Appendix D

Phase I Archaeological Report

A Phase 1 Archaeological Study
For Proposed Improvements to APN#2061-033-015
The Proposed Gupta Corporate Offices
(Tentative address: 29760 Agoura Road)
City of Agoura Hills, County of Los Angeles, California

Prepared for
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March, 2008

Summary of Findings

At the request of Neal Scribner Architecture of Thousand Oaks, California (representing Dr. Gupta) a Phase 1 Archaeological Study was prepared in support of an environmental document for Proposed Improvements to APN#2061-033-015 - The Proposed Gupta Corporate Offices (Tentative address: 29760 Agoura Road) City of Agoura Hills, County of Los Angeles, California. This document is intended to assist the client in achieving compliance with the California Environmental Quality Act (CEQA) and the Planning Department of the City of Agoura Hills, County of Los Angeles, guidelines, policies and procedures pertaining to the completion of cultural resource investigations. The scope of work consisted of:

1. Performing a record search at the South Central Coastal Information Center, California State University Fullerton.
2. Conducting an on-foot surface reconnaissance of the entire project area.
3. Preparing a report summarizing the results of the record search and field investigation phases.

The undeveloped lot lies north of the Pacific Ocean, south of Simi Valley, east of San Buenaventura, and west of Burbank, within the City of Agoura Hills, County of Los Angeles, California (Figure 1). More specifically, the parcel is located on the Thousand Oaks, California 7.5 minute USGS Map (1981) within Township 1 North, Range 18 West, in an unsectioned portion of Rancho Las Virgenes (Figure 2). The property is situated on the south side of Highway 101 Freeway, and to the west of Kanan-Dume Road. The parcel consists of terraced terrain that slopes from south to north and is bordered by Agoura Road on the north, open space on the south and a mixture of developed and open space land on the east and west (Figure 3). The southern portion of the property is dominated by oak trees with moderate vegetation coverage, while the central and northern portions of the parcel are dominated by man-made terraces that drop to Agoura Road on the north (Figure 4) Figure 5 illustrates a proposed site plan, which will include office buildings, parking, and associated landscaping features.

Soils on the property belong to the ***Gilroy Series***, which are moderately deep to deep, well-drained residual soils developed on gently rolling to steep uplands on basic igneous rock. They are characterized by dark grayish brown, medium to moderately fine textured, granular, slightly acid surface soils, brown moderately fine textured angular blocky, medium acid subsoils resting on fractured basalt and volcanic breccia at 22-40 inches; ***Hambright Series***, which are shallow, well drained, moderately steep to very steep residual soils occurring on volcanic rocks. They area characterized by very thin dark grayish brown, medium textured, granular, mildly alkaline surface soils, brown gravelly moderately fine textured subangular blocky, mildly alkaline subsoils over basalt and volcanic breccia at depths of 8 to 10 inches (20cm-25cm); and ***Igneous Rock Land***, which consist of steep to very steep, essentially barren mountainous uplands, with over 25% of the surface exhibiting exposed rock outcrops. The soils are relatively stable and are dominated by basalt, andesite, rhyolite and volcanic breccia (U.S. Department of Agriculture 1967).

A record search performed on February 28, 2008 by professional archaeologist Wayne Bonner, at the South Central Coastal Information Center, California State University, Fullerton (SCCIC), indicated that no previously recorded prehistoric or historic archaeological sites or isolates exist on the property. Also, the following results apply within a ½ -mile radius of the subject property:

- Fourteen prehistoric archaeological resources are recorded: CA-LAN-320; -321; -432; -462; -671; -776; -842; -970; -971; -1021;-1024; -1027; -1069; and -1236.
- CA-LAN-1021, which was recorded in 1979, lays roughly 75-feet to the west of the subject property. The site was roughly 750-feet east-west by 125-feet north-south. Roughly 126 stone tools and debitage were collected from the site during 1979. Three pieces of large mammal bone that was burned were also collected. Major disturbances occurred to the site during the construction of Agoura Road and the completion of Hidden Hills Trail Camp inclusive of facility construction, road clearance and landscaping. During 1988, additional testing was performed by Singer and an assortment of tools, debitage (primarily andesite and chert), mammal and fish bone were recovered. Woodworking, tool maintenance and hunting seemed to be the primary activities taking place at the site, which appears to have been occupied over 1000 years ago.
- CA-LAN-1027, which was recorded by Griff Coleman in 1972, lies roughly 100-feet the east of the subject property. The site was roughly 240-feet north-south, by 125-feet east-west and contained a midden component and numerous andesite and chert flakes and cores. During 1979, Clay Singer and Jamie Karl revisited the sites and noted that the archaeological site covered a baseball field on a graded terrace immediately south of Agoura Road. The site was rerecorded as being roughly 630-feet north-south by 465-feet east-west. The upper portion of

