Cogstone Cultural Report Aug 2007

APPENDIX E

Cogstone Resource Management Inc.
Paleontology • Archaeology • History

PALEONTOLOGICAL AND ARCHAEOLOGICAL ASSESSMENT REPORT FOR NORTH CANYON RANCH, TENTATIVE TRACT 5658, SIMI VALLEY, CALIFORNIA

Prepared for:
SVSJ Partners, LLC
4800 North Scottsdale Rd. ST. 6000
Scottsdale, AZ 85251-7630

Authors:
Sherri Gust, Steven McCormick and Kim Scott

Principal Investigator:
Sherri Gust
Registered Professional Archaeologist
Qualified Principal Paleontologist

August 2007

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NATIONAL ARCHAEOLOGICAL DATA BASE (NADB) INFORMATION SHEET

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Project Number: 1434
Type of Study: Paleontological and Archaeological Assessment (Extended Phase I)
Sites: None
USGS Quadrangle: Simi Valley West 7.5 quadrangle'
Area: 170 acres
Key Words: Paleontological and Archaeological Assessment, Sespe Formation, Eocene, Oligocene, Older alluvium, Pleistocene, terrestrial fauna, Chumash, Historic Rancho Simi

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EXECUTIVE SUMMARY

A cultural resources assessment to determine the potential impact of the development of North Canyon Ranch Tentative Tract 5658, located in the City of Simi Valley, County of Ventura, California was performed. The proposed project is the development of 170 acres. Residential development is proposed for the central and eastern portions of the site, while development for the Seventh-Day Adventist community (consisting of a private school, church, retirement housing, and staff housing) is proposed for the western portion of the site. Property boundaries extend from First Street on the west to the existing Big Sky Residential Development on the east-northeast

The vast majority of the project is mapped as Sespe Formation. Three fossil localities are known with a quarter mile and many more are known with two miles. The Sespe Formation has a very high potential to produce significant paleontological resources. Over 100 species of mammals are known from the Sespe including primate, marsupial, rhinoceros, camel, horse, deer, tapir, carnivores, rabbits, rodents, insectivores and many species without modern representatives. A small portion on the west is mapped as Older Alluvium. One fossil locality is known in this formation within a quarter mile and others are known with a couple of miles. Older Alluvium also has a high potential to produce significant fossils.

There are no recorded sites within the project area. There are 36 prehistoric sites, 6 prehistoric isolates and 5 historic sites within a one mile radius of the project. The prehistoric resources known are mostly small quarries or lithic scatters – none are villages or other major features. The historic resources known are ranching complexes or oil production structures.

Cogstone conducted an extended phase I archaeological and paleontological resources survey of the proposed project area in late June of 2007. Both pedestrian survey and shovel test pits were utilized. Large quantities of vegetation on slopes limited visibility in some areas. No paleontological, archeological or historical resources were observed during this survey or produced by subsurface shovel test pits.

The mitigation plan requires full-time paleontological monitoring plus archaeological monitoring of grubbing to recover any surface resources obscured by vegetation. Discovery of sites or localities will require temporary redirection of grading activities, documentation and possibly assistance from heavy equipment operators.

INTRODUCTION

PURPOSE OF STUDY

A cultural resources assessment to determine the potential impact of the development of North Canyon Ranch Tentative Tract 5658, located in the City of Simi Valley, County of Ventura, California (Figure 1) was performed. This study was requested by the City of Simi Valley to meet their responsibility as the lead agency under the California Environmental Quality Act (CEQA).

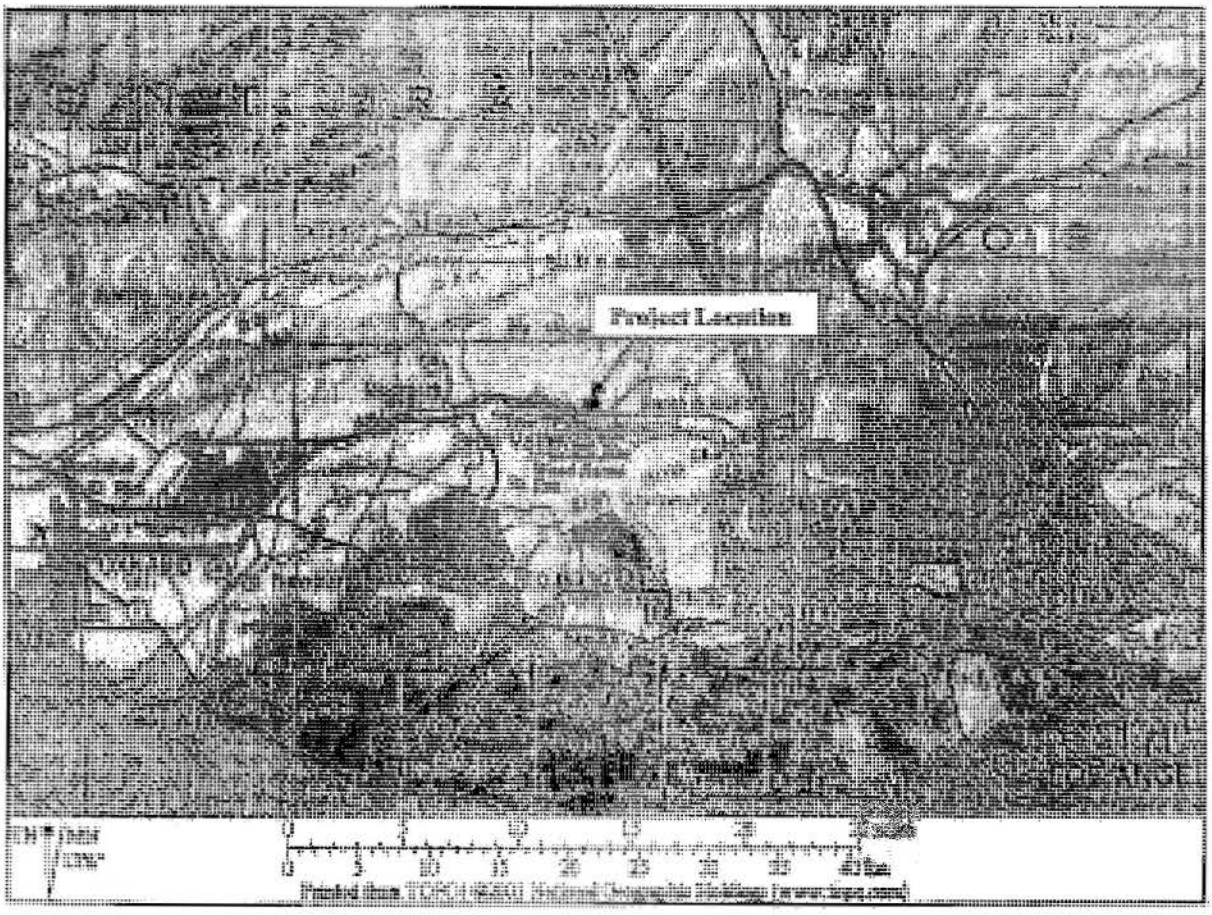

Figure 1. Project location

PROJECT DESCRIPTION

The proposed project is the development of 170 acres into residential and community services. Residential development is proposed for the central and eastern portions of the site, while development for the Seventh-Day Adventist community (consisting of a private school, church, retirement housing, and staff housing) is proposed for the western portion of the site. Property boundaries extend from First Street on the west to the existing Big Sky Residential Development on the east-northeast, approximately 1000 ft west of Erringer Road. This project is located within Section 4, Township 2 North, Range 18 West of the Simi Valley West USGS 7.5-minute quadrangle (Figure 2).

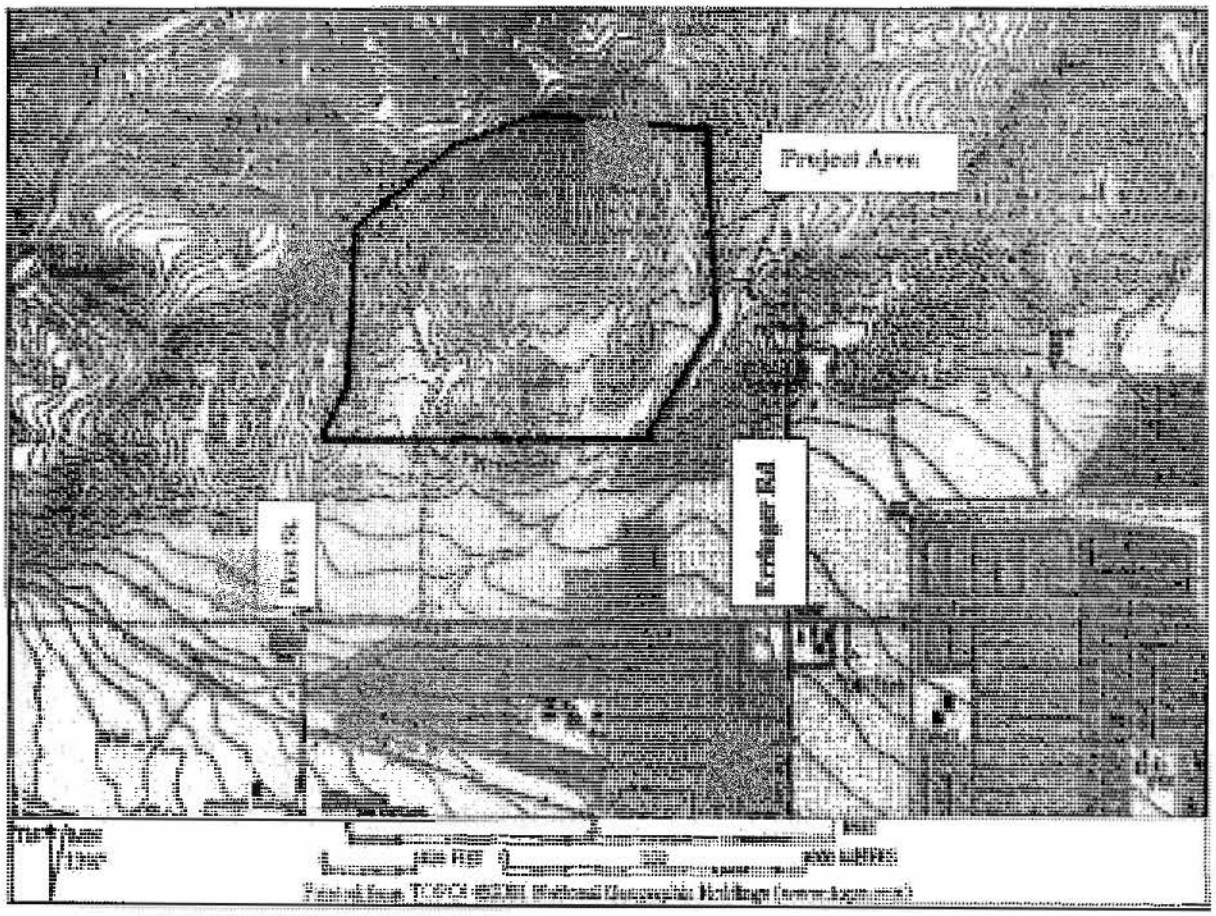

Figure 2. Project Map

PROJECT PERSONNEL

Cogstone Resource Management Inc. conducted the cultural resource studies. Sherri Gust served as the Principal Investigator for the project, supervised all work, wrote several portions of the report including the mitigation plan and edited it. Ms. Gust is a Registered Professional Archaeologist and a Qualified Principal Paleontologist. She has an M.S. in Anatomy (Evolutionary Morphology) from the University of Southern California, a B.S. in Anthropology from the University of California at Davis and over twenty-five years of experience in California.

