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8.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS

As addressed in Section 5.0, the project has been redesigned in order to avoid impacts to four of the archaeological sites. In addition, the following mitigation measures and design considerations will serve to mitigate project impacts to below a level of significance.

Table 7. Mitigation Measures and Design Considerations

CA-SDI- #	Direct Impacts	Mitigation Measures
17,506	Yes	Implementation of the data recovery program included as Appendix E of this report. Construction monitoring, curation of any cultural material collected during testing, data recovery, and monitoring
17,507	Yes	Construction monitoring, curation of any cultural material collected during monitoring
17,508	No	None, not a significant resource, no direct impacts
17,509	Yes	Construction monitoring, curation of any cultural material collected during monitoring
17,510	Yes	Construction monitoring, curation of any cultural material collected during testing and monitoring
20,762	No	Not a significant resource, no direct impacts; construction monitoring in the vicinity, curation of any cultural material collected during monitoring
20,763	No	Not a significant resource, no direct impacts; construction monitoring in the vicinity, curation of any cultural material collected during testing and monitoring
20,858	Yes	Construction monitoring, curation of any cultural material collected during monitoring
20,859	No	None, not a significant resource, no direct impacts
Potential Off-Site Sewer Alignment (Connection to HARRF)		
17,838	Yes, if alignment chosen	Implementation of data recovery program (Smith et al. 2006). Construction monitoring, curation of any cultural material collected during testing, data recovery, and monitoring
17,839	Yes, if alignment chosen	Not a significant resource; construction monitoring in the vicinity, curation of any cultural material collected during monitoring
P-37-#	**Direct Impacts**	**Mitigation Measures**
026709	No	None, not a significant resource, no direct impacts
026762	Yes	None; not a significant resource.
033262	Yes	None; not a significant resource. Construction monitoring, curation of any cultural material collected during monitoring

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APPENDIX A

AN ARCHAEOLOGICAL/HISTORICAL SURVEY AND RESOURCE EVALUATION OF THE EDEN HILLS PROJECT, SAN DIEGO COUNTY, CALIFORNIA

BY BRIAN F. SMITH

AN ARCHAEOLOGICAL/HISTORICAL SURVEY AND RESOURCE EVALUATION OF THE EDEN HILLS PROJECT

SAN DIEGO COUNTY, CALIFORNIA

APNs 232-013-01 through -03; 232-020-55

Prepared for:

Integral Communities
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November 14, 2011

National Archaeological Data Base Information

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Report Date:	November 14, 2011
Report Title:	An Archaeological/Historical Survey and Resource Evaluation of the Eden Hills Project, San Diego County, California
Submitted to:	Integral Communities 2235 Encinitas Boulevard, Suite 216 Encinitas, California 92024
Submitted by:	Brian F. Smith and Associates 14010 Poway Road, Suite A San Diego, California 92064
USGS Quadrangle:	*Rancho Santa Fe,* California (7.5 minute)
Study Area:	Approximately 130 acres
Key Words:	Survey; positive; site evaluations; approximately 130 acres; SDI-17,506; SDI-17,507; SDI-17,508; SDI-17,509; SDI-17,510; P-37-026709; P-37-026762; bedrock milling features; lithic scatter; significant prehistoric resource (SDI-17,506); historic farm complex (P-37-026762); San Diego County; USGS *Rancho Santa Fe* Quadrangle (7.5 minute).

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**Deleted from Public Review; bound in the Confidential Appendix*

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List of Abbreviations

AMSL	above mean sea level
APN	Assessor's Parcel Number
BFSA	Brian F. Smith and Associates
BMF	bedrock milling feature(s)
Cat no	catalog number
CEQA	California Environmental Quality Act
CGM	coarse-grained metavolcanic
FAR	fire-affected rock
FGM	fine-grained metavolcanic
LPW	lithic production waste
MGM	medium-grained metavolcanic
NAHC	Native American Heritage Commission
OHP	(State) Office for Historic Preservation
RPO	Resource Protection Ordinance
SCIC	South Coastal Information Center
SDSU	San Diego State University
SHPO	State Historic Preservation Office
ST	Shovel test pit
TU	Test unit
USDI	United States Department of Interior
USGS	United States Geological Survey
YBP	years before present

1.0 MANAGEMENT SUMMARY/ABSTRACT

Brian F. Smith and Associates, Inc. (BFSA) originally conducted a cultural resource survey and evaluation program for the Eden Hills Project located in northern San Diego County, California, in the North County Metropolitan Subregional planning area (Figure 2.0–1) in 2005 (Mattingly and Buysse 2005). The approximately 130-acre project is located within the County of San Diego, west of the city of Escondido, east of the city of San Marcos, and north of Mount Whitney Road.

The purpose of the current study was to update the BFSA report of 2005 and verify the status of sites studied and reported upon in the original technical report. The 2005 study by BFSA included an institutional records search, a pedestrian survey of the entire project area in order to identify any cultural resources, and the record and evaluation of all identified cultural resources. In 2005, BFSA was contracted by T&B Planning Consultants, Inc. to conduct the cultural resource survey, testing, and evaluation program, and to subsequently prepare a technical report for inclusion in the project's environmental impact documentation to be submitted to the County of San Diego, in accordance with the County of San Diego Resource Protection Ordinance (RPO), Section 21083.2 of the California Public Resources Code (PRC), and California Environmental Quality Act (CEQA).

The 2005 study was not processed by the applicant at that time, and the proposal development was not advanced. This review and update has been prepared for a new application. As a consequence of the 2005 study, a total of five archaeological sites, one very small, disturbed group of isolated artifacts, and three historic structures were identified, recorded, and evaluated during the cultural resource investigation of the project. These resources were recorded with SCIC through the proper Department of Parks and Recreation (DPR) forms and assigned permanent identification numbers (Appendix I). The cultural resources that were evaluated for significance included Sites SDI-17,506, SDI-17,507, SDI-17,508, SDI-17,509, SDI-17,510, an irrigation pump house, a farm house, and an employee residence with attached equipment shed. The isolate (P-026709) is not considered significant. The 2011 update survey essentially confirmed that no change has occurred to the recorded cultural resources and no additional resources were observed.

An archaeological records search and update, conducted at the South Coastal Information Center (SCIC) at San Diego State University (SDSU), indicated that in 2005 there were no previously recorded cultural resources within the project boundaries. However, 15 cultural resources, consisting mainly of lithic scatters and bedrock milling features, have been previously recorded within a one-mile radius of the project area. The results of the records search are discussed further in Section 3.0 and provided in Appendix IV.

Personnel from BFSA conducted the archaeological survey of the property on March 31, 2005 and May 4 and 5, 2005. The updated survey was completed by BFSA from October 26-28, 2011 by Brian F. Smith and a field crew from BFSA. The archaeological testing of the sites was

conducted on June 6 and 7, 2005, under the direction of Brian F. Smith, consulting archaeologist. Constraints on the investigation consisted of limited ground visibility in certain areas; these will be discussed further in Section 6.0.

Of the five prehistoric sites that were subjected to an evaluation, one site (Site SDI-17,506) is recommended as significant. Site SDI-17,506 is interpreted as a campsite where activities included floral and faunal food resource extraction and processing, as well as lithic tool manufacture and maintenance. Because of the presence of subsurface cultural deposits at the site, the range of artifacts recovered, and the remaining potential for buried features, the site is recommended as significant based on Criterion D of the California Register of Historic Places (California Register). However, the site does not meet the requirements for significance set forth in the County of San Diego's RPO.