the site had been graded and pushed around the entire area to level the ground surface. Fire-affected rock, fused shale, chert, quartzite, chalcedony and andesite flakes, shellfish, mammal bone, awls, projectile bones and human remains were noted by Singer and Karl. Dr. Chester King, who visited the site in 1984, noted artifacts and human remains on the surface.

- No historic archaeological resources were identified.
- Twenty-six prior investigations have been conducted (Atlantis Scientific 1977; Barkley & Cannon 1982; Brock & Van Horn 1980; Brown 1981; Chace 1979; D'Altroy 1976; Greenwood 1976; Hatheway & McKenna 1989a,b; Kirkish 1978; Leach 1980; Maki & Carbone 1996; Padon 1978; Rosen 1979; Rosen & Clewlow 1975; Scientific Resource Surveys 1979; Singer 1979a,b; Singer & Atwood 1988, 1989; Tartaglia 1977; Van Horn 1985; Webb and Romani 1982; and, Wlodarski 1996, 2003, 2004).
- None of these prior investigations encompassed the project area; therefore, the SCCIC mandated a Phase 1 Archaeological Study for the subject property.
- No National Register of Historic Places are identified (10/15/2004 with supplements to date).
- No California Register of Historic Resources exists (1992, with supplemental information to date).
- No California Historical Landmarks are listed (1995, with supplemental information to date).
- No California Points of Historical Interest are noted (1992, with supplemental information to date).
- No California State Historic Resources Commission issues are noted.
- No listed properties in the Office of Historic Preservation Historic Property data file are identified.
- No Archaeological Determinations of Eligibility are listed.

Additional information obtained from The Geography Department Map Reference Center, California State University Northridge, and the Los Angeles County Archives Project (Historical Records of Los Angeles County) follows:

- Township-Range Plat Map Surveys by, Henry Washington (1853), Henry Hancock (1854), J.E. Terrell (1861), G.H. Thompson (1870), J.R. Glover (1895) and M.E. Reilly (1895);
- 1853-Plat of the Rancho Las Virgenes (claimant: Maria Antonio Machado);
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- 1876-Plat of the Rancho Las Virgenes (surveyed by John Goldsworthy);
- 1878-Plat of the Rancho Las Virgenes (confirmed to Maria Antonia Machado on July 11, 1878);
- 1879-Plat of the Rancho Las Virgenes (surveyed by William Minto in February, 1879);
- 1881-Plat Rancho Las Virgenes (surveyed by William Minto, June 10, 1881);
- Map of the County of Los Angeles, California (Stevenson, 1881);
- Map of the County of Los Angeles, California (Rowan, 1888);
- Map of the Reservoir Lands in the County of Los Angeles (Seebold-1891);
- Calabasas 15 minute USGS Topographic Map (1903 edition - surveyed in 1893, 1900-1901);
- Camulos 15 minute USGS Topographic Map (1903 edition - surveyed in 1893, 1900-1901);
- Triunfo Pass 15 minute USGS Topographic Map (surveyed in 1921 and 1943);
- Dry Canyon 15 minute USGS Topographic Map (1932 edition - surveyed in 1925 and 1929).

A pedestrian survey was conducted for the property by the author serving as Principal Investigator, and Matthew Conrad serving as Project Manager, on March 2, 2008. The parcel was inspected for surface indications of cultural resources. All exposed terrain and fortuitous exposures such as rodent burrows and excavated or cleared areas, were thoroughly inspected for signs of cultural resources. The following observations were made while in the field:

- The property is situated on the south side of Highway 101 Freeway, and to the west of Kanan-Dume Road. The parcel consists of terraced terrain that slopes from south to north and is bordered by Agoura Road on the north, open space on the south and a mixture of developed and open space land on the east and west.
- Access is off Agoura Road on the south via a road trends north-south along the eastern boundary of the property The southern portion of the property is dominated by oak trees with moderate vegetation coverage, while the central and northern portions are dominated by man-made terraces that drop to Agoura Road on the north.
- Ground surface visibility was good-to-very-good throughout.
- The southern portion of the property appears to be the least disturbed portion of the parcel.
- Ground surface disturbances in the past appear to have including disking and vegetation clearance and terracing.

