

Brown Field Municipal Airport Master Plan Update

Cultural Resources Technical Report

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Submitted to:

City of San Diego
Real Estate Assets, Airports Division
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Report Title: Cultural Resources Technical Report for the Brown Field Municipal Airport Master Plan Update, City of San Diego, California

Submitted to: City of San Diego, Real Estate Assets, Airports Division

Type of Study: Archaeological Resources and Tribal Cultural Resources Inventory

New Sites and Isolates: P-37-038736; P-37-038734; P-37-038735

Updated Sites: None

USGS Quad: Otay Mesa 7.5' Quadrangle

Acreage: Approximately 551-acre Area of Potential Effect (APE); 45-acre direct effects APE

Key Words: San Diego County; Township 18 South, Range 1 West; City of San Diego; Brown Field Municipal Airport; Otay Mesa Community Plan area; Otay Mesa; updated Airport Master Plan; prehistoric site P-37-038736; prehistoric isolates; P-37-038734; P-37-038735; lithic artifacts.

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ALP	Airport Layout Plan
AMP	Airport Master Plan
AMSL	above mean sea level
APE	Area of Potential Effect
BLM	Bureau of Land Management
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of San Diego
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
EA	Environmental Assessment
EIR	Environmental Impact Report
ESA	Environmental Science Associates
FAA	Federal Aviation Administration
GLO	General Land Office
HELIX	HELIX Environmental Planning, Inc.
HRB	Historical Resources Board
HRG	Historical Resources Guidelines
HRR	Historical Resources Regulation
MAP	Metropolitan Airpark Project
NAAS	Naval Auxiliary Air Station
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	Public Resources Code

ACRONYMS AND ABBREVIATIONS (cont.)

SCIC	South Coastal Information Center
SDM	Brown Field Municipal Airport
sf	square foot/feet
SHPO	State Historic Preservation Officer
SLF	Sacred Lands File
SR	State Route
TCP	Traditional Cultural Properties
TCR	Tribal Cultural Resources
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

C&S Engineers, Inc. contracted HELIX Environmental Planning, Inc. (HELIX) to conduct a cultural resource assessment for the Brown Field Municipal Airport (SDM), located in the City of San Diego, California. The study was conducted in support of an Airport Master Plan (AMP) and its Programmatic Environmental Impact Report for all planned development at the airport within a 20-year planning period. The cultural resources study included a records search, a Sacred Lands File search, a Native American contact program, a review of historic aerial photographs and maps, a review of existing documentation, and a pedestrian field survey. This report details the methods and results of the cultural resources study and to comply with Federal Aviation Administration (FAA) *Order 1050.1F Environmental Impacts: Policies and Procedures* has been prepared to comply with both the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA), as amended.

The Area of Potential Effect (APE) for the AMP is 551 acres and consists of the approximately 880-acre SDM property, excluding the approximately 329 acres that are being leased to the private developers of the Metropolitan Airpark Project (MAP), a project which was reviewed previously in a separate Environmental Impact Report (EIR) (Project No. 208889/SCH No. 2010071054). The direct effects APE for the AMP is approximately 45 acres and includes the proposed development areas that would be subject to impacts from projects proposed under the AMP (impact areas), a 25-foot buffer, and areas where staging/access would occur outside of the MAP development area.

The records search of the California Historical Resources Information System, on file at the South Coastal Information Center (SCIC), indicated that 106 previous cultural resources studies have been conducted, and a total of 158 cultural resources have been recorded within one-half mile of the APE. Of these, 48 cultural resources have been previously identified within, or within a portion of, the airport property. Of these 48 resources, 22 are located within, or partially within, the APE. Furthermore, seven previously recorded historic-period resources are within the direct effects APE. Five of the resources are buildings that are proposed for demolition as part of the AMP; all five resources (P-37-018248, P-37-018249, P-37-018251, P-37-018257, and P-37-018261) have been evaluated as not eligible for listing in the National Register of Historic Places (NRHP) as part of a previous airport master plan update (Robbins-Wade and Van Wormer 1998), and assessed as non-significant under CEQA in the 1999 San Diego Air Commerce Center at Brown Field Airport Master Plan EIR/Environmental Assessment (EA) (SCH No. 97111029). One other built resource is situated within the direct effects APE - the Naval airfield control tower - which is part of the NRHP-eligible Auxiliary Naval Air Station Brown Field Historic District (P-37-018246); this building is addressed in a separate Historic Resource Technical Report (IS Architecture 2024). The remaining four buildings that are recorded as part of the district are not situated in the direct effects APE and will not be impacted by the AMP. The seventh resource consists of the remnants of one of the diagonal runways constructed in 1943 as part of the Naval Auxiliary Air Station (P-37-031954). The resource is also situated within the MAP development area; as part of the EIR process for that project, the resource was recommended as not eligible for listing in the California Register of Historical Resources (CRHR), NRHP, or local registers (Bray and Brewster 2012; Environmental Science Associates [ESA] 2013). No previously recorded prehistoric archaeological resources have been documented within the direct effects APE.

A search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) indicated that sacred lands have not been identified within the study area. The NAHC provided a list of Tribes culturally affiliated with the study area that could be contacted for additional information; an informal contact program was conducted by HELIX requesting any knowledge or information about cultural resources

that the tribal representatives would be willing to share. One response, from the Viejas Band of Kumeyaay Indians (Viejas), was received. The Band responded that the AMP area may contain many sacred sites important to the Kumeyaay people and requested that these sacred sites be avoided with adequate buffer zones. Additionally, they requested that all applicable federal and state laws be followed and that they be contacted on changes or inadvertent discoveries. HELIX followed up with Viejas in 2024; at this time, The Band had no further comments regarding the project.

A pedestrian survey of the direct effects APE was conducted by a HELIX archaeologist and a Kumeyaay Native American monitor on June 28, 2019. The survey resulted in the identification of three prehistoric archaeological resources: a lithic artifact scatter (P-37-038736); an isolate consisting of two lithic tools (P-37-038734); and an isolate consisting of a scraper tool (P-37-038735). The three resources were documented in areas that exhibited heavy disturbances from historic activities related to the development of Brown Field by the Navy in the 1940s and early 1950s. Due to the limited artifact density and the unlikelihood of intact subsurface deposits being present due to the past disturbances, the archaeological resources are recommended as ineligible for listing in the CRHR or the NRHP. Likewise, the resources do not meet the City's criteria to be considered a significant archaeological site.

As such, based on the results of the current study, no significant historical resources or historic properties will be affected by the Brown Field Municipal Airport AMP, and no additional investigation or evaluation efforts are recommended for project-specific development activities associated with the AMP. However, there are important cultural resources in the vicinity of the APE. Due to this overall cultural sensitivity of Otay Mesa, the potential remains for buried resources to be encountered within the APE. As such, it is recommended that an archaeological and Native American monitoring program be implemented for initial grading or other ground-disturbing activities (e.g., trenching for utilities) within undeveloped areas of the direct effects APE or adjacent to documented archaeological resource locations.

Should the proposed airport plan limits change to incorporate new areas of proposed disturbance, an archaeological survey of these areas will be required. In addition, the participation of the local Native American community is crucial to the effective identification and protection of cultural resources and tribal cultural resources, in accordance with the City's Historical Resources Guidelines (HRG). As such, Native American participation is required for all subsurface investigations and disturbances whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the APE of a City project is the subject of destruction.

1.0 INTRODUCTION

As the owner and operator of Brown Field Municipal Airport (SDM) the City of San Diego Airports Division is in the process of preparing an Airport Master Plan (AMP) to guide future airport development. An AMP presents the community and airport's vision for a 20-year strategic development plan based on the forecast of activity. It is used as a decision-making tool and is intended to complement other local and regional plans. C&S Engineers, Inc. contracted HELIX Environmental Planning, Inc. (HELIX) to conduct a cultural resource inventory and assessment in support of the updated AMP and its Programmatic Environmental Impact Report. This study documents the existing cultural resources located within the AMP area. Per the Federal Aviation Administration (FAA) *Order 1050.1F Environmental Impacts: Policies and Procedures*, this report has been prepared to comply with both the California Environmental Quality Act (CEQA) and the National Historic Preservation Act (NHPA) and its implementing regulations (16 U.S. Code 470 et seq., 36 Code of Federal Regulations [CFR] Part 800), as amended.

1.1 PROJECT LOCATION

SDM is located within the Otay Mesa Community Planning Area in the southern portion of the City of San Diego, in San Diego County (Figure 1, *Regional Location*). SDM is located within Sections 27, 28, and 32 of Township 18 South, Range 1 West, on the U.S. Geological Survey (USGS) 7.5' Otay Mesa quadrangle, (Figure 2, *Project Vicinity [USGS Topography]*). The airport property encompasses approximately 880 acres and is bound by Otay Mesa Road to the south, La Media Road to the east, Heritage Road to the west, and Pogo Row to the north. State Route (SR) 905 runs east-west to the south and SR 125 runs north-south to the east of the airport (Figure 3, *Project Vicinity [Aerial Photograph]*).

1.2 PROJECT BACKGROUND AND DESCRIPTION

The City of San Diego (City) owns and operates the Brown Field Municipal Airport (SDM) as a General Aviation airport located within the Otay Mesa community. Airport planning occurs at the national, state, regional, and local levels; in 2017, the City began developing an update to the AMP to determine the extent, type, and schedule of development needed (C&S Engineers 2019). The AMP consists of a report documenting existing conditions of the airport, a forecast of activity, facility requirements (the airport's needs based on the forecast and compliance with FAA Design Standards for airports), development and evaluation of alternatives to meet those needs, and a funding plan for that development. The AMP also includes an Airport Layout Plan (ALP) which graphically depicts all planned development at the airport within the 20-year planning period as determined in the AMP (Figure 4, *Proposed Airport Layout Plan*). This drawing requires approval by the FAA, which makes the airport eligible to receive federal funding for airport improvements and maintenance under the FAA's Airport Improvement Program.

The AMP would involve both landside and airside components (Figure 5, *Proposed Airport Plan*). The primary landside improvement to be covered by the AMP is a 14,000-square-foot (sf) terminal building. This would be accomplished by a rehabilitation of the existing building, as defined by the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties, for use and forecasted demand. All proposed rehabilitation work for the terminal building would comply with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties. The AMP also includes the construction of up to 107 new hangars (154,000 sf); however, the hangars would not be developed by the City until

there is sufficient demand. An aircraft wash rack is proposed within the hangar area as well as the construction of a centralized maintenance building located west of the terminal building and approximately 83 new automobile parking spaces, which are intended to compensate for the loss of a parking area off the west end of the runway apron as a result of proposed AMP improvements. Airside improvements proposed at SDM include the reconfiguration of several taxiways to bring them into compliance with current FAA design standards.

As denoted by the green hatched areas on Figures 4 and 5, much of SDM has been leased by the City to the proposed developers of the Metropolitan Airpark Project (MAP), which was previously evaluated in a separate Environmental Impact Report (EIR) (Project No. 208889/SCH No. 2010071054) and approved by the San Diego City Council in August 2013. These areas would be unaffected by the proposed AMP.

1.3 REGULATORY FRAMEWORK

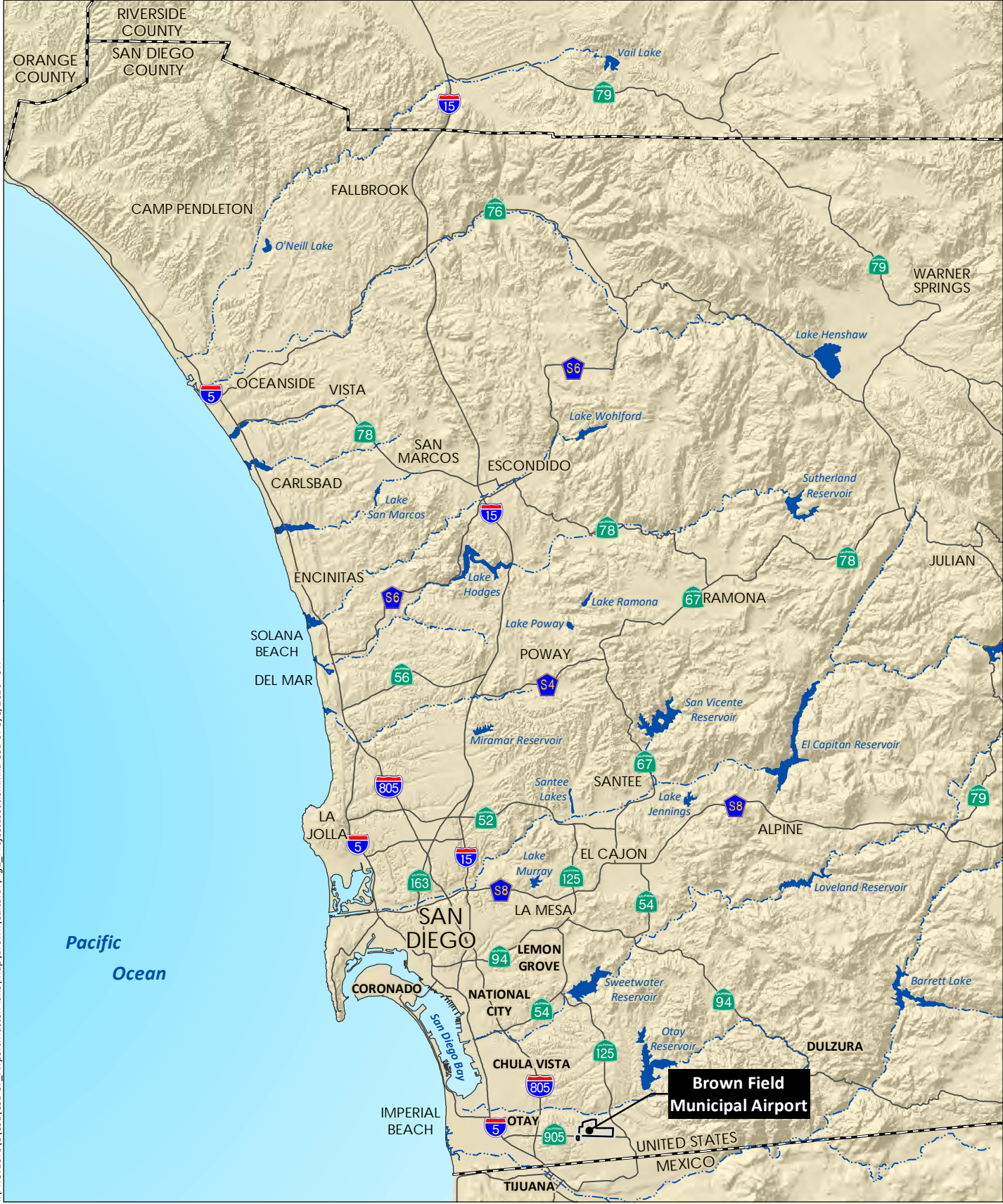
Historical resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Significant resources are those resources that have been found eligible for listing or are listed in the California Register of Historical Resources (CRHR), National Register of Historic Places (NRHP), or local listings, as applicable.