The results of the testing program at the remaining four prehistoric sites (Sites SDI-17,507, SDI-17,508, SDI-17,509, and SDI-17,510) resulted in recommendations of "not significant" according to both CEQA, Section 15064.5, criteria and the County of San Diego's RPO, Article II, Section 14. At each of these sites, the lack of a significant subsurface deposit or the absence of a subsurface component altogether, combined with the exhaustive recording of surface artifacts and bedrock milling features, indicates that these sites are not likely to yield additional information important to further understanding of the prehistory of San Diego County. Furthermore, the repeated use of the land as avocado and citrus orchards at Sites SDI-17,507 and SDI-17,509 has had a deleterious effect on subsurface deposits, and as a result these sites lack integrity. Provided the recommendation of "not significant" for these four resources is accepted by the County, any impacts incurred through the proposed project will not be significant.

Several historic standing structures were present on the property, and were subjected to a significance evaluation according to CEQA and County RPO criteria. Standing structures noted on the property were an agricultural dam and impound with an irrigation pump house, a farmhouse, and an employee house with attached equipment shed. None of these structures were found to be significant and no constraints are recommended where these features are concerned. A Primary DPR form was completed for the group and Building, Structure, and Object (BSO) forms were completed for the pump house, farmhouse, and employee residence. These forms were submitted with the appropriate attachments to SCIC at SDSU, and the structural complex was assigned the permanent identification number P-37-026762 (Appendix I).

This report includes all data relevant to the evaluation of the identified cultural resources and impact analysis. A copy of this report will be permanently filed with SCIC at SDSU. All collections, notes, photographs, and other materials related to this project will be temporarily housed at the BFSA archaeological laboratory in Poway, California, until permanent curation is arranged at the San Diego Archaeological Center.

2.0 INTRODUCTION

The cultural resource survey and evaluation program for the Eden Hills Project is required by the County of San Diego in conformance with their Archaeological Report Procedures and Resource Protection Ordinance, Section 21083.2 of the California Public Resources Code, and the California Environmental Quality Act (CEQA). The goal of the current study was to identify all cultural resources located within the project area, to determine the significance of all identified resources, and to determine the effect of the proposed project on these identified resources. BFSA was contracted by Integral Communities to complete the cultural resource survey and evaluation program. The proposed Eden Hills Project is an approximately 130-acre single-family residential plan, although the actual details of the proposed plan have not been finalized as of the writing of this report.

The Eden Hills Project is situated west of the city of Escondido, east of the city of San Marcos, and north of Mount Whitney Road in an unincorporated area of San Diego County (Figure 2.0–1). The property lies east of Mount Whitney and Frank's Peak, generally north of Escondido Creek, and northeast of San Elijo Canyon. The property is located on the USGS *Rancho Santa Fe* quadrangle in portions of Sections 18 and 19, Township 12 South and Range 2 West (Figure 2.0–2). The project area incorporates four separate parcels, including APNs 232-013-01 through –03 and 232-020-55.

BFSA conducted the archaeological survey (and update) and records search review, pedestrian survey, and significance evaluations of all cultural resources identified within the project area. Project personnel included Consulting Archaeologist Brian F. Smith, Senior Historian Larry Pierson, Project Archaeologists Seth Rosenberg and Tracy Stropes, Field Technicians Matthew Smith and Ryan Carpenter, Scott Mattingly, Ryan Robinson, James Shrieve, and the report production staff.

Figure 2.0-1:
General Location Map

The Eden Hills Project

1:750,000

1 inch equals 11.84 miles

0 1.5 3 6 9 12 Kilometers

0 1.5 3 6 9 12 Miles

Date Created: June 15, 2005
C:\GIS\projects\eden_hills_general.mxd
Data Sources: USGS, geographynetwork.com

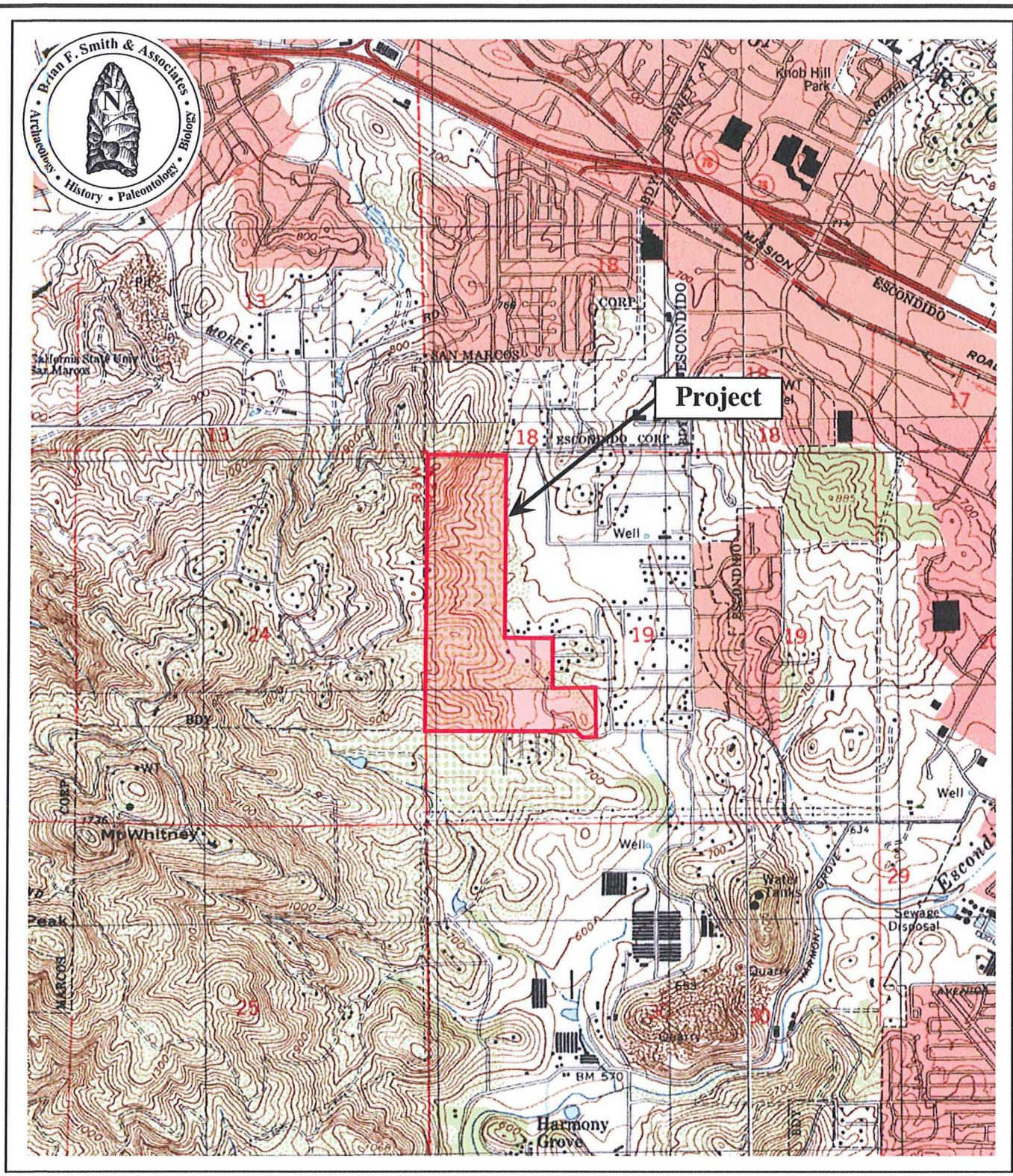

Figure 2.0–2
Project Location Map

The Eden Hills Project

USGS *Escondido, Rancho Santa Fe, San Marcos,* and *Valley Center* Quadrangles (7.5 minute series)

3.0 SETTING

The project setting includes both physical and biological contexts of the proposed project, as well as the cultural setting of prehistoric and historic human activities in the general area.