- There is moderate gopher disturbance throughout and a concrete and stone trough occurs in the southern portion of the parcel.

The results of the Phase 1 archaeological study yielded no visible indications of prehistoric or historic archaeological resources within the parcel. However, the nature of a pedestrian survey can only confidently assess the potential for encountering surface cultural resource remains. Due to the extreme cultural resource sensitivity of the area (two previously recorded archaeological sites: CA-LAN-1021 and CA-LAn-1027, lie within 100 feet of the subject property to the east and west) and because human remains were found in association with CA-LAN-1027, archaeological monitoring is recommended during the initial grading of any portion of the parcel proposed for development. It is recommended that a RPA qualified archaeologist is on-site during the initial grading of the upper three feet of soil to ensure that buried cultural resource remains are not inadvertently destroyed during construction related activities. Often, clients prefer to perform limited permitted pre-construction grading under the supervision of a RPA qualified archaeologist monitoring. The major advantage to pre-construction grading is that if anything significant is discovered, it can be dealt with without delaying or stopping major construction, which is often time-consuming and expensive.

Construction-related activities include any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing). Should unanticipated cultural resource remains be encountered during land modification activities, work must cease, and the Planning Director or Lead Agency contacted immediately to determine appropriate measures to mitigate adverse impacts to the discovered resources. Cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits.

If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of the Native American Heritage Commission.

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I. Introduction

1.1 Purpose and Scope of the Project

At the request of **Neal Scribner Architecture** of Thousand Oaks, California (representing Dr. Gupta) a Phase 1 Archaeological Study was prepared in support of an environmental document for Proposed Improvements to APN#2061-033-015 - Proposed Gupta Corporate Offices (Tentative address: 29760 Agoura Road) City of Agoura Hills, County of Los Angeles, California. This document is intended to assist the client in achieving compliance with the California Environmental Quality Act (CEQA) and the Planning Department of the City of Agoura Hills, County of Los Angeles, guidelines, policies and procedures pertaining to the completion of cultural resource investigations. The scope of work consisted of:

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2. Conducting an on-foot surface reconnaissance of the entire project area.
3. Preparing a report summarizing the results of the record search and field investigation phases.

1.2 Location and Description of the Project

The undeveloped lot lies north of the Pacific Ocean, south of Simi Valley, east of San Buenaventura, and west of Burbank, within the City of Agoura Hills, County of Los Angeles, California (Figure 1).

