50	94	202	68.4	0.1
Oak Glen Road East of Bryant Street	6,098	< 50	64	138	65.9	6,620	< 50	68	145	66.2	0.3
Oak Glen Road West of West Park Entrance	2,149	< 50	< 50	69	61.4	2,670	< 50	< 50	79	62.3	0.9
Oak Glen Road Between Park Entrances	2,115	< 50	< 50	68	61.3	2,175	< 50	< 50	69	61.4	0.1
Oak Glen Road East of East Park Entrance	2,041	< 50	< 50	67	61.1	2,100	< 50	< 50	68	61.3	0.2
Bryant Street North of Oak Glen Road	13,109	< 50	89	192	68.1	13,230	< 50	90	193	68.1	0.0
Bryant Street South of Oak Glen Road	12,505	< 50	103	222	69.0	12,560	< 50	103	222	69.0	0.0

Source: Compiled by LSA Associates, Inc. (2019).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

Table Q shows that this roadway would have a traffic volume of 2,175 ADT and a noise level of 60 dBA CNEL at 69 ft from the centerline of Oak Glen Road between park entrances under the 2022 Cumulative with Project scenario. The closest on-site outdoor active use area is the ropes course area, which is located approximately 90 ft from the centerline of Oak Glen Road. At a distance of 90 ft, noise would be attenuated by 2 dBA compared to the noise level at the reference distance. The ropes course area would be exposed to traffic noise levels of 58 dBA CNEL (60 dBA – 2 dBA = 58 dBA). All other on-site exterior outdoor active use areas associated with the park would be located farther from Oak Glen Road and would be exposed to traffic noise levels lower than 58 dBA CNEL. This noise level would not exceed the City's exterior noise standard of 65 dBA CNEL for park uses. Therefore, no on-site traffic noise impacts would occur. No noise reduction measures are required.

Interior Noise Assessment

The proposed cabinette is located approximately 540 ft from the centerline of Oak Glen Road. At a distance of 540 ft, noise would be attenuated by 13 dBA compared to the noise level at the reference distance. The exterior noise level at the proposed cabinette would be 47 dBA CNEL (60 dBA – 13 dBA = 47 dBA). Based on the United States Environmental Protection Agency (EPA) *Protective Noise Levels, Condensed Version of EPA Levels Document* (1978), with a combination of exterior walls, doors, and windows, standard construction for Southern California (warm climate) residential buildings would provide more than 24 dBA in exterior-to-interior noise reduction with windows closed and 12 dBA or more with windows open (the national average is 25 dBA with windows closed and 15 dBA with windows open). With windows and doors open, interior noise levels would be 35 dBA CNEL (47 dBA - 12 dBA = 35 dBA) and interior noise levels would be 23 dBA CNEL (47 dBA - 24 dBA = 23 dBA) with windows and doors closed. These noise levels would not exceed the City's interior noise standard of 45 dBA CNEL with windows and doors open and closed. Therefore, no on-site traffic noise impacts would occur. No noise reduction measures are required.

Long-Term Vibration Impacts

The proposed project would not generate vibration. In addition, vibration levels generated from project-related traffic on the adjacent roadway (Oak Glen Road) are unusual for on-road vehicles because the rubber tires and suspension systems of on-road vehicles provide vibration isolation. No vibration impacts from project-related traffic on the adjacent roadways would occur. No vibration reduction measures are required.

Long-Term Stationary Noise Impacts

Potential long-term noise impacts would be associated with stationary sources proposed on the project site. Stationary noise sources from the proposed project would include noise generated from the amphitheater, camping activities, event activities, heating, ventilation, and air conditioning (HVAC) noise, and parking lot activities. Further discussion on the potential long-term noise impacts from stationary noise sources are discussed below.

Amphitheater

Amphitheater activities, which would include people conversing, acoustic instruments, and singing, would potentially impact adjacent noise-sensitive land uses. No amplified sound would occur at this location and no amphitheater activities would occur during nighttime hours. Normal human conversations generate a noise level of 65 dBA L_{eq} at 3 ft. Assuming a worst-case scenario of 100 people at the amphitheater site, noise generated from such a group of people would be 85 dBA L_{eq} at 3 ft or 61 dBA L_{eq} at 50 ft.

The closest residences in San Bernardino County (County) to the south are located approximately 550 ft and the approved future residences in the City to the west are located approximately 1,360 ft from amphitheater activities. At a distance of 550 ft and 1,360 ft, noise would be attenuated by 21 dBA and 29 dBA, respectively, compared to the noise level measured at 50 ft from the source. The closest residences in the County to the south and approved future residences in the City to the west would be exposed to noise levels of 40 dBA L_{eq} (61 dBA - 21 dBA = 40 dBA) and 32 dBA L_{eq} (61 dBA - 29 dBA = 32 dBA), respectively, from amphitheater activities. These noise levels would not exceed the County and City's daytime 30-minute (L_{50}) noise standard of 55 dBA. The County and City nighttime 30-minute noise standards of 45 and 55 dBA, respectively, would not be exceeded because no amphitheater activities would occur during nighttime hours. Therefore, no off-site noise impacts from on-site amphitheater activities would occur. No noise reduction measures are required.

Camping Activities

Camping activities, which include people conversing, music, and children playing would potentially impact adjacent noise-sensitive land uses. Noise levels generated from people talking is typically 60 to 65 dBA at a distance of 3 ft. This noise level would be equivalent to 65 dBA L_{eq} at a distance of 3 ft when people talk continuously for 1 hour. Assuming a worst-case scenario of 20 people conversing at the camp site, noise generated from such a group of people would be 78 dBA L_{eq} at 3 ft or 54 dBA L_{eq} at 50 ft.

The closest residences in the County to the south are located approximately 260 ft and approved future residences in the City to the west are located approximately 1,200 ft from the proposed campsites. At a distance of 260 ft and 1,200 ft, noise would be attenuated by 14 dBA and 28 dBA, respectively, compared to the noise level measured at 50 ft from the source. The closest residences in the County to the south would be exposed to noise levels of 40 dBA L_{eq} (54 dBA - 14 dBA = 40 dBA) from camping activities. This noise level would not exceed the County's daytime and nighttime 30-minute noise standards of 55 dBA and 45 dBA, respectively. In addition, approved future residences in the City to the west would be exposed to noise levels of 26 dBA L_{eq} (54 dBA - 28 dBA = 26 dBA) from camping activities. This noise level would not exceed the City's daytime and nighttime 30-minute noise standard of 55 dBA. Therefore, no off-site noise impacts from on-site camping activities would occur. No noise reduction measures are required.

Event Activities

The event activities, located on the terraces northwest of the Adobe house, will include a space for a temporary shelter/tent and an area for hosting weddings, receptions, quiñceaneras, reunions and similar events that would generate noise associated with musical instruments, loudspeakers, and a crowd of up to 250 people. Additionally, the lawn east of the Adobe house would also be used for event activities. No event activities would occur during nighttime hours. LSA measured noise levels from dance music and crowd noise for an event with approximately 100 people at 69 dBA L_{eq} at 60 ft (LSA 2009). Noise levels from dance music and crowd noise for approximately 250 people was estimated to be 70 dBA at 60 ft based on an additional 150 people conversing at a noise level of 65 dBA L_{eq} at 3 ft.

The closest residences in the County to the south and the approved future residences in the City to the west are located approximately 530 ft from event activities. At a distance of 530 ft, noise would be attenuated by 19 dBA compared to the noise level measured at 60 ft from the source. The closest residences in the County to the south and approved future residences in the City to the west would be exposed to noise levels of 51 dBA L_{eq} (70 dBA - 19 dBA = 51 dBA) from event activities. This noise level would not exceed the County and City's daytime 30-minute noise standard of 55 dBA. The County and City nighttime 30-minute noise standards of 45 dBA and 55 dBA, respectively, would not be exceeded because no event activities would occur during nighttime hours. Therefore, no off-site noise impacts from on-site event activities would occur. No noise reduction measures are required.

HVAC Equipment

The project would have HVAC units for the Adobe house and repurposed barn. The HVAC equipment could operate 24 hours per day. The precise details of HVAC equipment including the location and sizing are unknown at this time. Therefore, for purposes of this analysis, a noise level of 75 dBA at 3 ft was assumed to represent HVAC-related noise (Trane 2002).

The closest residences in the County to the south are located approximately 440 ft from the HVAC unit associated with the barn and approved future residences in the City to the west are located approximately 770 ft from the HVAC unit associated with the Adobe house. At a distance of 440 ft and 770 ft, noise would be attenuated by 43 dBA and 48 dBA, respectively, compared to the noise level measured at 3 ft from the source. The closest residence in the County to the south would be exposed to noise levels reaching up to 32 dBA (75 dBA – 43 dBA = 32 dBA) from HVAC noise. This noise level would not exceed the County's daytime and nighttime 30-minute (L_{50}) noise standard of 55 dBA and 45 dBA, respectively. In addition, the closest approved future residence in the City to the west would be exposed to noise levels reaching up to 27 dBA (75 dBA – 48 dBA = 27 dBA) from HVAC noise. This noise level would not exceed the City's daytime and nighttime 30-minute noise standard of 55 dBA. Therefore, no off-site noise impacts from on-site HVAC noise would occur. No noise reduction measures are required.

Parking Lot Activities

Parking lot noise, including engine sounds, car doors slamming, car alarms, loud music, and people conversing, would occur as a result of the proposed project at the project site and on nearby streets.

Typical parking lot activities, such as people conversing or doors slamming, generates approximately 60 dBA to 70 dBA L_{max} at 50 ft.

The closest residences in the County to the south are located approximately 140 ft, and approved future residences in the City to the west are located approximately 640 ft from the proposed parking lot activities. At distances of 140 ft and 640 ft, noise would be attenuated by 9 dBA and 22 dBA, respectively, compared to the noise level measured at 50 ft from the source. The closest residence in the County to the south would be exposed to noise levels of 61 dBA L_{max} (70 dBA - 9 dBA = 61 dBA) from parking lot activities. This noise level would not exceed the County's daytime and nighttime maximum noise standards of 75 dBA and 70 dBA L_{max}, respectively. In addition, approved future residences in the City to the west would be exposed to noise levels of 48 dBA L_{max} (70 dBA - 22 dBA = 48 dBA) from parking activities. This noise level would not exceed the City's daytime and nighttime maximum noise standard of 75 dBA L_{max}. Therefore, no off-site noise impacts from on-site parking activities would occur. No noise reduction measures are required.

REDUCTION MEASURES

Short-Term Construction Noise Impacts

The following noise reduction measures would minimize construction noise:

- During all project site construction, the construction contractor shall limit all construction-related activities, including maintenance of construction equipment and the staging of haul trucks, to between 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction is permitted on Sundays and government code holidays.
- During all project site excavation and grading, contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with the manufacturers' standards.
- The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

Short-term Construction Vibration Impacts

No vibration reduction measures are required.

Long-Term Aircraft Noise Impacts

No noise reduction measures are required.

Long-Term Traffic Noise Impacts

No noise reduction measures are required.

Long-Term Vibration Impacts

No vibration reduction measures are required.

Long-Term Stationary Noise Impacts

No noise reduction measures are required.

Attachments: A: References
B: FHWA Traffic Noise Model Printouts

ATTACHMENT A

REFERENCES

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ATTACHMENT B

FHWA TRAFFIC NOISE MODEL PRINTOUTS

TABLE Existing NP-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of Bryant Street
NOTES: El Dorado Ranch Park - Existing NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11984 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.67

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	84.1	180.7	389.2

TABLE Existing NP-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of Bryant Street
NOTES: El Dorado Ranch Park - Existing NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5428 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	59.3	127.3	273.9

TABLE Existing NP-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of West Park Entrance
NOTES: El Dorado Ranch Park - Existing NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1739 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.44

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	59.8	128.4

TABLE Existing NP-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road Between Park Entrances
NOTES: El Dorado Ranch Park - Existing NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1705 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	59.1	126.7

TABLE Existing NP-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of East Park Entrances
NOTES: El Dorado Ranch Park - Existing NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1631 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	57.4	123.0

TABLE Existing NP-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street Nouth of Oak Glen Road
NOTES: El Dorado Ranch Park - Existing NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12529 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	86.6	186.2	400.9

TABLE Existing NP-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street South of Oak Glen Road
NOTES: El Dorado Ranch Park - Existing NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10835 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	93.8	201.6	434.1

TABLE Existing P-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of Bryant Street
NOTES: El Dorado Ranch Park - Existing P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12334 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.80

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.7	184.2	396.7

TABLE Existing P-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of Bryant Street
NOTES: El Dorado Ranch Park - Existing P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5958 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	63.1	135.4	291.4

TABLE Existing P-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of West Park Entrance
NOTES: El Dorado Ranch Park - Existing P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2259 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.57

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	71.1	152.8

TABLE Existing P-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road Between Park Entrances
NOTES: El Dorado Ranch Park - Existing P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1765 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	60.4	129.6

TABLE Existing P-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of East Park Entrances
NOTES: El Dorado Ranch Park - Existing P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1691 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.32

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	58.7	126.0

TABLE Existing P-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street Nouth of Oak Glen Road
NOTES: El Dorado Ranch Park - Existing P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12649 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.90

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	87.1	187.4	403.4

TABLE Existing P-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street South of Oak Glen Road
NOTES: El Dorado Ranch Park - Existing P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10895 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.41

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	94.1	202.4	435.7

TABLE 2022 NP-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of Bryant Street
NOTES: El Dorado Ranch Park - 2022 NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12104 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	84.6	181.9	391.7

TABLE 2022 NP-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of Bryant Street
NOTES: El Dorado Ranch Park - 2022 NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5488 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	59.8	128.2	275.9

TABLE 2022 NP-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of West Park Entrance
NOTES: El Dorado Ranch Park - 2022 NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1759 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	60.3	129.4

TABLE 2022 NP-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road Between Park Entrances
NOTES: El Dorado Ranch Park - 2022 NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1725 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	59.5	127.7

TABLE 2022 NP-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of East Park Entrances
NOTES: El Dorado Ranch Park - 2022 NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1651 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	57.8	124.0

TABLE 2022 NP-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street Nouth of Oak Glen Road
NOTES: El Dorado Ranch Park - 2022 NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12659 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.91

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	87.2	187.5	403.6

TABLE 2022 NP-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street South of Oak Glen Road
NOTES: El Dorado Ranch Park - 2022 NP

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10945 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	94.4	203.0	437.1

TABLE 2022 P-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of Bryant Street
NOTES: El Dorado Ranch Park - 2022 P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12450 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.84

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	86.2	185.4	399.2

TABLE 2022 P-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of Bryant Street
NOTES: El Dorado Ranch Park - 2022 P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6010 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	63.4	136.2	293.1

TABLE 2022 P-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of West Park Entrance
NOTES: El Dorado Ranch Park - 2022 P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2280 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.61

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	71.6	153.7

TABLE 2022 P-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road Between Park Entrances
NOTES: El Dorado Ranch Park - 2022 P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1785 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	60.9	130.6

TABLE 2022 P-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of East Park Entrances
NOTES: El Dorado Ranch Park - 2022 P

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1710 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	59.2	126.9

TABLE 2022 P-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street Nouth of Oak Glen Road
NOTES: El Dorado Ranch Park - 2022 P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12780 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	87.7	188.7	406.2

TABLE 2022 P-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street South of Oak Glen Road
NOTES: El Dorado Ranch Park - 2022 P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11000 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	94.7	203.7	438.5

TABLE Cumulative NP-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of Bryant Street
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13844 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.30

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	92.5	199.0	428.4

TABLE Cumulative NP-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of Bryant Street
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6098 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	64.1	137.5	296.0

TABLE Cumulative NP-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of West Park Entrance
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2149 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	68.8	147.8

TABLE Cumulative NP-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road Between Park Entrances
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2115 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.29

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	68.1	146.2

TABLE Cumulative NP-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of East Park Entrances
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2041 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	66.5	142.8

TABLE Cumulative NP-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street Nouth of Oak Glen Road
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13109 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	89.2	191.9	413.1

TABLE Cumulative NP-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street South of Oak Glen Road
NOTES: El Dorado Ranch Park - Cumulative NP

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12505 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.01

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	103.1	221.8	477.7

TABLE Cumulative P-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of Bryant Street
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14190 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	94.1	202.3	435.5

TABLE Cumulative P-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of Bryant Street
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6620 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.24

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	67.6	145.2	312.6

TABLE Cumulative P-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road West of West Park Entrance
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2670 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.30

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	79.5	170.8

TABLE Cumulative P-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road Between Park Entrances
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2175 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.41

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	69.4	149.0

TABLE Cumulative P-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Oak Glen Road East of East Park Entrances
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2100 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.26

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	67.8	145.5

TABLE Cumulative P-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street Nouth of Oak Glen Road
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13230 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.10

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	89.8	193.1	415.7

TABLE Cumulative P-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 05/14/2019
ROADWAY SEGMENT: Bryant Street South of Oak Glen Road
NOTES: El Dorado Ranch Park - Cumulative P

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12560 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	103.4	222.5	479.1

TRAFFIC IMPACT ANALYSIS

FIVE WINDS RANCH / EL DORADO PARK PROJECT

CITY OF YUCAIPA

SAN BERNARDINO COUNTY, CALIFORNIA

LSA

May 2019

TRAFFIC IMPACT ANALYSIS

FIVE WINDS RANCH / EL DORADO PARK PROJECT

CITY YUCAIPA

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

City of Yucaipa
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Project No. YCA1801

LSA

May 2019

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1.0 INTRODUCTION

This Traffic Impact Analysis (TIA) has been prepared to assess the potential circulation impacts associated with the proposed Five Winds Ranch / El Dorado Park Project in the City of Yucaipa (City). Figure 1-1 illustrates the regional and project location. (Figures and tables are located at the end of each chapter.) Figure 1-2 illustrates the aerial view of the project area as well as the proposed conceptual driveway locations.

This report is intended to satisfy the requirements established by the City and the San Bernardino County Transportation Authority's (SBCTA) *Congestion Management Plan (CMP) TIA Guidelines*, dated 2016, as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). The scope of work for this TIA, including trip generation, trip distribution, study area, and analysis methodologies have been approved by City staff via the Scoping Agreement process. A copy of the Scoping Agreement is included as Appendix A.

This study examines traffic operations in the vicinity of the proposed project under the following six scenarios:

- Existing conditions;
- Existing with project conditions;
- Opening Year (2022) without project conditions;
- Opening Year (2022) with project conditions;
- Cumulative without Project Condition; and
- Cumulative with project conditions.

Traffic conditions were examined for the weekday daily, a.m., and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

1.1 PROJECT DESCRIPTION

At Five Winds Ranch lays an adobe brick residence surrounded by undeveloped land. The structure is vacant at this time. El Dorado Park consist of an existing shower and restroom facility with a parking lot. The balance of the site is undeveloped and is surrounded by informal hiking trails. The proposed project consist of improvements to 58 acres including the existing facilities of Five Winds Ranch and El Dorado Ranch Park. The improvements include exterior and interior modifications to existing structures, relocation of an existing barn, a new park ranger cabin, an archery range, new trails, new restrooms, and new campground and recreational vehicle park. Figure 1-3 illustrates the conceptual site plan. As illustrated in Figure 1-3, access to the project will be provided via two existing driveways. The westerly driveway (Project Driveway 1) currently provides access to Five Winds Ranch. The easterly driveway (Project Driveway 2) currently provides access to El Dorado

Ranch Park. As part of the project improvements, an acceleration/deceleration lane and left- turn ingress are being proposed along Oak Glen Road at the current Five Winds Ranch entrance. The proposed improvements are planned in two phases. However, based on discussion with the City during the TIA Scoping Agreement process, only the fully developed project has been considered for this analysis.

1.2 STUDY AREA

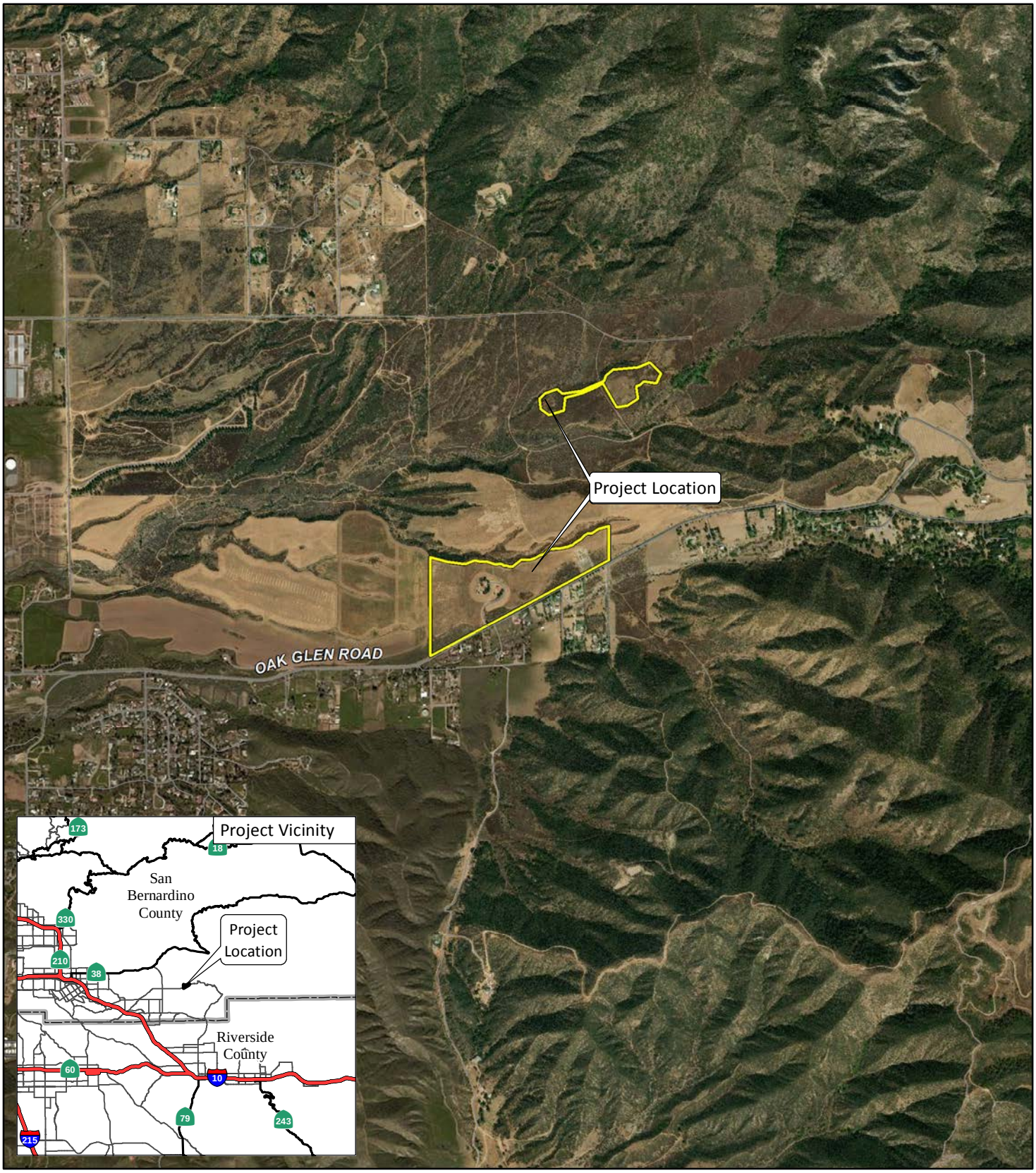
The study area was approved by City staff via the City's scoping agreement process (Appendix A). Based on discussion with City staff during the Scoping Agreement process, intersections of "Collector" or higher classification streets where the project would add 50 or more peak hour project trips or where the project might create a significant impact have been included in this analysis. All of the study area intersections listed below are under the jurisdiction of the City of Yucaipa.

1. Bryant Street/Oak Glen Road;
2. Driveway 1/ Oak Glen Road; and
3. Driveway 2/ Oak Glen Road.

Figure 1-4 illustrates the locations of all analysis intersections.

1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location
- Figure 1-2: Aerial View of Project Area
- Figure 1-3: Conceptual Site Plan
- Figure 1-4: Study Area Intersections



LSA

FIGURE 1-1

N

0 1000 2000
FEET

SOURCE: ESRI Streetmap, 2013; Bing Map, 2015.

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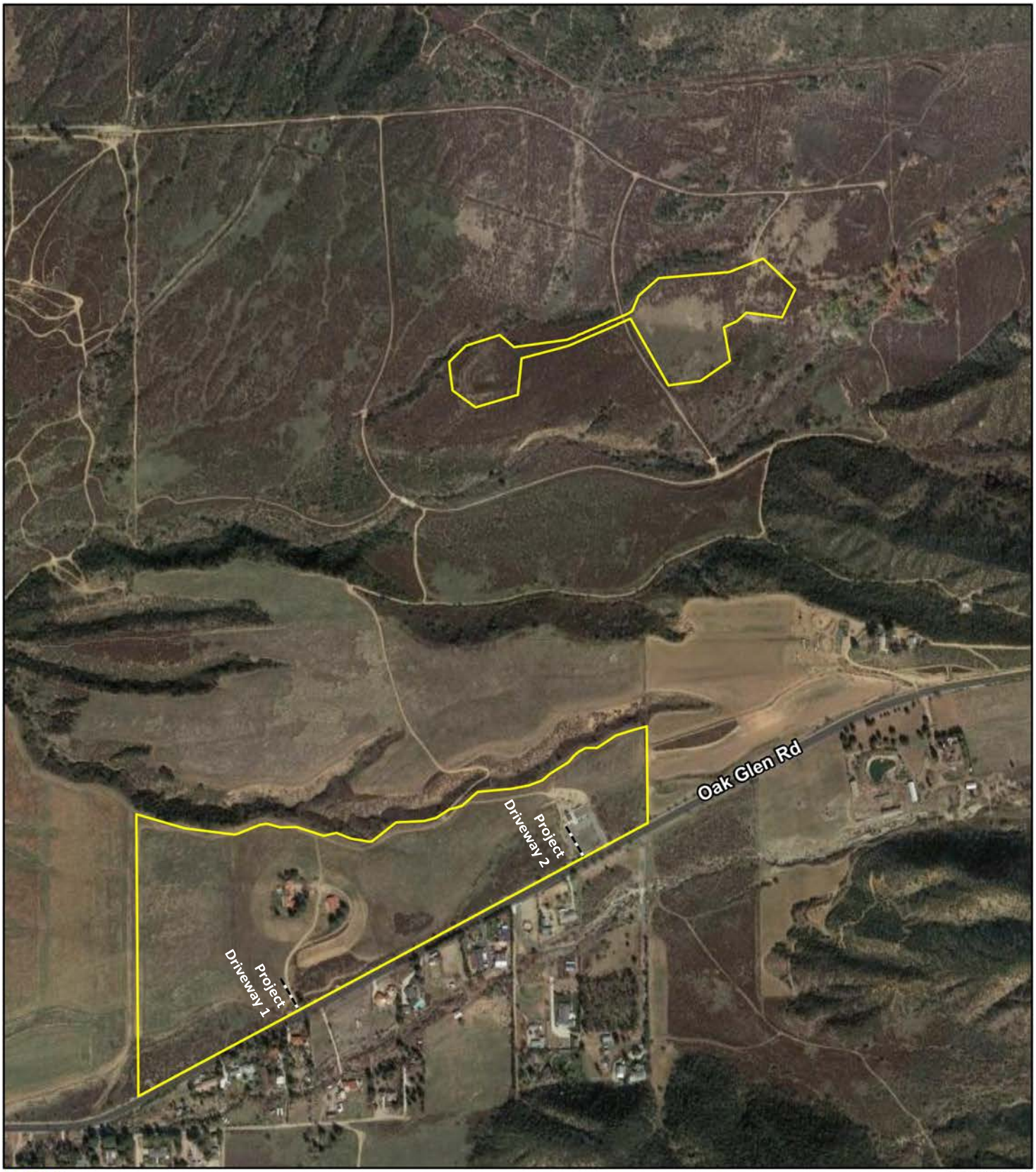
Five Winds Ranch/ El Dorado Park Project
Traffic Impact Study

Regional and Project Location



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LEGEND

Project Limits

Project Driveway

0 350 700
FEET

SOURCE: Google (2018)

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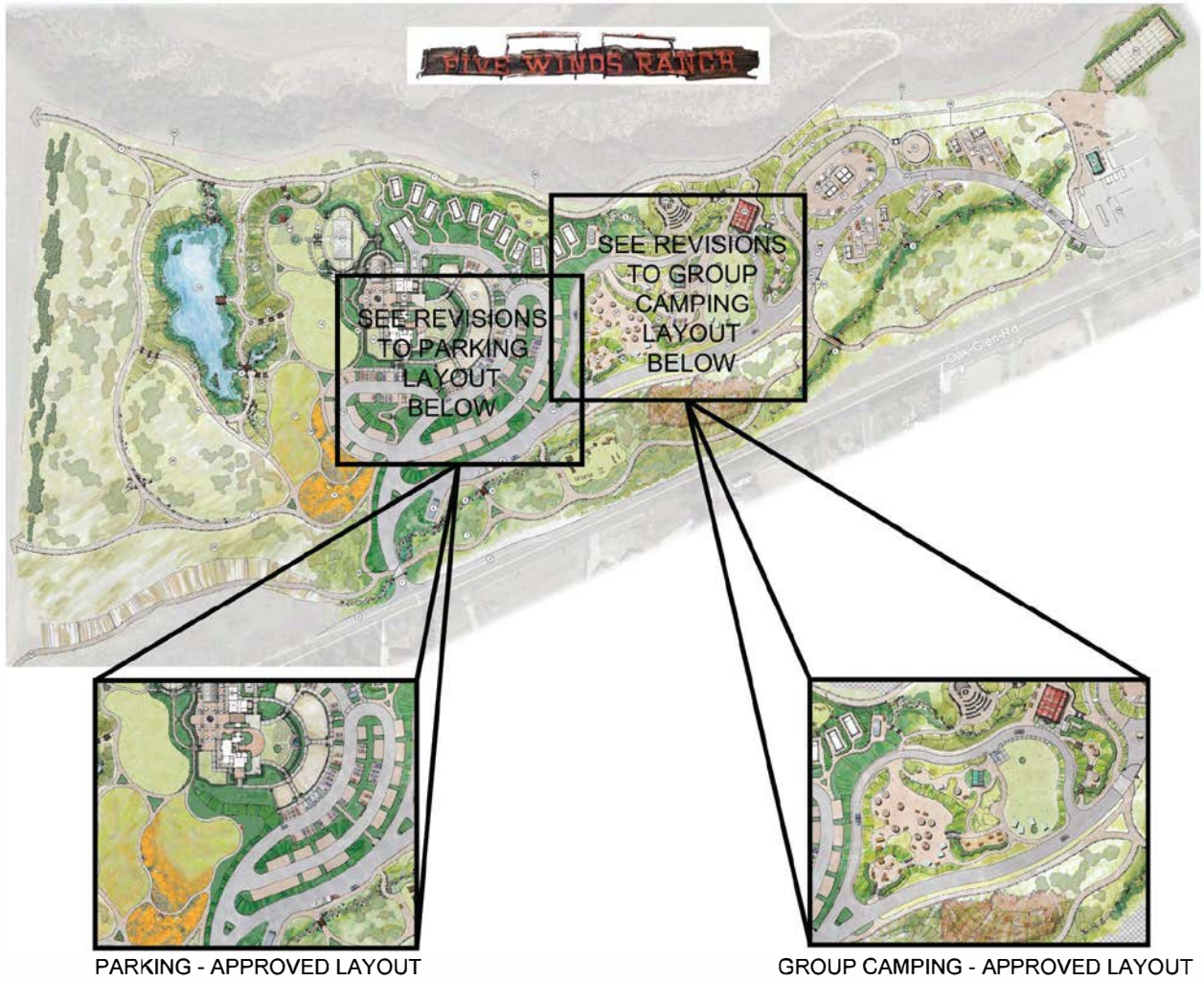
FIGURE 1-2

Five Winds Ranch/El Dorado Park Project

Traffic Impact Analysis

Project Limits



LSA

FIGURE 1-3

N

Five Winds Ranch/El Dorado Project Park
Traffic Impact Analysis

Conceptual Site Plan

SOURCE: Architerra Design Group, 2018

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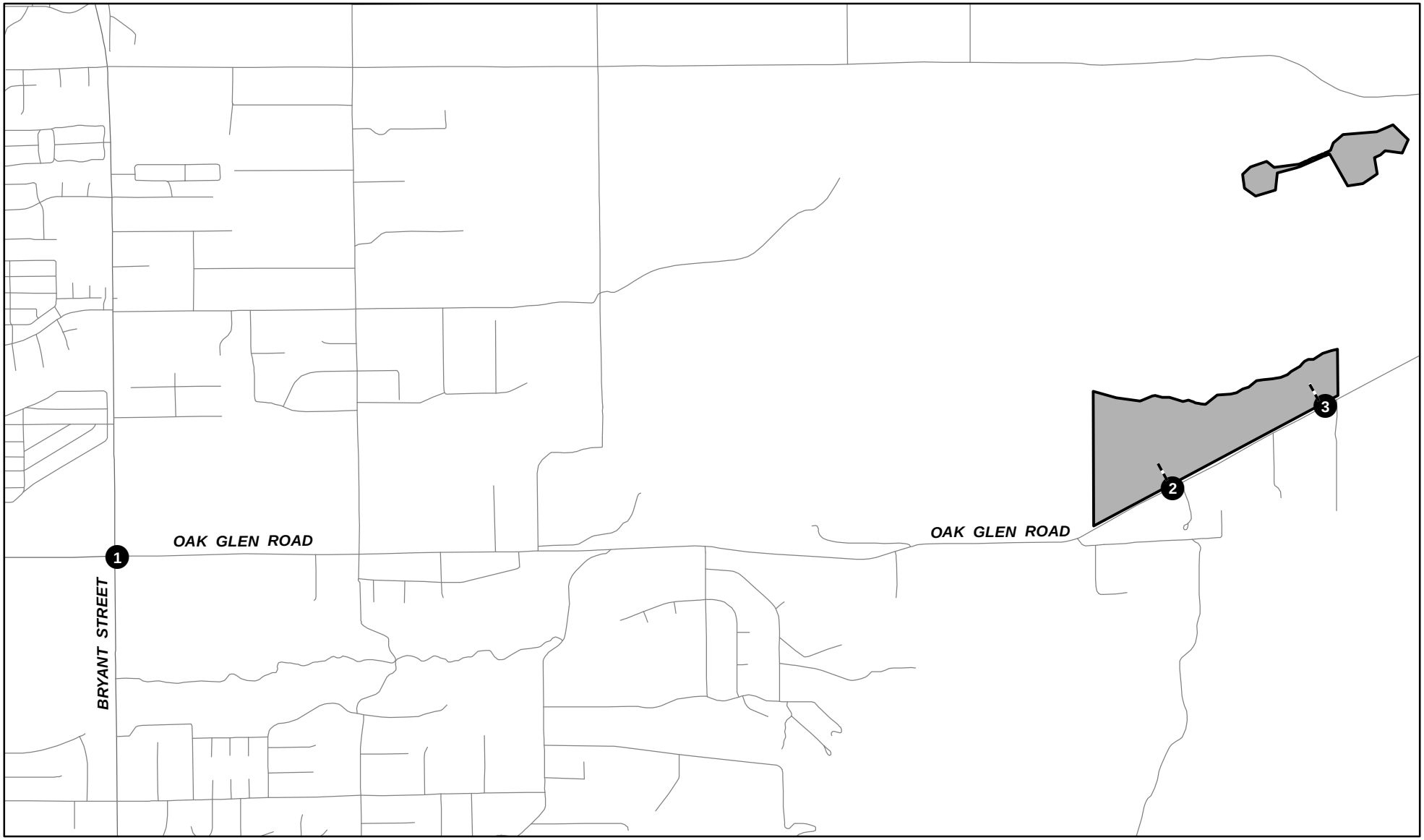

LSA

FIGURE 1- 4

LEGEND

Project Site

Study Area Intersection

Project Driveway

N

0 700 1400

FEET

SOURCE: ESRI Streetmap, 2013

Five Winds Ranch/ El Dorado Park Ranch Project
Traffic Impact Study

Study Area Intersections

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2.0 ANALYSIS METHODOLOGY

2.1 LEVEL OF SERVICE DEFINITIONS

Level of service (LOS) can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control, and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2-A. A description of LOS for roadway segments is summarized in Table 2-B.

For all study area intersections, the *Highway Capacity Manual 6th Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using Synchro 10 software, which uses the HCM 6 methodologies.

2.2 LEVEL OF SERVICE PROCEDURES AND THRESHOLDS

Study intersections analyzed in this report are under the jurisdiction of the City of Yucaipa, which uses LOS C as its minimum level of service criterion for intersections.

2.3 SIGNIFICANCE THRESHOLD

At study intersections the determination of a significant circulation impact is based on the impact criteria contained in the SBCTA CMP TIA guidelines, which state that a significant project impact occurs at a study intersection when the peak hour LOS falls below the City's LOS standard, LOS C (to D, E or F), or the project contributes to an existing or forecast deficiency.

2.4 LIST OF CHAPTER 2.0 TABLES

- Table 2-A: Level of Service Definitions for Intersections
- Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Table 2-A: Intersection Level of Service Definitions

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

3.0 CIRCULATION NETWORK SETTING

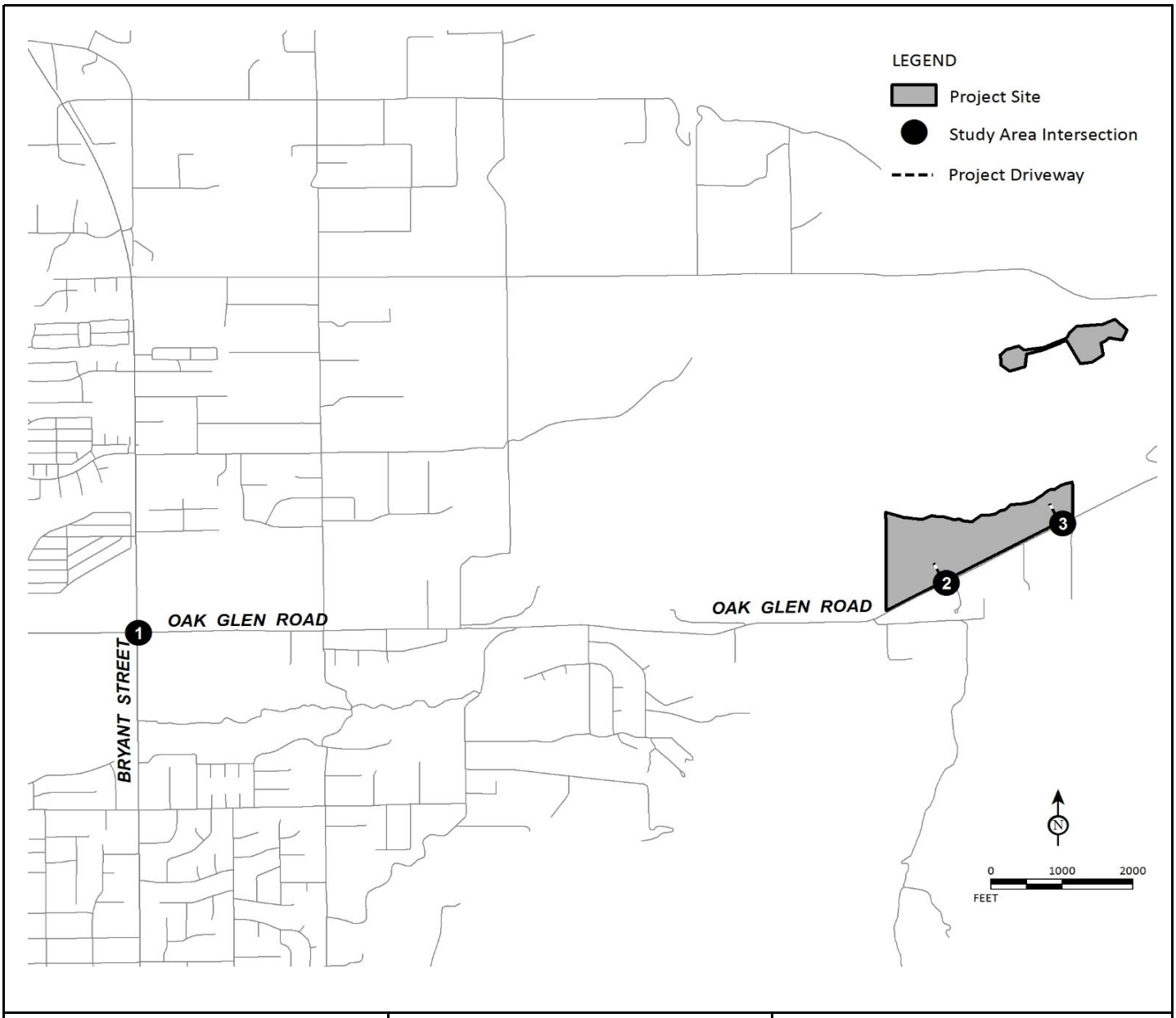
Figure 3-1 illustrates the existing study intersection geometrics and traffic control. As illustrated in Figure 1-3, access to the project will be provided via two existing driveways. Project Driveway 1 currently provides access to Five Winds Ranch while Project Driveway 2 provides access to El Dorado Ranch Park. As part of the project improvements, an acceleration/deceleration lane and left-turn ingress are being proposed along Oak Glen Road at Project Driveway 1. Therefore, the project will provide an improved and safer ingress/egress at Project Driveway 1. Figure 3-2 illustrates the intersection geometrics under with project conditions.

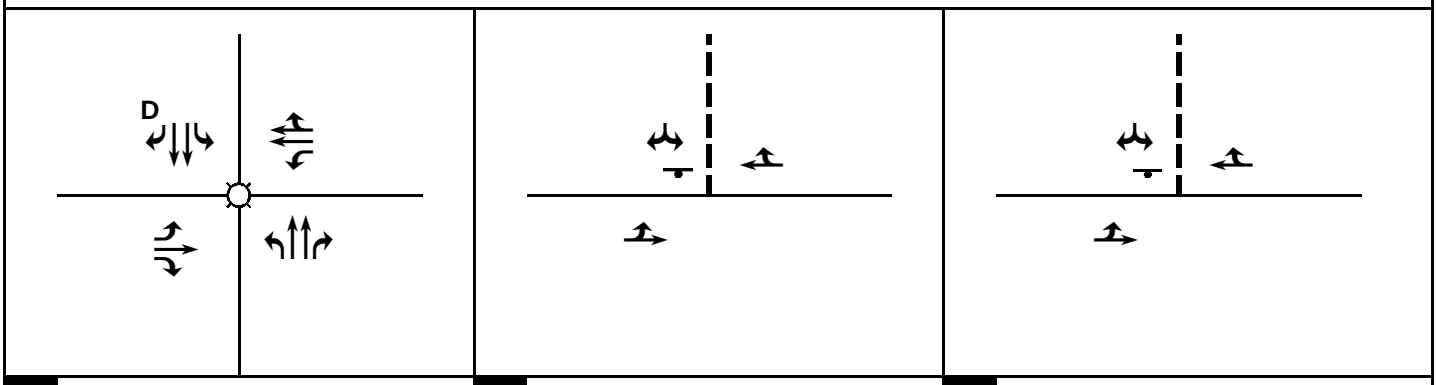
Following is a brief description of major roadways within the TIA study area:

- Oak Glen Road is a two lane east/west roadway with a posted speed limit of 50 miles per hour (MPH). According to the City of Yucaipa General Plan, the section of Oak Glen Road east of Bryant Avenue is classified as a Controlled Limited Access Collector while west of Bryant Avenue, it is classified and as a secondary highway. The City also classifies Oak Glen Road as a scenic highway.