Steven McCormick conducted the literature review, directed the field survey and wrote the historic background, archaeological record search and field survey results for this report. He also prepared the maps. McCormick has a B. A. in anthropology from California State University Long Beach, cross-training in paleontology and ten years experience. Armando Abeyta assisted with the survey. Abeyta holds a B.A. in anthropology from the University of California Berkley and is crossed-trained in Paleontology.

Kim Scott provided the geological and paleontology record search sections of this report. Scott has a B. S. in Geology with an emphasis in Paleontology from the University of California at Los Angeles and over 10 years of experience in southern Californian paleontology.

Qualifications of senior staff are detailed elsewhere (Appendix A).

LAWS AND REGULATIONS

The following discussion of applicable laws has been excerpted and reordered from the California Department of Transportation's (CALTRANS) on-line Environmental Handbook; more specifically, this information summarizes the regulatory section of Volume 1, Chapter 8 on Paleontology (2003) and Exhibit 3 of Volume 2, Cultural Resources (2001). This project is subject to state and local regulations.

California Environmental Quality Act of 1970 (CEQA) (PRC § Section 21000 *et seq.*)

CEQA declares that it is state policy to "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

CEQA includes historic and archaeological resources as integral features of the environment. If paleontological resources are identified as being within the proposed project area, the sponsoring agency (Caltrans or local) must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

California Register of Historical Resources (PRC § 5024.1)

Public Resources Code § 5024.1 establishes the California Register of Historical Resources. The register is listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks from No. 770 on. The criteria for listing are the same as those of the National Register. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources

Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic registers or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register, is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historic integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

A) 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;
B) It is associated with the lives of persons important to local, California, or national history;
C) 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; or
D) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion D, it maintains the potential to yield significant scientific or historical information or specific data.

BACKGROUND

NATURAL SETTING

The project site consists of four prominent south-draining canyons with intervening ridgelines that trend generally north-northwest. In the southern reaches of the site these canyons merge into two primary south-flowing ephemeral drainages. The project area is vegetated primarily by introduced grasses and herbs. Low growing native shrubs are found along the drainages.

PALEONTOLOGICAL SETTING

During the early Cenozoic (65 - 23 million years ago) most of coastal southern California was under the Pacific Ocean. Inland area including portions of Kern, Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, Santa Barbara, and Ventura counties were land. The areas were, at the time, downslope from New Mexico and Arizona. Rivers washed fossils from the lush tropical forests of the southwest of the Eocene and Oligocene Epochs across these inland areas to the Pacific. Vertebrates of the Sespe include various artiodactyls (early camels, deer-like animals, and other even-toed ungulates), perissodactyls (rhinoceros, horses, tapirs, and other odd-toed ungulates), primates, carnivores (dogs, cats, creodonts), insectivores, rabbits, rodents, marsupials, reptiles, and fish.

It is not until the Miocene (23 - 5 million years ago) that marine deposits in the coastal zone began to preserve diverse marine vertebrate assemblages in addition to abundant assemblages of fossil invertebrates. These vertebrate assemblages include sharks, bony fishes, turtles, birds, sea cows, sea lions, walruses, dolphins, and whales.

During the Pliocene Epoch (~5 - ~2 million years ago) coastal California began to emerge progressively from the sea, and most deposits of this age represent relatively shallow, near shore marine environments. More modern-appearing groups of animals are thus present in deposits of this age. The mollusks are increasingly represented by living genera, and even by some living species. The cetaceans and pinnipeds of Pliocene age usually are members of living families and

genera. As most of these deposits were still marine, fossils of terrestrial animals continued to be rare.

As the ocean continued to recede (or the land to rise), coastal California changed from shallow marine to terrestrial by the Pleistocene Epoch (2 million – 10, 000 years ago). In the project area, the Quaternary older alluvium sediments are included in this time period. At this time, the developing terrestrial landscape had a climate that was moister than the present, with free flowing streams and relatively abundant standing water; a climate similar to that now found in Monterey, California. Megafauna present in the region included ground sloths, mammoth, mastodon, horse, camel, bison, antelope, peccary, wolf, and saber-toothed cat. Small animals were abundant and included most of the same species found in the same areas today.

Geology and Paleontology

Simi Valley area exists as a portion of the Pacific Plate within the California Geomorphic Province known as the Transverse Ranges. The Transverse Ranges are an east-west trending set of steep mountain ranges and valleys. These mountains are oblique to the normal north-west trend of coastal California mountains, hence they are named "Transverse". This province includes the Channel Islands at its western extent and the San Bernardino Mountains at its eastern extent. Due to the bend in the San Andreas Fault, these ranges are subject to the intense pressure of two tectonic plates "snagging" against each other. As a result, the Transverse Ranges are one of the most rapidly rising regions on earth. [Wagner 2002]

The project is mapped as the Tertiary Sespe Formation, Quaternary older alluvial fan deposits, and Quaternary alluvium (Yerkes and Campbell 2005; Figure 3). Immediately to the south of the property and outside of the project boundaries, the Simi Fault runs from southwest to northeast along the foot of the hills. An anticline runs through the project area parallel to the Simi Fault.

Sespe Formation

The late Eocene to Oligocene (42 to 28 million years old) Sespe Formation is terrestrial and primarily fluvial in origin. Sespe deposits consist of reddish-brown sandstones, gravels, and pebble conglomerates interbedded with variegated red to grey to green siltstones and claystones. These rocks range from moderately to well indurated (toughness scale), allowing them to form ridges. This formation was named for the rocks of Sespe Creek north of Fillmore, Ca. There the Sespe Formation reaches 1410 feet (430 m) thick (Yerkes and Campbell 2005). In upper Sespe Creek, the Sespe Formation is the only continental (as opposed to marine) record in a stratigraphic section that spans approximately 25 million years.

In Brea Canyon, approximately 1.25 miles to the west of the project area, the Sespe Formation is about 7470 ft (2277 m) thick and three units can be recognized. The basal unit consists of conglomeratic sandstones, buff weathering sandstones, and minor amounts of maroon and grey clays. At the middle of the section, the formation is characterized by maroon and green clays and fine grained sandstones, interbedded with coarse grained, buff to green sandstones. This middle section contains significant amounts of variegated beds. The upper portion of the Sespe in Brea Canyon consists of brown-weathering and gray sandstones and conglomerate and grades into the lower Miocene Vaqueros Formation above (Stock 1931).

Land Mammal ages covered by the Sespe Formation include the late Uintan (42.5 - 40 million years ago), the Duchesnean (40-37 million years ago) and the Geringian (30.5 - 24 million years ago). Please note that the old terminology of the Arikareean Land Mammal age has now been subdivided into early or Geringian and late or Harrisonian (Alroy nd).

Fossils of the Sespe Formation include numerous types of rare terrestrial animals from the late Eocene to the late Oligocene (Lander 1997). Vertebrates of the Sespe include various artiodactyls (early camels, deer-like animals, and other even-toed ungulates), perissodactyls (rhinoceros, horses, tapirs, and other odd-toed ungulates), primates, carnivores (dogs, cats, creodonts), insectivores, rabbits, rodents, marsupials, reptiles, and fish.