3.1 Natural Setting

The approximately 130-acre project lies in the inland foothill region located in the Peninsular Range Geomorphic Province of southern California. The property is situated east of Mount Whitney, northeast of San Elijo Canyon, east of the city of San Marcos, and west of the City of Escondido. The project area is located in an unincorporated area of San Diego County, on the USGS *Rancho Santa Fe* quadrangle in portions of Sections 18 and 19, Township 12 South and Range 2 West (Figures 2.0–1 and 2.0–2). The topography within the project area is characterized by rolling hills and low ridges that lie at the lower slopes of steep buttes and mountains, such as Mount Whitney. There are two small, intermittent streams flowing east across the central portion of the project. Vegetation typical of the area includes live oak, white sage, black sage, globe mallow, star thistle, and non-native grasses. Additionally, avocado groves are located in the northern and southern portions of the project area. Elevations within the project area range from approximately 700 feet above mean sea level (AMSL) to approximately 1,000 feet AMSL on the slopes in the northeastern portion of the property. General overviews of the project area are presented in Plate 3.0–1.

The project area contains mostly Mesozoic granitic rocks with some areas of Pre-Cenozoic grantic and metamorphic rocks and Mesozoic plutonic rocks (Miles and Goudey 1998). Soils in the project area belong to the Fallbrook-Vista Association. In this association, soils are well-drained brown sandy loams that have a subsoil of dark-brown or reddish-brown sandy clay loam and clay loam (USDA 1973). Soils are generally shallow over rock. Rock outcrops and boulders cover approximately 10 percent of the surface. The mean annual precipitation is between 10 and 20 inches, and the mean annual temperture is 62 degrees Fahrenheit (USDA 1973).

The project area is currently used for farming and rural residences, and these uses have greatly impacted the natural topography and native vegetation. There are avocado orchards with underground irrigation throughout the project area.

Plate 3.0–1 Overview of project area, facing north.

Plate 3.0–2 Overview of project area, facing southeast.

3.2 Cultural Setting

The cultures that have been identified in the general vicinity of the Eden Hills Project consist of a possible Paleo-Indian manifestation of the San Dieguito Complex, the Archaic and Early Milling Stone horizons represented by the La Jolla Complex, and the Late Prehistoric Luiseño culture. The area was used for ranching and farming following the Hispanic intrusion into the region and extending into the historic period. A brief discussion of the cultural elements in the project area are provided in the following subsections.

3.2.1 Paleoenvironment

Because of the close relationship between prehistoric settlement and subsistence patterns and the environment, it is necessary to understand the setting in which these systems operated. At the end of the final period of glaciation, approximately 11,000 to 10,000 years before the present (YBP), the sea level was considerably lower than it is now; the coastline at that time would have been two to two and one-half miles west of its present location (Smith and Moriarty 1985a, 1985b). At approximately 7,000 YBP, the sea level rose rapidly, filling in many coastal canyons that had been dry during the glacial period. The period between 7,000 and 4,000 YBP was characterized by conditions that were drier and warmer than previously, followed by a cooler, moister environment, similar to the present-day climate (Robbins-Wade 1990). Changes in sea level and coastal topography are often manifested in archaeological sites through the types of shellfish that were utilized by prehistoric groups. Different species of shellfish prefer certain types of environments, and dated sites that contain shellfish remains reflect the setting that was exploited by the prehistoric occupants.

Unfortunately, pollen studies have not been conducted for this area of San Diego; however, studies in other areas of southern California, such as Santa Barbara, indicate that the coastal plains supported a pine forest between approximately 12,000 and 8,000 YBP (Robbins-Wade 1990). After 8,000 YBP, this environment was replaced by more open habitats, which supported oak and non-arboreal communities. The coastal sage scrub and chaparral environments of today appear to have become dominant after 2,200 YBP (Robbins-Wade 1990).

3.2.2 Prehistoric Period

San Dieguito Complex

The San Dieguito Complex were a group of people who occupied sites in this region between 10,000 and 8,000 YBP and were related to or contemporaneous with the Paleo-Indian groups in the Great Basin area and the Midwest. The artifacts recovered from San Dieguito sites duplicate the typology attributed to the Western Pluvial Lakes Tradition (Moratto 1984; Davis et al. 1969). These artifacts generally consist of scrapers and scraper planes, choppers, and bifacially flaked knives, but few or no milling tools. The absence of grinding or milling stones suggests that cereal grains and nuts were not an important part of the subsistence pattern. Tools recovered from sites of the San Dieguito Complex and the general pattern of site locations

indicate that they were a wandering, hunting and gathering society (Moriarty 1969; Rogers 1966).

The San Dieguito Complex is the least understood of the cultures that have inhabited San Diego County. This is due primarily to the fact that San Dieguito Complex sites rarely contain stratigraphic information or datable material. There is a current controversy among researchers centering on the relationship of the San Dieguito and the subsequent cultural manifestation in the area, the La Jolla Complex. Firm evidence has not yet been discovered to indicate whether the San Dieguito "evolved" into the La Jolla Complex, if the La Jolla Complex moved into the area and assimilated the San Dieguito people, or if the San Dieguito retreated from the area because of environmental or cultural pressures. It has been offered that the San Dieguito Complex may have been an early term for what later was identified as the inland Archaic (Raven-Jennings and Smith 1999). Very little evidence of the San Dieguito Complex has been identified within the immediate project area. It is probable that environmental changes associated with climatic change affected the subsistence base of the San Dieguito Complex, resulting in their exodus from this area sometime before 9,000 YBP.

The La Jolla Complex

Approximately 9,000 to 8,500 YBP, a second major cultural tradition was established in the San Diego region, primarily along the coast. At that time, the shoreline was located farther west than it is currently because the sea level was lower during the end of the last Ice Age. Locally, this cultural tradition has been called the La Jolla Complex, and radiocarbon dates from sites attributed to this culture span a period of over 7,000 years in this region (between 9,000 and 2,000 YBP). The La Jolla Complex is best recognized for its pattern of shell middens, grinding tools closely associated with marine resources, and flexed burials (Shumway, Hubbs and Moriarty 1961; Smith and Moriarty 1985a, 1985b).

The tool typology of the La Jolla Complex displays a wide range of sophisticated lithic manufacturing techniques. Scrapers, the most common type of flaked tool recovered from La Jolla sites, were created by either splitting cobbles or finely flaking quarried material. La Jolla Complex sites also contain large numbers of milling tools (manos and metates) and utilized flakes that appear to have been used to pry open shellfish (Smith and Moriarty 1985a, 1985b). Inland sites of the La Jolla Complex, sometimes called the Pauma Complex, were situated at a distance from marine food resources and generally lack marine-related refuse but do contain large quantities of milling tools and food bone, suggesting seasonal migration from the coast to the inland valleys (Smith 1986).

