

**Appendix C**  
**CULTURAL RESOURCES SURVEY REPORT AND**  
**NATIVE AMERICAN CONSULTATION**

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**Cultural Resources Survey Report  
for the Chino Airport Project, City of  
Chino, San Bernardino County,  
California**

Prepared for

**Coffman Associates**

Prepared by

**SWCA Environmental Consultants**

April 2012



# **CULTURAL RESOURCES SURVEY REPORT FOR THE CHINO AIRPORT PROJECT, CITY OF CHINO, SAN BERNARDINO COUNTY, CALIFORNIA**

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U.S. Geologic Survey 7.5-minute Topographic Quadrangle  
Prado Dam, California

SWCA Project No. 021589.00  
SWCA Cultural Resources Report Database No. 2012-153

April 10, 2012

Keywords: cultural resources survey, intensive, Chino Airport, 49 acres, negative results, no  
impact



## MANAGEMENT SUMMARY/ABSTRACT

**Purpose and Scope:** Coffman Associates retained SWCA Environmental Consultants (SWCA) to conduct cultural resources work that includes documentation of the results of a records search, the completion of a cultural resources survey, and preparation of a cultural resources survey report in support of the Chino Airport Project (the project). This assessment was prepared in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, as well as the California Environmental Quality Act (CEQA). The San Bernardino County's Department of Airports has initiated the preparation of a master plan update for the Chino Airport to assess its existing and future role, while also providing direction and guidance for future development. The study area for the project consists of five areas (totaling 20 hectares [49 acres]) located in southwestern San Bernardino County within the corporate limits of the City of Chino and adjacent to the City of Ontario. The study area consists of areas that are scheduled to be completed within the first five years of implementation of the proposed master plan. The study area is located within the Chino Airport and is bounded by Merrill Avenue to the north, farmland and dairy operations to the east, Kimball Avenue to the south, and Euclid Avenue to the west.

**Dates of Investigation:** The California Historical Resources Information System (CHRIS) records search was conducted by the San Bernardino Archeological Information Center (SBAIC) at the San Bernardino County Museum and received by SWCA on January 30, 2012. An additional records search was requested of the CHRIS at the Eastern Information Center (EIC) at the University of California, Riverside and received on February 13, 2012. SWCA cultural resources specialists conducted an intensive-level cultural resource survey on March 6, 2012. This report was completed and submitted in April 2012.

**Summary of Findings:** The SBAIC and EIC records and literature searches indicated that a total of 52 cultural resource studies have been conducted within a 1.6-kilometer (km) (1-mile) radius of the study area, including 45 within San Bernardino County and seven in Riverside County. Two of these studies include all or portions of the study area. The records and literature searches indicated that 26 previously recorded cultural resources are located within 1.6 km (1 mile) of the project area. The Chino Airport (P872-95H) is the only resource located in the study area. Twelve buildings and structures associated with the airport (but outside of the current study area) were previously surveyed and recommended eligible for the National Register of Historic Places (NRHP). One dairy farm located outside the study area was also found eligible for the NRHP. None of the 13 remaining historic resources identified through the records and literature searches were determined eligible through survey evaluation for inclusion in the NRHP, California Register of Historic Resources, or for local designation. No additional historic or archaeological resources were identified during the intensive-level survey.

**Investigation Constraints:** The project study area is located within the Chino Airport, which includes runway as well as agricultural fields and other vegetation. Approximately 20 percent of the study area was not accessible due to active runway activities, and fenced areas. Ground visibility throughout most of the project area was very poor, less than 10 percent, due to the presence of asphalt, concrete, flood control areas, alfalfa crops, and other low-lying vegetation.

**Impacts/Recommendations:** No cultural resources were identified during the field survey, and the archaeological sensitivity of the study area is low. Nevertheless, it is still possible that previously unidentified archaeological resources may be present. For that reason, implementation of mitigation measures CR-1 and CR-2 should occur in the event that unanticipated belowground cultural resources are identified during construction activities. These measures would reduce the level of impacts to cultural resources to less than significant.

**Disposition of Data:** This report and any subsequent related reports will be filed with Coffman Associates; SBAIC at the San Bernardino County Museum; EIC at University of California, Riverside;

and SWCA. All field notes, photographs, and records related to the current study are on file at the SWCA Pasadena, California, office.

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## INTRODUCTION

SWCA Environmental Consultants (SWCA) was retained by Coffman Associates to conduct a cultural resources study in support of the Chino Airport Project. The study includes the results of a records search, the completion of a cultural resources survey, and preparation of a cultural resources survey report. The study area for the project consists of five areas (totaling approximately 20 hectares [ha] [49 acres]) and is located at the Chino Airport in southwestern San Bernardino County, California, within the corporate limits of the City of Chino and adjacent to the City of Ontario (Figure 1). The *project area* is generally bound by Merrill Avenue to the north, agricultural-related farmland and dairy operations to the east, Kimball Avenue to the south, and Euclid Avenue to the west. The study area is located in the project area and contains areas that are scheduled to be completed within the first five years of implementation of the proposed master plan. The Federal Aviation Administration (FAA) is the lead agency for the proposed project. Therefore, this assessment was prepared in accordance with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulation, 36 Code of Federal Regulations (C.F.R.) Part 800. The study also complies with the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 5024.1, Section 15064.5 of the Guidelines, and Sections 21083.2 and 21084.1 of the Statutes of CEQA (Governor's Office of Planning and Research 1998). PRC Section 5024.1 requires the identification and evaluation of historical resources that may be affected by a proposed project.

SWCA Cultural Resources Project Manager Samantha Murray managed the project, requested the records search from the San Bernardino Archaeological Information Center (SBAIC) and the Eastern Information Center (EIC)(SCCIC) , and authored this report. Archaeologist John Covert performed the cultural resources survey. Geographical Information Systems Specialist Matthew South prepared the figures found in this report. Technical Editor Linda Tucker Burfitt edited this report. Finally, Cultural Resources Principal Investigator John Dietler, Ph.D., Registered Professional Archaeologist, reviewed this reports for quality assurance/quality control.

## Project Description

Chino Airport is a county-owned public-use facility located approximately 4.8 kilometers (km) (3.0 miles) southeast of the City of Chino. The airport is located in San Bernardino County, approximately 80 km (50 miles) east of Los Angeles. Several varieties of general aviation aircraft use the airport, including small, single-engine airplanes and helicopters.

With the FAA as the lead agency, the owner and operator of the Chino Airport—the San Bernardino County's Department of Airports (county)—has initiated the preparation of a master plan update. The purpose of this update is to assess the airport's existing and future role, while also providing direction and guidance for future development. Additionally, it will provide updated justification for projects for which the airport may receive funding participation through federal and state airport improvement programs. The county has hired Coffman Associates, an airport consulting firm that specializes in master planning and environmental studies, to complete the master plan update.

The goal of the master plan update is to accommodate the airport's needs in an environmentally and fiscally responsible manner while adhering to appropriate safety design standards. Alternative development scenarios will be devised, each satisfying projected needs in a unique way. Through coordinated review by the county, the City of Chino, the California Department of Transportation (CALTRANS), the FAA, airport users, and the public, a recommended development concept will evolve that serves as a guide to realistic and achievable airport development. The plan then acts as a guide to aid local, state, and federal decision-makers when considering airport improvements.

The master plan update is necessary as a timely reassessment of the development direction of the airport to meet the needs of a dynamic local economy and an ever-changing air transportation industry. Airport master plans are commonly updated every 5–10 years. The previous master plan for the Chino Airport was updated in 2003. An airport comprehensive land-use plan update was completed in 1991. To ensure the airport is meeting the demands of general aviation users and continuing to be an economic asset to the region, reassessment of the current development direction is especially beneficial. The master plan update will include an evaluation of airport-related development areas with regard to aviation forecasts, demand/capacity, airport design standards, facility requirements, land use, costs, environmental reviews, and opportunities. It will also serve as a strategic tool for establishing airport improvement priorities and obtaining funding.

Future airport projects will be initiated when demand dictates the need for development. The forecasts will identify a timeline in which development might reasonably be anticipated; however, if activity does not materialize as quickly as forecast, then development envisioned by the master plan update would be delayed accordingly. Conversely, if demand were to accelerate, projects could be initiated prior to the timeline associated with the master plan update. The county will monitor aviation activity at Chino Airport annually to determine whether activity is tracking as projected and which projects from the master plan update should be programmed into the airport's 5-year Capital Improvement Program. Each project will still need to be individually approved for funding and development, first by the County Board of Supervisors, then by the FAA.

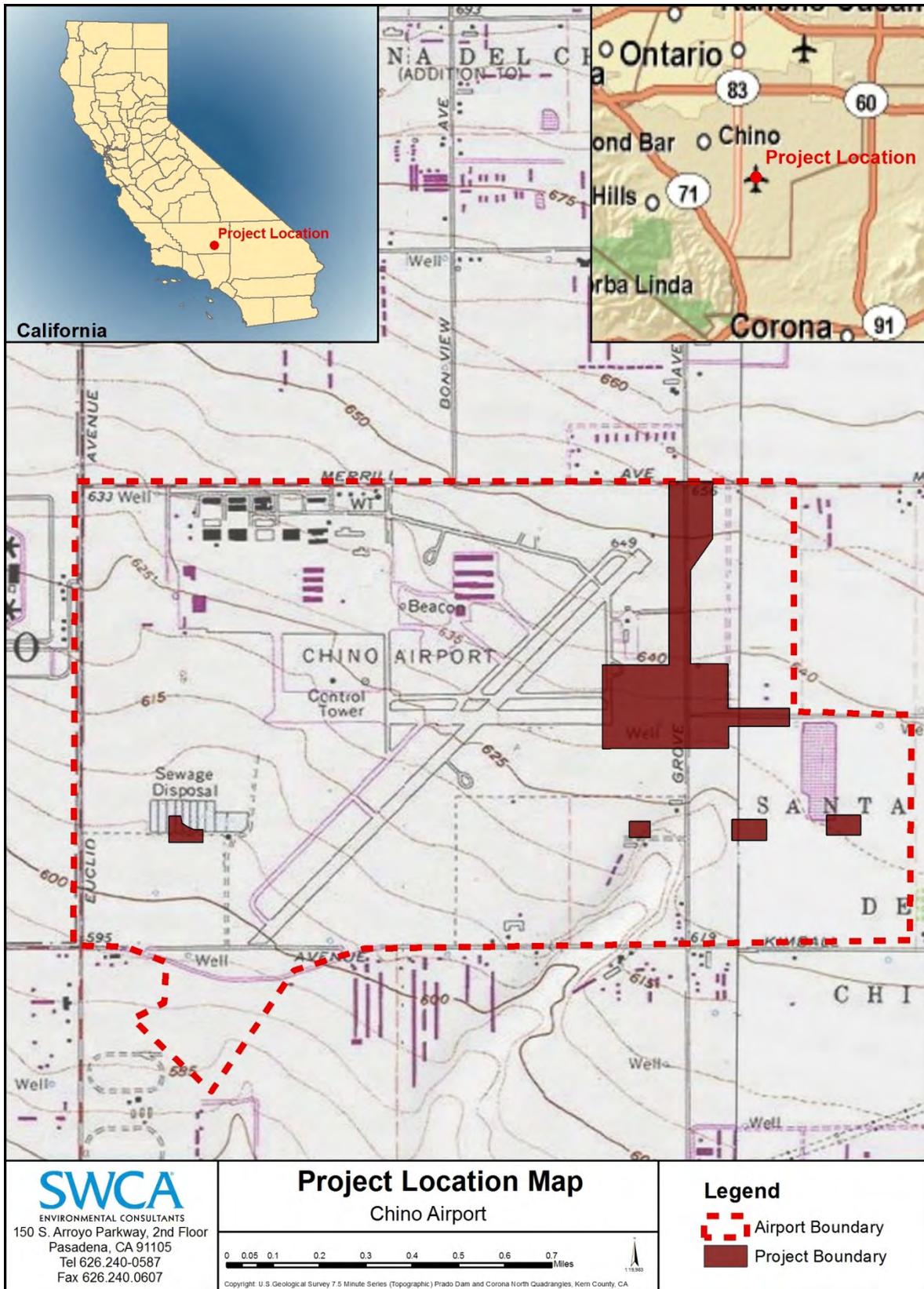


Figure 1. Project location.

## **Study Area**

The study area was delineated by Coffman Associates to ensure identification of significant historical resources that may be directly affected by the proposed project and are listed in or eligible for the National Register of Historic Places (NRHP) (Figure 2). The proposed study area includes areas that are scheduled to be completed within the first five years of implementation of the proposed master plan. The study area contains areas of potential direct ground disturbance, such as areas for staging and temporary building activities.