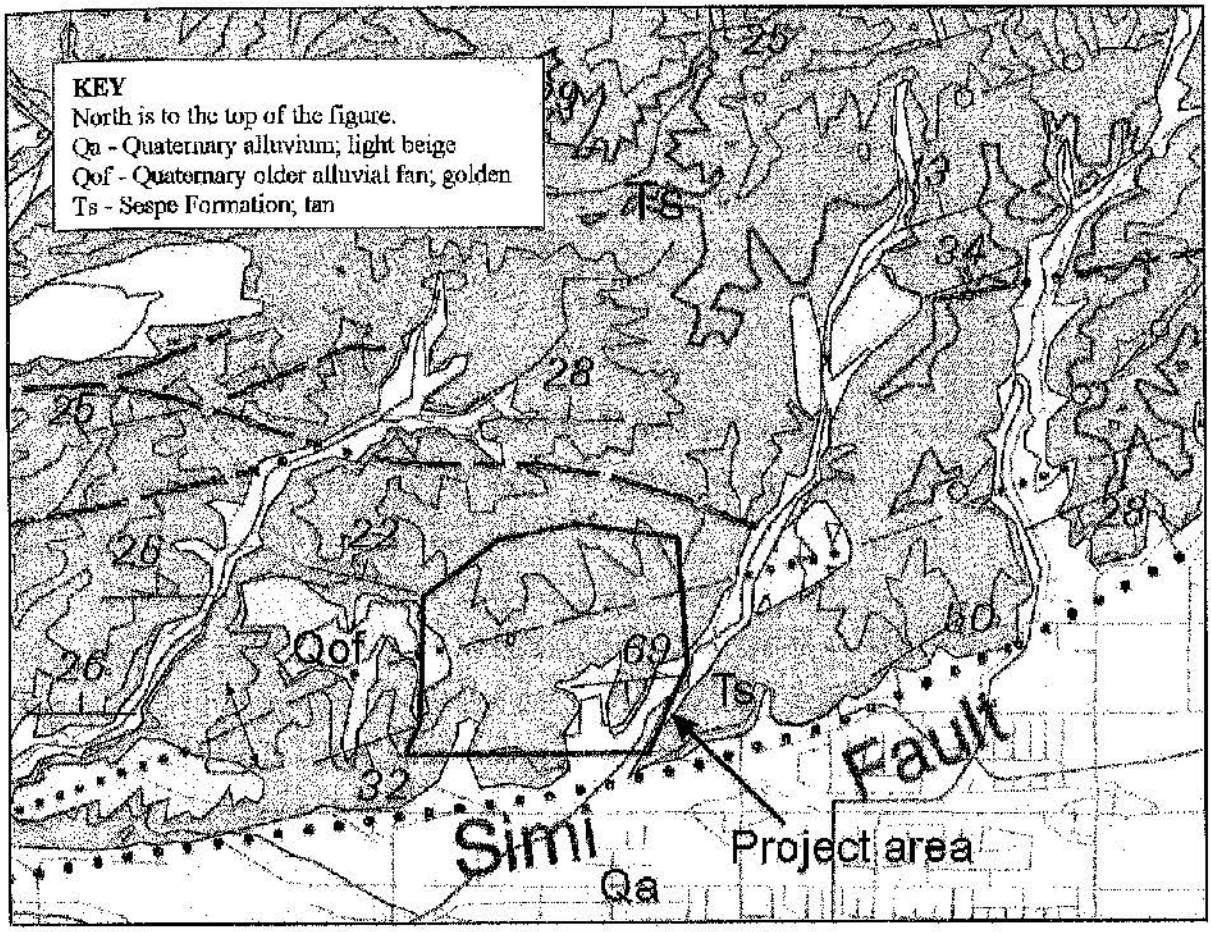

Figure 3. Project geology

Older alluvium

These deposits are middle to late Pleistocene (1 million to 10,000 years old; Yerkes and Campbell 2005). These old alluvial fans were deposited at the mouths of canyons in the local hills and mountains. Near the mountains, these sediments are coarse grained and reddish brown, but farther from the mountains the sediments finer and are more likely to contain fossils.

Fossils are known from these sediments in Simi and surrounding areas. They include ground sloth, two kinds of horse, mammoth, and an undetermined artiodactyl (Lander 1997).

CULTURAL SETTING

The section on chronology and cultural tradition is excerpted and summarized from the recent synthesis by Glassow, Gamble, Perry and Russell (2007). The section on ethnography is excerpted and summarized from Johnson (1997). The section on history is from Havens (1997).

Chronology and Cultural Traditions

Humans settled along the southern California coast more than 10 thousand years ago. A very small number of paleo-Indian sites are known, all of them coastal. They contain Clovis artifacts and demonstrate shellfish exploitation.

The Millingstone cultural tradition is recognized throughout California and dates about 7000-5000 cal. B.C. Climatic data indicate that the ocean was cooler and more productive than present throughout most of this period. Sites of this age typically contain large number of milling implements such as manos and metates. In addition, they contain large quantities of fire-affected rocks possibly used as heated stones in pit ovens. Additional artifacts known are cores and scrapers. There is little evidence of bifaces and only leaf shaped projectile points. People began to make olive shell beads during this period. The presence of extensive milling tools indicates use of hard seeds and possibly nuts. Coastal sites are dominated by shellfish with very little fish or land animal use. Inland sites are too poorly known to characterize.

The Hunting cultural tradition, found throughout California, is divided into two subperiods based on archaeological sites from Ventura and Santa Barbara Counties. The older, Maritime/Hunting Foundation tradition, dates 5000 to 2000 cal. B.C. Warming of marine waters reduced productivity of resources in the early part but was rapid. Metates and manos continued in use but became thicker, heavier and were worked into more diverse shapes. Mortars and pestles were added to the tool kit around 4000 cal. B.C. These tools indicate expanded use of food processed by pounding rather than grinding. This is supported by the appearance of digging stick weights use to increase efficiency of digging for bulbs or tubers. Presence of projectile points increases dramatically and the shape changes to side-notched. Large mammal food bones

do not increase in number over earlier sites and thus the changes in points may represent technological advances. Development of watercraft is implied by presence of deer bone on the Channel Islands and sea mammal exploitation sites.

The later subdivision, Resource Diversification tradition, dates from 2000 cal. B.C. to cal. A. D. 1. This tradition is marked by increased coastal settlement, intensified fishing and regional exchange, cultural elaboration including the development of wealth and status. The fishing tool kit expanded to include notched stone sinkers/net weights and circular shell fish hooks. Asphaltum containers and tarring pebbles indicate development of tar to waterproof baskets and other items. The range of bead, ornament and ceremonial object types increase including turtle shell rattles, bone whistles, pipes, charmstones and quartz crystals. Rock art production increased dramatically. Hunting developments include change to contracting stem projectile points and large increases in bones of many types of fish, sea mammals, deer and rabbit at sites. Shellfish use decreases. Settlement patterns demonstrate increased sedentism as marked by increased size of sites, year round habitations, semi-subterrean homes and ceremonial structures.

Late cultural tradition can clearly be linked to the Chumash culture present at European contact and dates cal. A. D. 1 to 1769. About midway through this period, the plank canoe and the bow-and-arrow were developed. These technological improvements would have affected subsistence but also status considerations. There is evidence of use of bow and arrow in intergroup competition also. Shell beads, ornaments and ritual objects continued to gain in elaboration and differentiation. Projectile points shifted to Cottonwood types (concave base) hafted using cordage (rather than asphaltum). Coastal Chumash sites indicate craft specialization. There is disagreement about whether inland sites represent seasonal use camps or permanent villages trading inland resources for coastal resources.

Ethnography

The project area was the traditional territory of peoples of the tribe now known as the Chumash. The Chumash were based along the coast from Morro Bay to Malibu but also inhabited inland areas. Three villages are known in the valley. The largest was Ta'apu at Tapo Canyon and the

two smaller ones were Shimiyi, precursor of the City of Simi Valley and Kimishax, precursor of Moorpark. Shimiyi had a population of about 25 in the 1780s while Ta'apu was about three times larger. Simi Valley sat at a crossroads of trails linking communities of different tribes and the resident Chumash were likely to have been active in trade. [Johnson 1997]

HISTORIC SETTING

The project area lies in the southern portion of the former Rancho San Jose de Simi, a land grant issue to Pico Family in 1795 of 113,000 acres (Figure 4; Bancroft Library). The land grant issued by the Spanish Governor Diego de Borica was considered to be one of the largest (Aviña 1976). In 1842, Jose de la Guerra a Captain of the Santa Barbara Presidio purchased the ranch to raise cattle. A severe drought in 1860 caused heavy losses of cattle. By the mid 1860's most of the ranch belonged to American speculators (Havens 1997).

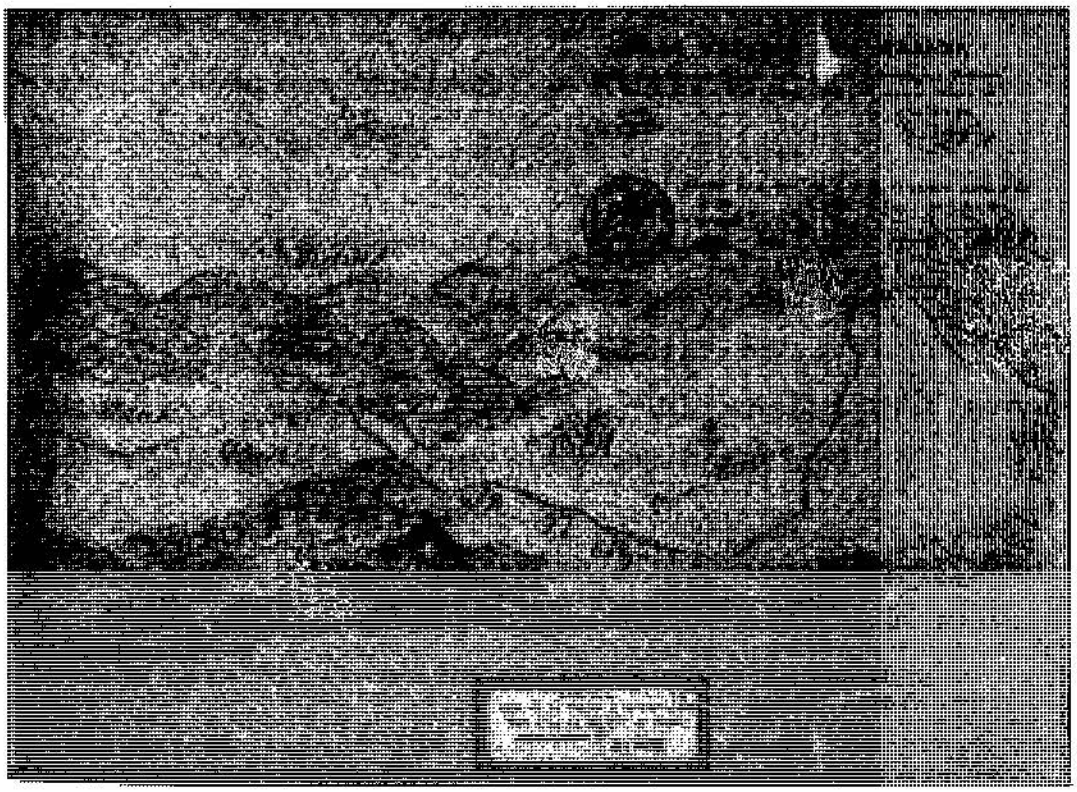

Figure 4. Rancho` San Jose de Simi 1842

Simi Valley continued to be utilized for ranching of cattle and sheep in the American period. In the late 1880's the settlement began with the formation of the Simi Land and Water Company to sell land in the first real estate promotion. A large hotel was built so potential investors would have a place to stay in the valley. Eventually there were four small settlements in the valley including the town of Simiopolis. This was later shortened to Simi. A railroad depot was built east of Simi Valley and rapidly became a center for the expanding agriculture that was prospering thought the valley. [Havens 1997]

RECORD SEARCHES

PALEONTOLOGICAL RESOURCES

A paleontology record search was requested from the Department of Vertebrate Paleontology at the Natural History Museum of Los Angeles County (LACMVP). Online searches were conducted with the Paleobiology Database; the Natural History Museum of Los Angelos County, Department of Invertebrate Paleontology (LACMIP); and at the University of California, Museum of Paleontology (UCMP).