Proposed actions at the airport would be subject to FAA review under the National Environmental Policy Act (NEPA) pursuant to the guidance provided in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*. Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on “historic properties”, that is, properties (either historic or archaeological) that are eligible for listing in the NRHP. To be eligible for listing in the NRHP, a historic property must be significant at the local, state, or national level under one or more of the following four criteria:

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



The California Environmental Quality Act, Public Resources Code (PRC) 21084.1, and California Code of Regulations (CCR) Title 14 Section 15064.5, address determining the significance of impacts to archaeological and historic resources and discuss significant cultural resources as “historical resources,” which are defined as:

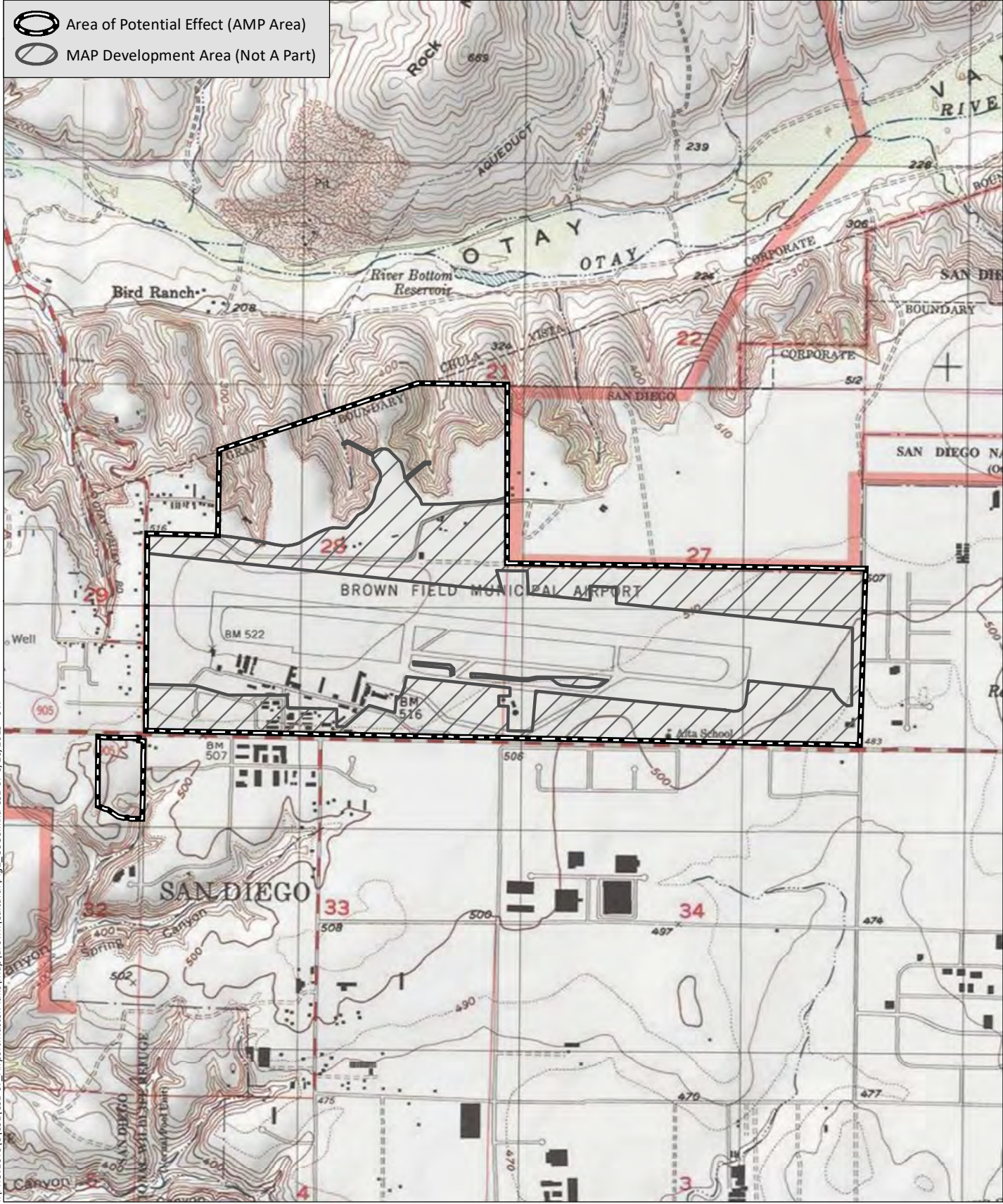
- resource(s) listed or determined eligible by the State Historical Resources Commission for listing in the CRHR (14 CCR Section 15064.5[a][1])
- resource(s) either listed in a “local register of historical resources” or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource



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Source: Base Map Layers (SanGIS, 2016)

-  Area of Potential Effect (AMP Area)
-  MAP Development Area (Not A Part)





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Source: Otay Mesa 7.5' Quad (USGS)



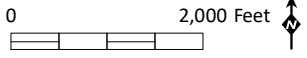
Project Vicinity (USGS Topography)

Figure 2

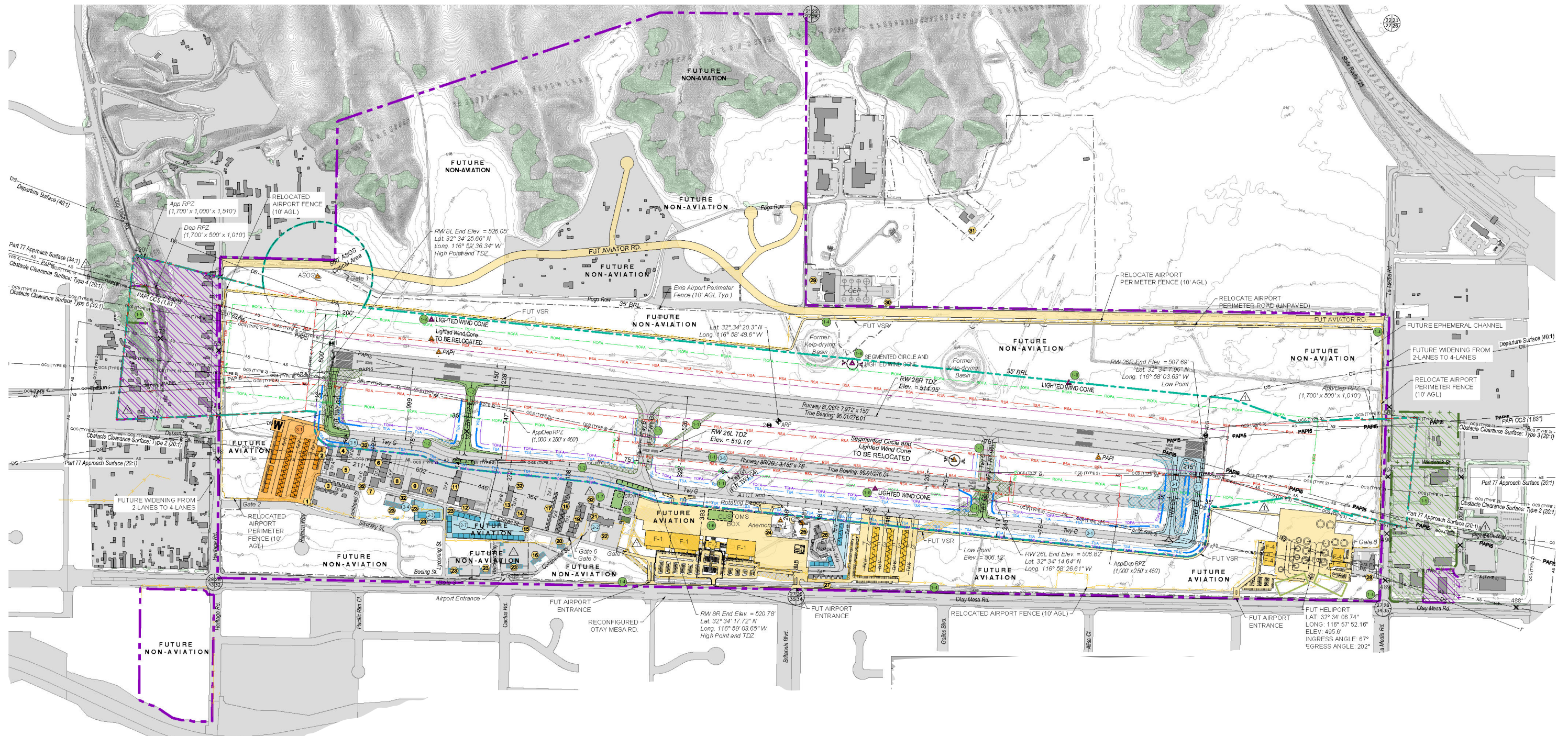
-  Area of Potential Effect (AMP Area)
-  MAP Development Area (Not A Part)



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Source: Aerial (SanGIS 2023)



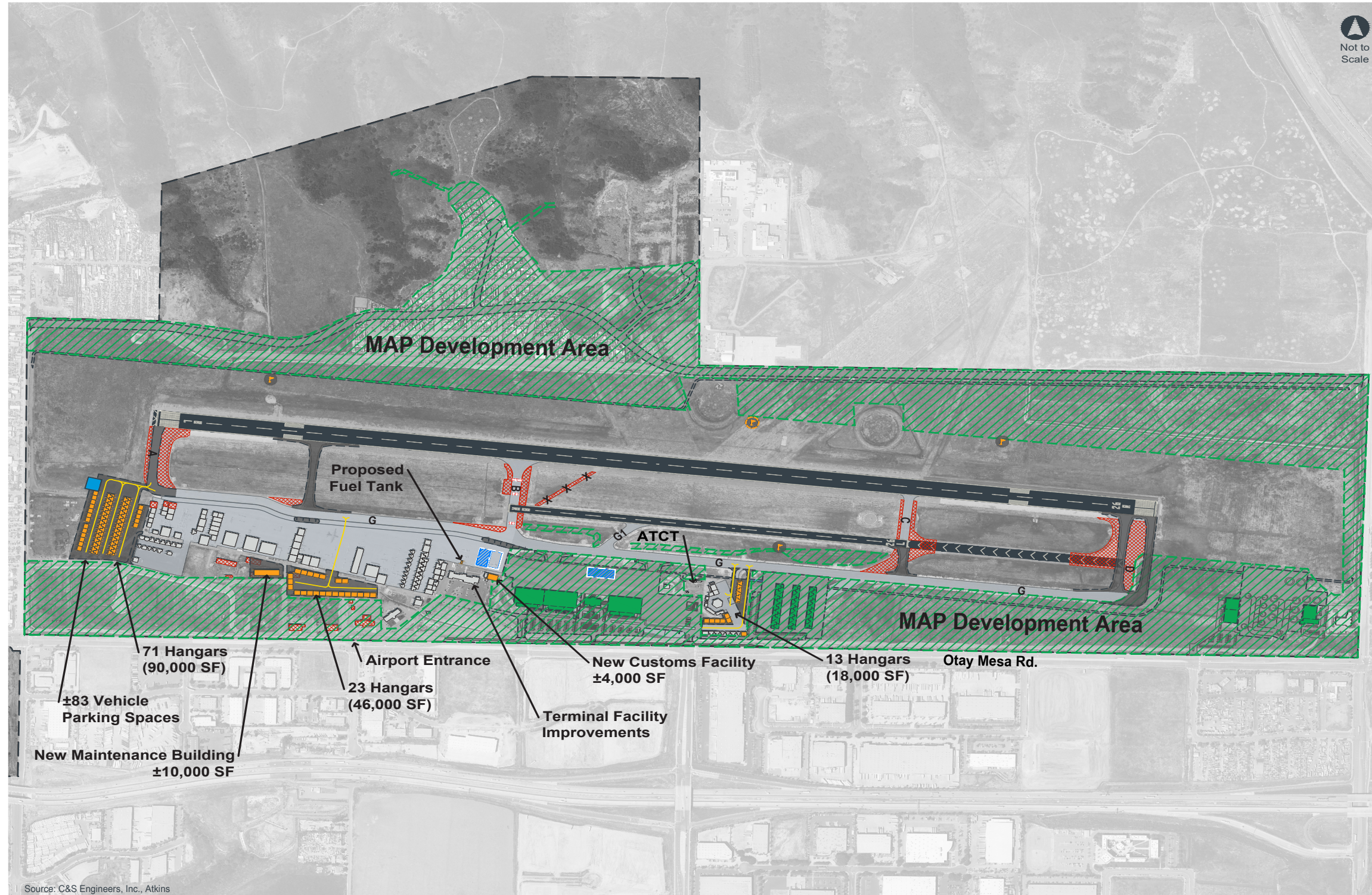
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Source: C&S Companies 2024