3.2.3 Late Prehistoric Period

Approximately 1,300 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Diego County, marking the transition to the Late Prehistoric Period. This period is characterized by higher population densities and development in social, political, and

technological systems. Economic systems diversified and intensified during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, but effective technological innovations. Technological developments during this period include the introduction of the bow and arrow between 400 and 600 A.D. Atlatl darts are replaced by smaller arrow darts, including the Cottonwood series points. Other hallmarks of the Late Prehistoric Period include cremation of the dead and extensive trade networks as far reaching as the Colorado River Basin. The period is divided into two phases, including San Luis Rey I and San Luis Rey II, based upon the introduction of pottery (Meighan 1954). Radiocarbon dating and the introduction of pottery established that the San Luis Rey II phase began at approximately 1,300 A.D. San Luis Rey I is characterized by the use of portable shaped or unshaped slab metates, and non-portable bedrock milling features. Manos and pestles can also be shaped or unshaped. Cremations, bone awls, and stone and shell ornaments are also prominent in the material culture. The later San Luis Rey II assemblage is augmented by pottery cooking and storage vessels, cremation urns, and polychrome pictographs, or rock art, which likely appeared as the result of increased population sizes, and increased sedentism (True et al. 1974). Flaked stone dart points are dominated by the Cottonwood Triangular series, but Desert Side-Notched, Dos Cabazas Serrated, leaf-shaped, and stemmed styles also occur. Subsistence is thought to have focused on the utilization of acorns, a storable species that allowed for relative sedentism and increased population sizes.

Ethnohistorical and ethnographic evidence indicates the Shoshonean-speaking group that occupied the northern portion of San Diego County was the Luiseño. Along the coast, the Luiseño made use of the marine resources available by fishing and collecting molluscs for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. The elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian, resources from the eastern deserts, and steatite from the Channel Islands.

When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Range mountains, including Palomar Mountain to the south and Santiago Peak to the north, on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano. The Luiseño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than to the Kumeyaay, a Yuman-speaking group, who occupied territory to the south. The Luiseño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, a distinct world view that stemmed from use of the hallucinogen *datura*, and an elaborate religion that included ritualized sand paintings of the sacred being "Chingichngish" (Bean and Shipek 1978; Kroeber 1925). The following is a summary of ethnographic data regarding this group.

Subsistence and Settlement

The Luiseño occupied sedentary villages, most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching, and in areas that offered thermal and defensive protection. Villages were comprised of areas that were both publicly and privately, or family, owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were utilized, particularly from January to March, when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. For the remainder of the year, the Luiseño remained at village sites, where food resources were within a day's travel (Bean and Shipek 1978).

The most important food source of the Luiseño was acorns, of which six different species were used (*Quercus californica*, *Q. agrifolia*, *Q. chrysolepis*, *Q. dumosa*, *Q. engelmanni*, and *Q. wizlizeni*). Seeds, particularly of grasses (Gramineae), composits (Compositae), and mints (Labiatae), were also heavily utilized. Seed-bearing species were encouraged through controlled burns, which were conducted at least every third year. A variety of other stems, leaves, shoots, bulbs, roots, and fruits were also utilized. Hunting augmented this vegetal diet. Animal species taken included deer (*Odocoileus hemionus*), rabbits (*Sylvilagus* sp.), hares (*Lepus californicus*), woodrats (*Neotoma* sp.), ground squirrels (*Spermophilus beecheyi*), antelope (*Antilicapra americana*), quail (*Callipelpa californica* and *Oreortyx pictus*), ducks (Anatidae), freshwater fish from mountain streams, and marine mammals, fish, crustaceans, and molluscs, particularly abalone (*Haliotis* sp.), from the coast. In addition, a variety of snakes, small birds, and rodents were taken (Bean and Shipek 1978; Kroeber 1925).

Social Organization

Social groups within the Luiseño nation consisted of patrilinear families or clans, which were politically and economically autonomous. Several clans comprised a religious party, or *nota*, which was headed by a chief, who organized religious ceremonies and controlled economics and warfare. The chief had assistants who specialized in particular aspects of ceremonial or environmental knowledge, and who, with the chief, were part of a cultic social group with special access to supernatural power, particularly that of Chingichngish. The positions of chief and assistants were hereditary, and the complexity and multiplicity of these specialists' roles likely increased in larger villages, notably along the coast (Bean and Shipek 1978; Kroeber 1925).

Marriages were arranged by the parents; these arrangements were often made to forge alliances between lineages. Useful alliances included those between groups of differing ecological niches, and those that resulted in territorial expansion. Residence was patrilocal (Bean and Shipek 1978; Kroeber 1925).

Women were primarily responsible for plant gathering, while men were responsible for hunting, although at times, particularly during acorn and marine mollusc harvests, there was no division of labor. Elderly women cared for children, while elderly men were active participants in rituals, ceremonies, and political affairs, and were responsible for manufacturing hunting and ritualistic implements. Children were taught subsistence skills at the earliest age possible (Bean and Shipek 1978; Kroeber 1925).

Material Culture

House structures were conical, partially subterranean, and thatched with reeds, brush, or bark. Ramadas were rectangular-shaped and generally used to protect workplaces for domestic chores, including cooking. Ceremonial sweathouses, which were important in purification rituals, were round, partially subterranean thatched structures covered with a layer of mud. Another ceremonial structure was the wámkis, which was located in the center of the village, and was the place of rituals, including the sand painting associated with the Chingichngish cult (Bean and Shipek 1978; Kroeber 1925).

Clothing was minimal; women wore a cedar-bark, netted-twine double apron, and men a waist cord. In cold weather, cloaks or robes of rabbit fur, deerskin, or sea otter fur were worn by both sexes. Footwear included sandals fashioned from yucca fibers, and deerskin moccasins. Adornments included bead necklaces and pendants made from bone, clay, stone, shell, bear claws, mica sheets, deer hooves, and abalone shell. Men wore ear and nose piercings made of cane or bone, which were sometimes decorated with beads (Bean and Shipek 1978; Kroeber 1925).

Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wooden tip, or a lithic point, usually fashioned from locally available felsite or quartz. Throwing sticks fashioned from wood were used in hunting small game, while deer head decoys were used during deer hunts. Coastal groups fashioned dugout canoes for near-shore fishing, and harvested fish with seines, nets, traps, and hooks made of bone or abalone shell (Bean and Shipek 1978; Kroeber 1925).

The Luiseño had a well-developed basket industry; baskets were used in resource gathering, food preparation, storage, and food serving. Pottery containers, which were shaped by paddle and anvil and then fired in shallow open pits, were used for food storage, cooking, and serving. Other utensils included wooden implements, steatite bowls, and ground stone manos, metates, mortars, and pestles (Bean and Shipek 1978; Kroeber 1925).

Additional tools included knives, scrapers, choppers, awls, and drills. Shamanistic items included soapstone or clay smoking pipes, and crystals made of quartz or tourmaline (Bean and Shipek 1978; Kroeber 1925).