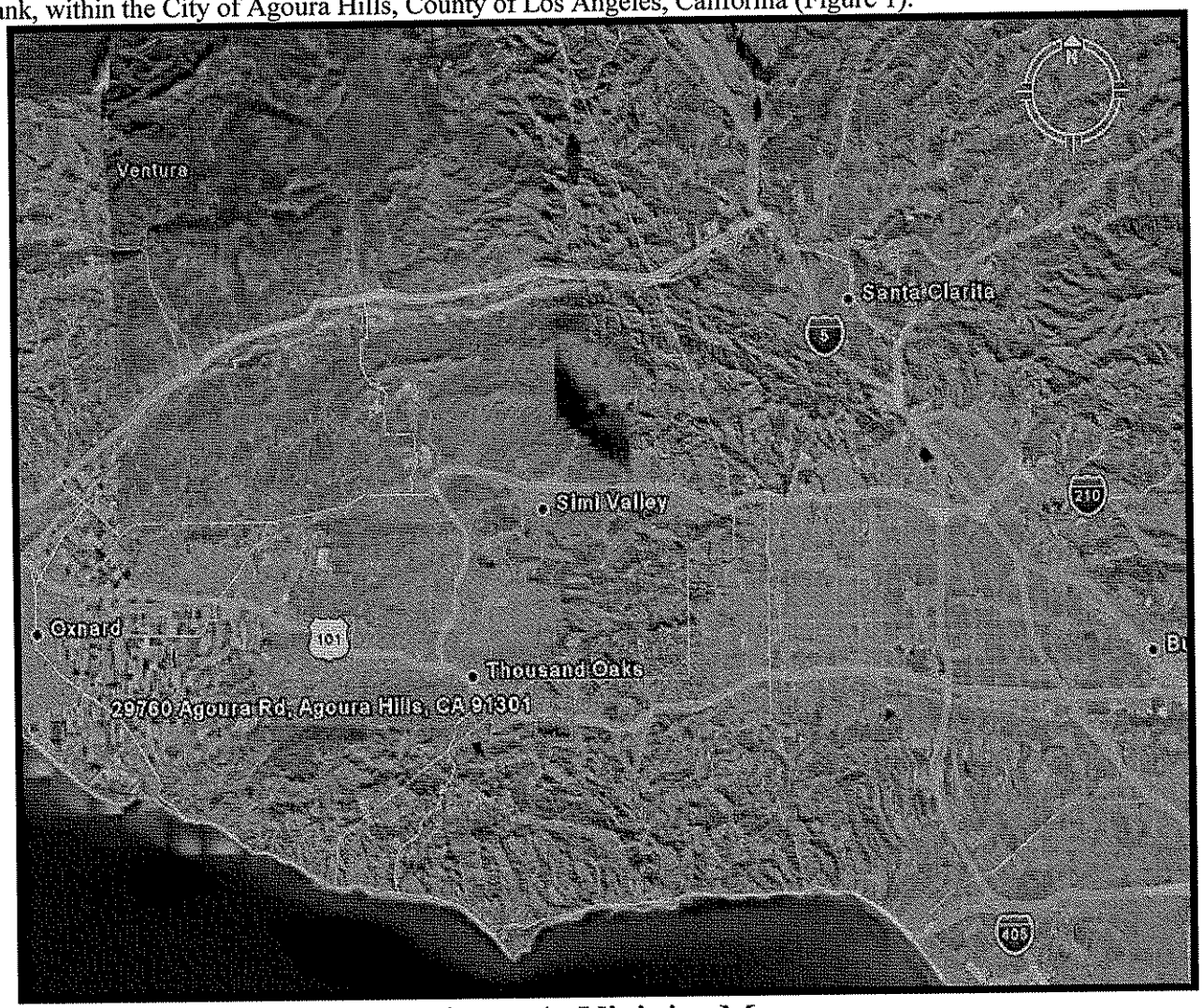

Figure 1: Vicinity Map

More specifically, the parcel is located on the Thousand Oaks, California 7.5 minute USGS Map (1981) within Township 1 North, Range 18 West, in an unsectioned portion of Rancho Las Virgenes (Figure 2).