Not to Scale



Brown Field Municipal Airport Master Plan



- Legend**
- Property Line
 - Existing Buildings
 - Proposed Buildings
 - Existing Airfield Pavement
 - Proposed Pavement
 - MAP Development Area
 - Proposed MAP Buildings
 - Proposed Demolition
 - Proposed Taxiway/Taxilane Centerline
 - Proposed Wash Rack
 - Existing Customs Box
 - Proposed Customs Box Expansion
 - Proposed Segmented Circle
 - Proposed Wind Cone
 - Proposed "No-Taxi" Island

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Source: C&S Engineers, Inc., Atkins

Source: C&S Companies 2025

as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant (14 CCR Section 15064.5[a][2])

- resources determined by the Lead Agency to be significant. Generally, a resource shall be considered by the lead agency to be “historically significant” if it meets the criteria for listing on the CRHR (14 CCR Section 15064.5[a][3])

For listing in the CRHR, a historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; and/or
4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California, or the nation.

Under 14 CCR Section 15064.5(a)(4), a resource may also be considered a “historical resource” for the purposes of CEQA at the discretion of the lead agency.

All resources that are eligible for listing in the NRHP or CRHR must have integrity, which is the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. In an archaeological deposit, integrity is assessed with reference to the preservation of material constituents and their culturally and historically meaningful spatial relationships. A resource must also be judged with reference to the particular criteria under which it is proposed for nomination. Under Section 106 of the NHPA, actions that alter any of the characteristics that qualify a property for eligibility for listing in the NRHP “in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5[a]) constitute an adverse effect to the historic property.

1.3.1 City’s Historical Resources Regulations

The purpose of the City’s Historical Resources Regulations (HRR; San Diego Municipal Code Chapter 14, Article 3, Division 2) is to protect, preserve, and, where damaged, restore the historical resources of the City of San Diego, which include historical buildings, historical structures or historical objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties (City 2018). These regulations are intended to ensure that development occurs in a manner that protects the overall quality of historical resources. It is further the intent of these regulations to protect the educational, cultural, economic, and general welfare of the public, while employing regulations that are consistent with sound historical preservation principles and the rights of private property owners.

The regulations apply to proposed development when the following historical resources are present on the site, whether or not a Neighborhood Development Permit or Site Development Permit is required: designated historical resources; historical buildings; historical districts; historical landscapes; historical objects; historical structures; important archaeological sites; and traditional cultural properties. Where any portion of a premises contains historical resources, the regulations shall apply to the entire premises.

The property owner or applicant shall submit the required documentation and obtain a construction permit, a Neighborhood Development Permit, or a Site Development Permit, as required pursuant to this division before any development activity occurs on a premise that contains historical resources. The regulations delineate which types of permits are required for a project, based on the type of development proposal and the types of historical resources that would potentially be affected by the project.

1.3.2 City of San Diego Historical Resources Guidelines

The purpose and intent of the City's Historical Resources Guidelines (HRG), located in the City's Land Development Manual (City 2001) is to protect, preserve and, where damaged, restore the historical resources of San Diego. These guidelines are designed to implement the City's HRRs in compliance with applicable local, state, and federal policies and mandates, including, but not limited to, the City's General Plan, CEQA, and Section 106 of the NHPA. The intent of the guidelines is to ensure consistency in the management of the City's historical resources, including identification, evaluation, preservation/mitigation, and development. The HRG states that if a project will potentially impact a resource, the resource's significance must be determined, even if it is not listed in or previously considered eligible for the California Register or a local register (Section II.D.5).

To be designated as historic and potentially listed in the City's Historical Resources Register, one or more of the following criteria must be met:

- (A) Exemplifies or reflects special elements of the City's, a community's or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;
- (B) Is identified with persons or events significant in local, state or national history;
- (C) Embodies distinctive characteristics of a style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
- (D) Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman;
- (E) Is listed or has been determined eligible by the National Park Service for listing on the NRHP or is listed or has been determined eligible by the California Office of Historic Preservation for listing on the CRHR; or
- (F) Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements that have a special character, historical interest, or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

Eligible resources, which may include an improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object, are designated to the City's Register of Designated Historical Resources by the City's Historical Resources Board (HRB) at a publicly noticed hearing.

The City's HRG also states that if a project will potentially impact a resource, the resource's significance must be determined, even if it is not listed in or previously considered eligible for the CRHR or a local register (Section II.D.5). The City has established baseline resource significance criteria based upon CEQA as follows:

An archaeological site must consist of at least three associated artifacts/ecofacts (within a 50-square meter area) or a single feature and must be at least 45 years of age. Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. Such site types may include isolated finds, bedrock milling stations, sparse lithic scatters, and shellfish processing stations. All other archaeological sites are considered potentially significant. The determination of significance is based on a number of factors specific to a particular site including site size, type and integrity; presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostics, and datable material; artifact and ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance (City 2001:15).

Non-significant resources are addressed in Section II.D.6 as including sites with no subsurface component, such as isolates, sparse lithic scatters, isolated bedrock milling stations, and shellfish processing stations.

1.3.3 Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, sacred objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study area has been to assess the likelihood that funerary remains are present in areas that would be affected by the proposed project.

The Native American Graves Protection and Repatriation Act (NAGPRA) established in 1990 provides a process for museums and federal agencies to return certain Native American cultural items including human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations. NAGPRA also includes requirements for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and tribal lands, and penalties for noncompliance and illegal trafficking of these items. On March 15, 2010, the Department of the Interior issued a final rule on 43 CFR Part 10, of the NAGPRA Regulations – Disposition of Culturally Unidentifiable Human Remains. The final rule implements NAGPRA by adding procedures for the disposition of culturally unidentifiable Native American human remains in the possession or control of museums or federal agencies. The rule also amends sections related to the purpose and applicability of the regulations, definitions, inventories of human remains and related funerary objects, civil penalties, and limitations and remedies. California State Assembly Bill (AB) 978, the California NAGPRA, enacted in 2001, requires all State agencies and museums that receive State funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. California

NAGPRA also provides a process for the identification and repatriation of these items to the appropriate tribes. Implementation of the AMP would be conducted in compliance with NAGPRA and California NAGPRA.

Potentially relevant to prehistoric archaeological sites is the category termed Traditional Cultural Properties (TCP) in discussions of cultural resource management performed under federal auspices. According to Parker and King (1998), “Traditional” in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community’s historically rooted beliefs, customs, and practices. Cultural resources can include TCPs, such as gathering areas, landmarks, and ethnographic locations, in addition to archaeological districts. Generally, a TCP may consist of a single site, or group of associated archaeological sites (district or traditional cultural landscape), or an area of cultural/ ethnographic importance.

California State AB 52 revised PRC Section 21074 to include Tribal Cultural Resources (TCRs) as an area of CEQA environmental impact analysis. Effective July 1, 2015, AB 52 introduced additional considerations relating to Native American consultation into CEQA for projects for which a Notice of Preparation, Notice of Mitigated Negative Declaration, Notice of Negative Declaration, or an EIR is filed or issued. Per PRC Section 21080.3, a CEQA lead agency must consult with any California Native American tribe that requests consultation and that is traditionally and culturally affiliated with the geographic area of a proposed project to identify resources of cultural or spiritual value to the tribe, even if such resources are already eligible as historical resources as a result of cultural resources studies.

As a general concept, a TCR is similar to the federally defined term Traditional Cultural Properties (TCP); however, it incorporates consideration of local and state significance and required mitigation under CEQA. PRC Section 21074 defines TCRs as:

- 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the CRHR.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1 of the PRC.
- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1 of the PRC. In applying the criteria set forth in subdivision (c) of Section 5024.1 of the PRC for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape meeting the criteria above is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape (PRC Section 21074). In addition, a historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in subdivision (g) of PRC Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of PRC Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria stated above.

1.4 AREA OF POTENTIAL EFFECT

Pursuant to 36 CFR 800.4(a)(1), the APE is the geographic area within which an undertaking may directly or indirectly alter the character or use of historic properties. Likewise, the City's HRG defines the APE as the geographic area (or areas) within which a project may cause changes in the character or use of historical resources.

The APE for the AMP encompasses 551 acres and consists of the approximately 880-acre SDM property, excluding the approximately 329 acres that are being leased to the private developers of the MAP (Figure 6, *Area of Potential Effect*). These "Not a Part" areas include most of the lands directly adjacent to Otay Mesa Road, as well as to the north of the runways. These areas are subject to a separate EIR and would be unaffected by the AMP. Any future projects that may be proposed within the green-hatched areas would be subject to the MAP EIR (Project No. 208889/SCH No. 2010071054) or required to complete their own CEQA review, as-needed. In addition, the new customs facility within the airport property has received a CEQA exemption and is not a part of the AMP.

Typically, the APE for archaeological resources is defined as the area of potential direct effects to properties. As such, the direct effects APE for the AMP consists of approximately 45 acres and encompasses the areas included in the ALP that are proposed for development as part of the AMP and that would be subject to impacts (Figure 6). The direct effects APE also include a 25-foot buffer around the areas where development would occur to account for temporary construction-related impacts and the areas where staging and access for all AMP development projects would occur outside of the MAP development area. The temporary staging areas and access roads have been placed within developed areas to the extent feasible.

1.5 PROJECT PERSONNEL

Stacie Wilson, M.S., RPA, served as principal investigator and is the co-author of this technical report. Ms. Wilson meets the qualifications of the Secretary of Interior's Standards and Guidelines for Archaeology. Theodore Cooley, M.A., RPA, is a report co-author. Mary Robbins-Wade, M.A., RPA, provided overall project management support and senior technical review. Julie Roy, B.A., conducted the field survey. Gabe Kitchen (Kumeyaay Native American monitor) from Red Tail Environmental, Inc. participated in the pedestrian survey.

2.0 PROJECT SETTING

2.1 NATURAL SETTING

The project area is located within the coastal plain of western San Diego County, where the climate is characterized as semi-arid steppe, with warm, dry summers and cool, moist winters (Hall 2007; Pryde 1992). The project area is situated on a wave-cut marine terrace along the coastal plain in the westernmost portion of the Peninsular Ranges geomorphic province of southern California (McArthur 1992). The foothills of the peninsular range mountains lie within four miles to the east, and the Otay River lies within one mile to the north. The elevation of the project area ranges from approximately 530 to 500 feet above mean sea level (AMSL). The northern portion of the airport property is characterized by three canyons that cut into the mesa, sloping downward towards the Otay River Valley, which is located off-site to the north.

The airport property is characterized predominantly by aviation and transportation infrastructure. Areas immediately surrounding SDM include transportation infrastructure (SR 905, SR 125, and Otay Mesa Road) and commercial, industrial, and residential development, as well as intermittent areas of vacant tilled fields and natural terrain.

Geologically, the airport property is underlain by sediments of the middle to early Pleistocene age, Lindavista Formation (Strand 1962; Tan and Kennedy 2002). In the Otay Mesa area these sediments consist of alluvial deposits of well-consolidated, poorly sorted flood plain deposits of gravel, sand, silt, and clay (Tan and Kennedy 2002). To the east, and in several nearby eroded ravines and canyons to the north and west of the project, Oligocene to Miocene age sedimentary formations are exposed, including the Otay Formation and the Otay Formation-fanglomerate facies (Tan and Kennedy 2002). The Otay Formation consists of poorly indurated massive light-colored sandstone, siltstone, and claystone, interbedded with bentonite lenses, while the Otay Formation-fanglomerate facies consists of poorly cemented boulder conglomerate and coarse-grained sandstone interfingering with the overlying Otay Formation (Tan and Kennedy 2002).

Six soil types are mapped within the airport property: Diablo clay, 15 to 30 percent slopes; Diablo clay, 30 to 50 percent slopes; gravel pits; Olivenhain cobbly loam, 30 to 50 percent slopes; Stockpen gravelly clay loam, 0 to 2 percent slopes; and Stockpen gravelly clay loam, 2 to 5 percent slopes (U.S. Department of Agriculture 2019). Stockpen gravelly clay loam, 0 to 2 percent slopes, is the most common soil type within the airport property. This nearly level soil is located on marine terraces and slopes with low broad-based hummocks, locally called mima mounds, occurring in undisturbed areas. Natural vegetation for the Stockpen soil series is mainly annual grasses and forbs (Bowman 1973:78-79). Prehistorically, annual grasses would have been a source of seeds, an important vegetal food source, and drainages in the vicinity, principally the Otay River, would have also had growths of riparian vegetation and would have provided a source of fresh water to native populations living in the area.