3.1 LIST OF CHAPTER 3.0 FIGURES

- Figure 3-1: Existing Study Intersection Geometrics and Traffic Control
- Figure 3-2: Proposed Study Intersection Geometrics and Traffic Control





1	Bryant Sreet/Oak Glen Road	2	Project Driveway 1/Oak Glen Road	3	Project Driveway 2/Oak Glen Road

LSA

FIGURE 3-1

Legend

- Stop Sign
- Signal
- Project Driveway
- D Defacto Right Turn

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

Existing Study Intersection Geometrics and Traffic Control

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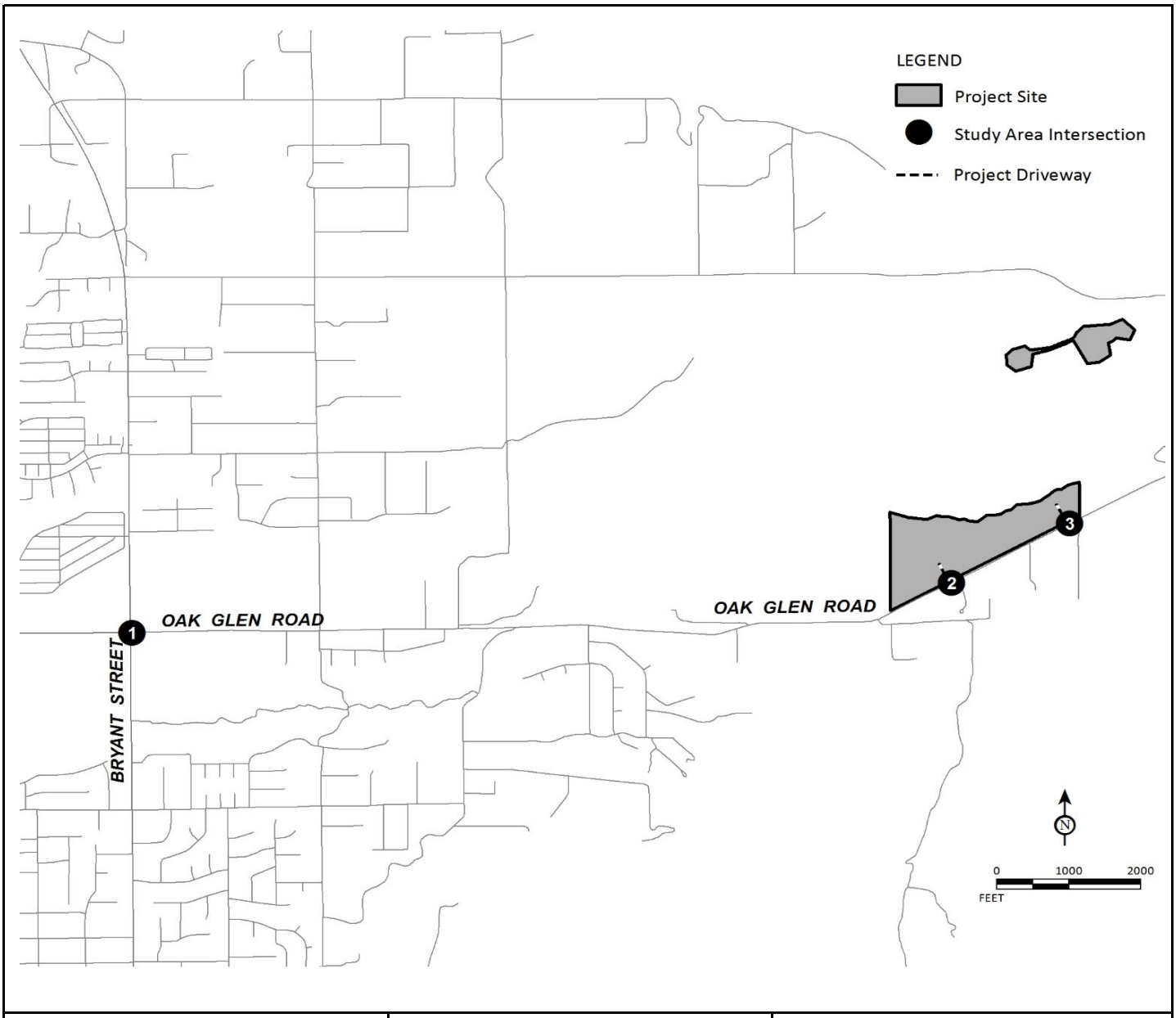

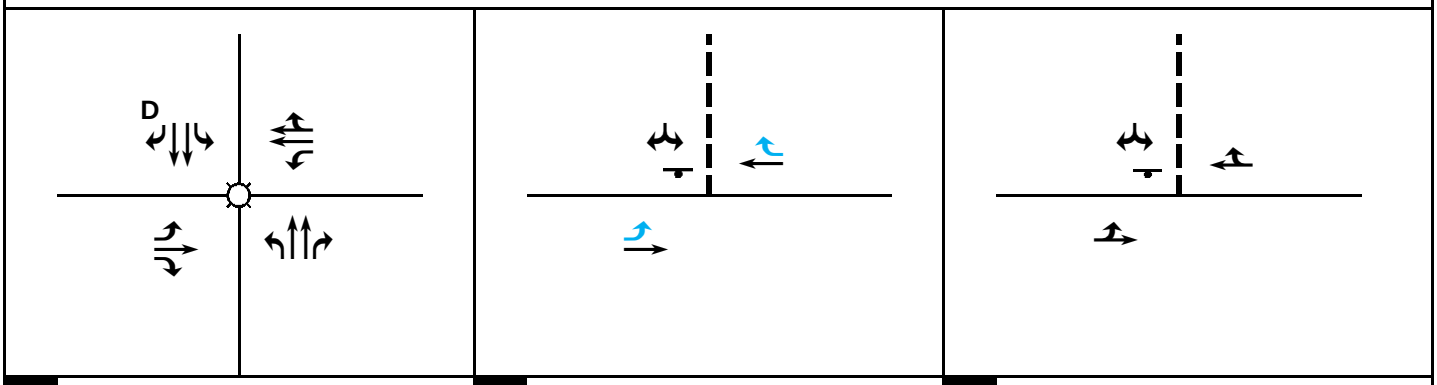

1	Bryant Sreet/Oak Glen Road	2	Project Driveway 1/Oak Glen Road	3	Project Driveway 2/Oak Glen Road

LSA

FIGURE 3-2

Legend

- Stop Sign
- Signal
- Recommended Improvements
- Project Driveway
- D Defacto Right Turn

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

Proposed Study Intersection Geometrics and Traffic Control

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4.0 TRAFFIC VOLUMES WITHOUT PROJECT SCENARIOS

4.1 EXISTING TRAFFIC VOLUMES

For all intersections, existing traffic volumes were collected by Counts Unlimited in March, 2019. Detailed count sheets are contained in Appendix B. The City noted that traffic during the apple harvesting season is greater than remaining months of the year. The apple season typically starts late August and ends in late November. Since, the traffic counts collected were outside the apple season, LSA applied a growth factor to the existing counts to account for the higher traffic generated during the apple season. Following is a step-by step description of the methodology applied to develop existing traffic volumes accounting for apple season growth:

Step 1 – Daily roadway segment counts were collected by Counts Unlimited along Oak Glen Road between Project Driveway 1 and Project Driveway 2 in March 2019.

Step 2 – Counts Unlimited also provided daily counts taken during apple season (September 2015).

Step 3 – The September 2015 counts were adjusted to 2019 volumes by applying an annual growth rate of 0.4%. The growth was developed using the San Bernardino County Transportation Analysis Model (SBTAM).

Step 4 – Adjusted apple season daily counts were then compared to existing daily counts to determine seasonal growth. Seasonal growth of 0.17% was applied to traffic volumes on Oak Glen Road to develop existing traffic volumes that has been used in the analysis.

Figure 4-1 illustrates adjusted existing peak hour volumes at study intersections. Detailed volume development worksheets are included in Appendix C.

4.2 OPENING YEAR (2022) WITHOUT PROJECT TRAFFIC VOLUMES

Per discussion with City Staff, traffic volumes for opening year without project conditions were developed by applying a growth rate to the existing without project traffic volumes and adding trips from cumulative projects in the area. The growth was developed using SBTAM that is applicable for the study area.

Figure 4-2 illustrates peak hour traffic volumes at study intersections for project completion year (2022) without project conditions.

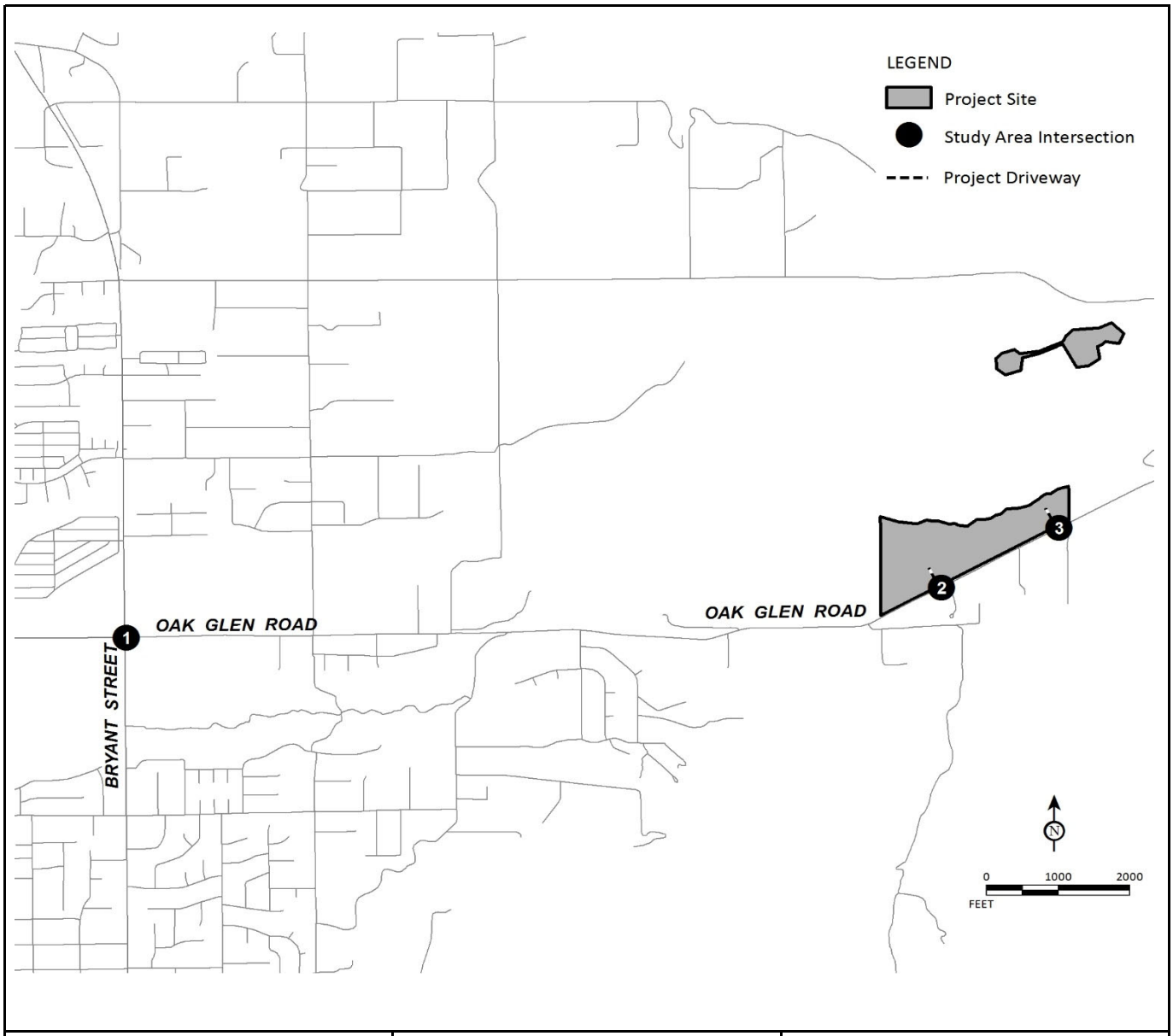
4.3 CUMULATIVE (2022) TRAFFIC VOLUMES

City staff provided information regarding cumulative projects in the vicinity of the proposed project. Figure 4-3 illustrates the cumulative project locations. The trip generation for cumulative projects was developed using rates from the ITE *Trip Generation Manual*, 10th Edition. As shown in Table 4-A, cumulative projects are expected to generate 5,652 net daily trips, with 787 net trips occurring during the a.m. peak hour and 640 net trips occurring during the p.m. peak hour. Project trips for these cumulative projects were assigned to the roadway network based on their locations in relation to surrounding land uses and regional arterials. Figure 4-3 illustrates peak hour cumulative

project trips at study area intersections. Figure 4-4 illustrates peak hour traffic volumes at study intersections under opening year without project conditions. Detailed volume development worksheets are included in Appendix C.

4.4 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Existing Peak Hour Traffic Volumes
- Figure 4-2: Project Completion Year (2022) without Peak Hour Traffic Volumes
- Figure 4-3: Cumulative Project Locations
- Figure 4-4: Cumulative Project Trip Assignment
- Figure 4-5: Cumulative (2022) without Project Peak Hour Traffic Volumes
- Table 4-A: Cumulative Projects Trip Generation



LSA

FIGURE 4-1

XXX / YYY

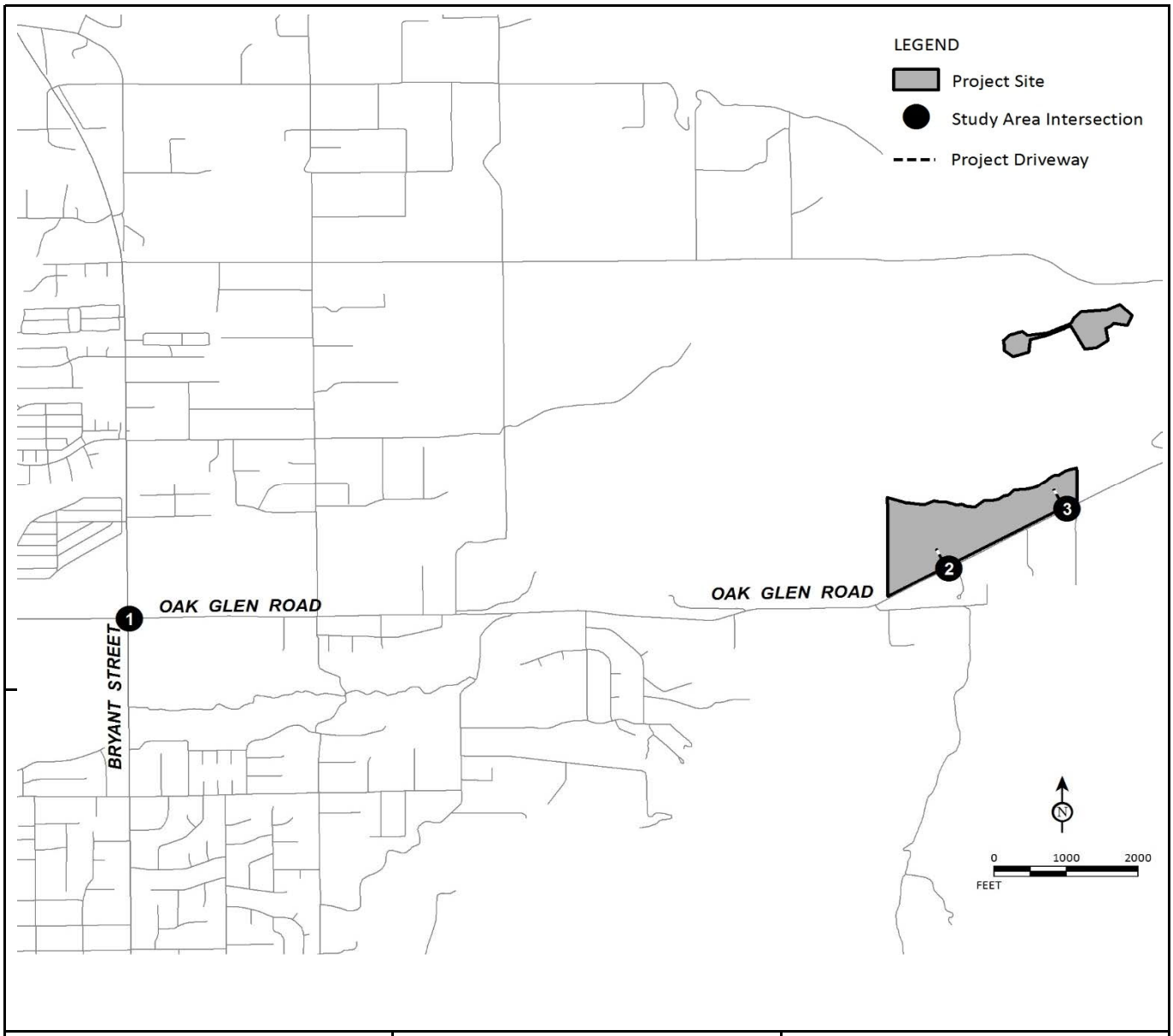
AM / PM Peak Hour Traffic Volumes

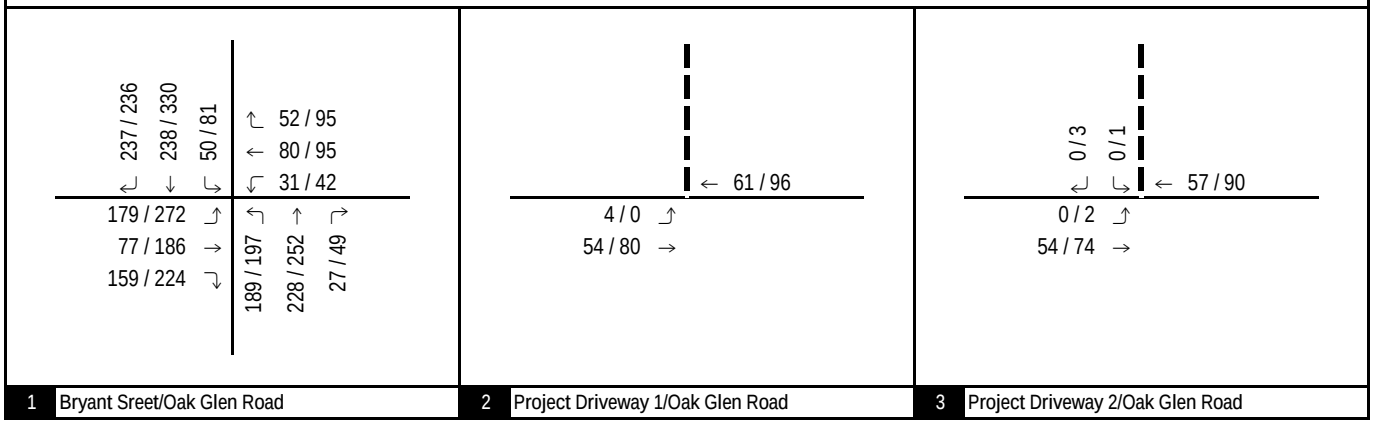
--- Project Driveway

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

Existing Peak Hour Traffic Volumes





LSA

FIGURE 4-2

XXX / YYY

AM / PM Peak Hour Traffic Volumes

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

--- Project Driveway

Project Completion Year (2022) without Project Peak Hour Traffic Volumes

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LSA

LEGEND

Project Location

Cumulative Project Location

FIGURE 4-3

N

0 1000 2000
FEET

SOURCE: ESRI Streetmap, 2013; Bing Aerial, 2015.

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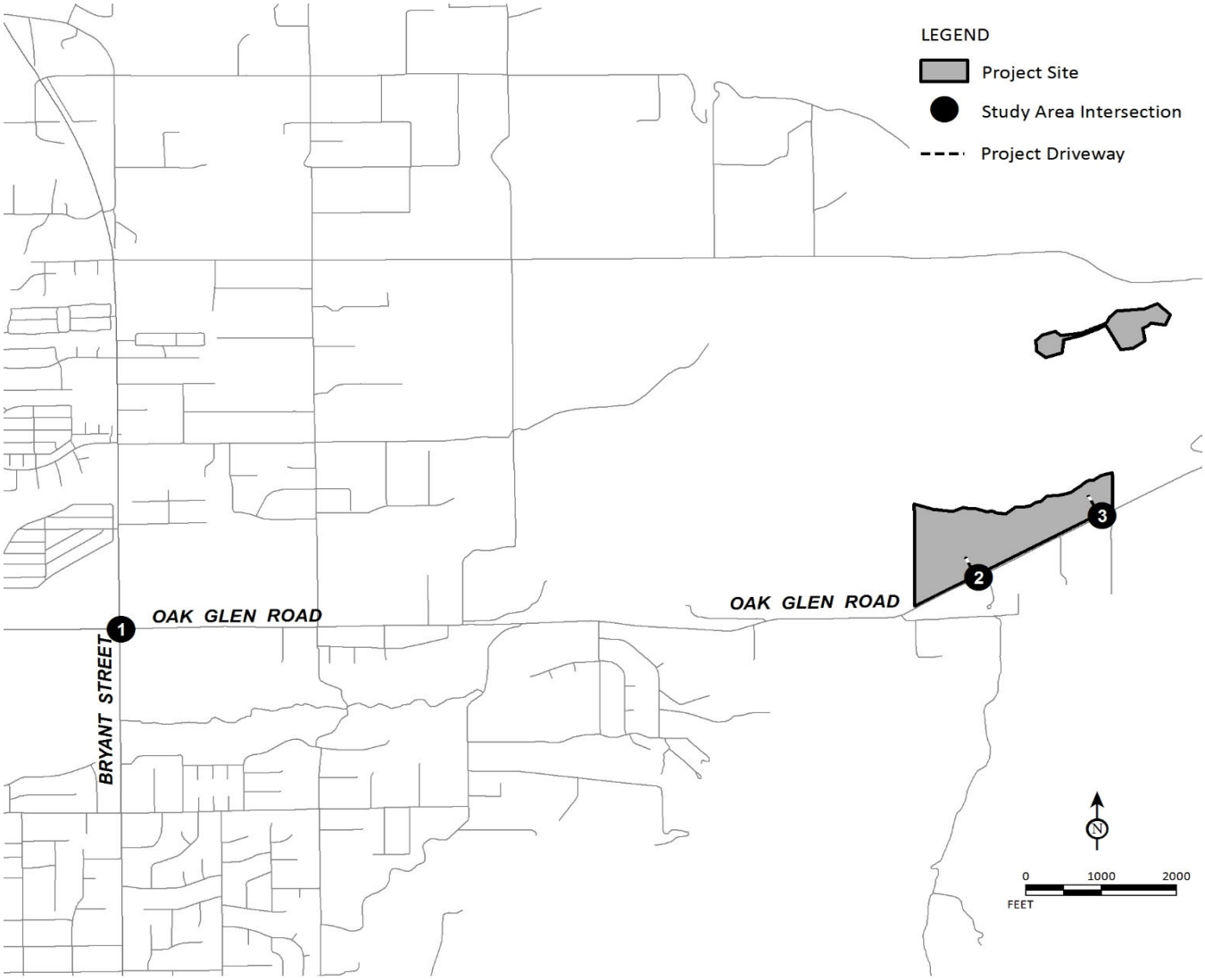
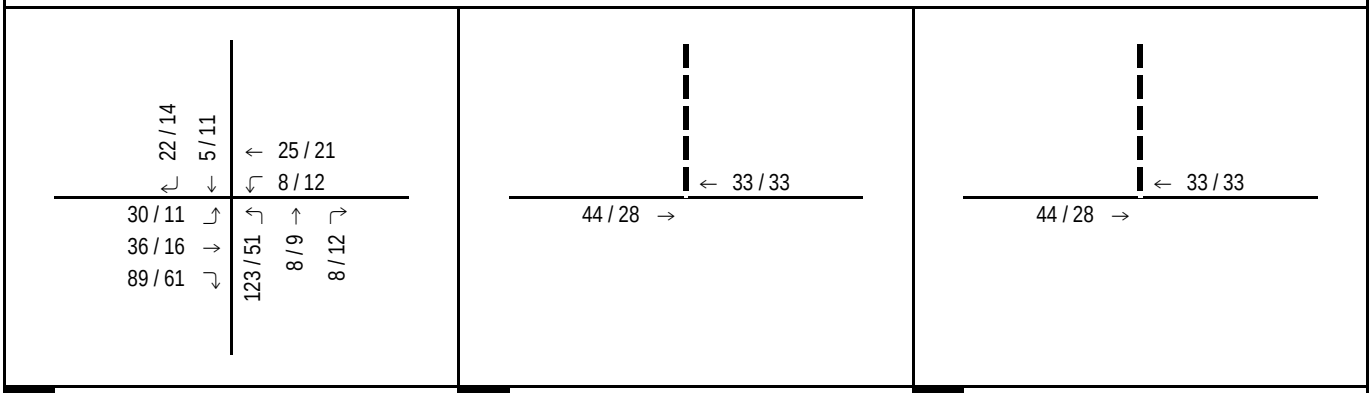
Five Winds Ranch / El Dorado Park
Traffic Impact Study

Cumulative Project Location





1	Bryant Sreet/Oak Glen Road	2	Project Driveway 1/Oak Glen Road	3	Project Driveway 2/Oak Glen Road

LSA

FIGURE 4-4

XX / YY

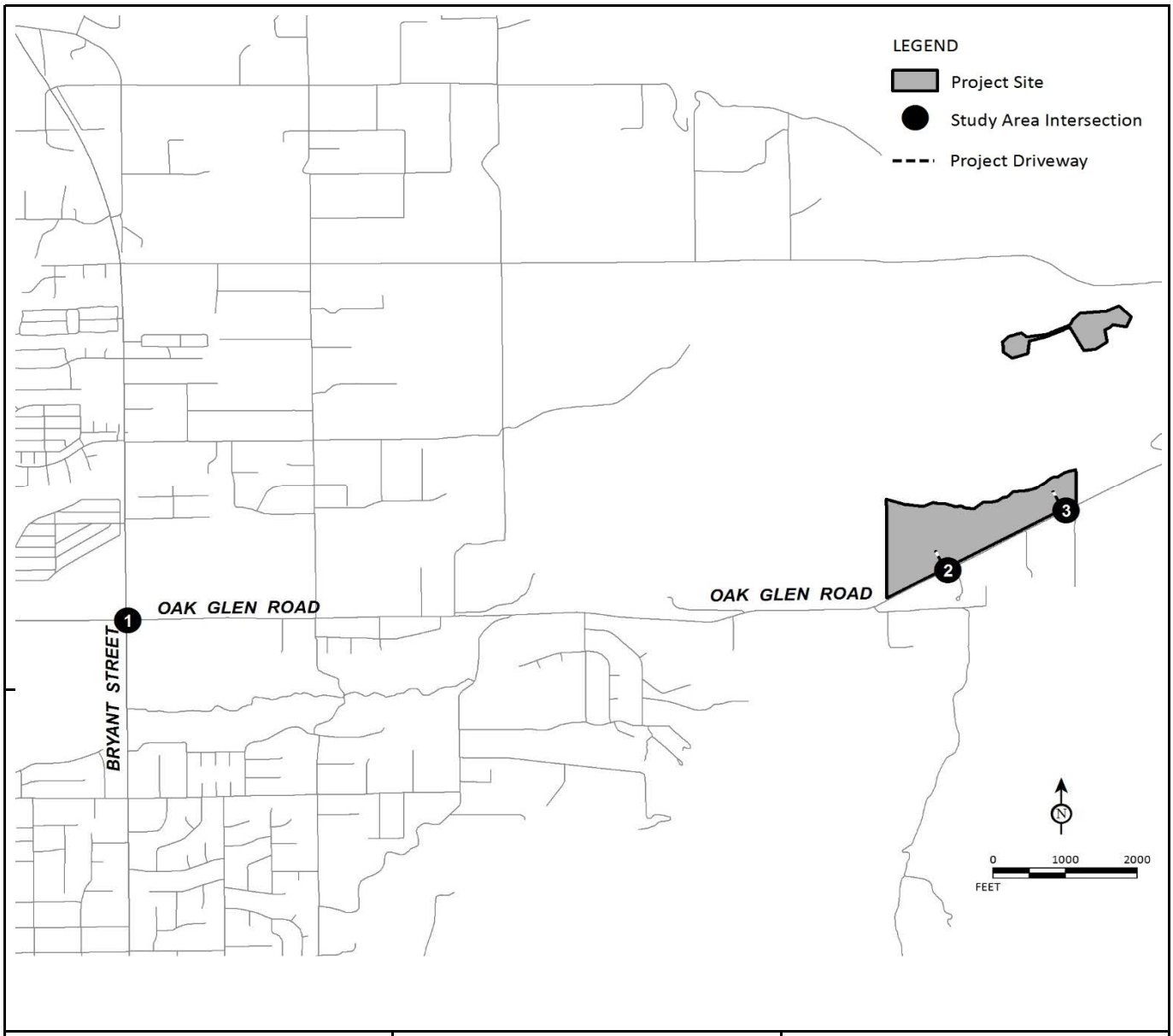
AM / PM Peak Hour Volumes

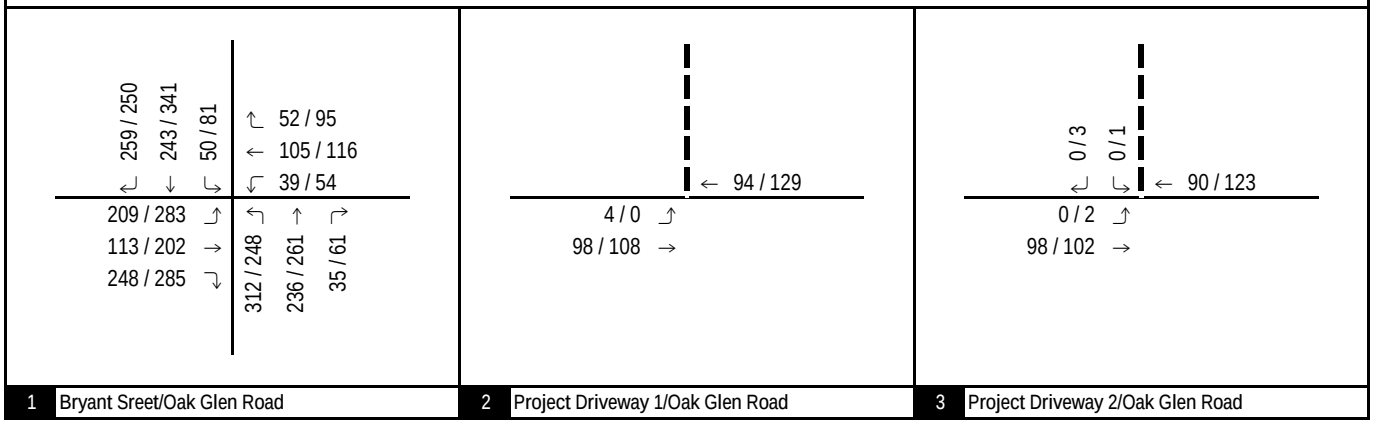
--- Project Driveway

Five Winds Ranch/El Dorado Park Project

Traffic Impact Analysis

Cumulative Project Trip Assignment





LSA

FIGURE 4-5

XXX / YYY

AM / PM Peak Hour Traffic Volumes

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

--- Project Driveway

Cumulative (2022) without Project Peak Hour Traffic Volumes

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LSA

Table 4-A - Cumulative Projects Trip Generation

Land Use	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
1. Oak Glen Specific Plan									
Single-Family Residential	200	DU							
Trips/Unit[1]			0.19	0.56	0.75	0.63	0.37	1.00	9.52
Trip Generation			38	113	150	126	74	200	1,904
Innovation Center	10	TSF							
Trips/Unit[1]			1.01	0.21	1.22	0.16	0.91	1.07	8.11
Trip Generation			10	2	12	2	9	11	81
Office	10	TSF							
Trips/Unit[1]			1.60	0.20	1.80	0.26	1.48	1.74	11.65
Trip Generation			16	2	18	3	15	18	117
	Project Trip Generation		64	117	180	130	98	228	2,102
2. Wildwood Calvary Chapel School (CUP 16-085)									
K-12 School	427	Stu[4]							
Trips/Unit[2]			0.49	0.31	0.80	0.07	0.10	0.17	2.48
Trip Generation			209	132	341	30	43	73	1,059
Day Care	228	Stu[4]							
Trips/Unit[3]			0.41	0.37	0.78	0.37	0.42	0.79	4.09
Trip Generation			93	84	177	84	96	180	933
	Project Trip Generation		302	216	518	114	139	253	1,991
3. Lakeview Mobile Home Park Expansion (CUP 18-067)	30	DU							
Trips/Unit[5]			0.08	0.18	0.26	0.29	0.17	0.46	5.00
Trip Generation			2	5	7	9	5	14	150
4. Performing Arts Center (CUP 14-067)	250	Seats							
Trips/Unit[6]			-	-	-	0.05	0.08	0.13	0.13
Trip Generation			-	-	-	13	20	33	33
5 Gas Station (LUCR 18-130)	8.00	VFP							
Trips/Unit[7]			5.14	5.14	10.28	7.04	7.03	14.07	172.01
Trip Generation			41	41	82	56	56	112	1,376
Total Net Cars			**409**	**379**	**787**	**322**	**318**	**640**	**5,652**

Notes:

DU=Dwelling Units; TSF= Thousand Square Feet; STU= Students; VFP= Vehicle Fueling Positions

[1] Rates based Traffic Impact Analysis for the Oak Glen Creek Specific Plan, IBI Group, July 2018

[2] Rates based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th edition) for Land Use 536– "Private School K-12"

[3] Rates based on the ITE *Trip Generation Manual* (10th edition) for Land Use 565– "Day Care"

[4] Number of students based on the Site Plan provided in the June 2017 Planning Commission Agenda for the City of Yucaipa.

[5] Rates based on the ITE *Trip Generation Manual* (10th edition) for Land Use 240– "Mobile Home Park"

[6] Rates based on the ITE *Trip Generation Manual* (10th edition) for Land Use 460– "Arena". The *ITE Trip Generation Manual* does not have AM and Daily Trip Generation rates. PM rates were used as Daily.

[7] Rates based on the ITE *Trip Generation Manual* (10th edition) for Land Use 944 – "Gasoline/Service Station"

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

The trip generation for the proposed project was developed using rates from the ITE *Trip Generation Manual* (10th Edition) for Land Use 537 "Campground/Recreational Vehicle Park", Setting/Location - "General Urban/Suburban." As shown in Table 5-A, the project is anticipated to generate 28 trips in the a.m. peak hour, 58 trips in the p.m. peak hour and 573 daily trips.

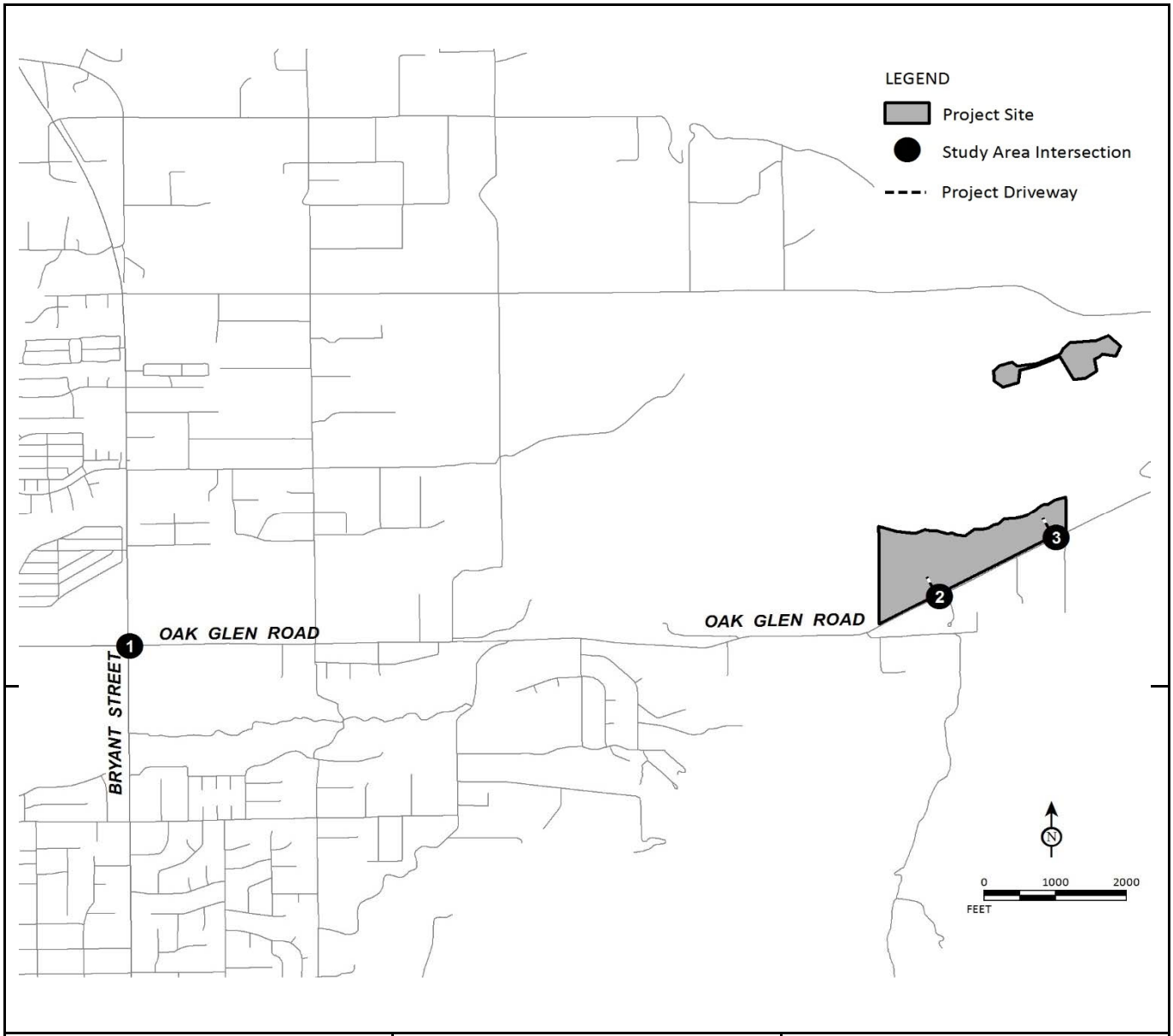
5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

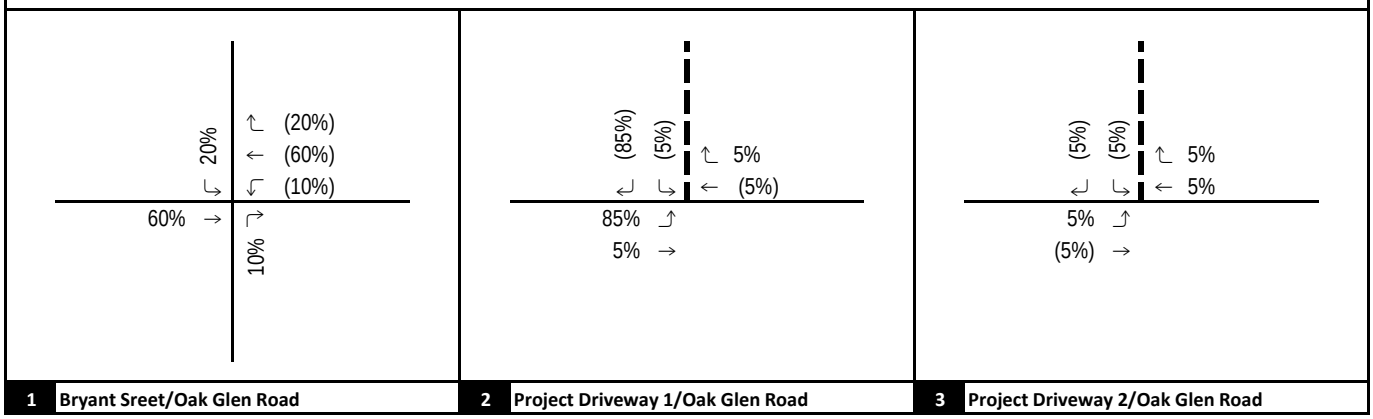
The distribution of project trips was developed based on the regional roadway network and the locations of residential, employment, and commercial centers in relation to the proposed project and in consultation with City staff during the Scoping Agreement process. Figures 5-1 illustrate the trip distributions for the proposed project at the study intersections.

The trip generation was applied to the trip distribution pattern to develop the trip assignment for the land use. Figures 5-2 illustrates the trip assignments.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution
- Figure 5-2: Project Trip Assignment
- Table 5-A: Project Trip Generation





1	Bryant Sreet/Oak Glen Road	2	Project Driveway 1/Oak Glen Road	3	Project Driveway 2/Oak Glen Road

LSA

FIGURE 5-1

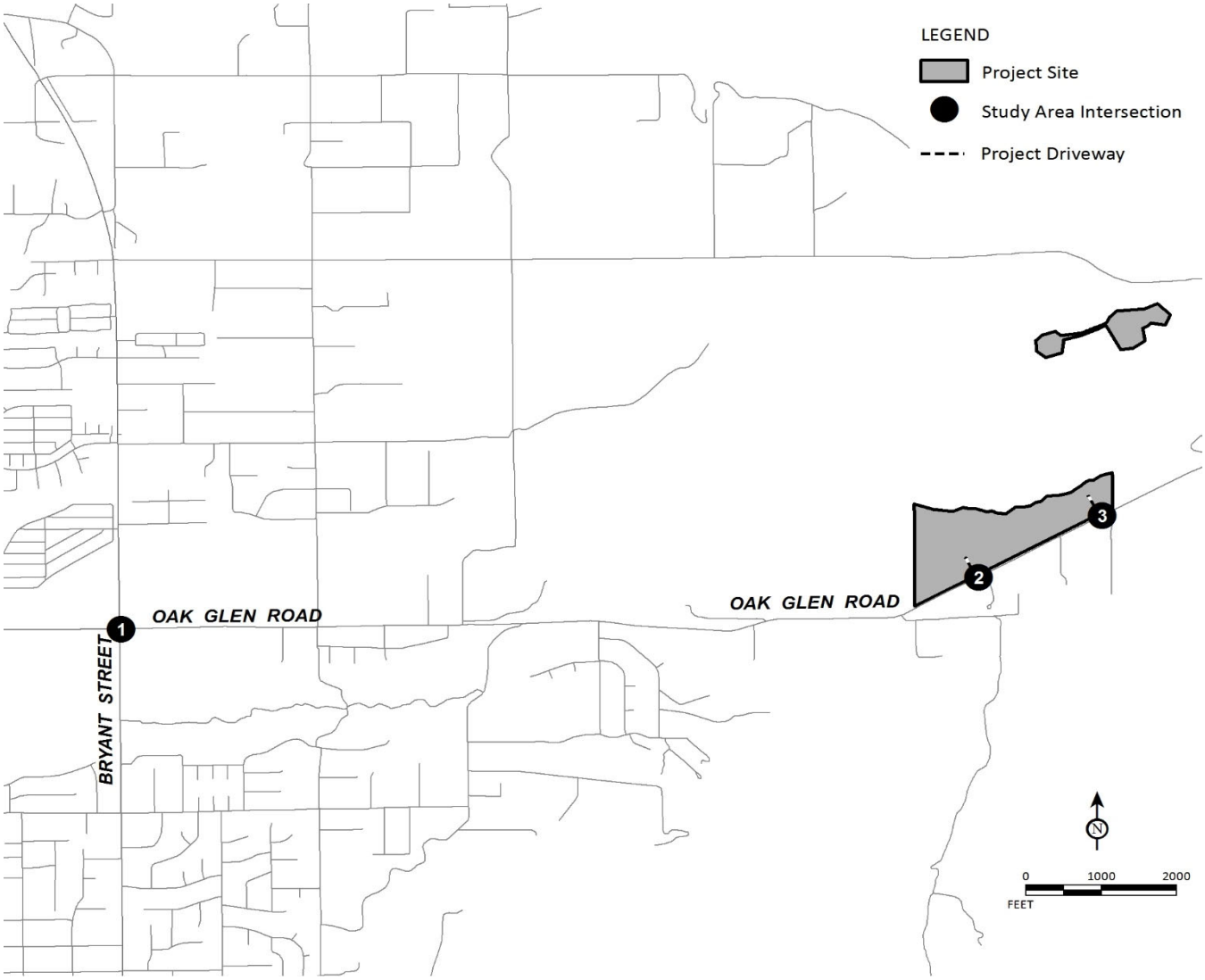
XX% (YY%) Inbound (Outbound) Distribution

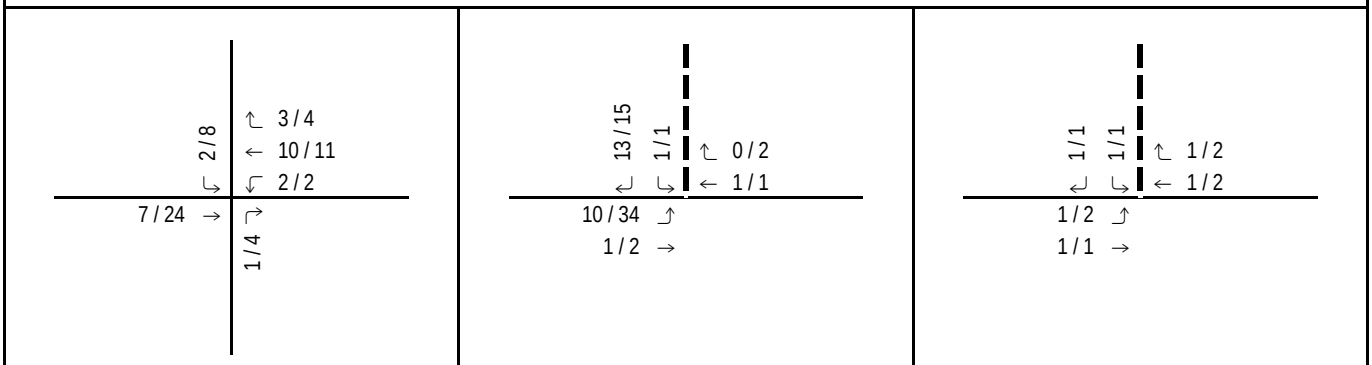
--- Project Driveway

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

Project Trip Distribution





1	Bryant Sreet/Oak Glen Road	2	Project Driveway 1/Oak Glen Road	3	Project Driveway 2/Oak Glen Road

LSA

FIGURE 5-2

XX / YY

AM / PM Peak Hour Volumes

--- Project Driveway

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

Project Trip Assignment

LSA

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily[2]
		In	Out	Total	In	Out	Total	
Five Winds Ranch/El Dorado Park Project	58.51 AC							
Trips/Unit[1]		0.20	0.28	0.48	0.68	0.30	0.98	9.80
Trip Generation		12	16	28	40	18	58	573

Notes:

AC = Acres

[1] Rates based on the Institute of Transportation Engineers (ITE)*Trip Generation Manual* (10th Edition) for Land Use 537 – "Campground/Recreational Vehicle Park", Setting/Location - "General Urban/Suburban."

