

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

202



**FROM:** Economic Development Agency

**SUBMITTAL DATE:**  
September 16, 2010

**SUBJECT:** 2010 French Valley Airport Master Plan Update

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Adopt a Mitigated Negative Declaration for Environmental Assessment EDA/CEQA 2010-02, based on the findings incorporated in the Initial Study and the conclusion that the project will not have a significant effect on the environment; and
2. Approve the 2010 French Valley Airport Master Plan update.

**BACKGROUND:** On May 24, 2005, Riverside County EDA established an RFP process utilizing FAA procedural guidelines for selecting an Airport Master Plan Consultant. As a result of the RFP process and with FAA concurrence, EDA selected Coffman Associates to conduct the French Valley Master Plan update. The previous Master Plan analysis was conducted in 1995.

(Continued)

Robert Field  
Assistant County Executive Officer/EDA

<b>FINANCIAL DATA</b>	Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2010/11

**COMPANION ITEM ON BOARD OF DIRECTORS AGENDA:** No

<b>SOURCE OF FUNDS:</b> Federal Aviation Administration AIP Planning Grant, 95% California Division of Aeronautics Match Grant, 2.5% and EDA Aviation Fund 2.5%	<b>Positions To Be Deleted Per A-30</b>	<input type="checkbox"/>
	<b>Requires 4/5 Vote</b>	<input type="checkbox"/>

**C.E.O. RECOMMENDATION:** APPROVE

County Executive Office Signature BY: Jennifer V. Sargent

**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Stone, seconded by Supervisor Buster and duly carried, IT WAS ORDERED that the above matter is approved as recommended.

**Ayes:** Buster, Stone, Benoit and Ashley  
**Nays:** None  
**Absent:** Tavaglione  
**Date:** September 28, 2010  
**xc:** EDA, Recorder

Kecia Harper-Ihem  
Clerk of the Board  
By: Deputy

**Prev. Agn. Ref.:** 3.14 of 12/04/2007

**District:** 3

**Agenda Number:**

3.46

ATTACHMENTS FILED  
WITH THE CLERK OF THE BOARD

FORM APPROVED COUNTY COUNSEL  
BY: ANITA C. WILLIS  
DATE:

Dept's Recomm.:  Consent  
Per Exec. Ofc.:  Consent  
 Policy  
 Policy

Departmental Concurrence

**BACKGROUND:** (Continued)

The Airport Master Plan studies the long-term development concept proposed for the airport. The Master Plan also displays the concept graphically in the form of an Airport Layout Plan (ALP) and provides supporting documentation in an accompanying written report. The Master Plan includes the approval of an Airport Capital Improvement Program, and short to mid-term airport development projects which include an environmental evaluation for each proposed project.

These future projects include the design and construction of a new apron, preventative maintenance in the form of an asphalt overlay for Rwy 18-36 and associated taxiways and replacement of the Airport Weather Observation System (AWOS). The master plan deletes a parallel runway proposed in the previous 1990 plan. In addition, the master plan includes in its scope an analysis of the requirements needed to operate the airport as a commercial facility and a site design study for an air traffic control tower.

The Master Plan was evaluated and approved by an Airport Planning Advisory Committee (PAC) consisting of the airport owner and majority stakeholders. The Riverside County Airport Land Use Commission (ALUC) found the plan consistent with the 2002 California Land Use Handbook. A review was conducted by the California Department of Transportation, Division of Aeronautics, and the Federal Aviation Administration Airports District Office, and it was found to be consistent with the applicable laws and guidelines for general aviation airports.

Staff recommends that the Board approve the French Valley Airport Master Plan Update.

# NOTICE OF DETERMINATION

TO:

FROM:

— Office of Planning and Research  
1400 Tenth Street, Room 121  
Sacramento, CA 95814

Riverside County  
Economic Development Agency  
3403 10 St 5<sup>th</sup> Floor  
Riverside, CA 92507  
Central Mail Stop #1330

County Clerk  
County of Riverside  
4080 Lemon Street  
Riverside, CA 92501  
Central Mail Stop #1420

Original Negative Declaration/Notice of  
Determination was routed to County  
Clerks for posting on.

10/4/10  
Date

100  
Initial

**Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.**

**Project Title:** French Valley Airport Master Plan Update

<u>2010031013</u>	<u>Chad Davies</u>	<u>(951) 955-9417</u>
State Clearinghouse Number (If submitted to Clearinghouse)	Lead Agency Contact Person	Telephone Number

**Project Location** (include county): The project site is located at 37552 Winchester Road, Murrieta, County of Riverside, California 92563.

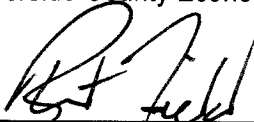
**Project Description:** The project concerns the updating of the French Valley Airport Master Plan document. The Airport Master Plan studies the long-term development concept proposed for the airport. The Master Plan also displays the concept graphically in the form of an Airport Layout Plan (ALP) and provides supporting documentation in an accompanying written report. The Master Plan includes the approval of an Airport Capital Improvement Program, and short to mid-term airport development projects which includes an environmental evaluation for each proposed project.

These projects consist of the design and construction of a new apron, preventative maintenance in the form of an asphalt overlay for RWY 18-36 and associated taxiways; and replacement of the Airport Weather Observation System (AWOS). The master plan deletes a parallel runway proposed in the previous 1990 master plan version. In addition, the master plan includes in its scope, an analysis of the requirements needed to operate the airport as a commercial facility and a site design study for an air traffic control tower.

This is to advise that the County of Riverside Board of Supervisors have approved the described project with approval effective on September 28, 2010, and has made the following determinations regarding the above described project:

1. The project will not have a significant effect on the environment.
2.  A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.
4. A Statement of Overriding Considerations [ was  was not] adopted for this project.
5. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Mitigated Negative Declaration is available to the General Public at: Riverside County Economic Development Agency, 3403 10<sup>th</sup> St. 5<sup>th</sup> Floor, Riverside, CA 92507.

  
Robert Field, Assistant County Executive Officer/EDA

9-8-10  
Date

SEP 28 2010 3.46

# MITIGATED NEGATIVE DECLARATION

**Initial Study Number:**

EDA/CEQA -2010-02

**Project Title:**

French Valley Master Plan Update

**Project Applicant:**

Riverside County Economic Development Agency

**Telephone Number:**

(951) 955-9417

**Project Location:**

37552 Winchester Road, Murrieta, County of Riverside, California 92563.

**Project Description:**

The project concerns the updating of the French Valley Airport Master Plan document. The Airport Master Plan studies the long-term development concept proposed for the airport.

---

## FINDING

The Riverside County Economic Development Agency has reviewed the above project in accordance with the "Rules for Riverside County Implementing the California Environmental Quality Act", and has determined that an Environmental Impact Report need not be prepared because:

- { } The proposed project will not have a significant effect on the environment.
- { x } Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the Initial Study have been added to the project and are hereby made part of this Mitigated Negative Declaration.

This determination is based upon an Initial Study. The Initial Study is available for review during normal business hours (7:30 a.m. to 5:30 p.m. Monday thru Thursday and 8:00 a.m. to 5:00 p.m. on alternate Fridays) at the County of Riverside Economic Development Agency, 3403 10 St, 5th Floor, Riverside, CA 92501, Telephone (951) 955 9417, and at the Office of the Clerk of the Board of Supervisors, 4080 Lemon Street, 1<sup>st</sup> Floor, Riverside, CA 92501, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, Telephone (951) 955-1060 or via the web at [www.rcfva.com](http://www.rcfva.com)

Prepared By: 

Chad Davies, Senior Airport Development Specialist

Date: 9-8-2010

SEP 28 2010 3.40

**NOTICE**

The public is invited to comment on the Mitigated Negative Declaration. The appropriateness and adoption of the Mitigated Negative Declaration will be considered by the following governing body on the following date in light of the information presented in the Initial Study, the recommendation of Economic Development Agency staff, and all of the comments received:

**Governing Body:**

Riverside County Board of Supervisors

Board of Directors of the Redevelopment Agency for the County of Riverside

Proposed Adoption Date of the Mitigated Negative Declaration: September 28, 2010

Date: September 28, 2010  
Time: 9:00 a.m., or as soon thereafter as possible  
Location: Board of Supervisors, Hearing Room  
County Administrative Center  
4080 Lemon Street  
Riverside, California 92501

**PLEASE SUBMIT ALL WRITTEN COMMENTS TO THE FOLLOWING ADDRESS:**

Riverside County Economic Development Agency  
C/O Chad Davies, Project Manager  
3403 10<sup>th</sup> Street, 5<sup>th</sup> Floor  
Riverside, California, 92501  
cdavies@rivcoeda.org

**Please Note:** All written comments regarding the Mitigated Negative Declaration must be received by no later than 5:00 p.m. on September 14, 2010. at the Riverside County Economic Development Agency. Thereafter, comments can be submitted to the Clerk of the Board of the Supervisors prior to or during the public hearing at 9:00 a.m. on September 28, 2010.

## RIVERSIDE COUNTY BOARD OF SUPERVISORS

### NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

for

**EDA/CEQA-2010-02**

**French Valley Master Plan Update  
Murrieta**

**(Third Supervisorial District)**

NOTICE IS HEREBY GIVEN that the Riverside County Board of Supervisors will hold a meeting on - **September 28, 2010 at 9:00a.m.**, or as soon thereafter as the matter may be heard, in the meeting room of the

Board of Supervisors, Riverside County Administrative Center, 1<sup>st</sup> Floor, 4080 Lemon Street, Riverside, California, to consider approval of the proposed French Valley Master Plan Update project (hereinafter referred to as "the proposed project"). The proposed project concerns the updating of the French Valley Airport Master Plan document. The Airport Master Plan studies the long-term development concept proposed for the airport. The Master Plan also displays the concept graphically in the form of an Airport Layout Plan (ALP) and provides supporting documentation in an accompanying written report. The Master Plan includes the approval of an Airport Capital Improvement Program, and short to mid-term airport development projects which includes an environmental evaluation for each proposed project.

These projects consist of the design and construction of a new apron, preventative maintenance in the form of an asphalt overlay for RWY 18-36 and associated taxiways; and replacement of the Airport Weather Observation System (AWOS). The master plan deletes a parallel runway proposed in the previous 1990 master plan version. In addition, the master plan includes in its scope, an analysis of the requirements needed to operate the airport as a commercial facility and a site design study for an air traffic control tower.

The following items are available for public inspection at the Riverside County Economic Development Agency, the Clerk of the Board of Supervisors and the County Clerk and Recorder's Office:

1. A copy of the Initial Study and Mitigated Negative Declaration for EDA/CEQA-2010-02.

In accordance with the California Environmental Quality Act (CEQA), the Riverside County Economic Development Agency has found that the proposed project will not have a significant effect on the environment and a Mitigated Negative Declaration documenting that finding has been completed. The Mitigated Negative Declaration and Initial Study may be examined at the Office of the Clerk of the Board of Supervisors, 4080 Lemon Street, 1<sup>st</sup> Floor, Riverside California 92501, between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday; the Office of the County Clerk and Recorder, 2724 Gateway Drive, Riverside, CA 92507, between the hours of 8:00a.m. and 4:30p.m; and the Riverside County Economic Development Agency, 3403 10st, 5<sup>th</sup> Floor, Riverside, CA 92501, between the hours of 8:00a.m. and 5:00p.m or **on the web at [www.rcfva.com](http://www.rcfva.com)**. The Mitigated Negative Declaration will be adopted by the appropriate hearing body that has the authority to approve or deny the proposed project. Any person affected by the Mitigated Negative Declaration and the above proposed project may submit

written comments to Chad Davies at the Riverside County Economic Development Agency, at the address listed below. Written comments should be submitted at the address listed below by September 14, 2010 at 5:00p.m., or after that date in c/o the Office of the Clerk of the Board of Supervisors (see address referenced above) before the Board of Supervisors' meeting. You may appear and be heard in support or opposition to the proposed project at the time of the Board meeting. All written comments received prior to the Board meeting will be submitted to the appropriate hearing body, and that hearing body will consider such comments, in addition to any oral testimony before making a decision on the proposed project or the proposed Mitigated Negative Declaration. If you challenge the above item in court, you may be limited to raising only those issues you or someone else raised at the board meeting described in this notice or in written correspondence to the Board of Supervisors at or prior to the board meeting. Furthermore, you must exhaust any administrative remedies prior to commencing a court challenge to the Board of Supervisor's action.

DATED:

By: Chad Davies (951) 955-9417

Riverside County Economic Development Agency

3403 10st, 5th Floor

Riverside, CA 92501

Pub. Date:

**Account Information**

Phone #: (951) 343-5493  
Name: EDA / AVIATION DIVISION  
Address: 3403 10TH STREET  
SUITE 500  
RIVERSIDE CA 92501

Acct #: 165877  
Client:  
Placed by: Michelle Moore, Aviation & Strategic PI  
Fax #: (951) 688-6873

**Ad Information**

Classification: Legals  
Publications: Press-Enterprise

Start date: 08-26-10  
Stop date: 08-26-10  
Insertions: 1

Rate code: LE-County  
Ad type: Ad Liner  
Taken by: Tinajero, Maria

Size: 2x109.530  
Bill size: 220.00x 5.14 agate lines

Amount due: **\$286.00**

**Ad Copy:**

**RIVERSIDE COUNTY BOARD OF SUPERVISORS  
NOTICE OF INTENT TO ADOPT  
A MITIGATED NEGATIVE  
DECLARATION  
for  
EDA/CEQA-2010-02  
French Valley Master Plan Update  
Murrieta  
(Third Supervisorial District)**

NOTICE IS HEREBY GIVEN that the Riverside County Board of Supervisors will hold a meeting on **September 28, 2010 at 9:00a.m.**, or as soon thereafter as the matter may be heard, in the meeting room of the Board of Supervisors, Riverside County Administrative Center, 1st Floor, 4080 Lemon Street, Riverside, California, to consider approval of the proposed French Valley Master Plan Update project (hereinafter referred to as "the proposed project"). The proposed project concerns the updating of the French Valley Airport Master Plan document. The Airport Master Plan studies the long-term development concept proposed for the airport. The Master Plan also displays the concept graphically in the form of an Airport Layout Plan (ALP) and provides supporting documentation in an accompanying written report. The Master Plan includes the approval of an Airport Capital Improvement Program, and short to mid-term airport development projects which includes an environmental evaluation for each proposed project.

These projects consist of the design and construction of a new apron, preventative maintenance in the form of an asphalt overlay for RWY 18-36 and associated taxiways, and replacement of the Airport Weather Observation System (AWOS). The master plan deletes a parallel runway proposed in the previous 1990 master plan version. In addition, the master plan includes in its scope, an analysis of the requirements needed to operate the airport as a commercial facility and a site design study for an air traffic control tower.

The following items are available for public inspection at the Riverside County Economic Development Agency, the Clerk of the Board of Supervisors and the County Clerk and Recorder's Office:

1. A copy of the Initial Study and Mitigated Negative Declaration for EDA/CEQA-2010-02.

In accordance with the California Environmental Quality Act (CEQA), the Riverside County Economic Development Agency has found that the proposed project will not have a significant effect on the environment and a Mitigated Negative Declaration documenting that finding has been completed. The Mitigated Negative Declaration and Initial Study may be examined at the Office of the Clerk of the Board of Supervisors, 4080 Lemon Street, 1st Floor, Riverside California 92501, between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday; the Office of the County Clerk and Recorder, 2724 Gateway Drive, Riverside, CA 92507, between the hours of 8:00a.m. and 4:30p.m; and the Riverside County Economic Development Agency, 3403 10st, 5th Floor, Riverside, CA 92501, between the hours of 8:00a.m. and 5:00p.m or on the web at [www.rctva.com](http://www.rctva.com). The Mitigated Negative Declaration will be adopted by the appropriate hearing body that has the authority to approve or deny the proposed project. Any person affected by the Mitigated Negative Declaration and the above proposed project may submit written comments to Chad Davies at the Riverside County Economic Development Agency, at the address listed below. Written comments should be submitted at the address listed below by September 14, 2010 at 5:00p.m., or after that date in c/o the Office of the Clerk of the Board of Supervisors (see address referenced above) before the Board of Supervisors' meeting. You may appear and be heard in support or opposition to the proposed project at the time of the Board meeting. All written comments received prior to the Board meeting will be submitted to the appropriate hearing body, and that hearing body will consider such comments, in addition to any oral testimony before making a decision on the proposed project or the proposed Mitigated Negative Declaration. If you challenge the above item in court, you may be limited to raising only those issues you or someone else raised at the board meeting described in this notice or in written correspondence to the Board of Supervisors at or prior to the board meeting. Furthermore, you must exhaust any administrative remedies prior to commencing a court challenge to the Board of Supervisor's action.