Biological surveys conducted by HELIX identified mostly disturbed and/or introduced vegetation communities and developed areas with small remnants of Diegan coastal sage, baccharis scrub, southern willow scrub, and vernal pool communities (HELIX 2024). Prehistorically, the natural vegetation in the area likely consisted mostly of native grassland and coastal sage scrub (Diegan coastal sage scrub) communities (Beauchamp 1986; Munz 1974). The native grasslands (*Stipa* spp., *Elymus* spp., *Poa* spp., *Muhlenbergia* spp.) would have covered most of the level mesa areas, with plants of the coastal sage scrub community California sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), flat-top buckwheat (*Eriogonum fasciculatum*), broom baccharis (*Baccharis sarothroides*), wild onion (*Allium haematochiton*), laurel sumac (*Malosma laurina*), San Diego sunflower (*Bahiopsis laciniata*), golden-yarrow (*Eriophyllum confertiflorum*), sawtooth goldenbush (*Hazardia squarrosa*), yucca (*Yucca schidigera*, *Hesperoyucca whipplei*), prickly pear cactus (*Opuntia* sp.), and scrub oak (*Quercus dumosa*) in most of the adjacent hills and canyons in the area (Beauchamp 1986; Munz 1974). Before historic and modern activities, adjacent major drainages such as the Otay River likely contained extensive stands of the riparian community with plants such as western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*) and willow (*Salix* sp.) (Beauchamp 1986; Munz 1974). Major wildlife species found in this environment prehistorically were coyote (*Canis latrans*); mule deer (*Odocoileus hemionus*); grizzly bear (*Ursus arctos*); mountain lion (*Puma concolor*); desert cottontail (*Sylvilagus audubonii*); black-tailed jackrabbit (*Lepus californicus*); and various rodents, the most notable of which are the Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), and dusky-footed woodrat (*Neotoma fuscipes*) (Head 1972). Desert cottontails, black-tailed jackrabbits, and rodents were very important to the prehistoric diet; deer were



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Source: Aerial (SanGIS, 2023).

somewhat less significant for food, but were an important source of leather, bone, and antler. Many of the plant species naturally occurring in the project area and vicinity are known to have been used by native populations for food, medicine, tools, ceremonial, and other uses (Christenson 1990; Hedges and Beresford 1986; Luomala 1978). Many of the animal species living within these communities (such as deer, small mammals, and birds) would have been used by native inhabitants as well.

2.2 CULTURAL SETTING

The cultural history in San Diego County presented below is based on documentation from both the archaeological and ethnographic records and represents a continuous human occupation in the region spanning approximately 12,000 years. While this information comes from the scientific reconstructions of the past, it does not necessarily represent how the Kumeyaay see themselves. While the material culture of the Kumeyaay is contained in the archaeological record, their history, beliefs, and legends have persevered, and are retained in the songs and stories passed down through the generations. It is important to note that Native American aboriginal lifeways did not cease at European contact. Protohistoric refers to the chronological trend of continued Native American aboriginal lifeways at the cusp of the recorded historic period in the Americas.

2.2.1 Prehistoric Period

In the San Diego area, the earliest well-documented archaeological sites belong to the San Dieguito Tradition, dating to over 9,000 years ago (Warren 1967; Warren et al. 1998; Warren and Ore 2011). The San Dieguito Tradition is thought by most researchers to have had an emphasis on the hunting of terrestrial game, with a lesser reliance on the gathering of vegetal resources and coastal marine resources that are characteristic of the subsequent Archaic Period (Warren 1967, 1968). Diagnostic material culture most associated with the San Dieguito Tradition includes large biface blades and projectile points, scrapers, and crescents (Rogers 1939, 1966; Warren 1966, 1967, 1968; Warren and True 1961).

In the southern coastal region, the traditional view of San Diego prehistory has the San Dieguito Tradition followed by the La Jolla/Pauma complexes of Warren's Encinitas Tradition (Warren 1968) and Wallace's (1955) "Early Milling Stone Horizon", during the Archaic Period, dating from circa 8,600 years Before Present (BP) to circa 1,300 BP (Warren 1968; Warren et al. 1998). Relative to the San Dieguito Tradition, a large number of Encinitas Tradition archaeological site assemblages dating to the Archaic Period have been identified at a range of coastal and inland sites in San Diego County (Warren et al. 1998). The Encinitas Tradition is generally "characterized by site assemblages containing large numbers of milling stones (manos and metates), occurring in shell middens, located often near sloughs and lagoons" (Moratto 1984:147). The content of these site assemblages indicates a shift from the putative hunting-focused subsistence pattern of the earlier San Dieguito Tradition to a more generalized economy with an increased emphasis on the gathering of seed resources, small game, and shellfish (Warren et al. 1998; Warren 2012). According to True (1958, 1980), sites of the La Jolla complex were located along the coast, and those of the Pauma complex in inland areas of the county. Not surprisingly, Pauma complex sites generally lack the shell that dominates in many of the La Jolla complex site assemblages located in proximity to the coast. In the central San Diego County coastal area, sites radiocarbon dated to the Archaic Period are most numerous along the coast around estuaries and near-coastal valleys, and while less commonly occurring in inland foothill areas, some have been documented (e.g., Cooley 1995; Cooley and Barrie 2004; Raven-Jennings and Smith 1999). In southernmost San Diego County, however, sites located in the near-coastal foothill areas of Otay Mesa have been documented,

clearly dating to, and associated with, both the early Archaic (i.e., circa 9,000 to 5,000 BP), as well as later Archaic Period occupations, circa 4,000 to 2,000 BP (e.g., Cooley et al. 1996; Gallegos et al. 1998; Kyle et al. 1990; Robbins-Wade 1990). Investigations at one site in the Otay Mesa area (CA-SDI-11019) have, in fact, yielded what may be the oldest radiocarbon dates for a La Jolla/Pauma complex assemblage, ranging from circa 9,400 to 8,250 BP (Gallegos et al. 1998). La Jolla/Pauma complex assemblages commonly include, in addition to manos and metates, rough cobble tools, especially choppers, scrapers, and scraper planes; terrestrial and marine mammal faunal remains; flexed burials; doughnut stones; discoidals; stone balls; plummet; biface points; beads; and bone tools (Moriarty 1966; True 1958, 1980).

The relationship between the San Dieguito Tradition and the subsequent, Archaic Period La Jolla/Pauma complexes of the Encinitas Tradition has been the focus of considerable debate centered on whether the San Dieguito Tradition and the Encinitas Tradition complexes might represent the same people using different subsistence techniques in different environments, or if they represent different, non-contemporaneous groups using different and distinct subsistence practices (e.g., Bull 1983, 1987; Ezell 1987; Gallegos 1987; Warren 1985, 1987). The onset of the following period, the Late Prehistoric Period (1,500 BP [or 450 BCE] to AD 1769), however, is demarcated in the archaeological record by an abrupt shift in subsistence and new tool technologies; the archaeological record indicates that the Late Prehistoric Period is characterized by higher population densities and intensification of social and political systems, and by the introduction of new technological innovations. Perhaps the most significant of these new technological innovations was the first use of the bow and arrow and of ceramics.

In the southern portion of San Diego County, the Late Prehistoric Period is represented by the Cuyamaca complex (True 1970), and in the northern portion by the San Luis Rey complex (Meighan 1954). The Late Prehistoric artifactual assemblages are typically characterized by small arrow-sized projectile points, Tizon Brown Ware pottery, various cobble-based tools (e.g., scrapers, choppers, and hammerstones), arrow shaft straighteners, pendants, manos and metates, and mortars and pestles (McDonald and Eighmey 1998). The arrow point assemblage is dominated, typologically, by the Cottonwood Triangular and Desert Side-notched points, but the Dos Cabezas Serrated type also occurs (McDonald and Eighmey 1998). Based on archaeological as well as ethnographic data, subsistence in the Late Prehistoric Period is thought to have been focused on the utilization of acorns and grass seeds, with small game serving as a primary protein resource and big game as a secondary resource. Fish and shellfish were also secondary resources, except immediately adjacent to the coast, where they assumed primary importance (Bean and Shipek 1978; Luomala 1978; Sparkman 1908). The settlement system is characterized by seasonal villages where people used a central-based collecting subsistence strategy.

Based on ethnographic and archaeological data, at the time of contact, it is generally accepted that, as originally proposed by Meighan (1954) and True (1970), the archaeological Cuyamaca complex is associated with the ethnographic Kumeyaay (Diegueño) and the archaeological San Luis Rey complex with the ethnographic Luiseño.

2.2.1.1 Otay Mesa

Otay Mesa is a unique geographic feature located on a flat mesa between rich biotic zones of riparian valleys, coastal strip, and the eastern mountains of southern San Diego County. The geological area of Otay Mesa is dominated by the Lindavista and Otay formations containing an abundance of readily available cobble material used for the manufacture of flaked stone tools. As a result, a nearly ubiquitous, shallow, low-density, prehistoric, lithic artifact scatter covers the majority of Otay Mesa.

Gallegos et al. (1998) have suggested that much of the extensive scatter of flaked stone artifacts could have been recorded as one incredibly large site had the entire Lindavista Formation been surveyed as one study. Although a few sites in the Otay Mesa area date to the Late Prehistoric period, with most of these occurring along major drainages such as in the Otay River Valley, the majority of radiocarbon-dated localities on the mesa fall within the Archaic period age range (Gallegos et al. 1998:4-6). The cobble/core-based lithic assemblage is also consistent with La Jolla and Pauma complex materials. Due to the abundant lithic scatters and relative lack of habitation sites within the Otay Mesa area, Otay Mesa may have served primarily as a source of toolstone for Archaic groups that were based at nearby major habitation sites situated in the Otay River and Tijuana River Valleys (Gallegos et al. 1998).

2.2.2 Ethnohistory

The Ethnohistoric Period, sometimes referred to as the ethnographic present, commences with the earliest European arrival in what is now San Diego and continued through the Spanish and Mexican periods and into the American period. Based on ethnographic data, at the time of European contact, the southern area of the San Diego area is in the traditional territory of the Hokan-based Yuman-speaking people (Kumeyaay). The Kumeyaay people have also been known as Ipai-Tipai, or as the Diegueño (named for Mission San Diego de Alcalá); Agua Hedionda Creek is often described as the division between the territories of the Luiseño to the north and the Kumeyaay people to the south (Bean and Shipek 1978; Luomala 1978), although various ethnographers (e.g., Kroeber 1925) have defined slightly different boundaries. Traditional stories and songs of the Native people also describe the extent of traditional use areas.

The founding of Mission San Diego de Alcalá in 1769 brought about profound changes in the lives of the Kumeyaay (Carrico 1997, 2008; Connolly n.d.). The coastal Kumeyaay died from introduced diseases or were brought into the mission system. Earliest accounts of Native American life in what is now San Diego were recorded as a means to salvage scientific knowledge of native lifeways. These accounts were often based on limited interviews or biased data collection techniques. Later researchers and local Native Americans began to uncover and make public the significant contributions in the understanding of native culture and language. These studies have continued to the present day, and involve archaeologists and ethnographers working in conjunction with Native Americans to address the continued cultural significance of sites and landscapes across San Diego County.

The population of the Kumeyaay people in San Diego in 1770 was estimated by Kroeber (1925:883) to be 3,000, but Luomala (1978:596) believes it was likely double or triple that estimate. At the time of Spanish contact, Kumeyaay bands occupied southern San Diego, southwestern Imperial counties, and northern Baja California. The Kumeyaay are a group of exogamous, patrilineal territorial bands that lived in semi-sedentary, politically autonomous villages or rancherias. Most rancherias were the seat of a clan, although it is thought that, aboriginally, some clans had more than one rancheria and some rancherias contained more than one clan (Bean and Shipek 1978; Luomala 1978). Several sources indicate that large Kumeyaay villages or rancherias were located in river valleys and along the shoreline of coastal estuaries (Bean and Shipek 1978; Kroeber 1925). They subsisted on a hunting and foraging economy, exploiting San Diego's diverse ecology throughout the year; coastal bands exploited marine resources while inland bands might move from the desert, ripe with agave and small game, to the acorn and pine nut rich mountains in the fall (Cline 1984; Kroeber 1925; Luomala 1978).

Several ethnographically documented Kumeyaay villages were located along the Otay River including the village of *'Utay* (Otay), situated inland, but probably downstream from the location of Otay Dam.

The village of *Chiap* (La Punta), was located farther downstream near the mouth of the river and lower San Diego Bay (Carrico 1998). A third village, indicated by Carrico (1998) to be in the vicinity of SDM, was the village of *Milejo*, located to the south in proximity to the Tijuana River. Some native speakers referred to river valleys as *oon-ya*, meaning trail or road, describing one of the main routes linking the interior of San Diego with the coast. For example, the floodplain from the San Diego Mission de Alcalá to the ocean was *hajir* or *qajir* (Harrington 1925). Carrico (1998; 2008) indicates that inhabitants of the village of Otay participated in the burning of the original Mission San Diego de Alcalá, in 1775. Results from archeological excavations conducted at site P-37-012809 (CA-SDI-12809), along the Otay River, suggest that, while speculative, the site may be associated with this village (McDonald et al. 1993; Carrico 1998).