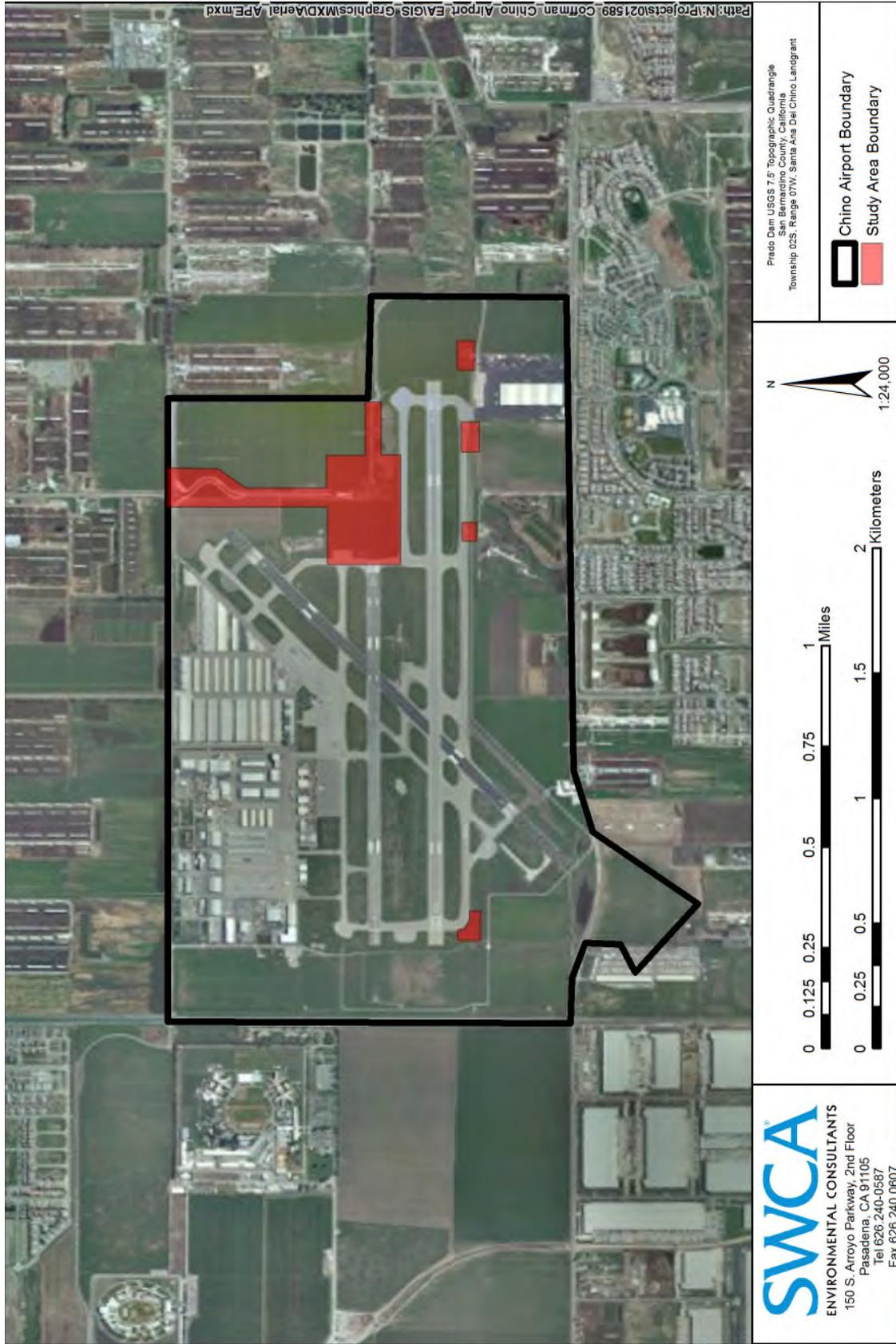


Figure 2. Study Area map.

## REGULATORY SETTING

This section identifies federal regulations, state legislation, and local statutes, ordinances, and guidelines that govern the identification and treatment of cultural resources and analysis of project-related effects to cultural resources. The lead agency must consider these requirements in making decisions on projects that may affect cultural resources.

### Federal

#### ***National Historic Preservation Act***

The current study was completed under the provisions of the NHPA of 1966, as amended (NHPA; 16 United States Code [U.S.C.] 470f). Cultural resources are considered during federal undertakings chiefly under Section 106 of NHPA through one of its implementing regulations; 36 C.F.R. Part 800 (Protection of Historic Properties); as well as NEPA. Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA. Other relevant federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989.

Section 106 requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for the NRHP and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 C.F.R. § 800.1). Under Section 106, cultural resources must be identified and evaluated; effects to historic properties are reduced to acceptable levels through mitigation measures or agreements among consulting and interested parties. Historic properties are those resources that are listed in or are eligible for the NRHP per the criteria listed below (36 C.F.R. § 60.4 [ACHP 2000]).

The quality of *significance* in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess *integrity* of location, design, setting, materials, workmanship, feeling and association and that

- (A) are associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) are associated with the lives of persons significant in our past; or
- (C) embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) have yielded, or may be likely to yield, information important in prehistory or history.

Impacts of a project to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP are considered a significant effect on the environment. Under 36 C.F.R. § 800.5(a)(2), adverse effects on historic properties include, but are not limited to

- (i) physical destruction of or damage to all or part of the property;
- (ii) alteration of a property;

- (iii) removal of the property from its historic location;
- (iv) change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- (v) introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- (vi) neglect of a property which causes its deterioration;
- (vii) transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

## State

### **California Environmental Quality Act**

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

Section 21083.2(g) defines a *unique archaeological resource* as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized, important prehistoric or historic event or person.

A *historical resource* is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR) (Section 21084.1); a resource included in a local register of historical resources (Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

PRC Section 5024.1, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1 were used as the basic guidelines for this cultural resources study. PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below.

According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or that adversely alter the significance of a resource listed on or eligible for the CRHR are considered a significant effect on the environment. These impacts could result from “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines, Section 15064.5 [b][1], 2000). *Material impairment* is defined as demolition or alteration “in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register...” (CEQA Guidelines Section 15064.5[b][2][A]).

## ENVIRONMENTAL SETTING

The Chino Airport is located approximately 4.8 km (3 miles) southeast of the City of Chino, in the southeast corner of San Bernardino County, California. It is situated immediately northeast of the Peninsular Ranges Province in the Chino Valley Basin. The Peninsular Ranges extend east to the Colorado Desert, south beyond the United States and into Baja California, Mexico, and north to the foothills of the San Bernardino and Santa Monica Mountains (Norris and Webb 1990). Geological maps of the Yorba Linda and Prado Dam quadrangle indicate that the study area is located on surficial sediments dating to the Holocene, consisting of alluvial gravel, silt, and sand deposited from valleys and floodplains, as well as older surficial sediments consisting of elevated, dissected remnants of alluvial gravel, sand, and silt (Dibblee 2001). The elevation of the Chino Airport ranges from 183 to 201 meters (m) (600 to 660 feet) above mean sea level.

The regional climate is characterized by warm summers, mild winters, and infrequent rainfall. The normal daily minimum temperature ranges from 5 degrees Celsius (°C) (41 degrees Fahrenheit [°F]) in December to 15°C (59°F) in July and August. The normal daily maximum temperature ranges from 20°C (68°F) in December and January to 32°C (89°F) in July and August. The region averages approximately 43 centimeters (17 inches) of precipitation annually. On average, Chino experiences sunshine 70% of the year. The monthly average wind speed is 10 km (6.2 miles) per hour, and the predominant wind direction is from the southwest to northeast.

Land use in the surrounding area consists of the agricultural fields to the north and east; residential, commercial, and public facilities to the south; and detention centers to the west. Because the study area is located in a heavily developed urban and agricultural area, there are no natural vegetation communities in the study area, with the site being composed of three anthropogenically disturbed habitats: maintained, developed, and ruderal lands. Based on the character of the study area and the lack of natural vegetation communities, focal species present are limited to two species: California horned lark (*Eremophila alpestris actia*) and burrowing owl (*Athene cunicularia*), both of which occur in disturbed and ruderal areas of non-native grasses. Refer to SWCA’s biological resources assessment (SWCA 2012) for more detailed information on vegetation communities and wildlife in the study area.

## CULTURAL SETTING

### Prehistoric Overview

Numerous chronological sequences have been devised to aid in understanding cultural changes in southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four periods are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's (1955) synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984), this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last three decades (Byrd and Raab 2007:217). Several revisions have been made to Wallace's (1955) synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994).

#### ***Horizon I (Early Man) (ca. 10,000–6,000 B.C.)***

When Wallace defined the Horizon I (Early Man) period in the mid-1950s, there was little evidence of human presence on the southern California coast prior to 6000 B.C. Archaeological work in the intervening years has identified numerous pre-8000 B.C. sites, both on the mainland coast and the Channel Islands (e.g., Erlandson 1991; Johnson et al. 2002; Moratto 1984; Rick et al. 2002). The earliest accepted dates for occupation are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area approximately 10,000 years ago (Erlandson 1991). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego Counties contain several sites dating to 9,000 to 10,000 years ago (Byrd and Raab 2007; Macko 1998a; Mason and Peterson 1994; Sawyer and Koerper 2006). Known sites dating to the Early Man period are rare in western Riverside County. One exception is the Elsinore site (CA-RIV-2798-B), which has deposits dating as early as 6630 calibrated B.C. (Grenda 1997).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones et al. 2002) and on Pleistocene lakeshores in eastern San Diego County (see Moratto 1984). Although few Clovis-like or Folsom-like fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), it is generally thought that the emphasis on hunting may have been greater during Horizon I than in later periods. Common elements in many sites from this period, for example, include leaf-shaped bifacial projectile points and knives, stemmed or shouldered projectile points, scrapers, engraving tools, and crescents (Wallace 1978). Subsistence patterns shifted around 6000 B.C. coincident with the gradual desiccation associated with the onset of the Altithermal climatic regime, a warm and dry period that lasted for approximately 3,000 years. After 6000 B.C., a greater emphasis was placed on plant foods and small animals.

#### ***Horizon II (Milling Stone) (6000–3000 B.C.)***

The Milling Stone Horizon of Wallace (1955, 1978) and Encinitas Tradition of Warren (1968) (6000–3000 B.C.) are characterized by subsistence strategies centered on collecting plant foods and small animals. Food procurement activities included hunting small and large terrestrial mammals, sea mammals, and birds; collecting shellfish and other shore species; near-shore fishing with barbs or gorges; the processing of yucca and agave; and the extensive use of seed and plant products (Kowta 1969). The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates and slabs) and handstones

(manos and mullers). Milling stones occur in large numbers for the first time during this period, and are more numerous still near the end of this period. Recent research indicates that Milling Stone Horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007).

Milling Stone Horizon sites are common in the southern California coastal region between Santa Barbara and San Diego, and at many inland locations, including the Prado Basin in western Riverside County and the Pauma Valley in northeastern San Diego County (e.g., Herring 1968; Langenwalter and Brock 1985; Sawyer and Brock 1999; Sutton 1993; True 1958). Wallace (1955, 1978) and Warren (1968) relied on several key coastal sites to characterize the Milling Stone period and Encinitas Tradition, respectively. These include the Oak Grove Complex in the Santa Barbara region, Little Sycamore in southwestern Ventura County, Topanga Canyon in the Santa Monica Mountains, and La Jolla in San Diego County. The well-known Irvine site (CA-ORA-64) has occupation levels dating between ca. 6000 and 4000 B.C. (Drover et al. 1983; Macko 1998b).

Stone chopping, scraping, and cutting tools made from locally available raw material are abundant in Milling Stone/Encinitas deposits. Less common are projectile points, which are typically large and leaf-shaped, and bone tools such as awls. Items made from shell, including beads, pendants, and abalone dishes, are generally rare. Evidence of weaving or basketry is present at a few sites. Kowta (1969) attributes the presence of numerous scraper-planes in Milling Stone sites to the preparation of agave or yucca for food or fiber. The mortar and pestle, associated with pounding foods such as acorns, were first used during the Milling Stone Horizon (Wallace 1955, 1978; Warren 1968).

Characteristic mortuary practices of the Milling Stone period or Encinitas Tradition include extended and loosely flexed burials, some with red ochre, and few grave goods such as shell beads and milling stones interred beneath cobble or milling stone cairns. “Killed” milling stones, exhibiting holes, may occur in the cairns. Reburials are common in the Los Angeles County area, with north-oriented flexed burials common in Orange and San Diego counties (Wallace 1955, 1978; Warren 1968).

### ***Horizon III (Intermediate) (3000 B.C.–A.D. 500)***

Following the Milling Stone Horizon, Wallace’s Intermediate Horizon and Warren’s Campbell Tradition in Santa Barbara, Ventura, and parts of Los Angeles Counties, date from approximately 3000 B.C. to A.D. 500 and are characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. The Campbell Tradition (Warren 1968) incorporates David B. Rogers’ (1929) Hunting Culture and related expressions along the Santa Barbara coast. In the San Diego region, the Encinitas Tradition (Warren 1968) and the La Jolla Culture (Moriarty 1966; Rogers 1939, 1945) persist with little change during this time.

During the Intermediate Horizon and Campbell Tradition, there was a pronounced trend toward greater adaptation to regional or local resources. For example, an increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites along the California coast during this period. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks become part of the tool kit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period. Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms. Koerper and Drover (1983) consider Gypsum Cave and Elko series points, which have a wide distribution in the Great Basin and Mojave deserts between ca. 2000 B.C. and A.D. 500, to be diagnostic of this period. Bone tools, including awls, were more numerous than in the preceding period, and the use of asphaltum adhesive was common.

Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment. Hopper mortars and stone bowls, including steatite vessels, appeared in

the tool kit at this time as well. This shift appears to correlate with the diversification in subsistence resources. Many archaeologists believe this change in milling stones signals a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn (e.g., Glassow et al. 1988; True 1993). It has been argued that mortars and pestles may have been used initially to process roots (e.g., tubers, bulbs, and corms associated with marshland plants), with acorn processing beginning at a later point in prehistory (Glassow 1997) and continuing to European contact.

Characteristic mortuary practices during the Intermediate Horizon and Campbell Tradition included fully flexed burials, placed facedown or face-up, and oriented toward the north or west (Warren 1968). Red ochre was common, and abalone shell dishes were infrequent. Interments sometimes occurred beneath cairns or broken artifacts. Shell, bone, and stone ornaments, including charmstones, were more common than in the preceding Encinitas Tradition. Some later sites include *Olivella* shell and steatite beads, mortars with flat bases and flaring sides, and a few small points. The broad distribution of steatite from the Channel Islands and obsidian from distant inland regions, among other items, attest to the growth of trade, particularly during the later part of this period. Recently, Raab and others (Byrd and Raab 2007) have argued that the distribution of *Olivella* grooved rectangle beads marks “a discrete sphere of trade and interaction between the Mojave Desert and the southern Channel Islands.”