3.2.4 Historic Period

Spanish Period (1769-1821)

The Spanish occupation of the claimed territory of Alta California took place during the reign of King Carlos III of Spain. The powerful representative of the King in Mexico was Jose de Galvez, who conceived of the plan to colonize Alta California and thereby secure the area for the Spanish crown (Rolle 1969). The effort involved both a military and a religious contingent, with the overall intent of establishing forts and missions to gain control of the land and of the native inhabitants through conversion. Actual colonization of the San Diego area began on July 16, 1769, when the first Spanish exploring party, commanded by Gaspar de Portolá (with Father Junípero Serra in charge of religious conversion of the native populations), arrived in San Diego to secure California for the Spanish crown (Palou 1926). The natural attraction of the harbor at San Diego and the establishment of a military presence in the area solidified the importance of San Diego to the Spanish colonization of the region and the growth of the civilian population. Missions were constructed from San Diego to as far north as San Francisco. The mission locations were based on a number of important territorial, military, and religious considerations. Grants of land to persons who made an application were made, but many tracts reverted to the government for lack of use. As an extension of territorial control by the Spanish empire, each mission was placed so as to command as much territory and as large a population as possible. While primary access to California during the Spanish Period was by sea, the route of El Camino Real served as the land route for transportation, commercial, and military activities. This route was considered to be the most direct path between the missions (Rolle 1969). As increasing numbers of Spanish and Mexican people, and later Americans during the Gold Rush, settled in the area, the Indian populations diminished as they were displaced or decimated by disease (Carrico and Taylor 1983).

Mexican Period (1821-1846)

By 1821, Mexico had gained independence from Spain, and the northern territories were subject to political repercussions. By 1834, all of the mission lands had been removed from the control of the Franciscan Order, under the Acts of Secularization. Without proper maintenance, the missions quickly began to disintegrate, and after 1836, missionaries ceased to make regular visits inland to minister the needs of the Indians (Engelhardt 1921). Large tracts of land continued to be granted to persons who applied for them or had gained favor with the Mexican government. Grants of land were also made to settle government debts.

Anglo-American Period (1846-Present)

California was invaded by United States troops during the Mexican-American War of 1846-1848. The acquisition of strategic Pacific ports and California land was one of the principal objectives of the war (Price 1967). At the time, the inhabitants of California were

practically defenseless, and they quickly surrendered to the United States Navy in July 1847 (Bancroft 1886).

The cattle ranchers of the "counties" of southern California had prospered during the cattle boom of the early 1850s. They were able to "reap windfall profit...pay taxes and lawyer's bills...and generally live according to custom" (Pitt 1966). Cattle-raising soon declined, however, contributing to the expansion of agriculture. With the passage of the "No Fence Act," San Diego's economy changed from stock-raising to farming (Rolle 1969). The act allowed for the expansion of unfenced farms, which was crucial in an area where fencing material was practically unavailable. Five years after its passage, most of the arable lands in San Diego County had been patented as either ranchos or homesteads, and growing grain crops replaced raising cattle in many of the county's inland valleys (Blick 1976; Elliott 1883 [1965]). By 1870, farmers had learned to dry-farm and were coping with some of the peculiarities of San Diego County's climate (*San Diego Union*, February 6, 1868; Van Dyke 1886). Between 1869 and 1871, the amount of cultivated acreage in the county rose from less than 5,000 acres to more than 20,000 (*San Diego Union*, January 2, 1872). Of course, droughts continued to hinder the development of agriculture (Crouch 1915; *San Diego Union*, November 10, 1870; Shipek 1977). Large-scale farming in San Diego County was limited by a lack of water and the small size of arable valleys; also, the small urban population and poor roads restricted commercial crop growing. Nevertheless, cattle continued to be grazed in inland San Diego County (Gordinier 1966).

During the first two decades of the twentieth century, the population of San Diego County continued to grow. The population of the inland county declined during the 1890s, but between 1900 and 1910, it rose by about 70 percent. The pioneering efforts were over, the railroads had broken the relative isolation of southern California, and life in San Diego County became similar to other communities throughout the west. After World War I, the history of San Diego County was primarily determined by the growth of San Diego Bay. In 1919, the United States Navy decided to make the bay the home base for the Pacific Fleet (Pourade 1967). During the 1920s, the aircraft industry also established itself at the bay (Heiges 1976). The establishment of these industries led to the growth of the county as a whole; however, most of the growth occurred in the north county coastal areas, where the population almost tripled between 1920 and 1930. During this time period, the history of inland San Diego County was subsidiary to that of the City of San Diego, which became a Navy center and industrial city (Heiges 1976). In inland San Diego County, agriculture became specialized, and recreational areas were established in the mountain and desert areas.

In particular, the project area is west of Rancho Rincon del Diablo and south of Rancho Los Vallecitos de San Marcos. Rincon del Diablo, meaning corner of the devil, was granted in 1843 to Juan Bautista Alvarado. The rancho, consisting of 12,633 acres, went through a series of owners after Alvarado until 1886, when the grant was deeded to the Escondido Land and Town Company (Whetstone 1963). The company subdivided the land into small farms, layed out the

townsite, and built wells and pipe systems. From the late eighteenth century until the middle of the twentieth century, Escondido and the surrounding region was used for agricultural purposes, including the production of citrus fruits, grapes, and avocados, hay and grain farming, and ranching.

3.3 Review of Previous Archaeological Investigations

An archaeological records search was conducted at the South Coastal Information Center (SCIC) at San Diego State University (Appendix II). The project area had not been surveyed for cultural resources prior to the current investigation. There have been 16 cultural resource studies within a one-mile radius of the center of the proposed project area (Table 3.3–1). A large portion of these studies have been completed for private individuals and/or firms as part of the environmental review for business and/or residential development projects. Other cultural resource studies were completed for infrastructure projects, such as road extensions and water lines, and submitted to the City of Escondido or the City of San Marcos.

A total of 15 cultural resources are located within one mile of the center of the study area (Table 3.3–2). The majority of these resources, 13 (N=86.67%), are prehistoric archaeological sites; however, two of these resources also contain an historic cultural component. A large portion of these prehistoric sites are located east of the project area in the valley surrounding Escondido Creek. Five (33.33%) of the prehistoric sites contain only bedrock milling features, while six (40.00%) include lithic production waste and lithic tools. The remaining prehistoric sites consist of one site containing bedrock milling features with associated lithic tools and lithic production waste, and one site containing a bedrock milling feature and pottery. The character and distribution of these prehistoric site types indicates that the Eden Hills area was utilized primarily during the Late Prehistoric period for resource procurement and processing and, secondarily, as a temporary camping area. No prehistoric lithic quarry sites have been identified within one mile of the project area.

The two previously recorded historic cultural resources are located northeast of the project area on Barham Drive. Both resources are historic residences built in the first half of the twentieth century. One residence, built in 1927, can be described as being built in the Spanish Eclectic style. The other previously recorded historic residence, built approximately in the 1940s, can be described as representing the Modified-Craftsman style.

TABLE 3.3–1

Previous Archaeological Investigations Within A One-Mile Radius of the Center of the Eden Hills Project

American Pacific Environmental Consultants, Inc.
1979 "Assessment District 76-2 of the San Marcos County Water District Draft Environmental Impact Report." American Pacific Environmental Consultants, Inc. Submitted to San Marcos County Water District. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

American Pacific Environmental Consultants, Inc.
1979 "Archaeological Reconnaissance of San Marcos County Water District Proposed Assessment District 76-2, San Diego County, California." American Pacific Environmental Consultants, Inc. Submitted to San Marcos County Water District. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Berryman, Judy A.
1980 "Results of an Archaeological Test on SDI-7843, located within Escondido, California." Archaeological Consulting and Technology, Inc. Submitted to Environmental Horizons, Inc. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Micheal Brandman Associates, Inc.
1989 "Draft Environmental Impact Report San Marcos Flood Control Channel San Marcos Creek/Las Posas Reach SCH #8801505." Micheal Brandman Associates, Inc. Submitted to the City of San Marcos. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Chace, Paul G.
1986 "Supplemental Archaeological Survey for the Louetto Business Park Project, City of Escondido." Paul G. Chase & Associates. Submitted to Louetto Business Park. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Gallegos, Dennis *et al.*
1993 "Cultural Resource Literature Review for the San Dieguito River Valley Regional Open Space Park Focused Planning Area, San Diego County, California." Gallegos & Associates. Submitted to San Dieguito River Valley Regional Open Space Park JPA. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Gallegos, Dennis
1983 "Archaeological Report for Business/Industrial, Richmar, Lake San Marcos and Barham/Discovery Community Plan, San Marcos, California." WESTEC Services, Inc. Submitted to City of San Marcos Planning Department. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