DATED:

By: Chad Davies (951) 955-9417  
Riverside County Economic Development Agency  
3403 10st, 5th Floor  
Riverside, CA 92501  
Pub. Date: August, 26, 2010

8/26



# FRENCH

# VALLEY AIRPORT



Initial Study



**INITIAL STUDY**

**for**

**FRENCH VALLEY AIRPORT  
Riverside County, California**

**Prepared by  
Coffman Associates, Inc.**

**August 2010**



---

---

## TABLE OF CONTENTS

# CONTENTS

## **FRENCH VALLEY AIRPORT Murrieta, California**

### **Initial Study**

#### **PROJECT DESCRIPTION**

#### **CEQA CHECKLIST**

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED.....	2-1
EVALUATION OF ENVIRONMENTAL IMPACTS .....	2-1
Aesthetics .....	2-2
Agriculture Resources .....	2-3
Air Quality.....	2-4
Biological Resources.....	2-8
Cultural Resources.....	2-11
Geology and Soils .....	2-13
Hazards and Hazardous Materials.....	2-15
Hydrology/Water Quality.....	2-18
Land Use/Planning.....	2-21
Mineral Resources.....	2-22
Noise .....	2-23
Population and Housing.....	2-25
Public Services.....	2-26
Recreation.....	2-27
Transportation/Traffic .....	2-28
Utilities and Service Systems.....	2-30
Mandatory Findings of Significance.....	2-32
SUMMARY.....	2-34
DETERMINATION.....	2-35
REFERENCES.....	2-36

## **EXHIBITS**

- 1 SHORT TERM PROJECTS ..... after page 1-2
- 2 INTERMEDIATE TERM PROJECTS..... after page 1-2
- 3 LONG TERM PROJECTS ..... after page 1-2
- 4 VEGETATION AND SENSITIVE RESOURCES..... after page 2-10
- 5 2008 AIRCRAFT NOISE EXPOSURE ..... after page 2-24
- 6 2030 AIRCRAFT NOISE EXPOSURE ..... after page 2-24

### **Attachment A EMISSIONS INVENTORY REPORT**

### **Attachment B WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS**

### **Attachment C CULTURAL RESOURCE ASSESSMENTS**



---

---

## PROJECT DESCRIPTION

# FRENCH VALLEY AIRPORT MASTER PLAN UPDATE CEQA DOCUMENTATION

**Project Title:**

French Valley Airport Master Plan  
Update

**Lead Agency Name and Address:**

Riverside County  
Economic Development Agency  
Aviation Division  
37552 Winchester Road  
Murrieta, CA 92563

**Contact Person and Phone Number:**

Mr. Chad Davies  
(951) 955-9417

**Project Location:**

French Valley Airport  
37552 Winchester Road  
Murrieta, CA 92563

**Project Sponsor's name and address:**

Riverside County at:  
Economic Development Agency  
Aviation Division  
3403 10<sup>th</sup> Street, 5<sup>th</sup> Floor  
Riverside, CA 92501

**Preparer:**

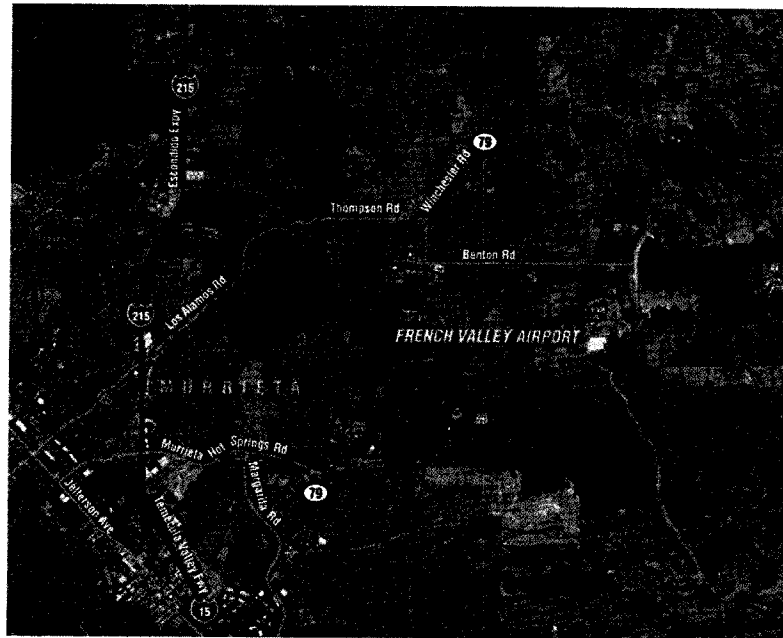
Coffman Associates, Inc.  
237 NW Blue Parkway, Suite 100  
Lee's Summit, MO 64063

**General Plan Designation:**

The existing French Valley Airport is designated as a public facility in the County of Riverside General Plan. Adjacent land is designated as office/business park, public/other institutional, industrial, and commercial.

**Zoning:**

The existing French Valley Airport is zoned by Riverside County for Manufacturing Service Commercial (M-SC). Adjacent properties are zoned Specific Plan (SP). Specific Plan land uses adjacent to the Airport are office/business park, industrial, and commercial.



## Project Description

The *2009 French Valley Airport Master Plan Update* proposes a number of potential physical improvements (depicted on **Exhibits 1, 2, and 3**) that will be undertaken at the airport as demand warrants. The purpose of the Master Plan is to establish an internal land use plan to support the development of general aviation uses at the airport. The *2009 French Valley Airport Master Plan Update* is a conceptual plan and not all of the improvements contained within the plan will likely be undertaken. Some of the airport improvements will be undertaken as demand warrants. The following sections provide a brief description of the improvements contained within the *2009 French Valley Airport Master Plan Update* broken down by short term, intermediate, and long term time horizons.

### Short Term Improvements

Many of the projects contained in the short term involve rehabilitation or improvement of existing facilities (identified with orange numbers on **Exhibit 1**). The most significant of these are the overlay of Runway 18-36 and the slurry seal of the apron. Upgrading security fencing, airport weather observation system, and runway lighting are short term improvement projects to existing facilities. The short term also includes several projects which would add to existing facilities (identified with yellow numbers on **Exhibit 1**). These projects include apron expansion, installation of omni-directional approach lighting system (ODALS) to Runway 18, property acquisition and site preparation for future hangars, and construction of an airport traffic control tower. A gravel road crossing the southern portion airport property and runway protection zone (RPZ) is also planned for closure in the short term.

### Intermediate Term Improvements

Intermediate term projects are grouped together to represent potential years 6-10 and are depicted on **Exhibit 2**. Several projects in the intermediate term include rehabilitation of existing facilities (identified with light green numbers on **Exhibit 2**). This includes overlays of the runway, taxiways, apron, and hangar taxilanes. Rehabilitation of the airfield lighting and navigational aids is also planned.

Expansion of the southern hangar area is proposed. The hangar expansion will provide for 44 nested hangars and taxilane access to proposed hangar developments. In addition, the plan proposes an extension to Airport Road and automobile parking. These improvements are identified with dark green numbers on **Exhibit 2**.

### Long Term Improvements

Long term projects are grouped together to represent potential years 10-20 and are depicted on **Exhibit 3**. Several projects in the long term also include rehabilitation of existing facilities (identified with light purple numbers on **Exhibit 3**). This includes overlays of the runway, taxiways, apron, and hangar taxilanes. Rehabilitation of the terminal building, airfield lighting, and navigational aids is planned for the long term. The fuel storage facility is also planned for updating in the long term. However, additional fuel storage capacity is not planned.

Phase 2 of the southern hangar area expansion is proposed. The hangar expansion will provide for 52 nested hangars and taxilane access to proposed hangar developments. In addition, the plan proposes an extension to Airport Road, additional automobile, relocation of Borel Road, and additional automobile parking. These improvements are identified with dark purple numbers on **Exhibit 3**. **Table 1** summarizes the improvement program schedule.



**TABLE 1****Improvement Program Schedule****French Valley Airport****Riverside County, California****Short Term Program (Years 1-5)**

Year 1	Tie-Down Expansion Upgrade Security Fencing Slurry Seal Apron Area Road Closure
Year 2	Design/Engineering-Runway/Taxiways Overlay Runway/Taxiways
Year 3	Update Airport Weather Observation System Install Omni-Directional Approach Lighting System Upgrade Runway Lighting To High Intensity Runway Lighting
Year 4	Acquire Acreage for Hangars Prepare Site for Hangar Development Airport Security/Fencing Around Acquired Acreage
Year 5	Construct Control Tower Airport Traffic Control Tower

**Intermediate Term Program (Years 6-10)**

Extend Taxilanes/T-hangar Access (Phase 1)  
 Extend Airport Rd./Parking (Phase 1)  
 Construct Nested Hangars (44 units)  
 Overlay Ramp/Hangar Taxilanes  
 Acquire Airport Maintenance Equipment  
 Rehabilitate Airfield Lighting/Nav aids  
 Overlay Runway/Taxiway Pavements

**Long Term Program (Years 11-20)**

Extend T-hangar Taxilanes (Phase 2)  
 Extend Airport Rd./Parking (Phase 2)  
 Construct Nested hangars (52 units)  
 Update Airport Security/Fencing  
 Acquire Airport Maintenance Equipment  
 Update Fuel Storage Facility  
 Rehabilitate Terminal Building  
 Overlay Runway/Taxiway Pavements  
 Rehabilitate Airfield Lighting/Nav aids  
 Overlay Ramp/hangar Taxilanes

Source: 2009 French Valley Airport Master Plan prepared by Coffman Associates.



---

---

# CEQA CHECKLIST

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

## EVALUATION OF ENVIRONMENTAL IMPACTS

Explanations of all "Potentially Significant," "Less Than Significant with Mitigation Incorporated," "Less than Significant Impact," and "No Impact" answers are provided on the attached sheets.

I. AESTHETICS				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		<input checked="" type="checkbox"/>		

***I.a Have a substantial adverse effect on a scenic vista?***

No Impact. French Valley Airport is located on a level area where the predominant land uses surrounding the airport are agricultural, public (Southwest County Justice Center), industrial, or residential. Significant scenic mountain vistas are located to the east of the airport, but the aviation-related elements of the 2010 French Valley Airport Master Plan would occur on the airport in proximity to existing and long-established airport facilities and would not significantly affect views from the airport environs. New airport development would be compatible in size and scale with existing aviation-related uses.

***I.b Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

No Impact. No state scenic highway designations apply to State Highway 79 immediately west of French Valley Airport. No significant scenic resources such as trees, rock outcroppings, or historic buildings within a state scenic highway would be altered by the proposed project.

***I.c Substantially degrade the existing visual character or quality of the site and its surroundings?***

No Impact. French Valley Airport is developed with aviation-related uses. In the near-term, the new aviation-related development identified in the 2010 French Valley Airport Master Plan would be concentrated in the vicinity of this existing development on the airport's west side (see Exhibit 1 and Table 1). Over the long-term, new aviation facilities would be developed on the airport's southwest side. The proposed development would be a less than significant impact on the visual character or quality of the surrounding area.

*I.d Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?*

Less than Significant Impact with Mitigation Incorporated. New light sources on the airport would include those associated with new development on the southwest side. These new light sources would primarily be from security lighting, parking, and streetlights. Riverside County Ordinance No. 655 restricts the use of certain light fixtures that could have a detrimental effect on astronomical observation and research related to the Mount Palomar Observatory. The French Valley Airport is located approximately 21 miles from the Palomar Observatory and complies with the provisions of the ordinance.

**Mitigation Measure AESTHETICS-1: The County shall ensure that only low pressure sodium vapor lights will be used for non-airfield lighting in order to minimize light emissions in accordance with Ordinance No. 655.**

Upgrading the Runway 18-36 lighting to high intensity runway lighting and the installation of an omni directional approach lighting system for Runway 18 would not have a significant impact, as the developments would occur totally within airport property. Moreover, the subject lighting systems are designed to be viewed from the air, and not the ground.

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

**II.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 a non-agricultural use?**

No Impact. The area to be acquired to the southwest for future hangars and parking is not designated as prime farmland by the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS).

The Multipurpose Open Space Element of the *County of Riverside General Plan* designates the area around the airport as local important farmland. Local important farmland is land determined by the County to be of significant economic importance locally. However, airport property and proposed land acquisition is not included in this classification. Therefore, no impact to farmland is anticipated.

**II.b Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

No Impact. There are no Williamson Act properties identified on French Valley Airport or on the property to be acquired. Therefore, conflicts with agricultural farm land designated in Williamson Act are not anticipated as a result of 2010 French Valley Airport Master Plan implementation.

**II.c Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?**

No Impact. None anticipated.

<b>III. AIR QUALITY</b>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Conflict with or obstruct implementation of the applicable air quality plan?				<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		<input checked="" type="checkbox"/>		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			<input checked="" type="checkbox"/>	
d) Expose sensitive receptors to substantial pollutant concentrations?		<input checked="" type="checkbox"/>		
e) Create objectionable odors affecting a substantial number of people?			<input checked="" type="checkbox"/>	
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.				

*III.a Conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. The project is located within the South Coast Air Basin (SCAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

The current regional air quality plan is the *2007 Air Quality Management Plan (AQMP)* adopted by the SCAQMD governing board on June 1, 2007. The SCAB is currently a Federal and State nonattainment area for PM<sub>2.5</sub> and ozone. The 2007 AQMP proposes attainment demonstration of the federal PM<sub>2.5</sub> standards through more focused control of sulfur oxides (SO<sub>x</sub>), directly-emitted PM<sub>2.5</sub>, and nitrogen oxides (NO<sub>x</sub>) supplemented with volatile organic compounds (VOC) by 2015. The 8-hour ozone control strategy includes additional NO<sub>x</sub> and VOC reduction measures to meet the standard by 2024. Appendix III of the 2007 AQMD includes emissions inventories for baseline (2005) and forecast (2010, 2020, 2030) scenarios. The emissions inventories include airport related emissions for general aviation airports, such as French Valley Airport. Therefore, anticipated increases in airport-related emissions resulting from operational growth at French Valley Airport are covered under the AQMP. Implementation of the projects included in the airport master plan will not conflict with or obstruct implementation of any of the control measures in these air quality plans.

*III.b Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less than Significant Impact with Mitigation Incorporated. Temporary increases in air emissions are anticipated during construction of projects outlined in the airport master plan. Additionally, vehicle trips to the airport may increase as a result of additional improvements to the airport.

During construction activities such as clearing, excavation, and grading operations, construction vehicle traffic and wind blowing over exposed earth may generate fugitive particulate matter emissions that would temporarily affect local air quality. The effects of construction activities would be increased fugitive dust and locally elevated levels of PM<sub>10</sub>. Construction dust has the potential for creating a nuisance at nearby properties. This impact is considered potentially significant during construction of airport improvements. However, these emissions will be temporary and limited to the timeframe of the construction phase of the projects outline in the airport master plan.

Adherence to the following measure will reduce potential impacts associated with this issue to a less than significant level:

**Mitigation Measure AIR QUALITY-1: All construction contracts shall require that dust control practices and other construction control measures (as identified in SCAQMD rules, regulations, and CEQA guidelines) in effect at the time of the contract signing be implemented throughout all stages of construction.**

New vehicle trips add to carbon monoxide concentrations near streets providing access to the site. Peak hour vehicle trip generation associated with the proposed Master Plan would be 21 trips in the p.m. peak traffic hour. The increase in trips would add to traffic volumes and resulting CO concentrations is unlikely to result in any new violations of the 8-hour standards for carbon monoxide or contribute substantially to an existing or projected violation.

**III.c Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

Less than Significant Impact. The Airport Master Plan demand-based forecasts indicate that annual flight operations will increase from 97,700 in 2009 to 149,200 in 2030. Additionally, the type of aircraft operating at the airport is anticipated to change. As a result of the increased operations and change in fleet mix at the airport, emissions will also increase at the airport. According to the South Coast Air Quality Management District's CEQA Air Quality Handbook, projects with daily operational emissions that exceed any of the long term operational thresholds established by the SCAQMD should be considered significant. The thresholds are outlined in **Table 2**.

<b>Pollutant<sup>1</sup></b>	<b>Threshold (Pounds Per Day)</b>
CO	550
VOC	55
NO <sub>x</sub>	55
SO <sub>x</sub>	150
PM <sub>10</sub>	150
PM <sub>2.5</sub>	55
Lead	3

Source: South Coast Air Quality Management District CEQA Air Quality Handbook

The FAA-approved *Emissions and Dispersion Modeling System*, Version 5.1 (EDMS) was used to calculate existing and future airport emissions using the master plan operations forecasts. EDMS is listed among the EPA's preferred guideline models and has been identified by the FAA as the only acceptable model for estimating aircraft emissions at airports. It calculates emissions of pollutants associated with an airport, including aircraft, ground support equipment, and automobiles.

EDMS does not calculate lead emissions; therefore, an assessment of these impacts cannot be made. Additionally, ozone emissions are not calculated by EDMS; however, volatile organic compounds (VOC) and nitrogen (NO<sub>x</sub>) are precursors to ozone. Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC) in the presence of sunlight. As a result, VOC and NO<sub>x</sub> emissions are used to estimate ozone emissions.

Automobile trips associated with the operation of French Valley Airport were also included in the analysis. For purposes of this study, the annual vehicle trips associated with the airport were calculated according to the Institute of Transportation Engineer's Trip Generation Manual, 7<sup>th</sup> Edition, based on average daily operations at the airport. Vehicle emissions associated with operation of the airport are included in the EDMS output report shown in **Attachment A**.