Fossils known within a quarter mile of the project area from the Quaternary Older Alluvium include a complete skeleton of mastodon (*Mammut americanum*; LACM 7455). Fossils from the Sespe Formation within a quarter mile include primate (*Dyseolemur pacificus*; LACM 5623), marsupial (*Peradectes californicus*; LACM 7599-7602), rodent (*Simimys sp.* and Rodentia; LACM 7599-7602 & 5623) and mammals (Mammalia LACM 5649).

Expanding the radius to a couple of miles of the project boundaries reveals a few additional localities in Older Alluvium and many additional localities in the Sespe Formation in Brea Canyon, the adjacent Big Sky area and other nearby areas (Table 1, Figure 5).

Table 1. Fossils known near the project area

Common name	Taxon	Locality; Reference; Notes	Formation; Location
ground sloth	*Paramylodon*	LACM (CIT) 153, LACM 65114; Jefferson 1991b	Older Alluvium; Brea Canyon
horse	*Equus*		
even-toed ungulate	Artiodactyla, large		
even-toed ungulate	*Tapochoerus egressus*	CIT 207; Brea Canyon (bed CS2, bed 8); Paleobiology database	Sespe; Brea Canyon
sheep-like animal	*Protoreodon pumilus*		
early camel	*?Protylopus robustus*		
early camel	*Protylopus stocki*		
deer-like animal	*Leptoreodon aff. leptotylopus*		
Common name	**Taxon**		
rhinoceros	*Amynodon cf. advenus*		
carnivore	*Procynodictis progressus*		
insectivore	*Proterixoides davisi*		
insectivore	*Sespedectes singularis*		
primate	*Dyseolemur pacificus*		
rodent	*Simimys simplex*		
rodent	*Griphomys alcer*		
rodent	*Tapomys*		
rodent	*Pareumys aff. milleri*		
rodent	*Mytonomys burkei*		
early camel	*Protylopus cf. robustus*	LACM 56168. 5627, 5628; Brea Canyon (bed SS4, bed 11); Paleobiology database	Sespe; Brea Canyon
deer-like animal	*Leptoreodon stocki*		
rhinoceros	*Amillion years agodon cf. advenus*		
rodent	*Mytonomys burkei*		
pygmy opossum	*Herpetotherium cf. knighti*	CIT 202, LACM 5616, LACM 5660; Brea Canyon (bed CS3, bed 10); Paleobiology database	Sespe; Brea Canyon
opossum-like marsupial	*Peradectes californicus*		
even-toed ungulate	*Tapochoerus egressus*		
sheep-like animal	*Protoreodon pumilus*		
early camel	*Protylopus cf. petersoni*		
early camel	*?Protylopus robustus*		
deer-like animal	*Leptoreodon stocki*		
early even-toed ungulate	Dichobunidae indet.		
rhinoceros	*Amillion years agodon*		
tapiroid	Isectolophidae indet.		
small carnivore	*Tapocyon occidentalis*		
insectivore	*Proterixoides davisi*		
insectivore	*Sespedectes singularis*		
primate	*Macrotarsius roederi*		
primate	*Dyseolemur pacificus*		
rodent	*Simimys simplex*		
rodent	*Griphomys alcer*		
rodent	*Eohaplomys matutinus*		
rodent	*Rapamys*		
rodent	*Paremys*		
rodent	*Mytonomys burkei*		
sheep-like animal	*Protoreodon pumilus*	LACM 5660, 5140, 5619, 5631, 5860; CIT 127, 151, UCMP V-72064; Brea Canyon East (bed CS4, bed 12); Paleobiology database	Sespe; Brea Canyon
early camel	*?Protylopus robustus*		
deer-like animal	*Leptoreodon stocki*		
insectivore	*Proterixoides davisi*		
insectivore	*Sespedectes singularis*		
rodent	*Griphomys alcer*		
rodent	*Eohaplomys matutinus*		
rodent	*Microparemys woodi*		
primate	*Dyseolemur pacificus*	LACM 5863; Brea Canyon (bed SS5, bed 13); Paleobiology database	Sespe; Brea Canyon
insectivore	Erinaceomorpha indet.= ?Sespedectinae indet		
deer-like animal	*Leptoreodon pusillus*	LACM 5620, 5629, 5630; CIT 152; Upper Brea Canyon (bed CS5, bed 14); Paleobiology database	Sespe; Brea Canyon
deer-like animal	*Leptoreodon stocki*		
rodent	*Microparemys tricus*	LACM 5865; Brea Canyon (bed CS6, bed 16); Paleobiology database	Sespe; Brea Canyon
carnivore	*Miacis*	LACM 5867; Brea Canyon (lower bed SS7, bed 17); Paleobiology database	Sespe; Brea Canyon
carnivore	*Miacis*	LACM 5866; Brea Canyon (upper bed SS7, bed 18); Paleobiology database	Sespe; Brea Canyon
insectivore	*Centetodon cf. aztecus*		
rodent	*Griphomys alcer*		
rodent	*Microparemys cf. tricus*		
insectivore	*Centetodon cf. aztecus*	LACM 5868, 5869; Brea Canyon (upper bed CS7, bed 19); Paleobiology database	Sespe; Brea Canyon
insectivore	*Metanoiamys cf. marinus*		
rodent	*Griphomys alcer*		
rodent	*Microparemys tricus*		
sheep-like animal	*Protoreodon pumilus*	LACM 3256; Brea Canyon West; Paleobiology database	Sespe; Brea Canyon
deer-like animal	*Leptoreodon stocki*		
rodent	Rodentia indet.		
frog	Anura	LACM (CIT) 180, 217, 4612; McLeod 1999	Sespe; Big Sky Ranch
turtle	*Chelonia*, Trionychidae		

lizard	*Peltosaurus macrodon*		
snake	*Boavus affinus*		
bird	Aves		
opossum-like	*Peratherium knighti*		
insectivore-like	*Apatemys bellus*		
insectivore-like	*Simidectes*		
insectivore	*Proterixoides davisi*		
insectivore	*Proterixoides primitivus*		
insectivore	*Sespedectes singularis*		
primate	*Craseops sylvestris*		
primate	*Dyseolemur pacificus*		
primate	*Yaquius travisi*		
primate	*Phenocolemur shifrae*		
rodent	*Eohaplomys tradux*		
rodent	*Ischyrotomus compressidens*		
rodent	*Leptotomus*		
rodent	*Microparamys woodi*		
rodent	*Tapomys tapensis*		
rodent	*Simimys simplex*		
carnivore	*Maicis hookwayi*		
carnivore	*Tapocyon occidentalis*		
carnivore	*Viverravus progressus*		
carnivore	Hyaenodontidae		
carnivore	Mesonychidae		
sheep-like animal	*Protoreodon pumilus*		
even-toed ungulate	*Tapochoerus egressus*		
even-toed ungulate	Oromerycidae		
deer-like animal	*Leptoreodon stocki*		
tapir	Tapiroidea		
odd-toed ungulate	Brontotheridae		
tapiroid	*Dilophodon*		
sheep-like animal	*Protoreodon pumilus*	LACM 5633; CIT 149; UCMP V-87156; Strathern (bed CS8); Paleobiology database	Sespe; Strathern
mouse-deer like animal	*Simimeryx hudsoni*		
rhinoceros	*?Triplopus woodi*		
rodent	*Mytonomys cf. mytonensis*		
sheep-like animal	*Protoreodon pumilus*	CIT 128 (in part); Strathern (bed CS13, bed 21); Paleobiology database	Sespe; Strathern
sheep-like animal	*Protoreodon pacificus*		
early camel	*Protylopus pearsonensis*		
deer-like animal	*Leptoreodon cf. pusillus*		
deer-like animal	*Leptoreodon stocki*		
mouse-deer like animal	*Simimeryx hudsoni*		
rhinoceros	*?Triplopus woodi*		
insectivore	*Proterixoides davisi*		
insectivore	*Sespedectes singularis*		
deer-like animal	*Leptoreodon stocki*	LACM 5636; CIT 128 (in part); Strathern (bed CS14, bed 22); Paleobiology database	Sespe; Strathern
insectivore	*Sespedectes singularis*		
primate	*Dyseolemur pacificus*		
sheep-like animal	*Protoreodon pacificus*	LACM 3374, 3375, 3378, 3380; CIT 179, 218; UCMP V-5242; Alamos Canyon (bed CS15, bed 24); Paleobiology database	Sespe; Alamos Canyon
mouse-deer like animal	*Simimeryx hudsoni*		
insectivore	*Proterixoides davisi*		
insectivore	*Sespedectes singularis*		
rodent	*Microparemys cf. tricus*		
invertebrates	unidentified	UCLA 6634; LACMIP database	Sespe; T2N, R18W

KEY
CIT = California Institute of Technology
LACM = Los Angeles County Museum of Natural History (Vertebrate Paleontology)
LACMIP = Los Angeles County Museum of Natural History, Invertebrate Paleontology
UCMP = University of California Museum of Paleontology