HCH & Associates
1980 "Palos Vista General Plan Amendment Draft Environmental Impact Report." HCH & Associates. Submitted to Prima Development Co. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Hector, Susan and Stephen Van Wormer
1985 "Archaeology Survey of the Prohoroff Property, San Marcos, California." RECON. Submitted to Bieri-Avis. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Moriarty, James Robert III and Larry J. Pierson
1980 "An Archaeological Survey of the North County Christian Center Subdivision, San Marcos, California." Archaeological/Historical Research Services. Submitted to Bradley & Associates Consultants, Inc. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

1980 "Archaeological Survey and Test of the Shelly Group/San Marcos Project, San Marcos, California." Archaeological/Historical Research Services. Submitted to Shelly Group, Inc. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Padon, Beth and Stephen Van Wormer
1987 "Cultural/Scientific Resources for the San Diego State University North County Center Master Plan San Diego County, California." LSA Associates, Inc. Submitted to California State University Office of the Chancellor. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

RECON
1977 "Draft Environmental Impact Report for Bright Skies Mobile Estates." RECON. Submitted to Bright Prospects Foundation, Inc. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Smith, Brian F.
1990 "An Archaeological Survey of the Douglas Subdivision Project, San Marcos, County of San Diego, TPM 4947, EAD Log #90-8-72." Brian F. Smith and Associates. Submitted to Clifford Douglas. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Smith, Brian F. and K. Harley Meier
2004 "Mitigation Monitoring Report for the Escondido Research and Technology Center." Brian F. Smith and Associates. Submitted to JRMC Real Estate. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

Smith, Brian F., Larry J. Pierson and Shannon Gilbert
2004 Archaeological Investigations at the Harmony Grove Village Project and Off-Site Improvements, San Diego County, California (SP 04-010; GPA 04-04; REZ 04-010; VTM 5365; MUP 04-014; MUP 04-013; MUP 04-012). Report on file at Brian F. Smith and Associates.

SRS Inc.
1990 "Archaeological Reconnaissance Report for Eden Valley Project, Rancho Los Vallecitos de San Marcos, San Diego County." Scientific Resources Inc. Submitted to Kingsway Development Corporation. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, CA 92182.

TABLE 3.3–2

Cultural Resources Located Within A One-Mile Radius of the Center of the Eden Hills Project

Site No.	Description
SDI-598	Lithic production waste and lithic tools
SDI-4667	Lithic production waste and lithic tools
SDI-4668	Lithic production waste and lithic tools
SDI-8329	Bedrock milling features
SDI-12,045/H	Historic structure
SDI-12,046/H	Historic structure
SDI-16,222	Bedrock milling feature
SDI-16,224	Bedrock milling features
SDI-16,225	Bedrock milling feature
SDI-16,226	Bedrock milling feature
SDI-16,989	Bedrock milling features, lithic production waste, and lithic tools
SDI-16,990	Lithic production waste and lithic tools
SDI-17,161	Bedrock milling feature and ceramic scatter
SDI-17,162	Lithic production waste and lithic tools
SDI-17,163	Lithic production waste and lithic tools

4.0 RESEARCH DESIGN

The significance testing program for the Eden Hills Project was requested by the applicant based on requirements by CEQA and the County of San Diego. The scope of work for this portion of the archaeological program included the evaluation of the significance of five prehistoric archaeological sites (SDI-17,506, SDI-17,507, SDI-17,508, SDI-17,509, and SDI-17,510) and three historic structures. The significance evaluation program for the prehistoric sites required a surface examination and the subsurface testing of each site, as well as the recordation of any features, including bedrock milling features, present at the sites. Basic goals, such as the determination of site boundaries, depth of any archaeological deposit, stratigraphy, integrity, content, and spatial distribution of any subsurface artifacts and cultural ecofacts, were essential to this test phase/significance evaluation program. The research orientation of a testing program is necessarily more limited than one developed for a data recovery investigation. While data recovery research designs typically transcend the goal of data acquisition by expanding the meaning of information extracted from a site through the use of archaeological questions important in current scientific research, the goal of a testing program is limited to determining significance. In this case, research goals that are of importance to prehistoric sites in the San Diego region were used as a backdrop for determining site significance. Regional and temporal research issues should be taken into consideration when posing such questions, regardless of the phase of study. Since the goal of the testing program is limited to determining significance, the research issues posed here will be more focused on the types of data that are available at the sites under investigation and the degree to which these data can be used to address research issues specific to San Diego prehistory. By limiting the scope of the research questions, the focus will be placed on the determination of significance of each site within the framework of San Diego prehistory and history.

- **Cultural Affiliation and Subsistence Strategy**

Determination of significance for prehistoric sites is typically associated with the fourth CEQA criteria: "the resources has yielded, or may be likely to yield, information important to the prehistory or history of the state and the nation." Two very general but common prehistoric research topics in San Diego County are cultural sequence and subsistence strategy.

In looking for and identifying separate cultural horizons, the premise can be that different people occupied the area at different times, or that a group or groups changed enough through time such that they appear to be different in retrospect. A tripartite theoretical cultural sequence has been the traditional operational hypothesis for San Diego County (Moriarty 1966; Moratto 1984). This sequence has been presented as *San Dieguito* being the oldest, then the *La Jolla Complex*, or Archaic period, followed by the late prehistoric *Luiseño* in northwestern San Diego County and *Diegueño* (Kumeyaay) in southern and eastern San Diego County. While a substantial amount is known about the late prehistoric peoples because of numerous sites with

good preservation and historic accounts (ethnohistory), the earlier occupants are more enigmatic due to a lack of preservation and ethnohistory. The earliest residents and their age and origins have been the subject of much confusion.

In terms of the Eden Hills sites, the presence of artifact types thought to be representative of specific cultural horizons would give an indication as to whether a cultural assignment can be attributed to this portion of the site. Without a cultural affiliation, it could be argued that the research potential of the site is particularly limited. Diagnostic artifacts may include small arrow points and ceramics for the Late Prehistoric Period, and dart points and an abundance of portable milling tools for the Archaic Period. The San Dieguito Period has been more difficult to which to assign temporally diagnostic artifacts, but has included crescentics, elongated bifacial knives, and intricate leaf-shaped points. If no diagnostic artifacts are present, the potential for datable material (charcoal, marine shell, or animal bone) should be determined.

Many of the earliest La Jolla Complex sites are located in northern portions of San Diego County and are the same sites as those reported for the San Dieguito Complex (Rancho San Diego, Agua Hedionda, and the Harris Site). Both cultures, as well as the Late Prehistoric, made use of coastal and inland resources, including plants, animals, shellfish, and fish. One of the primary differences between these cultures is the lack of milling implements attributed to the San Dieguito occupation of these sites, indicating that grinding was not an important aspect of the economy (Moriarty 1967; Kaldenberg 1982; Gallegos and Carrico 1984). Due to the similarity of the resources procured during the San Dieguito and La Jolla periods, discriminating between the subsistence practices is central to the issue of adaptive change through the early prehistory of San Diego County. The Late Prehistoric period, on the other hand, saw perhaps the widest range of resource utilization. In particular, it is necessary to document whenever possible the actual resources taken through the collection and analysis of ecofactual data and tool varieties. Site characteristics that could perhaps contribute to future research regarding subsistence strategies include marine shell, animal bone, bone tools, and a wider variety of lithic materials and tool types.