As previously discussed, French Valley Airport is located within the SCAB which is currently a Federal and State nonattainment area for PM<sub>2.5</sub> and ozone. **Table 3** provides the projected PM<sub>2.5</sub>, NO<sub>x</sub> and VOC emissions associated with the operations at French Valley Airport under the existing condition (2009) and future condition (2030). This includes emissions from aircraft, automobiles, ground support equipment, and fueling operations.



<b>Pollutant<sup>1</sup></b>	<b>2007</b>	<b>2030</b>	<b>Difference</b>	<b>Threshold</b>
VOC	72.9	108.54	35.64	55
NO <sub>x</sub>	33.55	40.68	7.13	55
PM <sub>2.5</sub>	0.65	0.78	0.13	55

<sup>1</sup> EDMS does not calculate emissions for lead  
Source: Coffman Associates analysis.

As indicated in **Table 3**, the proposed airport improvements outlined in the airport master plan are not expected to have a notable affect on the quantity of operations at the airport in the long range condition as the estimated increase in emissions does not exceed the established thresholds for PM<sub>2.5</sub>,NOX or VOC.

**III.d Expose sensitive receptors to substantial pollutant concentrations?**

Less than Significant Impact with Mitigation Incorporated. Implementation of the proposed Master Plan would result in construction-related emissions at various times. During construction activities such as clearing, excavation, and grading operations, construction vehicle traffic and wind blowing over exposed earth would generate fugitive particulate matter emissions that would temporarily affect local air quality. The effects of construction activities would be increased fugitive dust and locally elevated levels of particulate matter. Construction dust has the potential for creating a nuisance at nearby properties. This impact is considered potentially significant.

Adherence to the previously discussed mitigation measure AIR QUALITY-1 will reduce potential impacts associated with this issue to a less than significant level.

**III.e Create objectionable odors affecting a substantial number of people?**

Less than Significant Impact. During construction, the various diesel-powered vehicles and equipment in use on the site would create odors. These odors are temporary and not likely to be noticeable beyond the project boundaries. Airport operations could result in intermittent odors affecting a small area, but would not affect a substantial number of people.

**IV. BIOLOGICAL RESOURCES**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		<input checked="" type="checkbox"/>		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			<input checked="" type="checkbox"/>	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		<input checked="" type="checkbox"/>		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			<input checked="" type="checkbox"/>	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			<input checked="" type="checkbox"/>	

***IV.a Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

*Less than Significant Impact*

The Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) consistency analysis was prepared by the Riverside County Environmental Programs Department in July 2010. A copy of the WRCMSHCP consistency analysis can be found in **Attachment B**. The report identified the proposed property acquisition area to be within WRCMSHCP Criteria Cell 6071, which is part of Cell Group W. The remaining projects are located within the current airport property boundary and are not within a WRCMSHCP Cell.

The acquisition is within the survey area for Narrow Endemic Plant Species including, Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), Many-stemmed dudleya (*Dudleya multicaulis*), Spreading navarretia (*Navarretia fossa lis*), California Orcutt grass (*Orcuttia californica*), and Wrights trichocoronis (*Trichocoronis wrightii*). A field survey completed July 12, 2010 found the proposed property acquisition area (a construction equipment storage yard) to be devoid of vegetation and native plant communities. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped; however, the level of disturbance and compaction associated with the storage yard has altered the soil structure. The hillside to the west does not pond or hold water due to the level of topography.

The proposed acquisition area is also located within the WRCMSHCP survey area for burrowing owl (*Athene cunicularia*); therefore, a habitat assessment was conducted on July 12, 2010. The site is extremely flat and would provide foraging opportunities for the burrowing owl. However, the site does not support any small mammal burrows or areas viable for burrowing owl occupation, thus precluding suitable habitat for burrowing owl. In addition, the 150 meter buffer area was also visually inspected for the burrowing owls and suitable burrowing owl burrows. No burrowing owls or burrowing owl signs (feathers, white wash, scat) was observed on the project site or within the buffer area. The project site does not support suitable burrowing owl habitat and a focused survey was not recommended. However, the site is located in an area known to support burrowing owls, and the site could become occupied in the future. Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day preconstruction survey must be completed in the proposed project area.

Finally, the site is located within WRCMSHCP Criteria Cell and Urban/Wildlands Interface Guidelines (UWIG) must be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding. By incorporating the appropriate UWIG Guidelines as set forth in Section 6.1.4, the proposed property acquisition area will be consistent with Section 6.1.4 of the WRCMSHCP.

**Mitigation Measure BIOLOGICAL RESOURCES-1:** Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day preconstruction survey must be completed in the proposed project area.

**Mitigation Measure BIOLOGICAL RESOURCES-2:** The proposed property acquisition area is located within WRCMSHCP Criteria Cell and Urban/Wildlands Interface Guidelines (UWIG) must be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding.

***IV.b Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less than Significant Impact. See response to IV.a. As discussed above, a field survey completed July 12, 2010 found the proposed property acquisition area (a construction equipment storage yard) to be devoid of vegetation and native plant communities. .

***IV.c Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.). Through direct removal, filling, hydrological interruption, or other means?***

No Impact. A 2003 biological survey prepared for the 2004 environmental assessment for the Runway 18-36 runway extension indicated no jurisdictional waters or wetlands are present on airport property. In addition, National Resource Conservation Service information on hydric soils for the existing and proposed French Valley Airport property boundary indicates that hydric soils are not present at the airport (See **Exhibit 4**). A combination of hydric soils, hydrophytic vegetation, and hydrology properties define wetlands as described in the National Food Security Act Manual (Soil Conservation Service, 1994) and the Corps of Engineers (COE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and COE Regional Supplements. Therefore, an area that meets the hydric soil definition must also meet the hydrophytic vegetation and wetland hydrology definitions in order for it to be correctly classified as a jurisdictional wetland.

A field survey completed July 12, 2010 found the proposed property acquisition area (a construction equipment storage yard) to be devoid of vegetation and native plant communities. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped; however, the level of disturbance and compaction associated with the storage yard has altered the soil structure. The hillside to the west does not pond or hold water due to the level of topography.

Impacts to wetlands are not anticipated given the determination from the 2003 biological survey, lack of hydric soils in the proposed project areas, and a July 2010 survey of the proposed property acquisition area.

***IV.d Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Less than Significant Impact with Mitigation Incorporated. See responses to IV.a and IV.c. Implementation of BIOLOGICAL RESOURCES-2 will ensure that the project is consistent or modified in such a way that it becomes consistent with the WRCMSHCP and will reduce the severity of this impact to less than significant

***IV.e Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Less than Significant Impact. The project site will not conflict with any local policies or ordinances protecting biological resources (e.g., tree preservation policy or ordinance). For this reason, impacts are considered to be less than significant.

**IV.f Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?**

*Less than Significant Impact.* See response to IV.a. Implementation of the airport master plan will not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan.

<b>V. CULTURAL RESOURCES</b>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?		<input checked="" type="checkbox"/>		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		<input checked="" type="checkbox"/>		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		<input checked="" type="checkbox"/>		
d) Disturb any human remains, including those interred outside of formal cemeteries?		<input checked="" type="checkbox"/>		

**V.a Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?**

*Less than Significant Impact with Mitigation Incorporated.* Several cultural resource surveys have been conducted before the French Valley Airport was constructed in November 1984 and for improvement projects after it's opening in 1989. A review of these surveys indicates that, although cultural or historical resources have been located within the vicinity of the airport, no historical or cultural resources are known to exist on airport property. Copies of these surveys can be found in **Attachment C**. Field surveys may be required to determine the presence of historic properties or archaeological resources prior to acquisition of the property to the southwest.

**Mitigation Measure CULTURAL RESOURCES-1: Field surveys may be required to determine the presence of historic properties or archaeological resources prior to acquisition of the property to the southwest.**

**Mitigation Measure CULTURAL RESOURCES-2: In the unlikely event that cultural, archaeological, or historical resources are encountered during project-related activities, work in the immediate vicinity of the discovery shall cease until the finds can be evaluated by a qualified specialist. Should human remains be encountered within the project area, the County Coroner shall be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission shall be contacted as well.**

***V.b Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?***

*Less than Significant Impact with Mitigation Incorporated.* See response to V.a. As discussed above, cultural resource surveys have been conducted before the French Valley Airport was constructed in November 1984 and for improvement projects after it's opening in 1989. The project site is occupied by the existing airport development or cultivated farmland. No archaeological sensitive sites are located within or adjacent to the project site. While there is always the potential for archaeological resources to be uncovered during the course of ground-disturbing activities, the possibility of unearthing such resources is very low. In addition, implementation of CULTURAL RESOURCES-2 will ensure that potential archaeological resources are protected as proposed projects in the master plan developed.

***V.c Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

*Less than Significant Impact with Mitigation Incorporated.* No paleontological resource or site or unique geologic features were discovered during previous work. The Riverside County geographic information system identifies the southwest hangar development site as low potential/sensitivity for paleontological resources. However, implementation of CULTURAL RESOURCES-2 will ensure that potential paleontological resources or unique geologic features are protected as the southwest hangar area is developed.

***V.d Disturb any human remains, including those interred outside of formal cemeteries?***

*Less than Significant Impact with Mitigation Incorporated.* There is no indication that burials are present based on survey and document research. However, if during construction, undocumented human remains or artifacts should be unearthed, the County Coroner shall be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission shall be contacted as well. Also see *Mitigation Measure* CULTURAL RESOURCES-2.

VI. GEOLOGY AND SOILS				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		<input checked="" type="checkbox"/>		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?				<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?				<input checked="" type="checkbox"/>
iv) Landslides?				<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?				<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				<input checked="" type="checkbox"/>
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?				<input checked="" type="checkbox"/>
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?				<input checked="" type="checkbox"/>

*VI.a Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) Strong seismic ground shaking; iii) Seismic-related ground failure, including liquefaction; iv) Landslides?*

*Less than Significant Impact with Mitigation Incorporated.* There are two major regional fault zones in southwest Riverside County (the Elsinore and San Jacinto Faults). There are no known faults traversing the French Valley Airport. A review of the Riverside County geographical information indicated that the project site is not located in an Alquist-Priolo Fault Hazard Zone or County Fault Hazard Zone area. Therefore, no impact related to this issue will occur. The French Valley Airport is not located within an Alquist-Priolo zone. However, seismic activity could occur at the site in association with any one of a number of faults in the Coachella Valley region. The Riverside County GIS system also indicated that the project site is located in an area of low probability for liquefaction concerns, but is susceptible to subsidence. The site is level and not subject to landslides. Conformance with the requirements of the Uniform Building Code would reduce the potential for structural damage to buildings in the event of significant seismic activity.

**Mitigation Measure GEOLOGY-1: Where deemed necessary, new structural development (aircraft hangars or other airport related buildings) should be the subject of a geotechnical study prior to construction. This study shall evaluate local geologic and soil conditions and identify appropriate construction measures that should be completed in terms of building foundation design to ensure the protection of occupants of the future buildings. New buildings shall conform to the requirements of the Uniform Building Code.**

*VI.b Result in substantial soil erosion or the loss of topsoil?*

*Less than Significant Impact with Mitigation Incorporated.* Some erosion and loss of topsoil could occur during construction. However, the site is generally level and this potential impact is not considered significant. Erosion control measures undertaken during construction would reduce the potential for soil erosion.

**Mitigation Measure GEOLOGY-2: During construction, erosion and sedimentation shall be minimized on the site by measures such as silt fences, covering of stockpiled soil materials, and other Best Management Practices (BMPs) as identified by the San Diego Regional Water Quality Control Board.**

*VI.d 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?*

*Less than Significant Impact with Mitigation Incorporated.* Landslide, lateral spreading, subsidence, liquefaction, and collapse potential are addressed under (VI.a) above.

*VI.d Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?*

*Less than Significant Impact with Mitigation Incorporated.* Soils containing high clay content often exhibit a relatively high potential to expand when saturated, and contract when dried out. This shrink/swell movement can adversely affect building foundations, often causing them to crack or shift, with resulting damage to the buildings they support. The soils at the project site include Altamont Clay (35 to 55 percent clay content) and Bosanko Clay (35 to 50 percent clay content).

**Mitigation Measure GEOLOGY-3: Detailed site-specific geotechnical investigations will be conducted prior to the development of any structures on the airport to identify the potential for geological hazards and to develop construction techniques and design solutions to minimize risks.**



*VI.e Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

*No Impact.* This issue is not relevant to the project as septic tanks or alternative wastewater systems are not proposed for the project.

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

***VII.a Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?***

*Less than Significant Impact.* The proposed project envisions changes to the airport to accommodate the expected increased usage of the facility. Potentially hazardous materials such as fuel, paint products, lubricants, solvents, and cleaning products may be used during the course of daily activities at the airport. The proposed project may result in an increase in the amount of hazardous materials routinely transported to the site (more airplanes utilizing the facility may result in increased usage of fuel). The transport of hazardous materials to the site will be conducted in accordance with all applicable state and federal laws. Compliance with all applicable laws and regulations will reduce the potential impact associated with the routine transport, use, or disposal of hazardous materials to a less than significant level.

***VII.b Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

*Less than Significant Impact.* Due to the presence of hazardous materials on-site, the potential for an accidental release of hazardous materials into the environment is present at the airport. Hazardous materials and hazardous waste on-site will be handled in accordance with all applicable state and federal laws. The handling of hazardous materials and hazardous waste in accordance with all applicable State and federal laws will reduce the potential impacts associated with an accidental release of hazardous materials into the environment to a less than significant level.

***VII.c Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

*Less than Significant Impact.* The project site is not located within 0.25 mile of an existing school. The Murrieta Valley Unified School District and Temecula Valley Unified School District surround the French Valley Airport. Monte Vista Elementary School within the Murrieta Valley Unified School District located, 0.71 miles west of French Valley Airport, is the closest school. Impacts associated with this issue are considered to be less than significant.

***VII.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?***

*No Impact.* The Environmental Protection Agency's *EnviroMapper for Envirofacts*<sup>1</sup> was consulted regarding the presence of regulated hazardous sites. According to the *EnviroMapper* site, four hazardous waste sites were identified within the vicinity of the airport. These include a vehicle fleet service station and three manufacturing facilities that are registered with the EPA. All four sites are located north of the airport and would not be affected by the proposed developments at the airport. Therefore, there are no impacts related to this issue.

***VII.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?***

*Less than Significant Impact.* The proposed project consists of changes to French Valley Airport to accommodate increased future use of this facility. The proposed project is consistent with the *2010 French Valley Airport Master Plan*. Areas surrounding the airport do have potential risk associated with airport use. The Riverside County Airport Land Use Commission has established policies which would

---

<sup>1</sup> <http://www.epa.gov/enviro/emef/>, Accessed October 2009.

lead to compatible land uses in and around the airport, thereby reducing the impacts associated with the safety of people residing or working in the project area to a less than significant level.

**VII.f *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

No Impact. The project is not located within the vicinity of a private airstrip or heliport. There are no impacts associated with this issue.

**VII.g *Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?***

Less than Significant Impact with Mitigation Incorporated. The developers of the proposed projects will be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state and/or federal requirements related to emergency access and evacuation plans. Construction activities which may temporarily restrict vehicular traffic will be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Adherence to these measures will reduce potential impacts related to this issue to a less than significant level.

**Mitigation Measure HAZARDS AND HAZARDOUS MATERIALS -1: Proposed projects will be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state and/or federal requirements related to emergency access and evacuation plans.**

**VII.h *Expose people or structures to a significant risk of loss, injury or death involving wildland fires including where wildlands are adjacent to urbanized areas or where residents are intermixed with wildlands?***

Less than Significant Impact. The project site is surrounded by airport development and a construction staging/storage yard. Therefore, the project area is not readily subject to wildland fires. Impacts related to this issue have a less than significant level.

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

***VIII.a Violate any water quality standards or waste discharge requirements?***

*Less than Significant Impact with Mitigation Incorporated.* Waste discharges include discharges of storm water and construction project discharges. A construction project resulting in the disturbance of one acre or more requires an NPDES permit. Construction project proponents are required to prepare a Storm Water Pollution Prevention Plan (SWPPP). Adherence to measures included in the SWPPP will reduce potential water quality impacts to a less than significant level.

**Mitigation Measure HYDROLOGY/WATER QUALITY-1: Construction of the planned improvements at the airport requires an update of the airport's SWPPP and conformance with NPDES procedures.**

***VIII.b Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?***

*No Impact.* The project site is underlain by the Temecula Groundwater Basin. The Temecula Groundwater Basin encompasses approximately 87,800 acres (137 square miles). Water to the project site is provided by Eastern Municipal Water District. Development of the proposed project will not require any additional sources of water. The installation of additional hangers, taxilanes, apron, automobile parking, road relocation, and airport traffic control tower will incrementally reduce the amount of land available for groundwater recharge. When compared to the groundwater basin's total recharge area of 87,800 acres, the loss of permeable area on the 261-acre project site is insignificant.