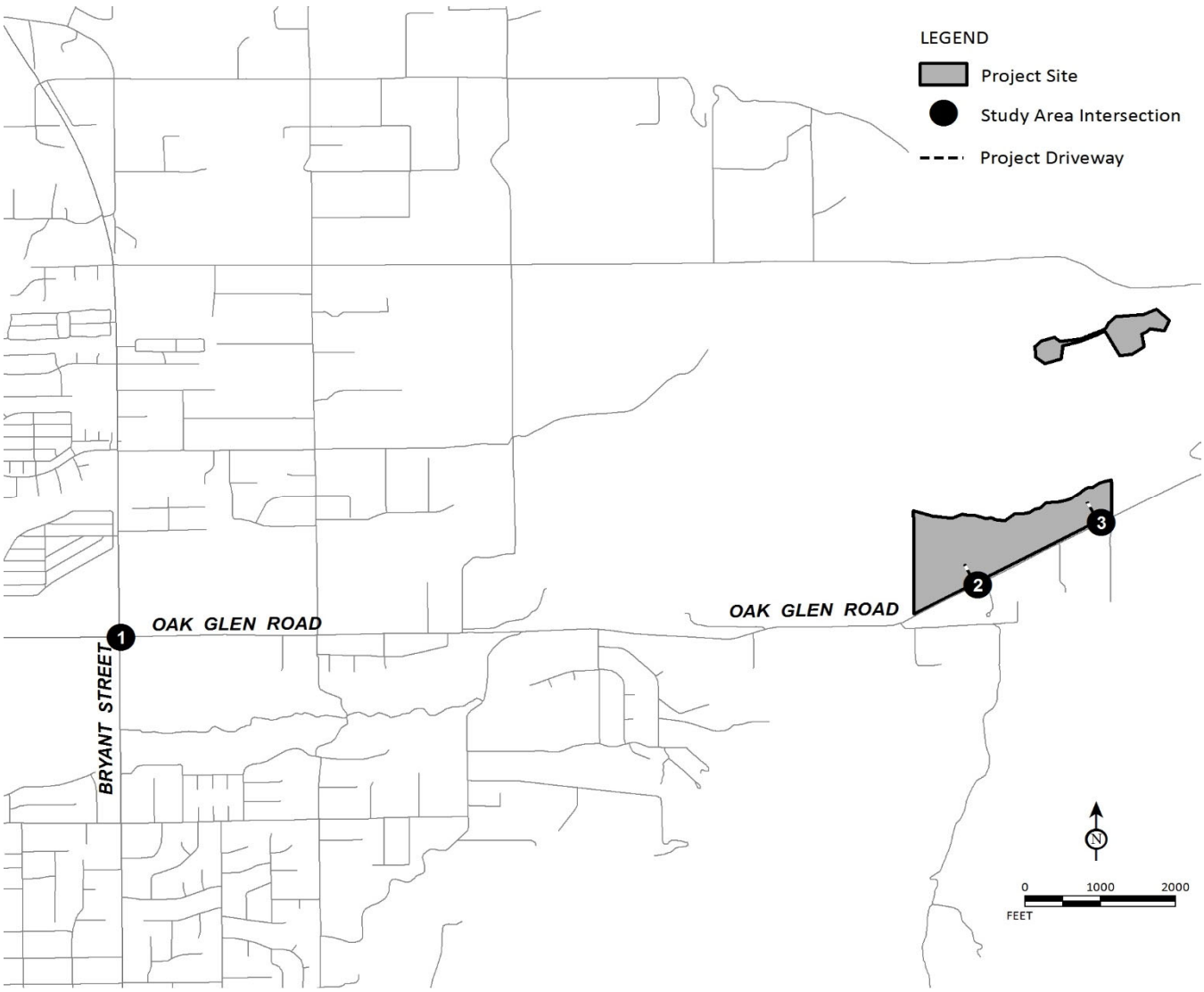
[2] Since a daily trip generation rate was not provided in the ITE*Trip Generation Manual* for Land Use 537 – "Campground/Recreational Vehicle Park", the daily rate was calculated by applying a factor of 10 to P.M. Peak Hour rates in consulattaion with the City.

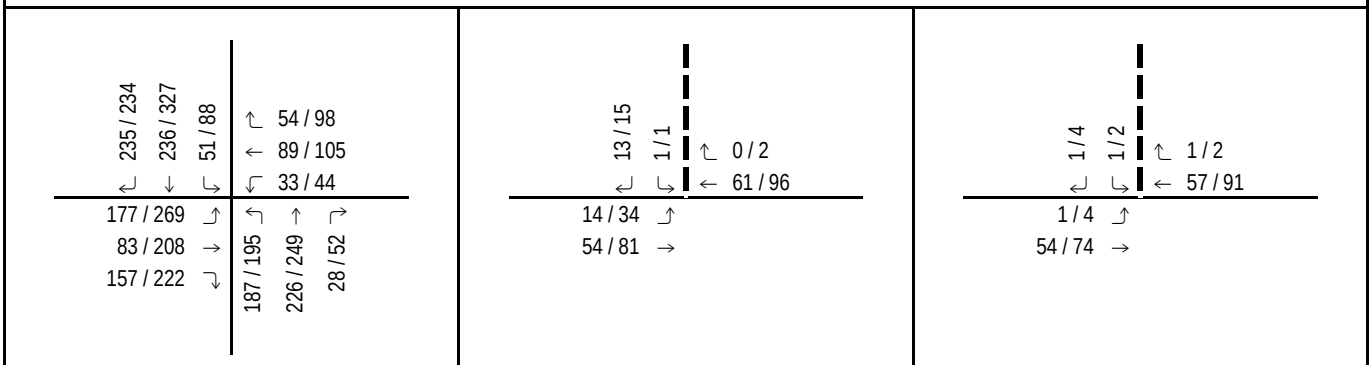
6.0 TRAFFIC VOLUMES WITH PROJECT SCENARIOS

Existing, opening year (2022) and cumulative (2022) with project traffic volumes were developed by adding project traffic to the corresponding without project scenarios. Figure 6-1 illustrates existing with project peak hour volumes at study intersections. Figure 6-2 illustrates opening year with project peak hour volumes at study intersections. Figure 6-3 illustrates cumulative with project peak hour volumes at study intersections. Detailed volume development worksheets are included in Appendix C.

6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing with Project Peak Hour Traffic Volumes
- Figure 6-2: Opening Year (2022) with Project Peak Hour Traffic Volumes
- Figure 6-3: Cumulative (2022) with Project Peak Hour Traffic Volumes





1	Bryant Sreet/Oak Glen Road	2	Project Driveway 1/Oak Glen Road	3	Project Driveway 2/Oak Glen Road

LSA

FIGURE 6-1

XXX / YYY

AM / PM Peak Hour Traffic Volumes

--- Project Driveway

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

Existing with Project Peak Hour Traffic Volumes

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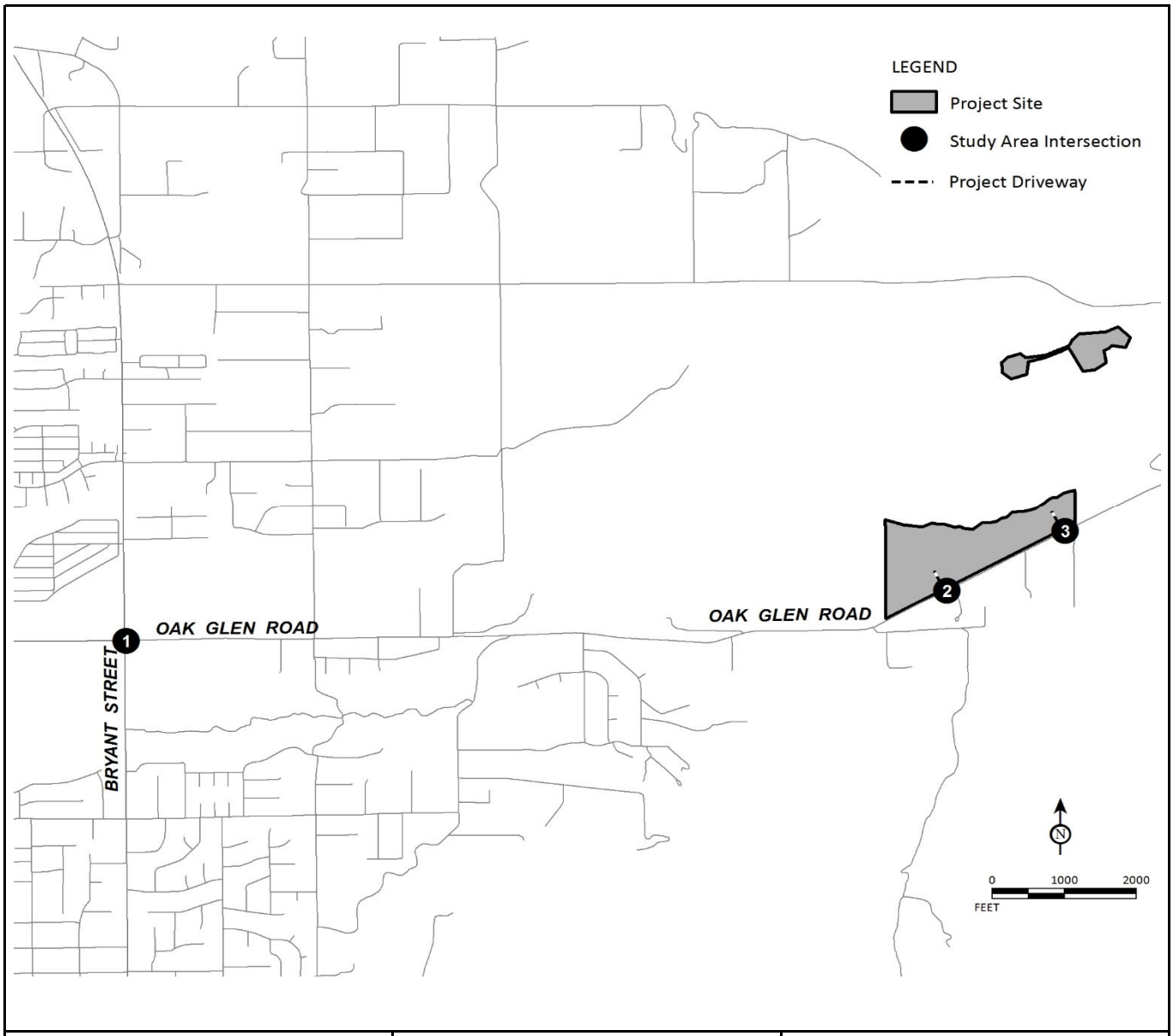

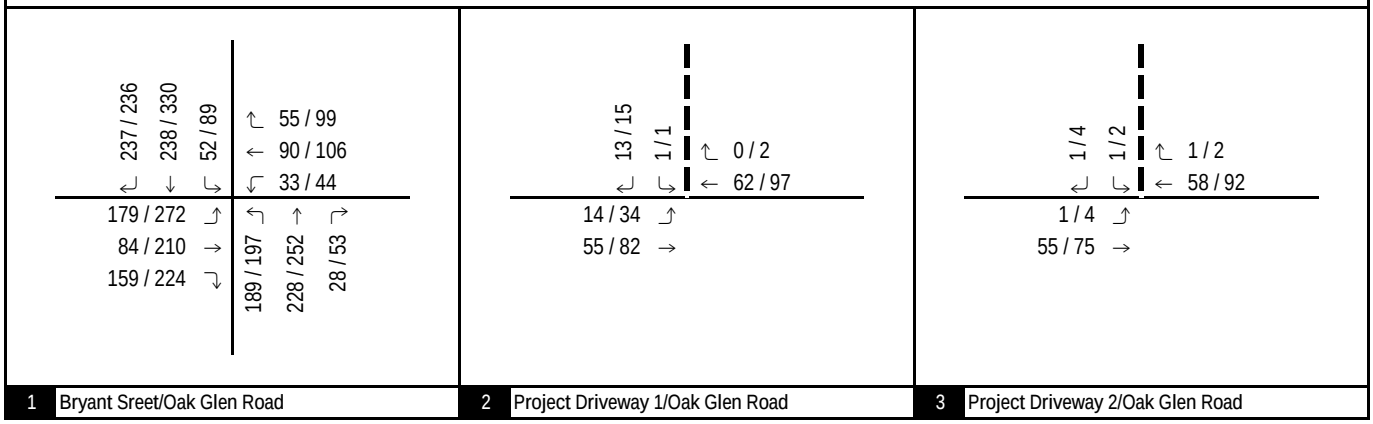

LSA

FIGURE 6-2

XXX / YYY

AM / PM Peak Hour Traffic Volumes

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

--- Project Driveway

Opening Year (2022) with Project Peak Hour Traffic Volumes

R:\YCA1801 El Dorado Park-Five Winds Ranch Project\02 Traffic\z12_Vol_OY_WP.xlsx (5/9/2019)

1 Bryant Sreet/Oak Glen Road	2 Project Driveway 1/Oak Glen Road	3 Project Driveway 2/Oak Glen Road
↰ 55 / 99 ← 115 / 127 ↱ 41 / 56 ↲ 259 / 250 ↓ 243 / 341 ↳ 52 / 89 209 / 283 ↱ 120 / 226 → 248 / 285 ↳ ↰ ↑ ↱ 312 / 248 236 / 261 36 / 65	↰ 0 / 2 ← 95 / 130 ↲ 13 / 15 ↳ 1 / 1 14 / 34 ↱ 99 / 110 →	↰ 1 / 2 ← 91 / 125 ↲ 1 / 4 ↳ 1 / 2 1 / 4 ↱ 99 / 103 →

LSA

FIGURE 6-3

XXX / YYY

AM / PM Peak Hour Traffic Volumes

Five Winds Ranch / El Dorado Park Project

Traffic Impact Analysis

--- Project Driveway

Cumulative (2022) with Project Peak Hour Traffic Volumes

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7.0 INTERSECTION LEVELS OF SERVICE

7.1 EXISTING LEVELS OF SERVICE

Figure 3-1 illustrates existing intersection geometrics and traffic control. An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all the study intersections currently operate at a satisfactory LOS under existing conditions. Detailed Level of Service Worksheets are included in Appendix D.

7.2 EXISTING WITH PROJECT LEVELS OF SERVICE

Figure 3-2 illustrates existing with project intersection geometrics and traffic control. Analysis of the existing with project scenario is provided for CEQA compliance to identify direct project impacts if the project were to be built and in operation today. This scenario eliminates the effects of ambient growth and other cumulative projects and deals specifically with project impacts.

An intersection level of service analysis was conducted for existing with project conditions to determine intersection performance. Table 7-A summarizes the results of this analysis and shows that all the study intersections are forecast to operate at a satisfactory LOS under existing with project conditions. Detailed Level of Service Worksheets are included in Appendix D.

7.3 OPENING YEAR (2022) WITHOUT PROJECT LEVELS OF SERVICE

An intersection level of service analysis was conducted for opening year without project conditions using the previously discussed methodologies. Table 7-B summarizes the results of this analysis and shows that all the study intersections are forecast to operate at a satisfactory LOS under opening year without project conditions. Detailed Level of Service Worksheets are included in Appendix D.

7.4 OPENING YEAR (2022) WITH PROJECT LEVELS OF SERVICE

An intersection level of service analysis was conducted for opening year with project conditions using the previously discussed methodologies. Table 7-B summarizes the results of this analysis and shows that all the study intersections are forecast to operate at a satisfactory LOS under opening year with project conditions. Detailed Level of Service Worksheets are included in Appendix D.

7.5 CUMULATIVE (2022) WITHOUT PROJECT LEVELS OF SERVICE

An intersection level of service analysis was conducted for cumulative without project conditions using the previously discussed methodologies. Table 7-C summarizes the results of this analysis and shows that all the study intersections are forecast to operate at a satisfactory LOS under opening year without project conditions. Detailed Level of Service Worksheets are included in Appendix D.

7.6 CUMULATIVE (2022) WITH PROJECT LEVELS OF SERVICE

An intersection level of service analysis was conducted for cumulative with project conditions using the previously discussed methodologies. Table 7-C summarizes the results of this analysis and shows

that all the study intersections are forecast to operate at a satisfactory LOS under opening year with project conditions. Detailed Level of Service Worksheets are included in Appendix D

7.7 LIST OF CHAPTER 7.0 TABLES

- Table 7-A: Existing Intersection Levels of Service
- Table 7-B: Opening Year (2022) Intersection Levels of Service
- Table 7-C: Cumulative (2022) Intersection Levels of Service

LSA

Table 7-A - Existing Intersection Levels of Service

Intersection	Control	Without Project				With Project				Significant Impact
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
		Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . Bryant Sreet/Oak Glen Road	Signal	10.8	B	11.2	B	10.9	B	11.3	B	No
2 . Project Driveway 1/Oak Glen Road	OWSC	7.4	A	0.0	A	8.8	A	8.9	A	No
3 . Project Driveway 2/Oak Glen Road	OWSC	0.0	A	8.9	A	9.0	A	9.0	A	No

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

LSA

Table 7-B - Opening Year (2022) Intersection Levels of Service

Intersection	Control	Without Project				With Project				Significant Impact
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
		Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . Bryant Sreet/Oak Glen Road	Signal	10.9	B	11.3	B	11.1	B	11.5	B	No
2 . Project Driveway 1/Oak Glen Road	OWSC	7.4	A	0.0	A	8.8	A	8.9	A	No
3 . Project Driveway 2/Oak Glen Road	OWSC	0.0	A	8.9	A	9.0	A	9.0	A	No

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

LSA

Table 7-C - Opening Year (2022) Cumulative Projects Intersection Levels of Service

Intersection	Control	Without Project				With Project				Significant Impact
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
		Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . Bryant Sreet/Oak Glen Road	Signal	26.7	C	11.3	B	27.9	C	11.5	B	No
2 . Project Driveway 1/Oak Glen Road	OWSC	7.5	A	0.0	A	9.0	A	8.9	A	No
3 . Project Driveway 2/Oak Glen Road	OWSC	0.0	A	8.9	A	9.4	A	9.0	A	No

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

LOS = Level of Service

8.0 PROJECT FRONTAGE IMPROVEMENTS

The proposed Five Winds Ranch / El Dorado Park Project consist of improvements to the existing facilities. As part of the improvements, the City is proposing acceleration, deceleration lanes and an eastbound left-turn pocket on Oak Glen Road at Project Driveway 1. Therefore, this analysis includes a conceptual striping plan illustrating these improvements. The striping plan has been designed using standards as set forth in the American Association of State Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highway and Streets manual (AASHTO Manual). As described in the AASHTO Manual, the designs of the acceleration and deceleration lanes are dependent on the posted speed limit of the roadway. The current posted speed limit on Oak Glen Road is 50mph. Figure 8-1 illustrates the proposed conceptual striping plan at Project Driveway 1. Following is summary of the recommended design as illustrated in the figure:

Westbound Oak Glen Road

- Deceleration Lane/Right-turn Lane – Based on the AASHTO Manual, the desirable full deceleration lane for a road with a posted speed limit of 50 MPH should be 425 feet (AASHTO Table 9-22). This distance includes the length of the taper and the deceleration lane itself (with a 50:50 split between the taper and deceleration lane). Additionally, AASHTO Manual recommends an additional storage of 50 feet (2 vehicles) when there are nominal right-turn movements. Therefore, the deceleration also includes an additional 50 feet storage length. In, summary the westbound right turn lane needs to have 265 feet of storage and 215 feet taper. The width of the proposed lane will be 12 feet.
- Acceleration Lane – Based on *Table 10-3. Minimum Acceleration on Lengths for Entrance Terminals with Flat Grades of Two Percent or Less* in the AASHTO guidelines, the length of an acceleration lane should be 720 feet for a posted speed limit of 50 MPH. The taper should be 600 feet, this based on the speed and lane width. The width of the proposed lane will be 12 feet.

Eastbound Oak Glen Road

- Deceleration Lane/Left-turn Lane – Design of the eastbound left-turn deceleration lane is based on the same methodology as the westbound right-turn deceleration lane.
- Acceleration Lane – Design of the eastbound acceleration lane is based on the same methodology as the westbound acceleration lane. However, to accommodate the acceleration lane utility poles would have to be relocated along Oak Glen Road.

LSA

LEGEND

Existing Curb

Proposed

0 60 120
FEET

SOURCE: Google Earth, 2018

I:\YCA1801\Reports\Traffic\fig8-1_Conceptual Striping Plan_05-08-2019

FIGURE 8-1

Five Winds Ranch/ El Dorado Park Project
Traffic Impact Study

Striping Plan

9. SUMMARY AND CONCLUSIONS

The proposed Five Winds Ranch/El Dorado Park Project consist of improvements to 58 acres including the existing facilities of Five Winds Ranch and El Dorado Ranch Park. The improvements include exterior and interior modifications to existing structures, relocation of an existing barn, a new park ranger cabin, an archery range, new trails, new restrooms, and new campground and recreational vehicle park.. When complete, the proposed project is forecast to generate 573 daily trips with 28 trips occurring in the a.m. peak hour and 58 trips occurring in the p.m. peak hour.

9.1 EXISTING CONDITIONS SUMMARY

All study area intersections operate at a satisfactory LOS under existing without and with project conditions.

9.2 OPENING YEAR (2022) CONDITIONS SUMMARY

All study area intersections are forecast to operate at a satisfactory LOS under opening year without and with project conditions.

9.3 CUMULATIVE (2022) CONDITIONS SUMMARY

All study area intersections are forecast to operate at a satisfactory LOS under cumulative without and with project conditions.

APPENDIX A:

SCOPING AGREEMENT

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

January 22, 2019

Ms. Katrina James,
Assistant Engineer
City of Yucaipa
34272 Yucaipa Boulevard,
Yucaipa, CA. 92399-9950

Subject: Traffic Impact Analysis Scope of Work for the Five Winds Ranch/El Dorado Park Project (LSA Project No. YCA1801)

Dear Ms. James,

LSA will be preparing a traffic impact analysis (TIA) for the proposed improvements for the Five Winds Ranch/El Dorado Park Project located on Oak Glen Road in the City of Yucaipa (City). Attached Figure 1 illustrates the regional and project location. Figure 2 illustrates project limits.

The proposed project consist of improvements to the existing facilities of Five Winds Ranch and El Dorado Ranch Park. Figure 3 illustrates the conceptual site plan. As illustrated in Figure 3, access to the project will be provided via two exiting driveways, one of which currently provides access to Five Winds Ranch. The second driveway will provide access to El Dorado Ranch Park. As part of the project improvements, an acceleration/deceleration lane and a turn pocket are being proposed along Oak Glen Road. The proposed improvements are planned in two phases. However, only the fully developed project will be considered for this analysis. Figure 4 illustrates the proposed study area intersections.

LSA anticipates that the following scope of work will be required to prepare the TIA for the proposed project.

SCOPE OF WORK

Trip Generation

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 537 – "Campground/Recreational Vehicle Park." Generalized trip distribution patterns were developed based on the location of the proposed project in relation to surrounding land uses and the regional roadway network. As shown in Table A, the project is anticipated to generate 573 daily trips, with 28 trips occurring in the a.m. peak hour and 58 trips in the p.m. peak hour. The project trip generation was applied to the trip distribution patterns to develop the project trip assignment. Figure 5 illustrates the project trip distribution. Figure 6 illustrates the project trip assignment.

The TIA will be prepared consistent with the San Bernardino County Transportation Authority (SBCTA) Congestion Management Program (CMP) TIA Guidelines, requirements of the City, as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). Based on the SBCTA CMP TIA guidelines, the study area

shall generally include any intersection of "Collector" or higher classification street on which the proposed project will add 50 or more peak hour trips or where the project may create a significant impact. As such, LSA proposes to include the following intersections based on the above criteria:

1. Bryant Street/Oak Glen Road;
2. Driveway 1/Oak Glen Road; and
3. Driveway 2/Oak Glen Road.

Analysis Scenarios

The TIA for the proposed project will be prepared to meet the requirements established by the SBCTA CMP TIA Guidelines. LSA proposes to analyze a.m. and p.m. peak hour traffic operations at the study intersections for the following scenarios:

- Existing Traffic Conditions;
- Existing with Project Traffic Conditions;
- Opening Year without Project Traffic Conditions;
- Opening Year with Project Conditions;
- Cumulative without Project Traffic Conditions; and
- Cumulative with Project Traffic Conditions.

Volume Development and Analysis Methodology

Traffic volumes for existing year traffic conditions will be based on existing a.m. and p.m. peak hour traffic counts collected for the intersections identified for the analysis. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m., while the p.m. peak hour is defined as the one hour of highest traffic volume occurring between 4:00 and 6:00 p.m.

The opening year for the entire project has been considered as 2022. Opening year without project traffic volumes will be developed by applying a growth rate of 2 percent per annum to existing traffic volumes. Cumulative without project traffic volumes will be developed by adding traffic from approved and pending development projects that will add substantial traffic to the study area. City staff provided LSA with a list of cumulative projects. LSA has shortlisted the projects based on their potential impacts at the study intersections. Table B lists the cumulative projects that will be included in the TIA. Figure 7 illustrates the location of the cumulative projects.

Existing, opening year, and cumulative with project traffic volumes will be developed by adding project traffic to the corresponding without project scenarios.

The TIA will analyze study intersections during the a.m. and p.m. peak hours. Intersection levels of service (LOS) will be calculated using the *Highway Capacity Manual 6* (HCM 6) analysis methodologies and using *Synchro 10* software.

Project Impact Assessment and Mitigation Measures

Intersection LOS without the project will be compared to the intersection LOS with the project for each of the analysis scenarios to determine potential project impacts. Determination of the

significance of project impacts will be made based on the City's LOS standards and the SBCTA CMP TIA thresholds of significance criteria. At significantly affected intersections, mitigation measures will be recommended to improve intersection performance to satisfactory conditions. Mitigation measures may include intersection turn lanes, signalization and segment lane additions. The LOS with mitigation will be calculated and summarized, along with a comparison of the LOS without mitigation.

Additionally, as mentioned in the project description, the TIA will evaluate the requirements for separate ingress and egress, left turn lanes, and acceleration and deceleration lanes along Oak Glen Road.

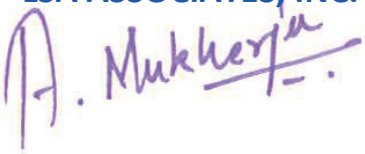
Fair Share

LSA will evaluate whether the mitigation measures identified in the TIA are included in the SBCTA Nexus Study Fee Program or the City's Development Impact Fees (DIF). If it is determined that the improvement is not covered through the DIF or the Nexus Study Fee Program, then the project's fair share contribution will be calculated based on the project traffic as a percentage of total growth from existing to cumulative conditions.

Should you have any questions, please do not hesitate to contact me at (951) 781-9310 or email me at Ambarish.Mukherjee@lsa.net.

Sincerely,

LSA ASSOCIATES, INC.



Ambarish Mukherjee, PE, AICP
Associate/Senior Transportation Planner

Attachments:

Table A: Project Trip Generation
Table B: Cumulative Projects
Figure 1: Regional and Project Location
Figure 2: Project Limits
Figure 3: Conceptual Site Plan
Figure 4: Study Area Intersections
Figure 5: Project Trip Distribution
Figure 6: Project Trip Assignment
Figure 7: Cumulative Projects

TABLES

LSA

Table A - Project Trip Generation

Land Use	Units	A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily[2]
Five Winds Ranch/El Dorado Park Project	58.51 AC							
Trips/Unit[1]		0.20	0.28	0.48	0.68	0.30	0.98	9.80
Trip Generation		12	16	28	40	18	58	573

Notes:

AC = Acres

[1] Rates based on the Institute of Transportation Engineers (ITE)*Trip Generation Manual* (10th Edition) for Land Use 537 – "Campground/Recreational Vehicle Park", Setting/Location - "General Urban/Suburban."

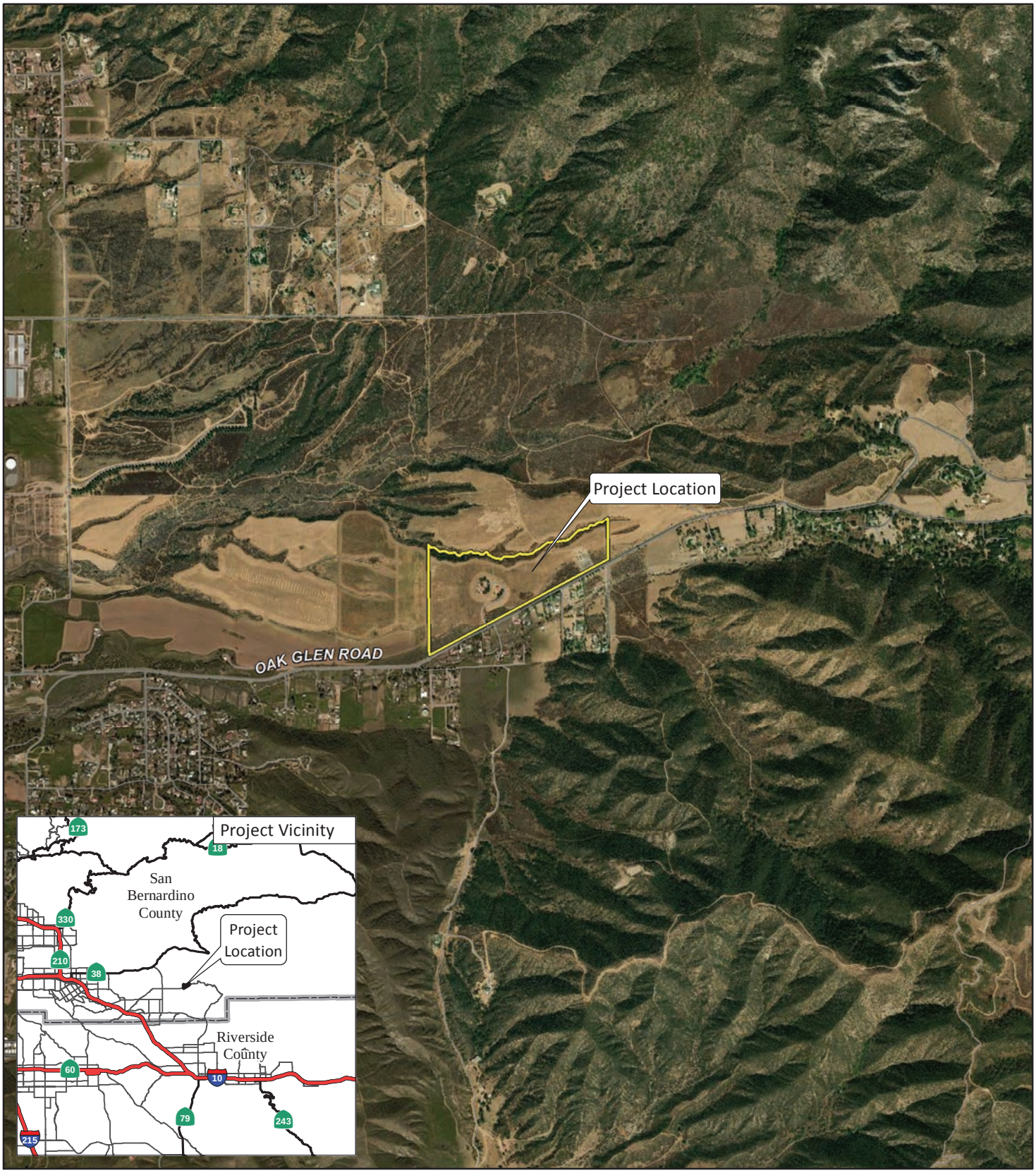
[2] Since a daily trip generation rate was not provided in the ITE*Trip Generation Manual* for Land Use 537 – "Campground/Recreational Vehicle Park", the daily rate was approximated as 10 times the p.m. peak hour rate.

LSA

Table B - Cumulative Projects

Project No.	Project Name	Address	Project Description
1	143 SFR Lots (17-093/TTM 20130)	Southeast corner of Oak Glen Road and 2nd Street	143 Single Family Subdivision
2	Oak Glen Creek Specific Plan (16-048/SP)	2nd Street, bounded by Oak Glen Road to the north and Bryant Street to the east	200 Single Family Subdivision
3	Wildwood Calvary Chappel School (16-085/CUP)	35145 Oak Glen Rd,	School Complex
4	Lakeview Mobile Home Park Expansion (18-067/CUP)	11050 Bryant Street	Mobile home park expansion
5	Performing Arts Center 14-067/CUP	Acacia Street, west of California Street	16,200 square feet (sf) multi-purpose Performing Arts Center, including an 11,600 sf performing arts theater, 2,500 sf wellness center, and a 2,100 sf outdoor stage. The proposal also includes a 22,300 sf plaza/park on 2.92 acres on the west side of California Street between Yucaipa Boulevard and Acacia Street
6	Gas Station (18-130/LUCR)	35298 Yucaipa Boulevard	Gas Station

FIGURES



LSA

FIGURE 1

N

0 1000 2000
FEET

SOURCE: ESRI Streetmap, 2013; Bing Map, 2015.

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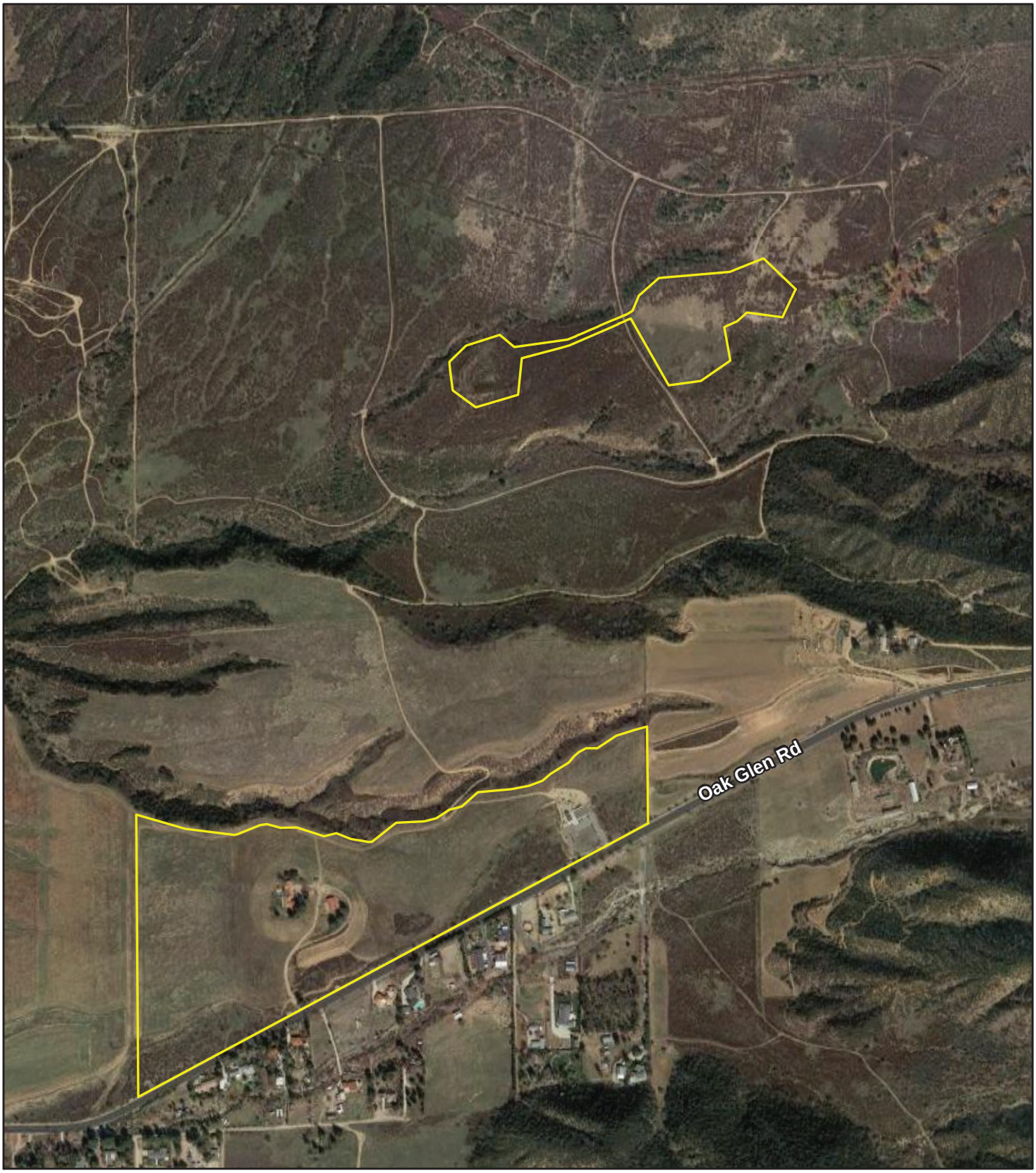
Five Winds Ranch/El Dorado Park Project
Traffic Impact Analysis

Regional and Project Location



LSA

LEGEND

Project Limits

FIGURE 2

N

0 350 700

FEET

SOURCE: Google (2018)

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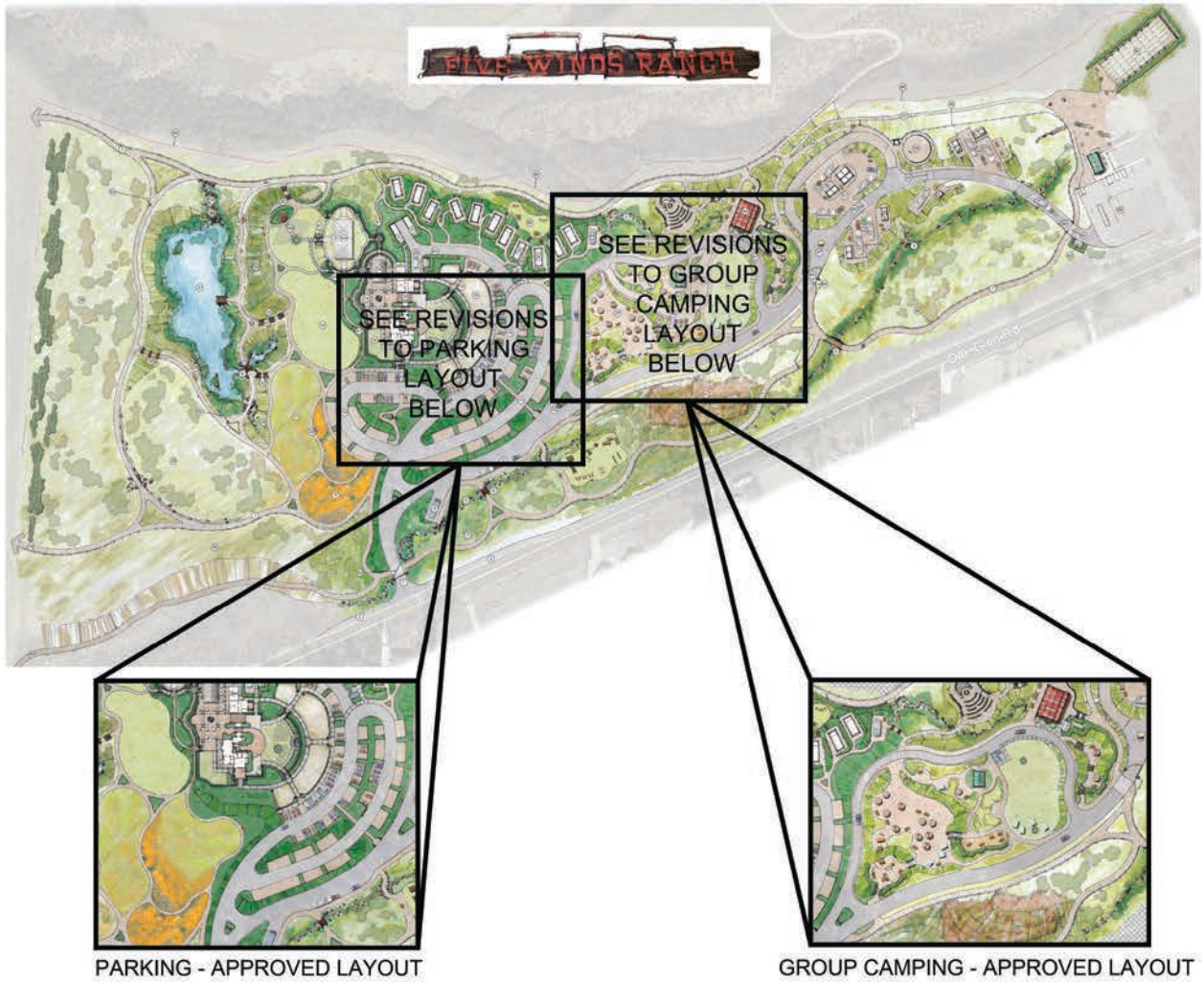
Five Winds Ranch/El Dorado Park Project