Research Questions:

Are culturally or temporally diagnostic artifacts represented at the Eden Hills sites?

If so, what culture groups are represented at the Eden Hills sites?

Are datable materials present at any of the Eden Hills sites?

Based on the testing program, would the culturally diagnostic information that is available at the sites be able to contribute to future research of these sites and sites in the region?

How do the testing results for these sites compare to previous archaeological investigations of sites in the region? Is the material culture recovered from the Eden Hills site consistent with recovery from sites in the region? How unique are the elements of each of the sites at the Eden Hills Project?

What activities were undertaken at sites within the project area and what resources were exploited?

Can faunal or marine shellfish remains provide information about the subsistence strategy of the occupants and perhaps the season of use of the site?

Were resources processed at any of the Eden Hills sites? In what manner were subsistence resources processed and prepared at each of the sites?

Based on the testing program, would the remains available at the site be able to contribute to future research regarding prehistoric subsistence strategies in the region?

- **Role of Bedrock Milling Sites**

The range of features and artifacts at a site has been used to characterize a site as residential or simply a resource extraction site (Smith and Moriarty 1985c; Pierson et al. 1987). Sites with a great quantity of thermally-affected rocks, a wide variety of tool types, items of personal adornment, ritual or shamanistic objects, interred cremations, and clearly defined special use areas are indicators of residential sites. At inland locations, sites with bedrock milling features but few tools and thermally-affected rock have traditionally been identified with food resource extraction and initial gross reduction activities of Late Prehistoric peoples. Such extraction sites can be part of the summer hunting and gathering system, or part of the support system for semi-permanent winter villages. Bedrock milling sites appear to be the most common type of prehistoric site type in this area of San Diego County; the role of these sites within the Late Prehistoric subsistence system of the area would have been based on the availability of plant and animal species at any given time of the year. The seasonality of plant resources and how their availability affected the focus on target resources, and thus site location, is developing as a research interest among those interested in prehistoric lifeways.

Research Questions:

What is the distribution of bedrock milling feature sites within the Eden Hills Project?

Are temporal diagnostic artifacts associated with bedrock milling features? Does it appear as though the use of bedrock milling sites within the project area is limited to the Late Prehistoric period?
What type of milling surface variability is present at the sites? Can this variability be used to assist in identification of species floral and fauna processed at a site? Can the variability be used to identify unique elements at any of the Eden Hills sites?

- **Historic Research Domains**

Again, the research questions developed for this phase of the investigation are necessarily limited due to the goals of an evaluation project. The primary goal of this project was the identification of resources within the project area and determination of their significance. Determination of significance for historic resources is typically associated with the first three of the four CEQA criteria: "association with significant events in California's history and cultural heritage; with important persons in the region's past; and exhibiting distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values." This not to say that the fourth criteria never applies to historic structures, but that the significance of standing structures with no associated archaeological deposits typically depends on the history of the structures themselves, rather than the continued information that can be extracted from the structure. In the case of historic structures, both field reconnaissance and archival research work are used to identify characteristics that might contribute toward resource significance. The following questions were developed to help evaluate the importance of each structure based on data gathered from field and archival research.

Research Questions:
Does the archival information indicate dates of construction for the identified structures? Are the structures old enough to be considered historic?

Are the structural elements typical of a certain type or method of construction? Is the type or method of construction typical of the Eden Hills area?

Are the structural elements typical of a certain time period? If so, is the period of construction well represented in the Eden Hills area?

Does the archival information identify a famous or otherwise important individual associated with the identified structures? If so, what is the association and when did it occur? How long during the lifetime of the structures did the association apply?

Are any significant events in California's or the region's history associated with the identified structures based on the archival research?

Do the structures help us to understand the make-up of rural communities in this area of San Diego County?

- **Integrity**

In order for the site to be considered significant, it must be established that enough of the deposit remains to retain integrity. This is particularly true in the case of Site SDI-17,506 where a large portion of the site has already disturbed by grading and agriculture. According to the California Register, *integrity* is defined as:

> ...the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance [California Register].

The surface of the site should be investigated for evidence of ground disturbances, perhaps resulting in uneven ground surfaces compared to adjacent lots, evidence of the movement of soil, or vehicle activity. All subsurface excavations should be thoroughly investigated and their profiles and soil descriptions compared to ascertain the existing state of the stratigraphy of the site. Any observed disturbances should be weighed against the quality and quantity of data that was gathered during the testing program.

Research Questions:
How have the sites been disturbed?

Do the sites retain adequate integrity to yield important information?

Are observed disturbances superficial or have they impacted the deposit to a greater depth?

How does the existing topography compare to adjacent properties?

Have any disturbances compromised the ability to analyze material culture contextually?

In the case of the historic structures, have the structures been altered or moved based on available archival data?

Overall Data Needs

The following data needs will be required at each site identified within the project area in order to address the research questions posed above. The answers to these questions can then be used to determine site significance based on CEQA and the County's RPO significance criteria.

Prehistoric Sites:

1. Surface observations and recordation (preferably through photographs as well as field notes);
2. Documentation of all bedrock milling features and individual milling surfaces, including a description and quantity of each milling surface type present at the site;
3. The excavation of subsurface tests that would determine the presence and extent of any subsurface deposits (shovel tests), as well as document the qualitative and quantitative elements of the deposit (test unit[s]);
4. Soil profiles documenting soil conditions and stratification;
5. Artifacts recovered should be quantified and cataloged by artifact type;
6. Ecofacts recovered should be quantified and cataloged by ecofact type and, if possible, scientific classification;
7. Examination of the horizontal and vertical distribution of artifact recovery; and,
8. Comparison of testing results with similar sites from the region (archaeological record search).

Historic Structures:

1. In the case of historic structures, each historic structure should be documented in detail, including building materials, building styles, alterations, etc. Documentation should include photography of each individual structure.
2. Historic Chain of Title, Assessor's Building Records, historic maps, and County recorder records.
3. San Diego Historical Society's Research Archives.
4. Archaeological and historical records search.

5.0 METHODOLOGY

The cultural resources study of the Eden Hills Project consisted of a cultural resources records search, an intensive cultural resource survey of the entire approximately 130 acres, the detailed recordation of all identified archaeological sites and historic structures, and a testing and evaluation of all identified cultural resources. The evaluation of the historic structures included archival research as discussed below. This study was conducted in conformance with the County of San Diego Archaeological Report Procedures, Resource Protection Ordinance (RPO) and the California Environmental Quality Act (CEQA). Statutory requirements of the CEQA guidelines (Section 15064.5) and the County of San Diego Resource Protection Ordinance, Article II, Section 14, were followed in evaluating the significance of each cultural resource. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO March, 1995). The report format follows the guidelines established by SHPO in the Archaeological Resource Management Report (ARMR) Guidelines and required by the County of San Diego.