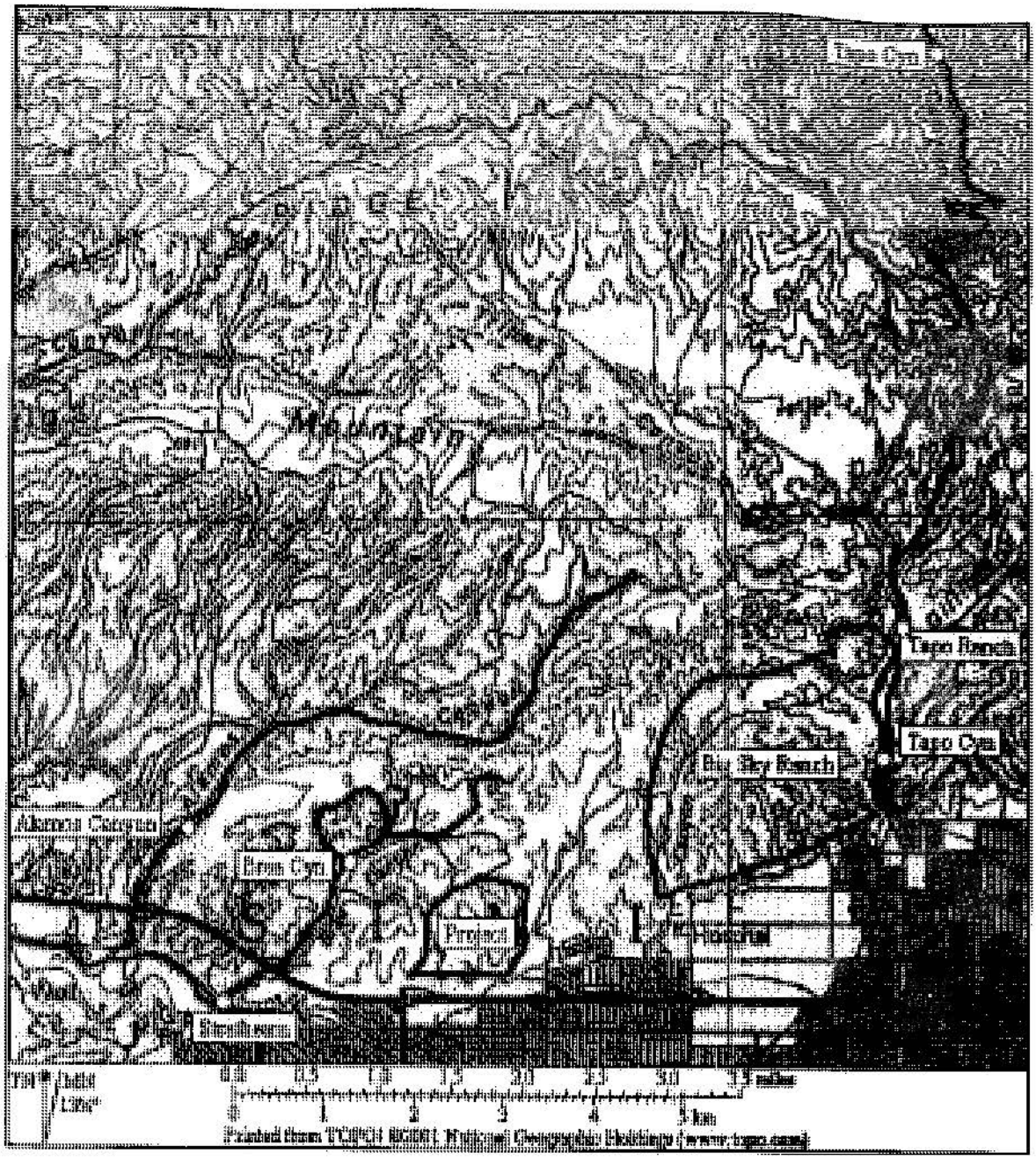

Figure 5. Some paleontological localities near the project area

ARCHAEOLOGICAL AND HISTORICAL RESOURCES

A search for known archaeological and historical resources was completed at the South Central Coast Information Center, California State University Fullerton, California. The record search was performed within the project boundaries plus a one-mile radius.

The record search determined that there are no recorded sites within the project area. There are 36 prehistoric sites, 6 prehistoric isolates and 5 historic sites within a one mile radius of the project (Table 2). The prehistoric resources known are mostly small quarries or lithic scatters – none are villages or other major features. The historic resources known are ranching complexes or oil production structures. Some 39 previous archaeological studies have been done within one mile radius of the current project boundaries (Table 3).

Table 2. Recorded archaeological & historical resources within one mile radius

Reference	Site Type	Date
56-000226	Lithic Scatter	1970
56-000345	Lithic Scatter	1974
56-000341	Lithic Scatter	1975
56-000342	Lithic Scatter	1975
56-000343	Lithic Scatter	1975
56-000344	Lithic Scatter	1975
56-000634	Lithic Scatter	1979
56-000635	Lithic Scatter	1979
56-000636	Lithic Scatter/Water Conveyance	1979
56-000638	Lithic / Ground Stone Scatter	1979
56-000639	Lithic Scatter	1979
56-000674	Lithic/Ground Stone Scatter	1980
56-000778	Lithic Scatter	1983
GI-A	Isolate	1983
GI-B	Isolate	1983
56-000784	Lithic Scatter	1984
56-001576	Historic Foundations	1998
56-100106	Isolate	1998
56-001581	Building Debris/Well/Road Segment	1999
56-001582	Historic Machinery/Foundations	1999
56-001588	Lithic tools and scatter	1999
56-001590	Quarry	1999
56-001591	Quarry	1999
56-001593	Habitation Debris	1999
56-001594	Quarry	1999
56-001595	Lithic Scatter	1999
56-001596	Lithic Scatter	1999

Reference	Site Type	Date
56-001597	Lithic Scatter/Hearth	1999
56-001598	Lithic Scatter	1999
56-004592	Quarry	1999
56-100112	Lithic Scatter	1999
56-100113	Lithic Scatter	1999
56-100114	Lithic Scatter	1999
56-100115	Lithic Scatter	1999
56-100116	Lithic Scatter	1999
56-100116	Lithic Scatter	1999
56-100117	Lithic Scatter	1999
56-100118	Lithic Scatter	1999
56-100119	Lithic Scatter	1999
56-100154	Ground Stone Scatter	2001
56-100155	Ground Stone Scatter	2001
56-001646	Lithic Scatter/Historic Trash Scatter	2002
56-100162	Isolate	2003
56-100163	Isolate	2003
56-100164	Isolate	2003

Table 3. Previous studies within a one mile radius of the project

Author	Ref	Title	Date
Pence, R.	VN857	Preliminary Investigations Into CA-VEN-341.	NA
Leonard, N., et al.	NV1441	UCAS-255 Calleguas Creek Flood Control Survey, Ventura County.	1970
Romani, J. and Garfinkel A.	VN15	Assessment of the Archaeological Impact by the Development of Site SUP-S-98.	1973
Anonymous	VN43	Caleguas Creek Simi Valley to Moorpark Ventura County, California.	1974
Leonard, N.	VN175	Further Investigations of the Proposed ICX Truck Terminal and Surrounding Property.	1975
Leonard, N.	VN440	Simi Valley Industrial Park Project: Archaeological Element (Same as V-799).	1976
Ivie, P.	VN79	An Archaeological Record Search of the Study.	1976
Leonard, N.	VN799	Simi Valley Industrial Park Project: Archaeological Element.	1976
Anonymous	VN176	Geological & Environmental Studies for EDA Technical Assistance Grant No. 07-6-01529.	1976
D'Altroy, T.	VN181	Survey and Assessment of Archaeological Resources Present on 750 Acres of Tapo Range, Ventura County, California.	1979
Pence, R.	VN323	Subsurface Test Assessment of VEN-226, Simi Valley, California.	1979
Anonymous	VN1167	Focused Environmental Report for PD-S-392, TT 3177 Draft.	1979
Kuhn, M.	VN1280	Response Letter of April 21, 1980 Map of Simi Valley Showing the Areas Which Have Been Surveyed.	1980
Singer, C	VN284	Cultural Resource Survey and Impact Evaluation for the Proposed Brea Canyon Airport Location, Simi Valley.	1980
Desautels, N.	VN417	Cultural Resources Report on a Portion of the Proposed West End Industrial Area in the Alamos and Brea Canyons Area.	1982
Raab, M.	VN443	Report of Archaeological Testing at Site CA-VEN-784, City of Simi Valley.	1984

Author	Ref	Title	Date
Raab, M.	VN745	Report of Partial Archaeological Data Recovery (Phase III), at Site VEN-784, City of Simi Valley, California.	1984
Anonymous	VN729	Preliminary Report on Archaeological Investigations at VEN-341, VEN-342, VEN-343, VEN-344 City of Simi, California.	1984
Macfarlane, H. and Romani, G.	VN727	Draft Summary Archaeological Test Excavation CA-VEN-226 Simi Valley, Ventura County, California.	1984
Anonymous	VN710	Big Sky Ranch Development Preliminary Summary of Archaeological Test Investigations at Big Sky Ranch (West) Simi Valley, Ventura County, California.	1984
Desautels, N.	VN467	Report on a Cultural Resources Investigation of the Madera Interchange, State Route 118 Ventura County, California.	1985
Macfarlane, H. and Romani, G.	VN739	Archaeological Test Excavation CA-VEN-226 Simi Valley, Ventura County, California.	1985
Penoe, R.	VN655	Archaeological Reconnaissance of the Proposed Simi Valley Regional Shopping Center.	1987
Dames and Moore	VN572	Phase I Cultural Resources Survey Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company.	1988
Bissell, R.	VN1655	Cultural Resources Management Plan for the Big Sky Ranch Property, Simi Valley, Ventura County, California.	1989
Lackow, B.	VN918	Draft Environmental Impact Report Concerning: Simi Valley Regional Center.	1990
Bissell, R.	VN816	Addendum to: Cultural Resources Management Plan for the Big Sky Ranch Property, Simi Valley, Ventura County, California.	1990
Anonymous	VN1153	Class 3 Cultural Resource Assessment of the Proposed Carpentaria and Southern Reroutes, Santa Barbara, Ventura and Los Angeles Counties.	1991
Reed, L.	VN1265	Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project.	1992
Macfarlane, H.	VN1271	Phase I Archaeological Survey Santa Clara River Alternative Broadway Feeder Option and San Fernando Valley Conveyance Project Simi Valley Feeder Options A, B, C, SubOption, and Perliter Tunnel Los Angeles and Ventura Counties, California.	1993
King, C.	VN1462	Prehistoric Native American Cultural Sites inn the Santa Monica Mountains.	1994
Brown, J.	VN1716	A Cultural Resources Reconnaissance for the Proposed Stormwater Detention Basin Sites in Simi Valley, Ventura County, California.	1999
Brown, J.	VN1825	Addendum to a Cultural Resources Reconnaissance for the Proposed Stormwater Detention Basin Sites in Simi Valley, Ventura County, California.	1999
Bissell, R.	VN1781	Volume I & II: Cultural Resources Reconnaissance of the Unocal Property, 2,800 Acres in Simi Valley and Moorpark, Ventura County, California.	1999
Wlodarski, R.	VN2209	A Phase I Archaeological Study for the Simi Valley Town Center EIR City of Simi Valley, County of Ventura, California.	2002
SAIC	VN1993	Phase I Archaeological Investigation Simi Valley Landfill and Recycling Center Ventura County, California.	2002
Maxon, P. and Brown J.	VN1834	Cultural Resources Reconnaissance for the Erringer Road Extension, Simi Valley, Ventura County, California.	2002
Pletka, N.	VN2174	Cultural Resource Assessment AT&T Wireless Services Facility No. OV51B Ventura County, California.	2003
Arrington, C. and Sikes, N.	VN2504	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California; Volumes I and II.	2006

NATIVE AMERICAN CONSULTATION

A sacred lands record search was requested from the Native American Heritage Commission on June 14, 2007. On June 19, the Commission replied that there were no known sacred lands within the project boundaries (Appendix B). The Commission recommended further consultation with sixteen contacts including tribes and individuals.