### **Horizon IV (Late Prehistoric) (A.D. 500–Historic Contact)**

In the Late Prehistoric Horizon (Wallace 1955, 1978), which lasted from the end of the Intermediate (ca. A.D. 500) until European contact, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points, usually stemless with convex or concave bases, suggests an increased usage of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Other items include steatite cooking vessels and containers, the increased presence of smaller bone and shell circular fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments made from shell, bone, and stone. There is also an increased use of asphalt for waterproofing and as an adhesive.

By A.D. 1000, fired clay smoking pipes and ceramic vessels were in use at some sites, but pottery was not as common in western Riverside County because it was closer to the Colorado River (Drover 1971, 1975; Meighan 1954; Warren and True 1984). The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels. Mortuary customs were elaborate and included cremation and interment with abundant grave goods.

The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric horizon are thought to be the result of a migration of Takic-speaking (or Numic) people toward the coast of peoples from eastern desert regions. In addition to the small triangular and triangular side-notched points similar to those found in the desert regions in the Great Basin and along the Lower Colorado River, the introduction of Colorado River–style pottery and the practice of cremation suggest a strong influence from the Colorado Desert region.

## **Ethnographic Overview**

The study area is located in the traditional ethnographic territory of the Native American group known as the Gabrielino/Tongva. Traditional Cahuilla territory is located approximately 24 km (15 miles) to the east, and Juaneño/Acjachemen territory is located approximately 27 km (17 miles) to the southeast of the

project area. More distant neighbors of the Gabrielino/Tongva include the Serrano and Tataviam to the north and the Chumash to northwest.

The name *Gabrielino* (sometimes spelled *Gabrieleño*) denotes those people who were administered by the Spanish from the San Gabriel Mission, which included people from the Gabrielino area proper as well as other social groups. Therefore, in the post-Contact period, the name does not necessarily identify a specific ethnic or tribal group. The names by which Native Americans in southern California identified themselves have, for the most part, been lost. Many modern Gabrielino identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin, and refer to themselves as the *Tongva*. This term is used through the rest of this section to refer to the pre-contact inhabitants of the Los Angeles Basin and their descendants (Bean and Smith 1978; Kroeber 1925; King 1994).

Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands: San Clemente, San Nicolas, and Santa Catalina. The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000, but recent ethnohistoric work suggests a number approaching 10,000. Houses constructed by the Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978; O'Neil 2002).

The Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, and deserts as well as riparian, estuarine, and open and rocky coastal eco-niches. As for most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period) (Bean and Smith 1978).

At the time of Spanish contact, the basis of Tongva religious life was the *Chinigchinich* cult, centered on the last of a series of heroic mythological figures. The Chinigchinich cult seems to have been relatively new when the Spanish arrived. It was spreading south into the Southern Tatic groups even as Christian missions were being built, and may represent a mixture of native and Christian beliefs and practices (Kroeber 1925; McCawley 1996).

## Historic Overview

Post-Contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins in 1769 with the establishment of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. News of Mexico's independence from Spain in reaching California in 1822 marks the beginning of the Mexican period. The signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American period when California became a territory of the United States.

### ***Spanish Period (1769–1822)***

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríguez Cabrillo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrillo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location

its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1885; Gumprecht 1999).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named "the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula" or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002).

### ***Mexican Period (1822–1848)***

A major emphasis during the Spanish period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos.

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of non-native inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

### ***American Period (1848–Present)***

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as United States Territories (Waugh 2003). Horticulture and livestock,

based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 1941).

### **City of Chino**

With the establishment of the nearby Mission San Gabriel Arcángel in 1771, the area that is present-day Chino was claimed by the Spaniards and used as grazing land for the mission's cattle. The Rancho Santa Ana del Chino remained under Spanish control for the next 40 years until Mexican Independence was gained in 1821. Following the secularization of the missions, Governor Juan Batista Alvarado granted the rancho to Don Antonio Maria Lugo, who later deeded it to his son-in-law Isaac Williams, an early settler of Los Angeles (Hoover et al. 2002).

The area continued to slowly develop through the Mexican and early-American periods, until Richard Gird purchased the land in 1881. Hoping to create a thriving farming and industrial community, Gird developed the new town of Chino with a 1-square-mile townsite with a block of brick buildings surrounded by 10-acre tracts (Garrett 1996). Gird further subdivided the old rancho lands and with the connection of the town to the Southern Pacific railroad, a strong local agricultural economy focused on beet production soon emerged, fostered largely due to Gird's construction of a sugar beet refining factory. In 1910, the town of Chino was incorporated. With the expansion of agriculture in the following decades, Chino became one of California's most prominent dairy producers by the 1940s (de Martino et al. 2011). Similar to much of southern California, Chino's population grew substantially after World War II, a trend that would continue into the following decades. Although the agriculture and the dairy industries have remained an important part of the local economy since that time, further development has led to the conversion of much of the city's agricultural land to urban uses (DCE 2010).

### **Chino Airport**

The development of the present-day Chino Airport began in 1940 when the United States government first leased the San Bernardino County-owned land in what was then considered Ontario for use as a pilot training center. Initially known as Cal Aero Field, the 152-ha (375-acre) site was eventually purchased by the government and became home to the Cal Aero Flying Academy. The flight school was operated by the University of California and became the first civilian facility at which United States Army Corps of Engineers cadets would receive their basic training (*Los Angeles Times* 1941). With the onset of World War II, an active construction campaign was begun to accommodate the arrival of an increasing number of cadets. By the time the airport was closed in 1944, it had grown to include 348 ha (860 acres) and had seen over 10,000 pilots train at the academy in a period of only 4 years (POF 2012).

Following the war, the airport was used as a storage facility for surplus aircraft until the ownership of the site and buildings was transferred to San Bernardino County in 1948. It remained nonoperational during the subsequent decade because the county leased the land to the Pacific Airmotive Corporation (PAC), a company that was involved in the overhaul of aircraft engines. PAC's lease was terminated in 1960 when increased air traffic indicated that the airfield was needed and a master plan was soon drafted to direct future growth (Frank 1965).

Since that time, numerous improvements have been undertaken at the Chino Airport, helped largely in part by the cooperation of the FAA and San Bernardino County, which have together invested nearly \$52 million in the facility through the Airport Improvement Program (AIP) (Coffman 2003). These improvements include the construction, reconstruction, and relocation of runways and taxiways, as well as the acquisition of land for future growth. Additionally, the airport has become a center for World War II–era aircraft restoration, as evidenced by the Planes of Fame Museum, which arrived at the airport in 1973 and whose annual military aircraft airshow has become one of the largest on the west coast (Shreeve 2010).

## BACKGROUND RESEARCH

### Literature Search

On January 27, 2012, SWCA Cultural Resources Specialist Samantha Murray requested a search of the California Historical Resources Information System (CHRIS) at the San Bernardino Archaeological Information Center (SBAIC), located at the San Bernardino County Museum. SWCA received the search results on January 30, 2012. The search included any previously recorded cultural resources and investigations within a 1.6-km (1-mile) radius of the study area. Because a small portion of the search area is located in Riverside County, an additional records search was requested of the CHRIS at the Eastern Information Center (EIC) at the University of California, Riverside on February 2, 2012. SWCA received the search results on February 13, 2012. The CHRIS search also included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory (HRI) list. The records search also included a review of all available historic U.S. Geologic Survey (USGS) 7.5- and 15-minute quadrangle maps. Letters from the SCCIC and EIC summarizing the results of the records searches, and bibliographies of prior cultural resources studies, are provided in Appendix A of this report.

### ***Prior Studies within 1.6 km (1 mile) of the Study Area***

Forty-five cultural resources studies have been previously conducted within a 1.6-km (1-mile) radius of the study area within San Bernardino County and seven cultural resources studies have been previously conducted within a 1.6-km (1-mile) radius of the study area in Riverside County (Table 1). Two of these (1060537 and 1061768) focused on the Chino Airport and include portions of the study area. An additional six unmapped studies were also conducted within the Corona North and Prado Dam quadrangles; however, all of these studies are overview reports encompassing very large areas, and all appear to be located outside of the study area. Appendix A provides a complete bibliography from the SCCIC for all studies listed in Table 1, as well as all unmapped studies.

**Table 1.** Previous Cultural Resources Studies within 1.5 km (1 mile) of the Study Area

<b>SCCIC Report No.</b>	<b>Title of Study</b>	<b>Author</b>	<b>Year</b>	<b>Proximity to the Study Area</b>
1060253	Ethnographic and Archaeological Background.	San Bernardino County Museum Association	1975	Outside (to the southeast)
1060254	Archaeological Impact Report: Resources Evaluation of Cucamonga Creek Area, Remington Avenue-Chino-Corona Road, U. S. G. S. Corona North, California.	Suss, T.	1975	Outside (to the southeast)
1060395	Archaeological –Historical Resources Assessment of Proposed Chino Maintenance yard Construction.	Hearn, J. and Simpson, R.	1976	Outside (within airport)

**Table 1.** Previous Cultural Resources Studies within 1.5 km (1 mile) of the Study Area

<b>SCCIC Report No.</b>	<b>Title of Study</b>	<b>Author</b>	<b>Year</b>	<b>Proximity to the Study Area</b>
1060537	Archaeological – Historical Resources Assessment of Land Area to be Impacted by Renovation Program at Chino Airport.	Hearn, J.	1977	<b>Within</b> (central portion)
1060547	Archaeological – Historical Resources Assessment of Kimball Road Improvement Project in Chino.	Hearn, J.	1977	Outside (to the south)
1060596	Archaeological – Historical Resources Assessment of Merrill Avenue – From Grove Avenue to Archibald Avenue, Chino Area.	San Bernardino County Museum Association	1978	Outside (to the east)
1061029	Cultural Resource Overview for the Serrano Substation to Mira Loma Substation Transmission Route Alternative Corridor Right-Of-Way.	Foster, J. and Greenwood, R.	1980	Outside (to the southeast)
1061287	Cultural Resources Assessment of the Santa Ana Regional Interceptor, Reaches IV-D and IV-E, San Bernardino and Riverside Counties, California.	Lerch, M. K.	1982	Outside (to the southwest, south, and southeast)
1061358	Final Report: Mira Loma-Serrano 500 kV DC and Serrano-Villa Park 220 kV Transmission Line Project.	Macko, M., et al.	1983	Outside (to the southeast)
1061492	Phase II Archaeological Studies: Prado Basin and the Lower Santa Ana River.	Langewalter II, P. and Brock, J.	1985	Outside (to the southwest)
1061499	Cultural Resources Overview: California Portion, Proposed Pacific Texas Pipeline Project.	Foster, J. and Greenwood, R.	1985	Outside (to the north and northeast)
1061768	A Cultural Resource Assessment, Chino Airport Expansion Project, San Bernardino County.	LSA Associates, Inc.	1988	<b>Within</b> (southern portion)
1061941	Archival Research and Site Documentation, Prado Basin, California.	Hatheway, R.	1989	Outside (to the southwest)
1061942	The Dairy Industry of the Prado Basin.	Swanson, M. and Hatheway, R.	1989	Outside (to the southwest)
1062030	Cultural Resources Assessment-Sari, Reaches IV D & E.	Kielusiak, C.	1989	Outside (to the south and southeast)
1062058	Context and Evaluation of Historic Sites in the Prado Basin.	Greenwood, R. and Foster, J.	1990	Outside (to the southwest)
1062623	Cultural Resources Assessment: Santa Ana Watershed Project Authority, Chino Basin Desalination Program – Phase I Project, Riverside and San.	Taskiran, A. and Greeley, R.	1992	Outside (to the west)
1062678	Addendum to Cultural Resources Assessment: Santa Ana Watershed Project Authority, Chino Basin Desalination Program – Phase I Project, Riverside and San.	Broomhall, L.	1992	Outside (to the southwest)
1062870	A Cultural Resource Assessment of Six Well Pad Locations Associated with the Chino Basin Desalination Program – Phase I Project, Riverside and San Bernardino Counties, CA.	White, W.	1993	Outside (to the south and southeast)
1063066	Historic Property Clearance Report for Euclid Ave. (RTE 83) Road Widening Between Kimball & Merrill Avenues in the City of Chino – 08-RIV-83 PM 2.73/3.920.	Rosenthal, J. and Padon, B.	1995	Outside (to the east)
1063073	Cultural Resources & Restraints, General Plan Considerations for the City of Chino, Sphere of Influence, Subarea 1, San Bernardino County, CA.	Chace, P.	1995	Outside (to the southwest)
1063686	Cultural Resource Assessment-Santa Ana Watershed Project Authority, Chino Basin Desalination Program: Water Pipelines, Wells & Reservoir.	Hale, A.	1997	Outside (to the south)
1063687	Identification & Evaluation of Historic Properties-Chino Basin Desalination Program, Facilities Revision Project, San Bernardino & Riverside Counties.	Love, B. and Tang, B.	1997	Outside (to the south and east)
1063688	Cultural Resources Investigation : California Institution for Men, Chino, Ca.	Hale, A.	2001	Outside (to the west)
1063689	Identification & Evaluation of Historic Property: Chino I Desalter Power Generation Pilot Scale Project.	Love, B., et al.	2001	Outside (to the southeast)