Traffic Impact Analysis

Project Limits



LSA

FIGURE 3

N

Five Winds Ranch/El Dorado Park Project
Traffic Impact Analysis

Conceptual Site Plan

SOURCE: Architerra Design Group, 2018

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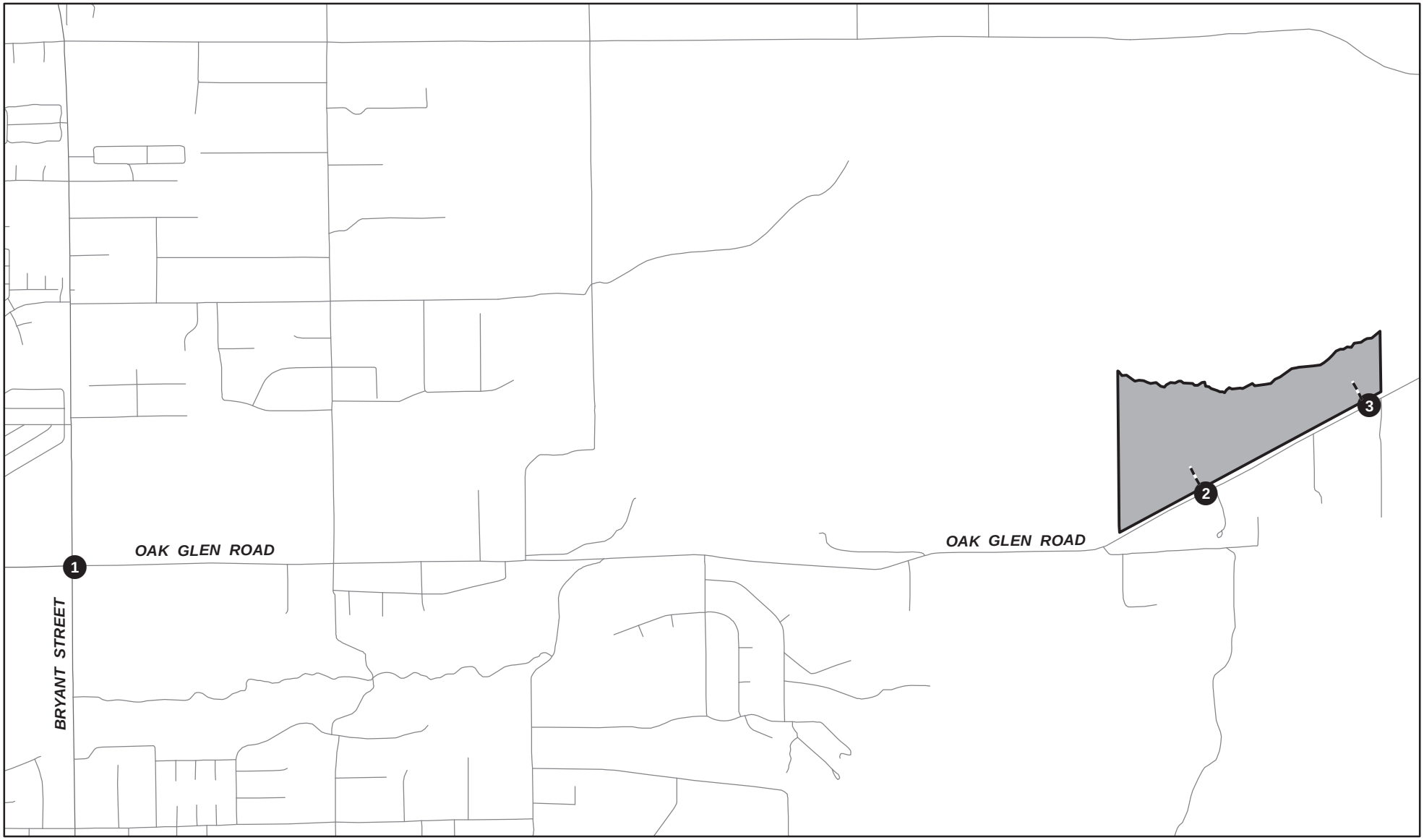

LSA

FIGURE 4

LEGEND

Project Site

Study Area Intersection

Project Driveway

N

0 700 1400
FEET

SOURCE: ESRI Streetmap, 2013

Five Winds Ranch/El Dorado Park Project
Traffic Impact Analysis

Study Area Intersections

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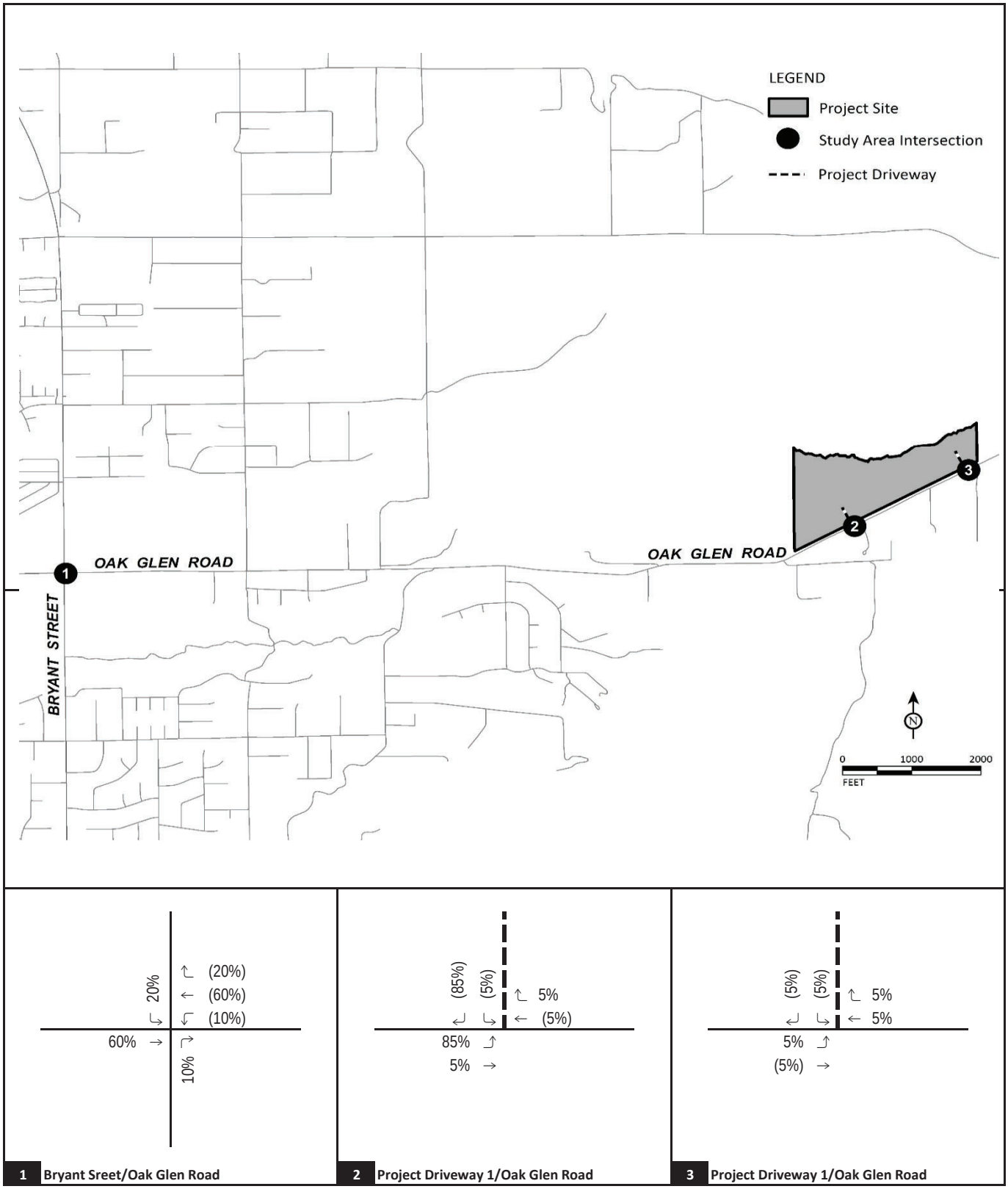


LSA

FIGURE 5

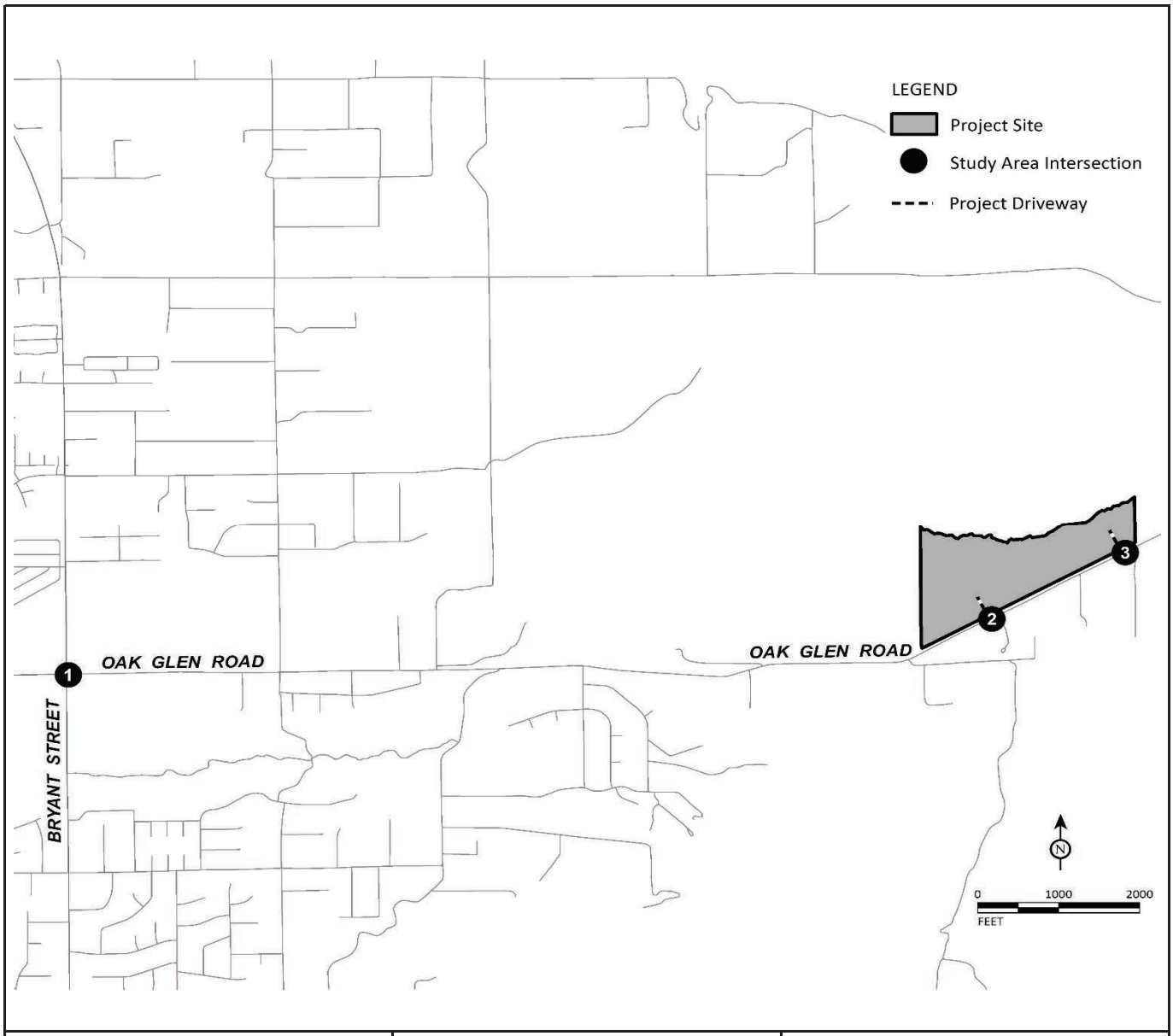
XX% (YY%) Inbound (Outbound) Distribution

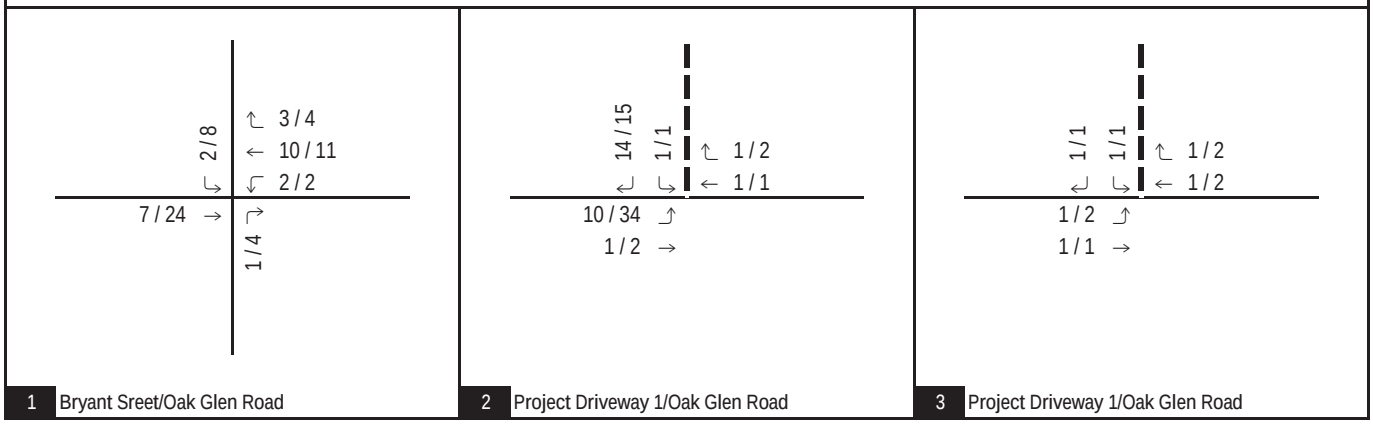
--- Project Driveway

Five Winds Ranch/El Dorado Park Project

Traffic Impact Analysis

Project Trip Distribution





LSA

FIGURE 6

XX / YY

AM / PM Peak Hour Volumes

--- Project Driveway

Five Winds Ranch/El Dorado Park Project

Traffic Impact Analysis

Project Trip Assignment

LSA

LEGEND

Project Location

Cumulative Project Location

N

0 1000 2000

FEET

SOURCE: ESRI Streetmap, 2013; Bing Aerial, 2015.

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FIGURE 7

Five Winds Ranch/El Dorado Park Project
Traffic Impact Analysis

Cumulative Project Location

APPENDIX B:

TRAFFIC COUNT SHEETS

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Yucaipa
N/S: Bryant Street
E/W: Oak Glen Road
Weather: Clear

File Name : 01_YUC_Bryant_Oak Glen AM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 1

Groups Printed- Total Volume

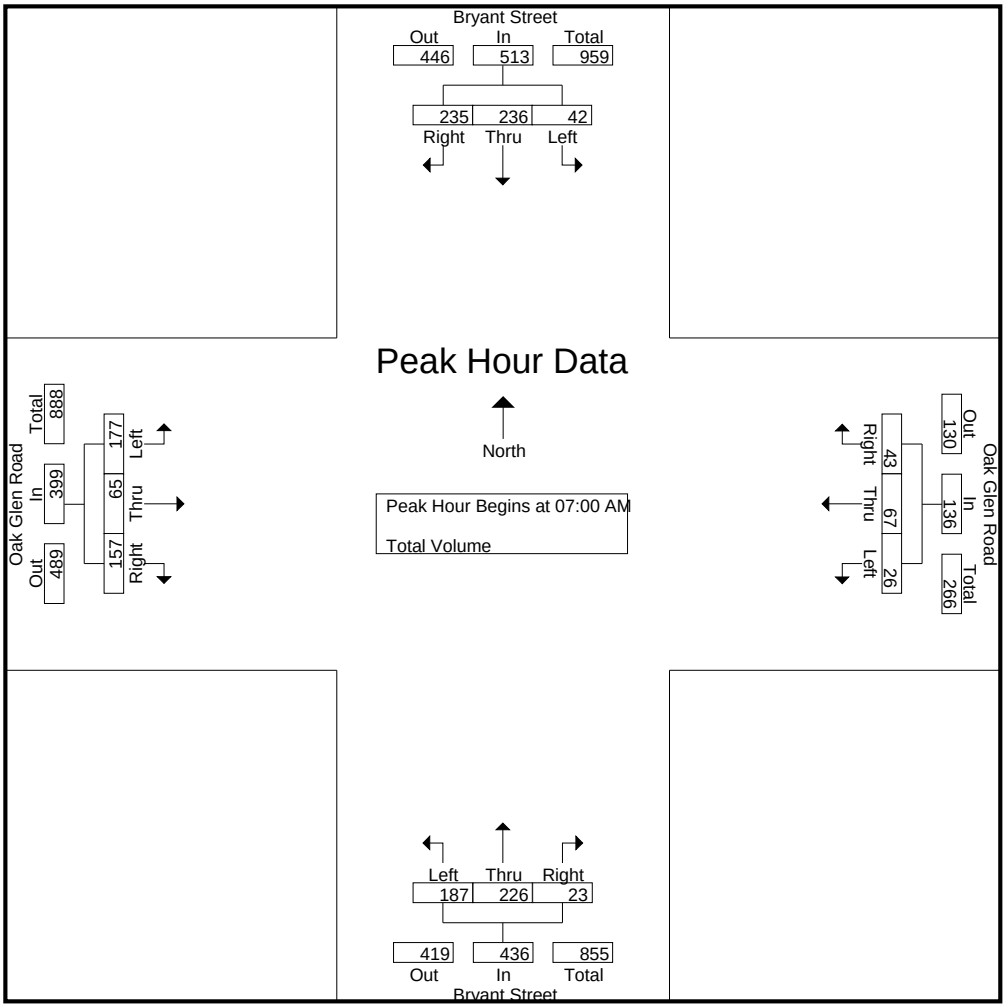
	Bryant Street Southbound				Oak Glen Road Westbound				Bryant Street Northbound				Oak Glen Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	111	89	213	5	20	19	44	58	83	8	149	65	16	74	155	561
07:15 AM	15	51	49	115	6	15	9	30	48	54	6	108	35	15	43	93	346
07:30 AM	7	29	43	79	7	11	13	31	34	46	6	86	32	16	22	70	266
07:45 AM	7	45	54	106	8	21	2	31	47	43	3	93	45	18	18	81	311
Total	42	236	235	513	26	67	43	136	187	226	23	436	177	65	157	399	1484
08:00 AM	6	36	56	98	5	20	6	31	35	20	3	58	40	17	13	70	257
08:15 AM	3	29	44	76	2	19	5	26	23	24	5	52	37	14	20	71	225
08:30 AM	4	35	48	87	5	25	5	35	27	31	6	64	30	27	21	78	264
08:45 AM	4	41	49	94	7	9	4	20	23	24	4	51	33	11	20	64	229
Total	17	141	197	355	19	73	20	112	108	99	18	225	140	69	74	283	975
Grand Total	59	377	432	868	45	140	63	248	295	325	41	661	317	134	231	682	2459
Apprch %	6.8	43.4	49.8		18.1	56.5	25.4		44.6	49.2	6.2		46.5	19.6	33.9		
Total %	2.4	15.3	17.6	35.3	1.8	5.7	2.6	10.1	12	13.2	1.7	26.9	12.9	5.4	9.4	27.7	

	Bryant Street Southbound				Oak Glen Road Westbound				Bryant Street Northbound				Oak Glen Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	13	**111**	**89**	**213**	5	20	**19**	**44**	**58**	**83**	**8**	**149**	**65**	16	**74**	**155**	**561**
07:15 AM	**15**	51	49	115	6	15	9	30	48	54	6	108	35	15	43	93	346
07:30 AM	7	29	43	79	7	11	13	31	34	46	6	86	32	16	22	70	266
07:45 AM	7	45	54	106	**8**	**21**	2	31	47	43	3	93	45	**18**	18	81	311
Total Volume	42	236	235	513	26	67	43	136	187	226	23	436	177	65	157	399	1484
% App. Total	8.2	46	45.8		19.1	49.3	31.6		42.9	51.8	5.3		44.4	16.3	39.3		
PHF	.700	.532	.660	.602	.813	.798	.566	.773	.806	.681	.719	.732	.681	.903	.530	.644	.661

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Yucaipa
N/S: Bryant Street
E/W: Oak Glen Road
Weather: Clear

File Name : 01_YUC_Bryant_Oak Glen AM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	13	**111**	**89**	**213**	5	20	**19**	**44**	**58**	**83**	**8**	**149**	**65**	16	**74**	**155**
+15 mins.	**15**	51	49	115	6	15	9	30	48	54	6	108	35	15	43	93
+30 mins.	7	29	43	79	7	11	13	31	34	46	6	86	32	16	22	70
+45 mins.	7	45	54	106	**8**	**21**	2	31	47	43	3	93	45	**18**	18	81
Total Volume	42	236	235	513	26	67	43	136	187	226	23	436	177	65	157	399
% App. Total	8.2	46	45.8		19.1	49.3	31.6		42.9	51.8	5.3		44.4	16.3	39.3	
PHF	.700	.532	.660	.602	.813	.798	.566	.773	.806	.681	.719	.732	.681	.903	.530	.644

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Yucaipa
N/S: Bryant Street
E/W: Oak Glen Road
Weather: Clear

File Name : 01_YUC_Bryant_Oak Glen PM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 1

Groups Printed- Total Volume

	Bryant Street Southbound				Oak Glen Road Westbound				Bryant Street Northbound				Oak Glen Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	12	80	54	146	7	22	12	41	55	69	9	133	85	34	70	189	509
04:15 PM	15	66	60	141	6	15	15	36	37	61	12	110	57	31	42	130	417
04:30 PM	25	101	62	188	12	21	28	61	66	67	14	147	79	58	58	195	591
04:45 PM	16	80	58	154	11	22	25	58	37	52	6	95	48	34	52	134	441
Total	68	327	234	629	36	80	80	196	195	249	41	485	269	157	222	648	1958
05:00 PM	14	70	36	120	14	8	9	31	46	46	5	97	64	24	71	159	407
05:15 PM	12	73	44	129	11	15	11	37	27	42	8	77	75	34	45	154	397
05:30 PM	10	62	42	114	6	14	10	30	30	57	1	88	70	34	73	177	409
05:45 PM	10	38	28	76	2	14	16	32	29	39	8	76	53	26	55	134	318
Total	46	243	150	439	33	51	46	130	132	184	22	338	262	118	244	624	1531
Grand Total	114	570	384	1068	69	131	126	326	327	433	63	823	531	275	466	1272	3489
Apprch %	10.7	53.4	36		21.2	40.2	38.7		39.7	52.6	7.7		41.7	21.6	36.6		
Total %	3.3	16.3	11	30.6	2	3.8	3.6	9.3	9.4	12.4	1.8	23.6	15.2	7.9	13.4	36.5	

	Bryant Street Southbound				Oak Glen Road Westbound				Bryant Street Northbound				Oak Glen Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	12	80	54	146	7	**22**	12	41	55	**69**	9	133	**85**	34	**70**	189	509
04:15 PM	15	66	60	141	6	15	15	36	37	61	12	110	57	31	42	130	417
04:30 PM	**25**	**101**	**62**	**188**	**12**	21	**28**	**61**	**66**	67	**14**	**147**	79	**58**	58	**195**	**591**
04:45 PM	16	80	58	154	11	22	25	58	37	52	6	95	48	34	52	134	441
Total Volume	68	327	234	629	36	80	80	196	195	249	41	485	269	157	222	648	1958
% App. Total	10.8	52	37.2		18.4	40.8	40.8		40.2	51.3	8.5		41.5	24.2	34.3		
PHF	.680	.809	.944	.836	.750	.909	.714	.803	.739	.902	.732	.825	.791	.677	.793	.831	.828

Counts Unlimited
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Corona, CA 92878
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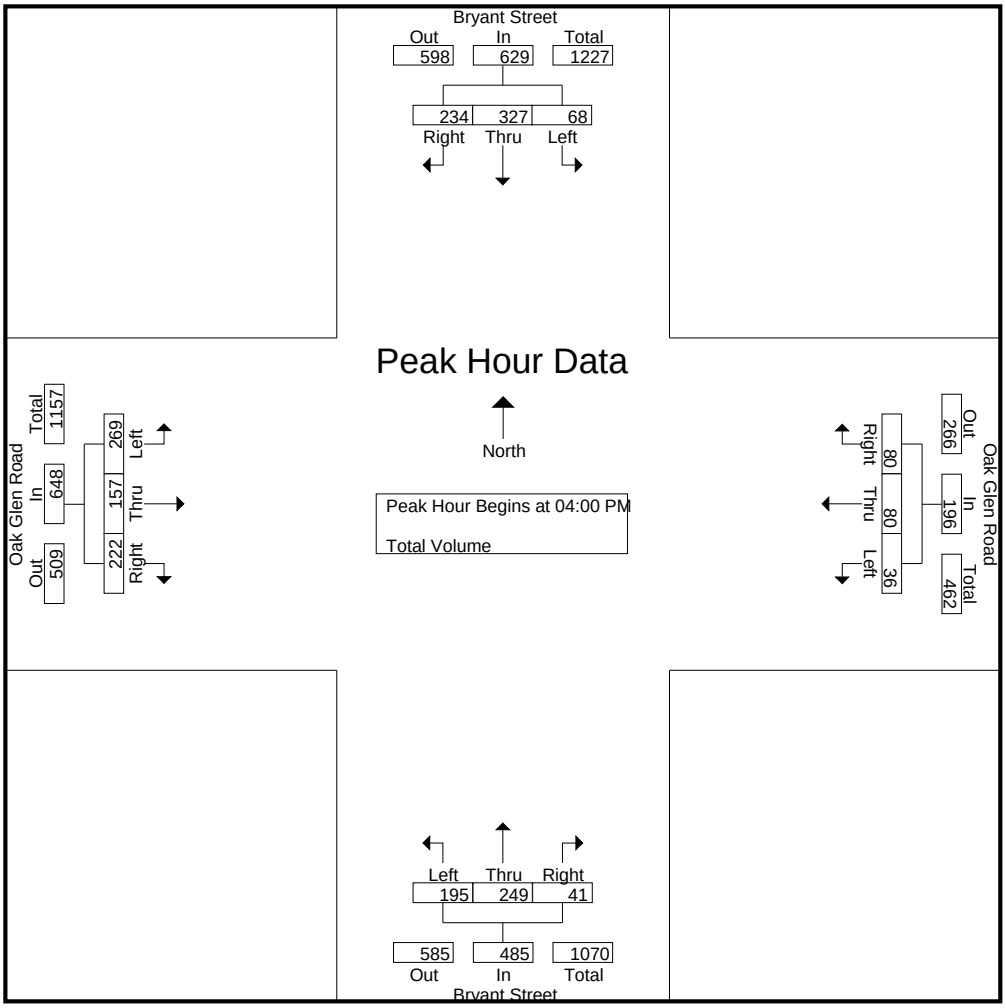
City of Yucaipa
N/S: Bryant Street
E/W: Oak Glen Road
Weather: Clear

File Name : 01_YUC_Bryant_Oak Glen PM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	12	80	54	146	7	**22**	12	41	55	**69**	9	133	**85**	34	**70**	189
+15 mins.	15	66	60	141	6	15	15	36	37	61	12	110	57	31	42	130
+30 mins.	**25**	**101**	**62**	**188**	**12**	21	**28**	**61**	**66**	67	**14**	**147**	79	**58**	58	**195**
+45 mins.	16	80	58	154	11	22	25	58	37	52	6	95	48	34	52	134
Total Volume	68	327	234	629	36	80	80	196	195	249	41	485	269	157	222	648
% App. Total	10.8	52	37.2		18.4	40.8	40.8		40.2	51.3	8.5		41.5	24.2	34.3	
PHF	.680	.809	.944	.836	.750	.909	.714	.803	.739	.902	.732	.825	.791	.677	.793	.831

Counts Unlimited
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Corona, CA 92878
(951) 268-6268

City of Yucaipa
N/S: Driveway 1
E/W: Oak Glen Road
Weather: Clear

File Name : 02_YUC_DW1_Oak Glen AM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 1

Groups Printed- Total Volume

	Driveway 1 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	12	0	12	3	4	7	19
07:15 AM	0	0	0	14	0	14	0	10	10	24
07:30 AM	0	0	0	12	0	12	0	14	14	26
07:45 AM	0	0	0	13	0	13	1	17	18	31
Total	0	0	0	51	0	51	4	45	49	100
08:00 AM	2	0	2	8	1	9	0	8	8	19
08:15 AM	0	0	0	5	0	5	0	19	19	24
08:30 AM	0	0	0	11	1	12	0	6	6	18
08:45 AM	1	0	1	7	1	8	1	15	16	25
Total	3	0	3	31	3	34	1	48	49	86
Grand Total	3	0	3	82	3	85	5	93	98	186
Apprch %	100	0		96.5	3.5		5.1	94.9		
Total %	1.6	0	1.6	44.1	1.6	45.7	2.7	50	52.7	

	Driveway 1 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	12	0	12	**3**	4	7	19
07:15 AM	0	0	0	**14**	0	**14**	0	10	10	24
07:30 AM	0	0	0	12	0	12	0	14	14	26
07:45 AM	0	0	0	13	0	13	1	**17**	**18**	**31**
Total Volume	0	0	0	51	0	51	4	45	49	100
% App. Total	0	0		100	0		8.2	91.8		
PHF	.000	.000	.000	.911	.000	.911	.333	.662	.681	.806

Counts Unlimited
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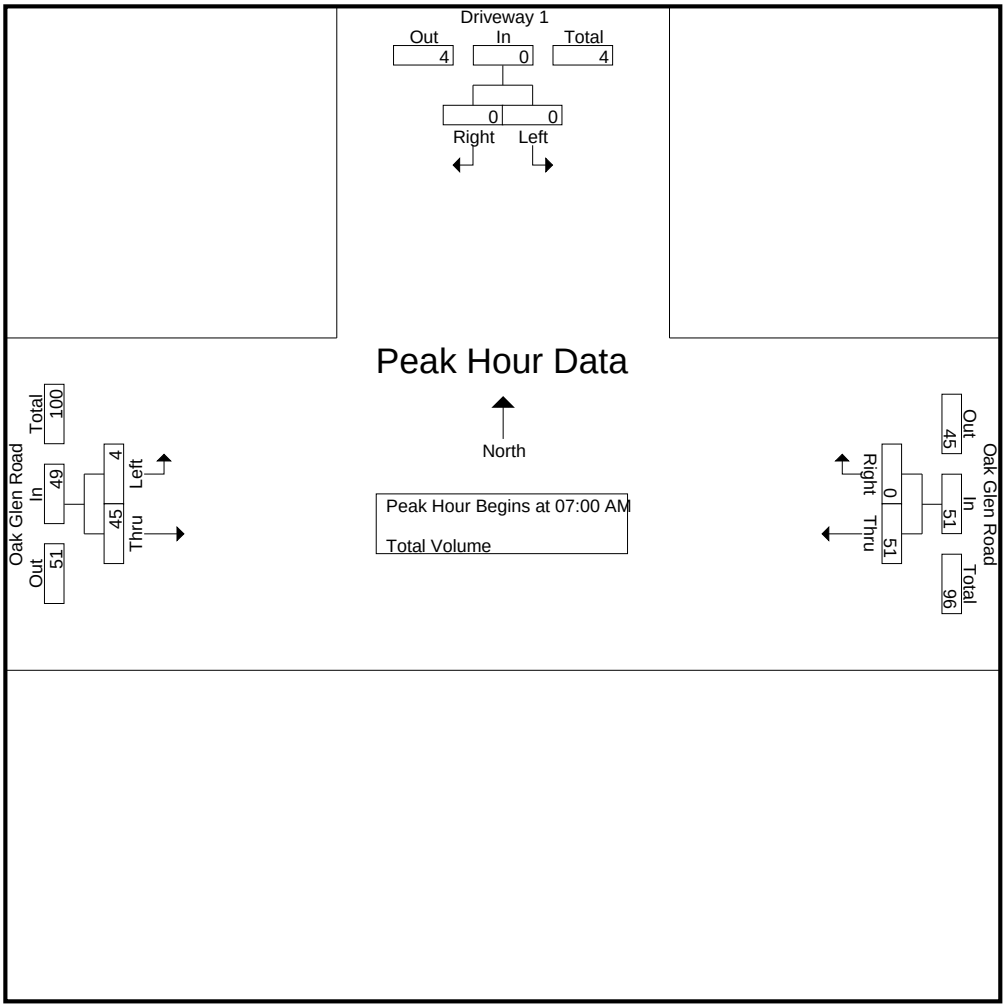
City of Yucaipa
N/S: Driveway 1
E/W: Oak Glen Road
Weather: Clear

File Name : 02_YUC_DW1_Oak Glen AM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			07:30 AM		
+0 mins.	**2**	0	**2**	12	0	12	0	14	14
+15 mins.	0	0	0	**14**	0	**14**	**1**	17	18
+30 mins.	0	0	0	12	0	12	0	8	8
+45 mins.	1	0	1	13	0	13	0	**19**	**19**
Total Volume	3	0	3	51	0	51	1	58	59
% App. Total	100	0		100	0		1.7	98.3	
PHF	.375	.000	.375	.911	.000	.911	.250	.763	.776

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City of Yucaipa
N/S: Driveway 1
E/W: Oak Glen Road
Weather: Clear

File Name : 02_YUC_DW1_Oak Glen PM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 1

Groups Printed- Total Volume

	Driveway 1 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	22	0	22	0	17	17	39
04:15 PM	0	0	0	21	0	21	0	19	19	40
04:30 PM	0	0	0	25	0	25	0	11	11	36
04:45 PM	0	0	0	13	0	13	0	20	20	33
Total	0	0	0	81	0	81	0	67	67	148
05:00 PM	0	0	0	15	0	15	0	14	14	29
05:15 PM	0	0	0	7	0	7	0	16	16	23
05:30 PM	0	0	0	7	0	7	0	22	22	29
05:45 PM	0	0	0	15	0	15	0	16	16	31
Total	0	0	0	44	0	44	0	68	68	112
Grand Total	0	0	0	125	0	125	0	135	135	260
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	48.1	0	48.1	0	51.9	51.9	

	Driveway 1 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	22	0	22	0	17	17	39
04:15 PM	0	0	0	21	0	21	0	19	19	**40**
04:30 PM	0	0	0	**25**	0	**25**	0	11	11	36
04:45 PM	0	0	0	13	0	13	0	**20**	**20**	33
Total Volume	0	0	0	81	0	81	0	67	67	148
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.810	.000	.810	.000	.838	.838	.925

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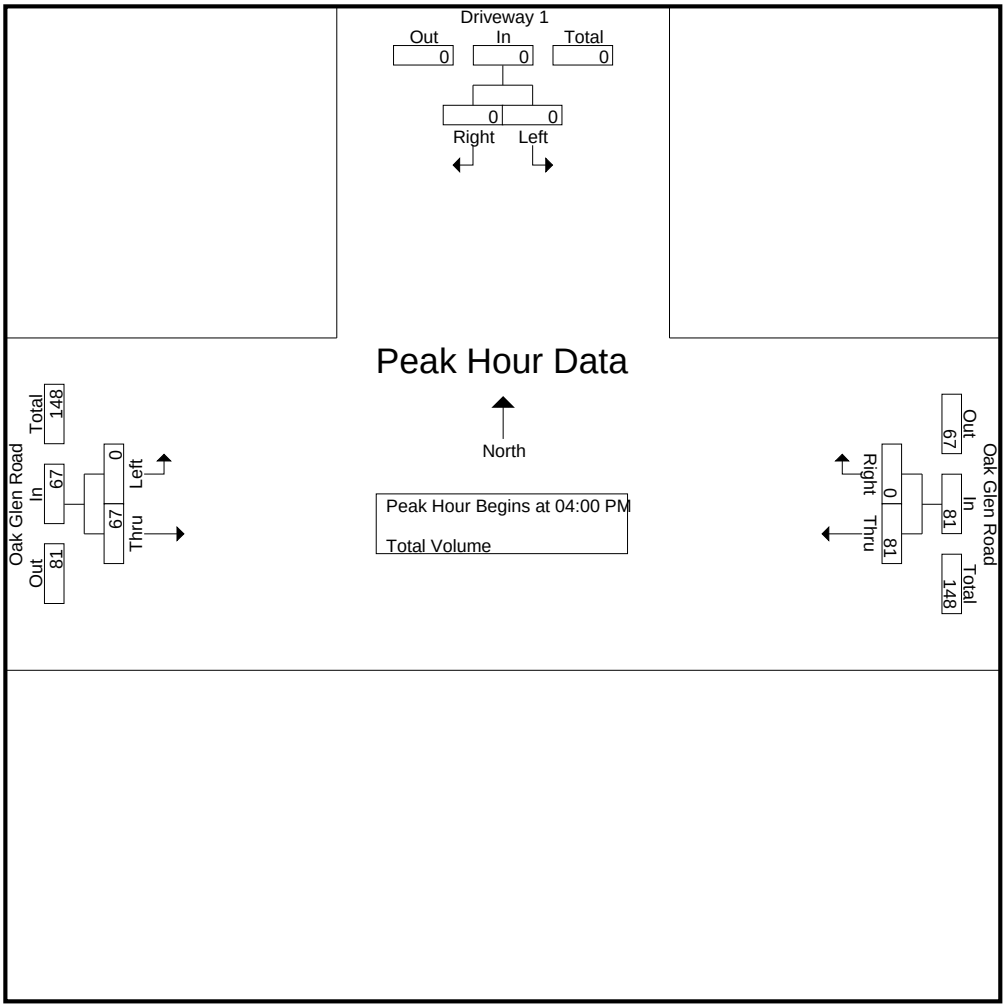
City of Yucaipa
N/S: Driveway 1
E/W: Oak Glen Road
Weather: Clear

File Name : 02_YUC_DW1_Oak Glen PM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:45 PM		
+0 mins.	0	0	0	22	0	22	0	20	20
+15 mins.	0	0	0	21	0	21	0	14	14
+30 mins.	0	0	0	**25**	0	**25**	0	16	16
+45 mins.	0	0	0	13	0	13	0	**22**	**22**
Total Volume	0	0	0	81	0	81	0	72	72
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.810	.000	.810	.000	.818	.818

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City of Yucaipa
N/S: Driveway 2
E/W: Oak Glen Road
Weather: Clear

File Name : 03_YUC_DW2_Oak Glen AM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 1

Groups Printed- Total Volume

	Driveway 2 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	12	0	12	0	4	4	16
07:15 AM	0	0	0	11	0	11	0	10	10	21
07:30 AM	0	0	0	12	0	12	0	14	14	26
07:45 AM	0	0	0	13	0	13	0	17	17	30
Total	0	0	0	48	0	48	0	45	45	93
08:00 AM	0	0	0	8	0	8	1	6	7	15
08:15 AM	0	0	0	4	0	4	0	17	17	21
08:30 AM	0	0	0	11	0	11	0	5	5	16
08:45 AM	0	0	0	6	1	7	1	15	16	23
Total	0	0	0	29	1	30	2	43	45	75
Grand Total	0	0	0	77	1	78	2	88	90	168
Apprch %	0	0		98.7	1.3		2.2	97.8		
Total %	0	0	0	45.8	0.6	46.4	1.2	52.4	53.6	

	Driveway 2 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	12	0	12	0	4	4	16
07:15 AM	0	0	0	11	0	11	0	10	10	21
07:30 AM	0	0	0	12	0	12	0	14	14	26
07:45 AM	0	0	0	**13**	0	**13**	0	**17**	**17**	**30**
Total Volume	0	0	0	48	0	48	0	45	45	93
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.923	.000	.923	.000	.662	.662	.775

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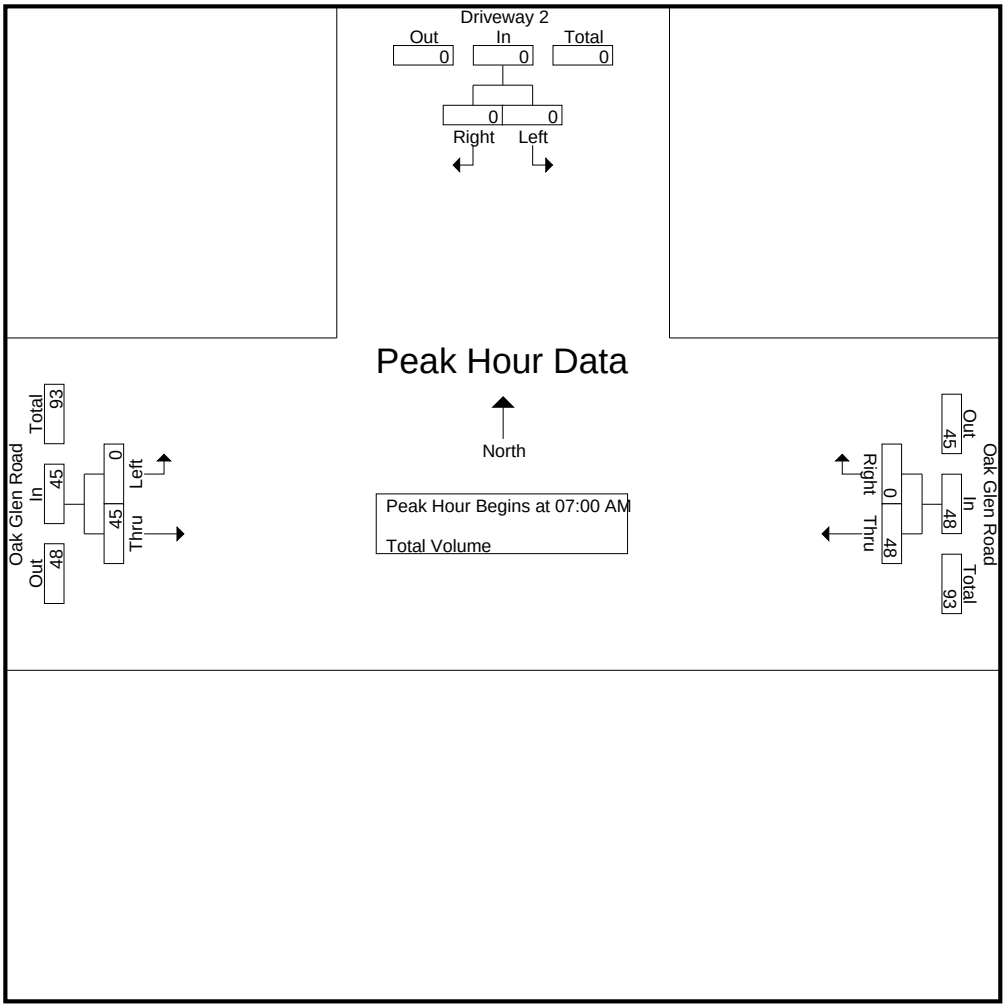
City of Yucaipa
N/S: Driveway 2
E/W: Oak Glen Road
Weather: Clear

File Name : 03_YUC_DW2_Oak Glen AM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	0	0	0	12	0	12	0	14	14
+15 mins.	0	0	0	11	0	11	0	**17**	**17**
+30 mins.	0	0	0	12	0	12	**1**	6	7
+45 mins.	0	0	0	**13**	0	**13**	0	17	17
Total Volume	0	0	0	48	0	48	1	54	55
% App. Total	0	0		100	0		1.8	98.2	
PHF	.000	.000	.000	.923	.000	.923	.250	.794	.809

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City of Yucaipa
N/S: Driveway 2
E/W: Oak Glen Road
Weather: Clear

File Name : 03_YUC_DW2_Oak Glen PM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 1

Groups Printed- Total Volume

	Driveway 2 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	2	2	19	0	19	1	15	16	37
04:15 PM	0	1	1	19	0	19	1	17	18	38
04:30 PM	0	0	0	25	0	25	0	10	10	35
04:45 PM	1	0	1	13	0	13	0	20	20	34
Total	1	3	4	76	0	76	2	62	64	144
05:00 PM	0	3	3	12	0	12	1	13	14	29
05:15 PM	0	0	0	6	0	6	0	17	17	23
05:30 PM	0	1	1	6	0	6	2	20	22	29
05:45 PM	0	2	2	15	0	15	0	16	16	33
Total	0	6	6	39	0	39	3	66	69	114
Grand Total	1	9	10	115	0	115	5	128	133	258
Apprch %	10	90		100	0		3.8	96.2		
Total %	0.4	3.5	3.9	44.6	0	44.6	1.9	49.6	51.6	

	Driveway 2 Southbound			Oak Glen Road Westbound			Oak Glen Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	**2**	**2**	19	0	19	**1**	15	16	37
04:15 PM	0	1	1	19	0	19	1	17	18	**38**
04:30 PM	0	0	0	**25**	0	**25**	0	10	10	35
04:45 PM	**1**	0	1	13	0	13	0	**20**	**20**	34
Total Volume	1	3	4	76	0	76	2	62	64	144
% App. Total	25	75		100	0		3.1	96.9		
PHF	.250	.375	.500	.760	.000	.760	.500	.775	.800	.947