Letters requesting information on any heritage sites were sent to all contacts on June 20, 2007. A written response was received from the Tribal Elders Council of the Santa Ynez Band of Mission Indians (Appendix C). It stated that while no sacred lands are known within the project boundaries the possibility of subsurface deposits exists. They requested a Native American monitor during grading. Beverly Salazar responded by phone with the same content.

SURVEY

SURVEY METHODS

The reconnaissance stage is important to verify the exact location of each cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of sensitivity. When items were observed, a preliminary identification/inventory was documented in the field notes, with the location recorded through means of Global Positioning Systems (GPS), and then photographed. Due to the nature of the terrain and the limited visibility afforded by the dense vegetation; two methods were utilized in this survey; the first was the use of a Probabilistic Stratified Random Pedestrian Survey (PSRPS) and the second was the implementation of Shovel Test Pits (STP's).

Stratified random surveys attempt to sample the whole population. If there are three basic geographical regions in a universe (e.g. river basin, mountainous area, plains), each one of these regions becomes a "mini-region." These mini-regions are then subject to random sampling as in the simple survey. The biggest advantage is that a greater amount of patterned similarity can be seen. In the case of the project area, a PSRPS was implemented due to the three basic topographic units within the project area: ridgelines, slopes and canyons.

When the archaeology and/or topography of an area indicated that there might subsurface artifacts, STP's were used to sample the area. The placement of these units around the project area was also done in a stratified random manner. Material excavated from the STP's was screened thru 1/8 inch hardware cloth and examined for potential artifacts.

SURVEY RESULTS

On June 19 and 20, 2007, Cogstone archaeologists Steven McCormick and Armando Abeyta conducted a survey of the proposed project area. All of the accessible ridgelines and drainages were examined. No paleontological, archaeological or historical resources were observed during the walking phase of the survey. Due to the dense vegetation and the limited visibility along the slopes and canyons, assessment was very limited (Figure 6).

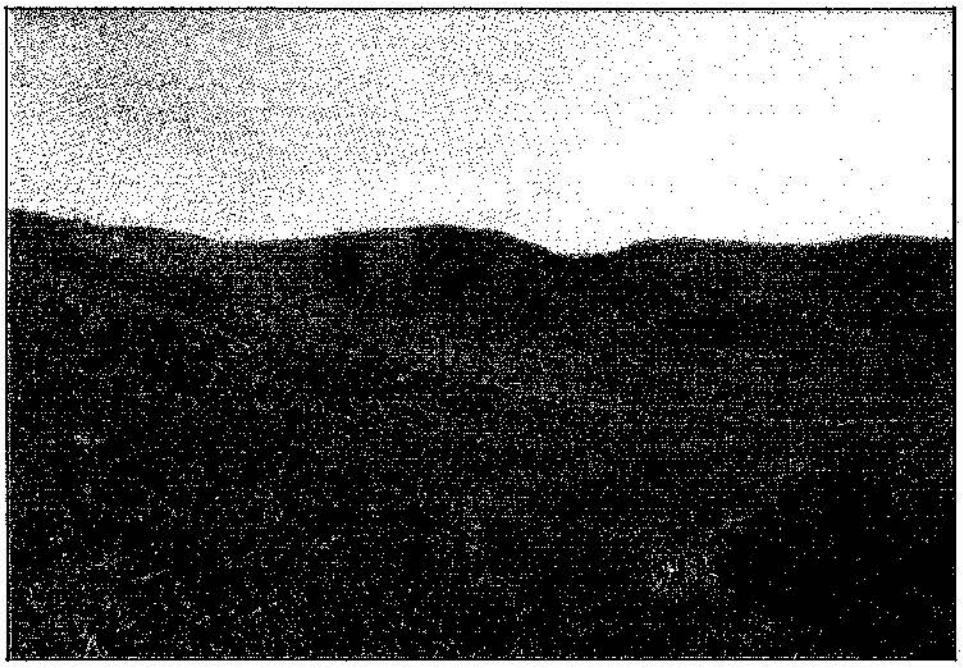

Figure 6. Typical dense slope vegetation limiting survey

Shovel Test Pits, placed in likely topographic locations, did not reveal any subsurface archaeological artifacts or features (Table 4; Figure 7).

Table 4. STP Results.

STP #	Dimensions	Depth	Artifacts
1	30 cm x 30 cm	25 cm	none
2	30 cm x 30 cm	23 cm	none
3	36 cm x 35 cm	32 cm	none
4	30 cm x 25 cm	16 cm	none
5	38 cm x 36 cm	18 cm	none
6	34 cm x 29 cm	18 cm	none
7	25 cm x 30 cm	12 cm	none
8	26 cm x 28 cm	11 cm	none
9	28 cm x 29 cm	50 cm	none
10	26 cm x 28 cm	40 cm	none
11	40 cm x 32 cm	33 cm	none
12	30 cm x 30 cm	32 cm	none
13	29 cm x 30 cm	25 cm	none

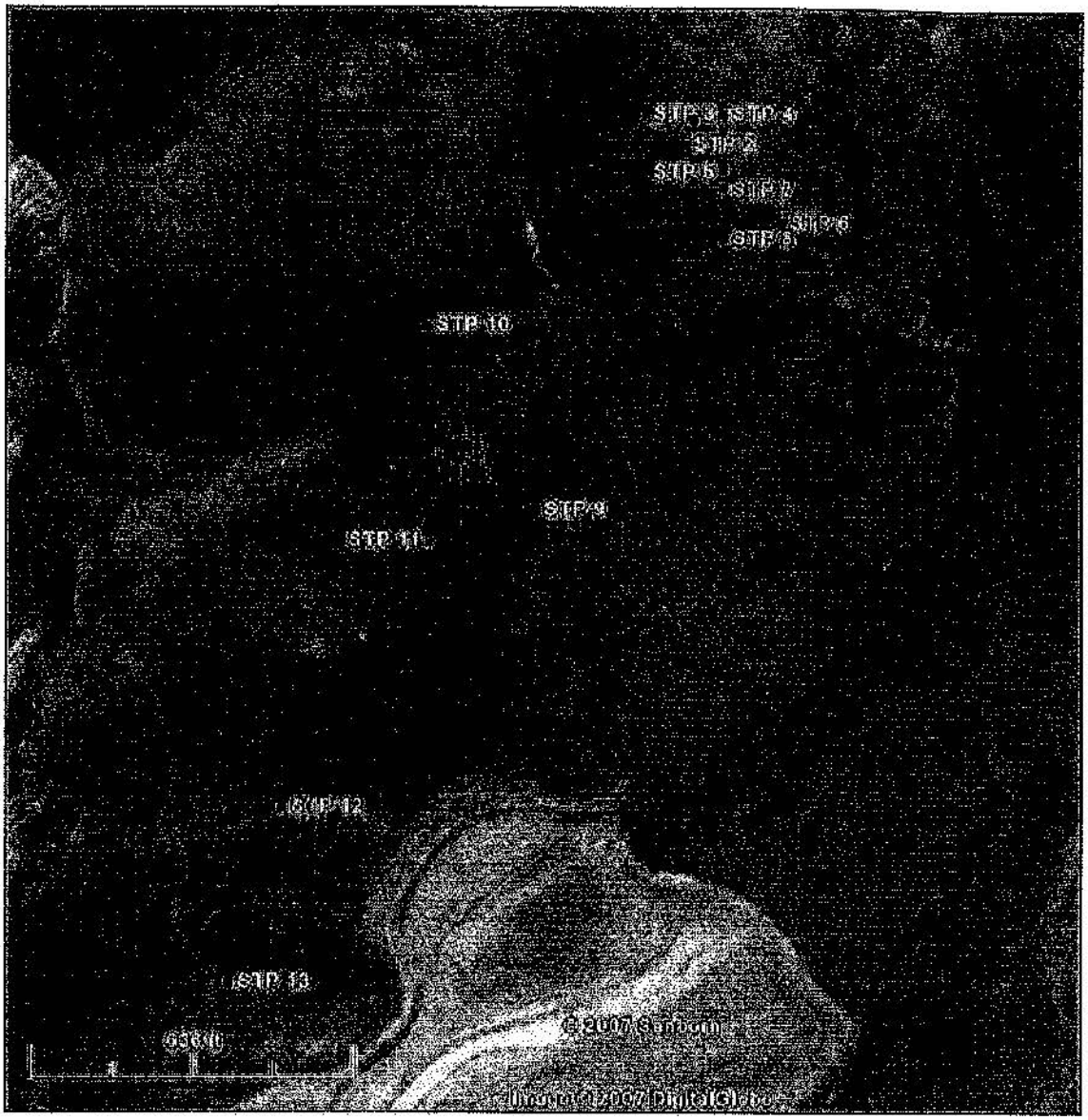

Figure 7. Location of shovel test pits onsite

POTENTIAL RESOURCES

Paleontological, archaeological and historical resources are considered to be significant if they possess integrity and may contribute information important in prehistory or history. Based on the prior research and survey results, the potential to impact resources is discussed below.