***VIII.c Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?***

*No Impact.* Implementation of the proposed project will require the installation of impermeable surfaces, which will result in the alteration of the existing on-site drainage patterns. However, storm water flows from new development as proposed by the Master Plan will be directed to the same off-site areas as in the existing condition, with a less than significant impact on local drainage patterns. In addition, there is a very low chance that new development will produce substantial erosion or siltation, due to the generally flat terrain in the local vicinity of the airport.

***VIII.d Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

*No Impact.* See response to VIII.c. The airport is surrounded by large areas of open space. Increases in storm water flow created by new development proposed by the Master Plan will not create any flooding at on-site or off-site locations.

***VIII.e Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

*No Impact.* See responses to VIII.c and VIII.d.

**VIII.f Otherwise substantially degrade water quality?**

Less than Significant Impact. The proposed project has the potential to cause changes in the quality of surface water. Construction of additional hangers, taxilanes, apron, automobile parking, road relocation, and an airport traffic control tower will require grading and excavation activities, which may allow eroded soils and other pollutants to enter drainage systems. Storm runoff from roadway surfaces tainted by sediment, petroleum products, commonly utilized construction materials, and to a lesser extent, trace metals such as zinc, copper, lead, cadmium and iron, may lead to the degradation of storm water in downstream channels. In accordance with the NPDES and as monitored by the County, planned improvements are required to comply with NPDES and SWPPP requirements regarding the implementation of BMPs during construction. Therefore, impacts to surface water quality will be less than significant.

**VIII.g Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazards delineation?**

Less than Significant Impact. Housing construction is not part of the proposed project. Therefore, the proposed project will not place housing within a 100-year flood hazard area, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map.

**VIII.h Place within 100-year flood hazard area structures that would impede or redirect flood flows?**

No Impact. The Federal Emergency Management Agency (FEMA) does not print floodplain maps for the area containing French Valley Airport. According to the Riverside County Flood Control and Water Conservation's Flood Zone Determination Application, the entire airport property is located in an area classified as Zone D. According to FEMA, Zone D indicates areas where there are possible, but undetermined, flood hazards.<sup>2</sup>

According to the *County of Riverside Comprehensive General Plan*, only the northwest corner of the airport lies within the Diamond Valley Inundation Zone from Lake Skinner. In the event of failure of the Lake Skinner Dam, this portion of airport property could be flooded. The only proposed project in this area will be the omni-directional approach light structures. Therefore, implementation of the proposed project will not substantially increase the exposure of persons or property to flood hazards.

**VIII.i Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

No Impact. See response to VIII.h.

**VIII.j Expose people or structures to inundation by seiche, tsunami, or mudflow?**

No Impact. The project site is not located near or immediately adjacent to an ocean or lake; therefore, the potential for inundation of the site by a seiche, tsunami, or mudflow is very low. For this reason, impacts associated with this issue are considered to be less than significant.

---

<sup>2</sup> <http://www.floodcontrol.co.riverside.ca.us> accessed March 2009

IX. LAND USE/PLANNING				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency 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?				<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			<input checked="" type="checkbox"/>	

***IX.a Physically divide an established community?***

No Impact. The site would not be located within or divide existing neighborhoods, nor would it introduce a barrier between residential uses; therefore, no impact related to this issue will occur.

***IX.b Conflict with any applicable land use plan, policy or regulation of an agency 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?***

No Impact. The proposed project is consistent with the current planned land uses for the site, as shown in the *County of Riverside General Plan*. The French Valley Airport is designated as public facility and is surrounded by areas planned for light industrial, commercial office, and commercial retail. In addition, the project reflects the County of Riverside's vision for the airport. For these reasons, there is no impact associated with this issue.

***IX.c Conflict with any applicable habitat conservation plan or natural communities?***

Less than Significant Impact with Mitigation Incorporated. See responses to IV.a and IV.f. Mitigation Measure **BIOLOGICAL RESOURCES-1** (see response to IV.a) will be applied to new development resulting from the Master Plan to ensure that the project is consistent with the MSHCP, reducing the potential impact to less than significant.

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

***X.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?***

No Impact. The project site is classified as Mineral Resource Zone (MRZ) 3, areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined. No mineral extraction has occurred on-site. Development of airport uses will not result in the loss of availability of statewide or locally important mineral resources. Adjacent properties do not include a state-classified or designated area or existing surface mine. No impact related to this issue will occur.

***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?***

No Impact. The project site is not classified as an area of locally important mineral resource recovery. No mineral extraction has occurred on-site. No impact related to this issue will occur.



<b>XI. NOISE</b>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			<input checked="" type="checkbox"/>	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			<input checked="" type="checkbox"/>	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			<input checked="" type="checkbox"/>	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			<input checked="" type="checkbox"/>	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			<input checked="" type="checkbox"/>	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				<input checked="" type="checkbox"/>

***XI.a Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

No Impact. Federal and state standards categorize residential uses within the 65 CNEL (or DNL) contour as incompatible. Riverside County Airport Land Use Commission (ALUC) policies for new development in the vicinity of French Valley Airport indicate that residential uses are clearly unacceptable inside the 60 CNEL contour.

The noise exposure contours were developed using the FAA-approved Integrated Noise Model (INM) which accepts inputs for several airport characteristics, including aircraft type, operations, flight tracks, time of day, and topography. For the purposes of this analysis, noise contours were prepared for the existing condition as well as the anticipated noise condition in 2030. The 2030 contours assume the operational levels described in Chapter Two of the *2010 French Airport Master Plan Update*.

**Exhibit 5** depicts the existing (2008) noise condition for French Valley Airport. As shown on the exhibit, the 60 and 65 CNEL noise contours extend off airport property to the east over the Riverside County

Sheriff's Department's Southwest County Justice Center and to the west over an office/business park and an industrial storage lot. No noise-sensitive land uses are contained within this contour of significance. **Exhibit 6** depicts the ultimate condition noise contours. As shown on the exhibit, the noise exposure contours experience a general increase in size extending over more of the Southwest County Justice Center and also commercial/industrial buildings north of the airport. To the south, the contour extends off airport property, encompassing portions of an adjacent industrial storage area and office business park. To the east and west, the contour extends over undeveloped areas. No noise-sensitive land uses are contained within the 2030 60 and 65 CNEL noise contours.

All future development of sensitive receptors (e.g., residents, schools) will be located outside of the current and forecast 60 CNEL contour area. Therefore, no significant effect on future sensitive receptors will occur.

***XI.b Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

No Impact. No pile driving or other sources of significant ground-borne vibration is expected to occur at the airport. No impact associated with this issue will occur.

***XI.c Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

Less than Significant Impact. There would be no noise-sensitive land uses located within the existing or future (2030) CNEL 65 noise contours for the airport.

***XI.d Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

Less than Significant Impact. The only temporary increase in ambient noise levels would occur during construction of the airport traffic control tower, road/parking extension, hangars, taxilanes, or apron. The sensitive noise receptors (residences) nearest potential sites of hangars, taxilanes, and road and parking extension are over 1,000 feet from the construction site. Given the distance, no significant impacts are anticipated.

***XI.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 expose people residing or working in the project area to excessive noise levels?***

Less Than Significant Impact. Riverside County Airport Land Use Commission has an adopted land use compatibility plan (LUCP) for French Valley Airport. The project involves an airport traffic control tower, construction of new aircraft hangars, taxilanes, apron, extension of Airport Road, relocation of Borel Road, and automobile parking at this public airport. As discussed in the response to XI.a, residents near the airport will not be exposed to noise levels that exceed the threshold of 65 CNEL. As noted above, the same volume of future aircraft operations is anticipated with or without the proposed master plan. As a result, the proposed plan would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, resulting in a less than significant impact.

***XI.f For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?***

No impact. The project is a public airport; therefore, this checklist item does not apply.

<b>XII. POPULATION AND HOUSING</b>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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)?			<input checked="" type="checkbox"/>	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				<input checked="" type="checkbox"/>

***XII.a Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?***

Less than Significant Impact. The proposed project will not induce growth not anticipated in the County's General Plan Update. Additionally, the project site is located in an urbanizing area, to which roadways and utility infrastructure have already been extended and municipal services provided. The proposed changes to the airport are consistent with the Riverside County's plan for the area. As the proposed project is consistent with the Riverside County planning for the project area, no significant growth inducing impact will be associated with development of the project site.

***XII.b Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?***

No Impact. No housing would be displaced by the proposed activities identified in the airport master plan update.

***XII. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?***

No Impact. See response to XII.b.

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

***XIII.a Fire Protection?***

*No Impact.* The project site is located near areas designated as a Moderate Fire Hazard Area. Fire protection service is provided by a fire station located on the airport. Development of the proposed project will not have a significant effect on the demand for fire protection services. The proposed airport traffic control tower and hangars will be designed and constructed per applicable fire prevention/protection standards, including the determination of the water supply to meet fire flow requirements. Adherence to these standards will reduce potential impacts related to the provision of fire protection services to a less than significant level.

***XIII.b Police Protection?***

*Less than Significant Impact.* Police protection service to the project site is provided by the County Sheriffs Department. Development of the 2010 French Valley Airport Master Plan Update will not result in a substantial increased demand for police protection services. The proposed master plan update includes security fencing that will meet all federal standards for security. Adherence to these standards will reduce potential impacts related to the provision of police protection services to a less than significant level.

***XIII.c Schools?***

*No Impact.* The project consists of changes to the French Valley Airport. There will be no local population increase due to the implementation of the proposed project; therefore, there will be no impact associated with the 2010 French Valley Airport Master Plan Update in regard to the demand for school services.

***XIII.d Parks?***

*No Impact.* Please refer to responses XIV.a and XIV.b.

**XIII.e Other Public Facilities?**

*Less than Significant Impact.* Maintenance of public facilities and infrastructure in Riverside County would not be significantly altered by development of the *2010 French Valley Airport Master Plan Update*. The services and utilities required to operate this project would be typical of other uses in the county and will not result in excessive wear and tear on the existing circulation, sewer, storm drain, or other public facilities. Therefore, a less than significant impact is expected from implementation of the proposed project.

<b>XIV. RECREATION</b>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				<input checked="" type="checkbox"/>
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?				<input checked="" type="checkbox"/>

**XIV.a 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?**

*No Impact.* The proposed project does not include a residential component. The proposed project is unlikely to significantly increase local or regional populations; therefore, the proposed project would not cause an increase in the use of existing neighborhood or regional parks or other recreational facilities in the area. No impacts associated with this issue will occur.

**XIV.b Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical affect on the environment?**

*No Impact.* The proposed project does not include recreational amenities or parkland. Because the proposed project does not include the construction of any housing, there will be no increase in population associated with the proposed project, and, therefore, the proposed project will not require the construction or expansion of recreational facilities in the area. No impacts associated with this issue will occur.

XV. TRANSPORTATION/TRAFFIC				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?				<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?				<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				<input checked="" type="checkbox"/>

***XV.a Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?***

***Less than Significant Impact:*** Vehicular trip generation for the proposed Master Plan was estimated based on the increase in daily flights attributable to the project. Trips were estimated based on the rates contained in *Trip Generation*, 7th Edition, General Aviation Airport (Land Use 022). Implementation of the proposed Master Plan is estimated to increase annual flight operations from 97,700 to 149,200. The 51,500 flights per year increase is estimated to result in a peak day increase of 119 flights. This estimate is based on 30 percent of flights occurring during weekdays (approximately 20 percent to 30 percent of flights currently occur during weekdays) and the peak week of the flight season equivalent to twice the annual average (51,500 flights divided by 52 weeks times two). This daily increase in the number of flights will generate 234 vehicle trips daily (119 flights x 1.97 = 234), 29 trips in the a.m. peak hour (119 flights x 0.24 = 17), and 21 trips in the p.m. peak hour (119 flights x 0.30 = 36).

An assessment of a project's potential traffic impacts is conducted by examining its effect on peak hour conditions. State Highway 79, an arterial road west of the airport, currently carries approximately 5,550 vehicles during the peak hour (2,800 southbound and 2,750 northbound)<sup>3</sup>. The addition of 36 trips during the p.m. peak will have less than significant impact in relation to existing traffic load and capacity of the roadway, as well as the vicinity street system. Similarly, impacts to the vicinity roadway system in the future, or cumulative, conditions are considered to be less than significant due to the minimal quantity of project trip additions.

A gravel road crossing the southern portion of airport property and runway protection zone (RPZ) is planned for closure in the short term. FAA's policy is not to have public access roads through any portion of the RPZ. This road has barricades restricting public access and is not part of Riverside County's current or future road plan. Therefore, closure of this road will have a less than significant impact on traffic.

***XV.b Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?***

*Less than Significant Impact.* As discussed above, the quantity of vehicular trips generated by the 2010 French Valley Airport Master Plan Update 234 vehicle trips daily. This will result in a less than significant impact to the existing and future roadway system in the project vicinity. The project's impact on the existing levels of service for the designated roads and highways would be negligible. Hence, any change in traffic levels due to the project, which would lead to exceeding the levels of service standards is not perceived.

***XV.c Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

*Less than Significant Impact.* The 2010 French Valley Airport Master Plan Update includes construction of an airport traffic control tower. This measure will ensure that air traffic safety measures are in place and maintained so that air traffic hazard potential is reduced to industry standards and potential impacts resulting from increased operations will remain less than significant.

***XV.d Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

*Less than Significant Impact.* Airport Road will have to be extended in the intermediate term and Borel Road will have to be relocated in the long term. Any on-site or off-site improvements associated with road projects would be designed and constructed in accordance with the appropriate standard plans of Riverside County. As is required in the State of California, the engineering design plans for improvements to any public streets will be prepared by a registered engineer. Potential hazards would be mitigated to less than significant as part of the design process. The project will not create incompatibility between existing and proposed uses nor will it worsen any existing incompatibility. As a result, impacts associated with land use incompatibility are considered to be less than significant.

***XV.e Would the project result in inadequate emergency access?***

*Less than Significant Impact.* The project would not result in inadequate emergency access. A fire station is located on-airport and adequate access roads serve the airport property.

***XV.f Would the project result in inadequate parking capacity?***

---

<sup>3</sup> [www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm](http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm)

Less than Significant Impact. Parking to accommodate the Master Plan will be provided on-site. No off-site parking areas affected. Hence, the project will have a less than significant impact on parking capacity on-site as well as off-site.

**XV.g Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

Less than Significant Impact. The project would not result in conflicts with adopted policies, plans, or programs supporting alternative transportation.

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



***XVI.a Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

*Less than Significant Impact.* Under Section 402 of the Clean Water Act (CWA) the Regional Water Quality Control Board (RWQCB), Santa Ana Region, issues National Pollutant Discharge Elimination System (NPDES) permits to regulate waste discharges to “waters of the nation,” which include rivers, lakes, and their tributary waters. Waste discharges include discharges of storm water and construction project discharges. A construction project resulting in the disturbance of more than one acre requires an NPDES permit. Construction project proponents are also required to prepare a Storm Water Pollution Prevention Plan (SWPPP). Furthermore, prior to the issuance of building permits, a project’s applicant will be required to satisfy Eastern Municipal Water District (EMWD) requirements related to the payment of fees and/or the provision of adequate wastewater facilities. Because the project will comply with the waste discharge prohibitions and water quality objectives established by the RWCQB and EMWD, impacts related to this issue will be reduced to a less than significant level.

***XVI.b Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

*Less than Significant Impact.* Bathrooms will be incorporated into the airport traffic control tower and may be incorporated into a cluster of T-hangers. This may total four to six additional bathrooms for the proposed projects. Wastewater conveyance and treatment services to French Valley Airport are provided by the EMWD. Typical daily flows at the Temecula Valley Water Reclamation Facility are approximately 6.0 million gallons per day (mgd). The capacity of the facility is 8.0 mgd. Due to the nature of activities conducted at the airport, the proposed project is not expected to significantly increase the flow of wastewater from the project site to the Temecula Valley Water Reclamation Facility. Due to the current existing capacity of the water reclamation facility, and the minimal increase in the flow of wastewater expected from the proposed projects, impacts associated with sewer services are considered less than significant.

***XVI.c Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

*Less than Significant Impact.* Development of the proposed project will result in an increase in the amount of impermeable surfaces and, therefore, an increase in surface runoff. As previously stated in response to XVI.a, construction projects that disturb more than one acre require an NPDES permit. Under the NPDES permit, the project proponent is required to prepare a SWPPP. Adherence to BMPs specified by the NPDES permit and SWPPP are expected to reduce potential impacts associated with this issue to a less than significant level.

***XVI.d Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?***

*Less than Significant Impact.* Water is supplied to French Valley Airport from the EMWD. Due to the nature of activities conducted at the airport, the proposed project is not expected to significantly increase water usage at the project site. Impacts associated with water usage for the proposed project are considered less than significant.

**XVI.e Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Less than Significant Impact. Please refer to response XVI.b.

**XVI.f Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Less than Significant Impact. Solid waste collection and disposal is a "demand-responsive" service and current service levels can be expanded and funded through user fees. Since the proposed project is not expected to cause a significant increase in employment at the airport, the impacts associated with solid waste disposal are considered to be less than significant.

**XVI.g Comply with federal, state, and local statutes and regulations related to solid waste?**

Less than Significant Impact. The proposed project will be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, state, and federal solid waste disposal standards, thereby ensuring that impacts associated with this issue are considered to be less than significant.