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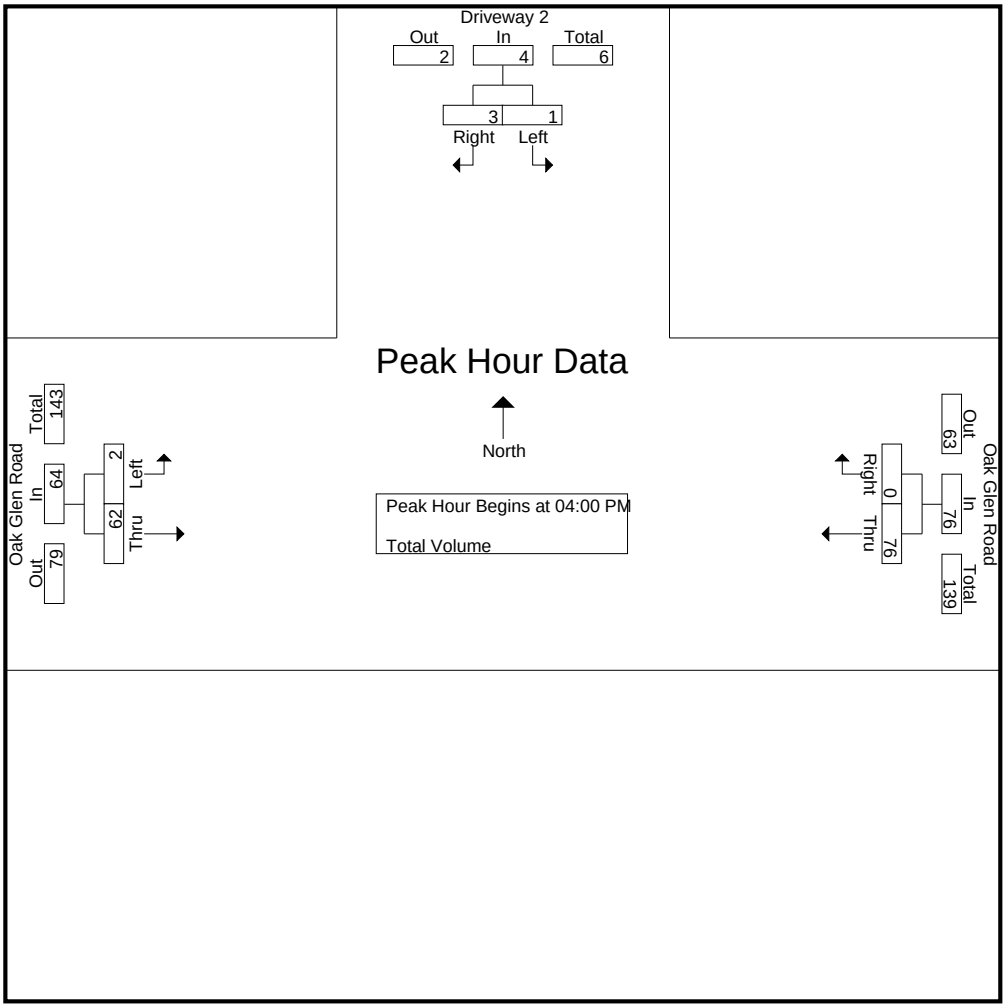
City of Yucaipa
N/S: Driveway 2
E/W: Oak Glen Road
Weather: Clear

File Name : 03_YUC_DW2_Oak Glen PM
Site Code : 00319164
Start Date : 3/12/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			04:45 PM		
+0 mins.	0	**3**	**3**	19	0	19	0	**20**	20
+15 mins.	0	0	0	19	0	19	1	13	14
+30 mins.	0	1	1	**25**	0	**25**	0	17	17
+45 mins.	0	2	2	13	0	13	**2**	20	**22**
Total Volume	0	6	6	76	0	76	3	70	73
% App. Total	0	100		100	0		4.1	95.9	
PHF	.000	.500	.500	.760	.000	.760	.375	.875	.830

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Yucaipa
Oak Glen Road
B/ Driveway 1 - Driveway 2
24 Hour Directional Volume Count

YUC001
Site Code: 003-19164

Start Time	12-Mar-19 Tue	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		3	19			1	8				
12:15		2	16			2	12				
12:30		3	19			1	11				
12:45		1	13	9	67	0	29	4	60	13	127
01:00		1	14			0	14				
01:15		1	14			2	15				
01:30		1	12			0	**27**				
01:45		0	19	3	59	0	**21**	2	77	5	136
02:00		0	13			0	**22**				
02:15		0	12			0	**29**				
02:30		0	13			0	17				
02:45		0	18	0	56	0	15	0	83	0	139
03:00		0	**18**			1	18				
03:15		1	**17**			0	13				
03:30		0	**23**			1	7				
03:45		0	**27**	1	85	2	16	4	54	5	139
04:00		1	16			1	21				
04:15		0	18			5	20				
04:30		0	10			2	25				
04:45		2	20	3	64	4	13	12	79	15	143
05:00		0	14			3	15				
05:15		1	17			5	6				
05:30		0	22			6	7				
05:45		0	16	1	69	8	17	22	45	23	114
06:00		3	16			9	13				
06:15		4	16			9	12				
06:30		5	13			5	10				
06:45		3	16	15	61	12	6	35	41	50	102
07:00		4	11			12	7				
07:15		10	3			11	3				
07:30		14	9			12	3				
07:45		17	9	45	32	13	5	48	18	93	50
08:00		7	8			8	5				
08:15		17	8			4	4				
08:30		5	6			11	4				
08:45		16	9	45	31	6	3	29	16	74	47
09:00		4	9			12	3				
09:15		8	6			7	1				
09:30		26	5			9	2				
09:45		6	8	44	28	10	5	38	11	82	39
10:00		2	5			11	1				
10:15		13	3			10	1				
10:30		15	3			11	2				
10:45		16	5	46	16	21	3	53	7	99	23
11:00		**10**	1			**12**	1				
11:15		**8**	3			**16**	0				
11:30		**12**	1			**15**	0				
11:45		**26**	0	56	5	**22**	1	65	2	121	7
Total		268	573	268	573	312	493	312	493	580	1066
Combined Total		841		841		805		805		1646	
AM Peak	-	11:00	-	-	-	11:00	-	-	-	-	-
Vol.	-	56	-	-	-	65	-	-	-	-	-
P.H.F.		0.538				0.739					
PM Peak	-	-	03:00	-	-	-	01:30	-	-	-	-
Vol.	-	-	85	-	-	-	99	-	-	-	-
P.H.F.			0.787				0.853				
Percentage		31.9%	68.1%			38.8%	61.2%				
ADT/AADT		ADT 1,646		AADT 1,646							

Counts Unlimited, Inc

PO Box 1178
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Phone: 951-268-6268
email: counts@countsunlimited.com

City of Yucaipa
Oak Glen Road
E/ Casa Blanca Avenue
24 Hour Directional Volume Count

YUC008
Site Code: 195-15541

Start Time	29-Sep-15 Tue	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		2	12			0	**24**				
12:15		1	18			0	**16**				
12:30		0	24			0	**29**				
12:45		3	10	6	64	0	**24**	0	93	6	157
01:00		1	23			0	16				
01:15		0	16			0	18				
01:30		0	14			0	24				
01:45		0	12	1	65	0	19	0	77	1	142
02:00		1	12			0	17				
02:15		0	12			0	18				
02:30		0	19			0	24				
02:45		0	**23**	1	66	0	20	0	79	1	145
03:00		0	**20**			0	29				
03:15		0	**14**			0	18				
03:30		0	**23**			0	14				
03:45		0	19	0	76	0	15	0	76	0	152
04:00		1	15			1	19				
04:15		1	22			0	20				
04:30		1	15			5	12				
04:45		0	21	3	73	1	19	7	70	10	143
05:00		0	17			2	16				
05:15		2	15			4	19				
05:30		0	19			2	15				
05:45		3	13	5	64	11	16	19	66	24	130
06:00		3	16			6	14				
06:15		8	14			9	8				
06:30		11	9			11	16				
06:45		7	24	29	63	**24**	8	50	46	79	109
07:00		7	13			**17**	2				
07:15		13	10			**13**	5				
07:30		18	11			**21**	4				
07:45		20	11	58	45	11	6	62	17	120	62
08:00		8	4			11	4				
08:15		18	4			13	5				
08:30		16	11			9	3				
08:45		18	11	60	30	9	2	42	14	102	44
09:00		18	13			14	2				
09:15		21	6			12	2				
09:30		23	3			10	3				
09:45		20	2	82	24	14	0	50	7	132	31
10:00		22	6			13	1				
10:15		19	1			14	2				
10:30		12	2			13	2				
10:45		**24**	2	77	11	15	1	55	6	132	17
11:00		**23**	3			21	0				
11:15		**23**	2			15	1				
11:30		**23**	2			20	1				
11:45		17	2	86	9	15	0	71	2	157	11
Total		408	590	408	590	356	553	356	553	764	1143
Combined Total		998		998		909		909		1907	
AM Peak	-	10:45	-	-	-	06:45	-	-	-	-	-
Vol.	-	93	-	-	-	75	-	-	-	-	-
P.H.F.		0.969				0.781					
PM Peak	-	-	02:45	-	-	-	12:00	-	-	-	-
Vol.	-	-	80	-	-	-	93	-	-	-	-
P.H.F.			0.870				0.802				
Percentage		40.9%	59.1%			39.2%	60.8%				
ADT/AADT		ADT 1,907		AADT 1,907							

APPENDIX C:

VOLUME DEVELOPMENT WORKSHEETS

LSA

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Existing Without Project	Net Project Trips	Existing With Project	Existing Without Project	Net Project Trips	Existing With Project
1 Bryant Sreet/Oak Glen Road						
NBL	187	0	187	195	0	195
NBT	226	0	226	249	0	249
NBR	27	1	28	48	4	52
SBL	49	2	51	80	8	88
SBT	236	0	236	327	0	327
SBR	235	0	235	234	0	234
EBL	177	0	177	269	0	269
EBT	76	7	83	184	24	208
EBR	157	0	157	222	0	222
WBL	31	2	33	42	2	44
WBT	79	10	89	94	11	105
WBR	51	3	54	94	4	98
North Leg						
Approach	520	2	522	641	8	649
Departure	454	3	457	612	4	616
Total	974	5	979	1,253	12	1,265
South Leg						
Approach	440	1	441	492	4	496
Departure	424	2	426	591	2	593
Total	864	3	867	1,083	6	1,089
East Leg						
Approach	160	15	175	230	17	247
Departure	153	10	163	312	36	348
Total	312	25	337	543	53	596
West Leg						
Approach	410	7	417	675	24	699
Departure	501	10	511	523	11	534
Total	911	17	928	1,198	35	1,233
Total Approaches						
Approach	1,530	25	1,555	2,039	53	2,092
Departure	1,530	25	1,555	2,039	53	2,092
Total	3,061	50	3,111	4,078	106	4,184

LSA

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Existing Without Project	Net Project Trips	Existing With Project	Existing Without Project	Net Project Trips	Existing With Project
2 Project Driveway 1/Oak Glen Road						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	1	1	0	1	1
SBT	0	0	0	0	0	0
SBR	0	14	14	0	15	15
EBL	4	10	14	0	34	34
EBT	53	1	54	79	2	81
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	60	1	61	95	1	96
WBR	0	1	1	0	2	2
North Leg						
Approach	0	15	15	0	16	16
Departure	4	11	15	0	36	36
Total	4	26	30	0	52	52
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	60	2	62	95	3	98
Departure	53	2	55	79	3	82
Total	113	4	117	174	6	180
West Leg						
Approach	57	11	68	79	36	115
Departure	60	15	75	95	16	111
Total	117	26	143	174	52	226
Total Approaches						
Approach	117	28	145	174	55	229
Departure	117	28	145	174	55	229
Total	234	56	290	348	110	458

LSA

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour			P.M. Peak Hour		
	Existing Without Project	Net Project Trips	Existing With Project	Existing Without Project	Net Project Trips	Existing With Project
3 Project Driveway 2/Oak Glen Road						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	1	1	1	1	2
SBT	0	0	0	0	0	0
SBR	0	1	1	3	1	4
EBL	0	1	1	2	2	4
EBT	53	1	54	73	1	74
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	56	1	57	89	2	91
WBR	0	1	1	0	2	2
North Leg						
Approach	0	2	2	4	2	6
Departure	0	2	2	2	4	6
Total	0	4	4	6	6	12
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	56	2	58	89	4	93
Departure	53	2	55	74	2	76
Total	109	4	113	163	6	169
West Leg						
Approach	53	2	55	75	3	78
Departure	56	2	58	92	3	95
Total	109	4	113	167	6	173
Total Approaches						
Approach	109	6	115	168	9	177
Departure	109	6	115	168	9	177
Total	219	12	231	336	18	354

LSA

Table C-2 - Opening Year (2022) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing	2019-2022 Growth	OY Without Project	Net Project Trips	OY With Project	Existing	2019-2022 Growth	OY Without Project	Net Project Trips	OY With Project
1 Bryant Sreet/Oak Glen Road						**1 Bryant Sreet/Oak Glen Road**				
NBL	187	2	189	0	189	NBL	195	2	197	0	197
NBT	226	2	228	0	228	NBT	249	3	252	0	252
NBR	27	0	27	1	28	NBR	48	1	49	4	53
SBL	49	1	50	2	52	SBL	80	1	81	8	89
SBT	236	2	238	0	238	SBT	327	3	330	0	330
SBR	235	2	237	0	237	SBR	234	2	236	0	236
EBL	177	2	179	0	179	EBL	269	3	272	0	272
EBT	76	1	77	7	84	EBT	184	2	186	24	210
EBR	157	2	159	0	159	EBR	222	2	224	0	224
WBL	31	0	31	2	33	WBL	42	0	42	2	44
WBT	79	1	80	10	90	WBT	94	1	95	11	106
WBR	51	1	52	3	55	WBR	94	1	95	4	99
North Leg						North Leg					
Approach	520	5	525	2	527	Approach	641	6	647	8	655
Departure	454	5	459	3	462	Departure	612	7	619	4	623
Total	974	10	984	5	989	Total	1,253	13	1,266	12	1,278
South Leg						South Leg					
Approach	440	4	444	1	445	Approach	492	6	498	4	502
Departure	424	4	428	2	430	Departure	591	5	596	2	598
Total	864	8	872	3	875	Total	1,083	11	1,094	6	1,100
East Leg						East Leg					
Approach	160	2	162	15	178	Approach	230	2	232	17	249
Departure	153	2	155	10	164	Departure	312	4	316	36	352
Total	312	4	316	25	342	Total	543	6	549	53	601
West Leg						West Leg					
Approach	410	5	415	7	422	Approach	675	7	682	24	706
Departure	501	5	506	10	516	Departure	523	5	528	11	539
Total	911	10	921	17	938	Total	1,198	12	1,210	35	1,245
Total Approaches						Total Approaches					
Approach	1,530	16	1,546	25	1,572	Approach	2,039	21	2,060	53	2,112
Departure	1,530	16	1,546	25	1,572	Departure	2,039	21	2,060	53	2,112
Total	3,061	32	3,093	50	3,144	Total	4,078	42	4,120	106	4,224

LSA

Table C-2 - Opening Year (2022) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing	2019-2022 Growth	OY Without Project	Net Project Trips	OY With Project	Existing	2019-2022 Growth	OY Without Project	Net Project Trips	OY With Project
2 Project Driveway 1/Oak Glen Road						**2 Project Driveway 1/Oak Glen Road**				
NBL	0	0	0	0	0	NBL	0	0	0	0	0
NBT	0	0	0	0	0	NBT	0	0	0	0	0
NBR	0	0	0	0	0	NBR	0	0	0	0	0
SBL	0	0	0	1	1	SBL	0	0	0	1	1
SBT	0	0	0	0	0	SBT	0	0	0	0	0
SBR	0	0	0	14	14	SBR	0	0	0	15	15
EBL	4	0	4	10	14	EBL	0	0	0	34	34
EBT	53	1	54	1	55	EBT	79	1	80	2	82
EBR	0	0	0	0	0	EBR	0	0	0	0	0
WBL	0	0	0	0	0	WBL	0	0	0	0	0
WBT	60	1	61	1	62	WBT	95	1	96	1	97
WBR	0	0	0	1	1	WBR	0	0	0	2	2
North Leg						North Leg					
Approach	0	0	0	15	15	Approach	0	0	0	16	16
Departure	4	0	4	11	15	Departure	0	0	0	36	36
Total	4	0	4	26	30	Total	0	0	0	52	52
South Leg						South Leg					
Approach	0	0	0	0	0	Approach	0	0	0	0	0
Departure	0	0	0	0	0	Departure	0	0	0	0	0
Total	0	0	0	0	0	Total	0	0	0	0	0
East Leg						East Leg					
Approach	60	1	61	2	63	Approach	95	1	96	3	99
Departure	53	1	54	2	56	Departure	79	1	80	3	83
Total	113	2	115	4	119	Total	174	2	176	6	182
West Leg						West Leg					
Approach	57	1	58	11	69	Approach	79	1	80	36	116
Departure	60	1	61	15	76	Departure	95	1	96	16	112
Total	117	2	119	26	145	Total	174	2	176	52	228
Total Approaches						Total Approaches					
Approach	117	2	119	28	147	Approach	174	2	176	55	231
Departure	117	2	119	28	147	Departure	174	2	176	55	231
Total	234	4	238	56	294	Total	348	4	352	110	462

LSA

Table C-2 - Opening Year (2022) Peak Hour Volume Summary

	AM Peak Hour						PM Peak Hour				
	Existing	2019-2022 Growth	OY Without Project	Net Project Trips	OY With Project		Existing	2019-2022 Growth	OY Without Project	Net Project Trips	OY With Project
3 Project Driveway 2/Oak Glen Road						**3 Project Driveway 2/Oak Glen Road**					
NBL	0	0	0	0	0	NBL	0	0	0	0	0
NBT	0	0	0	0	0	NBT	0	0	0	0	0
NBR	0	0	0	0	0	NBR	0	0	0	0	0
SBL	0	0	0	1	1	SBL	1	0	1	1	2
SBT	0	0	0	0	0	SBT	0	0	0	0	0
SBR	0	0	0	1	1	SBR	3	0	3	1	4
EBL	0	0	0	1	1	EBL	2	0	2	2	4
EBT	53	1	54	1	55	EBT	73	1	74	1	75
EBR	0	0	0	0	0	EBR	0	0	0	0	0
WBL	0	0	0	0	0	WBL	0	0	0	0	0
WBT	56	1	57	1	58	WBT	89	1	90	2	92
WBR	0	0	0	1	1	WBR	0	0	0	2	2
North Leg						North Leg					
Approach	0	0	0	2	2	Approach	4	0	4	2	6
Departure	0	0	0	2	2	Departure	2	0	2	4	6
Total	0	0	0	4	4	Total	6	0	6	6	12
South Leg						South Leg					
Approach	0	0	0	0	0	Approach	0	0	0	0	0
Departure	0	0	0	0	0	Departure	0	0	0	0	0
Total	0	0	0	0	0	Total	0	0	0	0	0
East Leg						East Leg					
Approach	56	1	57	2	59	Approach	89	1	90	4	94
Departure	53	1	54	2	56	Departure	74	1	75	2	77
Total	109	2	111	4	115	Total	163	2	165	6	171
West Leg						West Leg					
Approach	53	1	54	2	56	Approach	75	1	76	3	79
Departure	56	1	57	2	59	Departure	92	1	93	3	96
Total	109	2	111	4	115	Total	167	2	169	6	175
Total Approaches						Total Approaches					
Approach	109	2	111	6	117	Approach	168	2	170	9	179
Departure	109	2	111	6	117	Departure	168	2	170	9	179
Total	219	4	223	12	234	Total	336	4	340	18	358

LSA

Table C-3- Cumulative (2022) Peak Hour Volume Summary

	AM Peak Hour						PM Peak Hour				
	Opening Year 2022	Cumulative Project Trips	Cumulative Without Project	Net Project Trips	Cumulative With Project		Opening Year 2022	Cumulative Project Trips	Cumulative Without Project	Net Project Trips	Cumulative With Project
1 Bryant Sreet/Oak Glen Road						**1**					
NBL	189	123	312	0	312	NBL	197	51	248	0	248
NBT	228	8	236	0	236	NBT	252	9	261	0	261
NBR	27	8	35	1	36	NBR	49	12	61	4	65
SBL	50	0	50	2	52	SBL	81	0	81	8	89
SBT	238	5	243	0	243	SBT	330	11	341	0	341
SBR	237	22	259	0	259	SBR	236	14	250	0	250
EBL	179	30	209	0	209	EBL	272	11	283	0	283
EBT	77	36	113	7	120	EBT	186	16	202	24	226
EBR	159	89	248	0	248	EBR	224	61	285	0	285
WBL	31	8	39	2	41	WBL	42	12	54	2	56
WBT	80	25	105	10	115	WBT	95	21	116	11	127
WBR	52	0	52	3	55	WBR	95	0	95	4	99
North Leg						North Leg					
Approach	525	27	552	2	554		647	25	672	8	680
Departure	459	38	497	3	500		619	20	639	4	643
Total	984	65	1,049	5	1,054		1,266	45	1,311	12	1,323
South Leg						South Leg					
Approach	444	139	583	1	584		498	72	570	4	574
Departure	428	102	530	2	532		596	84	680	2	682
Total	872	241	1,113	3	1,116		1,094	156	1,250	6	1,256
East Leg						East Leg					
Approach	162	33	195	15	211		232	33	265	17	282
Departure	155	44	199	10	208		316	28	344	36	380
Total	316	77	393	25	419		549	61	610	53	662
West Leg						West Leg					
Approach	415	155	570	7	577		682	88	770	24	794
Departure	506	170	676	10	686		528	86	614	11	625
Total	921	325	1,246	17	1,263		1,210	174	1,384	35	1,419
Total Approaches						Total Approaches					
Approach	1,546	354	1,900	25	1,926		2,060	218	2,278	53	2,330
Departure	1,546	354	1,900	25	1,926		2,060	218	2,278	53	2,330
Total	3,093	708	3,801	50	3,852		4,120	436	4,556	106	4,660

LSA

Table C-3- Cumulative (2022) Peak Hour Volume Summary

	AM Peak Hour						PM Peak Hour				
	Opening Year 2022	Cumulative Project Trips	Cumulative Without Project	Net Project Trips	Cumulative With Project		Opening Year 2022	Cumulative Project Trips	Cumulative Without Project	Net Project Trips	Cumulative With Project
2 Project Driveway 1/Oak Glen Road						**2**					
NBL	0	0	0	0	0	NBL	0	0	0	0	0
NBT	0	0	0	0	0	NBT	0	0	0	0	0
NBR	0	0	0	0	0	NBR	0	0	0	0	0
SBL	0	0	0	1	1	SBL	0	0	0	1	1
SBT	0	0	0	0	0	SBT	0	0	0	0	0
SBR	0	0	0	14	14	SBR	0	0	0	15	15
EBL	4	0	4	10	14	EBL	0	0	0	34	34
EBT	54	44	98	1	99	EBT	80	28	108	2	110
EBR	0	0	0	0	0	EBR	0	0	0	0	0
WBL	0	0	0	0	0	WBL	0	0	0	0	0
WBT	61	33	94	1	95	WBT	96	33	129	1	130
WBR	0	0	0	1	1	WBR	0	0	0	2	2
North Leg						North Leg					
Approach	0	0	0	15	15		0	0	0	16	16
Departure	4	0	4	11	15		0	0	0	36	36
Total	4	0	4	26	30		0	0	0	52	52
South Leg						South Leg					
Approach	0	0	0	0	0		0	0	0	0	0
Departure	0	0	0	0	0		0	0	0	0	0
Total	0	0	0	0	0		0	0	0	0	0
East Leg						East Leg					
Approach	61	33	94	2	96		96	33	129	3	132
Departure	54	44	98	2	100		80	28	108	3	111
Total	115	77	192	4	196		176	61	237	6	243
West Leg						West Leg					
Approach	58	44	102	11	113		80	28	108	36	144
Departure	61	33	94	15	109		96	33	129	16	145
Total	119	77	196	26	222		176	61	237	52	289
Total Approaches						Total Approaches					
Approach	119	77	196	28	224		176	61	237	55	292
Departure	119	77	196	28	224		176	61	237	55	292
Total	238	154	392	56	448		352	122	474	110	584

LSA

Table C-3- Cumulative (2022) Peak Hour Volume Summary

	AM Peak Hour						PM Peak Hour				
	Opening Year 2022	Cumulative Project Trips	Cumulative Without Project	Net Project Trips	Cumulative With Project		Opening Year 2022	Cumulative Project Trips	Cumulative Without Project	Net Project Trips	Cumulative With Project
3 Project Driveway 2/Oak Glen Road						**3**					
NBL	0	0	0	0	0	NBL	0	0	0	0	0
NBT	0	0	0	0	0	NBT	0	0	0	0	0
NBR	0	0	0	0	0	NBR	0	0	0	0	0
SBL	0	0	0	1	1	SBL	1	0	1	1	2
SBT	0	0	0	0	0	SBT	0	0	0	0	0
SBR	0	0	0	1	1	SBR	3	0	3	1	4
EBL	0	0	0	1	1	EBL	2	0	2	2	4
EBT	54	44	98	1	99	EBT	74	28	102	1	103
EBR	0	0	0	0	0	EBR	0	0	0	0	0
WBL	0	0	0	0	0	WBL	0	0	0	0	0
WBT	57	33	90	1	91	WBT	90	33	123	2	125
WBR	0	0	0	1	1	WBR	0	0	0	2	2
North Leg						North Leg					
Approach	0	0	0	2	2		4	0	4	2	6
Departure	0	0	0	2	2		2	0	2	4	6
Total	0	0	0	4	4		6	0	6	6	12
South Leg						South Leg					
Approach	0	0	0	0	0		0	0	0	0	0
Departure	0	0	0	0	0		0	0	0	0	0
Total	0	0	0	0	0		0	0	0	0	0
East Leg						East Leg					
Approach	57	33	90	2	92		90	33	123	4	127
Departure	54	44	98	2	100		75	28	103	2	105
Total	111	77	188	4	192		165	61	226	6	232
West Leg						West Leg					
Approach	54	44	98	2	100		76	28	104	3	107
Departure	57	33	90	2	92		93	33	126	3	129
Total	111	77	188	4	192		169	61	230	6	236
Total Approaches						Total Approaches					
Approach	111	77	188	6	194		170	61	231	9	240
Departure	111	77	188	6	194		170	61	231	9	240
Total	223	154	377	12	388		340	122	462	18	480

APPENDIX D:

LEVEL OF SERVICE WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	76	157	31	79	51	187	226	27	49	236	235
Future Volume (veh/h)	177	76	157	31	79	51	187	226	27	49	236	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	268	115	238	47	120	77	283	342	41	74	358	356
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	624	529	476	712	427	459	1579	704	563	1579	704
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1186	1870	1585	1028	2136	1281	736	3554	1585	1000	3554	1585
Grp Volume(v), veh/h	268	115	238	47	98	99	283	342	41	74	358	356
Grp Sat Flow(s),veh/h/ln	1186	1870	1585	1028	1777	1640	736	1777	1585	1000	1777	1585
Q Serve(g_s), s	8.4	1.8	4.8	1.4	1.6	1.7	15.5	2.4	0.6	2.0	2.5	6.5
Cycle Q Clear(g_c), s	10.1	1.8	4.8	3.1	1.6	1.7	18.0	2.4	0.6	4.4	2.5	6.5
Prop In Lane	1.00		1.00	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	523	624	529	476	593	547	459	1579	704	563	1579	704
V/C Ratio(X)	0.51	0.18	0.45	0.10	0.17	0.18	0.62	0.22	0.06	0.13	0.23	0.51
Avail Cap(c_a), veh/h	654	831	704	590	790	729	459	1579	704	563	1579	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	9.6	10.6	10.7	9.5	9.6	12.6	6.9	6.4	8.3	7.0	8.1
Incr Delay (d2), s/veh	0.8	0.1	0.6	0.1	0.1	0.2	6.1	0.3	0.2	0.5	0.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.6	1.4	0.3	0.5	0.5	2.6	0.7	0.2	0.4	0.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	9.7	11.2	10.8	9.7	9.7	18.6	7.2	6.6	8.8	7.3	10.6
LnGrp LOS	B	A	B	B	A	A	B	A	A	A	A	B
Approach Vol, veh/h		621			244			666			788	
Approach Delay, s/veh		12.1			9.9			12.0			8.9	
Approach LOS		B			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		18.0		22.5		18.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		12.1		8.5		5.1				
Green Ext Time (p_c), s		0.0		1.4		2.9		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	53	60	0	0	0
Future Vol, veh/h	4	53	60	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	65	74	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	74	0	-	0	149	74
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	75	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1526	-	-	-	843	988
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	948	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1526	-	-	-	840	988
Mov Cap-2 Maneuver	-	-	-	-	840	-
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	948	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1526	-	-	-	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	7.4	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	53	56	0	0	0
Future Vol, veh/h	0	53	56	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	68	72	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	72	0	-	0	140	72
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	68	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1528	-	-	-	853	990
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	955	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1528	-	-	-	853	990
Mov Cap-2 Maneuver	-	-	-	-	853	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	955	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1528	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	184	222	42	94	94	195	249	48	80	327	234
Future Volume (veh/h)	269	184	222	42	94	94	195	249	48	80	327	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	222	267	51	113	113	235	300	58	96	394	282
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	708	600	433	672	600	426	1473	657	535	1473	657
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1155	1870	1585	907	1777	1585	763	3554	1585	1023	3554	1585
Grp Volume(v), veh/h	324	222	267	51	113	113	235	300	58	96	394	282
Grp Sat Flow(s),veh/h/ln	1155	1870	1585	907	1777	1585	763	1777	1585	1023	1777	1585
Q Serve(g_s), s	11.3	3.6	5.5	1.8	1.8	2.1	12.7	2.3	1.0	2.9	3.2	5.5
Cycle Q Clear(g_c), s	13.4	3.6	5.5	5.5	1.8	2.1	15.9	2.3	1.0	5.2	3.2	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	708	600	433	672	600	426	1473	657	535	1473	657
V/C Ratio(X)	0.59	0.31	0.45	0.12	0.17	0.19	0.55	0.20	0.09	0.18	0.27	0.43
Avail Cap(c_a), veh/h	589	775	657	466	736	657	426	1473	657	535	1473	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.5	9.5	10.1	11.4	9.0	9.0	13.6	8.1	7.7	9.8	8.4	9.1
Incr Delay (d2), s/veh	1.4	0.3	0.5	0.1	0.1	0.2	5.1	0.3	0.3	0.7	0.4	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.2	1.6	0.3	0.6	0.6	2.3	0.7	0.3	0.6	1.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	9.8	10.6	11.6	9.1	9.2	18.7	8.4	8.0	10.5	8.8	11.1
LnGrp LOS	B	A	B	B	A	A	B	A	A	B	A	B
Approach Vol, veh/h		813			277			593			772	
Approach Delay, s/veh		12.1			9.6			12.5			9.9	
Approach LOS		B			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		20.9		22.5		20.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		17.9		15.4		7.5		7.5				
Green Ext Time (p_c), s		0.0		1.0		3.0		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	79	95	0	0	0
Future Vol, veh/h	0	79	95	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	85	102	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	102	0	-	0	187	102
Stage 1	-	-	-	-	102	-
Stage 2	-	-	-	-	85	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1490	-	-	-	802	953
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	938	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1490	-	-	-	802	953
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	938	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1490	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	73	89	0	1	3
Future Vol, veh/h	2	73	89	0	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	77	94	0	1	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	94	0	-	0	175	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	81	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1500	-	-	-	815	963
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	942	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1500	-	-	-	814	963
Mov Cap-2 Maneuver	-	-	-	-	814	-
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	942	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1500	-	-	-	921
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	83	157	33	89	54	187	226	28	51	236	235
Future Volume (veh/h)	177	83	157	33	89	54	187	226	28	51	236	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	268	126	238	50	135	82	283	342	42	77	358	356
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	518	636	539	474	741	423	454	1563	697	556	1563	697
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1164	1870	1585	1018	2178	1245	736	3554	1585	999	3554	1585
Grp Volume(v), veh/h	268	126	238	50	109	108	283	342	42	77	358	356
Grp Sat Flow(s),veh/h/ln	1164	1870	1585	1018	1777	1646	736	1777	1585	999	1777	1585
Q Serve(g_s), s	8.6	2.0	4.8	1.5	1.8	1.9	15.4	2.4	0.6	2.1	2.6	6.6
Cycle Q Clear(g_c), s	10.5	2.0	4.8	3.4	1.8	1.9	18.0	2.4	0.6	4.6	2.6	6.6
Prop In Lane	1.00		1.00	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	518	636	539	474	604	560	454	1563	697	556	1563	697
V/C Ratio(X)	0.52	0.20	0.44	0.11	0.18	0.19	0.62	0.22	0.06	0.14	0.23	0.51
Avail Cap(c_a), veh/h	634	823	697	575	782	724	454	1563	697	556	1563	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	9.6	10.5	10.8	9.5	9.5	12.9	7.1	6.6	8.5	7.1	8.3
Incr Delay (d2), s/veh	0.8	0.2	0.6	0.1	0.1	0.2	6.3	0.3	0.2	0.5	0.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.6	1.4	0.3	0.6	0.6	2.7	0.7	0.2	0.4	0.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	9.7	11.1	10.9	9.6	9.7	19.2	7.4	6.8	9.0	7.5	10.9
LnGrp LOS	B	A	B	B	A	A	B	A	A	A	A	B
Approach Vol, veh/h		632			267			667			791	
Approach Delay, s/veh		12.1			9.9			12.4			9.2	
Approach LOS		B			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		18.4		22.5		18.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		12.5		8.6		5.4				
Green Ext Time (p_c), s		0.0		1.4		2.9		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	54	61	1	1	14
Future Vol, veh/h	14	54	61	1	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	67	75	1	1	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	176	75
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1523	-	-	-	814	986
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	805	986
Mov Cap-2 Maneuver	-	-	-	-	805	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	923	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1523	-	-	-	971
HCM Lane V/C Ratio	0.011	-	-	-	0.019
HCM Control Delay (s)	7.4	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	54	57	1	1	1
Future Vol, veh/h	1	54	57	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	69	73	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	74	0	-	0	145	74
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	71	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1526	-	-	-	847	988
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1526	-	-	-	846	988
Mov Cap-2 Maneuver	-	-	-	-	846	-
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	952	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1526	-	-	-	912
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	7.4	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	208	222	44	105	98	195	249	52	88	327	234
Future Volume (veh/h)	269	208	222	44	105	98	195	249	52	88	327	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	251	267	53	127	118	235	300	63	106	394	282
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	542	717	608	419	697	595	422	1460	651	528	1460	651
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1135	1870	1585	883	1817	1551	763	3554	1585	1019	3554	1585
Grp Volume(v), veh/h	324	251	267	53	124	121	235	300	63	106	394	282
Grp Sat Flow(s),veh/h/ln	1135	1870	1585	883	1777	1591	763	1777	1585	1019	1777	1585
Q Serve(g_s), s	11.7	4.2	5.5	2.0	2.0	2.2	12.9	2.4	1.1	3.3	3.2	5.6
Cycle Q Clear(g_c), s	13.9	4.2	5.5	6.2	2.0	2.2	16.1	2.4	1.1	5.7	3.2	5.6
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	542	717	608	419	681	610	422	1460	651	528	1460	651
V/C Ratio(X)	0.60	0.35	0.44	0.13	0.18	0.20	0.56	0.21	0.10	0.20	0.27	0.43
Avail Cap(c_a), veh/h	573	769	651	443	730	654	422	1460	651	528	1460	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	9.6	10.0	11.8	8.9	9.0	13.9	8.3	7.9	10.1	8.5	9.2
Incr Delay (d2), s/veh	1.6	0.3	0.5	0.1	0.1	0.2	5.2	0.3	0.3	0.9	0.5	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.4	1.6	0.3	0.6	0.6	2.4	0.8	0.3	0.7	1.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	9.9	10.5	11.9	9.1	9.2	19.1	8.6	8.2	11.0	9.0	11.3
LnGrp LOS	B	A	B	B	A	A	B	A	A	B	A	B
Approach Vol, veh/h		842			298			598			782	
Approach Delay, s/veh		12.1			9.6			12.7			10.1	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		21.3		22.5		21.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		18.1		15.9		7.7		8.2				
Green Ext Time (p_c), s		0.0		0.9		3.1		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			11.3									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	81	96	2	1	15
Future Vol, veh/h	34	81	96	2	1	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	87	103	2	1	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	264	103
Stage 1	-	-	-	-	103	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1486	-	-	-	725	952
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	707	952
Mov Cap-2 Maneuver	-	-	-	-	707	-
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	868	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	932
HCM Lane V/C Ratio	0.025	-	-	-	0.018
HCM Control Delay (s)	7.5	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	74	91	2	2	4
Future Vol, veh/h	4	74	91	2	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	78	96	2	2	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	-	0	183	97
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1495	-	-	-	806	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1495	-	-	-	804	959
Mov Cap-2 Maneuver	-	-	-	-	804	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	937	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1495	-	-	-	901
HCM Lane V/C Ratio	0.003	-	-	-	0.007
HCM Control Delay (s)	7.4	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	77	159	31	80	52	189	228	27	50	238	237
Future Volume (veh/h)	179	77	159	31	80	52	189	228	27	50	238	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	117	241	47	121	79	286	345	41	76	361	359
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	629	533	476	714	435	455	1572	701	558	1572	701
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1182	1870	1585	1023	2121	1294	732	3554	1585	997	3554	1585
Grp Volume(v), veh/h	271	117	241	47	100	100	286	345	41	76	361	359
Grp Sat Flow(s),veh/h/ln	1182	1870	1585	1023	1777	1638	732	1777	1585	997	1777	1585
Q Serve(g_s), s	8.6	1.8	4.8	1.4	1.6	1.8	15.4	2.4	0.6	2.1	2.6	6.6
Cycle Q Clear(g_c), s	10.3	1.8	4.8	3.2	1.6	1.8	18.0	2.4	0.6	4.5	2.6	6.6
Prop In Lane	1.00		1.00	1.00		0.79	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	524	629	533	476	598	551	455	1572	701	558	1572	701
V/C Ratio(X)	0.52	0.19	0.45	0.10	0.17	0.18	0.63	0.22	0.06	0.14	0.23	0.51
Avail Cap(c_a), veh/h	649	827	701	584	786	724	455	1572	701	558	1572	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	9.6	10.6	10.7	9.5	9.5	12.9	7.0	6.5	8.4	7.0	8.2
Incr Delay (d2), s/veh	0.8	0.1	0.6	0.1	0.1	0.2	6.5	0.3	0.2	0.5	0.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.6	1.4	0.3	0.5	0.5	2.8	0.7	0.2	0.4	0.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	9.7	11.2	10.8	9.6	9.7	19.3	7.3	6.7	8.9	7.4	10.8
LnGrp LOS	B	A	B	B	A	A	B	A	A	A	A	B
Approach Vol, veh/h		629			247			672			796	
Approach Delay, s/veh		12.1			9.9			12.4			9.1	
Approach LOS		B			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		18.2		22.5		18.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		12.3		8.6		5.2				
Green Ext Time (p_c), s		0.0		1.4		2.9		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	54	61	0	0	0
Future Vol, veh/h	4	54	61	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	67	75	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	75	0	-	0	152	75
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	77	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1524	-	-	-	840	986
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	946	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1524	-	-	-	837	986
Mov Cap-2 Maneuver	-	-	-	-	837	-
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	946	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1524	-	-	-	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	7.4	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	54	57	0	0	0
Future Vol, veh/h	0	54	57	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	69	73	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	73	0	-	0	142	73
Stage 1	-	-	-	-	73	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1527	-	-	-	851	989
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1527	-	-	-	851	989
Mov Cap-2 Maneuver	-	-	-	-	851	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1527	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	186	224	42	95	95	197	252	49	81	330	236
Future Volume (veh/h)	272	186	224	42	95	95	197	252	49	81	330	236
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	328	224	270	51	114	114	237	304	59	98	398	284
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	549	713	604	433	677	604	422	1467	654	530	1467	654
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1153	1870	1585	903	1777	1585	759	3554	1585	1019	3554	1585
Grp Volume(v), veh/h	328	224	270	51	114	114	237	304	59	98	398	284
Grp Sat Flow(s),veh/h/ln	1153	1870	1585	903	1777	1585	759	1777	1585	1019	1777	1585
Q Serve(g_s), s	11.6	3.7	5.5	1.8	1.9	2.1	13.1	2.4	1.0	3.0	3.2	5.6
Cycle Q Clear(g_c), s	13.7	3.7	5.5	5.5	1.9	2.1	16.3	2.4	1.0	5.4	3.2	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	549	713	604	433	677	604	422	1467	654	530	1467	654
V/C Ratio(X)	0.60	0.31	0.45	0.12	0.17	0.19	0.56	0.21	0.09	0.19	0.27	0.43
Avail Cap(c_a), veh/h	585	772	654	462	733	654	422	1467	654	530	1467	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	9.5	10.1	11.4	8.9	9.0	13.9	8.2	7.8	10.0	8.5	9.2
Incr Delay (d2), s/veh	1.5	0.3	0.5	0.1	0.1	0.1	5.3	0.3	0.3	0.8	0.5	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.2	1.6	0.3	0.6	0.6	2.4	0.8	0.3	0.6	1.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	9.7	10.6	11.6	9.0	9.2	19.2	8.5	8.1	10.7	8.9	11.3
LnGrp LOS	B	A	B	B	A	A	B	A	A	B	A	B
Approach Vol, veh/h		822			279			600			780	
Approach Delay, s/veh		12.1			9.5			12.7			10.0	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	22.5	21.1	22.5	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	18.3	15.7	7.6	7.5
Green Ext Time (p_c), s	0.0	1.0	3.1	1.1