PALEONTOLOGICAL RESOURCES

No paleontological localities are known within the project area and no paleontological resources were observed during the surface survey. Project sediments indicate a high potential to produce significant vertebrae paleontological resources. Both the Older alluvial deposits and the Sespe Formation are well known to contain fossil resources.

ARCHAEOLOGICAL RESOURCES

No archaeological materials were observed on the surface of the project nor produced by the subsurface shovel test pit program. A large number of small archaeological sites consisting of lithic quarries and scatters are known within one mile of the project boundaries. No major features or substantial sites such as villages are known within one mile of the project boundaries.

Since complete survey was limited by dense vegetation on slopes, removal of that vegetation may reveal small lithic scatters similar to those already known in the area. However, no major archaeological features or villages are anticipated to be present.

HISTORICAL RESOURCES

No historical resources were observed nor are they known from the record search.

RECOMMENDED MITIGATION PLAN

The following mitigation measures have been developed to reduce the adverse impacts of project construction on cultural resources to an acceptable level. The measures are derived from current professional guidelines and the meet requirements of the City of Simi Valley and CEQA. These general mitigation measures have been used throughout California and have been demonstrated to be successful in protecting resources while allowing timely completion of construction.

1. A qualified principal investigator for Paleontology will be retained to develop and implement the paleontological monitoring plan. A qualified principal investigator for Archaeology should be on-call in the event unanticipated archaeological resources are revealed by grading or excavation. The principal investigators will be responsible to implement the mitigation plan and maintain professional standards of work including use of qualified monitors.

2. A qualified archaeological monitor will be present during grubbing to observe and recover any materials obscured by vegetation. In addition, the archaeological monitor should be present for grading and excavation within ¼ mile of the stream channels as these areas are sensitive for possible subsurface prehistoric archaeological materials. The principal investigator may need to adjust the mitigation plan dependent upon the results of monitoring of grubbing.

3. Full-time paleontological monitoring of construction grubbing, grading, and excavation in native sediments is necessary. Monitoring will include inspection of exposed surfaces and microscopic examination of matrix. The monitor will have authority to divert grading away from exposed resources temporarily in order to recover the specimens. Cooperation and assistance from on-site personnel will greatly assist timely resumption of work in the area of the discovery.

4. If the discovery meets the criteria for an archaeological site or a fossil locality, then work will be diverted until the Field Supervisor or Principal Investigator evaluates the discovery. This includes potential human bone which should be verified by experts before the coroner is called. Sites and localities require documentation including location and stratigraphic information. Decisions about testing and data recovery will be made in consultation with the client and the lead agency.

5. If microfossil localities are discovered, the monitor will collect matrix for processing. In order to limit downtime, the monitor may request heavy machinery assistance to move large quantities of matrix out of the path of construction to designated stockpile areas. Testing of stockpiles will consist of screen washing small samples (200 pounds) to determine if fossils are present. Productive tests will result in screen washing of

additional matrix from the stockpiles to a maximum of 6000 pounds per locality.

6. The principal investigator will prepare monthly progress reports to be filed with the client and the lead agency.

7. Significant artifacts, specimens and fossils recovered will be prepared, identified, and cataloged before donation to accredited repositories designated by the lead agency. Any resources determined not to meet significance criteria will be offered to local schools for use in educational programs.

8. The principal investigator will prepare a final report to be filed with the client, the lead agency and the California Historic Resources Information System. The report will include a list of resources recovered, documentation of each site/locality, interpretation of resources recovered and will include all specialist's reports as appendices.

9. The project proponent is responsible to bear all costs associated with the mitigation plan.

REFERENCES

Alroy, John
Nd A Quantitative North American Mammalian Time Scale.
http://www.nceas.ucsb.edu/~alroy/TimeScale.html

Aviña, R.H.
1976 *Spanish and Mexican Land Grants in California.* Arno Press, New York.

Bown, T.
1994 An assessment of the vertebrate paleoecology and biostratigraphy of the Sespe Formation, southern California. United States Geological Survey Open File Report 94-630; 24pp.

Brattstrom, B.
1955 New snakes and lizards from the Eocene of California. *Journal of Paleontology* 29 (1): 145-149.

1961 Some new fossil tortoises from western North America with remarks on the zoogeography and paleoecology of tortoises. *Journal of Paleontology* 35 (3):543-560.

California Department of Transportation
2001 Cultural Resources, Online Environmental Handbook, Vol. 2.
http://www.dot.ca.gov/ser/vol2/vol2.htm

2003 Paleontology, Online Environmental Handbook, Vol. 1, Chapter 8.
http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm

Dickenson, K.A. and J.S. Leventhal
1988 The geology, carbonaceous materials, and origin of the epigenetic uranium deposits in the Tertiary Sespe formation in Ventura County, California. *U.S. Geological Survey Bulletin* 1771.

Glassow, M., L. Gamble, J. Perry and G. Russell
2007 Prehistory of the Northern California Bight and the Adjacent Transverse Ranges. In *California Prehistory*, T. Jones and K. Klar (eds)., Altamira Press, Lanham, pages 191-213.

Gust, S.
2000 Paleontological resources assessment report for Lost Canyons (Big Sky Ranch) residential estates project, Simi Valley, CA. On file with City of Simi Valley.

Havens, Patricia
1997 *Simi Valley: a journey through time*, Simi Valley Historical Society and Museum, Simi Valley, pages 22-186.

Heizer, R.
1978 *The Handbook of North American Indians.* Smithsonian Institution, Washington D.C.

Howard, J.L.
1995 Conglomerates of the Upper Middle Eocene to Lower Miocene Sespe Formation along the Santa Ynez Fault-Implications for the Geologic History of the Eastern Santa Maria Basin Area, California. *U.S. Geological Survey Bulletin* 1995-H. 23pp.

Jefferson, G.T.
1991a A Catalogue of late Quaternary Vertebrates from California: Part one, nonmarine lower vertebrate and avian taxa. *Natural History Museum of Los Angeles, Technical Report* #5.

1991b A Catalogue of late Quaternary Vertebrates from California: Part two, Mammals. *Natural History Museum of Los Angeles, Technical Report* #7.

nd A Catalogue of Blancan and Irvingtonian Vertebrates and Floras from Arizona, southern California, Nevada, Utah, and northwestern Mexico. Unpublished data.

Johnson, J.
1997 Chumash Indians in Simi Valley. In *Simi Valley: a journey through time*, P. Havens (ed), Simi Valley Historical Society and Museum, Simi Valley, pages 4-21.

McLeod, S.A.
1999 Paleontological resources for the Lost Canyon Homes/ BigSky Ranch project area *in* Gust 2000, Appendix 1.

2007 Vertebrate paleontology records check for paleontological resources for the proposed North Canyon Ranch, near the City of Simi Valley, Ventura County, Cogstone Project #1434, project area. On file at Cogstone.

Stock, C.
1932 Eocene Land Mammals on the Pacific Coast. *Proceedings of the National Academy of Scientists* l 18: 518-523.

1933a Hyaenodontidae of the upper Eocene of California. *Proceedings of the National Academy of Scientists* 19:434-440.

1933b An Eocene primate from California. *Proceedings of the National Academy of Scientists* 19: 954-959.

1933c A second primate from California. *Proceedings of the National Academy of Scientists* 20:150-154.

1933d An amnyodont skull from the Sespe deposits, California. *Proceedings of the National Academy of Scientists* 20:762-767.

1934a Microsynopsinae and Hyposodontidae in the Sespe upper Eocene, California. *Proceedings of the National Academy of Scientists* 20:349-354.

1934b A new creodont from the Sespe upper Eocene, California. *Proceedings of the National Academy of Scientists* 20: 423-427.

1934c On the occurrence of an oreodont skeleton in the Sespe of South Mountain, California. *Proceedings of the National Academy of Scientists* 20:518-523.

1934d A hypertragulid from the Sespe uppermost Eocene, California. *Proceedings of the National Academy of Scientists* 20: 625-629.

1935a *Plesiomaicis*, a new creodont from the Sespe upper Eocene, California. *Proceedings of the National Academy of Scientists* 21: 119-122.

1935b Insectivora from the Sespe uppermost Eocene, California. *Proceedings of the National Academy of Scientists* 21:214-219.

1935c Titanothere remains from the Sespe of California. *Proceedings of the National Academy of Scientists* 21:456-462.

1935d Sespe Eocene Didelphids. *Proceedings of the National Academy of Scientists* 22:122-124.

1936a *Hesperomeryx*, a new artiodactyl from the Sespe Eocene, California. *Proceedings of the National Academy of Scientists* 22: 177-182.

1936b Perrisodactyla of the Sespe Eocene, California. *Proceedings of the National Academy of Scientists* 22:260-265.

Wagner, D.L.

2002 California Geomorphic Provinces. *California Geologic Survey Note* 36. Website: http://www.consrv.ca.gov/cgs/information/publications/cgs_notes/note_36/note_36.pdf

Yerkes, R.F. and R.H. Campbell

2005 Preliminary digital geologic map of the Los Angeles 30'x60' quadrangle, California version 1.0. *U.S. Geological Survey Open File Report* 2005-1019.

APPENDIX A: QUALIFICATIONS

SHERRI GUST
Qualified Paleontologist and Registered Professional Archaeologist

EDUCATION

1994 M. S., Anatomy and Cell Biology (Evolutionary Morphology), University of Southern California, Los Angeles

1979 B. S., Anthropology (Physical), University of California, Davis

SELECTED PROJECTS

Research, survey and report on cultural resources from a property with a prehistoric site and historic ranching in San Juan Capistrano.

Research, testing and report on the Zanja Madre, the original water sources of Los Angeles for MTA.

SELECTED REPORTS AND PUBLICATIONS

2006 Gust, S., A. Abeyta, A. Diaz, C. Abeyta, B. Loren-Webb, H. Koerper, and A. Knight. Archeological and Historical Resources Mitigation Report for the Rosedale Project, Azusa, California. On file, City of Azusa and Cogstone Resource Management Inc.