<b>XVII. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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?				<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				<input checked="" type="checkbox"/>

*XVII.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?*

*No Impact.* With implementation of project-related mitigation measures, no substantial adverse effects on the habitat of a fish or wildlife species, either direct or indirect, would result from the project.

*XVII.b: Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

*No Impact.* With implementation of the project-related mitigation measures contained in this Initial Study, the proposed project's cumulative impacts associated with air quality and biological resources would be mitigated to less than significant. There are no other development projects that in combination with the proposed project would create a significant environmental impact associated with aesthetics, agricultural resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

*XVII.c: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

*No Impact.* With implementation of project-related mitigation measures, no substantial adverse effects on human beings, either direct or indirect, would result from the project.

## SUMMARY

A summary of recommended mitigation measures is provided in the table below. The Riverside County Economic Development Agency, Aviation Division, must agree to implement these mitigation measures and where required, agreements to implement appropriate mitigation must be secured from individual developers.

Summary of Mitigation Measures	
Mitigation Measure	Description
AESTHETICS-1	The County shall ensure that only low pressure sodium vapor lights will be used for non-airfield lighting in order to minimize light emissions in accordance with Ordinance No. 655.
AIR QUALITY-1	All construction contracts shall require dust control practices and other construction control measures (as identified in SCAQMD rules, regulations, and CEQA guidelines) in effect at the time of the contract signing be implemented throughout all stages of construction.
BIOLOGICAL RESOURCES-1	Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day preconstruction survey must be completed in the proposed project area.
BIOLOGICAL RESOURCES-2	The proposed property acquisition area is located within WRCMSHCP Criteria Cell and Urban/Wildlands Interface Guidelines (UWIG) must be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding.
CULTURAL RESOURCES-1	Field surveys may be required to determine the presence of historic properties or archaeological resources prior to acquisition of the property to the southwest.
CULTURAL RESOURCES-2	In the unlikely event that cultural, archaeological, or historical resources are encountered during project-related activities, work in the immediate vicinity of the discovery shall cease until the finds can be evaluated by a qualified specialist. Should human remains be encountered within the project area, the County Coroner shall be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission shall be contacted as well.
GEOLOGY-1	Where deemed necessary, new structural development should be the subject of a geotechnical study prior to construction. This study shall evaluate local geologic and soil conditions and identify appropriate construction measures that should be completed in terms of building foundation design to ensure the protection of occupants of the future buildings. New buildings shall conform to the requirements of the Uniform Building Code.
GEOLOGY-2	During construction, erosion and sedimentation shall be minimized on the site by measures such as silt fences, covering of stockpiled soil materials, and other Best Management Practices (BMPs) as identified by the San Diego Regional Water Quality Control Board.
GEOLOGY-3	Detailed site-specific geotechnical investigations will be conducted prior to the development of any structures on the airport to identify the potential for geological hazards and to develop construction techniques and design solutions to minimize risks.
HAZARDS AND HAZARDOUS MATERIALS -1	Proposed projects will be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state and/or federal requirements related to emergency access and evacuation plans.
HYDROLOGY/WATER QUALITY -1	Construction of the planned improvements at the airport requires an update of the airport's SWPPP and conformance with NPDES procedures.

**DETERMINATION:**

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

_____	_____
Signature	Date
_____	_____
Printed Name	For

## REFERENCES

*2008 State Highway Congestion Monitoring Program Annual Data Compilation*, 2009, CALTRANS

*California Groundwater Bulletin 118*, 2004. Hydrologic Region South Coast Temecula Valley Ground Water Basin.

*EMWD Insights*, 2003. Eastern Municipal Water District Temecula Valley Regional Reclamation Facility

Fire and Resource Assessment Program, California Department of Forestry and Fire Protection (2007).

*French Valley Airport Master Plan Update*, (2010).

*French Valley Airport Environmental Assessment*, (2004).

*French Valley Airport Environmental Impact Report*, (1994).

*Riverside County Airport Comprehensive Land Use Plan* (2004)

[www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm](http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm)

[www.epa.gov/enviro/emef/](http://www.epa.gov/enviro/emef/) accessed October 2009.

[www.floodcontrol.co.riverside.ca.us](http://www.floodcontrol.co.riverside.ca.us) accessed March 2009

[www.projectcleanwater.cog/images/FSantaMargLU.jpg](http://www.projectcleanwater.cog/images/FSantaMargLU.jpg)

[www.rctlma.org/online/content/rcip\\_report\\_generator.aspx](http://www.rctlma.org/online/content/rcip_report_generator.aspx), Parcel #96303001, accessed March 27, 2009

[www.tlma.co.riverside.ca.us](http://www.tlma.co.riverside.ca.us)



ATTACHMENT A

---

---

# EMISSIONS INVENTORY REPORT

# Emissions Inventory Summary

(Short Tons per Year)  
Baseline - French Valley 2008

Category	CO2	CO	THC	NMHC	VOC	TOG	NOX	SOX	PM-10	PM-2.5	Fuel Consumpt...
Aircraft	3,225.577	704.225	13.565	13.253	12.900	14.172	4.654	1.321	0.070	0.070	1,022.370
GSE	N/A	8.011	N/A	0.309	0.322	0.354	1.320	0.037	0.034	0.033	N/A
APUs	N/A	0.115	0.011	0.013	0.012	0.013	0.082	0.018	0.016	0.016	N/A
Parking Facilities	N/A	0.401	N/A	0.060	0.060	0.063	0.049	0.000	0.001	0.001	N/A
Roadways	N/A	0.123	N/A	0.010	0.010	0.011	0.018	0.000	0.001	0.000	N/A
Stationary Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	3,225.577	712.875	13.576	13.644	13.305	14.612	6.123	1.376	0.122	0.120	1,022.370



# Emissions Inventory Summary

(Short Tons per Year)  
Baseline - French Valley 2030

Category	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5	Fuel Consumpt...
Aircraft	4,913.975	1,073.635	20.665	20.190	19.651	21.590	7.089	2.012	0.106	0.106	1,557.520
GSE	N/A	1.924	N/A	0.088	0.093	0.100	0.187	0.020	0.012	0.012	N/A
APUs	N/A	0.175	0.017	0.019	0.019	0.019	0.124	0.027	0.025	0.025	N/A
Parking Facilities	N/A	0.380	N/A	0.039	0.039	0.041	0.017	0.000	0.001	0.000	N/A
Roadways	N/A	0.119	N/A	0.006	0.006	0.007	0.006	0.000	0.001	0.000	N/A
Stationary Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	4,913.975	1,076.232	20.682	20.342	19.809	21.756	7.423	2.059	0.145	0.143	1,557.520



ATTACHMENT B

---

---

**WESTERN RIVERSIDE COUNTY MULTIPLE  
SPECIES HABITAT CONSERVATION PLAN  
CONSISTENCY ANALYSIS**

**WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES  
HABITAT CONSERVATION PLAN  
CONSISTENCY ANALYSIS**

**For  
County of Riverside  
Economic Development Agency  
French Valley Airport Expansion**

**Approximately 12.0 Acre Project Site in the French Valley Area  
East of Highway 79, South of Sparkman Way, and North of Boreal Rd  
APN: 957-320-021  
Section 18, Township 7 South, Range 2 West**

**Survey Date: July 12, 2010**

**Prepared: July 13, 2010 by:**

**Jared Bond  
Senior Ecological Resources Specialist  
Riverside County Environmental Programs Department  
(951) 955-0314  
jbond@rctlma.org**

**PROJECT OVERVIEW**

Riverside County Economic Development Agency is proposing to acquire additional property for the expansion of the existing French Valley Airport. The parcel borders the western boundary of the French Valley Airport and is located north of Borel Road in the Murrieta area of unincorporated Riverside County (Appendix A). Site specific design plans are currently being developed for the parcel.

**MSHCP REVIEW**

The following Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) Consistency Analysis includes a habitat assessment for burrowing owl (*Athene cunicularia*). In addition, the review of this parcel includes analysis of consistency with Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the WRCMSHCP. The proposed project site is located within WRCMSHCP Criteria Cell thus a Criteria Analysis is also included in this report.

**INTRODUCTION and METHODOLOGY:**

This site was visited by Riverside County Environmental Programs Department (EPD) biologist, Jared Bond, at 10:00 a.m. on Monday, July 12, 2010. The entire project site was walked to allow 100% visual coverage. The surrounding area, including 150 meter buffer area was visually inspected with binoculars. The burrowing owl habitat assessment was conducted in accordance with the Burrowing Owl Survey Instructions for the WRCMSHCP, dated March 29, 2006.

**SITE CONDITIONS: Location, Weather, Topography and Soils**

The approximately 12.0-acre project area borders the western boundary of the French Valley Airport and is located north of the current alignment of Borel Road. The site is located in Section 18, Township 7 South, and Range 2 West of the Murrieta USGS quadrangle. The proposed project site is comprised of APN 957-320-021 and additional area along Borel Road. Weather conditions were recorded using a Kestrel personal weather meter. The elevation of the study area is approximately 1,340 feet above sea level and the topography associated with the parcel is relatively flat. Site photos are located in Appendix B.

The subject parcel is an operating construction equipment storage yard and is highly impacted by the existing use land use. The western portion of the site that is not currently being utilized as part of the existing storage yard is relatively undisturbed other than for an access road associated with the current alignment of Borel Road and Sky Canyon Drive. Soils were evaluated based on the Natural Resource Conservation Service-Web Soil Survey (2008). Soils mapped on site consist of Bosanko Clay (Bfc) and Las Posas loam (LaP2). A soil map is located in Appendix C.

**OBSERVATIONS: Vegetation and Wildlife****Vegetation**

The area associated with the existing equipment storage yard is devoid of vegetation and native plant communities. Only a few ornamental fan palm (*Washingtonia sp.*) trees are present within the yard. The area west of the storage yard and associated office buildings is dominated by recovering coastal sage scrub. The hill side is mainly vegetated with emergent California buckwheat (*Eriogonum fasciculatum*), black mustard (*Brassica nigra*), vinegar weed (*Trichostema lanceolatum*) and Russian thistle (*Salsola iberica*). The hillside has experienced varying levels of disturbance associated with the development of the French Valley Airport and access along the hillside dating back to 1996. The Riverside County GIS Vegetation Map (2005) maps the area as Developed/Disturbed land.

**Wildlife**

Wildlife activity at the project site was relatively low. Wildlife species observed includes American crow (*Corvus brachyrhynchos*) and northern mocking bird (*Mimus polyglottos*), Mourning dove (*Zenaida macroura*), side-blotched lizard (*Uta stansburiana*), cottontail rabbit (*Sylvilagus audubonii*) and Mormon metalmark (*Apodemaia mormo*). No small mammals or small mammal burrows were observed.

**MULTIPLE SPECIES HABITAT CONSERVATION PLAN AREA (MSHCP)****MSHCP CELL CRITERIA:**

The proposed project is located within WRCMSHCP Criteria Cell 6071 which is part of Cell Group W in the South West Area Plan (Appendix D). Conservation within this Cell Group W will contribute to assembly of Proposed Core 2. Conservation within this Cell Group W will focus on coastal sage scrub, grassland, chaparral and Riversidean alluvial fan sage scrub habitat and agricultural land. Areas conserved within this Cell Group W will be connected to agricultural land proposed for conservation in Cell #6180 to the south and to coastal sage scrub, grassland and chaparral habitat and agricultural land proposed for conservation in Cell Group V to the north. Conservation within this Cell Group W will range from 65%-75% of the Cell Group focusing in the eastern portion of the Cell Group. The proposed project site is located in the north west corner of Cell Group W and does not contribute to the assembly of Proposed Core 2. Based on the existing land use, level of disturbance, lack of quality habitat and proximity to the French Valley Airport and Borel Road the proposed project site would not contribute to the WRCMSHCP.

**Section 6.1.2 Riverine/Riparian Areas:**

The project site does not support any drainage features or other protected habitats listed in Section 6.1.2 of the WRCMSHCP. The site does not contain vernal pools, ephemeral ponds or other human modified depressions or other features suitable for fairy shrimp. Clay soils are mapped

however the level of disturbance and compaction associated with the storage yard has altered the soil structure. The hill side to the west does not pond or hold water due to the level of topography. This analysis shall satisfy Section 6.1.2 of the WRCMSHCP.

#### Section 6.1.3 Narrow Endemic Plant Species:

The project site is within the survey area for Narrow Endemic Plant Species including, Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), Many-stemmed dudleya (*Dudleya multicaulis*), Spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wrights trichocoronis (*Trichocoronis wrightii*). Visual inspection of the site located neither rare plant species nor the potential to support rare plant species. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped on site but have been highly altered due to historic and ongoing disturbance. Focused plant surveys are not recommended at this time. This analysis shall satisfy Section 6.1.3 of the WRCMSHCP.

#### Section 6.1.4 Urban/Wildlands Interface Guidelines (UWIG):

There site is located within WRCMSHCP Criteria Cell thus UWIG guidelines should be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding. By incorporating the appropriate UWIG Guidelines as set forth in Section 6.1.4, the proposed project will be consist with Section 6.1.4 of the WRCMSHCP.

#### Section 6.3.2 Criteria Area Species Surveys:

The proposed project site is located within the WRCMSHCP survey area for burrowing owl (*Athene cunicularia*); therefore, a habitat assessment was conducted on July 12, 2010. The proposed project site is highly disturbed from existing operations. The site is extremely flat and would provide foraging opportunities for burrowing owl. However the site does not support any small mammal burrows or areas viable for burrowing owl occupation thus precluding suitable habitat for burrowing owl. In addition, the 150 meter buffer area was also visually inspected for burrowing owls and suitable burrowing owl burrows. No burrowing owls or burrowing owls sign (feathers, white wash, scat) was observed on the project site or within the buffer area. The project site does not support suitable burrowing owl habitat and a focused survey is not recommended. However, the site is located in an area known to support burrowing owls and the site could become occupied in the future. Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day pre-construction survey is recommended.

The proposed project site is also located with the WRCMSHCP survey area for Criteria Area Plant Speceis including, Davidsons saltscale (*Atriplex serenana var. davidsonii*), Parish's brittle scale (*Atriplex parishii*), thread-leaved brodiaea (*Brodiaea filifolia*), smooth tarplant (*Centromadia pungens*), round-leaved filaree (*Erodium macrophyllum*), Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*) and little mousetail (*Myosurus minimus*). Visual inspection of the site

located neither rare plant species nor the potential to support rare plant species. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped on site but have been highly altered due to historic and ongoing disturbance. The site also lacks saline-alkaline soils, and seasonal drainages thus the required Narrow Endemic Plant Species are not expected to occur on site and focused surveys are not recommended.

This analysis along with implementation of a 30-day burrowing owls survey would insure that the project is consistent with Section 6.3.2 of the WRCMSHCP.

#### CONCLUSION:

The site does not currently support suitable habitat for burrowing owl (*Athene cunicularia*) and is thus consistent with Sections 6.3.2 of the WRCMSHCP. Though the site does not currently support suitable habitat for burrowing owl, there is potential for the species to inhabit the site in the future. Therefore, a pre-construction burrowing owl survey should be conducted no more than 30 days prior to any grading or site preparation.

The project site does not support any Riparian/Riverine features, vernal pool or fairy shrimp habitat, as defined in Section 6.1.2 of the MSHCP. The proposed project is consistent with Section 6.1.2 of the WRCMSHCP.

Suitable habitat for the required Narrow Endemic Plant and Criteria Area Plant Species is not present. The July 12, 2010 field survey of the property confirmed absence of these species and focused survey are not recommended due to the existing land use and highly impacted nature of the site.

Based on the analysis contained herein, implementation of a 30-day burrowing owl preconstruction survey, and implementation of UWIG Guidelines set forth in Section 6.1.4, the proposed project is consistent with the WRMSHCP.

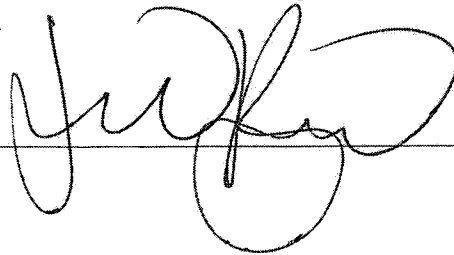
#### CERTIFICATION:

I hereby certify that the statements furnished above and in the attached exhibits present the information required for this biological evaluation and the statements provided are true and correct to the best of my knowledge and belief.

DATE:

7/17/10

SIGNED:



---

## REFERENCES

California Department of Fish & Game. 2009. California Natural Diversity Data Base

Clarke, Oscar. 2007. Flora of the Santa Ana River & Environs. Heyday Books

Dudek & Associates. 2003. Western Riverside County Multiple Species Habitat Conservation Plan

Heath, Fred. 2004. An Introduction to Southern California Butterflies. Mountain Press Publishing Company.