**Table 1.** Previous Cultural Resources Studies within 1.5 km (1 mile) of the Study Area

<b>SCCIC Report No.</b>	<b>Title of Study</b>	<b>Author</b>	<b>Year</b>	<b>Proximity to the Study Area</b>
1064384	Indirect APE historic Architectural Assessment for Cingular Telecommunications Facility Candidate SB 313-02 (Hernandez Nursery) 7031 Kimball Ave, Chino, San Bernardino County, CA.	Crawford, K.	2004	Outside (to the southwest)
1064386	An Archaeological Resources Evaluation & Paleontological Records Search on John Laing Homes Englesma Dairy Project, City of Chino, CA.	Dice, M.	2004	Outside (to the south)
1064387	Identification & Evaluation of Historic properties: Inland Empire Utilities Agency Monitoring Well Sites In and Near the City of Chino, San Bernardino County, CA	Wetherbee, M.	2004	Outside (to the south)
1064405	A Phase I Cultural Resource Investigation of Approximately 60 Acres of Land in the Prado Basin Area of San Bernardino county, CA.	McKenna, J.	2003	Outside (to the south)
1064407	A Phase I Cultural Resource Investigation of Approximately 60 Acres of Land in the Prado Basin Area of San Bernardino County, CA.	McKenna, J.	2003	Outside (to the south and southeast)
1064408	Chino Demolition Monitoring (Tract 16419).	McKenna, J.	2003	Outside (to the south)
1064506	Historical/Archaeological Resources Survey Report: chino I Desalter Expansion & Chino II Desalter & Support Facilities, Chino Basin Area, San Bernardino & Riverside Counties.	Dahdul, M.	2001	Outside (to the east)
1064660	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate SB-313-04 (Cypress/Kimball Development), Cypress Avenue & Kimball Avenue, Chino, San Bernardino County, CA..	Michael Brandman Associates	2004	Outside (to the southwest)
1064663	Historical/Archaeological Resources Survey Report, Tentative Tract Map No. 17995 in the City of Chino, San Bernardino County, CA.	CRM TECH	2006	Outside (to the southwest)
1064681	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate SB-575-03 (VV Dairy), 8571 Merrill Avenue, Chino, San Bernardino County, CA.	Michael Brandman Associates	2004	Outside (to the east)
1064751	A Phase I Cultural Resources Investigation of Approximately 60 Acres of Land Within the Lewis Operating Corp. Property North of Bickmore Avenue in the City of Chino, San Bernardino County, CA.	McKenna, J., et al.	2005	Outside (to the south)
1064752	A Phase I Cultural Resources Investigation of Approximately 100 Acres of Land within the Lewis Operating Corp. Property South of Bickmore Avenue in the City of Chino, San Bernardino County, CA.	McKenna, J., et al.	2005	Outside (to the south)
1064756	Archaeological Survey of the New Chino-Kimball 66kV Transmission Line, City of Chino, San Bernardino and Riverside Counties, CA.	Pollock, K.	2006	Outside (to the south)
1064850	Addendum Studies, Eastside Master Plan Amendment and TTM 17058.	McKenna, J., et al.	2006	Outside (to the southwest)
1065243	Archaeological Survey of Three Alternate Sites for the Proposed Kimball Substation, Riverside and San Bernardino Counties, CA.	Pollock, K. and Lerch, M.	2005	Outside (to the southwest)
1065700	On-Call Archaeological Monitoring Services Eastern Trunk Sewer/Kimball Interceptor Sewer Cities of Ontario and Chino, San Bernardino County, CA.	CRM TECH	2006	Outside (to the southwest)
1065786	Final Phase I Cultural Resources Survey Report for Watson Land Company, Near Euclid and Bickmore Avenue, Chino, County of San Bernardino, CA.	Aislin-Kay, M., and Lord, K.	2006	Outside (to the southeast)

**Table 1.** Previous Cultural Resources Studies within 1.5 km (1 mile) of the Study Area

SCCIC Report No.	Title of Study	Author	Year	Proximity to the Study Area
1065787	Phase I Cultural Resources Assessment Paleontological Records Review Merrill Avenue Project: Albers and Van Vliet Dairy Farms Chino, San Bernardino County, CA.	Sanka, J.	2006	Outside (to the east)
1066068	Cultural Resources Inventory of Proposed Edison International Aircraft Operations Facility, Chino, San Bernardino County, CA.	ECORP Consulting, Inc.	2008	Outside (within the airport)
1066818	Identification and Evaluation of Historic Properties, Chino Desalter Phase 3 Expansion Project, Riverside and San Bernardino Counties, CA.	Tang, B. and Hogan, M.	2010	Outside (to the south and southwest)
RI-01674	Mira Loma-Serrano 500 kV DC and Serrano-Villa Park 220 kV Transmission Line Project-Final Report, Cultural Resource Survey and Test Excavations at CA-ORA-614, CA-SBR-3690, And CA-SBR-4032	Macko, M., et al.	1983	Outside (to the southeast)
RI-03590	Cultural Resources Assessment, Santa Ana Watershed Project authority, Chino Basin Desalination Program: Water Pipelines, Wells, and Reservoir	Hale, A.	1997	Outside (to the southeast)
RI-04924	An Archaeological Historic Evaluation Report: Tract 31309, APNs 144-020-004, 144-020-012, -013 and 144-020-015, 110-Acre Property, Norco, County of Riverside, California	Hoover, A. and Fox, J.	2004	Outside (to the southeast)
RI-05400	A Phase I Archaeological Record Search and survey Report For Tract 32491, APNs 144-020-003, 43.87 Acres, Norco County, of Riverside, CA	Hoover, A. and Belvins, K.	2005	Outside (to the southeast)
RI-05815	Archaeological Survey of Three Alternate Sites for the Proposed Kimball Substation, Riverside and San Bernardino Counties, California	Pollock, K. and Lerch, M.	2005	Outside (to the southeast)
RI-06544	Historical/Archaeological Resources Survey Report, The Ranch at Eastvale, Assessor's parcel Nos. 144-010-008, -009, and -013, Near the City of Norco, Riverside County, California	Tang, B., et al.	2006	Outside (to the southeast)
RI-07111	Archaeological Survey of the New Chino-Kimball 66kV Transmission Line, City of Chino, San Bernardino and Riverside Counties, California	Pollock, K.	2006	Outside (to the southeast)

### 1060537

In 1977, Dr. Joseph E. Hearn prepared a letter report titled *Archaeological-Historical Resources Assessment of Land Area to be impacted by Renovation Program at Chino Airport*. The cultural resources assessment included a literature search and records check at the San Bernardino County Museum, University of California Riverside, and the Chino Historical Society, and a reconnaissance-level survey of the Chino Airport area, a portion of which includes the current study area. No archaeological or historical resources were identified in the project area, and no further cultural resources investigations were recommended for the project.

### 1061768

In 1988, LSA Associates Inc., prepared a report titled *A Cultural Resource Assessment, Chino Airport Expansion Project, San Bernardino County*. The authors conducted a cultural/scientific resource assessment and field investigation to inventory all archaeological, historical, and paleontological resources within the Chino Airport area. This included archival research and an intensive-level archaeological survey, which focused on areas that were not surveyed in 1977 (Report No. 1060537), and partially overlap portions of the current study area. No evidence of prehistoric use was identified as a result of the inventory and no further archaeological investigation was recommended. The authors did identify a number of historic structures (all of which are outside of the current study area and are listed below) as potentially eligible for the NRHP for their association with the Cal-Aero Flight Academy and

its role in United States military history. A series of mitigation measures were suggested to avoid any adverse impacts to these structures, which included the redesign of expansion plans, relocation, and/or documentation in the case of demolition. The properties were not evaluated for the CHRH, as it was not created until 1998.

### **Previously Recorded Cultural Resources within 1.6 km (1 mile) of the Study Area**

The SBAIC records search identified 26 previously recorded cultural resources within 1.6 km (1 mile) radius of the study area (Table 2). Twelve of these resources were recorded on DPR forms and designated a primary number by the SBAIC, whereas the remaining 14 were only discussed in previously conducted cultural resources reports and have no associated DPR forms or primary numbers. These 14 resources have been assigned temporary numbers by the SBAIC. All of the cultural resources identified within 1.6 km (1 mile) of the study area are buildings or structures associated with either the dairy farming industry or the airport.

As part of a study undertaken in 1988 (1061768), 12 buildings and structures within the Chino Airport were recommended eligible for the NRHP for their association with the Cal Aero Flight Academy and its role during World War II. None of these appear to have been formally recorded or evaluated and none are located in the current study area.

The HRI lists three addresses with associated primary numbers within the Chino Airport that were determined not eligible for the NRHP in 1989 by the FAA. The SBAIC has no record of these primary numbers or DPRs, and they do not appear to be the same resources mentioned in the LSA report. Most likely they were historic-period residences or agricultural buildings clustered along Kimball Avenue and Grove Avenue that have since been demolished. This was not verified as they are outside the study area.

No prehistoric cultural resources were identified in the records search. Additionally, the EIC records search did not identify any previously recorded cultural resources within a 1.6 km (1 mile) of the project study area.

**Table 2.** Previously Recorded Cultural Resources within 1.6 km (1 mile) of the Study Area

<b>Primary Number</b>	<b>Resource Description</b>	<b>California Historical Resources Status Code</b>	<b>Recorded by and Year</b>	<b>Proximity to Study Area</b>
36-012494	Historic: farm worker residence (7262 Bickmore Avenue)	6Z	Smallwood, J. 2006	Outside (0.7 mile south)
36-013623	Historic: single-family residence (16130 S. Euclid Avenue)	Recommended not eligible for CRHR	Smith, R. 2006	Outside (0.8 mile south)
36-019871	Historic: dairy (8552 Kimball Road)	7R	Delu, A. 2009	Outside (0.3 mile southeast)
36-019872	Historic: barn (8822 Kimball Road)	7R	Delu, A. 2009	Outside (0.65 mile southeast)
36-020256	Historic: single-family residence (8011 Kimball Avenue)	6Z	Taniguchi, C. 2004	Outside (0.2 mile south)
36-020415	Historic: barn (7031 Kimball Avenue)	6Y	Crawford, K. 2004	Outside (0.3 mile southwest)
36-020641	Historic: single-family residence (8286 Pine Avenue)	6Z	Tang, B. 2005	Outside (0.9 mile south)
36-020642	Historic: single-family residence (8300 Pine Avenue)	6Z	Tang, B. 2005	Outside (0.9 mile south)

**Table 2.** Previously Recorded Cultural Resources within 1.6 km (1 mile) of the Study Area

Primary Number	Resource Description	California Historical Resources Status Code	Recorded by and Year	Proximity to Study Area
36-020643	Historic: wood building (8300 Pine Avenue)	6Z	Tang, B. 2005	Outside (0.9 mile south)
36-020644	Historic: single-family residence (8342 Pine Avenue)	6Z	Tang, B. 2005	Outside (0.9 miles south)
36-020645	Historic: dairy farm (8342 Pine Avenue)	6Z	Tang, B. 2005	Outside (0.9 miles south)
36-023548	Historic: Van Vliet Dairy (8571 and 8505 Merrill Avenue)	n/a (demolished in 2007)	Dice, M. 2011	Outside (0.35 miles east)
<b>Resources with Temporary Numbers Only – No DPR Form</b>				
P872-60H	Historic: Bldg. No. 3 (administration/office)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-61H	Historic: Bldg. No. 4 (former dining hall)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-62H	Historic: Bldg. No. 6 (former barracks)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-63H	Historic: Bldg. No. 7 (maintenance facility)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-64H	Historic: Bldg. No. 8 (offices/food service)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-65H	Historic: Bldg. No. 12 (former guardhouse)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-66H	Historic: Bldg. No. 13 (former operations bldg./part of museum)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-67H	Historic: Bldg. No. 17 (hanger)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-68H	Historic: Bldg. No. 18 (hanger)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-69H	Historic: Bldg. No. 19 (hanger)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-70H	Historic: Bldg. No. 20 (hanger)	Recommended eligible	LSA Associates, Inc. 1988	Outside (within airport)
P872-71H	Historic: Bldg. No. 30 (revetment)	Recommended eligible	LSA Associates, Inc. 1988	Adjacent (within airport)
P872-76H	Historic: Wilkinson Dairy	Recommended eligible	Hatheway, R. 1989	Outside (1 mile south)
*P872-95H (36-015217)	15622 Grove Avenue	6Y	FAA 1989	Outside (within airport)
*36-015218;	7780 Kimball Avenue	6Y	FAA 1989	Outside (within airport)
*36-015219	7802 Kimball Avenue	6Y	FAA 1989	Outside (within airport)

*Notes:*

6Y = determined ineligible for the NRHP by consensus through Section 106 process. Not evaluated for CRHR or local listing.

6Z = found ineligible for NRHP, CRHR, or local designation through survey evaluation.

7R = identified in reconnaissance-level survey, not evaluated.

\* a primary number is listed in the HRI; however, the SBAIC has no DPR form on file.

## Historic Research

Archival research was carried out between February and March 2012. Research methodology focused on a review of a variety of primary and secondary source materials relating to the history and development of the study area. Sources included but were not limited to historic maps, aerial photographs, and written

histories of the area. The following repositories, publications, and individuals were contacted to identify known historical land uses and the locations of research materials pertinent to the project area:

- *Los Angeles Times* Index, ProQuest Database, Los Angeles Public Library, City of Los Angeles
- Aerial photographs
- USGS maps

### **Review of Historic Maps**

In addition to reviewing previously conducted studies and previously recorded site records, SWCA examined the study area on historic maps provided by the SCCIC. The 1888 Irrigation Map, Riverside Sheet shows that the study area is contained within the lands of the Rancho Santa Ana del Chino. Rancho Santa Ana del Chino appears to be subdivided into small lots for single-family farms and residences. The Rancho El Rincon is directly to the south of the project area and displays much larger subdivisions for larger ranches, but shows no structures. The Pomona and Elsinore Railroad line runs near, but not through the study area. Neighboring areas exhibit development, with many buildings and structures plotted in the Riverside area, then called Auburndale. The 1894/9 Corona 30-minute California Quadrangle map shows that the area featured very few buildings or structures scattered across Santa Ana del Chino and study area, with the nearest population to the southeast at Corona. The 1944/63 Corona 15-minute California Quadrangle map shows that the study area was completely undeveloped at that time.