2006 Scott, K. and S. Gust. Paleontological Resources of the Interstate 80 Median and Auxillary Lanes Project, Sacramento, California. On file, Caltrans and Cogstone Resource Management Inc.

2006 Gust, S., A. Abeyta and A. Knight. Cultural Resource Monitoring Report for the Naval Gates Project, Naval Weapons Station Seal Beach, California. On file, Department of the Navy and South Central Coastal Information Center.

2006 Gust, S. Cultural Resource Monitoring Plan for the Naval Gates Project, Naval Weapons Station Seal Beach, California. On file, Department of the Navy and South Central Coastal Information Center.

2006 Gust, S., S. McCormick, A. Abeyta and K. Scott. Archaeological and Paleontological Evaluation Report and Mitigation Plan for the Atascadero Commercial Project, Atascadero, California. On file, Central Coastal Information Center.

PROFESSIONAL AFFILIATION & RECOGNITION

Member, Register of Professional Archaeologists
Member, Society for California Archaeology
Member, Society for Historical Archaeology
Member, Pacific Coast Archaeological Society
Member, Society for Archaeological Science
Associate, Vertebrate Paleontology LA County Museum of Natural History
Qualified Paleontologist, Bureau of Land Management
Qualified/Certified Paleontologist, Counties of Orange, LA, SLO, Ventura, Riverside, Santa Barbara

STEVEN MCCORMICK
Field Director/Supervisor

Education

expected M. A. Anthropology, California State University, Long Beach.
Thesis *Building California Obsidian Database Using Laser Ablation Inductively Coupled Plasma Time of Flight Mass Spectrometer.*

2000 B. A., Anthropology, California State University, Long Beach.

Selected Projects

2005 Geophysical survey Ely Airport and Sunshine Locality, Ely, Nevada.

2004 Geophysical survey California State University Geophysical Research, Kennett, Missouri

2002 Excavation and monitoring CA-ORA-1617 Costa Mesa, California. Responsible for overseeing excavations and monitoring activities, data recovery activities, client consultation, field reports, analysis, and report.

2001 Paleontological & Archaeological monitoring Pacific Commerce Center Lake Forest California. Responsible for overseeing monitoring activities and data recovery activities, client consultation, artifacts analysis and report.

2000-02 Archaeological monitoring Talega Development, San Clemente, California. Responsible for monitoring, data recovery, analysis and reports.

2000 Level 3 archaeological monitoring Ventura River, Ventura, California. Responsible for mitigation monitoring, data recovery and field reports.

2000 Paleontological & Archaeological monitoring Harveston Development Temecula, California. Responsible for monitoring, data recovery, fossil salvage and field reports.

1998 Excavation Santa Barbara Presidio, Santa Barbara, California. Responsible for excavation, in field artifact analysis, mapping, data recovery and field reports.

Reports and Publications

2006 Dr. Hector Neff and Steven McCormick, *Chemical Characterization of Obsidian from CA ORA-907 and ORA 711* unpublished report prepared by IIRMES for SWCA Mission Viejo, California.

2001 Joan Brown, RPA *and* Steven McCormick, *Cultural Resource Monitoring for Water Tank Access Road, Laguna Niguel, California.* Prepared by RMW Paleo Associates Mission Viejo, California.

2001 Joan Brown, RPA *and* Steven McCormick,, *Cultural Resources Literature and Records Review, and Reconnaissance for the Capistrano Valley Water District Domestic, Non-Domestic, and Brackish Water Wells Project.* Prepared by RMW Paleo Associates Mission Viejo, California.

KIM SCOTT
Paleontologist and Field Director

EDUCATION

in progress Masters of Science in Biology with paleontology emphasis, California State University San Bernardino.

2000 Bachelors of Science in Geology with paleontology emphasis, University of California at Los Angeles.

SELECTED PROJECTS

Domenigoni Valley Project. Monitored, recovered, mapped, and prepared fossil collections for the San Bernardino County Museum.

Owens Lake Project. Conducted field survey, fossil recovery and preparation, and assisted with report on paleontological resources of Owens Lake Valley for Cogstone Resource Management Inc.

Creation of Orange County Paleontology Collections database and reference manual.

Eastside Reservoir Project, Hemet California. Worked on field monitoring, fossil recovery, site mapping, stratigraphy, preparation, and curation.

SELECTED REPORTS (ADDITIONAL PROJECT EXPERIENCE)

2005 Scott, K. and S. Gust. Paleontological Survey and Evaluation of Camp Roberts and Camp San Luis Obispo, California Army National Guard Facilities, Central California. On file, Cogstone Resource Management Inc. and California Army National Guard Environmental Division.

2005 Van Wyke, A., K. Scott and S. Gust. Archaeological and Paleontological Resource Assessment and Monitoring Report for the Fox Digital Lot B Project, City of Los Angeles, California. On file, Cogstone Resource Management Inc. and South Central Coastal Information Center.

2005 Scott, K. and S. Gust. Archaeological and Paleontological Resource Assessment Report for the Rich Haven Project, Ontario, California. On file, Cogstone Resource Management Inc.. Eastern Information Center and San Bernardino Archaeological Information Center.

2005 Scott, K. and S. Gust. Paleontological Resources Assessment Report for the First Street Trunk Line Project, City of Los Angeles, California. On file, Cogstone Resource Management Inc.

2005 Glenn, B., Scott., K. and S. Gust. Cultural resources monitoring report for the Lake at Santa Ysabel Ranch, San Luis Obispo County, California.

PROFESSIONAL AFFILIATIONS

1997- pres. Member, Society of Vertebrate Paleontology
2004- pres. Member, Geological Society of America

APPENDIX B: NATIVE AMERICAN HERITAGE COMMISSION

STATE OF CALIFORNIA — Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390

June 19, 2007

Sherri Gust
1801 Parkcourt Pl., St. B-102
Santa Ana, Ca 92701

Sent by Fax: 714-245-0054
Number of Pages: 3

RE: North Canyon Ranch Project; Ventura County

Dear Ms. Gust:

A record search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

Katy Sanchez

Katy Sanchez
Program Analyst

Native American Contacts
Ventura County
June 18, 2007

Charles Cooke
32835 Santiago Road
Acton , CA 93510
(661) 269-1422
(661) 733-1812
Chumash
Fernandeno
Tataviam
Kitanemuk

Julie Lynn Tumamait
365 North Pole Ave
Ojai , CA 93023
jtumamait@hotmail.com
(805) 646-6214
Chumash

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand , CA 91362
805 492-7255
Chumash
Tataviam
Fernandeño

Patrick Tumamait
992 El Camino Corto
Ojai , CA 93023
yanahoa2@aol.com
(805) 640-0481
(805) 216-1253 Cell
Chumash

Owl Clan
Dr. Kote & Lin A-LulKoy Lotah
48825 Sapaque Road
Bradley , CA [redacted]
(805) 472-9536
Chumash

San Luis Obispo County Chumash Council
Chief Mark Steven Vigil
1030 Ritchie Road
Grover Beach , CA 93433
[redacted]@santaynezchumash.org
(805) 481-2461
(805) 474-4729 - Fax
Chumash

Santa Ynez Band of Mission Indians
Vincent Armenta, Chairperson
P.O. Box 517
Santa Ynez , CA 93460
varmenta@santaynezchumash.org
(805) 688-7997
(805) 686-9578 Fax
Chumash

Owl Clan
Qun-tan Shup
48825 Sapaque Road
Bradley , CA 93426
(805) 472-9536
(805) 835-2382 - CELL
Chumash

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

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed North Canyon Ranch Project; Ventura County.

Native American Contacts
Ventura County
June 16, 2007

Stephen William Miller
189 Cartagena
Camarillo , CA 93010
(805) 484-2439
Chumash

Richard Angulo
P.O. Box 182
Salome , AZ 85348
Chumash

Santa Ynez Tribal Elders Council
Adelina Alva-Padilla, Chair Woman
P.O. Box 365
Santa Ynez , CA 93460
elders@santaynezchumash.org
(805) 688-8446
(805) 693-1768 FAX
Chumash

Santa Ynez Band of Mission Indians
Sam Cohen, Tribal Administrator
P.O. Box 517
Santa Ynez , CA 93460
(805) 688-7997
(805) 686-9578 Fax
Chumash

Randy Guzman - Folkes
269 Maclay Street, PO BOX 909
San Fernando , CA 91340
ndnrandy@hotmail.com
(805) 501-5279 (cell)
Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

Carol A. Pulido
165 Mountainview Street
Oak View , CA 93022
805-649-2743 (Home)
Chumash

Charles S. Parra
P.O. Box 8612
Oxnard , CA 93031
(805) 340-3134 (Cell)
(805) 488-0481 (Home)
Chumash

Melissa M. Para-Hernandez
119 North Balsam Street
Oxnard , CA 93030
805-988-9171
Chumash

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed North Canyon Ranch Project; Ventura County.

APPENDIX C: NATIVE AMERICAN CONTACTS

SANTA YNEZ BAND OF MISSION INDIANS
Tribal Elders Council

June 22, 2007

Sherri M. Gust, R.P.A.
Cogstone Resource Management Inc.
1801 Parkcourt Place B102
Santa Ana, CA 92701

RE: North Canyon Ranch Project (#1434)

Dear Ms. Gust:

Thank you for contacting the Tribal Elders Council for the Santa Ynez Band of Chumash Indians in regards to the above mentioned project.

At this time, the Tribal Elders Council has no further knowledge of this site as being spiritual or ceremonial; however, there is always the possibility that unrecorded deposits are present. Therefore we recommend that Chumash from the project area are also inclusive in your request for information.

If regulations that apply to this project do not require the presence of a Native American monitor, we ask that you please consider having a monitor in place during ground disturbance to assure that any cultural items unearthed be identified as quickly as possible. If you decide to honor this request pertaining to monitoring, please contact the Chumash office of the project area.

Thank you for remembering that at one time our ancestors walked this sacred land.

Sincerely Yours,

The Tribal Elders Council Governing Board

AAP: kk

P.O. Box 365 • Santa Ynez • CA • 93460
Phone: (805) 688-8446 • Fax: (805) 693-1768 • Email: elders@santaynezchumash.org