Natural Resources Conservation Service Web Soil Survey. 2008.  
<http://websoilsurvey.nrcs.usda.gov/app/>

National Geographic. 1999. National Geographic Field Guide to the Birds of North America (3<sup>rd</sup> Edition)



## APPENDIX A – Project Site

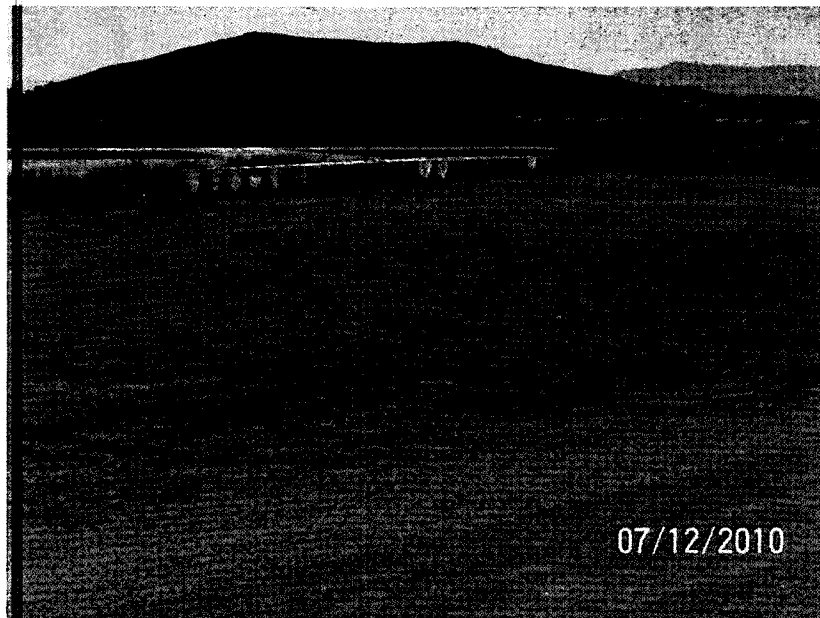


Selected parcel(s):  
957-320-021

## APPENDIX B – Site Photos



**Photo 1: Looking north across the project site from southeast corner of the parcel.**



**Photo 2: Taken along Borel Road looking east**



**Photo 3: Looking West from the northern boundary of parcel**



**Photo 4: Looking south across equipment yard**

## APPENDIX C – Soil Map



**Map Unit**  
BfC  
LaD2

**Map Unit Legend**  
**Western Riverside Area, California (CA679)**  
**Symbol Map Unit Name**  
Bosanko clay, 2 to 8 % slopes  
Las Posas loam, 8 to 15% slopes

### APPENDIX D- WRCMSHCP Criteria Cells



Selected parcel(s):  
 957-320-021

#### CRITERIA CELLS/CELL GROUPS

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> SELECTED PARCEL | <input type="checkbox"/> WRCMSHCP BOUNDARY | <input type="checkbox"/> PARCEL         | <b>36</b> CRITERIA CELL NUMBER          |
| <input type="checkbox"/> CRITERIA CELL   | <b>A</b> CELL GROUP IDENTIFIER             | <input type="checkbox"/> C, C', AND C'' | <input type="checkbox"/> V, V', AND V'' |
| <input type="checkbox"/> W, W', AND W''  | <input type="checkbox"/> CITIES            |   |   |



ATTACHMENT C

---

---

# CULTURAL RESOURCE ASSESSMENTS

MF # 360

A CULTURAL RESOURCE ASSESSMENT

AIRPORT BUSINESS PARK

French Valley, Riverside County, California

for:

Mr. Richard Miklich  
Ran Pac Engineering  
27447 Enterprise Circle West  
Temecula, California 92390

by:

Christopher E. Drover Ph.D  
Consulting Archaeologist  
13522 Malena Drive  
Tustin, California 92680  
(714) 838-2051

5 March 1990

RECEIVED IN

AUG 02 1991

EIC

TABLE OF CONTENTS

MANAGEMENT SUMMARY.....3

SUMMARY OF CURRENT KNOWLEDGE.....4

EFFECTIVE ENVIRONMENT.....6

RESEARCH METHODS AND STRATEGY.....6

RESULTS.....7

MITIGATION MEASURES.....9

REFERENCES CITED.....16



**MANAGEMENT SUMMARY:**

In September 1990, Mr. Miklich of Ran Pac Engineering requested an archaeological assessment of several study areas near Murrieta Hot Springs, California. The subject properties are planned for various development including both residential and commercial. A cultural resources assessment was necessary to satisfy the requirements of the County of Riverside with regard to identification and protection of cultural resources.

An archaeological records check and survey were undertaken in January and February 1990, for the project sites located on the Murrieta and Winchester 7.5' USGS quadrangles, to ascertain whether any cultural resources might be impacted by the proposed development. A surface survey conducted on the subject property and a check of the archaeological site records on file at the Eastern California Information Center, University of California, Riverside, were accomplished.

An 800 and 24,000-scale map of the subject property provided the boundary reference for the actual land area surveyed. The subject parcel lie northwest of Temecula, to the north of the community of Murrieta Hot Springs. Several discontinuous parcels amounting to approximately 1200 acres of land.

Archaeological records search activities indicate that portions of the project area have been previously surveyed resulting in the recordation of two archaeological sites Riv-716 and 2932). Nine additional archaeological sites have been located during the subject archaeological survey for a total of ten sites

within the project boundaries. Cultural resource constraints (mitigation measures for the proposed project are included herein).

#### SUMMARY OF CURRENT KNOWLEDGE:

A review of the archaeological site records on file at the ECIC showed two, previously recorded archaeological sites within the subject property boundaries Riv-716 and 2932. While one of these sites, Riv-2932, lies only partially within the project area, it is an extremely significant resource. Other sites surround the project, but are too distant to be directly impacted by the subject project.

Perhaps the most pertinent regional study of the general area regarding prehistoric land use is that accomplished at Perris Reservoir (O'Connell et al. 1974). This research took place about 15 miles north of the property, in the San Jacinto Plains. Given the similarities between the environments between the two areas the general settlement/subsistence of the Perris Reservoir project provides an excellent example of prehistoric land-use patterns in the area.

Most of the archaeological sites described in that study were late prehistoric age (pottery present) and may have resulted from population intrusions from the Coachella Valley caused by the desiccation of Lake Cahuilla (ancestral Salton Sea) (Wilke 1978). settlement patterns seem to consist of campsites (located near perennial water sources) and temporary processing locations (O'Connell et al. 1974).

Considering the topography and proximity portions of the subject parcel to water, site density may be expected to be moderate as in similar areas of the Perris Reservoir. Based on settlement/subsistence models generated by O'Connell et al. (1974), temporary food gathering/processing sites, campsites and even longer term habitation sites might be expected on the subject project given the existing environmental setting.

Through time, land use patterns at nearby Perris Reservoir changed from being rather sporadic between 2200 years ago (the earliest occupations) to about A.D. 1500 when an influx of population with different subsistence exploitation strategies (O'Connell et al. 1974).

At European contact times, the study area was within areas occupied by groups known as the Luisen<sup>o</sup>, named after the Mission San Luis Rey de Francia in present-day Oceanside, California, which some of their linguistic group frequented. The Luisen<sup>o</sup> culture area incorporated southwestern Riverside County, northern San Diego County, eastern Orange County and was linguistically comprised of a language of the Shoshonean language family (Kroeber 1925: Plate 57). The Contact period ethnicity of the study area is clear as Luisen<sup>o</sup> villages such as Pechanga are relatively close to the project area. Murrieta Hot Springs was apparently utilized prehistorically and the existing site Riv-1012 may be related to such prehistoric usage. Ethnographic literature pertinent to the Luisen<sup>o</sup> and surrounding ethnographic groups is fairly extensive and has been collected since the 1800's (see Barrows 1900; Sparkman

1908; Kroeber 1925; White 1963 and Bean 1972).

**EFFECTIVE ENVIRONMENT:**

The physiography of the subject property consists of the north-south trending French Valley which joins the Tocalota Creek water course, ultimately collecting into the Santa Gertrudis Creek, and which joins Murrieta Creek south property boundary near Temecula. Soils on the property consist primarily of decomposed granitics with limited granite outcroppings visible.

Precipitation is mainly a result of winter dominant, frontal storms from the northwest, although occasional summer thundershowers result from damp air intruding from the southern (Gulf of Mexico--Sea of Cortez) monsoon season.

The property ranges from 1320 to 1440 feet above sea level. Aside from agriculturally disturbed areas, the project contains some native vegetation, a sage-scrub community, dominated by buckwheat (Eriogonum fasciculatum), and california sagebrush (Artemisia californica). Narrow riparian environments also exist along the Tocalota Creek, dominated by plant such as willow (Salix sp.) along with limited Oak Woodland plant associations. The riparian habitat may have been enhanced in recent years due to increased run-off from Lake Skinner. The above mentioned plant communities are noted as having many ethnographic uses among the neighboring Cahuilla (Bean and Saubel 1972).

**RESEARCH METHODS AND STRATEGY:**

Archival study of the archaeological records compiled at the Archaeological Research Unit, University of California, Riverside

was conducted by Mr. Dave Smith in February 1990. Several, small portions of the subject property had been previously surveyed and two archaeological sites had been previously recorded (Riv-716 and 2932).

Field methods consisted of an on-site, intuitive survey, conducted in January 1990. The field crew consisted of Messrs. David Smith, Terry Buckley, Radek Cecil, David Leavens and the author. Survey of the parcel included transects defined by the project boundaries, and geographical contours. Special attention was paid to bedrock granite outcrops (especially at the interface of hills and plains), the creek drainage and other, less disturbed areas. European grasses (Gramineae) and other ground cover exist in some areas but, due to the dry season, resulted in relatively good conditions for observation. Much of the subject property had been under intense cultivation in recent years, for crops such as barley (Hordeum vulgare). Such heavy cultivation provided both for excellent conditions for observation, but also for significant disturbances to several sites.

#### RESULTS:

The updated description of each of these sites is presented below along with nine other, newly recognized sites.

#### Archaeological Site Descriptions:

##### Riv-2932: 5,625m<sup>2</sup>

This previously recorded site is 150m west of Borel Road, on top of a knoll 100m south of a ranch, and 40m west of a small corrugated metal tank. This site consists of a milling station with 4 mortars, 6 slicks, 7 projectile points (Cottonwood Triangular), 1 bone or antler awl tip, 1 pestle, 3+ groundstone fragments, 6 pottery sherds, 5 biface, 100+ quartz, chalcedony, and basalt debitage. When we updated the condition of this site, several

problems were noticed. The western part of the site lies in a cultivated field. The obvious midden area had been excavated extensively by unauthorized individuals, but did not appear totally disturbed. At least two dirt roads cross the site and a burn had occurred recently throughout the site. NOTE: THIS SITE WAS MISSPLOTTED ON THE ORIGINAL RECORD.

Riv-716: 150,000m<sup>2</sup>

This site is .5km west of the intersection of S.R. 79 and Benton Road. This is a major, long-term habitation site. This site is associated with the late, ethnographic use of the springs by the Luiseno. Local historic literature suggest that the Temecula Massacre (a battle between the Cahuilla and Luiseno) which ended in Nigger Canyon near the present Vail Lake) began at this site. This site may be one of the more significant deposits, (from the perspectives of archaeology and Native American concern), to be impacted within the subject project area. It consists of numerous and extensive bedrock grinding feature, darkened soil, fire-cracked rock, debitage and well established midden. Despite the considerable unauthorized digging which has occurred on the property much of the site is intact and should be investigated and protected.

ABP-1: 1000m<sup>2</sup>

This site is located .5 km south of Borel Rd. and .7 km west of Leon Rd.; The site a milling station with 2 slicks 7 manos, 3 mano fragments, 6 metate fragments, 50+ pieces quartz, chert, and basalt debitage.

ABP-2: 100m<sup>2</sup>

This site is located 100m southwest of the junction of Borel and Leon Roads. This site consists of a milling/lithic scatter site with 1 slick, and 5 pieces of debitage.

ABP-3: 400m<sup>2</sup>

This site is located on the south side of Borel Road 50m west of Leon Road. This is a milling or vegetable processing site consisting of 2 isolated grinding slicks on 2 boulders; no artifacts were observed.

ABP-4: 100m<sup>2</sup>

This site is located 50m south of Borel Rd. and 200m west of Leon Rd. This site is another milling station consisting of 2 isolated slicks on 2 boulders; no surface artifacts were observed.

ABP-5: 100m<sup>2</sup>

This site is located 10m south of Borel Road and 150m west of ABP 4. This is another milling station or food processing site consisting of 1 grinding slick, and 1 piece of debitage.

ABP-6: 375m<sup>2</sup>

This site is located .6 km south of Borel Rd. on the west bank of

the ravine that runs through the center of section 18. This site is likely a campsite or longer-term occupation site. Features and artifact observed include 2 grinding slicks, 1 bowl fragment, 3 mano fragments, 2 manos, 1 uniface, 10+ quartz and basalt debitage.

ABP-7: 250m<sup>2</sup>

This site is located 400m west of a farmhouse and 75m south of Borel Rd. This site appears to be a food processing or milling station. Features and surface artifacts observed include 6 slicks, 1 slab metate, 1 mano fragment. The surface artifact may indicate that the site has potential for further subsurface deposits.

ABP-8 was an unused, arbitrary site number.

ABP-9: 100m<sup>2</sup>

This site is located 30 meters east of S.R. 79 at a point .8 km north of Borel Road. This site is likely an isolated milling station or food preparation location. The site consists of 3 grinding features or slicks on 3 boulders; no surface artifacts were observed at the site.

MITIGATION:

Ten archaeological sites exist on the subject property, Riv-716, 2932, ABP 1, 2, 3, 4, 5, 6, 7, and 9. The Airport Business Park (ABP) temporary numbers will be replaced by official Riverside County numbers. While several of these sites consist simply of bedrock grinding features, the settlement patterns within the subject project area also reflect short-term campsites and larger, longer-term habitation (village?) sites. As most of the sites have not been investigated beyond their initial recording, it is difficult to determine any chronological patterns in settlement. However, it is assumed that most of these sites are late given the research at Perris reservoir. Several of these sites, however, may have components of an earlier period (ca. 4,000 years ago) called Archaic or late Archaic in southern California (see the discussion in Drover 1986:26-27; Fig. 4, of the Santa Gertrudis Site just outside the subject property boundaries).

Ten archaeological sites may suffer direct impacts from the proposed development of the Airport Business Park, Riv-716, 2932, ABP 1, 2, 3, 4, 5, 6, 7, and 9. The appropriate mitigation measures for each of these sites are described below. Since project specific impacts are not yet distinct enough to differentiate between direct and indirect impacts, impacts will be assumed to be direct, implying actual physical damage as opposed to indirect which would include secondary disturbances by unauthorized artifact collection, grading staging or induced erosion from later phases of construction.

The mitigation recommendations discussed in this section are based on a set of general procedures which are normally carried out when mitigating archaeological sites in California.

Once a site has been located, two phases may follow: 1) boundary testing, which includes both surface collection and subsurface testing; and if depth or overall significance warrant, 2) site "salvage" (data collection) and/or preservation. The procedures outlined here are applicable to future design changes effecting the subject archaeological sites.

Whether both of these phases are implemented, and to what degree they are pursued, depends upon the nature of the cultural resource and whether a site is to be directly or indirectly impact during the course of the development of the property. If a site is to be directly impacted (i.e., physically disturbed by grading, landscaping, road or building construction, etc.), both phases are obligatory. Generally, if a site is to be directly impacted, phase



one implies a 100 percent surface collection of the site coupled with subsurface test units to determine site boundaries, approximate site chronology, site function, and cultural affiliations. Such a procedure requires site mapping using a transit. The resultant information is then used to determine whether the particular site is a unique resource for the area and should be preserved or mitigated by data collection "salvage" (Phase Two). If a site is to be salvaged, the actual percentage of the site to be excavated will depend upon the importance of the site, but will generally range between 5-20 percent, though small sites are sometimes sampled at a level of 50-100 percent. Sample size is both a reflection of the research question being asked as well as supplying an adequate sample for future inquiry after the site is destroyed. If the site is to be preserved, two alternative procedures may be followed depending upon how the site is to be preserved. If the site is to be preserved as green space, it may be fenced off and/or capped with a layer of fill to protect the site from vandalism or erosion. If development is allowed to proceed, the site may be preserved by covering it with a layer of fill prior to grading and/or construction activities. If the latter procedure is followed, additional subsurface testing is usually suggested since this type of preservation makes it very difficult for future archaeological work to be effectively accomplished and damage may occur to the resource during the course of fill operations. Where possible, preservation or avoidance is preferable to salvage.

If a site is only indirectly impacted by development, only

Phase One activities are generally implemented. The surface collection involved may range from 50 to 100 percent, but would include the collection and proveniencing of all important diagnostic artifacts. This is done to prevent the loss of such artifacts to amateur collectors. Subsurface testing would also be conducted such that enough information would exist to determine the general complexity of the resource. In most instances no salvage operations are undertaken in the case of indirect impact. If development plans were to change, however, such that the site were to be directly impacted, then the question of "salvage" (data collection) or preservation must be addressed. In rare instances, involving a rare archaeological resource which would be subject to amateur collecting/pot hunting, a site may require protection or "salvage" even in the case of indirect impact. Protective measures might include 100 percent surface collection, the fencing off of the site and/or its capping with a layer of protective fill.