## **METHODS**

### **Cultural Resources Survey**

SWCA Cultural Resources Specialist John Covert conducted an intensive-level pedestrian survey on March 6, 2012 to identify and record any archaeological resources that may exist in the study area. The study area included five separate areas totaling 8 ha (20 acres) located within the boundaries of the Chino Airport (Figure 2). Intensive-level archaeological survey methods consisted of a pedestrian survey in parallel transects spaced no more than 15 m (49 feet) apart over the entire study area. SWCA used aerial photographs and maps to document the location of any resources encountered during the survey. Within each transect, Mr. Covert examined the ground surface for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics). He also visually inspected ground disturbances such as burrows, cut banks, and drainages for exposed subsurface materials. However, due to safety concerns and constraints, approximately 20 percent of the project area, which included runways, taxiways, and fenced areas, survey transects were interrupted and reconnaissance was accomplished from a safe and permitted distance. These inaccessible areas included a small western portion of the largest, northernmost study area parcel, as well as portions of the three small parcels in the southeast part of the study area.

Mr. Covert documented his fieldwork using field notes, digital photography, close-scale field maps, and aerial photographs. All field notes, photographs, and records related to the current study are on file at SWCA's Pasadena, California, office.

## RESULTS AND IMPACT CONSIDERATIONS

No cultural resources were identified during the survey of the study area. A dense cover of low-lying ruderal vegetation (Figure 3) and active alfalfa fields (Figure 4) resulted in poor ground visibility, less than 10 percent, throughout much of the study area. Although ground visibility was much improved in the northern portion of the study area, the ground surface was heavily disturbed due to the development of a flood control area, as well as dirt and paved access roads (Figure 5). Other ground disturbances have also been caused by the construction of runways and taxiways within the study area (Figure 6). A reconnaissance-level survey was performed over approximately 20 percent of the study area, within the areas where access was not permitted; however, these areas also featured poor ground visibility and ground disturbances due to berms and other construction activities (Figure 7).

The negative results of the current study may be a reflection of the fact that surface visibility was poor during the field survey, limiting the ability to detect archaeological resources. However, numerous archaeological surveys have taken place near the project area over the last 36 years, and no archaeological resources have been identified within 1.6 km (1 mile) of the study area. The area has been subjected to numerous impacts since its initial occupation by non-native people, including ranching, farming, road-building, and the construction of the airfield. These facts suggest that the likelihood of intact archaeological resources being present in the study area is relatively low.



**Figure 3.** Overview of study area showing dense vegetation; view to the east.



**Figure 4.** Overview of study area showing alfalfa crops; view to the west.



**Figure 5.** Overview of study area showing flood control area; view to the south.



**Figure 6.** Overview of study area showing paved runway; view to the southeast.



**Figure 7.** Overview of study area showing dense vegetation and a berm; view to the east.

## **Project Impacts and Mitigation Measures**

No cultural resources were identified during the field survey, and the archaeological sensitivity of the study area is low. Nevertheless, it is still possible that previously unidentified archaeological resources may be present. For that reason, the following mitigation measures are recommended.

Implementation of the following mitigation measures should occur in the event that unanticipated belowground cultural resources are identified during construction activities. These measures would reduce the level of impacts to cultural resources to less than significant.

### ***Cultural Resource Mitigation Measure 1***

In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, an archaeologist who meets the Secretary of the Interior's professional qualification standards in archaeology (National Park Service 1983) shall be retained. Construction activities (e.g., grading, grubbing, vegetation clearing) within 9 m (25 feet) of the discovery shall be halted while the resources are evaluated for significance under the NRHP and CRHR. Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and would be discussed in consultation with the lead agency.

Prehistoric materials in the project area might include flaked or ground stone tools, tool-making debris, pottery, culturally modified animal bone, fire-affected rock, or soil darkened by cultural activities (midden). Historic materials might include building remains, metal, glass, ceramic artifacts, or other debris greater than 45 years old.

### ***Cultural Resource Mitigation Measure 2***

The discovery of human remains is always a possibility during construction activities; State of California Health and Safety Code Section 7050.5 addresses this topic. This code section states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The county coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification, and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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**Appendix A**  
**Records Search Results**

**ARCHAEOLOGICAL INFORMATION CENTER**

San Bernardino County Museum

2024 Orange Tree Lane

(909) 307-2669 x 255

Redlands, CA 92374

FAX (909) 307-0689

[rlaska@sbcm.sbcounty.gov](mailto:rlaska@sbcm.sbcounty.gov)



San Bernardino  
County

27 January 2012

Samantha Murray

SWCA Environmental Consultants

150 S. Arroyo Pkwy, 2<sup>nd</sup> Floor

Pasadena, CA 91105

Phone Number: 626-240-0587

**HISTORICAL RESOURCES RECORD SEARCH: Chino Airport Project**

In response to your request for information dated 24 January 2012, a records search has been conducted for the above project on USGS Corona North & Prado Dam 7.5' quads.

**Historical Resources:**

Prehistoric Archaeological Resources:

- 0 prehistoric archaeological sites
- 0 pending prehistoric archaeological sites
- 0 prehistoric districts
- 0 prehistoric isolates

Historic Archaeological Resources (sites older than 50 years of age):

- 2 historic archaeological sites
- 14 pending historic archaeological sites
- 10 historic structures
- 0 historic districts
- 0 historic isolates
- many possible historic structure/archaeological site locations determined from historic maps (maps checked): Beasley, 1892; Blackburn, 1932; Hall, 1888; Plat of Rancho Rincon, 1858; Carlisle vs Estate of Yorba, 1871; AAA-various; USGS Corona, 1894/9, 1944/63.

Cultural Landscapes:

- 0 cultural Landscapes

Ethnic Resources:

- 0 ethnic resources

Heritage Properties (designated by State and Federal commissions):

- 0 National Register Listed Properties
- 0 National Register Eligible Properties
- 0 California Historic Landmarks
- 0 California Points of Historic Interest

**PREVIOUS HISTORICAL RESOURCE INVESTIGATIONS:**

Historical resource reports for the project area include:

- 43 Area-specific survey reports
- 6 General area overviews

In addition to the Center's historical resources files, the following publications, manuscripts or correspondence also were consulted:

- 1986 Survey of Surveys: A Summary of California's Historical and Architectural Resource Surveys.
- 1988 Five Views: An Ethnic Sites Survey for California.  
California Historical Landmarks.  
California Points of Historical Interest.
- 2011 Determinations of Eligibility--Records entered into the OHP computer file--received quarterly.
- 2011 Directory of Historic Properties--Records entered into the OHP computer file of historic resources--received quarterly.

**SENSITIVITY OF PROJECT AREA FOR HISTORICAL RESOURCES:**

Based upon the above information, available historical records and maps, and comparisons with similar environmental localities, the sensitivity assessment for this project area is:

Prehistoric Archaeological Resources	Low
Historic Archaeological Resources	High
Historic Resources (built environment)	High
Cultural Landscapes	Unknown
Ethnic Resources	Unknown

Comments: Potential for Historic & Historic Archaeological Resources based on site/structures found in the project area & streets/structures/airport/well shown on historic maps in the project area. APE is primarily within the historic Rancho Santa Ana del Chino and is also in the northern edge of Rancho Rincon and is adjacent to or may be partially within Rancho Jurupa.

## RECOMMENDATIONS:

In order to minimally comply with CEQA, NEPA and/or Section 106 of the National Historic Preservation Act, a field survey should be conducted by a qualified professional for historical resources within portions of the project area not previously surveyed for such resources. A list of qualified professionals can be found at [www.chrisinfo.org](http://www.chrisinfo.org).

A CEQA Initial Study of "**MAYBE**" for potential adverse environmental impact to historical resources is warranted unless it can be documented by a qualified professional that NO resources older than 45 years in age exist on the property. Implementation of the above recommendation(s) will ensure that existing historical resources will be inventoried and evaluated, and that appropriate mitigation measures will be recommended to avoid adverse impacts.

If appropriate mitigation measures are not proposed for significant historical resources within the project area, then subsequent destruction of these resources may violated the California Environmental Quality Act, Nation Environmental Policy Act, National Historic Preservation Act, California codes or various local government ordinances.

If prehistoric or historic artifacts over 50 years in age area encountered during land modification, than activities in the immediate area of the finds should be halted and an on-site inspection should be performed immediately by a qualified archaeologist. This professional will be able to assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act and/or the Federal National Environmental Policy Act.

If human remains are encountered on the property, then the San Bernardino County Coroner's Office **MUST** be contacted within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other involved agencies. Contact the County Coroner at 175 South Lena Road, San Bernardino, CA 92415-0037 or (909) 387-2543, or (760) 955-8535 in Victorville, or (760) 365-1668 in Yucca Valley or (760) 326-4825 in Needles.

The County of San Bernardino requests that historical resource data and artifacts collected within this project area be permanently curated at a repository within the County. Per a State Historical Resources Commission motion dated 7 Feb 1992, the repository selected should consider 36 CFR 79, Curation of Federally-owned and Administered Archaeological Collection; Final Rule, as published Federal Register, 12 Sept 1990, or a later amended for, for archival collection standards.

If you have any further questions, please, contact me at (909) 307-2669 x 255, Monday through Friday between 8 AM and 4 PM.



Robin E. Laska  
Assistant Center Coordinator

## EASTERN INFORMATION CENTER

### CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

Department of Anthropology, University of California, Riverside, CA 92521-0418

(951) 827-5745 - Fax (951) 827-5409 - eickw@ucr.edu

Inyo, Mono, and Riverside Counties

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February 13, 2012

EIC-RIV-ST-1722

Samantha Murray  
SWCA Environmental Consultants  
150 South Arroyo Parkway. 2<sup>nd</sup> Floor  
Pasadena, CA 91105

Re: Cultural Resources Records Search for the Riverside County Portion of the Chino Airport Project Kadiz's (Project #021589)

Dear Ms. Murray:

We received your request on February 2, 2012, for a cultural resources records search for the Chino Airport Project located in Section 27, T.2S, R.2S, SBBM, in the Santa Ana del Chino area of Riverside County. We have reviewed our site records, maps, and manuscripts against the location map you provided.

Our records indicate that seven cultural resources studies have been conducted within Riverside County portion of your project area radius. Two additional studies provide overviews of cultural resources in the general project vicinity. All of these reports are listed on the attachment entitled "Eastern Information Center Report Listing" and are available upon request at 15¢/page plus \$40/hour.

No cultural resources properties are recorded within the Riverside County portion of the project area radius.

The above information is reflected on the enclosed maps. Areas that have been surveyed are highlighted in yellow; pencil line slashes indicate a consultant records search report. Numbers marked in blue ink refer to the report number (RI #). Additional sources of information consulted are identified below.

National Register of Historic Places: no listed properties are located within the boundaries of the project area.

Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility (ADOE): no listed properties are located within the boundaries of the project area.

Samantha Murray  
February 13, 2012  
Page 2

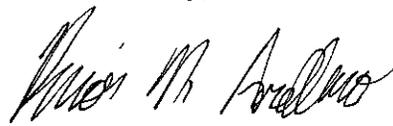
Office of Historic Preservation (OHP), Historic Property Directory (HPD):  
no listed properties are located within the boundaries of the project area.

*Note: not all properties in the California Historical Resources Information System are listed in the OHP ADOE and HPD; the ADOE and HPD comprise lists of properties submitted to the OHP for review.*

A copy of the 1947 USGS Corona 15' topographic map is included for your reference.

As the Information Center for Riverside County, it is necessary that we receive a copy of all cultural resources reports and site information pertaining to this county in order to maintain our map and manuscript files. Confidential information provided with this records search regarding the location of cultural resources outside the boundaries of your project area should not be included in reports addressing the project area.

Sincerely,



Ramón M. Arellano  
Information Officer

Enclosures

**Exact location of identified resources is not disclosed to protect resource integrity.**

# Eastern Information Center Report Listing

Report No.	Year	Author(s)	Title	Affiliation	Pages	Resources	Survey	Monitoring	----- Acreage -----
RI-00535	1979	Lowell John Bean,, Sylvia Brakke Vane, Matthew C. Hall, Harry Lawton, Richard Logan, Lee Gooding Massey, John Oxendine, Charles Rozaire, and David P. Whistler	Cultural Resources and the Devers-Mira 500 KV Transmission Line Route (Valley to Mira Loma Section)	Cultural Systems Research, Incorporated, Menl Park, CA	192	16	403202.79	0.00	
✓ RI-01674	1983	MACKO, MICHAEL, EDWARD B. WEIL, JILL WEISBORD, and JOHN COOPER	MIRA LOMA - SERRANO 500 KV DC AND SERRANO - VILLA PARK 220 KV TRANSMISSION LINE PROJECT - FINAL REPORT, CULTURAL RESOURCE SURVEY AND TEST EXCAVATIONS AT CA-ORA-614, CA-SBR-3690, AND CA-SBR-4032	APPLIED CONSERVATION TECHNOLOGY, INC., Fullerton, CA	184	0	48.49	0.00	
✓ RI-02902	1989	Mark T. Swanson and Roger G. Hatheway	The Prado Dam and Reservoir, Riverside and San Bernardino Counties, California.	Greenwood and Associates	120	0	0.00	0.00	
✓ RI-03590	1997	HALE, ALICE	CULTURAL RESOURCES ASSESSMENT, SANTA ANA WATERSHED PROJECT AUTHORITY, CHINO BASIN DESALINATION PROGRAM: WATER PIPELINES, WELLS, AND RESERVOIR	GREENWOOD & ASSOC.	30	0	0.00	0.00	
✓ RI-04924	2004	HOOVER, ANNA M. and JULIA FOX	AN ARCHAEOLOGICAL HISTORIC EVALUATION REPORT: TRACT 31309, APNS 144-020-004, 144-020, 012, -013 AND 144-020-015, 110-ACRE PROPERTY, NORCO, COUNTY OF RIVERSIDE, CALIFORNIA	L&L ENVIRONMENTAL, INC.	38	0	0.00	0.00	
✓ RI-05400	2005	HOOVER, ANNA and KRISTIE BELVINS	A PHASE I ARCHAEOLOGICAL RECORD SEARCH AND SURVEY REPORT FOR TRACT 32491, APNS 144-020-003, 43.87 ACRES, NORCO, COUNTY, OF RIVERSIDE, CA	L&L ENVIRONMENTAL	45	0	43.87	0.00	
✓ RI-05815	2005	POLLOCK, KATHERINE H. and MICHAEL K. LERCH	ARCHAEOLOGICAL SURVEY FO THREE ALTERNATE SITES FOR THE PROPOSED KIMBALL SUBSTATION, RIVERSIDE AND SAN BERNARDINO COUNTIES, CALIFORNIA	STATISTICAL RESEARCH, INC.	5	0	~1.00	0.00	
✓ RI-06544	2006	TANG, BAI, MICHAEL HOGAN, DEIRDRE ENCARNACION, NICHOLAS HEARTH, JOSH SMALLWOOD, and TERRI JACQUEMAIN	HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT, THE RANCH AT EASTVALE, ASSESSOR'S PARCEL NOS. 144-010-008, -009, AND -013, NEAR THE CITY OF NORCO, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH	24	0	120.00	0.00	
✓ RI-07111	2006	Pollock, Katherine H.	Archaeological Survey of the New Chino-Kimball 66KV Transmission Line, City of Chino, San Bernardino and Riverside Counties, California.	Southern California Edison	7	0	-83.51	0.00	