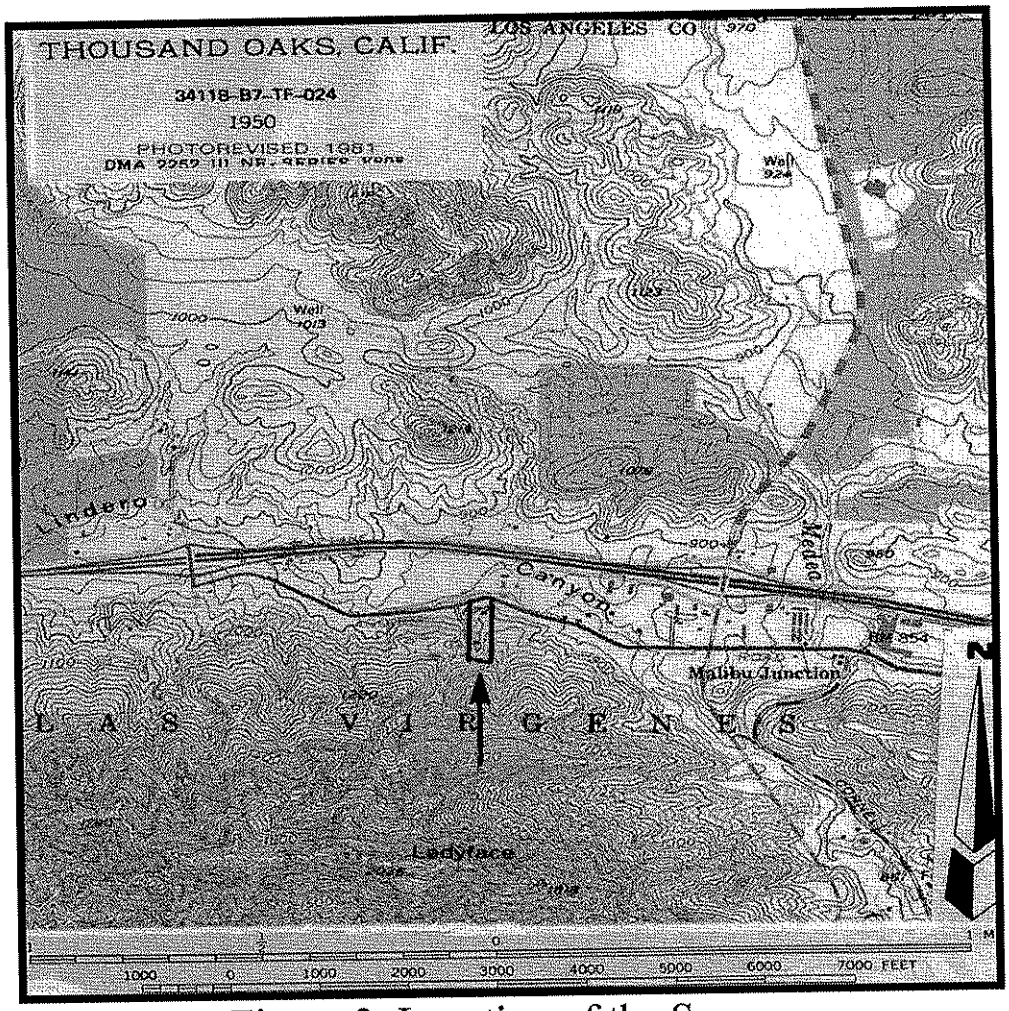

Figure 2: Location of the Survey

The property is situated on the south side of Highway 101 Freeway, and to the west of Kanan-Dume Road. The parcel occupies terrain that slopes gently from south to north and is bordered by Agoura Road on the south, and a mixture of developed and open space land on the north, east and west (Figure 3).

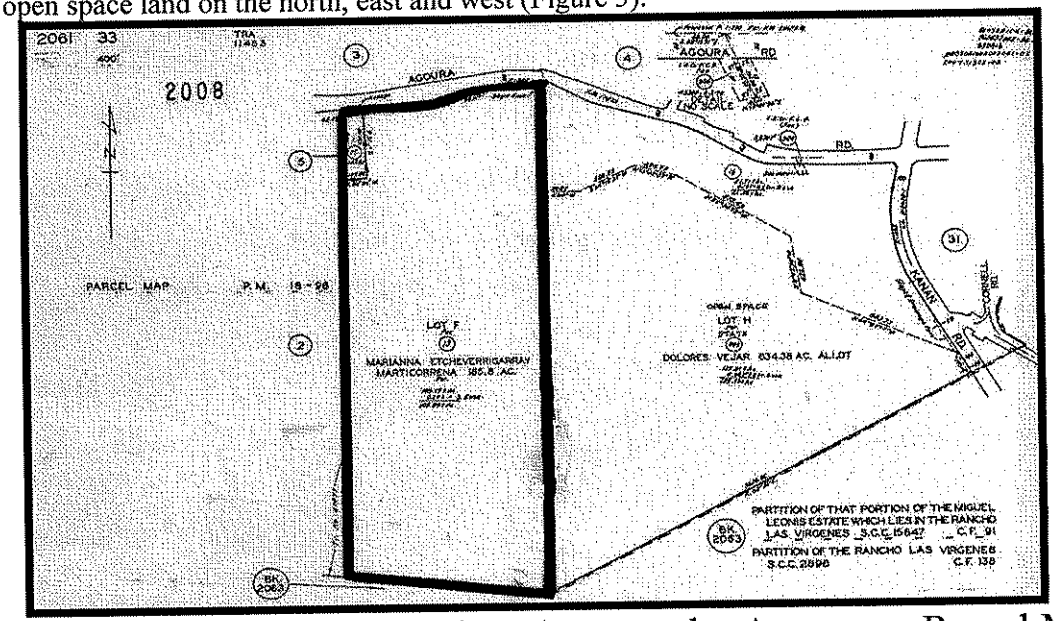

Figure 3: Location of the Project Area on the Assessors Parcel Map

Figure 4 provides an aerial view of the subject property looking north. The property is an undeveloped parcel between a developed parcel with a building and parking area on the left of the photograph, cleared and overgrown land on the right side of the photograph, to the left of an north south trending access road and south of Agoura Road near the top of the photograph.