Given the scale of maps provided for the project assessment, and the present stage of planning, impact analysis is somewhat limited. Impact analysis amounts to comparing the proximity of known site location on a 7.5' map (24,000 scale), to proposed improvements shown on an 800 scale map. At these scales, errors may exist in the estimation of specific site impacts. For this reason, it is first recommended that, prior to any mitigation efforts, archaeological sites be relocated along with the surveyed flagging of proposed road alignments or development areas to specifically ascertain the nature of impacts. In some cases, sites which have

been described above as suffering direct impacts, may only suffer indirect impacts.

Assuming the ("worst case") impact scenario described above, the following mitigation measures be recommended on a site specific basis. Note that in some cases, the recommendations reflect only the first phase (testing) of the larger sites.

Riv-2932:

Site relocation and impact assessment verification; 50-100% surface collection; 10-20 subsurface test excavation units; 1-3% final salvage excavation dependant upon the findings of subsurface testing. Test level activities may require 80-100 man-days of field work effort alone.

Riv-716:

The vast majority of this site lie outside the subject property. While a small, northerly portion of the site may suffer direct impact, the southern portion of the site, outside the project area, may experience secondary (indirect) impacts as described above, ultimately requiring surface collection and protection. That portion of site which is within the boundaries of the property would undergo the following testing procedures. Site relocation and impact assessment verification; 100% surface collection; 5-10 subsurface test excavation units; 1-3% final salvage excavation dependant upon the findings of subsurface testing and the determined mitigation of the southern portion of the site. Test level activities may require 15-40 man-days of field work.

ABP-1:

Site relocation and impact assessment verification; 50-100% surface collection; 5-10 subsurface test excavation units; 1-3% final salvage excavation dependant upon the findings of subsurface testing. Test level activities may require 15-40 man-days of field work.

ABP-2:

Site relocation and impact assessment verification; photography of bedrock grinding features and mapping of spatial distribution of grinding features; 3 subsurface test excavation unit to check for depth, although it is unlikely that this site would yield any subsurface deposits. Test level activities may require 9-12 man-days of field work.

and size before the results of testing, it could safely be estimated that even the minimum-sized site would likely exceed 300-400 man-days of field and laboratory effort.

Aside from the archaeological sites described here, it is possible that archaeological materials could be found during grading activities. Should any such finds come to light, it is recommended that a qualified archaeologist be contacted to evaluate their significance prior to further grading.

## REFERENCE CITED

- Barrows, David P.  
1900 The Ethno-botany of the Coahuilla Indians of Southern California. Chicago Press. (Reprinted 1976 by Malki Museum, Banning).
- Bean, Lowell J.  
1972 Mukat's People: The Cahuilla Indians of Southern California. Berkeley: University of California Press.
- Bean, Lowell J., and Katherine S. Saubel  
1972 Temalpakh: Cahuilla Indian Knowledge and Usage of Plants. Banning, Ca.: Malki Museum Press.
- Drover, Christopher E.  
1986 The Santa Gertrudis Site Riv-1730: A Cultural Resource Mitigation Plan and Implementation. Rancho California. UCARU Miscellaneous Manuscripts.
- 1988 Rancho California Masterplan: A Cultural Resources Overview. Rancho California Development Company. The Bedford Group. Manuscript on file at the Eastern California Information Center, University of California, Riverside.
- Kroeber, Alfred L.  
1925 Handbook of the Indians of California. Washington, D.C.: Bureau of American Ethnology Bulletin 78.
- O'Connell, J. F., P. J. Wilke, T. F. King, and C. L. Mix (Eds.)  
1974 Perris Reservoir Archaeology: Late Prehistoric Demographic Change in Southeastern California. Sacramento: Department of Parks and Recreation Archaeological Reports 14.
- Sparkman, Philip S.  
1908 The Culture of the Luisen̄o Indians. Berkeley: University of California Publications in American Archaeology and Ethnology 8: 147-234.
- White, R. C.  
1963 Luisen̄o Social Organization. Berkeley: University of California Publications in American Archaeology and Ethnography 48: 91-194.
- Wilke, Philip J.  
1971 Late Prehistoric Change in Land Use Patterns at Perris Reservoir. Los Angeles: University of California Los Angeles Archaeological Survey Annual Report 13.

1978 Late Prehistoric Human Ecology at Lake Cahuilla,  
Coachella Valley, California. Berkeley: University of  
California Archaeological Research Facility Contributions  
No. 38.

MF 2024

**ENVIRONMENTAL IMPACT EVALUATION: An Archaeological Assessment of Several  
Alternate Sites for the New Rancho California  
Airport, Riverside County, California**

By: Stan Wilmoth  
Staff Archaeologist

Archaeological Research Unit  
University of California  
Riverside, CA 92521

UCRARU #797

Philip J. Wilke  
Administrator

for: Earth Metrics Incorporated  
859 Cowan Road  
Burlingame, CA 94010

P.O. #01061

November 1984

CAI

#### MAMAGEMENT SUMMARY

In October, 1984, an archaeological assessment was conducted on several locations for a proposed airport in the Rancho California area. The objective of the study was to locate, record, and evaluate archaeological resources on the subject properties, and to determine the effect of the proposed development on archaeological resources. The California Archaeological Inventory (CAI) records revealed that two (H & I) of the three proposed locations chosen for consideration had been previously surveyed and that one archaeological site (CA-RIV-856) had been previously recorded on the third location (L). An on-foot survey was conducted of alternative site L. The survey located one additional site and the previously recorded site was relocated. Given the nature of these two sites further data recovery probably would not increase our understanding of the area's prehistory. No further archaeological investigation is recommended at this time.

#### INTRODUCTION

At the request of Earth Metrics Inc., the Archaeological Reseach Unit (ARU), University of California, Riverside, conducted an archaeological assessment of 180 acres of land designated alternate site 'L' for the new Rancho California Airport. The purpose of this assessment was to satisfy certain requirements of the Riverside County Planning Commission concerning the identification and protection of significant archaeological and historical materials. The study included a check of the CAI records, a review of the archaeological, ethnographic, and historic literature pertinent to the study area, and an on-foot survey of the subject area. The records search at the CAI revealed that alternative sites H and I (Fig. 1) had been previously surveyed and that no archaeological sites were recorded within the areas proposed for possible construction (White 1980). Therefore, only alternative L (Fig. 2) was surveyed. The project area which comprises of approximately 180 acres is located on the rolling valley floor southeast of the Hogback Mountains 2 km northeast of Murrieta Hot Springs in southwestern Riverside County, California. The area is shown on the USGS Murrieta, California 7.5' series quadrangle in section 7, T.7S, R.2W, SBEM.



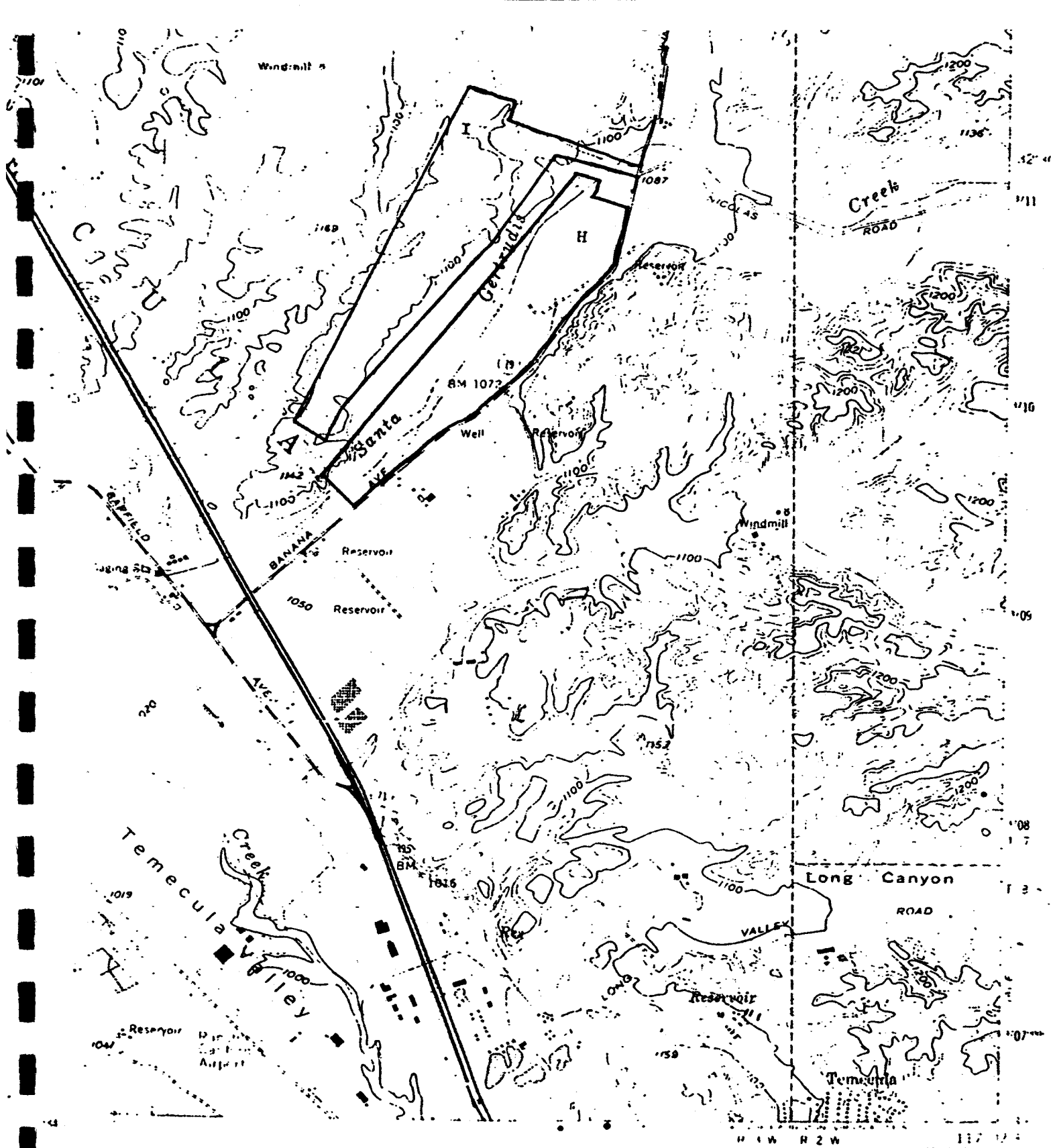


Fig. 1 New Rancho California  
 Airport Alternative Sites  
 H & I



ROAD CLASSIFICATION

- Heavy duty ——— Light duty
- Medium duty - - - - - Unimproved dirt
- U.S. Route                      State Route

MURRIETA, CALIF.

N 11° W 1:25,000

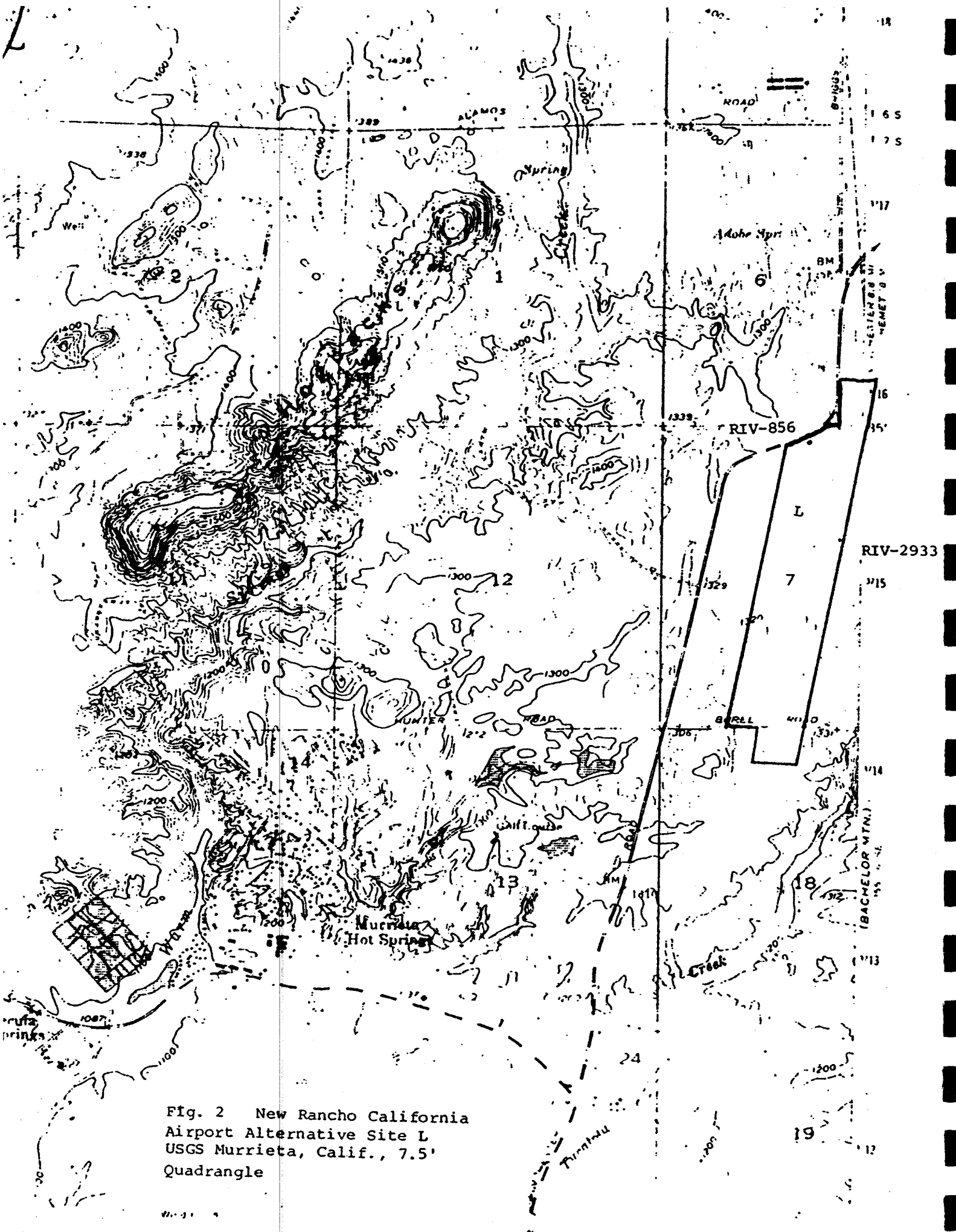


Fig. 2 New Rancho California  
 Airport Alternative Site L  
 USGS Murrieta, Calif., 7.5'  
 Quadrangle

Proposed development plans call for the construction of an airport runway, parking apron, hangers, and support buildings.

#### SUMMARY OF CURRENT KNOWLEDGE

The review of the CAI records indicated that one known archaeological site (CA-RIV-856) is located within the north-central boundary of the property. This site, consisting of metate fragments and stone tool waste flakes, represents a temporary food processing station and has already been greatly disturbed by road building and farming activities. The CAI records also indicated the presence of a large number of other recorded archaeological sites within a 3-km radius of the subject property, some of which have midden deposits suggesting longer or more regular use of the area. Rock paintings and carvings are also known for the region.

#### Culture History

Human populations have occupied southern California for at least the last 12,000 years. The earliest sites can be grouped together into an Early Hunting Stage (12,000-8500 B.P. [years before present]), characterized occasionally by fluted or more often by leaf-shaped projectile points, crescents, core tools, scrapers, and choppers. The absence of milling tools suggests an orientation to hunting, possibly of the now-extinct Pleistocene megafauna. Marked increases in plant exploitation and population size signal the onset of the Early Millingstone Stage (8500-5000 B.P.). Typical artifact assemblages consist of manos, metates, choppers, and scraper planes. Projectile points are rare. In-place adaptations to various ecological niches and further population growth typify the Regional Specialization Stage (5000-300 B.P.). In southern California, a heavy dependence on both hunting and gathering of wild plant foods continued into the historic period (Meighan 1978:233-237).

Based on work in the San Luis Rey River Basin to the south of the study area, Meighan (1954) defined two late prehistoric complexes that may be applicable to the present study. His San Luis Rey I complex existed from ca. 600-250 B.P., and is typified by grinding implements, small triangular projectile points with concave bases, stone pendants, Olivella shell beads,

quartz crystals, and bone tools. The San Luis Rey II complex, lasting from ca. 250-150 B.P., is very similar, but with the addition of ceramic vessels, pictographs, glass beads, stone knives, and steatite arrow straighteners.

Information on the prehistory of the region comes primarily from excavations carried out at the Perris Reservoir (O'Connell et al. 1974). The Perris Reservoir excavations indicate that the San Jacinto Plain was inhabited at least as early as 2300 B.P. by people with a low but gradually increasing population density. Around 500 B.P., the population density increased dramatically, and it is thought that this increase represents an influx of people rather than an increase in the earlier population. This demographic shift coincided with the disappearance of freshwater Lake Cahuilla in the Salton Basin, which may have caused people to leave that area and move to more productive environments. The late prehistoric components at the Perris Reservoir sites indicate a broad pattern of resource exploitation that can best be understood with reference to ethnographic accounts of the people living in the area; these were published in the early part of this century.