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	80	96	0	0	0
Future Vol, veh/h	0	80	96	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	86	103	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	103	0	-	0	189	103
Stage 1	-	-	-	-	103	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1489	-	-	-	800	952
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1489	-	-	-	800	952
Mov Cap-2 Maneuver	-	-	-	-	800	-
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	937	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1489	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	74	90	0	1	3
Future Vol, veh/h	2	74	90	0	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	78	95	0	1	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	95	0	-	0	177	95
Stage 1	-	-	-	-	95	-
Stage 2	-	-	-	-	82	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1499	-	-	-	813	962
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	941	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1499	-	-	-	812	962
Mov Cap-2 Maneuver	-	-	-	-	812	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1499	-	-	-	920
HCM Lane V/C Ratio	0.001	-	-	-	0.005
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	84	159	33	90	55	189	228	28	52	238	237
Future Volume (veh/h)	179	84	159	33	90	55	189	228	28	52	238	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	127	241	50	136	83	286	345	42	79	361	359
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	519	641	543	474	745	428	450	1557	695	552	1557	695
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1162	1870	1585	1014	2174	1249	732	3554	1585	997	3554	1585
Grp Volume(v), veh/h	271	127	241	50	110	109	286	345	42	79	361	359
Grp Sat Flow(s),veh/h/ln	1162	1870	1585	1014	1777	1646	732	1777	1585	997	1777	1585
Q Serve(g_s), s	8.8	2.0	4.8	1.5	1.8	1.9	15.4	2.5	0.6	2.2	2.6	6.8
Cycle Q Clear(g_c), s	10.7	2.0	4.8	3.5	1.8	1.9	18.0	2.5	0.6	4.7	2.6	6.8
Prop In Lane	1.00		1.00	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	519	641	543	474	609	564	450	1557	695	552	1557	695
V/C Ratio(X)	0.52	0.20	0.44	0.11	0.18	0.19	0.64	0.22	0.06	0.14	0.23	0.52
Avail Cap(c_a), veh/h	630	820	695	571	779	721	450	1557	695	552	1557	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	9.5	10.5	10.7	9.5	9.5	13.2	7.2	6.7	8.6	7.2	8.4
Incr Delay (d2), s/veh	0.8	0.1	0.6	0.1	0.1	0.2	6.7	0.3	0.2	0.5	0.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.7	1.4	0.3	0.6	0.6	2.8	0.7	0.2	0.4	0.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	9.7	11.0	10.8	9.6	9.7	19.9	7.5	6.8	9.2	7.6	11.1
LnGrp LOS	B	A	B	B	A	A	B	A	A	A	A	B
Approach Vol, veh/h		639			269			673			799	
Approach Delay, s/veh		12.1			9.9			12.7			9.3	
Approach LOS		B			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		18.6		22.5		18.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		12.7		8.8		5.5				
Green Ext Time (p_c), s		0.0		1.4		2.9		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	55	62	1	1	14
Future Vol, veh/h	14	55	62	1	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	68	77	1	1	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	78	0	-	0	179	77
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	102	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1520	-	-	-	811	984
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	922	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1520	-	-	-	802	984
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	922	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1520	-	-	-	969
HCM Lane V/C Ratio	0.011	-	-	-	0.019
HCM Control Delay (s)	7.4	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	55	58	1	1	1
Future Vol, veh/h	1	55	58	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	71	74	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	75	0	-	0	148	75
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	73	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1524	-	-	-	844	986
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	950	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1524	-	-	-	843	986
Mov Cap-2 Maneuver	-	-	-	-	843	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1524	-	-	-	909
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	7.4	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	210	224	44	106	99	197	252	53	89	330	236
Future Volume (veh/h)	272	210	224	44	106	99	197	252	53	89	330	236
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	328	253	270	53	128	119	237	304	64	107	398	284
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	543	722	612	419	701	599	418	1455	649	523	1455	649
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1133	1870	1585	879	1816	1551	759	3554	1585	1014	3554	1585
Grp Volume(v), veh/h	328	253	270	53	125	122	237	304	64	107	398	284
Grp Sat Flow(s),veh/h/ln	1133	1870	1585	879	1777	1591	759	1777	1585	1014	1777	1585
Q Serve(g_s), s	11.9	4.2	5.5	2.0	2.0	2.2	13.3	2.4	1.1	3.3	3.3	5.7
Cycle Q Clear(g_c), s	14.2	4.2	5.5	6.2	2.0	2.2	16.6	2.4	1.1	5.8	3.3	5.7
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	543	722	612	419	686	614	418	1455	649	523	1455	649
V/C Ratio(X)	0.60	0.35	0.44	0.13	0.18	0.20	0.57	0.21	0.10	0.20	0.27	0.44
Avail Cap(c_a), veh/h	570	766	649	439	727	651	418	1455	649	523	1455	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	9.6	10.0	11.8	8.9	9.0	14.1	8.4	8.0	10.3	8.6	9.3
Incr Delay (d2), s/veh	1.7	0.3	0.5	0.1	0.1	0.2	5.5	0.3	0.3	0.9	0.5	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.4	1.6	0.3	0.6	0.6	2.4	0.8	0.3	0.7	1.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	9.9	10.5	11.9	9.0	9.1	19.6	8.7	8.3	11.1	9.1	11.5
LnGrp LOS	B	A	B	B	A	A	B	A	A	B	A	B
Approach Vol, veh/h		851			300			605			789	
Approach Delay, s/veh		12.2			9.6			12.9			10.2	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		21.5		22.5		21.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		18.6		16.2		7.8		8.2				
Green Ext Time (p_c), s		0.0		0.8		3.1		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	82	97	2	1	15
Future Vol, veh/h	34	82	97	2	1	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	88	104	2	1	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	106	0	-	0	266	104
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	162	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1485	-	-	-	723	951
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	867	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1485	-	-	-	705	951
Mov Cap-2 Maneuver	-	-	-	-	705	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	867	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1485	-	-	-	931
HCM Lane V/C Ratio	0.025	-	-	-	0.018
HCM Control Delay (s)	7.5	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	75	92	2	2	4
Future Vol, veh/h	4	75	92	2	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	79	97	2	2	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	99	0	-	0	185	98
Stage 1	-	-	-	-	98	-
Stage 2	-	-	-	-	87	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1494	-	-	-	804	958
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	936	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1494	-	-	-	802	958
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	936	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1494	-	-	-	900
HCM Lane V/C Ratio	0.003	-	-	-	0.007
HCM Control Delay (s)	7.4	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	113	248	39	105	52	312	236	35	50	243	250
Future Volume (veh/h)	209	113	248	39	105	52	312	236	35	50	243	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	317	171	376	59	159	79	473	358	53	76	368	379
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	543	706	598	437	883	418	414	1475	658	507	1475	658
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1142	1870	1585	860	2339	1109	714	3554	1585	975	3554	1585
Grp Volume(v), veh/h	317	171	376	59	119	119	473	358	53	76	368	379
Grp Sat Flow(s),veh/h/ln	1142	1870	1585	860	1777	1671	714	1777	1585	975	1777	1585
Q Serve(g_s), s	11.2	2.7	8.4	2.2	1.9	2.1	15.1	2.8	0.9	2.4	2.9	8.0
Cycle Q Clear(g_c), s	13.2	2.7	8.4	4.9	1.9	2.1	18.0	2.8	0.9	5.2	2.9	8.0
Prop In Lane	1.00		1.00	1.00		0.66	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	543	706	598	437	671	631	414	1475	658	507	1475	658
V/C Ratio(X)	0.58	0.24	0.63	0.14	0.18	0.19	1.14	0.24	0.08	0.15	0.25	0.58
Avail Cap(c_a), veh/h	585	776	658	469	737	693	414	1475	658	507	1475	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.5	9.3	11.0	10.9	9.0	9.0	17.2	8.3	7.7	10.0	8.3	9.8
Incr Delay (d2), s/veh	1.3	0.2	1.7	0.1	0.1	0.1	89.0	0.4	0.2	0.6	0.4	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.9	2.5	0.4	0.6	0.6	14.0	0.9	0.3	0.5	0.9	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	9.4	12.7	11.1	9.1	9.2	106.2	8.6	7.9	10.6	8.7	13.4
LnGrp LOS	B	A	B	B	A	A	F	A	A	B	A	B
Approach Vol, veh/h		864			297			884			823	
Approach Delay, s/veh		12.8			9.5			60.8			11.0	
Approach LOS		B			A			E			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		20.9		22.5		20.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		15.2		10.0		6.9				
Green Ext Time (p_c), s		0.0		1.1		2.7		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			26.7									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	98	94	0	0	0
Future Vol, veh/h	4	98	94	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	121	116	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	116	0	-	0	247	116
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	131	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1473	-	-	-	741	936
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1473	-	-	-	738	936
Mov Cap-2 Maneuver	-	-	-	-	738	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1473	-	-	-	-
HCM Lane V/C Ratio	0.003	-	-	-	-
HCM Control Delay (s)	7.5	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	98	90	0	0	0
Future Vol, veh/h	0	98	90	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	126	115	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	115	0	-	0	241	115
Stage 1	-	-	-	-	115	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1474	-	-	-	747	937
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	900	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1474	-	-	-	747	937
Mov Cap-2 Maneuver	-	-	-	-	747	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1474	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	202	285	54	116	95	248	261	61	81	341	250
Future Volume (veh/h)	283	202	285	54	116	95	248	261	61	81	341	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	306	432	82	176	144	376	395	92	123	517	379
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	515	748	634	364	765	588	345	1421	634	455	1421	634
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1060	1870	1585	720	1911	1471	621	3554	1585	909	3554	1585
Grp Volume(v), veh/h	429	306	432	82	163	157	376	395	92	123	517	379
Grp Sat Flow(s),veh/h/ln	1060	1870	1585	720	1777	1606	621	1777	1585	909	1777	1585
Q Serve(g_s), s	15.1	5.3	10.1	4.1	2.7	2.9	13.4	3.4	1.7	4.8	4.6	8.5
Cycle Q Clear(g_c), s	18.0	5.3	10.1	9.4	2.7	2.9	18.0	3.4	1.7	8.1	4.6	8.5
Prop In Lane	1.00		1.00	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	748	634	364	711	642	345	1421	634	455	1421	634
V/C Ratio(X)	0.83	0.41	0.68	0.23	0.23	0.24	1.09	0.28	0.15	0.27	0.36	0.60
Avail Cap(c_a), veh/h	515	748	634	364	711	642	345	1421	634	455	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	9.7	11.1	13.1	8.9	9.0	18.9	9.1	8.6	11.9	9.5	10.6
Incr Delay (d2), s/veh	11.2	0.4	3.0	0.3	0.2	0.2	74.7	0.5	0.5	1.5	0.7	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	1.8	3.3	0.6	0.9	0.8	10.5	1.1	0.5	1.0	1.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	10.0	14.1	13.4	9.1	9.2	93.6	9.6	9.1	13.3	10.2	14.8
LnGrp LOS	C	B	B	B	A	A	F	A	A	B	B	B
Approach Vol, veh/h		1167			402			863			1019	
Approach Delay, s/veh		18.0			10.0			46.1			12.3	
Approach LOS		B			A			D			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		20.0		10.5		11.4				
Green Ext Time (p_c), s		0.0		0.0		3.3		1.4				

Intersection Summary												
HCM 6th Ctrl Delay			22.4									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	108	129	0	0	0
Future Vol, veh/h	0	108	129	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	159	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	159	0	-	0	292	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	133	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1420	-	-	-	699	886
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1420	-	-	-	699	886
Mov Cap-2 Maneuver	-	-	-	-	699	-
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	893	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1420	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	102	123	0	1	3
Future Vol, veh/h	2	102	123	0	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	131	158	0	1	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	158	0	-	0	295	158
Stage 1	-	-	-	-	158	-
Stage 2	-	-	-	-	137	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1422	-	-	-	696	887
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1422	-	-	-	695	887
Mov Cap-2 Maneuver	-	-	-	-	695	-
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1422	-	-	-	830
HCM Lane V/C Ratio	0.002	-	-	-	0.006
HCM Control Delay (s)	7.5	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	120	248	41	115	55	312	236	36	52	243	259
Future Volume (veh/h)	209	120	248	41	115	55	312	236	36	52	243	259
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	317	182	376	62	174	83	473	358	55	79	368	392
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	536	715	606	434	906	414	407	1463	653	501	1463	653
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1123	1870	1585	851	2370	1083	706	3554	1585	973	3554	1585
Grp Volume(v), veh/h	317	182	376	62	129	128	473	358	55	79	368	392
Grp Sat Flow(s),veh/h/ln	1123	1870	1585	851	1777	1675	706	1777	1585	973	1777	1585
Q Serve(g_s), s	11.5	2.9	8.4	2.3	2.1	2.2	15.0	2.9	0.9	2.5	3.0	8.4
Cycle Q Clear(g_c), s	13.7	2.9	8.4	5.3	2.1	2.2	18.0	2.9	0.9	5.4	3.0	8.4
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	536	715	606	434	679	641	407	1463	653	501	1463	653
V/C Ratio(X)	0.59	0.25	0.62	0.14	0.19	0.20	1.16	0.24	0.08	0.16	0.25	0.60
Avail Cap(c_a), veh/h	569	770	653	459	732	690	407	1463	653	501	1463	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	9.2	10.9	11.0	9.0	9.0	17.4	8.4	7.8	10.2	8.4	10.0
Incr Delay (d2), s/veh	1.5	0.2	1.6	0.1	0.1	0.2	96.6	0.4	0.3	0.7	0.4	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.0	2.5	0.4	0.7	0.7	14.7	0.9	0.3	0.5	1.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	9.4	12.5	11.2	9.1	9.2	113.9	8.8	8.1	10.9	8.9	14.1
LnGrp LOS	B	A	B	B	A	A	F	A	A	B	A	B
Approach Vol, veh/h		875			319			886			839	
Approach Delay, s/veh		12.8			9.5			64.9			11.5	
Approach LOS		B			A			E			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		21.2		22.5		21.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		15.7		10.4		7.3				
Green Ext Time (p_c), s		0.0		1.0		2.6		1.3				

Intersection Summary			
HCM 6th Ctrl Delay			27.9
HCM 6th LOS			C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	99	95	1	1	14
Future Vol, veh/h	14	99	95	1	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	122	117	1	1	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	118	0	-	0	273	117
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1470	-	-	-	716	935
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1470	-	-	-	707	935
Mov Cap-2 Maneuver	-	-	-	-	707	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	872	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1470	-	-	-	915
HCM Lane V/C Ratio	0.012	-	-	-	0.02
HCM Control Delay (s)	7.5	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	99	91	1	1	1
Future Vol, veh/h	1	99	91	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	127	117	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	118	0	-	0	247	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	129	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1470	-	-	-	741	934
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	897	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1470	-	-	-	740	934
Mov Cap-2 Maneuver	-	-	-	-	740	-
Stage 1	-	-	-	-	906	-
Stage 2	-	-	-	-	897	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1470	-	-	-	826
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	7.5	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	226	285	56	127	97	248	261	65	89	341	250
Future Volume (veh/h)	283	226	285	56	127	97	248	261	65	89	341	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	341	272	343	67	153	117	299	314	78	107	411	301
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	541	742	629	398	785	562	400	1429	637	502	1429	637
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1109	1870	1585	807	1977	1415	738	3554	1585	992	3554	1585
Grp Volume(v), veh/h	341	272	343	67	136	134	299	314	78	107	411	301
Grp Sat Flow(s),veh/h/ln	1109	1870	1585	807	1777	1616	738	1777	1585	992	1777	1585
Q Serve(g_s), s	13.1	4.6	7.5	2.9	2.2	2.4	14.5	2.6	1.4	3.5	3.5	6.3
Cycle Q Clear(g_c), s	15.5	4.6	7.5	7.5	2.2	2.4	18.0	2.6	1.4	6.1	3.5	6.3
Prop In Lane	1.00		1.00	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	541	742	629	398	705	641	400	1429	637	502	1429	637
V/C Ratio(X)	0.63	0.37	0.55	0.17	0.19	0.21	0.75	0.22	0.12	0.21	0.29	0.47
Avail Cap(c_a), veh/h	547	752	637	403	715	650	400	1429	637	502	1429	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	9.5	10.4	12.2	8.8	8.9	16.6	8.8	8.4	10.8	9.0	9.9
Incr Delay (d2), s/veh	2.3	0.3	0.9	0.2	0.1	0.2	12.1	0.4	0.4	1.0	0.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	1.5	2.2	0.5	0.7	0.7	4.1	0.9	0.4	0.8	1.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	9.8	11.3	12.4	9.0	9.0	28.6	9.1	8.8	11.8	9.6	12.4
LnGrp LOS	B	A	B	B	A	A	C	A	A	B	A	B
Approach Vol, veh/h		956			337			691			819	
Approach Delay, s/veh		12.7			9.7			17.5			10.9	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.3		22.5		22.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		20.0		17.5		8.3		9.5				
Green Ext Time (p_c), s		0.0		0.3		3.1		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	110	130	2	1	15
Future Vol, veh/h	34	110	130	2	1	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	118	140	2	1	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	142	0	-	0	332	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	192	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1441	-	-	-	663	908
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1441	-	-	-	646	908
Mov Cap-2 Maneuver	-	-	-	-	646	-
Stage 1	-	-	-	-	864	-
Stage 2	-	-	-	-	841	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1441	-	-	-	886
HCM Lane V/C Ratio	0.025	-	-	-	0.019
HCM Control Delay (s)	7.6	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	103	125	2	2	4
Future Vol, veh/h	4	103	125	2	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	108	132	2	2	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	134	0	-	0	249	133
Stage 1	-	-	-	-	133	-
Stage 2	-	-	-	-	116	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1451	-	-	-	739	916
Stage 1	-	-	-	-	893	-
Stage 2	-	-	-	-	909	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1451	-	-	-	737	916
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	909	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1451	-	-	-	847
HCM Lane V/C Ratio	0.003	-	-	-	0.007
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

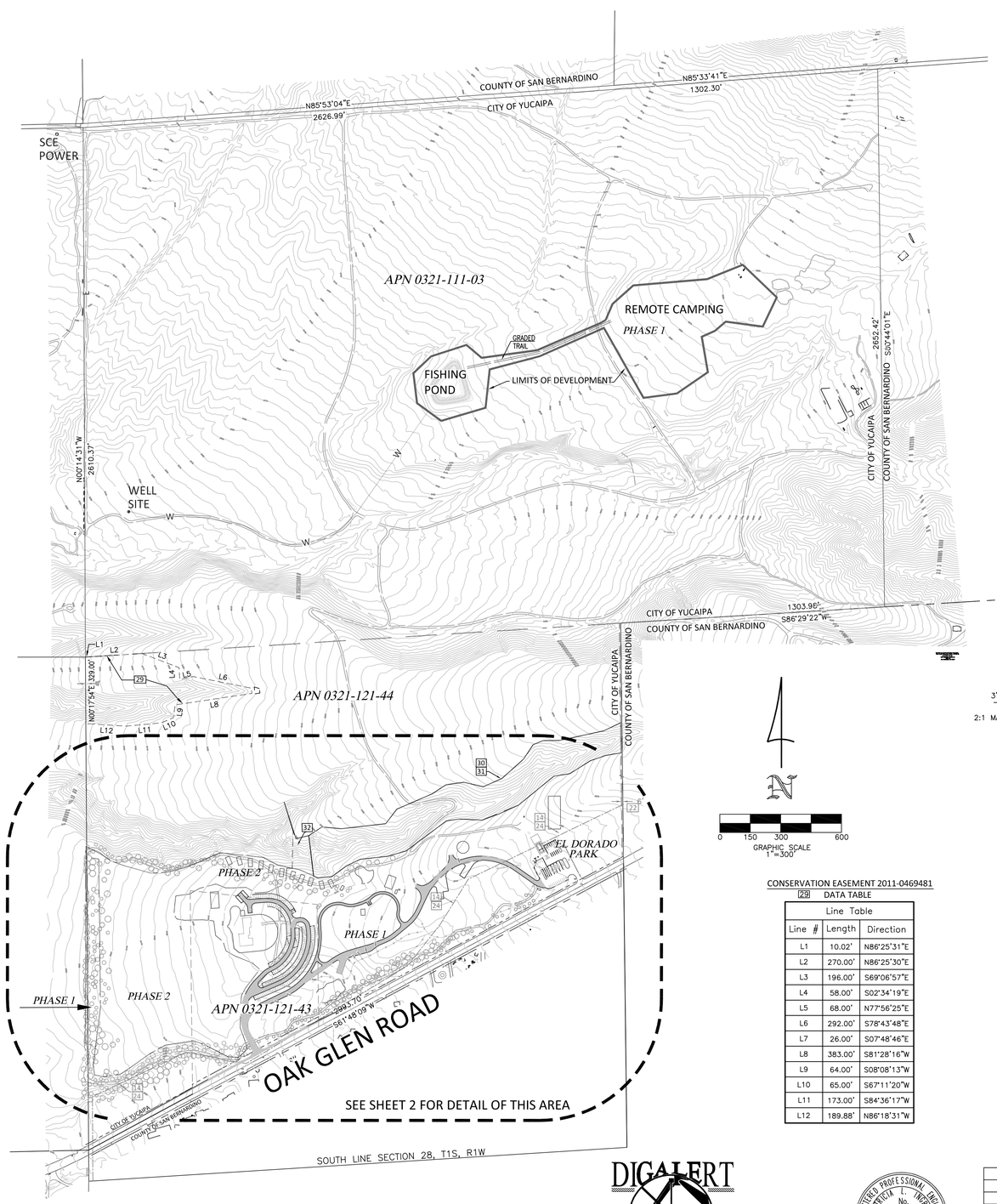
city of YUCAIPA

ARCHITERRA DESIGN GROUP
LANDSCAPE ARCHITECTURE AND PLANNING

APPROVED CONCEPTUAL PLAN

1" = 75'

PLAN SUBJECT TO FINAL DESIGN MODIFICATIONS



CONSERVATION EASEMENT 2011-0469481

29 DATA TABLE

Line Table		
Line #	Length	Direction
L1	10.02'	N86°25'31"E
L2	270.00'	N86°25'30"E
L3	196.00'	S69°06'57"E
L4	58.00'	S02°34'19"E
L5	68.00'	N77°56'25"E
L6	292.00'	S78°43'48"E
L7	26.00'	S07°48'46"E
L8	383.00'	S81°28'16"W
L9	64.00'	S08°08'13"W
L10	65.00'	S67°11'20"W
L11	173.00'	S84°36'17"W
L12	189.88'	N86°18'31"W

PROJECT DESCRIPTION:

PROJECT CONSISTS OF 347 ACRES TO BE UTILIZED AS A RECREATION AREA. THE CITY PREVIOUSLY CONSTRUCTED THE EL DORADO RANCH PARKING AREA AND RESTROOM FACILITY IN THE SOUTHEAST PORTION OF THE SITE. THE PROPOSAL IS TO CONVERT THE EXISTING FIVE WINDS RANCH HOUSE INTO A PUBLIC USE FACILITY. THE GROUNDS AROUND THE EXISTING HOUSE WILL BE USED FOR GROUP EVENTS AS SHOWN. THE EXISTING BARN WILL BE RELOCATED FOR USE AS AN ARCADE AND GAMING AREA. THERE WILL BE AN AMPHITHEATER AND WALKING TRAILS.

GROUP AND INDIVIDUAL CAMPING WILL BE PROVIDED IN AN IMPROVED AREA NEAR OAK GLEN ROAD AND AN UNIMPROVED AREA NEAR A PROPOSED FISHING POND IN THE NORTHERN PORTION. THE IMPROVED CAMPING AREAS HAVE EQUESTRIAN APPURTENANCES. THERE WILL BE CABINS FOR RENT.

TO PROVIDE WATER TO THE FISHING POND, AN EXISTING WELL WILL BE UTILIZED AND POWER SUPPLIED FROM THE NW PROPERTY CORNER

133 PARKING SPACES ARE PROVIDED INCLUDING 7 HANDICAP SPACES AND 4 LOADING ZONES AT THE VISITORS.RECEPTION AREA. THE EXISTING PARKING AT EL DORADO PARK WILL REMAIN WITH 19 PARKING SPACES INCLUDING 2 HANDICAP SPACES AND 5 TRAILER SPACES

EXISTING FIVE WINDS RANCH HOUSE BUILT IN ±1946

EXISTING EL DORADO PARK RESTROOMS BUILT ±2016

NO EXISTING STRUCTURES WITHIN 30 FEET OF THE PROPERTY LINE.

ESTIMATED GRADING QUANTITY : 35,000 CY

BUILDING COVERAGE : 8850 SF = .20 AC, .20/347 AC = .0006 = .06% BUILDING COVERAGE

ESTIMATED IMPERVIOUS AREA (SIDEWALKS, PAVERS, ROADS AND BUILDINGS): 3.9 ACRES – 3.9 AC/347 AC = .011 = 1.1% OF SITE

LEGAL DESCRIPTION:

APN 321-121-43

PARCEL 1 OF PARCEL MAP 15032, IN THE CITY OF YUCAIPA, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 184 PAGES 69 AND 70 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN 0321-111-03

GOVERNMENT LOTS 2, 3, 4, 5, 6 AND 7 IN SECTION 28, TOWNSHIP 1 SOUTH, RANGE 1 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE GOVERNMENT SURVEY, THEREOF.

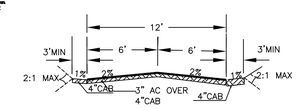
APN 0321-121-44

GOVERNMENT LOTS 12 AND A PORTION OF LOTS 11, 13, AND 14 LYING NORTHWESTERLY OF OAK GLEN ROAD ALL IN THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 1 SOUTH, RANGE 1 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF YUCAIPA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

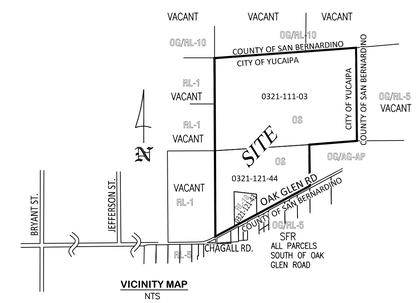
EXCEPT THAT PORTION DESCRIBED AS FOLLOWS:

PARCEL 1 OF PARCEL MAP 15032, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 184, PAGE 69 AND 70, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

SAID LAND IS DESCRIBED PURSUANT TO CERTIFICATE OF COMPLIANCE NO. E0006-98 RECORDED MARCH 27, 1998 AS INSTRUMENT NO. 98-111918 OFFICIAL RECORDS.



12' WIDE PAVED ACCESS ROAD
NTS



VICINITY MAP
NTS

TOTAL PARKING PROVIDED:
156 SPACES AT MAIN CENTER INCLUDING 7 HANDICAP SPACES
38 SPACES AT EL DORADO PARK INCLUDING 2 HANDICAP SPACES
194 SPACES INCLUDING 9 HANDICAP SPACES, STD SPACES 9'X19'

ADDITIONAL SPACES:
5 TRAILER SPACES AT EL DORADO PARK
4 LOADING SPACES AT MAIN CENTER 10'X20'

REQUIRED PARKING:

1 SPACE PER 250 SF FOR GENERAL BUSINESS
1 SPACE PER 24 SF OF SEATING AREA FOR PUBLIC ASSEMBLY

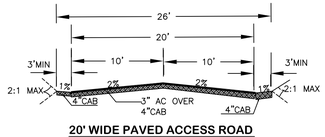
PROPOSED FACILITY :

4000 SF BUILDING GENERAL BUSINESS
4000 SF/ 250 = 16 SPACES

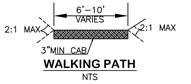
COMMERCIAL RECREATION/PARK GATHERING AREA – 100 PEOPLE
1 SP/4 PEOPLE = 25 SPACES

TENT : 3200 SF SEATING AREA / 24 = 133 SPACES

TOTAL MAXIMUM REQUIRED FOR ALL VENUES USED AT SAME TIME:
19 SPACES FOR GENERAL BUSINESS
25 SPACES FOR COMMERCIAL RECREATION
133 SPACES FOR TENT SEATING
177 SPACES WITH 194 PROVIDED



20' WIDE PAVED ACCESS ROAD
NTS



WALKING PATH
NTS

BASIS OF BEARINGS:

THE EAST LINE OF SECTION 28, T1S, R1W ALSO BEING THE EAST LINE OF SECTION 28, T1S, R1W AS SHOWN ON RECORD OF SURVEY RECORDED IN BK 69, PG 46 RECORDS OF SAN BERNARDINO COUNTY

BENCHMARK:

ELEV: 3560.03
AT–11 SOUTHEAST CORNER OF PROPERTY IN CL OF OAK GLEN ROAD.

RECORD OWNER:

CITY OF YUCAIPA
34272 YUCAIPA BLVD
YUCAIPA, CA 92399

UTILITY PURVEYORS

YUCAIPA VALLEY WATER DISTRICT
ATTENTION: MATT PORRAS, MANAGEMENT ANALYST
12770 2nd STREET,
YUCAIPA, CA. 92399
(909) 790–3300
MPORRAS@YVWD.US

SOUTHERN CALIFORNIA EDISON, DISTRIBUTION
ATTENTION: RYAN JASSO
287 TENNESSEE STREET
REDLANDS, CA. 92373
(909) 307–6789, (909)771–9353
RYAN.JASSO@SCE.COM

SOUTHERN CALIFORNIA EDISON TRANSMISSION
ATTN: CAROLYN HENSLEY, PROJECT MANAGER
300 N PEPPER AVE BLDG B
RIALTO, CA 92376
909–820–5532
CAROLYN.HENSLEY@SCE.COM

SOUTHERN CALIFORNIA GAS COMPANY
ATTENTION: JARED FOWLER
1981 W. LUGONIA AVE SC8031
REDLANDS, CA. 92374–9796
TELEPHONE: (909) 335–7871

SPECTRUM COMMUNICATIONS
ATTENTION: MR. FRANK RODRIGUES
7337 CENTRAL AVENUE
RIVERSIDE, CA 92504
(909) 975–3378
FRANK.RODRIGUES@CHARTER.COM

EASEMENTS:

APN 0321–121–43

1. AN EASEMENT FOR WATER RIGHTS AND EASEMENTS IN FAVOR OF JOSEPH AND M.M. WEBSTER RECORDED MAY 19, 1892 IN BK 158,PAGE 255 OF DEEDS, NOT PLOTTABLE.
2. AN EASEMENT FOR WATER RIGHTS AND EASEMENTS IN FAVOR OF SOUTH MOUNTAIN WATER COMPANY RECORDED JUNE 1, 1919 IN BK 460, PAGE 117 OF DEEDS, NOT PLOTTABLE.
3. AN EASEMENT FOR PIPELINES AND CONDUITS IN FAVOR OF YUCAIPA VALLEY MUTUAL WATER COMPANY RECORDED MAY 1, 1923 IN BK 794. PG 259 OF DEEDS, NOT PLOTTABLE.
4. AN EASEMENT FOR ROAD PURPOSES IN FAVOR OF THE COUNTY OF SAN BERNARDINO RECORDED MARCH 6, 1931 IN BK 702, PG 298, O.R.
5. AN EASEMENT FOR WATER RIGHTS , RIGHT TO DITCHES, RESERVOIRS IN FAVOR OF THE UNITED STATES OF AMERICA, RECORDED APRIL 2,1931 IN BK.711, PG.192,O.R., NOT PLOTTABLE.
6. AN EASEMENT FOR ROAD PURPOSES IN FAVOR OF SAN BERNARDINO COUNTY RECORDED MARCH 18, 1931 IN BK 704, PG 243, O.R.
7. EASEMENTS AS SHOWN ON PARCEL MAP NO 15032, PMB 184, PGS 69 AND 70 OF PARCEL MAPS.

APN 0321–111–03

8. VESTED AND ACCRUED WATER RIGHTS IN FAVOR OF THE UNITED STATES OF AMERICA, RECORDED IN BK F OF PATENTS, PG 5 AND IN BOOK H OF PATENTS, PG 245, NOT PLOTTABLE.
9. AN EASEMENT FOR POLE LINES, CONDUITS AND INCIDENTAL PURPOSES IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY RECORDED IN BK 2085, PG 210, O.R.
10. AN EASEMENT FOR POLE LINES, CONDUITS AND INCIDENTAL PURPOSES IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY RECORDED IN BK 4486, PG 245, O.R.
11. AN EASEMENT FOR ROAD PURPOSES, ELECTRICITY AND TELEPHONE RECORDED IN BK 6014, PG 590, O.R.
12. AN EASEMENT RECORDED DEC. 28, 1998 AS INSTRUMENT NO. 98–553416 O.R.

APN 0321–121–44

13. AN EASEMENT FOR WATER RIGHTS AND EASEMENTS IN FAVOR OR JOSEPH AND M.M. WEBSTER RECORDED MAY 19, 1892, IN BK 158,PAGE 255 OF DEEDS NOT PLOTTABLE
14. AN EASEMENT 20' WIDE FOR ROAD PURPOSES IN FAVOR OF THE COUNTY OF SAN BERNARDINO RECORDED MAY 21, 1900 IN BK 283, PG 260 OF DEEDS
15. VARIOUS WATER EASEMENTS AND AGREEMENTS IN FAVOR OF SOUTH MOUNTAIN WATER COMPANY RECORDED JUNE 1, 1910 IN BK 460, PG 117 OF DEEDS, NOT PLOTTABLE.
16. AN EASEMENT FOR RAILROAD PURPOSES IN FAVOR OF SOUTHERN PACIFIC RAILROAD COMPANY RECORDED MARCH 25, 1912 IN BK 498, PG 299 OF DEEDS, NOT PLOTTABLE.
17. AN EASEMENT FOR PIPELINES AND CONDUITS IN FAVOR OF YUCAIPA VALLEY MUTUAL WATER COMPANY RECORDED MAY 1, 1923 IN BK 794. PG 259 OF DEEDS, NOT PLOTTABLE.
18. AN EASEMENT FOR HIGHWAY PURPOSES IN FAVOR OF THE COUNTY OF SAN BERNARDINO RECORDED FEBRUARY 24, 1931, IN BL 701, PG 234 AND MARCH 18, 1931 IN BK 704, PG 243, O.R., NOT PLOTTABLE.
19. AN EASEMENT FOR EMINENT DOMAIN FOR HIGHWAY PURPOSES RECORDED MARCH 6, 1931, IN BK 702, PG 298, O.R.
20. AN EASEMENT FOR WATER RIGHTS , RIGHT TO DITCHES, RESERVOIRS IN FAVOR OF THE UNITED STATES OF AMERICA, RECORDED APRIL 2, 1931, IN BK 711, PG 192, O.R., NOT PLOTTABLE.
21. A RIGHT OF WAY FOR WATER CONVEYANCE IN FAVOR OF LEON A. ATWOOD RECORDED NOV. 6, 1940 NOV. 18, 1940 IN BK 1437, PG 491, O.R., NOT PLOTTABLE.
22. AN EASEMENT IN FAVOR OR SOUTHERN CALIFORNIA EDISON COMPANY, RECORDED SEPT. 18, 1947 IN BK 2134, PG 277, O.R.
23. AN EASEMENT FOR POLE LINES IN FAVOR OF SOUTHER SIERRAS POWER COMPANY OVER EXISTING POLES.
24. AN EASEMENT FOR PUBLIC UTILITIES CONTAINED IN THE VACATED STREET RECORDED MAY 15, 1958 IN BOOK 4509, PG 559, O.R.
25. AN EASEMENT FOR PUBLIC UTILITIES IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY RECORDED DEC. 29, 1967 IN BK 6951, PG 229, O.R. , NOT PLOTTABLE.
26. TERMS OF A CERTIFICATE OF NON–RENEWAL OF LAND CONSERVATION CONTRACT RECORDED OCT. 10., 1997 AS INST. NO. 97–0374317
27. WILDLANDS CONSERVANCY CONDITIONS AS CONTAINED IN DEED RECORDED MAY 4, 2005 AS INST. NO. 2005–312813 O.R.
28. TERMS OF CORRECTED NOTICE OF NON–RENEWAL OF LAND CONSERVATION CONTRACT RECORDED JULY 14, 2006 AS INST. NO. 2006–0479777 O.R.
29. A CONSERVATION EASEMENT IN FAVOR OF YUCAIPA VALLEY CONSERVANCY AND THE WILDLANDS CONSERVANCY RECORDED NO. 14, 2011 IN DOC.#2011–0469481, O.R.
30. A CONSERVATION EASEMENT IN FAVOR OF INLAND EMPIRE RESOURCE CONSERVATION DISTRICT RECORDED AUG. 17, 2016 IN DOC.#2016–0333119, O.R.
31. A CONSERVATION EASEMENT IN FAVOR OF INLAND EMPIRE RESOURCE CONSERVATION DISTRICT RECORDED SEPT. 12, 2016 IN DOC.#2016–0373765, O.R.
32. DECLARATION OF RESTRICTIVE COVENANT RECORDED JUNE 20, 2018 AS INST. # 2018–0224258. O.R.

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PATRICIA L. INGRAM
No. 31890
Exp. 12-31-20
STATE OF CALIFORNIA
CIVIL

REV.	BY	REVISIONS	APPV'D	DATE

YUCAIPA VALLEY ENGINEERING, INC.
34159 YUCAIPA BLVD. STE. D
YUCAIPA, CA 92399
909–797–3310

SCALE 1"=300'
DATE 03/02/20
JOB NO. 171101– 5–WINDS/EL DORADO

CITY OF YUCAIPA

CONDITIONAL USE PERMIT

5-WINDS & EL DORADO RANCH

APN 0321-121-43,0321-121-44,0321-111-03

Submitted By: _____ Date: _____
Recommended for Approval By: _____ Date: _____
Approved By: _____ Date: _____
FERMIN G. PRECIADO, DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

Job No.
Sheet No. 1 of 2 sheets
Drawing No. 10821

City of Yucaipa Public Works Department
Engineering Division

CONSERVATION EASEMENTS
2016-0373765 [31]
2016-0333119 [30]

LINE TABLE		
LINE	LENGTH	BEARING
L13	200.75	N06°07'23"W
L14	77.00	N57°22'34"E
L15	97.00	S84°28'49"E
L16	220.00	N84°12'35"E
L17	90.00	N38°03'44"E
L18	190.00	N67°13'45"E
L19	82.00	N57°12'26"E
L20	89.00	N82°53'44"E
L21	98.00	S76°18'17"E
L22	100.00	N66°56'43"E
L23	144.00	N48°40'13"E
L24	85.00	N34°22'02"E
L25	53.00	N68°11'01"E
L26	81.88	S89°52'37"E
L27	223.11	N78°22'17"E
L28	91.89	N65°16'25"E
L29	148.26	S00°00'51"E
L30	76.63	S81°07'01"W
L31	80.00	S71°45'49"W
L32	120.00	S58°18'42"W
L33	80.00	S81°57'46"W
L34	225.00	S51°17'52"W
L35	108.00	S66°23'57"W
L36	86.00	S70°37'38"W
L37	112.00	N86°33'21"W
L38	65.00	S82°31'43"W
L39	248.00	S53°57'49"W
L40	95.00	S74°36'39"W
L41	135.00	S84°19'46"W
L42	76.00	S65°21'49"W
L43	89.00	S54°22'36"W
L44	70.00	S85°19'17"W
L45	22.70	N65°40'29"W

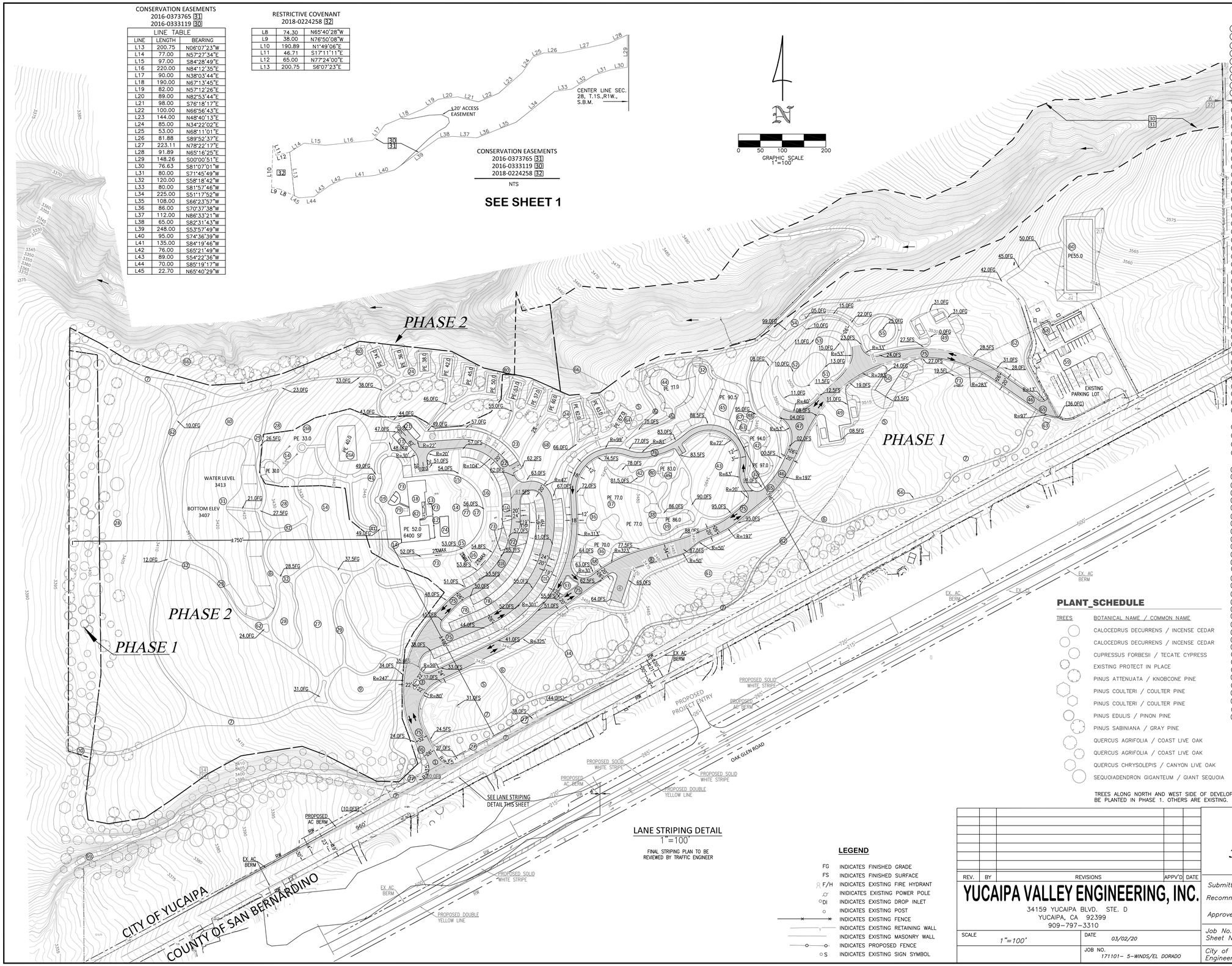
RESTRICTIVE COVENANT
2018-0224258 [32]

L8	74.30	N65°40'28"W
L9	38.00	N76°50'08"W
L10	190.89	N1°49'06"E
L11	46.71	S17°11'11"E
L12	65.00	N77°24'00"E
L13	200.75	S6°07'23"E

CONSERVATION EASEMENTS
2016-0373765 [31]
2016-0333119 [30]
2018-0224258 [32]

NTS

SEE SHEET 1



LANE STRIPING DETAIL
1"=100'

FINAL STRIPING PLAN TO BE REVIEWED BY TRAFFIC ENGINEER

NOTES:

1. FIVE WINDS RANCH PARK ENTRY GATEWAY WITH CLOSURE GATES
2. DECELERATION/ACCELERATION LANES OFF/ONTO OAK GLEN ROAD PER ASHTO MANUAL
3. DIRECTIONAL SIGNAGE FOR CAMPING AND ADOBE HOUSE
4. CAMPGROUND HOST SITE AT ENTRY
5. DRAINAGE SWALE WITH ENHANCED LANDSCAPING BOULDER PLACEMENT
6. PEDESTRIAN FOOTBRIDGE CROSSING DRAINAGE SWALE
7. MULTI-PURPOSE STALOCK DECOMPOSED GRANITE TRAIL WITH RAIL FENCING AND MILE MARKERS
8. ASPHALT PARKING LANE FOR CAMPGROUND CHECK-IN
9. NATIVE WILDFLOWER GARDEN HIGHLIGHTING CALIFORNIA POPPIES
10. ASPHALT DRVIE AISLE WITH CRUSHED ROCK PARKING
11. TIERED CRUSHED ROCK PARKING AREA
12. ASPHALT DRIVE AISLE AND CONCRETE PAVED HANDICAP PARKING STALLS (4 STALLS)
13. LOWER TIERED PARKING LOT WITH CRUSHED ROCK PARKING STALLS
14. ENTRY COURTYARD WITH ENHANCED PAVING
15. EXISTING PIT AND LEACH FIELD
16. OPEN LAWN AREA
17. STAIRCASE ACCESS AND RETAINING WALL (MAX HT 4') AT FRONT COURTYARD GARDEN
18. FRUITLESS OLIVE GROVE TERRACE WITH RANCH FENCING AT PERIMETER AND ACCENT ENTRY COLUMNS
19. FRONT GARDEN WALL FOUNTAIN AND DECOMPOSED GRANITE PATHWAY
20. LARGE BREEZEWAY RECEPTION HALL AND BAR WITH ENHANCED PAVING
21. VERANDA WITH CENTRALIZED TIERED FOUNTAIN AND ENHANCED PAVING AT VIEW TERRACE
22. ASPHALT SERVICE ACCESS ROAD WITH MODIFIED HAMMER-HEAD TURNAROUND
23. REPURPOSED EXISTING AND NEW STORAGE CONTAINER WITH SCREENED LANDSCAPING
24. PARKING AREA (8 STALLS & 1 HANDICAP) AND SERVICE ACCESS ROAD TO CABINETTES
25. ADA ACCESSIBLE CABINETTE WITH RESTROOM AND ACCESSIBLE PATHWAY AND PARKING
26. CABINETTES 20 FT. X 40 FT. WITH RESTROOM ON LEVEL PAD AND DECOMPOSED GRANITE
27. CANOPY TRELLIS WITH VINE POCKETS FOR COVERED SEATING AT NORTH END OF VIEW TERRACE
28. A OPEN LAWN TERRACE GARDEN FOR EVENTS, EVENT TENT OVERLAY (40 FT. X 80 FT.) 3200 SF
28. B LOWER LAWN TERRACE AND EVENT LOCATION WITH GAZEBO, STAIRCASE ACCESS AND WALK
29. NATIVE GRASS MEADOW WITH DECOMPOSED GRANITE TRAILS
30. NATIVE HABITAT RESTORATION AREA AND LANDSCAPED SLOPES
31. PICNIC TABLE SEATING AREAS ALONG DECOMPOSED GRANITE PATHWAYS
32. WETLAND POND OVERFLOW SPILLWAY WITH BOULDER AND COBBLE PROTECTION
33. WETLAND POND WITH WATERFALL INLET AND PEDESTRIAN OBSERVATION DOCK
34. NATURAL TIMBER STAIRS AT SLOPE AREAS
35. CAMPING DIRECTIONAL SIGNAGE
36. ACCESS PATHWAY TO OPEN LAWN AREA AND PARCOURSE WITH PICNIC TABLES
37. RESTROOM BUILDING FOR GROUP CAMPGROUND
38. LOW ROPES COURSE AT GROUP CAMPGROUND
39. GROUP CAMPGROUND WITH LARGE LEVEL OPEN SPACE FOR TENTS
40. STAIRCASE ACCESS TO LOWER GROUP TENT PAD AREA
41. GROUP PICNIC AREA WITH TABLES
42. ONE-WAY ACCESS ROAD WITH 45 DEGREE HEAD-IN PARKING (10 STALLS)
43. STAIRCASE ACCESS TO LOWER LEVEL
44. INDIVIDUAL TENT PADS WITH PICNIC TABLES
45. MULTI-USE OPEN LAWN AREA FOR TENT PITCHING OVERFLOW OR GAMING
46. CAMPER GATHERING AREA - 2000 SF
47. REPURPOSED BARN CONVERTED TO KITCHENETTE & COUNTERS AND GAMING ROOM WITH POOL TABLE, FOOSBALL & VIDEO ARCADE, 2450 SF
48. VEHICULAR GATE FOR GROUP EQUESTRIAN CAMPGROUND
49. EQUESTRIAN CAMPGROUND DIRECTIONAL/INFO SIGNAGE
50. STAIRCASE ACCESS TO KITCHENETTE/GAMING ROOM
51. BACK-IN DOUBLE WIDE DUAL TRAILER CAMP UNITS WITH (4) PIPE CORRALS, WATER SPIGOT, BEAR PROOF LOCKER, TRASH AND (2-3) PICNIC TABLES
52. BACK-IN SINGLE TRAILER CAMP UNIT WITH PIPE CORRAL, BEAR PROOF LOCKER, TRASH AND PICNIC TABLE
53. PULL THROUGH CAMP UNIT FOR MULTIPLE TRAILERS
54. WASH RACKS WITH GRAVEL COLLECTION PIT AND WATER HYDRANT AND TROUGH
55. HORSE SHOE GAMING PITS AT EACH END OF GROUP CAMP AREA
56. DECOMPOSED GRANITE SPUR TRAIL TO EXISTING ELDORADO RANCH PARK TRAILS
57. 60 FOOT DIAMETER WARM UP PEN
58. 5' TALL 3-RAIL EQUESTRIAN PERIMETER ENCLOSURE FENCING
59. EXISTING TRAIL ACCESS TO ELDORADO RANCH PARK
60. EXISTING RESTROOM AND SHOWER FACILITY AT ELDORADO RANCH PARK
61. EXISTING ELDORADO RANCH PARK PARKING LOT WITH ADDED BIKE RACKS
62. 50 METER ARCHERY RANGE WITH HAY BALE MARKERS AND 10 FOOT WIDE TARGET LANES
63. EXISTING PRESERVED CALIFORNIA BUCKWHEAT AT KNOLL
64. WOOD DUCK, OWL AND BAT BOXES
65. TRASH ENCLOSURES PER CITY STANDARDS
66. PARK RANGER AIRSTREAM
67. HEAVY TEXTURED CONCRETE FOR EQUESTRIAN CROSSING OF ROADWAY
68. CONSERVATION EASEMENT
69. PROPANE TANK FOR KITCHENETTE AND FIRE PIT
70. NATIVE GRASS MEADOW VIEW TERRACE WITH PICNIC TABLE AND ADIRONDACK CHAIRS
71. MULTI-PURPOSE DECOMPOSED GRANITE TRAIL CONNECTION TO CHAGALL ROAD
72. OPTIONAL MULTI-PURPOSE STALOCK DECOMPOSED GRANITE TRAIL CONNECTION AT TOP OF BENCH
73. INSTALL DRAINAGE PIPE WITH HEADWALLS SIZE TO BE DETERMINED
74. RELOCATE BARN TO NUMBER 45
75. REMOVE EXISTING FENCE AND WALLS
76. BUILDING TO BE REMOVED
77. 26' WIDE PAVED ACCESS ROAD PER DETAIL SHEET 1
78. 14' WIDE ONE-WAY PAVED ACCESS
79. RELOCATE POWER POLES
80. PROTECT POWER POLE IN PLACE
81. EXISTING 1000 GAL SEPTIC TANK AND LEACH FIELD
82. PROPOSED 1,500 GAL SEPTIC TANK AND LEACH FIELD
83. PROPOSED 3,000 GAL SEPTIC TANK AND LEACH FIELD
84. EXISTING STRUCTURE TO BE REMODELED. 6400 SF. REFER TO ARCH. DWGS FOR SIZE AND HEIGHTS

REFER TO SEPARATE PLANS FOR SIGN DETAILS.