May 7, 2012

Ms. Judi Krauss  
Environmental Planner  
Coffman Associates, Airport Consultants  
4835 E. Cactus Rd., Ste. #235  
Scottsdale, AZ 85254

**RE: Native American Consultation in support of the "Cultural Resources Survey Report for the Chino Airport, City of Chino, San Bernardino County, California"**

SWCA Environmental Consultants (SWCA) was retained by Coffman Associates to conduct cultural resources work that included documentation of the results of a records search and the completion of a cultural resources survey in support of the Chino Airport Project (the project). This assessment was prepared in accordance with the California Environmental Quality Act (CEQA). The results of these findings were presented in the "Cultural Resources Survey Report for the Chino Airport, City of Chino, San Bernardino County, California," completed by SWCA in May 2012. As part of this process, SWCA undertook consultation with Native American groups to identify potential cultural resources in or near the study area. This included the initiation and review of a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) and coordination with local Native American individuals and tribal organizations as summarized below and enclosed with this letter report.

SWCA initiated Native American coordination for this project on January 25, 2012. As part of the process of identifying cultural resources in or near the study area, SWCA Cultural Resources Project Manager Samantha Murray contacted the NAHC to request a review of the SLF. The NAHC faxed a response on March 7, 2012 (enclosed), and stated that Native American cultural resources were not identified within 0.8 km (0.5 mile) of the study area, but noted that it is always possible for cultural resources to be unearthed during construction activities. The NAHC also provided a contact list of ten Native American individuals or tribal organizations that may have knowledge of cultural resources in or near the study area. SWCA prepared and mailed letters to each of the NAHC-listed contacts on March 7, 2012, requesting information regarding any Native American cultural resources in or immediately adjacent to the study area.

SWCA received one response to the coordination letters. A copy of this response is enclosed and is summarized here:

- On March 14, 2012, Joseph Ontiveros of the Soboba Band of Luiseño Indians sent a letter to SWCA via U.S. Mail. Mr. Ontiveros stated that although the project area is outside the existing reservation, it falls within the bounds of the tribal traditional use areas. As a result, Mr. Ontiveros requested a government-to-government consultation in accordance with Section 106 of the National Historic Preservation Act, including the transfer of information to the Soboba Band of Luiseño Indians regarding the process of the project. Mr. Ontiveros also requested that the Soboba Band of Luiseño Indians continue to be the a lead consulting

tribal entity for the project, and that a Native American Monitor(s) from the Soboba Band of Luiseño Indians Cultural Resource Department be present during any ground-disturbing proceedings, including archaeological survey and testing. Finally, Mr. Ontiveros requested that proper procedures be taken and requests of the tribe be honored, including the return of any cultural items (artifacts) and treatment and disposition of remains.

SWCA made two follow-up phone calls/emails to the remaining nine Native American contacts on March 22, 2012, and April 3, 2012. Mr. Contreras of the Morongo Band of Mission Indians responded via telephone and stated he had no concerns regarding the project, but would like to be informed of any discoveries that may occur. No additional responses have been received to date. A complete record of Native American coordination to date is provided below. No further action is required for this effort.

**Table 1.** Record of Native American Coordination Efforts

<b>NAHC-provided Contact</b>	<b>SWCA Coordination Efforts</b>	<b>Results of Coordination Efforts</b>
<p><b>Pechanga Band of Mission Indians</b> P.O. Box 1477 Temecula, California 92593</p> <p>Contact: Paul Macarro</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left voicemail. <b>4/3/12:</b> Left voicemail.</p>	<p>No response to date.</p>
<p><b>Ramona Band of Cahuilla Mission Indians</b> P.O. Box 391670 Anza, California 92539</p> <p>Contact: Joseph Hamilton</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Follow-up call: SWCA was directed to John Gomez of the Cultural Resources Board; left voicemail for Mr. Gomez. <b>4/3/12:</b> Follow-up call: Mr. Gomez asked that SWCA resend the letter via email to him. A copy of the letter was sent to Mr. Gomez via email.</p>	<p>No response to date.</p>
<p><b>San Manuel Band of Mission Indians</b> 26569 Community Center Drive Highland, California 92346</p> <p>Contact: James Ramos</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left voicemail. <b>4/3/12:</b> Left voicemail.</p>	<p>No response to date.</p>
<p><b>Gabrieleno/Tongva San Gabriel Band of Mission Indians</b> P.O. Box 693 San Gabriel, California 91778</p> <p>Contact: Anthony Morales</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left message with Dee (no surname provided). <b>4/3/12:</b> Follow-up call: Mr. Morales stated that he did not have any concerns regarding the project.</p>	<p>No further action required.</p>
<p><b>Gabrielino Tongva Nation</b> P.O. Box 86908 Los Angeles, California 90086</p> <p>Contact: Sam Dunlap</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left voicemail. <b>4/3/12:</b> Left voicemail.</p>	<p>No response to date.</p>

**Table 1. Record of Native American Coordination Efforts**

NAHC-provided Contact	SWCA Coordination Efforts	Results of Coordination Efforts
<p><b>Morongo Band of Mission Indians</b> 12700 Pumarra Road Banning, California 92220</p> <p>Contact: Michael Contreras</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left voicemail.</p>	<p><b>3/22/12:</b> Mr. Contreras responded via telephone and stated he had no concerns regarding the project, but would like to be informed of any discoveries that may occur.</p>
<p><b>San Miguel Band of Mission Indians</b> 26569 Community Center Drive Highland, California 92346</p> <p>Contact: Ann Brierty</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left voicemail. <b>4/3/12:</b> Left voicemail.</p>	<p>No response to date.</p>
<p><b>Serrano Nation of Indians</b> P.O. Box 343 Patton, California 92369</p> <p>Contact: Goldie Walker</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Telephoned: number provided by NAHC is no longer in service. <b>4/3/12:</b> Telephoned: number provided by NAHC is no longer in service.</p>	<p>No response to date.</p>
<p><b>Morongo Band of Mission Indians</b> 9570 Mias Canyon Road Banning, California 92220</p> <p>Contact: Ernest H. Siva</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Left voicemail. <b>4/3/12:</b> Left voicemail.</p>	<p>No response to date.</p>
<p><b>Soboba Band of Luiseño Indians</b> P.O. Box 487 San Jacinto, California 92581</p> <p>Contact: Joseph Ontiveros</p>	<p><b>3/7/12:</b> Letter sent via U.S. Mail. <b>3/22/12:</b> Follow up call: Mr. Ontiveros had not been to P.O. Box, but asked that SWCA call to confirm receipt of letter by 3/28/12.</p>	<p><b>3/14/12:</b> In a letter sent to SWCA, Mr. Ontiveros requested a government-to-government consultation; that the Soboba Ban Luiseño Indians continue to be a lead consulting tribal entity for the project; Native American monitoring; and that proper procedures are taken.</p>

If you have any questions regarding this letter report, please do not hesitate to contact me at (626) 240-0587 or scarmack@swca.com.

Sincerely,



Shannon Carmack

Cultural Resources Project Manger

**Enclosure:** NAHC Sacred Lands File Results and Native American Coordination

## **Sacred Lands File & Native American Contacts List Request**

### **NATIVE AMERICAN HERITAGE COMMISSION**

915 Capitol Mall, RM 364

Sacramento, CA 95814

(916) 653-4082

(916) 657-5390 – Fax

nahc@pacbell.net

*Information Below is Required for a Sacred Lands File Search*

Project: Cultural Resources Studies for the Chino Airport Project (Project #021589)

County: San Bernardino County

USGS Quadrangle Name: Prado Dam, CA

Township Range Section(s): Township 02 South / Range 7 West / Santa Ana del Chino Landgrant

Company/Firm/Agency: SWCA Environmental Consultants

Contact Person: Sam Murray, Cultural Resources Project Manager

Street Address: 150 S. Arroyo Parkway, 2<sup>nd</sup> Floor

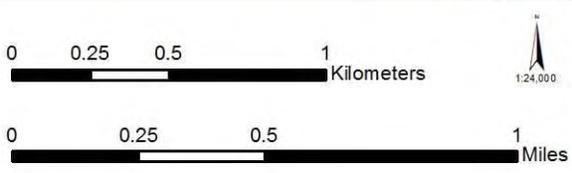
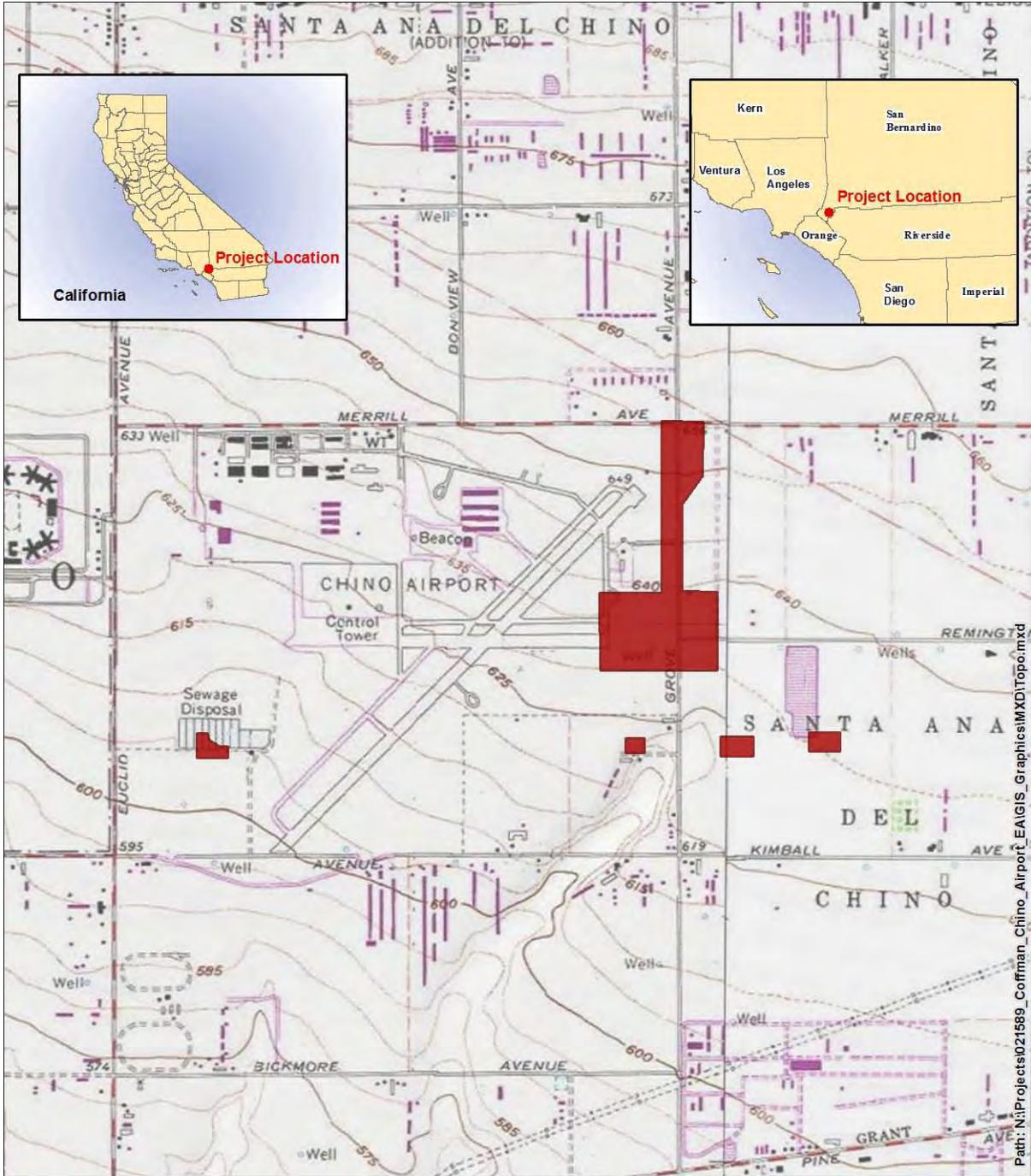
City: Pasadena Zip: 91105

Phone: 626.240.0587

Fax: 626.240.0607

Email: smurray@swca.com

Project Description: Cultural resources survey of five areas within the Chino Airport totaling 49 acres.