2.2.3 Historical Background

2.2.3.1 Spanish Period

While Juan Rodriguez Cabrillo visited San Diego briefly in 1542, the beginning of the historic period in the San Diego area is generally given as 1769. In the mid-18th century, Spain had escalated its involvement in California from exploration to colonization (Weber 1992), and in that year, a Spanish expedition headed by Gaspar de Portolá and Junípero Serra established the Royal Presidio of San Diego. Portolá then traveled north from San Diego, seeking suitable locations to establish military presidios and religious missions to extend the Spanish Empire into Alta California.

Initially, both a mission and a military presidio were located on Presidio Hill overlooking the San Diego River. A small pueblo, now known as Old Town San Diego, developed below the presidio. The Mission San Diego de Alcalá was constructed in its current location five years later. The missions and presidios stood, literally and figuratively, as symbols of Spanish colonialism, importing new systems of labor, demographics, settlement, and economies to the area. Cattle ranching, animal husbandry, and agriculture were the main pursuits of the missions.

2.2.3.2 Mexican Period

Although Mexico gained its independence from Spain in 1821, Spanish patterns of culture and influence remained for a time. The missions continued to operate as they had in the past, and laws governing the distribution of land were also retained in the 1820s. Following the secularization of the missions in 1834, large ranchos were granted to prominent and well-connected individuals, ushering in the Rancho Era, with the society making a transition from one dominated by the church and the military to a more civilian population, with people living on ranchos or in pueblos. With the numerous new ranchos in private hands, cattle ranching expanded and prevailed over agricultural activities.

These ranches put new pressures on California's native populations, as grants were made for inland areas still occupied by the Kumeyaay, forcing them to acculturate or relocate farther into the backcountry. In rare instances, former mission neophytes were able to organize pueblos and attempt to live within the new confines of Mexican governance and culture. The most successful of these was the Pueblo of San Pasqual, located inland along the San Dieguito River Valley, founded by Kumeyaay who were no longer able to live at the Mission San Diego de Alcalá (Carrico 2008; Farris 1994).

2.2.3.3 American Period

The Mexican period ended when Mexico ceded California to the United States after the Mexican-American War (1846–1848), which concluded with the Treaty of Guadalupe Hidalgo. A great influx of settlers to California and the San Diego region occurred during the American Period, resulting from several factors, including the discovery of gold in the state in 1849, the end of the Civil War, the availability of free land through the passage of the Homestead Act, and later, the importance of San Diego County as an agricultural area supported by roads, irrigation systems, and connecting railways. The increase in American and European populations quickly overwhelmed many of the Spanish and Mexican cultural traditions.

The 1880s saw “boom and bust” cycles that brought thousands of people to the area of San Diego County. By the end of the decade, many had left, although some remained to form the foundations of small communities based on dry farming, orchards, dairies, and livestock ranching. During the late nineteenth and early twentieth centuries, rural areas of San Diego County developed small agricultural communities centered on one-room schoolhouses, such as Alta School in Otay Mesa. In 1887, Otay Mesa was an established community of 140 people, including 25 school-age children, with farms located throughout the Mesa (Robbins Wade and Van Wormer 1998, 1999).

By the 1890s, the City entered a time of steady growth, and subdivisions such as Golden Hill, Sherman Heights, Logan Heights, Bankers Hill, and University Heights were developed. As the City continued to grow in the early 20th century, the downtown’s residential character changed. Streetcars and the introduction of the automobile allowed people to live farther from their downtown jobs, and new suburbs were developed. The influence of military development, beginning in 1916 and 1917 during World War I, resulted in substantial development in infrastructure and industry to support the military and accommodate soldiers, sailors, and defense industry workers. In the post-World War II years, San Diego grew significantly, with new jobs created in the aircraft industry, shipbuilding, fishing, and other enterprises.

Brown Field Municipal Airport

SDM, originally named East Field in honor of Army Major Whitten J. East, opened in 1918 as an aerial gunnery and aerobatics school for the purposes of congestion relief at North Island during the war efforts of World War I. Alta School, which is no longer extant, was previously located along the southeastern boundary of the AMP, and was used as an operations base, where the 283rd Aero Squadron set up a base camp of tents in the area surrounding the school (Robbins-Wade and Van Wormer 1999). After the war ended, the training field was turned over to a caretaker, and students returned to the Alta School site.

In the 1920s, the U.S. Navy leased acreage to the west of Alta School and used the field for “touch and go” landing practices (Robbins-Wade and Van Wormer 1999). In 1940, an approximately 320-acre parcel was acquired by the Navy, with an additional 475 acres being acquired two years later in 1942. Landing mats in the shape of wheel spokes, three standard landing runways, barracks, and support facilities were constructed, and in 1943 the field was commissioned as the Naval Auxiliary Air Station (NAAS), Otay Mesa, and later changed to NAAS Brown Field within the same year. Between the years of 1943 and 1946, the Navy and Army used the Air Station for training, with approximately 1,400 personnel stationed at the field in 1944 (Robbins-Wade and Van Wormer 1999). By 1945, communication facilities,

officer's quarters, a mess hall, a dispensary, recreation facilities, and other repair and support facilities had been constructed along with a concrete parking apron, and four concrete runways.

In 1946, Brown Field was decommissioned and leased to the County of San Diego, resulting in portions of the former base being used as a chicken farm, as well as the Chula Vista High School being established within its grounds. However, in 1951 the airport was reopened by the Navy during the war efforts of the Korean War, at which time the Navy also acquired 160 acres to the east, which included the Alta School site, to expand the runway (City 2017). In 1954, it was re-commissioned and re-designated as a NAAS once again. However, with the end of the Korean War, activity quickly decreased at Brown Field, and by late 1956, personnel at the NAAS included only 19 officers, 306 enlisted men, and 127 civilians (Robbins-Wade and Van Wormer 1999).

In the early 1960s, the Navy reduced the NAAS to caretaker status, re-assigning all Naval personnel and laying off all but 10 of the civilian employees (Robbins-Wade and Van Wormer 1999). In September 1962, ownership of the former NAAS was transferred to the City of San Diego under the condition that the airport would remain for the "use and benefit of the public" (City 2017). After the conversion of Brown Field to a general aviation airport, multiple small businesses such as flying schools, aircraft maintenance shops, and sales companies began operations at the airport (Robbins-Wade and Van Wormer 1999). In the mid-to-late 1960s, Pacific Southwest Airlines utilized the airfield for the purpose of training commercial pilots, who were given instruction in single- and twin-engine aircraft. For a short period in 1967, German pilots for Lufthansa Airlines were also trained at the airport.

In the early 1970s, the U.S. Customs Service announced that planes crossing into the United States from Mexico could land at Otay Mesa to clear customs and establish offices at the airport (Robbins-Wade and Van Wormer 1999). The increased use of Brown Field that resulted from the port of entry designation change, as well as from the airport's increased use by private pilots, students, crop dusters, and Border Patrol resulted in the need to modernize the control tower, which occurred in 1971. By this time, annual traffic for the airport was estimated at 350,000 takeoffs and landings (Robbins-Wade and Van Wormer 1999). By 1973, a new control tower was constructed and in operation at the airport. SDM is still currently used as a general aviation airport; since the City's possession of SDM in the 1960s, the facility has been under the regulatory authority of the FAA. General aviation aircraft that currently operate at SDM include "private, corporate, charter, air ambulance, law enforcement, fire rescue, flight training, cargo, skydiving, banner towing, and airships" (City 2017).

3.0 REPORT OF FINDINGS

3.1 RECORDS AND LITERATURE SEARCH

A record search of the California Historical Resources Information System, on file at the South Coastal Information Center (SCIC) and provided to the City under contract, was conducted by the City; a supplemental search of in-house records and searches of site records and reports on file at the SCIC were conducted by HELIX staff on June 19, 2019, and January 31, 2024. The record searches covered a half-mile radius around the airport property and included the identification of previously recorded cultural resources and locations and citations for previous cultural resources studies. A review of the state Office of Historic Preservation (OHP) historic properties directory and the California Historical Resources Inventory Database (City 2019) was also conducted. Historic maps and aerial photographs

were reviewed to assess the potential for historic archaeological resources to be present. The records search summary and map are included as Appendix A (Confidential Appendices, bound separately).

Also reviewed and compiled was baseline cultural resources information from several sources, including the *Metropolitan Airpark Project Final Environmental Impact Report* (Environmental Science Associates [ESA] 2013), the Brown Field Master Plan Update, Environmental Baseline Report (City 2010), associated cultural resource reports for these documents (Bray and Brewster 2012; Robbins-Wade and Van Wormer 1998, 1999), and various other available relevant cultural resource reports (Cooley et al. 1996; Price and Zepeda-Herman 2013; Robbins-Wade and Shultz 1996).

3.1.1 Previous Studies

The records search results identified that 106 previous cultural resource studies have been conducted within one-half mile of AMP area. Of these 106 studies, 29 are within, or within a portion of, the airport property (Table 1, *Previous Studies within the AMP Area*). These studies include archaeological surveys and records searches, testing and evaluation programs, construction monitoring programs, overview studies, and various other environmental documents.

Table 1
PREVIOUS STUDIES WITHIN THE AMP AREA

Report Number (SD-)	Report Title	Author, Year
01580	Archaeological Investigations at SDI-10608 and the Alta School Site in Otay Mesa, California	Wade, Sue A., 1996
02067	Draft Environmental Impact Report Brown Field Master Plan & Comprehensive Land Use Plan	City of San Diego, 1981
02842	Archaeological Survey of Two Sewerline Routes: Proposed Otay Mesa Prison Site, San Diego, California	Kidder, Fred W., 1984
04564	Historical/Archaeological Survey of a Proposed Storm Drain Alignment and Evaluation of The Prehistoric Component of Site CA-SDI-10623/H Brown Field, San Diego, California	Kyle, Carolyn and Dennis Gallegos, 1998
04570	Archaeological Testing at the Alta School Site (CA-SDI-10628/H) Otay Mesa, San Diego, CA	Shultz, Richard, 1996
04696	Archaeological and Historical Building Assessment for the Brown Field Master Plan Update Otay Mesa, San Diego, California	Robbins-Wade, Mary, 1998
04706	Draft - Comprehensive Land Use Plan for Brown Field, San Diego, California	City of San Diego, 1999
04768	Archaeological Survey of the United States Border Patrol Station Alternate Brown Field Site, San Diego, California	Carrico, Richard, 1982
06165	Historical/Archaeological Survey of a Proposed Storm Drain Alignment and Evaluation of the Prehistoric Component of the Site CA-SDI-10623/H Brown Field, San Diego, California	Kyle, Carolyn, 1998
06369	Historic Property Survey Report for the State Route 905	Gallegos, Dennis, 1999
06878	Facilities Construction and Realignment of Storm Drain at Brown Field, San Diego County	Abeyta, Daniel and Pamela Maxwell, 1998
07075	Brown Field Airport National WWII Historical District Buildings Evaluation Table	US Department of The Interior, n.d.

Report Number (SD-)	Report Title	Author, Year
09402	Cultural Resources Survey and Testing Report for the Otay Mesa Road Widening Project	Kyle, Carolyn, Roxana L. Phillips, Adella B. Schroth, Sinead Ni Ghablain, and Dennis R. Gallegos, 1996
09516	The Cemeteries and Gravestones of San Diego County: An Archaeological Study	Caterino, David, 2005
10594	Historic Property Survey Report, San Diego, California	Gallegos, Dennis, Carolyn Kyle, and Roxana L. Phillips, 1997
10836	Misc. Papers on the Brown Field	Various
11826	Archaeological Resources Analysis for the Master Stormwater System Maintenance Program, San Diego, California Project. No. 42891	Robbins-Wade, Mary, 2008
13276	Final Cultural Resources Survey and Assessment for the Metropolitan Airpark Project, Otay Mesa, San Diego CA	Bray, Madeleine and Brad Brewster, 2011
13277	Metropolitan Airpark Project, Otay Mesa, San Diego, CA- Historic Resources Assessment	Brewster, Brad, 2011
13907	Metropolitan Airpark Project	ESA, 2012
14047	Negative Monitoring Report Geotechnical Investigation for Brown Field Airport SDM West Taxiway A, Otay Mesa, City of San Diego, California	Ni Ghablain, Sinead, 2011
14368	Draft Program Environmental Impact Report for the Otay Mesa Community Plan Update, City of San Diego Project Number 30330/304032	City of San Diego, 2013
14567	A Phase I Cultural Resource Study for the Rowland Auto Dismantling Project	Stropes, Tracy A. and Brian F. Smith, 2012
14714	Final Program Environmental Impact Report for the Otay Mesa Community Plan Update, City of San Diego	City of San Diego, 2013
16383	U.S. Border Patrol, San Diego Sector (SDC), Implementation of Energy Conservation Measures (ECMs) for Facilities in San Diego, El Cajon, San Ysidro, and Otay Mesa, all Located in San Diego County, California	Enriquez, Paul, 2015
16647	Draft Cultural Resources Inventory Report for Improvements at Four Intersections: Metropolitan Airpark Project, San Diego County, California	Westwood, Lisa and Wendy Blumel, 2016
16940	ETS #33668, Cultural Resources Survey for Metropolitan Airpark Relocation, Otay Mesa, San Diego County, California	Connolly, Michael T., 2016
17206	Archaeological Resources Monitoring Report for the Metropolitan Airpark Geotechnical Investigations Project San Diego, California	Vader, Michael, 2014
18293	Historical Resources Assessment for the Proposed Metropolitan Airpark Project, Brown Field Municipal Airport, San Diego, San Diego County, California	Brewster, Brad, and Michael Vader, 2016

3.1.2 Previously Recorded Resources

The results of the records search indicated that 158 cultural resources have been identified within one-half mile of the AMP area. Of these, 48 cultural resources have been recorded within the boundary of the airport property (Table 2, *Previously Recorded Resources Within the AMP Area*; Figure 7, *Previously Recorded Cultural Resources Within the Airport Property* [Confidential Appendices, bound separately]). Of the previously recorded resources, 23 are historic, one is multi-component, and 24 are prehistoric. The historic era resources consist of 16 built environment resources (mostly early military-related buildings or structures); Otay Mesa Road; and six historic archaeological resources, including segments of diagonal runways, an early military-associated access road, three farmstead sites, and a secondary historic trash deposit. The prehistoric resources include 13 prehistoric lithic and/or shell scatters and 11 prehistoric isolates. The multicomponent resource consists of foundations and historic debris associated with the Alta School site as well as a prehistoric lithic scatter. It must be noted, however, that several of the resources have been demolished or otherwise destroyed since being recorded and no longer exist, or in the case of several shell scatters, may be a result of imported fill material.