PLANT_SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME
	CALOCEDRUS DECURRENS / INCENSE CEDAR
	CALOCEDRUS DECURRENS / INCENSE CEDAR
	CUPRESSUS FORBESII / TECATE CYPRESS
	EXISTING PROTECT IN PLACE
	PINUS ATTENUATA / KNOBCONE PINE
	PINUS COULTERI / COULTER PINE
	PINUS COULTERI / COULTER PINE
	PINUS EDULIS / PINON PINE
	PINUS SABINIANA / GRAY PINE
	QUERCUS AGRIFOLIA / COAST LIVE OAK
	QUERCUS AGRIFOLIA / COAST LIVE OAK
	QUERCUS CHRYSOLEPIS / CANYON LIVE OAK
	SEQUOIADENDRON GIGANTEUM / GIANT SEQUOIA

TREES ALONG NORTH AND WEST SIDE OF DEVELOPED AREA TO BE PLANTED IN PHASE 1. OTHERS ARE EXISTING.

LEGEND

FG	INDICATES FINISHED GRADE
FS	INDICATES FINISHED SURFACE
F/H	INDICATES EXISTING FIRE HYDRANT
	INIDICATES EXISTING POWER POLE
DI	INDICATES EXISTING DROP INLET
	INDICATES EXISTING POST
	INDICATES EXISTING FENCE
	INDICATES EXISTING RETAINING WALL
	INDICATES EXISTING MASONRY WALL
	INDICATES PROPOSED FENCE
S	INDICATES EXISTING SIGN SYMBOL

REV.	BY	REVISIONS	APPV'D	DATE

YUCAIPA VALLEY ENGINEERING, INC.
34159 YUCAIPA BLVD. STE. D
YUCAIPA, CA 92399
909-797-3310

SCALE	DATE
1"=100'	03/02/20
	JOB NO. 171101- 5-WINDS/EL DORADO

CITY OF YUCAIPA

CONDITIONAL USE PERMIT

5-WINDS & EL DORADO RANCH

APN 0321-121-43,0321-121-44,0321-111-03

Submitted By: _____ *Date:* _____

Recommended for Approval By: _____ *Date:* _____

Approved By: _____ *Date:* _____
FERMIN G. PRECIADO, DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

Job No. *Drawing No.* 10821
Sheet No. 2 of 2 sheets

City of Yucaipa Public Works Department
Engineering Division

Agenda Item 5

CITY OF YUCAIPA
DEVELOPMENT SERVICES DEPARTMENT
AGENDA REPORT

TO: Honorable Chairman and Planning Commissioners

FROM: Benjamin J. Matlock, Planning Manager/City Planner

FOR: Planning Commission Meeting of March 18, 2020

SUBJECT: **City of Yucaipa** (Case No. 20-031/DCA): Consideration of Ordinance No. Ordinance No. 388 regarding small wireless facilities and amending the Yucaipa Development Code regarding the same, and adopting environmental findings in connection therewith.

RECOMMENDATION:

That the Planning Commission conduct a public hearing and recommend that the City Council:

A) Approve first reading, by title only, as read by staff, of Ordinance No. 388 regarding small wireless facilities and amending the Yucaipa Development Code regarding the same and;

B) Approve Resolution No. 2020-09 establishing the regulations and policies governing small wireless facilities, and;

C) Find that the ordinance is exempt from Environmental Review pursuant to Public Resources Code Section 15061(b)(3).

BACKGROUND:

A new network of telecommunications infrastructure known as a small wireless facility, or small cell, has emerged as a result of growing capacity demands for wireless data. Small wireless facility networks have much smaller coverage areas than typical macro wireless facilities, with an antenna range of approximately 150 to 500 feet, but are designed to complement or stretch macro cellular facility coverage, and to add capacity and data transfer rates in high demand areas. This technology results in improved service to areas with weak or limited coverage, supports the increased demand on wireless technology that occurred in the past decade, and also supports the deployment of the next generation of wireless technology, known as 5G, resulting in faster data speeds.

Small wireless facilities are typically installed on poles within the public right-of-way and utility easements in public and private properties. They differ from the types of wireless facilities the City has previously encountered, based on the size of the necessary structure, the number of antennas for the site, and the power supplied to the antennas. For example, the macro site

previously encountered may be a new monopole structure, up to 70 feet tall in some areas in the City, with an individual carrier on the pole featuring twelve antennas, along with other ancillary equipment on the pole, and then a separate ground lease area with supporting equipment. The small wireless facilities are typically designed to be located on existing poles such as utility poles, streetlights or traffic signals that are 25 to 50-feet in height, or along a replacement of an existing pole that has modified specifically to accommodate the wireless equipment. Small wireless facility equipment will usually consists of a 2 to 4-foot tall antenna at the top of the pole, an electric meter, compact transmitters, receivers and other components that are also attached to the pole. Some facilities also include a ground mounted battery back-up cabinet.

On September 26, 2018, the Federal Communications Commission (FCC) adopted a Declaratory Ruling and Third Report and Order geared toward speeding up the deployment of small wireless facilities in the public right-of-way and public utility easements ("FCC ruling"). The FCC ruling, which went into effect January 14, 2019, sets forth limitations on state and local government regulation of small wireless facilities that are placed on existing or new utility poles and street light standards located in the public right-of-way and public utility easements. The FCC ruling clarifies, and more specifically restricts, the authority of state and local governments to regulate small wireless facilities in the public right-of-way and public utility easements. This ruling is significant in that there are several nuances in small "cell" wireless facilities technology and application, which set them apart from other wireless communication facilities.

In accordance with state Public Utilities Code section 7901, telephone companies, which include wireless telecommunications service providers, have a statutory right to place equipment (i.e. small wireless facility) in the public right-of-way and utility easements. However, in accordance with Public Utilities Code section 7901.1, cities have the statutory right to regulate the design, location, and placement of the equipment. This authority is limited in that local regulations cannot: 1) effectively prohibit the provision of wireless telecommunications service or 2) unreasonably discriminate among providers of wireless telecommunications service.

The FCC, at the urging of the cellular network industry, passed a declaratory ruling (FCCCIRC1809-02) known as the "Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment" on September 24, 2018. The FCC Order defines small wireless facility, provides for the expedited processing ("shot clock") of small wireless facility applications, limits the fees that can be assessed by municipalities on the review of these applications, and places limitations on discretionary aesthetic considerations. The new application review "shot clock" for small wireless facilities is 60 days for placement on an existing structure and 90 days for installation of a new structure. In response, a coalition of municipalities requested a stay of the FCC order which was denied. This means municipalities must respond to applications that are submitted after January 15, 2019 pursuant to the new "shot clocks". In addition, failure to meet the "Shot Clock" deadlines means that a project is automatically deemed approved.

The City has recently received three (3) applications for small cell wireless facilities, and other neighboring jurisdictions have also received numerous applications for these facilities, including some larger jurisdictions that have a high demand for wireless service receiving dozens of submittals at one time. Because the City's current regulations were not developed with the

purpose and intent to regulate small wireless facilities, it is not feasible for the City to continue to process a discretionary Conditional Use Permit application to establish new small wireless facilities within the new FCC mandated review periods, or to comply with the other provisions identified in the FCC Ruling. Therefore, to ensure that the City has an adopted Ordinance and Resolution regulating small wireless facilities consistent with recently adopted Federal regulations, Ordinance No. 388 and Resolution No. 2020-19 has been developed.

It should be noted that the current FCC Ruling is currently in litigation and may be subject to change; however, given the number of small cell wireless facilities that are proposed throughout the state and country, as well as numerous pieces of legislation that had previously drafted at the state and federal level that were intended to support and expedite their deployment, it is unlikely that the substantive changes will occur to diminish the deployment of this technology. Therefore, it is prudent that the City develop an appropriate permitting framework to ensure that the City can adequately and timely process these applications. In addition, the proposed Resolution provides greater flexibility to accommodate changes to the City's permitting policies should there be modifications to state or federal law.

DISCUSSION:

The draft Ordinance No. 388 is presented to the Commission for their consideration and recommendation to City Council. The Ordinance adds Small Wireless Facilities to Section 88.01005, Applicability of Wireless Telecommunication Facilities section of the Yucaipa Development Code, and to Division 12 ("General Definitions"), Chapter 19 ("Definitions Beginning With 'S'"). In addition, the Ordinance establishes that Small Wireless Facilities shall be governed by "City Wide Policy Regarding Permitting Requirements And Development Standards For Small Wireless Facilities," adopted by Council Resolution ("Policy"). As part of the approval of the Ordinance, Resolution No. 2020-19 is included, and contains the Policy that is proposed.

The purpose of the Policy is to establish reasonable and comprehensive standards and procedures for the permitting of small wireless facilities within the City, including but not limited to the siting and design of proposed facilities, in order to be consistent with existing law, and to ensure the process can meet the timelines of the required "Shot Clocks." The Policy is intended to promote the community interest of protecting the City's visual character from potential adverse impacts from facilities while providing access to high quality advanced wireless technology for the City's residents, businesses, and visitors. The Planning Commission should note that, as a policy rather than an Ordinance, the City may amend or revoke the provisions more quickly. This approach is recommended by the City Attorney due to the rapid changes in the federal law, as well as potential changes that may result from the existing litigation on the FCC Ruling. .

Key provisions of the Policy:

1. Application Requirements: Applicants are required to submit a variety of items, including but not limited to, a project narrative and justification, construction drawings, a site plan, a radio frequency ("RF") report certifying compliance with federal standards, photo simulations, an executed Pole License Agreement, and review/permitting fees. In addition, the permit process

requires that all applications must be submitted to the City at a pre-scheduled appointment, which is intended to ensure that applications can be reviewed for completeness prior to submittal to avoid potential "shot clock" violations.

2. Project Decisions: The City Planner, or his/her designee, shall be responsible for reviewing all applications and approving, conditionally approving or denying the application, subject to the required Findings. The process for approval reflects the limited authority for review pursuant to the FCC rules, as well as the extremely short "shot clocks" windows.

3. Location Preferences and Design Standards: The policy sets forth ranked preferences for locations and support structures within those locations. Residential areas and new freestanding poles or similar structures are the least preferred and require the applicant to demonstrate why no more preferred location within a reasonable distance from the site is technically feasible. The standards also identify that antenna features shall be completely concealed within an opaque antenna shroud or radome that is painted a flat, non-reflective color to match the underlying support structure. The ordinance also identifies prohibited locations, which includes decorative poles, or any pole scheduled to be removed within one year from when an application is submitted. This would therefore include the existing decorative poles found in the Uptown District, as well as the proposed decorative poles that are to be installed between 2nd and 5th Street along Yucaipa Boulevard in the upcoming year.

Environmental Review:

The adoption of the Ordinance is exempt from the California Environmental Quality Act (CEQA) pursuant Section 15061(b)(3) covering activities with no possibility of having a significant effect on the environment as the Ordinance has been developed to comply with the provisions of federal law. In addition, the City of Yucaipa has determined that the ordinance is categorically exempt pursuant to Section 15301 of the CEQA Regulations applicable to minor alterations of existing governmental and/or utility-owned structures.

FISCAL IMPACT:

There is no direct fiscal impact as a result of this approval of the Development Code Amendments. Applications processed under the proposed resolution would be assessed at the fee rate approved by the City Council.

CONCLUSION:

The required findings for approval of the Development Code Amendment have been made and are attached.

Attachments: Findings for Development Code Amendment
Draft Ordinance No. 388
Draft Resolution No. 2020-09

Approved by:

Benjamin J. Matlock, Planning Manager/City Planner
Development Services Department

FINDINGS: DEVELOPMENT CODE AMENDMENT NO. 20-031

1. The proposed Development Code Amendment is consistent with the General Plan and its policies and objectives because its implementation will enhance the public's health, safety, and general welfare, and has been developed to meet the requirements of State law.

ORDINANCE NO. 388

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF YUCAIPA REGARDING SMALL WIRELESS FACILITIES AND AMENDING THE YUCAIPA DEVELOPMENT CODE REGARDING THE SAME AND ADOPTING ENVIRONMENTAL FINDINGS IN CONNECTION THEREWITH

WHEREAS, on September 26, 2018, the Federal Communications Commission ("FCC") adopted its Declaratory Ruling and Third Report and Order ("Report and Order") relating to placement of small wireless facilities in public rights-of-way, and the Report and Order went into effect on January 14, 2019; and

WHEREAS, the Report and Order purports to substantially limit the ability of local agencies to regulate the use of their rights-of-way and to give providers of wireless services rights to utilize public rights of way and to attach so-called "small wireless facilities" to public infrastructure, including infrastructure of the City of Yucaipa, subject to payment of "presumed reasonable", non-recurring and recurring fees; and

WHEREAS, notwithstanding the limitations imposed on local regulation of small wireless facilities in public rights-of-way by the Report and Order, local agencies retain the ability to regulate the aesthetics of small wireless facilities, including location, compatibility with surrounding facilities, spacing, and overall size of the facility, provided the aesthetic requirements are: (i) "reasonable", i.e., "technically feasible and reasonably directed to avoiding or remedying the intangible public harm or unsightly or out-of-character deployments"; (ii) "objective", i.e., they "incorporate clearly-defined and ascertainable standards, applied in a principled manner"; and (iii) published in advance. Regulations that do not satisfy the foregoing requirements are likely to be subject to invalidation, as are any other regulations that "materially inhibit wireless service", (e.g., overly restrictive spacing requirements); and

WHEREAS, local agencies also retain the ability to regulate small wireless facilities in the public rights-of-way in order to more fully protect the public health and safety, ensure continued quality of telecommunications services, and safeguard the rights of consumers; and

WHEREAS, it is the intent of the City Council in adopting this Ordinance to supersede regulations of the City that conflict with the Report and Order, and to establish consistent regulations governing deployment of small wireless facilities in order to more fully protect the public health, safety, and welfare, and the City Council declares that it adopts this Ordinance with the understanding that the City expressly reserves all rights to re-enact and/or establish new regulations consistent with State and federal law as it existed prior to adoption of the Report and Order in the event the Report and Order is invalidated, modified, or limited in any way;

NOW THEREFORE THE CITY COUNCIL OF THE CITY OF YUCAIPA ORDAINS AS FOLLOWS:

Section 1. Findings. The City Council finds that each fact set forth in the preceding recitals are true.

Section 2. Division 12 ("General Definitions"), Chapter 19 ("Definitions Beginning With 'S'") is hereby amended by the addition of the term, "Small Wireless Facility" defined as follows:

> "'Small Wireless Facility': any 'small wireless facility' same as defined by the Federal Communications Commission in 47 C.F.R. § 1.6002(*l*), as such regulation may be amended or superseded."

Section 3. Section 88.01005 of the Yucaipa Development Code is hereby amended to read as follows:

> "88.01005 Applicability.
>
> (a) New Towers and Antennas. All new towers or antennas shall be subject to these regulations, except as provided in Sections (b) through (e) herein, inclusive.
>
> (b) Amateur Radio Station Operators/Receive Only Antennas. This section shall not govern any tower, or the installation of any antenna, that is under seventy feet (70') in height and is owned and operated by a federally-licensed amateur radio station operator, or is used exclusively for receive only antennas.
>
> (c) Pre-existing Towers or Antennas. Pre-existing towers and pre-existing antennas shall not be required to meet the requirements of this section, other the requirements of Sections 88.01010(b) and (c).
>
> (d) AM Array. For purposes of implementing this section, an AM array consisting of one or more tower units and supporting ground system which functions as one AM broadcasting antenna, shall be considered one tower. Measurements for setbacks and separation distances shall be measured from the outer perimeter of the towers including in the AM array. Additional tower units may be added within the perimeter of the AM array by right.
>
> (e) Small Wireless Facilities. Notwithstanding any other provision of the Municipal Code to the contrary, all small wireless facilities as defined by the FCC in 47 C.F.R. § 1.60002(l), as may be amended or superseded, shall be subject only to, and must comply with, the "City Wide Policy Regarding Permitting Requirements And Development Standards For Small Wireless Facilities" adopted by City Council resolution. No person shall construct, install, attach, operate, collocate, modify, reconstruct, relocate, remove, or otherwise deploy any small wireless facility in violation of such policy."

Section 3. CEQA. The City of Yucaipa has determined that the adoption of this Ordinance is exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000, et seq.), pursuant to State CEQA Regulation §15061(b)(3) (14 Cal. Code Regs. § 15061(b)(3)) covering activities with no possibility of having a significant effect on the environment. In addition, the City of Yucaipa has determined that the ordinance is categorically exempt pursuant to Section 15301 of the CEQA Regulations applicable to minor alterations of existing governmental and/or utility-owned structures.

Section 4. Future Modifications. The City Council finds and declares that it is adopting this Ordinance in order to more fully protect and preserve the public health and safety with respect to City rights-of-way in light of the adoption of the Report and Order. Notice is hereby given to any and all wireless providers obtaining a permit pursuant to the Yucaipa Municipal Code as amended herein, that the City expressly reserves any and all rights it possessed prior to the adoption of the Report and Order. In the event the Report and Order is invalidated, modified, or limited in any way, the City Council reserves the right, subject to reasonable notice and due process, to modify the terms and conditions applicable to any permit issued hereunder including, but not limited to, the term, fees charged, and scope of any future wireless deployments within the City's rights-of-way.

Section 5. Severability. If any sections, subsections, sentence, clause, or phrase of the Chapter adopted by this Ordinance is for any reason held to be invalid or unconstitutional by the decision or legislation of any court of competent jurisdiction, or by reason of preemptive legislation, such decision or legislation shall not affect the validity of the remaining portions of the Chapter. The City Council declares that it would have passed this Ordinance, and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that one or more of the sections, subsections, sentences, clauses, or phrases thereof is declared invalid or unconstitutional.

Section 6. Publication and Certification. The City Clerk shall certify the adoption of this Ordinance and cause it to be published in the manner required by law.

APPROVED AND ADOPTED this ____ day of _____, 2019.

_____
DAVID AVILA
MAYOR

ATTEST:

_____
JENNIFER CRAWFORD
ASSISTANT CITY MANAGER/CITY CLERK

I, Jennifer Crawford, City Clerk of the City of Yucaipa, do hereby certify that the foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Yucaipa held on the __th day of _____, 2020, and was finally passed at a regular meeting of the City Council of the City of Yucaipa held on the _____ day of _____, 2020, by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ABSTAINED: COUNCIL MEMBERS:

_____
JENNIFER CRAWFORD
ASSISTANT CITY MANAGER/CITY CLERK

RESOLUTION 2020-09

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUCAIPA ADOPTING A CITY WIDE POLICY REGARDING PERMITTING REQUIREMENTS AND DEVELOPMENT STANDARDS FOR SMALL WIRELESS FACILITIES

WHEREAS, on September 26, 2018, the Federal Communications Commission ("FCC") adopted its Declaratory Ruling and Third Report and Order ("Report and Order") relating to placement of small wireless facilities in public rights-of-way; and

WHEREAS, the Report and Order purports to substantially limit the ability of local agencies to regulate the use of their rights-of-way and to give providers of wireless services rights to utilize public rights-of-way and to attach so-called "small wireless facilities" to public infrastructure, including infrastructure of the City of Yucaipa, subject to payment of "presumed reasonable", non-recurring and recurring fees; and

WHEREAS, notwithstanding the limitations imposed on local regulation of small wireless facilities in public rights-of-way by the Report and Order, local agencies retain the ability to regulate the aesthetics of small wireless facilities, including location, compatibility with surrounding facilities, spacing, and overall size of the facility, provided the aesthetic requirements are: (i) "reasonable," i.e., "technically feasible and reasonably directed to avoiding or remedying the intangible public harm or unsightly or out-of-character deployments"; (ii) "objective," i.e., they "incorporate clearly-defined and ascertainable standards, applied in a principled manner"; and (iii) published in advance. Regulations that do not satisfy the foregoing requirements are likely to be subject to invalidation, as are any other regulations that "materially inhibit wireless service," (e.g., overly restrictive spacing requirements); and

WHEREAS, local agencies also retain the ability to regulate small wireless facilities in the public rights-of-way in order to more fully protect the public health and safety, ensure continued quality of telecommunications services, and safeguard the rights of consumers, and pursuant to this authority retained, the City Council has amended the Yucaipa Municipal Code to require all small wireless facilities as defined by the FCC in 47 C.F.R. § 1.6002(*l*), as may be amended or superseded, to comply with the requirements of a policy adopted by resolution of the City Council entitled "City Wide Policy Regarding Permitting Requirements And Development Standards For Small Wireless Facilities";

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF YUCAIPA DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Findings. The City Council finds each of the facts in the preceding recitals to be true.

Section 2. City Wide Policy Adopted. The City Council of Yucaipa hereby adopts the "City Wide Policy Regarding Permitting Requirements And Development Standards For Small Wireless Facilities" set forth in Exhibit A to this Resolution, which is hereby incorporated as though set forth in full.

Section 3. CEQA. The City of Yucaipa has determined that the adoption of this Resolution is exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000, et seq.), pursuant to State CEQA Regulation §15061(b)(3) (14 Cal. Code Regs. § 15061(b)(3)) covering activities with no possibility of having a significant effect on the environment. In addition, the City of Yucaipa has determined that the ordinance is categorically exempt pursuant to Section 15301 of the CEQA Regulations applicable to minor alterations of existing governmental and/or utility-owned structures.

Section 4. Certification. The City Clerk shall certify to the adoption of this resolution and shall cause a certified resolution to be filed in the book of original resolutions.

PASSED AND ADOPTED this __th day of _____, 2020.

_____
DAVID AVILA
MAYOR

ATTEST:

_____
JENNIFER CRAWFORD
ASSISTANT CITY MANAGER/CITY CLERK

EXHIBIT A

CITY OF YUCAIPA
CITY WIDE POLICY REGARDING PERMITTING REQUIREMENTS AND DEVELOPMENT STANDARDS FOR SMALL WIRELESS FACILITIES

SECTION 1. GENERAL PROVISIONS

SECTION 1.1. PURPOSE AND INTENT

(a) On September 27, 2018, the Federal Communications Commission ("FCC") adopted a *Declaratory Ruling and Third Report and Order*, FCC 18-133 (the *"Small Cell Order"),* in connection with two informal rulemaking proceedings entitled *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, WT* Docket No. 17-79, and *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84. The regulations adopted in the *Small Cell Order* significantly curtail the local authority over wireless and wireline communication facilities reserved to State and local governments under sections 253 and 704 in the federal Telecommunications Act. Numerous legal challenges to the *Small Cell Order* have been raised but its regulations will become effective while such challenges are pending. Although the provisions may well be invalidated or modified by future action, the City recognizes the practical reality that failure to comply with the *Small Cell Order* while it remains in effect will likely result in greater harm to the City's interests than if the City ignored the FCC's ruling. Accordingly, the City Council adopts this Policy ("Policy") as a means to accomplish such compliance that can be quickly amended or repealed in the future without the need to amend the City's municipal code.

(b) The City of Yucaipa intends this Policy to establish reasonable, uniform and comprehensive standards and procedures for small wireless facilities deployment, construction, installation, collocation, modification, operation, relocation and removal within the City's territorial boundaries, consistent with and to the extent permitted under federal and California state law. The standards and procedures contained in this Policy are intended to, and should be applied to, protect and promote public health, safety and welfare, and balance the benefits from advanced wireless services with local values, which include without limitation the aesthetic character of the City. This Policy is also intended to reflect and promote the community interest by (1) ensuring that the balance between public and private interests is maintained; (2) protecting the City's visual character from potential adverse impacts and/or visual blight created or exacerbated by small wireless facilities and related communications infrastructure; (3) protecting and preserving the City's environmental resources; (4) protecting and preserving the City's public rights-of-way and municipal infrastructure located within the City's public rights-of-way; and (5) promoting access to high-quality, advanced wireless services for the City's residents, businesses and visitors.

(c) This Policy is not intended to, nor shall it be interpreted or applied to: (1) prohibit or effectively prohibit any personal wireless service provider's ability to provide personal wireless services; (2) prohibit or effectively prohibit any entity's ability to provide any telecommunications service, subject to any competitively neutral and nondiscriminatory rules, regulations or other legal requirements for rights-of-way management; (3)

unreasonably discriminate among providers of functionally equivalent personal wireless services; (4) deny any request for authorization to place, construct or modify personal wireless service facilities on the basis of environmental effects of radio frequency emissions to the extent that such wireless facilities comply with the FCC's regulations concerning such emissions; (5) prohibit any collocation or modification that the City may not deny under federal or California state law; (6) impose any unreasonable, discriminatory or anticompetitive fees that exceed the reasonable cost to provide the services for which the fee is charged; or (7) otherwise authorize the City to preempt any applicable federal or California law.

SECTION 1.2. DEFINITIONS

(a) **Undefined Terms**. Undefined phrases, terms or words in this Policy will have the meanings assigned to them in 1 U.S.C. § 1, as may be amended or superseded, and, if not defined therein, will have their ordinary meanings. If any definition assigned to any phrase, term or word in Section 1.2 conflicts with any federal or state-mandated definition, the federal or state-mandated definition will control.

(b) **Defined Terms**.

(1) **"Accessory equipment"** means the same as "antenna equipment" as defined by FCC in 47 C.F.R. § 1.6002(b), as may be amended or superseded.

(2) **"Antenna"** means the same as defined by the FCC in 47 C.F.R. § 1.6002(b), as may be amended or superseded.

(3) **"Approval authority"** means the City official(s) responsible for reviewing applications for small cell permits and vested with the authority to approve, conditionally approve or deny such applications as provided in this Policy.

(4) **"Collocation"** means the same as defined by the FCC in 47 C.F.R. § 1.6002(g), as may be amended or superseded.

(5) **"Concealed"** or **"concealment"** means camouflaging techniques that integrate the transmission equipment into the surrounding natural and/or built environment such that the average, untrained observer cannot directly view the equipment and would not likely recognize the existence of the wireless facility or concealment technique.

(6) **"Decorative pole"** means any pole that includes decorative or ornamental features and/or materials intended to enhance the appearance of the pole. Decorative or ornamental features include, but are not limited to, fluted poles, ornate luminaires and artistic embellishments. Cobra head luminaires and octagonal shafts made of concrete or crushed stone composite material are not considered decorative or ornamental.

(7) **"FCC"** means the Federal Communications Commission or its duly appointed successor agency.

(8) **"FCC Shot Clock"** means the presumptively reasonable time frame within which the City generally must act on a given wireless application, as defined by the FCC and as may be amended or superseded.

(9) **"Ministerial permit"** means any City-issued non-discretionary permit required to commence or complete any construction or other activity subject to the City's jurisdiction. Ministerial permits may include, without limitation, any building permit, construction permit, electrical permit, encroachment permit, excavation permit, traffic control permit and/or any similar over-the-counter approval issued by the City's departments.

(10) **"Personal wireless services"** means the same as defined in 47 U.S.C. § 332(c)(7)(C)(i), as may be amended or superseded.

(11) **"Personal wireless service facilities"** means the same as defined in 47 U.S.C. § 332(c)(7)(C)(ii), as may be amended or superseded.

(12) **"Public right-of-way"** means any land which has been reserved for or dedicated to the City for the use of the general public for public road purposes, including streets, sidewalks and unpaved areas.

(13) **"RF"** means radio frequency or electromagnetic waves.

(14) **"Section 6409"** means Section 6409(a) of the Middle-Class Tax Relief and Job Creation Act of 2012, Pub. **L.** No. 112-96, 126 Stat. 156, codified as 47 U.S.C. § 1455(a), as may be amended or superseded.

(15) **"Small wireless facility"** or **"small wireless facilities"** means the same as defined by the FCC in 47 C.F.R. § 1.6002(*l*), as may be amended or superseded.

SECTION 2. SMALL WIRELESS FACILITIES

SECTION 2.1. APPLICABILITY; REQUIRED PERMITS AND APPROVALS

(a) **Applicable Facilities**. Except as expressly provided otherwise in this Policy, the provisions in this Policy shall be applicable to all existing small wireless facilities and all applications and requests for authorization to construct, install, attach, operate, collocate, modify, reconstruct, relocate, remove or otherwise deploy small wireless facilities within the City's jurisdictional boundaries.

(b) **Approval Authority**. The approval authority for small wireless facilities in public rights-of-way shall be the City Engineer or his/her designee. The approval authority for small wireless facilities outside of public rights-of-way shall be the City Planner or his/her designee.

(c) **Small Wireless Facility Permit**. A small wireless facility permit, subject to the approval authority's prior review and approval, is required for any small wireless facility proposed on an existing, new or replacement structure.

(d) **Request for Approval Pursuant to Section 6409**. Requests for approval to collocate, replace or remove transmission equipment at an existing wireless tower or base station submitted pursuant to Section 6409 are not be subject to this policy, but shall be reviewed in accordance with Section 6409.

(e) **Other Permits and Approvals**. In addition to a small wireless facility permit, the applicant must obtain all other permits and regulatory approvals as may be required by any other federal, state or local government agencies, which includes without limitation any ministerial permits and/or other approvals issued by other City departments or divisions. All applications for ministerial permits submitted in connection with a proposed small wireless facility must contain a valid small wireless facility permit issued by the City for the proposed facility. Any application for any ministerial permit(s) submitted without such small cell permit may be denied without prejudice. Furthermore, any small cell permit granted under this Policy shall remain subject to all lawful conditions and/or legal requirements associated with such other permits or approvals.

SECTION 2.2. SMALL WIRELESS FACILITY PERMIT APPLICATION REQUIREMENTS

(a) **Application Contents**. All applications for a small wireless facility must include all the information and materials required in this subsection (a).

(1) **Application Form**. The applicant shall submit a complete, duly executed small wireless facility permit application using the then-current City form which must include the information described in this subsection (a).

(2) **Application Fee.** The applicant shall submit the applicable small wireless facility permit application fee established by City Council resolution. Batched applications must include the applicable small wireless facility permit application fee for each small wireless facility in the batch. If no permit application fee has been established, then the applicant must submit a signed written statement that acknowledges that the applicant will be required to reimburse the City for its reasonable costs incurred in connection with the application within 10 days after the City issues a written demand for reimbursement.

(3) **Construction Drawings.** The applicant shall submit true and correct construction drawings on plain bond paper and electronically, prepared, signed and stamped by a California licensed or registered structural engineer, that depict all the existing and proposed improvements, equipment and conditions related to the proposed project and project site, which includes without limitation any and all poles, posts, pedestals, traffic signals, towers, streets, sidewalks, pedestrian ramps, driveways, curbs, gutters, drains, handholes, manholes, fire hydrants, equipment cabinets, antennas, cables, trees and other landscape features. If the applicant proposes to use existing poles or other existing structures, the structural

engineer must certify that the existing above and below ground structure will be adequate for the purpose. The construction drawings must: (i) contain cut sheets that contain the technical specifications for all existing and proposed antennas and accessory equipment, which includes without limitation the manufacturer, model number and physical dimensions; (ii) identify all structures within 250 feet from the proposed project site and call out such structures' overall height above ground level; (iii) depict the applicant's plan for electric and data backhaul utilities, which shall include the locations for all conduits, cables, wires, handholes, junctions, transformers, meters, disconnect switches, and points of connection; (iv) traffic control plans for the installation phase, stamped and signed by a California licensed or registered civil or traffic engineer; and (v) demonstrate that proposed project will be in full compliance with all applicable health and safety laws, regulations or other rules, which includes without limitation all building codes, electric codes, local street standards and specifications, and public utility regulations and orders.

(4) **Site Plan.** The applicant shall submit a survey prepared, signed and stamped by a California licensed or registered surveyor. The survey must identify and depict all existing boundaries, encroachments, buildings, walls, fences and other structures within 250 feet from the proposed project site, which includes without limitation all: (i) traffic lanes; (ii) all private properties and property lines; (iii) above and below-grade utilities and related structures and encroachments; (iv) fire hydrants, roadside call boxes and other public safety infrastructure; (v) streetlights, decorative poles, traffic signals and permanent signage; (vi) sidewalks, driveways, parkways, curbs, gutters and storm drains; (vii) benches, trash cans, mailboxes, kiosks and other street furniture; and (viii) existing trees, including the dripline radius and/or protection zone of those trees, planters and other landscaping features.

(5) **Architectural Renderings**. The applicant shall submit architectural renderings of the proposed facility, which must include any proposed alternative designs the applicant wishes to consider in the alternative.

(6) **Photo Simulations.** The applicant shall submit site photographs and photo simulations that show the existing location and proposed small wireless facility in context from at least three vantage points within the public streets or other publicly accessible spaces, together with a vicinity map that shows the proposed site location and the photo location for each vantage point. At least one simulation must depict the small wireless facility from a vantage point approximately 50 feet from the proposed support structure or location.

(7) **Project Narrative and Justification.** The applicant shall submit a written statement that explains in plain factual detail why the proposed wireless facility qualifies as a “small wireless facility” as defined by the FCC in 47 C.F.R. § 1.6002(/). A complete written narrative analysis will state the applicable standard and all the facts that allow the City to conclude the standard has been met. Bare conclusions not factually supported do not constitute a complete written analysis.

As part of the written statement the applicant must also include (i) whether and why the proposed support is a "structure" as defined by the FCC in 47 C.F.R. § 1.6002(m); and (ii) whether and why the proposed wireless facility meets each required finding as provided in Section 2.4.

(8) **RF Propagation & Compliance Report.** The applicant shall submit an RF propagation and exposure compliance report that demonstrates the applicant's current service capabilities and needs and certifies that the proposed small wireless facility, as well as any collocated wireless facilities, will comply with applicable federal RF exposure standards and exposure limits. The RF report must be prepared and certified by an RF engineer acceptable to the City. The RF report must include the actual frequency and power levels (in watts effective radiated power) for all existing and proposed antennas at the site and exhibits that show the location and orientation of all transmitting antennas and the boundaries of areas with RF exposures in excess of the uncontrolled/general population limit (as that term is defined by the FCC) and also the boundaries of areas with RF exposures in excess of the controlled/occupational limit (as that term is defined by the FCC). Each such boundary shall be clearly marked and identified for every transmitting antenna at the project site.

(9) **Regulatory Authorization.** The applicant shall submit evidence of the applicant's regulatory status under federal and California law to provide the services and construct the small wireless facility proposed in the application.

(10) **Site Agreement.** For any small wireless facility proposed to be installed on any structure located within the public rights-of-way, the applicant shall submit a partially-executed site agreement on a form prepared by the City that states the terms and conditions for such use by the applicant. No changes shall be permitted to the City's form site agreement except as may be indicated on the form itself. Any unpermitted changes to the City's form site agreement shall be deemed a basis to deem the application incomplete. Refusal to accept the terms and conditions in the City's site agreement shall be an independently sufficient basis to deny the application.

(11) **Property Owner's Authorization.** The applicant must submit a written authorization signed by the property owner that authorizes the applicant to submit a wireless application in connection with the subject property and, if the wireless facility is proposed on a utility-owned support structure, submit a written final utility design authorization from the utility.

(12) **Acoustic Analysis.** The applicant shall submit an acoustic analysis prepared and certified by an engineer licensed by the State of California for the proposed small wireless facility and all associated equipment including all environmental control units, sump pumps, temporary backup power generators and permanent backup power generators demonstrating compliance with the City's noise regulations. The acoustic analysis must also include an analysis of the manufacturers' specifications for all noise-emitting equipment and a depiction of the proposed

equipment relative to all adjacent property lines. In lieu of an acoustic analysis, the applicant may submit evidence from the equipment manufacturer(s) that the ambient noise emitted from all the proposed equipment will not, both individually and cumulatively, exceed the applicable noise limits.

(13) **Justification for Non-Preferred Location or Structure.** If a facility is proposed anywhere other than the most preferred location or the most preferred structure within 500 feet of the proposed location as described in Section 2.6, the applicant shall demonstrate with clear and convincing written evidence all of the following:

(A) A clearly defined technical service objective and a map showing areas that meets that objective;

(B) A technical analysis that includes the factual reasons why a more preferred location(s) and/or more preferred structure(s) within 500 feet of the proposed location is not technically feasible;

(C) Bare conclusions that are not factually supported do not constitute clear and convincing written evidence.

(b) **Additional Requirements.** The City Council authorizes the approval authority to develop, publish and from time to time update or amend permit application requirements, forms, checklists, guidelines, informational handouts and other related materials that the approval authority finds necessary, appropriate or useful for processing any application governed under this Policy. All such requirements and materials must be in written form and publicly stated to provide all interested parties with prior notice.

SECTION 2.3. SMALL WIRELESS FACILITY PERMIT APPLICATION SUBMITTAL AND COMPLETENESS REVIEW

(a) **Requirements for a Duly Filed Application.** Any application for a small wireless facility permit will not be considered duly filed unless submitted in accordance with the requirements in this subsection (a).

(1) **Submittal Appointment.** All applications must be submitted to the City at a pre-scheduled appointment with the approval authority. Potential applicants may generally submit either one application or one batched application per appointment as provided below. Potential applicants may schedule successive appointments for multiple applications whenever feasible and not prejudicial to other applicants for any other development project. The approval authority shall use reasonable efforts to offer an appointment within five working days after the approval authority receives a written request from a potential applicant. Any purported application received without an appointment, whether delivered in-person, by mail or through any other means, will not be considered duly filed, whether the City retains, returns or destroys the materials received.

(2) **Pre-Submittal Conferences.** The City encourages, but does not require, potential applicants to schedule and attend a pre-submittal conference with the approval authority for all proposed projects that involve small wireless facilities. A voluntary pre-submittal conference is intended to streamline the review process through informal discussion between the potential applicant and staff that includes, without limitation, the appropriate project classification and review process; any latent issues in connection with the proposed project, including compliance with generally applicable rules for public health and safety; potential concealment issues or concerns (if applicable); coordination with other City departments responsible for application review; and application completeness issues.

(b) **Applications Deemed Withdrawn.** To promote efficient review and timely decisions, and to mitigate unreasonable delays or barriers to entry caused by chronically incomplete applications, any application governed under this Policy will be automatically deemed withdrawn by the applicant when the applicant fails to tender a substantive response to the approval authority within 60 calendar days after the approval authority deems the application incomplete in a written notice to the applicant. As used in this subsection (b), a "substantive response" must include the materials identified as incomplete in the approval authority's notice.

(c) **Batched Applications.** Applicants may submit applications individually or in a batch; provided, that the number of small wireless facilities in a batch should be limited to five and all facilities in the batch should be substantially the same with respect to equipment, configuration, and support structure. Applications submitted as a batch shall be reviewed together, provided that each application in the batch must meet all the requirements for a complete application, which includes without limitation the application fee for each application in the batch. If any individual application within a batch is deemed incomplete, the entire batch shall be automatically deemed incomplete. If any application is withdrawn or deemed withdrawn from a batch, all other applications in the same batch shall be automatically deemed withdrawn. If any application in a batch fails to meet the required findings for approval, the entire batch shall be denied.

(d) **Additional Procedures.** The City Council authorizes the approval authority to establish other reasonable rules and regulations for duly filed applications, which may include without limitation regular hours for appointments with applicants, as the approval authority deems necessary or appropriate to organize, document and manage the application intake process. All such rules and regulations must be in written form and publicly stated to provide all interested parties with prior notice.

SECTION 2.4. APPROVALS AND DENIALS

(a) **Review by Approval Authority.** The approval authority shall review a complete and duly filed application for a small wireless facility and may act on such application without prior notice or a public hearing.

(b) **Required Findings.** The approval authority may approve or conditionally approve a complete and duly filed application for a small wireless facility permit when the approval authority finds:

(1) The proposed project meets the definition for a "small wireless facility" as defined by the FCC;

(2) The proposed facility would be in the most preferred location within 500 feet from the proposed site in any direction or the applicant has demonstrated with clear and convincing evidence in the written record that any more-preferred location(s) within 500 feet would be technically infeasible;

(3) The proposed facility would not be located on a prohibited support structure identified in this Policy;

(4) The proposed facility would be on the most preferred support structure within 500 feet from the proposed site in any direction or the applicant has demonstrated with clear and convincing evidence in the written record that any more-preferred support structure(s) within 500 feet would be technically infeasible;

(5) The proposed facility complies with all applicable design standards in this Policy;

(6) The applicant has demonstrated that the proposed project will be in planned compliance with all applicable FCC regulations and guidelines for human exposure to RF emissions.

(c) **Conditional Approvals; Denials without Prejudice.** Subject to any applicable federal or California laws, nothing in this Policy is intended to limit the approval authority's ability to conditionally approve or deny without prejudice any small wireless facility permit application as may be necessary or appropriate to ensure compliance with this Policy.