Prado Dam USGS 7.5 Topographic Quadrangle  
 San Bernardino County, California  
 Township 02S, Range 07W, Santa Ana Del Chino Landgrant

Area of Potential Effect (APE)

**SWCA**  
 ENVIRONMENTAL CONSULTANTS  
 150 S. Arroyo Parkway, 2nd Floor  
 Pasadena, CA 91105  
 Tel 626.240.0587  
 Fax 626.240.0607

Path: N:\Projects\021589\_Coffman\_Chino\_Airport\_EA\GIS\_Graphics\MXD\Topo.mxd

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
 SACRAMENTO, CA 95814  
 (916) 653-6251  
 Fax (916) 657-5390  
 Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
 ds\_nahc@pacbell.net



March 7, 2012

Ms. Samantha Murray, RPA

**SWCA Environmental Consultants**

150 S. Arroyo Parkway, 2<sup>nd</sup> Floor  
 Pasadena, CA 91105

Sent by FAX to: 626-240-0607

No. of Pages: 4

Re: Sacred Lands File Search and Native American Contacts list for the "Cultural Resources Studies for the Chino Airport Project (#022883);" located near the City of Chino; San Bernardino County, California

Dear Ms. Murray:

The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search of the 'area of potential effect,' (APE) based on the USGS coordinates provided and **Native American cultural resources were not identified** in the project areas of potential effect (e.g. APE): you specified. However, there are Native American cultural resources in close proximity to the APE. Also, please note; the NAHC Sacred Lands Inventory is not exhaustive and does not preclude the discovery of cultural resources during any project groundbreaking activity.

California Public Resources Code §§5097.94 (a) and 5097.96 authorize the NAHC to establish a Sacred Land Inventory to record Native American sacred sites and burial sites. These records are exempt from the provisions of the California Public Records Act pursuant to California Government Code §6254 (r). The purpose of this code is to protect such sites from vandalism, theft and destruction.

In the 1985 Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites

The California Environmental Quality Act (CEQA – CA Public Resources Code §§ 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential

effect (APE), and if so, to mitigate that effect. CA Government Code §65040.12(e) defines "environmental justice" provisions and is applicable to the environmental review processes.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Local Native Americans may have knowledge of the religious and cultural significance of the historic properties of the proposed project for the area (e.g. APE). Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). We urge consultation with those tribes and interested Native Americans on the list the NAHC has attached in order to see if your proposed project might impact Native American cultural resources. Lead agencies should consider avoidance as defined in §15370 of the CEQA Guidelines when significant cultural resources as defined by the CEQA Guidelines §15064.5 (b)(c)(f) may be affected by a proposed project. If so, Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "substantial," and Section 2183.2 which requires documentation, data recovery of cultural resources.

The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Partnering with local tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 4(f), Section 110 (f)(k) of federal NHPA (16 U.S.C. 470 *et seq.*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The NAHC remains concerned about the limitations and methods employed for NHPA Section 106 Consultation.

Also, California Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery', another important reason to have Native American Monitors on board with the project.

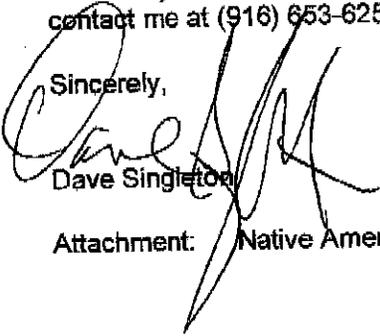
To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. An excellent way to reinforce the relationship between a project and local tribes is to employ Native American Monitors in all phases of proposed projects including the planning phases.

Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not

eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,



Dave Singleton

Attachment: Native American Contact List

**Native American Contacts**  
**San Bernardino County**  
**March 7, 2012**

**Pechanga Band of Mission Indians**  
**Paul Macarro, Cultural Resources Manager**  
 P.O. Box 1477 Luiseno  
 Temecula , CA 92593  
**(951) 770-8100**  
 pmacarro@pechanga-nsn.  
 gov  
 (951) 506-9491 Fax

**Ramona Band of Cahuilla Mission Indians**  
**Joseph Hamilton, Chairman**  
 P.O. Box 391670 Cahuilla  
 Anza , CA 92539  
 admin@ramonatribe.com  
 (951) 763-4105  
 (951) 763-4325 Fax

**San Manuel Band of Mission Indians**  
**James Ramos, Chairperson**  
 26569 Community Center Drive Serrano  
 Highland , CA 92346  
 (909) 864-8933  
 (909) 864-3724 - FAX  
 (909) 864-3370 Fax

**Gabrielino/Tongva San Gabriel Bnd Mission**  
**Anthony Morales, Chairperson**  
 PO Box 693 Gabrielino Tongva  
 San Gabriel , CA 91778  
 GTTribalcouncil@aol.com  
 (626) 286-1632  
 (626) 286-1758 - Home  
 (626) 286-1262 -FAX

**Gabrielino Tongva Nation**  
**Sam Dunlap, Chairperson**  
 P.O. Box 86908 Gabrielino Tongva  
 Los Angeles , CA 90086  
 samdunlap@earthlink.net  
 (909) 262-9351 - cell

**Morongo Band of Mission Indians**  
**Michael Contreras, Cultural Heritage Prog.**  
 12700 Pumarra Road Cahuilla  
 Banning : CA 92220 Serrano  
**(951) 201-1866 - cell**  
 mcontreras@morongo-nsn.  
 gov  
 (951) 922-0105 Fax

**San Manuel Band of Mission Indians**  
**Ann Brierty, Policy/Cultural Resources Departmen**  
 26569 Community Center. Drive Serrano  
 Highland , CA 92346  
 (909) 864-8933, Ext 3250  
 abrierty@sanmanuel-nsn.  
 gov  
 (909) 862-5152 Fax

**Serrano Nation of Indians**  
**Goldie Walker**  
 P.O. Box 343 Serrano  
 Patton , CA 92369  
 (909) 862-9883

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed Cultural Resources Studies for the Chino Airport Project; located in the Chino area; San Bernardino County, California for which a Sacred Lands File search and Native American Contacts list were requested.

**Native American Contacts**  
San Bernardino County  
March 7, 2012

**Ernest H. Siva**  
Morongo Band of Mission Indians Tribal Elder  
9570 Mias Canyon Road Serrano  
Banning, CA 92220 Cahuilla  
**siva@dishmail.net**  
(951) 849-4676

**SOBOBA BAND OF LUISENO INDIANS**  
Joseph Ontiveros, Cultural Resource Department  
P.O. BOX 487 Luiseno  
San Jacinto, CA 92581  
jontiveros@soboba-nsn.gov  
(951) 663-5279  
(951) 654-5544, ext 4137

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.6 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed Cultural Resources Studies for the Chino Airport Project; located in the Chino area; San Bernardino County, California for which a Sacred Lands File search and Native American Contacts list were requested.



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.

Pasadena Office  
150 S. Arroyo Parkway, 2nd Floor  
Pasadena, CA 91105  
Tel 626.240.0587 Fax 626.240.0607  
www.swca.com

March 7, 2012

Ann Brierty, Policy/Cultural Resources Department  
San Manuel Band of Mission Indians  
26569 Community Center Drive  
Highland, CA 92346

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Ms. Brierty:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

The proposed project area is located in southwestern San Bernardino County within the corporate limits of the City of Chino and adjacent to the City of Ontario. The project Area of Potential Effects (APE) consists of five areas (totaling approximately 20-acres) within the Chino Airport, bounded by Merrill Avenue to the north, agricultural-related farmland and dairy operations to the east, Kimball Avenue to the south, and Euclid Avenue to the west. The project APE falls within the USGS 7.5-minute Prado Dam, California quadrangle in Township 2 South, Range 7 West of the Santa Ana Del Chino Landgrant (see enclosed project APE map).

As part of the process of identifying cultural resources issues for this project, SWCA contacted the California Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC SLF search did not identify any Native American cultural resources in the immediate project area, but noted that there are Native American cultural resources in close proximity to the APE. The NAHC recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

If you have knowledge of any cultural resources that may exist within or near the proposed project area, please contact me via telephone at (626) 240-0587 Ext. 6608; or via email at smurray@swca.com; or in writing at the above address at your earliest convenience. Thank you for your assistance.

Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



ENVIRONMENTAL CONSULTANTS

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Pasadena Office  
150 S. Arroyo Parkway, 2nd Floor  
Pasadena, CA 91105  
Tel 626.240.0587 Fax 626.240.0607  
www.swca.com

March 7, 2012

Michael Contreras, Cultural Heritage Prog.  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA 92220

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Contreras:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

The proposed project area is located in southwestern San Bernardino County within the corporate limits of the City of Chino and adjacent to the City of Ontario. The project Area of Potential Effects (APE) consists of five areas (totaling approximately 20-acres) within the Chino Airport, bounded by Merrill Avenue to the north, agricultural-related farmland and dairy operations to the east, Kimball Avenue to the south, and Euclid Avenue to the west. The project APE falls within the USGS 7.5-minute Prado Dam, California quadrangle in Township 2 South, Range 7 West of the Santa Ana Del Chino Landgrant (see enclosed project APE map).

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Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



ENVIRONMENTAL CONSULTANTS

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Pasadena Office  
150 S. Arroyo Parkway, 2nd Floor  
Pasadena, CA 91105  
Tel 626.240.0587 Fax 626.240.0607  
www.swca.com

March 7, 2012

Sam Dunlap, Chairperson  
Gabrielino Tongva Nation  
P.O. Box 86908  
Los Angeles, CA 90086

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Dunlap:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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If you have knowledge of any cultural resources that may exist within or near the proposed project area, please contact me via telephone at (626) 240-0587 Ext. 6608; or via email at [smurray@swca.com](mailto:smurray@swca.com); or in writing at the above address at your earliest convenience. Thank you for your assistance.

Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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150 S. Arroyo Parkway, 2nd Floor  
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www.swca.com

April 3, 2012

John Gomez  
Ramona Band of Cahuilla Mission Indians  
P.O. Box 391670  
Anza, CA 92539

Sent Via E-Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Gomez:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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March 7, 2012

Joseph Hamilton, Chairman  
Ramona Band of Cahuilla Mission Indians  
P.O. Box 391670  
Anza, CA 92539

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Hamilton:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

A handwritten signature in black ink, appearing to read 'Samantha Murray'. The signature is fluid and cursive, written over a light blue horizontal line.

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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March 7, 2012

Paul Macarro, Cultural Resources Manager  
Pechanga Band of Mission Indians  
P.O. Box 1477  
Temecula, CA 92593

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Macarro:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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March 7, 2012

Anthony Morales, Chairperson  
Gabrieleno/Tongva San Gabriel Band Mission  
P.O. Box 693  
San Gabriel, CA 91778

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Morales:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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March 7, 2012

Joseph Ontiveros, Cultural Resources Department  
Soboba Band of Luiseno Indians  
P.O. Box 487  
San Jacinto, CA 92581

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Ontiveros:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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www.swca.com

March 7, 2012

James Ramos, Chairperson  
San Manuel Band of Mission Indians  
26569 Community Center Drive  
Highland, CA 92346

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Ramos:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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www.swca.com

March 7, 2012

Ernest H. Siva  
Morongo Band of Mission Indians Tribal Elder  
9570 Mias Canyon Road  
Banning, CA 92220

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Mr. Siva:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

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Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map



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www.swca.com

March 7, 2012

Goldie Walker  
Serrano Nation of Indians  
P.O. Box 343  
Patton, CA 92369

Sent Via U.S. Mail

**RE: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

Dear Ms. Walker:

SWCA Environmental Consultants (SWCA) has been retained by Coffman Associates to perform cultural resources services in accordance with Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA), for the Chino Airport Project (proposed project). The Federal Aviation Administration (FAA) is the lead agency for this project. San Bernardino County's Department of Airports (County), the owner and operator of Chino Airport, has initiated the preparation of a Master Plan Update for the Chino Airport in order to assess its existing and future role, while also providing direction and guidance for future development.

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Sincerely,

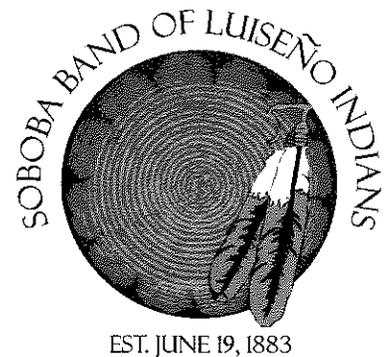
A handwritten signature in black ink, appearing to read "Samantha Murray".

Samantha Murray  
Cultural Resources Project Manager

Enclosures: project APE map

March 14, 2012

Attn: Samantha Murray, Cultural Resources Project Manager  
SWCA Environmental Consultants  
150 S. Arroyo Parkway, 2<sup>nd</sup> Floor  
Pasadena, CA 91105



**Re: Cultural Resources Survey for the Chino Airport Project, San Bernardino County, California**

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project location is in close proximity to known village sites and is a shared use area that was used in ongoing trade between the Luiseno and Cahuilla tribes. Therefore it is regarded as highly sensitive to the people of Soboba.

Soboba Band of Luiseño Indians is requesting the following:

1. **Government to Government** consultation in accordance to Section 106. Including the transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.
2. Soboba Band of Luiseño Indians continue to be a lead consulting tribal entity for this project.
3. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason the Soboba Band of Luiseño Indians requests that Native American Monitor(s) from the Soboba Band of Luiseño Indians Cultural Resource Department to be present during any ground disturbing proceedings. Including surveys and archaeological testing.
4. Request that proper procedures be taken and requests of the tribe be honored (Please see the attachment)

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Ontiveros", is written over a horizontal line.

Joseph Ontiveros  
Soboba Cultural Resource Department  
P.O. Box 487  
San Jacinto, CA 92581  
Phone (951) 654-5544 ext. 4137  
Cell (951) 663-5279  
[jontiveros@soboba-nsn.gov](mailto:jontiveros@soboba-nsn.gov)

**Cultural Items (Artifacts).** Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer should agree to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. When appropriate and agreed upon in advance, the Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

The Developer should waive any and all claims to ownership of Native American ceremonial and cultural artifacts that may be found on the Project site. Upon completion of authorized and mandatory archeological analysis, the Developer should return said artifacts to the Soboba Band within a reasonable time period agreed to by the Parties and not to exceed (30) days from the initial recovery of the items.