Table 2
PREVIOUSLY RECORDED RESOURCES WITHIN THE AMP AREA

Primary (P-37-)	Trinomial (CA-SDI-)	Description	Recorder(s), Date	Location	Significance Status
Built Environment					
018246*	--	Auxiliary Naval Air Station Brown Field Historic District; composed of five separate buildings consisting of Naval airfield control tower and four nose end hangar repair docks.	Van Wormer, 1997; Brewster, 2010	APE	Determined eligible for listing in the NRHP under Criterion A and C; City of San Diego Historic Landmark #405-409.
018247	--	Rectangular shaped bunkers.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP.
018248*	--	Single story rectangular buildings (line shacks).	Van Wormer, 1997	APE	Evaluated as not eligible for listing in the NRHP; one has been demolished.
018249*	--	Single story rectangular store houses.	Van Wormer, 1997	APE	Evaluated as not eligible for listing in the NRHP; all have been demolished.
018250	--	Naval airfield galley and mess hall. Single story rectangular buildings.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; both demolished.
018251*	--	Wood framed, single story store house.	Van Wormer, 1997	APE	Evaluated as not eligible for listing in the NRHP

Primary (P-37-)	Trinomial (CA-SDI-)	Description	Recorder(s), Date	Location	Significance Status
018252	--	Naval airfield barracks. Narrow, rectangular, single-story buildings.	Van Wormer, 1997	APE & MAP	Evaluated as not eligible for listing in the NRHP; demolished.
018253	--	Naval airfield gymnasium. Two story rectangular building.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; demolished.
018254	--	Naval airfield brig. Single story rectangular building.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; demolished.
018255	--	Naval airfield barracks. Single story rectangular buildings.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; both demolished.
018256	--	Naval airfield latrine. Rectangular single-story building.	Van Wormer, 1997	APE	Evaluated as not eligible for listing in the NRHP; City of San Diego Historic Landmark #410.
018257*	--	Naval airfield fire station.	Van Wormer, 1997	APE	Evaluated as not eligible for listing in the NRHP.
018258	--	Naval airfield officer's mess hall and gymnasium. Low, rambling, single story, "U" shaped building with a two story central section.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; demolished.
018259	--	Naval airfield WAVES' barracks. Two story rectangular building.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; demolished.
018260	--	Naval airfield synthetic trainer building. Single story rectangular building.	Van Wormer, 1997	MAP	Evaluated as not eligible for listing in the NRHP; demolished.
018261*	--	Storage locker/building of curved corrugated steel resembling a small Quonset hut.	Van Wormer, 1997	APE	Evaluated as not eligible for listing in the NRHP.
031491	--	Historic Otay Mesa Road.	Robbins-Wade, 2010; Gunderman, 2011	Adjacent to Airport Boundaries	Not evaluated.

Primary (P-37-)	Trinomial (CA-SDI-)	Description	Recorder(s), Date	Location	Significance Status
Archaeological Sites					
010186	10186	Prehistoric lithic scatter with two loci. Most of the site has been destroyed by construction of SR 905.	Van Wormer and Winterrowd, 1983; Bray, 2011	APE	Determined not eligible for listing on the NRHP.
010196	10196	Prehistoric lithic and shell scatter, extending into CA-SDI-10186. One grinding element on a low-lying boulder also documented.	Winterrowd and Van Wormer, 1983; Bray, 2011	APE	Determined not eligible for listing on the NRHP.
010608	10608	Prehistoric lithic and shell scatter; contiguous with site CA-SDI-10628H (adjacent to the east).	Van Wormer and Hector, 1986; Kyle, Ni Ghabhlain, and Tift, 1996	MAP	Determined not eligible for listing on the NRHP.
010622	10622	Prehistoric lithic scatter.	Van Wormer, 1986; Bray, 2010	APE	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
010623	10623	Prehistoric lithic and shell scatter; historic trash scatter, and a historic olive grove.	Van Wormer, 1986; Smith, 1996; James, Briggs, and Cooley, 1996; Dietler and Luhnnow, 1998	APE	Determined not eligible for listing on the NRHP.
010628	10628/H	Foundations and historic debris associated with historic Alta School as well as a prehistoric lithic scatter.	Hector, Wade, Van Wormer, Eighmey, 1986; Robbins-Wade, 1996; Kyle, Ni Ghabhlain, and Tift, 1996	APE & MAP	Determined not eligible for listing on the NRHP; a portion of the site is considered significant; City of San Diego Historic Landmark #411.
014283	14082	Northern extent of CA-SDI-7208; prehistoric lithic scatter.	Tift, Briggs, and Sabio, 1995; Kyle, Ni Ghabhlain, and Tift, 1995	MAP	Evaluated as not eligible for listing in the NRHP; CA-SDI-7208 has been determined ineligible for listing on the NRHP or CRHR.
015976	14559	Prehistoric lithic scatter.	Shultz and Robbins-Wade, 1997; Bray, 2010	APE	Not evaluated.

Primary (P-37-)	Trinomial (CA-SDI-)	Description	Recorder(s), Date	Location	Significance Status
015980	--	Historic farmstead site as shown on historic maps and aerials. No surface features or artifacts observed. Resource location situated under auto yard.	Robbins-Wade, 1997	MAP	Determined not eligible for listing on the NRHP under Criteria A, B, and C; not evaluated under Criteria D; not reidentified.
015981	--	Historic farmstead site as shown on historic maps and aerials. No surface features or artifacts observed; however historic artifacts identified within neighboring site (CA-SDI-10623).	Robbins-Wade, 1997	APE	Determined not eligible for listing on the NRHP under Criteria A, B, and C; not evaluated under Criteria D.
015982	--	Historic farmstead site as shown on historic maps and aerials. No surface features or artifacts observed.	Robbins-Wade, 1997	APE	Determined not eligible for listing on the NRHP under Criteria A, B, and C; not evaluated under Criteria D.
031948	20226	Concentration of shell - possibly imported.	Bray and Tietjen, 2010	MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
031949	20227	Concentration of shell; determined to be a non-cultural secondary deposit.	Bray, 2010; Roland, 2016	MAP	Not eligible for NRHP, CRHR, or local register.
031950	20228	Prehistoric lithic scatter and shell scatter. Aerial photographs show that the site area was occupied by military barracks during the 1940s and early 1950s.	Bray and Tietjen 2010	MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
031951	20229	Concentration of shell - possibly imported.	Bray, 2010	MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
031952	20230	Concentration of shell.	Bray, 2010	MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
031953	20231	Prehistoric lithic scatter.	Bray, 2010	MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.

Primary (P-37-)	Trinomial (CA-SDI-)	Description	Recorder(s), Date	Location	Significance Status
031954*	--	Two segments of the diagonal runways and a segment of a taxiway constructed in 1943 as part of the WWII-era Naval Auxiliary Air Station.	Tietjen, 2010	APE & MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
034481	--	Likely a secondary trash deposit containing historic materials that appear to date the mid-twentieth century.	Vader, 2014	APE & MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
037109	--	Pogo Row perimeter road associated with several periods of military aircraft development at Brown Field, beginning during the 1940s and early 1950s.	Connolly, 2016	MAP	Recommended as not eligible for listing in the CRHR, NRHP, or local registers.
Archaeological Isolates					
014298	--	Prehistoric lithic flake.	Tift, Briggs, and Sabio, 1995	MAP	Not eligible for NRHP, CRHR, or local register.
015977	--	Prehistoric lithic flake.	Robbins-Wade and Shultz, 1997	APE	Not eligible for NRHP, CRHR, or local register.
015978	--	Two prehistoric lithic flakes.	Shultz and Robbins-Wade, 1997	APE	Not eligible for NRHP, CRHR, or local register.
015979	--	Prehistoric core.	Robbins-Wade and Shultz, 1997	APE	Not eligible for NRHP, CRHR, or local register.
031955	--	Prehistoric lithic scraper.	Tietjen, 2010	MAP	Not eligible for NRHP, CRHR, or local register.
031956	--	Two prehistoric lithic scrapers.	Tietjen, 2010	MAP	Not eligible for NRHP, CRHR, or local register.
031957	--	Two prehistoric lithic scrapers.	Tietjen, 2010	MAP	Not eligible for NRHP, CRHR, or local register.
031958	--	Two prehistoric lithic scrapers.	Tietjen, 2010	MAP	Not eligible for NRHP, CRHR, or local register.
031959	--	Prehistoric lithic scraper.	Tietjen, 2010	MAP	Not eligible for NRHP, CRHR, or local register.
031960	--	Prehistoric lithic scraper.	Tietjen, 2010	MAP	Not eligible for NRHP, CRHR, or local register.
034480	--	Prehistoric lithic scraper.	Vader, 2014	APE	Not eligible for NRHP, CRHR, or local register.

* Resource situated within direct effects APE

Of the 48 previously recorded cultural resources, 18 were recorded within the APE, which consists of the airport property excluding the MAP development area (Figure 7). Four of the resources were documented within both the APE and the MAP development area, and 25 of the resources are recorded exclusively within the MAP development area. The last resource is Otay Mesa Road, which travels east-west along the southern border of SDM. Of the 22 previously recorded resources located within the APE, seven historic-period resources, six consisting of buildings and one consisting of the remnants of a Naval runway, are located within the direct effects APE.

3.1.2.1 Prehistoric Archaeological Resources

The prehistoric resources documented within the airport property are all comprised of lithic and/or shell scatters, representing lithic reduction or resource processing areas. Artifacts documented within the sites consist of a light density of lithic debitage and tools. The majority of the prehistoric resources within SDM have been documented along the perimeter of the property, in particular in the northern region, in or near the canyons that lead into the Otay River Valley that still contain native habitats. However, it is likely that the construction of airport runways and Naval airfield facilities destroyed much of the light-density lithic scatter that undoubtedly existed throughout the majority of the airport area. None of the previously recorded prehistoric resources are located in the direct effects APE.

Otay Mesa has been the focus of considerable archaeological research (e.g., Carrico and Eckhardt 1998; Cook 1989; Cooley et al. 1996; Gallegos et al. 1998; Kyle et al. 1990; Robbins-Wade 1990). The majority of sites on Otay Mesa have been identified as lithic reduction sites and processing locations, with habitation sites primarily being situated at the head of canyons, which would have provided easy access to canyon resources such as water and game (Gallegos et al. 1998; Robbins-Wade 1990). Moving away from the canyons, extensive lithic scatters take prominence on the mesa and are fairly evenly spread across the mesa, with many of the sites overlapping and eventually being subsumed into neighboring site designations, as seen with P-37-010186/010196 (CA-SDI-10186/10196), P-37-010608/010628 (CA-SDI-10608/10628), and P-37-014283/007208 (CA-SDI-14082/7208) within the airport property. These wide-spread, low-density lithic scatters have created a number of resource management issues. As noted in Section 2.2.1.1 above, it has been suggested that much of the extensive lithic scatter now known to be present on the mesa could have been recorded as one incredibly large site had the entire Otay Mesa been surveyed within one study (Gallegos et al. 1998).

In the late 1990s, a management plan was developed by Gallegos et al. (1998) to help focus archaeological research efforts by proposing more stringent archaeological site definitions. As such, sparse lithic scatters lacking a substantial subsurface deposit and surface artifact density ratios of less than 0.03 per square meter were defined as “non-sites.” The Management Plan for Otay Mesa Prehistoric Resources concludes that these sparse lithic scatters or “non-sites” be excluded from site comparisons and research efforts within Otay Mesa, due to their lack of artifact diversity, inability to determine site age, and overall lack of research potential and that research questions and efforts should be focused on habitation sites, temporary camps, quarries, and other sites that can provide insight to chronological, settlement, subsistence, technology, and trade-related research topics (Gallegos et al. 1998).