(d) **Decision Notices.** Within five calendar days after the approval authority acts on a small wireless facility permit application or before the FCC Shot Clock expires (whichever occurs first), the approval authority shall notify the applicant by written notice. If the approval authority denies the application (with or without prejudice), the written notice must contain the reasons for the decision.

(e) **Appeals.** Any decision by the approval authority shall be final and not subject to any administrative appeals.

SECTION 2.5. STANDARD CONDITIONS OF APPROVAL

(a) **General Conditions.** In addition to all other conditions adopted by the approval authority permits issued under this Policy shall be automatically subject to the conditions in this subsection (a).

(1) **Permit Term.** This permit will automatically expire 10 years and one day from its issuance unless California Government Code § 65964(b) authorizes the City to establish a shorter term for public safety reasons. Any other permits or approvals issued in connection with any collocation, modification or other change to this wireless facility, which includes without limitation any permits or other approvals deemed-granted or deemed-approved under federal or state law, will not extend this term limit unless expressly provided otherwise in such permit or approval or required under federal or state law.

(2) **Permit Renewal.** Within one (1) year before the expiration date of this permit, the permittee may submit an application for permit renewal. To be eligible for renewal, the permittee must demonstrate that the subject wireless facility is in compliance with all the conditions of approval associated with this permit and all applicable provisions in the Yucaipa Municipal Code and this Policy that exist at the time the decision to renew the permit is rendered. The approval authority shall have discretion to modify or amend the conditions of approval for permit renewal on a case-by-case basis as may be necessary or appropriate to ensure compliance with this Policy. Upon renewal, this permit will automatically expire 10 years and one day from its issuance, except when California Government Code § 65964(b), as may be amended or superseded in the future, authorizes the City to establish a shorter term for public safety reasons.

(3) **Post-Installation Certification.** Within 60 calendar days after the permittee commences full, unattended operations of a small wireless facility approved or deemed-approved, the permittee shall provide the approval authority with documentation reasonably acceptable to the approval authority that the small wireless facility has been installed and/or constructed in strict compliance with the approved construction drawings and photo simulations. Such documentation shall include without limitation as-built drawings, and site photographs.

(4) **Build-Out Period.** This small wireless facility permit will automatically expire six (6) months from the approval date unless the permittee obtains all other permits and approvals required to install, construct and/or operate the approved small wireless facility, which includes without limitation any permits or approvals required by the any federal, state or local public agencies with jurisdiction over the subject property, the small wireless facility or its use. If this build-out period expires, the City will not extend the build-out period, but the permittee may resubmit a complete application, including all application fees, for the same or substantially similar project.

(5) **Site Maintenance.** The permittee shall keep the site, which includes without limitation any and all improvements, equipment, structures, access routes, fences and landscape features, in a neat, clean and safe condition in accordance with the approved construction drawings and all conditions in this small wireless facility permit. The permittee shall keep the site area free from all litter and debris at all times. The permittee, at no cost to the City, shall remove and remediate any graffiti, damage, or other vandalism at the site within 48 hours after the permittee

receives notice or otherwise becomes aware that such graffiti, damage, or other vandalism occurred.

(6) **Compliance with Laws.** The permittee shall maintain compliance at all times with all federal, state and local statutes, regulations, orders or other rules that carry the force of law ("laws") applicable to the permittee, the subject property, the small wireless facility or any use or activities in connection with the use authorized in this small wireless facility permit, which includes without limitation any laws applicable to human exposure to RF emissions. The permittee expressly acknowledges and agrees that this obligation is intended to be broadly construed and that no other specific requirements in these conditions are intended to reduce, relieve or otherwise lessen the permittee's obligations to maintain compliance with all laws. No failure or omission by the City to timely notice, prompt or enforce compliance with any applicable provision in the Yucaipa Municipal Code, this Policy any permit, any permit condition or any applicable law or regulation, shall be deemed to relieve, waive or lessen the permittee's obligation to comply in all respects with all applicable provisions in the Yucaipa Municipal Code, this Policy, any permit, any permit condition or any applicable law or regulation.

(7) **Adverse Impacts on Other Properties.** The permittee shall use all reasonable efforts to avoid any and all unreasonable, undue or unnecessary adverse impacts on nearby properties that may arise from the permittee's or its authorized personnel's construction, installation, operation, modification, maintenance, repair, removal and/or other activities on or about the site. The permittee shall not perform or cause others to perform any construction, installation, operation, modification, maintenance, repair, removal or other work that involves heavy equipment or machines except during normal construction work hours authorized by the Yucaipa Municipal Code. The restricted work hours in this condition will not prohibit any work required to prevent an actual, immediate harm to property or persons, or any work during an emergency declared by the City or other state or federal government agency or official with authority to declare a state of emergency within the City. The approval authority may issue a stop work order for any activities that violates this condition in whole or in part.

(8) **Inspections; Emergencies.** The permittee expressly acknowledges and agrees that the City's officers, officials, staff, agents, contractors or other designees may enter onto the site and inspect the improvements and equipment City's officers, officials, staff, agents, contractors or other designees may, but will not be obligated to, enter onto the site area without prior notice to support, repair, disable or remove any improvements or equipment in emergencies or when such improvements or equipment threatens actual, imminent harm to property or persons. The permittee, if present, may observe the City's officers, officials, staff or other designees while any such inspection or emergency access occurs.

(9) **Permittee's Contact Information.** Within 10 days from the final approval, the permittee shall furnish the City with accurate and up-to-date contact information

for a person responsible for the small wireless facility, which includes without limitation such person's full name, title, direct telephone number, facsimile number, mailing address and email address. The permittee shall keep such contact information up-to-date at all times and promptly provide the City with updated contact information if either the responsible person or such person's contact information changes.

(10) **Indemnification.** The permittee shall defend, indemnify and hold harmless the City, City Council and the City's boards, commissions, agents, officers, officials, employees and volunteers (collectively, the "indemnitees") from any and all (i) damages, liabilities, injuries, losses, costs and expenses and from any and all claims, demands, law suits, writs and other actions proceedings ("claims") brought against the indemnitees to challenge, attack, seek to modify, set aside, void or annul the City's approval of this permit, and (ii) other claims of any kind or form, whether for personal injury, death or property damage, that arise from or in connection with the permittee's or its agents', directors', officers', employees', contractors', subcontractors', licensees' or customers' acts or omissions in connection with this small cell permit or the small wireless facility. In the event the City becomes aware of any claims, the City will use best efforts to promptly notify the permittee shall reasonably cooperate in the defense. The permittee expressly acknowledges and agrees that the City shall have the right to approve, which approval shall not be unreasonably withheld, the legal counsel providing the City's defense, and the permittee shall promptly reimburse City for any costs and expenses directly and necessarily incurred by the City in the course of the defense. The permittee expressly acknowledges and agrees that the permittee's indemnification obligations under this condition are a material consideration that motivates the City to approve this small cell permit, and that such indemnification obligations will survive the expiration, revocation or other termination of this small cell permit.

(11) **Performance Bond.** Applicable to small wireless facilities within public rights-of-way. Before the City issues any permits required to commence construction in connection with this permit, the permittee shall post a performance bond from a surety and in a form acceptable to the approval authority in an amount reasonably necessary to cover the cost to remove the improvements and restore all affected areas based on a written estimate from a qualified contractor with experience in wireless facilities removal. The written estimate must include the cost to remove all equipment and other improvements, which includes without limitation all antennas, radios, batteries, generators, utilities, cabinets, mounts, brackets, hardware, cables, wires, conduits, structures, shelters, towers, poles, footings and foundations, whether above ground or below ground, constructed or installed in connection with the wireless facility, plus the cost to completely restore any areas affected by the removal work to a standard compliant with applicable laws. In establishing or adjusting the bond amount required under this condition, and in accordance with California Government Code § 65964(a), the approval authority shall take into consideration any information provided by the permittee regarding the cost to remove the wireless facility to a standard compliant with applicable laws. The performance bond shall expressly survive the duration of the permit

term to the extent required to effectuate a complete removal of the subject wireless facility in accordance with this condition.

(12) **Permit Revocation.** The approval authority may recall this approval for review at any time due to complaints about noncompliance with applicable laws or any approval conditions attached to this approval after notice and an opportunity to cure the violation is provided to the permittee. If the noncompliance thereafter continues, the approval authority may, following notice and an opportunity for the permittee to be heard (which hearing may be limited to written submittals), revoke this approval or amend these conditions as the approval authority deems necessary or appropriate to correct any such noncompliance.

(13) **Record Retention.** Applicable to small wireless facilities within public rights-of-way. The permittee must maintain complete and accurate copies of all permits and other regulatory approvals issued in connection with the wireless facility, which includes without limitation this approval, the approved plans and photo simulations incorporated into this approval, all conditions associated with this approval and any ministerial permits or approvals issued in connection with this approval. In the event that the permittee does not maintain such records as required in this condition, any ambiguities or uncertainties that would be resolved through an inspection of the missing records will be construed against the permittee. The permittee may keep electronic records; provided, however, that hard copies or electronic records kept in the City's regular files will control over any conflicts between such City-controlled copies or records and the permittee's electronic copies, and complete originals will control over all other copies in any form.

(14) **Abandoned Wireless Facilities.** A small wireless facility shall be deemed abandoned if not operated for any continuous six-month period. Within 90 days after a small wireless facility is abandoned or deemed abandoned, the permittee shall completely remove the small wireless facility and all related improvements and shall restore all affected areas to a condition compliant with all applicable laws, which includes without limitation the Yucaipa Municipal Code. In the event that the permittee does not comply with the removal and restoration obligations under this condition within said 90-day period, the City shall have the right (but not the obligation) to perform such removal and restoration with or without notice, and the permittee shall be liable for all costs and expenses incurred by the City in connection with such removal and/or restoration activities.

(15) **Landscaping.** The permittee shall replace any landscape features damaged or displaced by the construction, installation, operation, maintenance or other work performed by the permittee or at the permittee's direction on or about the site. If any trees are damaged or displaced, the permittee shall hire and pay for a licensed arborist to select, plant and maintain replacement landscaping in an appropriate location for the species, subject to City approval. Only workers under the supervision of a licensed arborist shall be used to install the replacement tree(s). Any replacement tree must be substantially the same size as the damaged tree

unless otherwise approved by the approval authority. The permittee shall, at all times, be responsible to maintain any replacement landscape features.

(16) **Cost Reimbursement.** Applicable to small wireless facilities within public rights-of-way. The permittee acknowledges and agrees that (i) the permittee's request for authorization to construct, install and/or operate the wireless facility will cause the City to incur costs and expenses; (ii) the permittee shall be responsible to reimburse the City for all costs incurred in connection with the permit, which includes without limitation costs related to application review, permit issuance, site inspection and any other costs reasonably related to or caused by the request for authorization to construct, install and/or operate the wireless facility; (iii) any application fees required for the application may not cover all such reimbursable costs and that the permittee shall have the obligation to reimburse City for all such costs 10 days after a written demand for reimbursement and reasonable documentation to support such costs; and (iv) the City shall have the right to withhold any permits or other approvals in connection with the wireless facility until and unless any outstanding costs have been reimbursed to the City by the permittee.

(17) **Future Undergrounding Programs.** Applicable to small wireless facilities within public rights-of-way. Notwithstanding any term remaining on any small cell permit, if other utilities or communications providers in the public rights-of-way underground their facilities in the segment of the public rights-of-way where the permittee's small wireless facility is located, the permittee must also underground its equipment, except the antennas and any approved electric meter, at approximately the same time. Accessory equipment such as radios and computers that require an environmentally controlled underground vault to function shall not be exempt from this condition. Small wireless facilities installed on wood utility poles that will be removed pursuant to the undergrounding program may be reinstalled on a streetlight that complies with the City's standards and specifications. Such undergrounding shall occur at the permittee's sole cost and expense except as may be reimbursed through tariffs approved by the state public utilities commission for undergrounding costs.

(18) **Electric Meter Upgrades.** Applicable to small wireless facilities within public rights-of-way. If the commercial electric utility provider adopts or changes its rules obviating the need for a separate or ground-mounted electric meter and enclosure, the permittee, on its own initiative, and at its sole cost and expense, shall remove the separate or ground-mounted electric meter and enclosure. Prior to removing the electric meter, the permittee shall apply for any encroachment and/or other ministerial permit(s) required to perform the removal. Upon removal, the permittee shall restore the affected area to its original condition that existed prior to installation of the equipment.

(19) **Rearrangement and Relocation.** Applicable to small wireless facilities within public rights-of-way. The permittee acknowledges that the City, in its sole discretion and at any time, may: (i) change any street grade, width or location;

(ii) add, remove or otherwise change any improvements in, on, under or along any street owned by the City or any other public agency, which includes without limitation any sewers, storm drains, conduits, pipes, vaults, boxes, cabinets, poles and utility systems for gas, water, electric or telecommunications; and/or (iii) perform any other work deemed necessary, useful or desirable by the City (collectively, "City work"). The City reserves the rights to do any and all City work without any admission on its part that the City would not have such rights without the express reservation in this small cell permit. If the Development Services Director determines that any City work will require the permittee's small wireless facility located in the public rights-of-way to be rearranged and/or relocated, the permittee shall, at its sole cost and expense, do or cause to be done all things necessary to accomplish such rearrangement and/or relocation. If the permittee fails or refuses to either permanently or temporarily rearrange and/or relocate the permittee's small wireless facility within a reasonable time after the Public Works Director's notice, the City may (but will not be obligated to) cause the rearrangement or relocation to be performed at the permittee's sole cost and expense. The City may exercise its rights to rearrange or relocate the permittee's small wireless facility without prior notice to permittee when the Public Works Director determines that the City work is immediately necessary to protect public health or safety. The permittee shall reimburse the City for all costs and expenses in connection with such work within 10 days after a written demand for reimbursement and reasonable documentation to support such costs.

SECTION 2.6. LOCATION REQUIREMENTS

(a) **Preface to Location Requirements.** To better assist applicants and decisionmakers understand and respond to the community's aesthetic preferences and values, subsections (b) and (c) set out listed preferences for locations and support structures to be used in connection with small wireless facilities in an ordered hierarchy. Applications that involve less-preferred locations or structures may be approved so long as the applicant demonstrates that either (1) no more preferred locations or structures exist within 500 feet from the proposed site; or (2) any more preferred locations or structures within 500 feet from the proposed site would be technically infeasible as supported by clear and convincing evidence in the written record. Subsection (d) identifies "prohibited" support structures on which the City shall not approve any small cell permit application for any competitor or potential competitor.

(b) **Locational Preferences.** The City prefers small wireless facilities to be installed in locations, ordered from most preferred to least preferred, as follows:

(1) any location in a non-residential zone or non-residential Specific Plan designation;

(2) any location in a residential zone 250 feet or more from any structure approved for a residential use;

(3) If located in a residential area, a location that is as far as possible from any structure approved for a residential use.

(c) **Support Structures in Public Rights-of-Way.** The City prefers small wireless facilities to be installed on support structures in the public rights-of-way, ordered from most preferred to least preferred, as follows:

(1) Existing or replacement streetlight poles;

(2) New, non-replacement streetlight poles;

(3) New or replacement traffic signal poles;

(4) New, non-replacement poles;

(5) Existing or replacement wood utility poles.

(d) **Prohibited Support Structures in Public Rights-of-Way.** The City prohibits small wireless facilities to be installed on the following support structures:

(1) Decorative poles;

(2) Signs;

(3) Any utility pole scheduled for removal or relocation within 12 months from the time the approval authority acts on the small cell permit application;

(4) New, non-replacement wood poles.

SECTION 2.7. DESIGN STANDARDS

(a) **General Standards.**

(1) **Noise.** Noise emitted from small wireless facilities and all accessory equipment and transmission equipment must comply with all applicable City noise control standards.

(2) **Lights.** Small wireless facilities shall not include any lights that would be visible from publicly accessible areas, except as may be required under Federal Aviation Administration, FCC, other applicable regulations for health and safety. All equipment with lights (such as indicator or status lights) must be installed in locations and within enclosures that mitigate illumination impacts visible from publicly accessible areas. The provisions in this subsection (a)(2) shall not be interpreted or applied to prohibit installations on streetlights or luminaires installed on new or replacement poles as may be required under this Policy.

(3) **Landscape Features.** No small wireless facility shall encroach into the protected zone of a protected oak or other tree. Small wireless facilities shall not displace any other existing landscape features unless: (A) such displaced landscaping is

replaced with native and/or drought-resistant plants, trees or other landscape features approved by the approval authority and (B) the applicant submits and adheres to a landscape maintenance plan. The landscape plan must include existing vegetation, and vegetation proposed to be removed or trimmed, and the landscape plan must identify proposed landscaping by species type, size and location, and shall be subject to approval by the approval authority. Landscaping and landscape maintenance must be performed in accordance with all applicable provisions of the Yucaipa Municipal Code.

(4) **Site Security Measures.** Small wireless facilities may incorporate reasonable and appropriate site security measures, such as locks and anti-climbing devices, to prevent unauthorized access, theft or vandalism. However, barbed wire, razor ribbon, electrified fences or any similarly dangerous security measures are prohibited. All exterior surfaces on small wireless facilities shall be constructed from or coated with graffiti-resistant materials.

(5) **Signage; Advertisements.** All small wireless facilities must include signage not to exceed one (1) square feet in sign area that accurately identifies the site owner/operator, the owner/operator's site name or identification number and a toll-free number to the owner/operator's network operations center. Small wireless facilities may not bear any other signage or advertisements unless expressly approved by the City, required by law or recommended under FCC, Occupational Safety and Health Administration or other United States governmental agencies for compliance with RF emissions regulations.

(6) **Compliance with Health and Safety Regulations.** All small wireless facilities shall be designed, constructed, operated and maintained in compliance with all generally applicable health and safety regulations, which includes without limitation all applicable regulations for human exposure to RF emissions and compliance with the federal Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12101 *et seq.).*

(7) **Overall Height.** Small wireless facilities must comply with the minimum separation from electrical lines required by applicable safety regulations (such as CPUC General Order 95 and 128).

(b) **Small Wireless Facilities within Public Rights-of-Way.**

(1) **Antennas.**

(A) **Concealment.** All antennas and associated mounting equipment, hardware, cables or other connecters must be completely concealed within an opaque antenna shroud or radome. The antenna shroud or radome must be painted a flat, non-reflective color to match the underlying support structure.

(B) **Antenna Volume.** Each individual antenna may not exceed three cubic feet in volume.

(2) **Accessory Equipment.**

(A) **Installation Preferences.** All non-antenna accessory equipment shall be installed in accordance with the following preferences, ordered from most preferred to least preferred: (i) underground in any area in which the existing utilities are primarily located underground; (ii) on the pole or support structure; or (iii) integrated into the base of the pole or support structure. Applications that involve lesser-preferred installation locations may be approved so long as the applicant demonstrates that no more preferred installation location would be technically feasible as supported by clear and convincing evidence in the written record.

(B) **Undergrounded Accessory Equipment.** All undergrounded accessory equipment must be installed in an environmentally controlled vault that is load-rated to meet the City's standards and specifications. Underground vaults located beneath a sidewalk must be constructed with a slip-resistant cover. Vents for airflow shall be flush-to-grade when placed within the sidewalk and may not exceed two feet above grade when placed off the sidewalk. Applicants shall not be permitted to install an underground vault in a location that would cause any existing tree to be materially damaged or displaced. The Noise restrictions apply to underground equipment as well, especially ventilation/cooling equipment.

(C) **Pole-Mounted Accessory Equipment.** All pole-mounted accessory equipment must be installed flush to the pole to minimize the overall visual profile. If any applicable health and safety regulations prohibit flush-mounted equipment, the maximum separation permitted between the accessory equipment and the pole shall be the minimum separation required by such regulations. All pole-mounted equipment and required or permitted signage must be placed and oriented away from adjacent sidewalks and structures. Pole-mounted equipment may be installed behind street, traffic or other signs to the extent that the installation complies with applicable public health and safety regulations. All cables, wires and other connectors must be routed through conduits within the pole, and all conduit attachments, cables, wires and other connectors must be concealed from public view. To the extent that cables, wires and other connectors cannot be routed through the pole, applicants shall route them through a single external conduit or shroud that has been finished to match the underlying support structure.

(D) **Base-Mounted Accessory Equipment.** All base-mounted accessory equipment must be installed within a shroud, enclosure or pedestal integrated into the base of the support structure. All cables, wires and other connectors routed between the antenna and base-mounted equipment must be concealed from public view.

(E) **Ground-Mounted Accessory Equipment.** The approval authority shall not approve any ground-mounted accessory equipment including, but not limited to, any utility or transmission equipment, pedestals, cabinets, panels or electric meters.

(F) **Accessory Equipment Volume.** All accessory equipment associated with a small wireless facility installed above ground level shall not cumulatively exceed: (i) nine (9) cubic feet in volume if installed in a residential district; or (ii) seventeen (17) cubic feet in volume if installed in a non-residential district. The volume calculation shall include any shroud, cabinet or other concealment device used in connection with the non-antenna accessory equipment. The volume calculation shall not include any equipment or other improvements placed underground.

(3) **Streetlights.** Applicants that propose to install small wireless facilities on an existing streetlight must remove and replace the existing streetlight with one substantially similar to the design(s) for small wireless facilities on streetlights described in the City's Road Design and Construction Standards. To mitigate any material changes in the streetlighting patterns, the replacement pole must: (A) be located as close to the removed pole as possible; (B) be aligned with the other existing streetlights; and (C) include a luminaire at substantially the same height and distance from the pole as the luminaire on the removed pole. All antennas must be installed above the pole within a single, canister style shroud or radome that tapers to the pole.

(4) **Wood Utility Poles.** Applicants that propose to install small wireless facilities on an existing wood utility pole must install all antennas in a radome above the pole unless the applicant demonstrates that mounting the antennas above the pole would be technically infeasible as supported by clear and convincing evidence in the written record. Side-mounted antennas on a stand-off bracket or extension arm must be concealed within a shroud. All cables, wires and other connectors must be concealed within the radome and stand-off bracket. The maximum horizontal separation between the antenna and the pole shall be the minimum separation required by applicable health and safety regulations.

(5) **New, Non-Replacement Poles.** Applicants that propose to install a small wireless facility on a new, non-replacement pole must install a new streetlight substantially similar to the City's standards and specifications but designed to accommodate wireless antennas and accessory equipment located immediately adjacent to the proposed location. If there are no existing streetlights in the immediate vicinity, the applicant may install a metal or composite pole capable of concealing all the accessory equipment either within the pole or within an integrated enclosure located at the base of the pole. The pole diameter shall not exceed twelve (12) inches and any base enclosure diameter shall not exceed sixteen (16) inches. All antennas, whether on a new streetlight or other new pole, must be installed above the pole within a single, canister style shroud or radome that tapers to the pole.

(6) **Encroachments over Private Property.** Small wireless facilities may not encroach onto or over any private or other property outside the public rights-of-way without the property owner's express written consent.

(7) **Backup Power Sources.** Fossil-fuel based backup power sources shall not be permitted within the public rights-of-way; provided, however, that connectors or receptacles may be installed for temporary backup power generators used in an emergency declared by federal, state or local officials.

(8) **Obstructions; Public Safety and Circulation.** Small wireless facilities and any associated equipment or improvements shall not physically interfere with or impede access to any: (A) worker access to any aboveground or underground infrastructure for traffic control, streetlight or public transportation, including without limitation any curb control sign, parking meter, vehicular traffic sign or signal, pedestrian traffic sign or signal, barricade reflectors; (B) access to any public transportation vehicles, shelters, street furniture or other improvements at any public transportation stop; (C) worker access to above-ground or underground infrastructure owned or operated by any public or private utility agency; (D) fire hydrant or water valve; (E) access to any doors, gates, sidewalk doors, passage doors, stoops or other ingress and egress points to any building appurtenant to the rights-of-way; (F) access to any fire escape or (G) above ground improvements must be setback a minimum of 2 feet from existing or planned sidewalks, trails, curb faces or road surfaces.

(9) **Utility Connections.** All cables and connectors for telephone, data backhaul, primary electric and other similar utilities must be routed underground in conduits large enough to accommodate future collocated wireless facilities. Undergrounded cables and wires must transition directly into the pole base without any external doghouse. All cables, wires and connectors between the underground conduits and the antennas and other accessory equipment shall be routed through and concealed from view within: (A) internal risers or conduits if on a concrete, composite or similar pole; or (B) a cable shroud or conduit mounted as flush to the pole as possible if on a wood pole or other pole without internal cable space. The approval authority shall not approve new overhead utility lines or service drops merely because compliance with the undergrounding requirements would increase the project cost.

(10) **Spools and Coils.** To reduce clutter and deter vandalism, excess fiber optic or coaxial cables shall not be spooled, coiled or otherwise stored on the pole outside equipment cabinets or shrouds.

(11) **Electric Meters.** Small wireless facilities shall use flat-rate electric service or other method that obviates the need for a separate above-grade electric meter. If flat-rate service is not available, applicants may install a shrouded smart meter. The approval authority shall not approve a separate ground-mounted electric meter pedestal unless required by the utility company.

(12) **Street Trees.** To preserve existing landscaping in the public rights-of-way, all work performed in connection with small wireless facilities shall not cause any street trees to be trimmed, damaged or displaced. If any street trees are damaged or displaced, the applicant shall be responsible, at its sole cost and expense, to plant and maintain replacement trees at the site for the duration of the permit term.

(13) **Lines of Sight.** No wireless facility shall be located so as to obstruct pedestrian or vehicular lines-of-sight.

(c) **Small Wireless Facilities Outside of Public Rights-of-Way**

(1) **Setbacks.** Small wireless facilities on private property may not encroach into any applicable setback for structures in the subject zoning district.

(2) **Backup Power Sources.** The Director shall not approve any diesel generators or other similarly noisy or noxious generators in or within 250 feet from any residence; provided, however, the Director may approve sockets or other connections used for temporary backup generators.

(3) **Parking; Access.** Any equipment or improvements constructed or installed in connection with any small wireless facilities must not reduce any parking spaces below the minimum requirement for the subject property. Whenever feasible, small wireless facilities must use existing parking and access rather than construct new parking or access improvements. Any new parking or access improvements must be the minimum size necessary to reasonably accommodate the proposed use.

(4) **Freestanding Small Wireless Facilities.** All new poles or other freestanding structures that support small wireless facilities must be made from a metal or composite material capable of concealing all the accessory equipment, including cables, mounting brackets, radios, and utilities, either within the support structure or within an integrated enclosure located at the base of the support structure. All antennas must be installed above the pole in a single, canister-style shroud or radome. The support structure and all transmission equipment must be painted with flat/neutral colors that match the support structure. The pole diameter shall not exceed twelve (12) inches and any base enclosure diameter shall not exceed sixteen (16) inches.

(5) **Small Wireless Facilities on Existing Buildings.**

(A) All components of building-mounted wireless facilities must be completely concealed and architecturally integrated into the existing facade or rooftop features with no visible impacts from any publicly accessible areas. Examples include, but are not limited to, antennas and wiring concealed behind existing parapet walls or facades replaced with RF-transparent material and finished to mimic the replaced materials.

(B) If the applicant demonstrates with clear and convincing evidence that integration with existing building features is technically infeasible, the applicant may propose to conceal the wireless facility within a new architectural element designed to match or mimic the architectural details of the building including length, width, depth, shape, spacing, color, and texture.

(6) **Small Wireless Facilities on Existing Lattice Tower Utility Poles**

(A) Antennas must be flush-mounted to the side of the pole and designed to match the color and texture of the pole. If technologically infeasible to flush-mount an antenna, it may be mounted on an extension arm that protrudes as little as possible from the edge of the existing pole provided that the wires are concealed inside the extension arm. The extension arm shall match the color of the pole.

(B) Wiring must be concealed in conduit that is flush-mounted to the pole. The conduit and mounting hardware shall match the color of the pole.

(C) All accessory equipment must be placed underground unless undergrounding would be technically infeasible as supported by clear and convincing evidence in the written record. Above-ground accessory equipment mounted on a pole, if any, shall be enclosed in a cabinet that matches the color and finish of the structures on which they are mounted. Above-ground cabinets not mounted on a structure, if any, shall be dark green in color.

(D) No antenna or accessory equipment shall be attached to a utility line, cable or guy wire.

(7) **Small Wireless Facilities on Existing Wood Utility Poles.**

(A) All antennas must be installed within a cylindrical shroud (radome) above the top of the pole unless the applicant demonstrates that mounting antennas above the pole would be technically infeasible as supported by clear and convincing evidence in the written record.

(B) All antennas must be concealed within a shroud (radome) designed to match the color or the pole, except as described in (7) (E).

(C) No antenna or accessory equipment shall be attached to a utility line, cable or guy wire.

(D) If it is technically infeasible to mount an antenna above the pole it may be flush-mounted to the side of the pole. If it is technically infeasible to flush-mount the antenna to the side of the pole it may be installed at the top of a stand-off bracket/extension arm that protrudes as little as possible beyond

the side of the pole. Antenna shrouds on stand-off brackets must be a medium gray color to blend in with the daytime sky.

(E) Wires must be concealed within the antenna shroud, extension bracket/extension arm and conduit that is flush-mounted to the pole. The conduit and mounting hardware shall match the color of the pole.

(F) All accessory equipment must be placed underground, unless undergrounding would be technically infeasible as supported by clear and convincing evidence in the written record. Above ground accessory equipment mounted on a pole, if any, shall be enclosed in a cabinet that matches the color and finish of the pole. Above-ground cabinets not mounted on a structure, if any, shall be dark green in color.

(8) **Small Wireless Facilities on Existing Water Reservoirs.**

(A) Antennas must be mounted as close as possible to the side of the reservoir.

(B) No antenna or accessory equipment shall project above the top of the reservoir.

(C) Wires must be concealed within a shroud or conduit that is flush-mounted to the reservoir. The conduit and mounting hardware shall match the color of the reservoir.

(D) Antennas and antenna shrouds shall be painted to match the color of the reservoir.

(E) All accessory equipment must be placed underground unless undergrounding would be technically infeasible as supported by clear and convincing evidence in the written record. Above-ground equipment cabinets, if any, shall be dark green in color.

(F) All water reservoir installations must also be approved by the Water District having jurisdiction/ownership.

Agenda Item 6

CITY OF YUCAIPA
DEVELOPMENT SERVICES DEPARTMENT
AGENDA REPORT

TO: Honorable Chairman and Planning Commissioners

FROM: Benjamin J. Matlock, Planning Manager/City Planner

FOR: Planning Commission Meeting of March 18, 2020

SUBJECT: **City of Yucaipa** (Case No. 20-032/DCA): Consideration of Ordinance No. 389, amending Development Code Section 88.0405 of Chapter 4 of Division 8 and Section 83.041120 of Chapter 4 of Division 3 of the Yucaipa Development Code related to underground utility requirements and adopting environmental findings in connection therewith.

RECOMMENDATION:

That the Planning Commission conduct a public hearing and recommend that the City Council:

A) Approve first reading, by title only, as read by staff, of Ordinance No. 389, amending Development Code Section 88.0405 of Chapter 4 of Division 8 and Section 83.041120 of Chapter 4 of Division 3 of the Yucaipa Development Code related to underground utility requirements, and;

B) Find that the Ordinance is exempt from Environmental Review pursuant to Public Resources Code Section 15061(b)(3).

BACKGROUND:

On February 13, 2006, the City Council adopted Ordinance No. 253, which amended Development Code Section 83.041120(c)(1)(A) to require the undergrounding of utility poles within or directly serving each subdivision where there are three or more utility poles on the same street adjacent to the project's property line(s). Prior to adoption of Ordinance No. 253, the undergrounding of utility poles was required when a total of three or more poles were located on any of the street frontages adjacent to the project's property lines. For instance, if a project was located on a corner lot, the project would have to underground utilities if there were two poles along one street frontage and an additional pole along the other street frontage. The historical context listed in the Agenda Report for Ordinance No. 253 noted that when the utility undergrounding requirement was initially proposed, it was primarily evaluated on the basis of a project's size, as it was believed that projects with at least 200 feet of street frontage would not be excessively burdened by this cost. Because utility poles are generally spaced at least 100 feet apart, and the required undergrounding was limited to those projects with at least three (3) poles, the undergrounding requirement would generally be restricted to one (1) acre or larger parcels. However, it was possible for the development of a single 10,000 square foot "corner lot" be

subject to the undergrounding requirement under the original code language, and the language was therefore modified.

Since the adoption of Ordinance No. 253, the timeline for approving the underground utility with Southern California Edison, as well as the associated costs related to the timeline, in addition to the overall costs for the utility construction, have substantially increased. Project applicants within the City, as well as feedback from other local jurisdictions, have reported that the design process has added years and considerable expense to projects to meet underground utility requirements.

This issue was recently identified by the proposed Project developer for Tentative Tract Map 19901 (Case No. 14-138/TTM), a Tentative Tract Map approved by the Planning Commission at their regular meeting of September 16, 2015, to create 21 single family lots ranging in size from 20,011 square feet to 24,027 square feet, a lettered lot for storm water detention, and a Not-A-Part lot for an existing residence on 12.33 gross acres. The previously-approved subdivision is located between Douglas and Fremont Street, south of Avenue D. A Not-A-Part lot reflects the same ownership as the balance of the project site, as required by State law, but is not intended to be within the boundaries of the tentative map nor is it required to meet the Projects Conditions of Approval. Due to the configuration of the Not-A-Part parcel, the Project would not have had three poles along its "project" frontage, and would therefore not be subject to the City's Underground Utility Requirements. However, the current owner of the property wants to amend the map design to remove the Not-A-Part parcel in order to create a more cohesive and uniform project design. The modification would remain within substantial conformance to the original approval of the Project, but would now be subject to the undergrounding requirements for the utility poles. However, the developer has acknowledged that the subject site, with frontage along Douglas Street, is surrounded by existing development, and would be considered as a type of infill project. Further, above-ground utility poles are currently located along significant stretches of Douglas Street around the subject site, and due to the existing built environment, it is unlikely that those utility poles would be undergrounded along the majority of the street without future City participation. Consequently, the developer requested that the City evaluated the current policy, and that some exceptions be provided for infill projects so that a pragmatic consideration is offered to the existing built environment in the determination of whether existing poles are required to be undergrounded.

At their regular meeting of January 13, 2020, the City Council conducted a Study Session regarding the underground utility requirements, and recommended that Staff revise the Ordinance for both residential and commercial/industrial projects to establish an exemption for "infill" type projects. In addition, Councilmember Riddell also recommended that the City consider revising the requirement to underground to sites where four (4) or more poles are located along a Project frontage. This consideration would have the potential to reduce off-site construction costs, and assist in the delivery of new housing units and other projects by providing greater sensitivity to smaller-projects, while maintaining the undergrounding requirement for larger-scale projects.

DISCUSSION:

The draft Ordinance No. 389 is presented to the Commission for their consideration and recommendation to City Council. The Ordinance revises the Underground Utility Requirement by defining infill projects as a site no more than 15 acres, completely surrounded by existing development, and where poles along the surrounding frontage have not been undergrounded, as being exempt from the requirement to underground poles along a project frontage. Based on council direction, this requirement would apply to residential and commercial industrial, or institutional projects. In addition, the pole underground requirement has been modified from three (3) poles along a frontage to four (4). The Ordinance does maintain the requirement that all new utility lines will be underground. The proposed change would remain consistent with the City's adopted General Plan, and would be considered as another policy the City has developed to support the delivery of housing, consistent with the City's Housing Element and statewide goals.

Environmental Review:

The proposed Development Code Amendment to the City's undergrounding utility ordinance does not directly result in the development of any parcel of land. Instead, the proposed amendment will maintain existing requirements for new construction projects, but lessen the requirements for infill projects surrounded by poles adjacent to the Project frontage. Therefore, Staff is recommending that the proposed amendment is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the CEQA Guidelines. This section is known as the general rule exemption and applies to project where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.

FISCAL IMPACT:

There is no direct fiscal impact as a result of this approval of the Development Code Amendments.

CONCLUSION:

The required findings for approval of the Development Code Amendment have been made and are attached.

Attachments: Findings for Development Code Amendment
Draft Ordinance No. 389

Approved by:

Benjamin J. Matlock, Planning Manager/City Planner
Development Services Department

FINDINGS: DEVELOPMENT CODE AMENDMENT NO. 20-032

1. The proposed Development Code Amendment is consistent with the General Plan and its policies and objectives because its implementation will enhance the public's health, safety, and general welfare, and has been developed to meet the requirements of State law.

ORDINANCE NO. 389

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF YUCAIPA, CALIFORNIA AMENDING DEVELOPMENT CODE SECTION 88.0405 OF CHAPTER 4 OF DIVISION 8, AND SECTION 83.041120 (SUBDIVISION DESIGN AND IMPROVEMENT STANDARDS.) OF CHAPTER 4 (DIVISION OF LAND PROCEDURES) OF DIVISION 3 (PROCEDURES) OF THE YUCAIPA DEVELOPMENT CODE RELATED TO UNDERGROUND UTILITY REQUIREMENTS AND ADOPTING ENVIRONMENTAL FINDINGS IN CONNECTION THEREWITH

WHEREAS, on March 14, 1994, the City Council of the City of Yucaipa (the "City Council") adopted a comprehensive Development Code that included zoning standards and development review procedures for the City of Yucaipa (the "City") to use to evaluate a variety of development and land use proposals, and

WHEREAS, Development Code Amendment No. 20-032 is consistent with the goals and policies of the City of Yucaipa General Plan, and

WHEREAS, the City has a responsibility to assure adherence to the General Plan in meeting the needs and desires of its residents and the community in general, and

WHEREAS, the Planning Commission of the City has considered these proposed amendments to the Development Code at a duly noticed public hearing on March 18, 2020, and recommended that the City Council adopt the proposed amendments, and

WHEREAS, the City's Planning Department has evaluated the potential environmental impacts that could result from the adoption of these amendments to the Development Code, and has found that the proposed amendments are categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3)) of the CEQA Guidelines, and

WHEREAS, the City Council has reviewed and considered the information in the Agenda Report, as well as public testimony presented at the hearing.

NOW, THEREFORE, the City Council of the City of Yucaipa does ordain as follows:

Section 1. Findings, Purpose and Intent.

A. This Ordinance is adopted by the City Council pursuant to the City's police powers to protect the health, safety, and general welfare of the public.

B. The City Council finds that the overall use and development of land should be designed for the protection of the public health, safety and welfare; that it is important to ensure that the establishment of all land uses conform to a plan

of logical and orderly development of the land, and that present and future land uses be compatible with surrounding land uses; and that incompatible land uses would be aesthetically displeasing, economically detrimental, and harmful to the public health, safety and welfare.

Section 2. Section 88.0405 (Underground Utility Requirements.) of Chapter 4 (Commercial and Industrial) of Division 8 (Specific Use Design Standards) of the Yucaipa Development Code is amended to read as follows:

"**88.0405 Underground Utility Requirements.**

Utility lines, including, but not limited to, electric, telephone, communication, street lighting, and cable television, within or directly serving each new commercial, industrial, or institutional development that, for purposes of this section, includes the construction of a new building or an expansion of an existing building by the lesser of 500 square feet or 10% of the existing building square footage, and/or overhead distribution lines on the perimeter, where such undergrounding would result in the removal of four (4) or more utility poles on the same street, shall be placed underground. However, an infill project, which for purposes of this section consists of a site no more than 15 acres, completely surrounded by existing development, and where poles along the surrounding frontage have not been undergrounded, is exempt from underground utility requirements for existing poles along the frontage. The developer is responsible for complying with the requirements of this subsection without expense to the City, and he or she shall make necessary arrangements for the installation of such facilities."

Section 3. Section 83.041120 (Subdivision Design and Improvement Standards.) of Chapter 4 (Division of Land Procedures) of Division 3 (Procedures) of the Yucaipa Development Code is amended to read as follows, with all other provisions in Section 83.041120 remaining in effect without amendment:

"**Section 83.041120 Subdivision Design and Improvement Standards.**

(c) Public Services and Facilities

The public services and facilities standards in this subsection shall be applied as requirements for map approval.

(1) These standards shall regulate the placement of utilities within the subdivision.

(A) Utility lines, including, but not limited to, electric, telephone, communications, street lighting, and cable television, within or directly serving each subdivision, and/or overhead distribution lines on the perimeter of all subdivisions where such undergrounding would result in the removal of four (4) or more utility poles on the same street, shall be placed underground. In addition, an infill project, which for purposes of this section consists of a site no more than 15 acres, completely surrounded by existing development with lot sizes that, on average, are close to

the minimum lot size that is permitted within the subject land use district, and where poles along the surrounding frontage have not been undergrounded, is exempt from underground utility requirements for existing poles along the frontage. The subdivider is responsible for complying with the requirements of this subsection without expense to the City, and he or she shall make all necessary arrangements with the utility company for the installation of such facilities. Appurtenances and associated equipment such as boxes and meter cabinets and concealed ducts in an underground system may be placed above ground. Waiver of the requirements for underground utilities shall be made through the Public Utilities Commission. Aerial route still in existence at the time the subdivision is completed may be reinforced from time to time as conditions dictate; however, all provisions of this subsection shall be subject to the requirements of any underground district created pursuant to Yucaipa Municipal Code Section 13.08 in existence prior to the subdivision of the land or created subsequent thereto.

Section 4. Severability.

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance or any part thereof is for any reason held to be unlawful, such decision shall not affect the validity of the remaining portion of this Ordinance or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof, irrespective of the fact that any one or more section, subsection, subdivision, paragraph, sentence, clause or phrase be declared unlawful.

Section 5. Certification.

The City Clerk of the City of Yucaipa shall certify to the passage and adoption of this Ordinance and shall cause the same to be published or posted in the manner required by law.

Section 6. **Effective Date.**

This ordinance shall take effect thirty (30) days after the date of its adoption by the City Council.

Section 7. Publication and Posting.

The City Clerk is hereby directed to cause the following summary of this Ordinance to be published by two (2) insertions in the Yucaipa News Mirror, a newspaper of general circulation that is printed, published, and circulated in the City of Yucaipa, and hereby designated for that purpose by said Council of the City of Yucaipa: “Development Code Amendment (Ordinance No. 389) initiated by the City to amend Development Code Section 88.0405 of Chapter 4 of Division 8 and Section 83.041120 of Chapter 4 of

Division 3 of the Yucaipa Development Code related to underground utility requirements."

PASSED, APPROVED and ADOPTED on this __th day of April, 2020.

_____
David Avila, Mayor

ATTEST:

_____
Jennifer Crawford, Assistant City Manager/City Clerk

APPROVED AS TO FORM:

_____
David Snow, City Attorney

Agenda Item 7

CITY OF YUCAIPA
DEVELOPMENT SERVICES DEPARTMENT
AGENDA REPORT

TO: Honorable Chairman and Planning Commissioners

FROM: Benjamin J. Matlock, Planning Manager/City Planner

FOR: Planning Commission Meeting of March 18, 2020

SUBJECT: State Housing Related Legislation Update

RECOMMENDATION:

That Planning Commission conduct a study session regarding updates to State Housing Related Legislation as a precursor to the beginning of the Housing Element Update Process.

DISCUSSION:

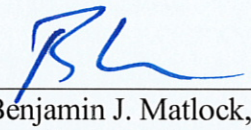
What began with an effort to increase the development of additional affordable housing throughout the State has evolved as the State has declared an overall housing crisis in California. The past few years have resulted in more legislation regarding cities efforts towards housing production than had been seen in several decades. Further, recent state law has resulted in more stringent requirements for housing elements and the affordable housing sites that are identified in the Housing Element, and has strengthened requirements designed to ensure that cities do not modify proposed projects to be at a lower density than what is permitted by the development code. In combination with the expected substantial increase of the Regional Housing Needs Assessment (RHNA) relative to the prior housing cycles, these updated laws will make it harder for cities to develop California Department of Housing and Community Development (HCD)-compliant Housing Elements, and a greater emphasis on policies that support the building of housing will be necessary.

On January 13, 2020, the City Council awarded a Professional Services Agreement with PlaceWorks, a planning consultant firm, to facilitate the City's Housing Element Update. As part of the scope of work, a presentation from PlaceWorks was provided to City Council at their meeting of January 27, 2020 to help tie together recent key legislation, and highlight how these laws will impact the preparation of the Housing Element as the City initiates the planning process. As the Planning Commission will be an integral component of the Housing Element process by recommending policies to the City Council for their consideration, staff will provide a study session that gives a general highlight of the current legislative environment as it pertains to housing.

FISCAL IMPACT:

There is no fiscal impact to the General Fund associated with this item.

Approved by:



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