**Treatment and Disposition of Remains**

A. The Soboba Band shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.

B. The Soboba Band, as MLD, shall complete its inspection within twenty-four (24) hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98 (a). The Parties agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes.

C. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The Soboba Band, as the MLD in consultation with the Developer, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains.

D. All parties are aware that the Soboba Band may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near, the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Developer should accommodate on-site reburial in a location mutually agreed upon by the Parties.

E. The term "human remains" encompasses more than human bones because the Soboba Band's traditions periodically necessitated the ceremonial burning of human remains. Grave goods are those artifacts associated with any human remains. These items, and other funerary remnants and their ashes are to be treated in the same manner as human bone fragments or bones that remain intact.

**Coordination with County Coroner's Office.** The Lead Agencies and the Developer should immediately contact both the Coroner and the Soboba Band in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c).

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

Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer agrees to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

**Appendix D**  
**NOISE AND COMPATIBLE LAND USE**

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## **Appendix D**

### **NOISE AND COMPATIBLE LAND USE**

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The compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the airport's noise impacts. Typically, significant impacts will occur over noise-sensitive areas within the 65 Community Noise Equivalent Level (CNEL) noise contour, based upon the Federal Aviation Administration's (FAA) Integrated Noise Model (INM).

INM describes aircraft noise in either the Yearly Day-Night Average Sound Level (DNL) or the CNEL. DNL accounts for the increased sensitivity to noise at night (10:00 p.m. to 7:00 a.m.) and is the metric preferred by the FAA, Environmental Protection Agency (EPA), and Department of Housing and Urban Development (HUD), among others, as an appropriate measure of cumulative noise exposure. In California, however, these agencies accept the use of CNEL which, in addition to nighttime sensitivities, also accounts for increased sensitivities during the evening hours (7:00 p.m. to 10:00 p.m.). The FAA accepts the 65 CNEL metric as the threshold of significance for the noise analysis within the State of California.

According to the *Chino Airport Comprehensive Land Use Plan* prepared for the San Bernardino County Airport Land Use Commission in November 1991, current County policy restricts residential construction where aircraft noise exposure exceeds a 65 decibel threshold within exterior living spaces. In addition, all new residential construction will utilize measures to mitigate aircraft noise exposure to 45 decibels or less within interior living spaces. CNEL is defined as the average A-weighted sound level as measured in decibels during a 24-hour period. A 10 decibel weighting is applied to noise events occurring at night, and a 4.8 decibel weighting is applied to those occurring during the evening hours. CNEL is a summation metric which allows for objective analysis and can describe noise exposure comprehensively over a large area. In addition to being widely accepted, the primary benefit of using the CNEL metric is that it accounts

for the average community response to noise as determined by the actual number and types of noise events and the time of day they occur.

A variety of user-supplied input data is required to use the INM. This includes the airport elevation, average annual temperature, airport area terrain, a mathematical definition of the airport runways, the mathematical description of ground tracks above which aircraft fly, and the assignment of specific take-off weights to individual flight tracks. In addition, aircraft not included in the model's database may be defined for modeling, subject to FAA approval.

Noise contours were generated for the existing airport condition (2009) and forecast conditions (2015 and 2030). Existing airport activity for 2009, the most recent full calendar year of available data, was collected from the Airport Traffic Control Tower (ATCT) at Chino Airport.

The selection of individual aircraft types is important to the modeling process because different aircraft types generate different noise levels. The aircraft fleet mix was derived from an inventory of existing operations at the airport. Existing and forecast airport fleet mix data input into the noise analysis (i.e., take-offs and landings, or operations by aircraft) are summarized in **Table D1**.

**TABLE D1**  
**Operational Fleet Mix**  
**Chino Airport Aircraft Fleet Mix and Operations**

<b>Aircraft</b>	<b>2009</b>	<b>2015</b>	<b>2030</b>
<b><i>Itinerant Operations</i></b>			
Single Engine Fixed Pitch Propeller	20,105	20,700	23,700
Single Engine Variable Pitch Propeller	20,104	20,700	23,700
Multi-Engine Piston	10,700	11,200	13,000
Turboprop	5,400	6,200	10,000
Small Fanjet (<30,000 lbs.)	4,800	5,600	8,600
Medium Fanjet (30,000 – 90,000 lbs.)	800	1,100	1,900
Large Fanjet (>90,000 lbs.)	300	400	800
Helicopter	2,000	2,200	2,600
<b>TOTAL ITINERANT OPERATIONS</b>	<b>64,209</b>	<b>68,100</b>	<b>84,300</b>
<b><i>Local Operations</i></b>			
Single Engine Fixed Pitch Propeller	33,600	35,600	45,000
Single Engine Variable Pitch Propeller	33,600	35,600	45,000
Multi-Engine Piston	10,000	10,500	12,000
Helicopter	27,800	29,300	34,500
<b>TOTAL LOCAL OPERATIONS</b>	<b>105,000</b>	<b>111,000</b>	<b>136,500</b>
<b>TOTAL OPERATIONS</b>	<b>169,209</b>	<b>179,100</b>	<b>220,800</b>

Source: Coffman Associates analysis

Existing noise conditions are depicted on **Exhibit D1**. Under existing conditions, the 65 CNEL contour does not extend beyond airport property, resulting in no significant noise impacts.

Future noise contours for 2015 and 2030 are depicted on **Exhibits D2** and **D3**, respectively. The 65 CNEL contour remains entirely on existing or ultimate airport property in the 2015 future

noise condition. The 2030 65 CNEL contour extends beyond ultimate airport property east of the Runway 26R threshold over a small portion of land currently used for agricultural purposes. This land is included within *The Preserve Specific Plan*, prepared for the City of Chino in March 2003, which identifies it to be used as a Public Facility in the future. Permitted land uses in this Public Facility designated area include minor utility facilities, police and fire stations, and row crops. These facilities would be considered to be compatible land uses.



Figure D1  
2009 NOISE EXPOSURE CONTOURS

09M09-01-05/03/12

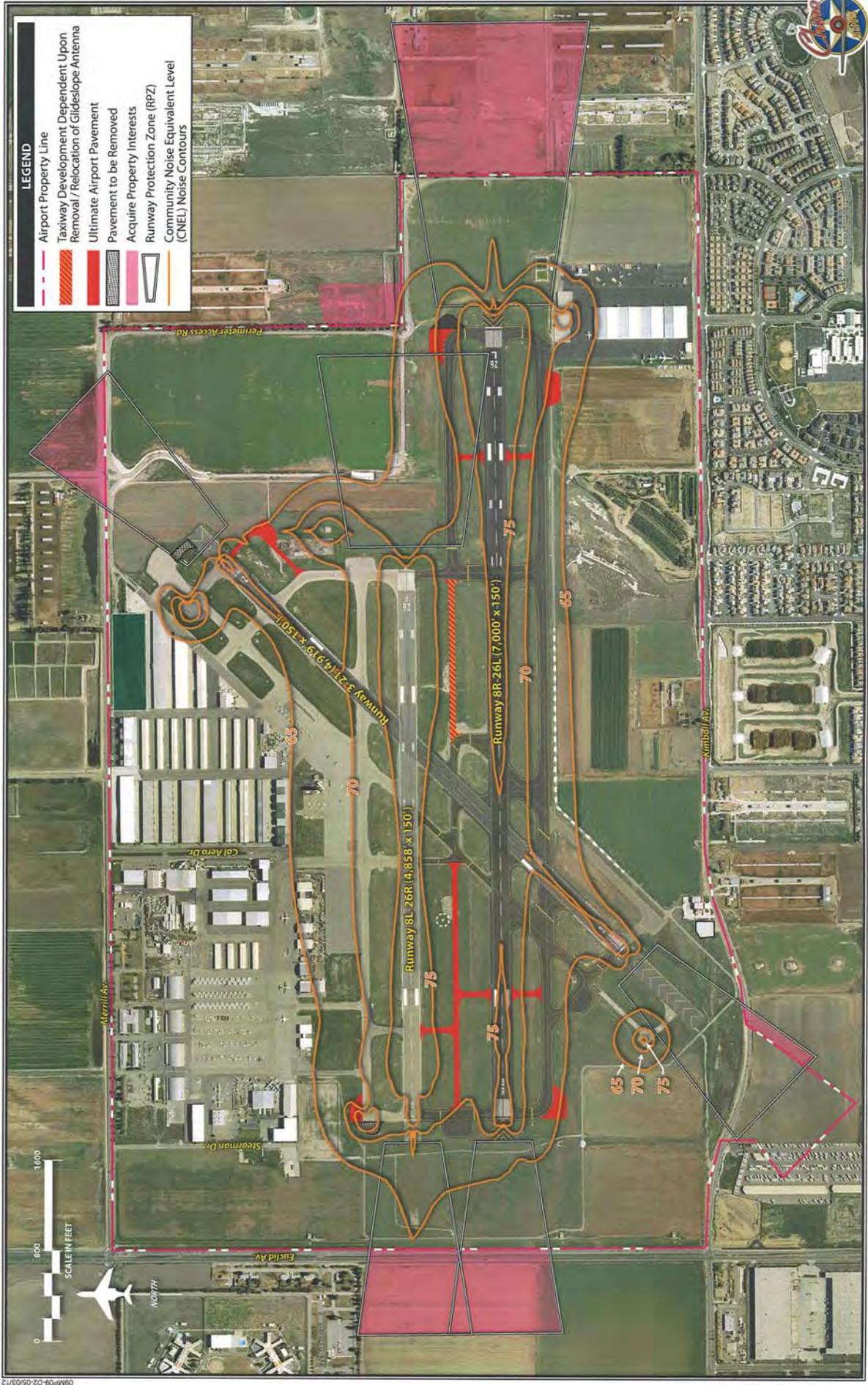


Figure D2  
2015 NOISE EXPOSURE CONTOURS

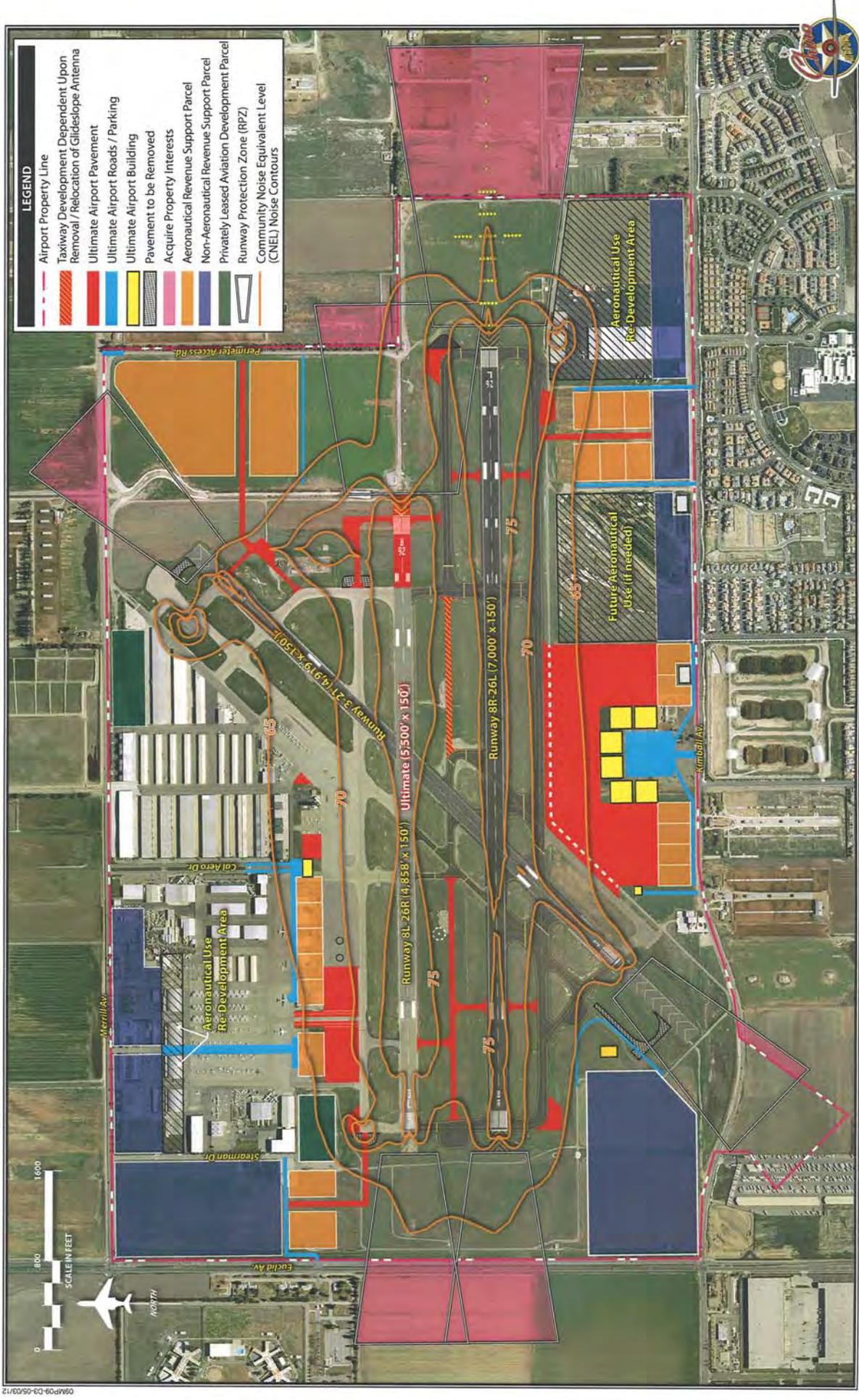


Figure D3  
2030 NOISE EXPOSURE CONTOURS

09MP09-D3-05/03/12