3.1.2.2 Historic-Era Resources

Three of the historic-era resources recorded within the airport property are late nineteenth-century farms (P-37-015980, P-37-015981, and P-37-015982) that were documented based on information on

the 1903 USGS Cuyamaca topographic map, a land ownership map of Otay Mesa (Roll et al. 1985), and an aerial photograph from 1928. There are no standing structures associated with the farmstead locations, and no surface features or artifacts have been observed at the resource locations. While it was determined by the FAA that these sites are not eligible for listing on the NRHP due to insufficient proof of eligibility, the sites contain the potential for subsurface features or artifacts to be present, and it was recommended that evaluation of the resources be conducted in conjunction with specific project plans (Robbins Wade and Van Wormer 1999).

Other historic-era resources include the Alta School Site (CA-SDI-10628/H/ P-37-010628), the Historic Otay Mesa Road (P-37-031491); and a historic component of CA-SDI-10623 (P-37-010623), comprised of a trash scatter and a historic olive grove; a historic trash deposit (P-37-034481), and Pogo Row (P-37-037109). The Alta School site is listed locally as HRB Site #411 for its archaeological significance exemplifying Otay Mesa's unique history. Alta School was constructed in approximately 1885 and was in use until the 1950s. CA-SDI-10623/H/ P-37-010628 is located adjacent to P-37-015981 and may represent constituents of the farmstead. The alignment of Otay Mesa Road is shown in its current alignment on the 1903 USGS Cuyamaca topographic map and the 1928 aerial. Site P-37-034481 consists of a likely secondary deposit of historic trash materials that appear to date to the mid-twentieth century (Vader 2014). Site P-37-037109 consists of the Pogo Row perimeter road, along the northern side of the airfield, associated with several periods of military aircraft development at Brown Field during the 1940s and early 1950s (Connolly 2016).

Naval airfield-related facilities that were constructed beginning in the 1940s are primarily clustered in the southwest portion of the airport property, with the original runways and taxiway (P-37-031954) in the central portion of the AMP area. A total of 30 buildings have been documented and evaluated under 16 resource numbers (P-37-018246 through - 018261). In the late 1990s, five of the buildings were documented as comprising the Auxiliary Naval Air Station Brown Field Historic District (P-37-018246). The 1997 District Record form for the resource states the following:

The Auxiliary Naval Air Station Brown Field Historic District is composed of those architecturally significant buildings associated with the use and development of Naval Auxiliary Air Station Otay Mesa and Naval Auxiliary Air Station Brown Field between April 1941, when construction of the facility began, and August 1945 when World War II ended. This period of significance constitutes the years of the national mobilization effort to fight World War II in which the facility played a vital role. The district includes the control tower, and four repair docks known as nose end hangers located along the southern edge of a large concrete aircraft parking apron. Since their construction in 1943 and 1945 these five buildings have been the most prominent and characteristic of Brown Field's World War II era operations. Architectural styles of these buildings constitute utilitarian military designs developed for naval air stations during the war. The buildings were directly associated with aircraft maintenance and repair and station air traffic control during the period of significance. The district's boundaries have been designed to include these 5 contributing structures and exclude non-contributing elements. While the individual contributing buildings have had varying degrees of alteration, they retain a sense of character and function reflective of their role during the period of significance (Van Wormer 1997).

In a letter dated November 19, 1998, the California State Historic Preservation Officer (SHPO) concurred with the NRHP-eligibility assessment of the District, consisting of the five buildings noted above

(Robbins-Wade and Van Wormer 1998). In addition, the building recorded as P-37-018256 has been designated locally for its association with the World War II effort.

In 2000, P-37-018256 and the Alta School Site (CA-SDI-10628/H/ P-37-010628) were locally designated as contributing resources to the San Diego Historic Landmark Auxiliary Naval Air Station Brown Field Historic District. Altogether, the District comprises a total of seven buildings that are listed as HRB Sites Nos. 405-411 and include the Control Tower (Building 2002, 1943), Nose End Hangers – Repair Docks (Buildings 10, 1943; 2004, 1943; 2005, 1943; 2003, 1945), Building Facility 2044, and the Alta School Site.

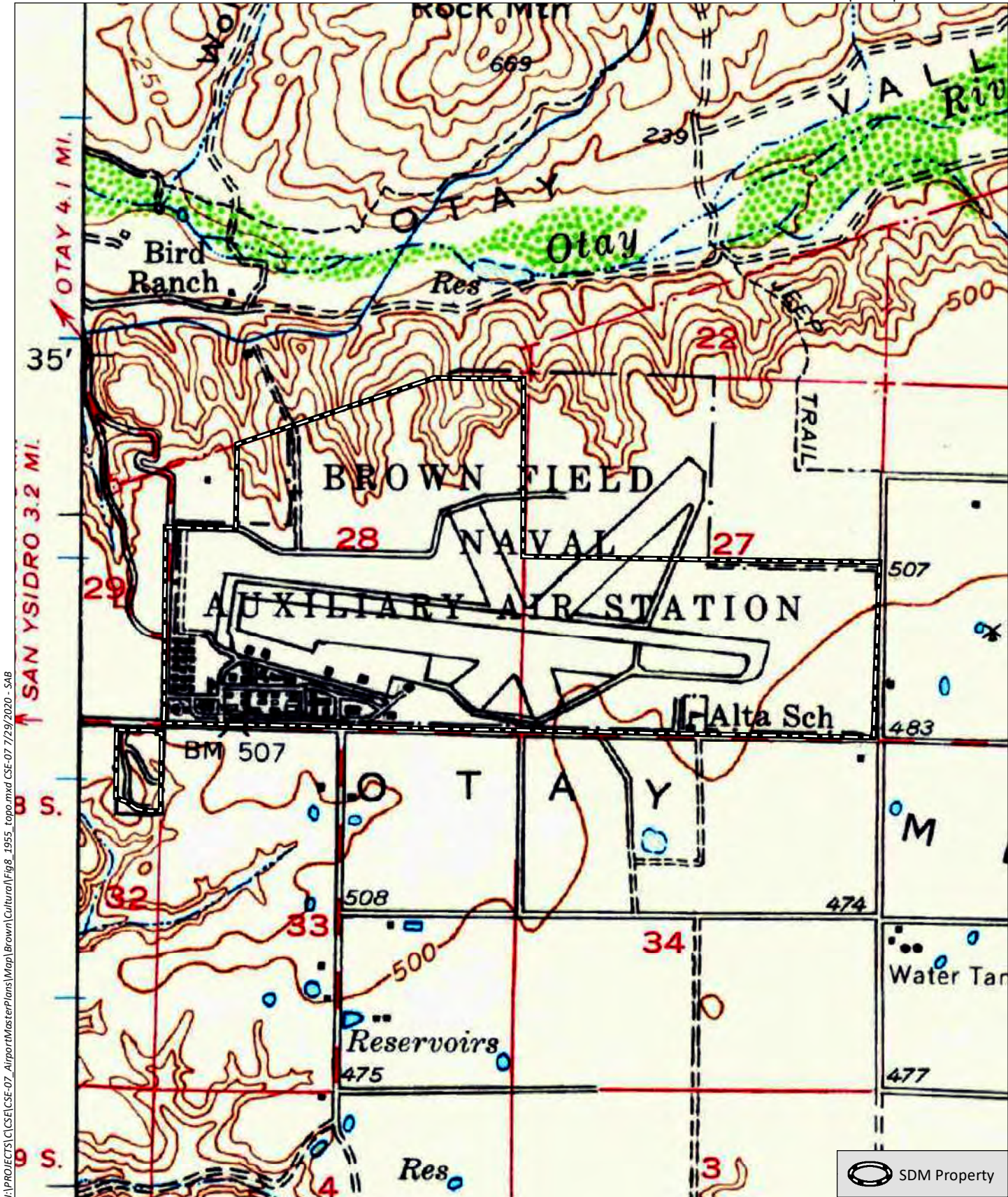
Seven of the previously recorded historic-period resources are situated within the direct effects APE. Two of the resources, P-37-018248 and P-37-018249, consist of two buildings each, each with one building having been demolished since recordation in 1997. The remaining two buildings associated with the two primary numbers, and the three buildings recorded as P-37-018251, P-37-018257, and P-37-018261, are proposed for demolition as part of the AMP (Figure 6). These five resources were evaluated as not eligible for listing in the NRHP as part of the previous airport master plan update in the 1990s, due to a lack of “integrity and architectural or engineering distinction to qualify for the National Register” (Robbins-Wade and Van Wormer 1998:58). According to the 1999 San Diego Air Commerce Center at Brown Field Airport Master Plan EIR/Environmental Assessment (EA) (SCH No. 97111029), the documentation of the buildings in the accompanying historic structures report (Robbins-Wade and Van Wormer 1999) is considered appropriate mitigation for the adverse but less than significant loss of the buildings; only the resources assessed as eligible to the NRHP were determined to be significant under CEQA.

The sixth historic-period resource recorded within the direct effects APE is the Auxiliary Naval Air Station Brown Field Historic District (P-37-018246), which has been evaluated as eligible for listing in the NRHP under Criterion A and C. In support of the AMP process, a Historic Resource Technical Report has been conducted for the Naval airfield control tower (Building 2002) of the district (IS Architecture 2024). As such, this building will not be addressed further within this report. The remaining four buildings that are recorded as part of the district are repair docks that are not situated in the direct effects APE and will not be affected by the AMP.

The remaining historic resource situated within the direct effects APE consists of the remnants of one of the diagonal runways constructed in 1943 as part of the Naval Auxiliary Air Station (P-37-031954). A segmented circle and lighted wind cone are proposed in the AMP within the boundary of the runway (Figures 5 and 6). All that remains of the resource in this location are remnants of pavement. The resource is also situated within the MAP development area; it was evaluated as part of the EIR process for that project and was recommended as not eligible for listing in the CRHR, NRHP, or local registers.

3.2 OTHER ARCHIVAL RESEARCH

Various archival sources were consulted, including historic topographic maps, aerial imagery (NETR Online 2020), and the Bureau of Land Management (BLM) General Land Office (GLO) Records. These include historic aerials from 1953, several from the 1960s, and 1971 (NETR Online 2020); the 1903 Cuyamaca (1:125,500), the 1943 and 1955 Jamul (1:62,500), and the 1955 and 1971 Otay (1:24,000) historic USGS topographic maps; and a GLO survey plat map from 1879. The purpose of this research was to identify historic structures and land use in the area.



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0 2,000 Feet

On the 1879 plat map, a road is shown traveling east-west through the airport property, connecting to a road on the west labeled as “Old Road from San Diego to Lower California”. In addition, several other roads are shown in the region on the plat, and multiple land patents are on file with the BLM for the airport property. These include one granted to Samuel Longshore in 1890 for the southeast quarter of Section 27, and in 1892 to Lyman Modie for the southwest quarter of the section. Within Section 28, patents were issued in 1888 to John Rauch, in 1890 to Henry Chester and George Engel, in 1896 to Ernst Frederick Piper, and in 1914 to John Schroeder.

On the 1903 topographic map, a road traveling east-west is shown through the middle of Sections 27 and 28, and a north-south travelling road runs through the central portion of the airport property. Several structures are shown within and near these roads; these structures are those documented as sites P-37-015980, P-37-015981, and P-37-015982 and likely represent ranches or farms established by the holders of the land patents issued in the late 1800s. Otay Mesa Road (P-37-031491) is shown in its same alignment on the 1903 map, and the location of Alta School (CA-SDI-10628/H/ P-37-010628) is indicated with a church symbol. Similar roads and structures can be observed on the 1943 topographic map but with the Alta School now symbolized as a school.

On the 1955 topographic maps, the Alta School remains; however, by this time the airport had been developed by the Navy (Figure 8, *1955 Jamul [1:62,500] USGS Topographic Map*). The diagonal runways and taxiway (P-37-031954) are illustrated, and the airport is labeled as “Brown Field Naval Auxiliary Air Station”. Multiple buildings (P-37-018246 through -018261) are shown in the southwest portion of the airport property. These same developments can be seen on the 1953 aerial photograph (NETR Online 2020).

On the 1971 topographic map, several of the structures in the southwestern portion of the airport property are no longer shown or are illustrated as ruins. By this time the diagonal runways are no longer shown either. These changes reflect the ownership of the airport having been transferred to the City by this time.

3.3 NATIVE AMERICAN CONTACT PROGRAM

HELIX initiated a Native American Contact Program with local tribes and tribal representatives to identify tribal cultural resources considered significant to the local Native American community. The Native American Heritage Commission (NAHC) was contacted for a search of their SLF on August 22, 2017. A response was received from the NAHC on August 28, 2017; a search of their SLF was completed with negative results for the airport property. HELIX contacted the tribal entities identified by the NAHC regarding the proposed AMP study on August 30, 2017; one response has been received. On September 7, 2017, the Viejas Band of Kumeyaay Indians responded that the AMP area may contain many sacred sites important to the Kumeyaay people. They requested that these sacred sites be avoided with adequate buffer zones. Additionally, they requested that all applicable federal and state laws be followed and that they are immediately contacted on changes or inadvertent discoveries. On May 29, 2024, HELIX Cultural Resources Group Manager Stacie Wilson contacted Viejas to inquire about any new concerns or questions that The Band may have. Viejas responded on May 30, 2024, noting that The Band had no additional thoughts. Native American Correspondence is included as Appendix C (Confidential Appendices, bound separately).