5.1 Institutional Records Searches

An archaeological records search was conducted by BFSA at the South Coastal Information Center (SCIC) at San Diego State University (Appendix II). No previously recorded cultural resources were identified within the project boundaries. However, 15 previously recorded cultural resources are located within a one-mile radius of the center of the project area (see Section 3.3). Most of these previously recorded sites are lithic scatters and bedrock milling features. In addition, a search was conducted by the Native American Heritage Commission of the Sacred Lands File (see Section 5.5)

5.2 Archival Research

As part of the records search conducted by BFSA at SCIC (Appendix II), a complete listing of previous studies and recorded standing structures was identified. No previously recorded historic resources were noted within the project boundaries. Because potentially historic standing structures were identified during the field reconnaissance, it was necessary to determine the age and significance of those features. Several 200-foot scale contour maps were obtained to verify age and footprint characteristics of each feature and compare those characteristics with the building record. The Assessor's Building Record was copied with the owner's permission and a Chain of Title was ordered for the two parcels that contained standing structures. Resources of the San Diego Historical Society's Research Archives were utilized to identify historical significance of past owners and the Eden Hills farm itself. No additional research was conducted because 1) the results of this research was negative or of questionable accuracy (in the case of the building record), and 2) further research would be low yield in terms of results for effort expended and would likely not change the interpretation of no significance.

5.3 Field Methodology

5.3.1 Survey

The archaeological survey of the proposed Eden Hills project was conducted on March 31, and April 4 and 5, 2005, and subsequently updated on October 21-28, 2011. The 2005 survey generally consisted of pedestrian surveillance of north-south parallel transects spaced at five to ten meter intervals. All natural features, such as bedrock outcrops and seasonal drainages, were examined in greater detail for cultural resources. Nearly 75% of the ground was covered with thick grass and leaves from live oaks, avocado trees, or citrus trees. Additionally, at least 60% of the area had been graded and disturbed for the construction of roads, structures, irrigation, and farming. All newly identified cultural resources were recorded according to the Office of Historic Preservation's (OHP) manual, Instructions for Recording Historical Resources using DPR 523 forms. Site forms for each identified prehistoric site and historic structure were submitted to the South Coastal Information Center at San Diego State University for the assignment of a permanent trinomial and/or primary numbers (Appendix I). The 2011 survey update included a review of all previously recorded sites and an intuitive reconnaissance of high potential areas when resources could be expected.

5.3.2 Prehistoric Site Testing

The archaeological testing and significance evaluation program for sites located within the proposed Eden Hills project area was conducted on June 1 and 2, 2005. When possible, locations of sites, bedrock milling features, excavations, surface collections and topographic features were recorded with a Trimble GeoXT Global Positioning System. Within the avocado groves (where the canopy was too dense for effective operation of the GPS) a datum was established from which all surface points, as well as shovel tests, test excavations, and bedrock milling features were mapped using range and azimuth readings collected with a tripod mounted Brunton compass, and metric measuring tape. All surface artifacts were recorded and collected. The surface collection procedure consisted of mapping each recovery location, collecting the artifacts, and securing the artifacts in a container that was labeled with the provenience information. All of the recovered surface artifacts were returned to the consultant's laboratory for analysis. Bedrock milling features were given alphabetic designations and recorded, drawn, and photographed. Together, the surface collections, bedrock milling features, and results of the subsurface excavations delineated the boundaries of each site.

A series of shovel tests (STs) were excavated in order to identify the nature and extent of potential subsurface deposits at all newly identified sites. The ST series consisted of excavations 30 centimeters in diameter that proceeded, in decimeter levels, to a culturally sterile soil horizon or solid rock. The quantity and placement of STs at each site varied according to the abundance and extent of surface artifacts and cultural features, the general morphology of the landform on which the site was located, and the limitations imposed by bedrock, orchard trees, and private property. All soil was sifted through one-eighth-inch mesh hardware cloth, and all recovered

artifacts were placed in containers labeled with the provenience information. All of the artifacts recovered from this testing procedure were returned to the consultant's laboratory for analysis.

Qualitative and quantitative testing of subsurface cultural material was conducted through the excavation of a one-meter-square test unit (TU) at Site SDI-17,506. The test unit was excavated in standard decimeter levels to rodent disturbed bedrock. Placement of the TU was based on the presence of positive shovel tests and a concentration of surface artifacts. The TU measured one meter square and was oriented to true north. All excavated soils were sifted through one-eighth-inch mesh screens. Artifacts recovered through subsurface excavations were bagged, labeled, and returned to the BFSA laboratory in Poway for cataloging and further analysis. Unit level record sheets, describing the soil types revealed and the materials recovered, were completed after the excavation of each test unit level. At the completion of the excavation, the TU was photographed, sketched, and then backfilled. The data obtained from the TU was subsequently subjected to both standard and specialized analysis to evaluate the significance of the cultural deposits.

5.3.3 Historic Field Documentation

The historical aspect of this significance evaluation program consisted of field recordation of the characteristics of each structure. This was accomplished using both written descriptions and photographic recordation of all standing structures and the dam/impound feature. Each structure was compared to the building record for accuracy in structural details and apparent age. In the case of the farmhouse and the foreman's house/equipment shed, the age as given on the building record did not match the structural characteristics of the existing structures. To resolve this disparity, additional analysis was required. The method by which the building record was prepared and physical changes that have taken place at those two locations were carefully compared and evaluated to resolve the issue (see Section 6). The date of the last visit by the Assessor's representative, and the difference between the present building configuration and that recorded on the building record, were both used to assist in data conflict resolution.

5.4 Laboratory Methods

5.4.1 Artifacts

All of the artifacts recovered from the project were identified and cataloged, in keeping with generally accepted archaeological procedures. Washing of artifacts was minimized to preserve any possible organic substances that might remain on the lithic artifacts. Washing of artifacts was undertaken only when required to provide sufficient clarity to permit proper artifact identification and analysis of use wear.

The cataloging process used to categorize the recovered lithic materials was based on a classification system commonly used in this region. As was noted previously, the definitions for some of the artifact types were taken from the OHP publication, *California Archaeological Resource Identification and Data Acquisition Program: Sparse Lithic Scatters* (1988). After

cataloging and identification, the collections were marked with the appropriate provenience and catalog information, then packaged for permanent curation. No radiocarbon dating or other specialized studies were conducted as part of the evaluation study.

5.4.2 Ecofacts

Ecofacts recovered during investigations at the Eden Hills project included marine shell only; no charcoal or animal bone was recovered. Marine shell remains were classified to the generic (genus) level using the comparative collection at the laboratory of BFSA. Shell identification source books by Fitch (1963), Morris (1966), and Reish (1972) were also used for classification. During the shell analysis, fragments which, due to their small size or state of decomposition, could not be identified to genera were put into the category of unidentifiable shell. Shell was sorted into burned and unburned categories, and all specimens were examined for evidence of intentional alteration or utilization.

5.5 Native American Consultation

The project is not located on Native American reservation land and none of the sites appeared to contain elements that would be of Native American religious significance. However, due to the continued interest of the local Native Americans and the potential for traditional cultural properties to be located within the project, Native American consultation was conducted. A letter was sent to the Native American Heritage Commission requesting a records search of the Sacred Lands File. The results of the inquiry state that no known traditional cultural properties are located within the immediate project area (Appendix II).

5.6 Curation

After cataloging, identification, and analysis, the artifact collection from each site was marked with the appropriate provenience and catalog information, then packaged for permanent curation. All collections, notes, photographs, and other materials related to this project will be temporarily housed at the BFSA archaeological laboratory in Poway, California, until permanent curation is arranged at the San Diego Archaeological Center.