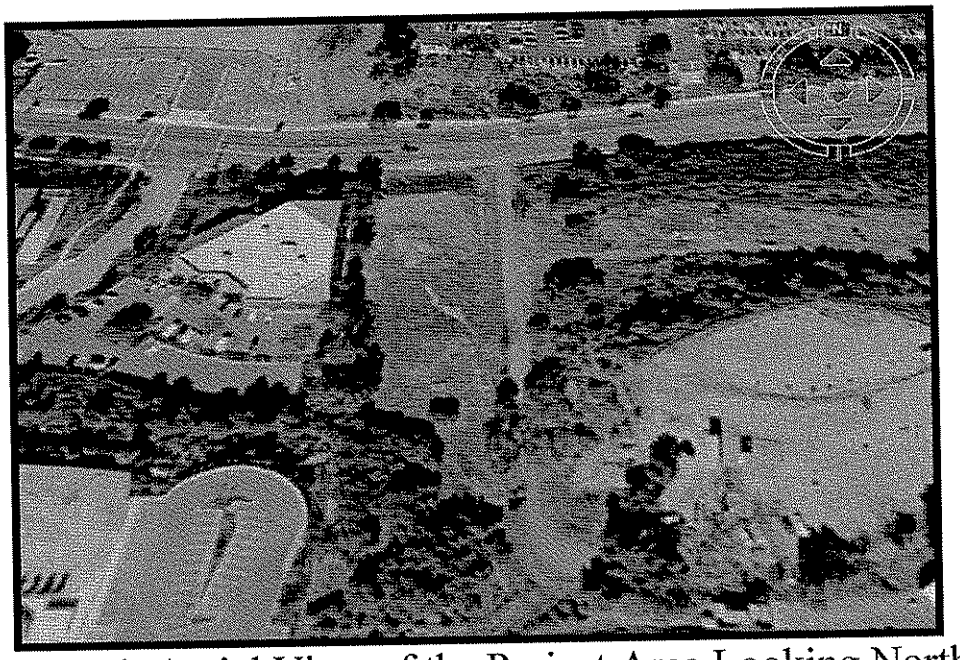

Figure 4: Aerial View of the Project Area Looking North

Figure 5 illustrates a proposed site plan, which includes office buildings, parking and associated landscaping features.