Tribal consultation notices in accordance with AB 52 were delivered by the City of San Diego to representatives from the Lipay Nation of Santa Ysabel, the Jamul Indian Village, and the San Pasqual

Band of Mission Indians on July 12, 2024. The Cultural Resources Technical Report, as well as confidential data, was provided to all representatives to assist with their review in determining if the AMP area contains any Tribal Cultural Resources or areas of tribal importance that would require further evaluation or special consideration during the environmental review process. The City received one response requesting to consult from the San Pasqual Band of Mission Indians on July 12, 2024. Upon attempting to schedule an AB-52 consultation meeting, the tribe did not respond to two follow-up communications (July 16, 2024, and August 14, 2024). Therefore, the City considers the consultation concluded.

3.4 ARCHAEOLOGICAL SURVEY METHODS

An intensive pedestrian survey of the direct effects APE was conducted on June 28, 2019, by HELIX archaeological field director Julie Roy and Kumeyaay Native American Monitor Gabe Kitchen from Red Tail Environmental, Inc. Where feasible, the direct effects APE was walked in transects spaced approximately 10 meters apart, otherwise, reconnaissance and walking the sides of the paved/cement runways and paved roads was performed. All areas of the direct effects APE were visually inspected and photos were taken.

Much of the direct effects APE is covered in pavement, concrete, or built environment (Figure 6). Visibility surrounding the developed areas was generally poor, ranging from 0 to 30 percent due to the presence of a dense gravel base obscuring the ground surface; these areas were also highly disturbed due to prior construction of the airport infrastructure.

The direct effects APE within the infield of the runway and taxiways included a few areas of open field and remnant pavement. The open areas frequently contained dense vegetation in the form of dead grass and weeds, while the areas with old pavement had weeds and grasses growing out of the cracks in the pavement. The portion of the direct effects APE within the southwest portion of the airport property generally contained either fields with thick vegetation or dirt access roads. Visibility in this area ranged dramatically, from up to 100 percent within the roadways, to less than five percent within the fields. Disturbances consisting of scattered modern trash, push piles, and small mounds of debris were observed in this area.

3.5 ARCHAEOLOGICAL SURVEY RESULTS

As discussed above, only one previously recorded archaeological resource (P-37-031954) has been documented within the direct effects APE, which encompasses the areas included in the ALP that are proposed for development as part of the AMP and that would be subject to impacts. P-37-031954 consists of the remnants of one of the diagonal runways constructed in 1943 as part of the Naval Auxiliary Air Station. The resource is also situated within the MAP development area, evaluated as part of the EIR process for that project, and was recommended as not eligible for listing in the CRHR, NRHP, or local registers (Bray and Brewster 2012; ESA 2013).

During the pedestrian field survey, three prehistoric archaeological resources were observed: a lithic artifact scatter (P-37-038736); an isolate consisting of two lithic tools (P-37-038734); and an isolate consisting of a scraper tool (P-37-038735). These newly recorded resources are described in detail below, summarized in Table 3, *Cultural Resources Within the Direct Effects APE*, and shown on Figure 9, *Cultural Resources Within the Direct Effects APE* [Confidential Appendices, bound separately]). The resources were recorded on appropriate Department of Parks and Recreation (DPR) 523 forms, which

are included in Appendix D (Confidential Appendices, bound separately). The completed DPR site forms were submitted to the SCIC.

Table 3
CULTURAL RESOURCES WITHIN THE DIRECT EFFECTS APE

Resource Number	Age	Description	Status
P-37-031954	Historic	Two diagonal runways and a segment of a taxiway constructed in 1943 as part of the Naval Auxiliary Air Station	Previously recorded.
P-37-038734	Prehistoric	Scraper tool and core	Newly identified within the direct effects APE
P-37-038735	Prehistoric	Scraper tool	Newly identified within the direct effects APE
P-37-038736	Prehistoric	Lithic artifact scatter	Newly identified within the direct effects APE

3.6 DESCRIPTIONS OF ARCHAEOLOGICAL RESOURCES WITHIN THE DIRECT EFFECTS APE

3.6.1 P-37-038734

P-37-038734 is a prehistoric isolate consisting of two lithic artifacts: a core and a scraper tool, both of metavolcanic material. One of the artifacts was found in a dirt road, the other in the field approximately 15 meters to the southwest. Marine shell fragments were observed in the confluence of two dirt roads approximately 50 meters to the west of the artifacts; however, the shell is in a disturbed context and may not be prehistoric in origin. As with site P-37-038736, described in further detail below, a review of historic aerial photographs shows that the resource area has been graded and heavily disturbed since at least 1953, likely from the development of Brown Field by the Navy in the 1940s and early 1950s.

3.6.2 P-37-038735

P-37-038735 is a prehistoric isolate consisting of a green, metavolcanic scraper tool observed in a highly disturbed area next to a taxiway sign in the central portion of the airport property.

3.6.3 P-37-038736

P-37-038736 is a prehistoric site consisting of a scatter of prehistoric lithic artifacts in a densely vegetated field in the southwestern portion of the airport property. The artifacts observed include three flakes of metavolcanic material, one of which may have been used as a tool (Plate 1). A review of historic aerial photographs shows that the site area, located in the southwest portion of the SDM property, has been heavily disturbed since at least 1953, likely from the Naval Auxiliary Air Station development in the 1940s and early 1950s (NETR Online 2020). The 1953 aerial photograph shows the location of the artifacts as being graded and cleared of vegetation, with several dirt roadways surrounding the area. Similar conditions illustrating continuous episodes of disturbance in the site vicinity can be observed on subsequent aerial photographs from the 1960s through the 1990s. The roads surrounding the resource location can also be observed on the 1971 Otay (1:24,000) USGS topographic map and the City of San Diego 800' Scale Map (Robbins-Wade and Gross 1990).



Plate 1. Lithic tool and one of the flakes identified at P-37-038736.

4.0 MANAGEMENT RECOMMENDATIONS

A study was undertaken to identify cultural resources that are present in the SDM property and to determine the effects of the AMP on historical resources (per CEQA) and historic properties (per Section 106 of the NHPA). The records search revealed that 48 recorded cultural resources have been documented within the airport property; of these, 22 are within, or partially within, the APE for the AMP, which excludes the 329 acres that are being leased to the private developers of the MAP development project.

Of the 22 previously recorded resources located in the APE, seven historic-period resources are within the direct effects APE. Five of the resources are buildings that are proposed for demolition as part of the AMP; all five resources (P-37-018248, P-37-018249, P-37-018251, P-37-018257, and P-37-018261) have been evaluated as not eligible for listing in the NRHP and CRHR due to a lack of integrity and architectural or engineering distinction (Robbins-Wade and Van Wormer 1999). One building that is part of the NRHP-eligible and locally designated Auxiliary Naval Air Station Brown Field Historic District (P-37-018246) - the Naval airfield control tower (Building 2002) - is within the direct effects APE and is addressed in a separate Historic Resource Technical Report (IS Architecture 2024). The remaining four buildings that are recorded as part of the district are not situated in the direct effects APE and will not be impacted by the AMP. The final resource located within the direct effects APE consists of the remnants of one of the diagonal runways constructed in 1943 as part of the Naval Auxiliary Air Station (P-37-031954). The resource is also situated within the MAP development area; as part of the EIR process for that project, the resource was recommended as not eligible for listing in the CRHR, NRHP, or local registers (Bray and Brewster 2012; ESA 2013).

No previously recorded prehistoric archaeological resources have been documented within the direct effects APE. However, as part of the current 2019 field survey conducted in support of the AMP, one newly identified prehistoric archaeological site (P-37-038736) and two prehistoric isolated finds (P-37-038734 and P-37-038735) were identified and recorded. The three newly documented resources consist of only one to three artifacts each and were observed in areas that exhibited heavy disturbances from previous airport development activities. However, despite the disturbances, the identification of the

lithic artifacts is unsurprising due to the location of SDM within Otay Mesa; as discussed in this report, much of the mesa is characterized by an extensive low-density lithic scatter.

Although P-37-038736 meets the definition of an archaeological site, per the City's HRG (at least three associated artifacts and/or ecofacts within a 50 square meter area), it may be better classified as a "non-site," per the Management Plan for Otay Mesa Prehistoric Resources, which are defined as sparse lithic scatters that lack a substantial subsurface deposit and contain a surface artifact density ratio of less than three artifacts per 100 square meters (Gallegos et al. 1998).

Despite whether the resource should be considered a site or "non-site," the HRG further states that sparse lithic scatters containing only a surface component are generally considered not significant. Following the programmatic treatment steps in the Management Plan, "non-sites," as defined above, require no further work. Due to the location of P-37-038736 being 0.40 miles from the head of the canyons that overlook the Otay River Valley, a subsurface deposit is not likely to be present, as numerous archaeological testing efforts in the vicinity have shown (e.g., Cook and Palette 1994; Hector 1986; Kyle et al. 1994; Robbins-Wade and Gross 1990). For example, the testing program conducted for a parcel located less than 500 feet to the west of P-37-038736 resulted in the surface collection of over 300 artifacts within an approximately 18-acre area, with only seven artifacts recovered from the subsurface excavation of 20 shovel test pits, all found within the top 20 centimeters (Robbins-Wade and Gross 1990).

The three artifacts recorded as P-37-038736 are best described as being part of the extensive sparse lithic scatter that is present on Otay Mesa and is a "surface manifestation disturbed through agricultural activities over the past 100 years" (Gallegos et al. 1998:3.6). As explained in the Management Plan for Otay Mesa Prehistoric Resources:

Extensive research, that includes survey and testing programs, has been conducted on the sparse lithic scatters. This work has identified this resource as a surface manifestation that contains no subsurface deposition, no ecofacts, no diagnostic artifacts, and no artifact diversity. Given this, tests of this site type have repeatedly shown this resource to lack research potential, lack Native American concerns, and lack the qualities that would make it eligible for the National Register of Historic Places or the California Register of Historical Resources. Because of the agricultural activity over the past 100 years and the absence of temporal placement and an intact subsurface deposit, these sites simply represent a smear or background noise, as opposed to the significant sites which provide information to address important research questions [Gallegos et al. 1998:vi].

As further stated in the Management Plan, "The research potential of the non-sites, however, is almost non-existent. Because these sparsely scattered artifacts cannot be said to co-occur, they cannot be compared with other sites or loci; nor can they be said to represent a statistical sample of either tools or debitage" (Gallegos et al. 1998:3-51). Additionally, because of the additional 70-plus years of airport-related disturbances and displacement of the soils in the area where the artifacts were observed, on top of the agricultural activities occurring over the past 100 years, the artifacts cannot be determined to be in situ, resulting in poor site integrity.

As such, P-37-038736 does not have the potential to yield information important to our understanding of prehistory and is recommended ineligible for listing in the CRHR or NRHP. Likewise, the site also does not meet the City's criteria to be considered a significant resource; significant sites that have been

identified on Otay Mesa are typically habitation sites with intact subsurface deposits. Following the programmatic treatment guidelines presented in the Management Plan for Otay Mesa Prehistoric Resources, no further work is recommended (Gallegos et al. 1998).

The other two resources, P-37-038734 and P-37-038735, are both archaeological isolates. As a general rule, isolates are not eligible for inclusion in the CRHR or NRHP, and are considered non-significant resources, per the City's HRG. As with site P-37-038736, subsurface deposits are unlikely to be present based on the results of the extensive amount of testing that has occurred in the vicinity and due to the past disturbances at the isolate locations.

As such, based on the results of the current study, no significant archaeological resources would be affected by the Brown Field Municipal Airport AMP, and no additional investigation or evaluation efforts are recommended for project-specific development activities associated with the AMP.

While the archaeological resources documented within the direct effects APE are not considered historical resources (per CEQA) or historic properties (per Section 106 of the NHPA), and no Native American cultural resources have been identified within the APE, there are important cultural resources in the vicinity. Due to this overall cultural sensitivity of Otay Mesa, the potential remains for buried resources to be encountered within the APE. As such it is recommended that an archaeological and Native American monitoring program be implemented for initial grading or other ground-disturbing activities (e.g., trenching for utilities) within undeveloped areas of the direct effects APE or adjacent to documented archaeological resource locations.

It is also recommended that any unevaluated buildings or structures, or those that will be 45 years or older at the time of project-specific development related to the AMP, be documented and assessed for significance or eligibility for listing on the City's Historical Resources Register, the CRHR or the NRHP, if applicable, as part of any future proposed project-specific activities.

In the event that human remains are discovered during any project activities associated with the AMP, the San Diego County Medical Examiner shall be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code §7050.5 and PRC §5097.98 shall be followed.

Should the proposed ALP limits change to incorporate new areas of proposed disturbance, an archaeological survey of these areas shall be required. In addition, the participation of the local Native American community is crucial to the effective identification and protection of cultural resources and tribal cultural resources. In accordance with the City's HRG, Native American participation is required for all subsurface investigations and disturbances whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the APE of a City project is the subject of destruction.

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