At the time of historic contact, the study area was occupied by the Luiseño tribe (Sparkman 1908), whose name derived from the Spanish Mission San Luis Rey, built in their territory in 1789 on the San Luis Rey River. The subject property is in the eastern portion of the territory inhabited by the Luiseño. The remainder of their territory extended west through the mountainous areas to the Pacific Coast and south to the San Luis Rey River (Kroeber 1925). Sparkman (1908), in his ethnography of the Luiseño, states that these people shared cultural attributes with the Juaneño to the west, the Cupeño and Cahuilla to the east, and the Yuman-speaking Diegueño (Ipai-Tipai) to the south.

The Luiseño lived in permanent villages which they left periodically for the gathering of plant foods as they ripened seasonally in the various life zones within their territory. Foodstuffs maturing at different times in the various altitudinal life zones allowed for a continuing seasonal cycle of resource exploitation. Of all the plant foods used, acorns were the most important, accounting for an estimated 50 percent of the aboriginal diet. Acorns were collected from as many as six different species of oak (Quercus spp.), each of which was adapted to a slightly different environ-

ment (White 1963:116). In addition to acorns, plant foods used by the Luiseño included numerous species of berries, grapes, cactus fruit, bulbs, greens, and seeds such as chia (Salvia columbariae). Sparkman (1908:228-234) enumerates more than 100 plants known to have been used for food or medicine. Meat in the diet was provided by deer, rabbits, ducks, quail and other birds, and certain rodents and insects (Sparkman 1908:197-200).

More detailed information on the lifeways of the Luiseño tribe can be found in accounts by Sparkman (1908), DuBois (1908), Kroeber (1925), Strong (1929), White (1963), and Bean and Shipek (1978).

#### EFFECTIVE ENVIRONMENT

The subject property is located in the rolling valley floor 2 km southeast of the Hogbacks Mountains. Elevations range from about 1206 to 1250 m above sea level. The subject area has been farmed for several decades; consequently, very little of the native vegetation remains. Prior to modern farming the vegetation in this area may have consisted of Valley Grassland characterized by needlegrass (Stipa pulchra, S. cernua) and other grasses (Poa scabrella), and (Aristida divaricata) (Munz and Keck 1949, 1950). These and other plants have been replaced by introduced grasses and weedy annuals.

The climate of the study area is that typical of cismontane southern California and is classified as Mediterranean, or "summer-dry subtropical" (Bailey 1966). The characteristics of such a climate are a dry, warm or hot summer and a relatively mild, wet winter, a condition that prevails over only about 3 percent of the world's land surface. Total annual rainfall seldom exceeds 65 cm.

#### RESEARCH GOALS AND OBJECTIVES

The objectives of an archaeological assessment are to locate, interpret, and evaluate the indications of past human activities in the study area. The indicators of such activities are labeled archaeological resources and can consist of any visible remains of human use of the environment. The locations of such resources can be defined by the presence or significant occurrence of one or more of the following categories of archaeological

remains: food waste, fragmentary or whole tools, tool manufacturing waste, concentrations or alignments of stone, trails, modifications of natural rock surfaces, soil discoloration and/or its accumulation, or human skeletal remains. All such types of remains are known to exist in the project vicinity. The scope of this study concerns significant materials 100 years of age or older.

#### SURVEY PROCEDURE

The on-foot investigation was carried out by the author and one associate on October 31 and November 1, 1984. The property was surveyed in a series of generally north-south transects at approximately 10-meter intervals. Special attention was given to rock outcrops and the area immediately south of Auld Road where site RIV-856 was reported. Visibility was excellent as the property had been recently plowed.

#### SURVEY RESULTS

Site RIV-856 was relocated just south of Auld Road and the CAI records updated accordingly. Two metate fragments were observed on the site. In addition to the previously recorded site, one additional site was located during the survey. This site, RIV-2933, consists of a single bedrock metate. This site is located approximately 600 m south of Auld Road, along the eastern boundary of the subject property.

#### RECOMMENDATIONS

Inasmuch as it seems unlikely that any excavations or other data gathering measures would prove productive in gleaning any additional information on the local prehistory from these sites, no additional work is recommended. The sites have been recorded and measurements of artifacts and features have been made and filed with the California Archaeological Inventory.

## REFERENCES

- Bailey, H. P.  
1966 Weather of Southern California. California Natural History Guide No. 17. Berkeley: University of California Press.
- Bean, L. J., and F. Shipek  
1978 Luiseño. In: The Handbook of North American Indians, Vol. 8, California, R. F. Heizer, ed., pp. 550-563. Washington: Smithsonian Institution.
- Curtis, E. S.  
1926 The North American Indian, Vol. 15. Cambridge, Mass.: The University Press.
- Kroeber, A. L.  
1925 Handbook of the Indians of California. Washington: Bureau of American Ethnology Bulletin No. 78.
- McCown, B. E.  
1955 Temeku: A Page from the History of the Luiseño Indians. Bloomington: Archaeological Survey Association of Southern California Paper 3.
- Meighan, C. W.  
1954 A Late Complex in Southern California Prehistory. Southwestern Journal of Anthropology 10(2):215-227.
- Meighan, C. W.  
1978 California. In: Chronologies in New World Archaeology, R. E. Taylor and C. W. Meighan, eds., pp. 223-240. New York: Academic Press.
- Munz, P. A., and D. D. Keck  
1949 California Plant Communities. El Aliso 2:87-105.  
1950 California Plant Communities--A Supplement. El Aliso 2:199-202.
- O'Connell, J. F., P. J. Wilke, T. F. King, and C. L. Mix, eds.  
1974 Perris Reservoir Archeology: Late Prehistoric Demographic Change in Southeastern California. Sacramento: California Department of Parks and Recreation Archeological Report No.14.
- Sparkman, P. S.  
1908 The Culture of the Luiseño Indians. Berkeley: University of California Publications in American Archaeology and Ethnology 8(4).

Strong, W. D.

1929 Aboriginal Society in Southern California. University of California Publications in American Archaeology and Ethnology 26.

White, R. C.

1963 Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48(2).



ARCHEOLOGICAL SITE RECORD

Temporary Number: \_\_\_\_\_

Page 1 of \_\_\_\_\_

Agency Designation: \_\_\_\_\_

1. County: Riverside
2. USGS Quad: Murrieta, Calif. (7.5') 53 (15') Photorevised 1973
3. UTM Coordinates: Zone 11 / 4881100 Easting / 3715780 Northing (
4. Township 7S Range 2W ; \_\_\_\_\_ % of \_\_\_\_\_ % of NE % of NW % of Section 7 Base (Mer.) SBM (
5. Map Coordinates: \_\_\_\_\_ mmS \_\_\_\_\_ mmE (from NW corner of map) 6. Elevation 1320'
7. Location: 400 meters east of intersection of Winchester Road and old Winchester Road as it turns into Auld Road, on south side of road shoulder
8. Prehistoric XX Historic \_\_\_\_\_ Protohistoric \_\_\_\_\_ 9. Site Description: Two metate fragments noted 100 m. apart in hay field. Site had been recorded as flake scatter, metate fragments and cores along road shoulder. These artifacts were not relocated.
10. Area: 1000 m(length)x 100 m(width) 10 m<sup>2</sup>. Method of Determination: paced
11. Depth: surface cm Method of Determination: nothing seen in road cut
12. Features: none
13. Artifacts: two metate fragments: worked surface of each measure 11 x 20 cm & 9 x 11 cm. Both were granitic.
14. Non-Artifactual Constituents: \_\_\_\_\_
15. Date Recorded: Nov 1, 1984 16. Recorded By: S. Wilmoth
17. Affiliation and Address: Arch. Res. Unit, Univ. of California, Riverside

State of California - The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
ARCHEOLOGICAL SITE RECORD

Permanent Trinomial: RIV-856 / 11/84  
mo. yr.

Temporary Number: \_\_\_\_\_

Agency Designation: \_\_\_\_\_

Page 2 of \_\_\_\_\_

18. Human Remains: none

19. Site Integrity: Site area has been farmed for several decades. Several roads have been put in as has a gas pipeline. Site has little integrity left. New airport will most likely disturb remaining artifacts.

20. Nearest Water (type, distance and direction): spring 100 m NW

21. Largest Body of Water within 1 km (type, distance and direction): \_\_\_\_\_

22. Vegetation Community (site vicinity): Marsh and valley grasslands (Plant List ( ))

23. Vegetation Community (on site): hay crop (Plant List ( ))

References for above: see report

24. Site Soil: sandy loam ( ) 25. Surrounding Soil: same

26. Geology: granite and quartz ( ) 27. Landform: rolling valley floor

28. Slope: gentle slope facing spring 29. Exposure: open

30. Landowner(s) (and/or tenants) and Address: private

31. Remarks: none

32. References: none

33. Name of Project: New Rancho California Airport Survey

34. Type of Investigation: Archaeological Assessment - See UCRARU #797.

35. Site Accession Number: none Curated At: \_\_\_\_\_

36. Photos: none Taken By: \_\_\_\_\_

37. Photo Accession Number: none On File At: \_\_\_\_\_

State of California - The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
ARCHEOLOGICAL SITE  
MAP

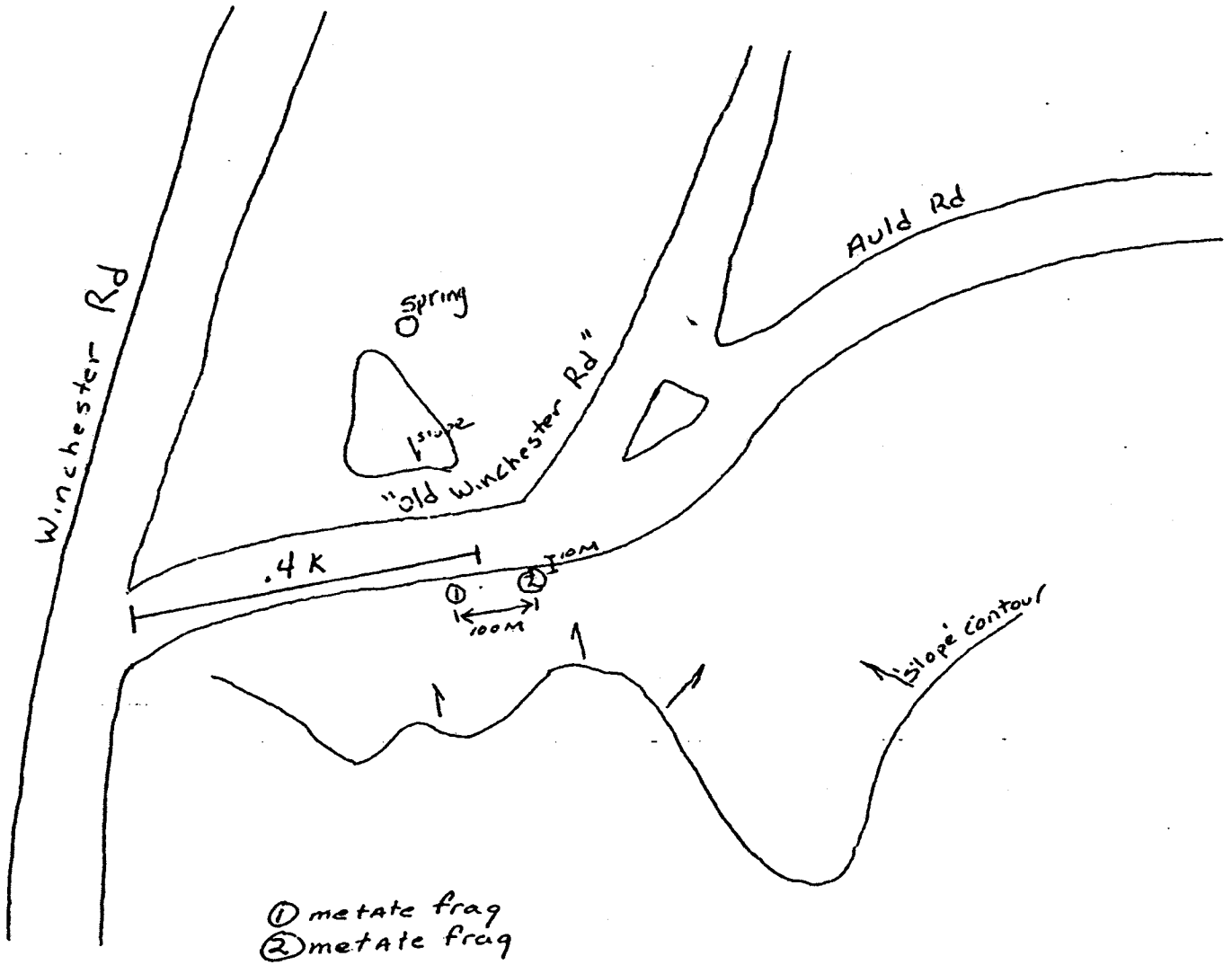
Permanent Trinomial: RIV-856 / 11-5-84  
mo. yr.

Temporary Number: \_\_\_\_\_

Agency Designation: \_\_\_\_\_

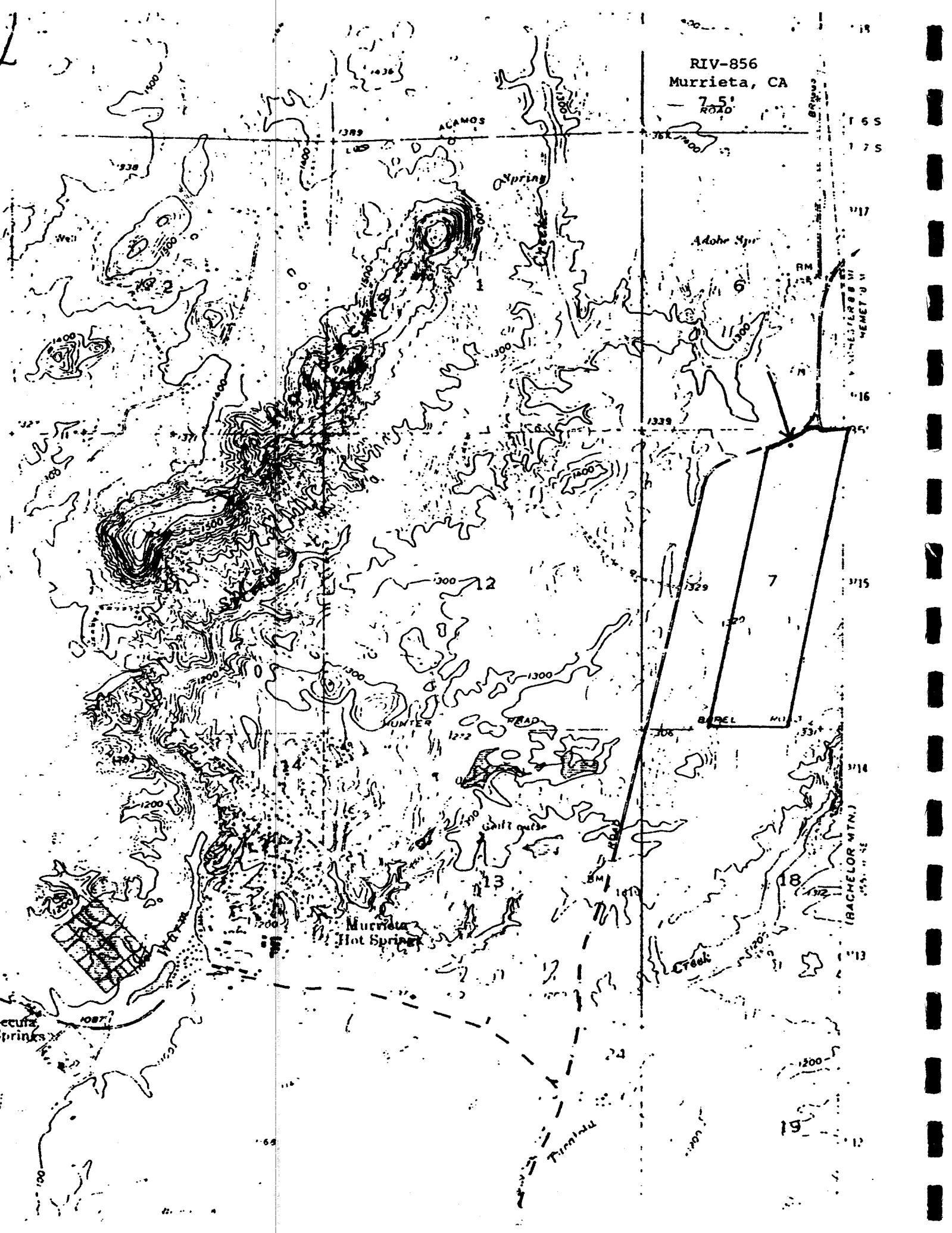
Page 3 of 4.

N (TRUE)  
(NO SCALE)



RIV-856  
Murrieta, CA

7.5  
7020



18  
165  
175  
117  
16  
115  
116  
113  
113

(BACHELOR MTN.)  
105.5 N 32

ccur  
prinks

65