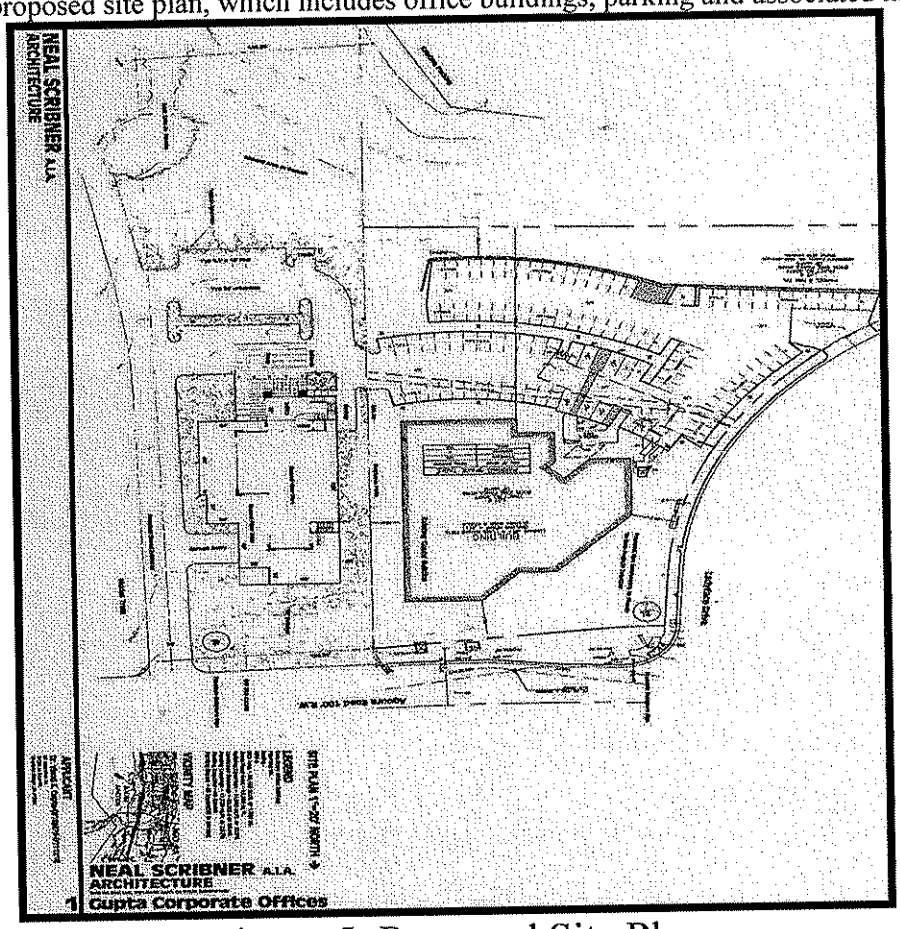

Figure 5: Proposed Site Plan

II. Environmental Information

2.1 Geology

The property lies within the Santa Monica Mountains, which is part of the Transverse Range geologic province. This mountain range is primarily composed of sedimentary and volcanic formations. The general topography consists of rolling hills, seasonal drainages, and narrow-to-moderate broad valleys, interspersed with sage/chaparral and oak-woodland plant communities. The major stratigraphic units in the area include: Upper Miocene Marine Sedimentary Rocks consisting of interbedded sandstone, shale, siltstone and conglomerate; and, Miocene Volcanic Rocks, consisting of agglomerate, flow breccias, flows, tuffs, and volcanic materials (State of California 1969).

2.2 Soils

Soils on the property belong to the ***Gilroy Series***, which are moderately deep to deep, well-drained residual soils developed on gently rolling to steep uplands on basic igneous rock. They are characterized by dark grayish brown, medium to moderately fine textured, granular, slightly acid surface soils, brown moderately fine textured angular blocky, medium acid subsoils resting on fractured basalt and volcanic breccia at 22-40 inches; ***Hambright Series***, which are shallow, well drained, moderately steep to very steep residual soils occurring on volcanic rocks. They area characterized by very thin dark grayish brown, medium textured, granular, mildly alkaline surface soils, brown gravelly moderately fine textured subangular blocky, mildly alkaline subsoils over basalt and volcanic breccia at depths of 8 to 10 inches (20cm-25cm); and ***Igneous Rock Land***, which consist of steep to very steep, essentially barren mountainous uplands, with over 25% of the surface exhibiting exposed rock outcrops. The soils are relatively stable and are dominated by basalt, andesite, rhyolite and volcanic breccia (U.S. Department of Agriculture 1967).

2.3 Climate

The region, classified as Mediterranean warm, lies between the dry Mojave Desert and the humid Pacific Coast. It is characterized by warm, dry summers, and mild, moderately wet winters. Temperatures range from 100 degrees in July and August to the low 30s in January. Snowfall is rare and rainfall occurs normally between November and April.

2.4 Flora and Wildlife

The region supports several major plant communities including Oak Woodland, Riparian, and Sage/ Chaparral with species of sycamore, willow, alder and mulefat, white, black and coastal sage, buckwheat, poison oak, lemonadeberry, chamise, yucca, scrub oak, laurel sumac, toyon, and open grassland. Regional wildlife consists of seasonal populations of quail, rabbit, rodents, deer, lizards, snakes and numerous species of birds. Combined with coastal resources that are available less than ten miles away, the region provided an extensive resource base for prehistoric populations.

III. Cultural Overview

3.1 Prehistory/Protohistory

At Spanish Contact, the region was occupied by the Chumash, a diverse population living in settlements along the California coast from Malibu Creek to the southeast, Estero Bay in the north, Tejon Pass, Lake Casitas and the Cuyama River inland, and the islands of San Miguel, Santa Rosa, and Santa Cruz. Chumash society became more complex over the last 9,000 years. Wallace (1955) and Warren (1968) developed chronologies for the region. King (1982) proposed sequences based on changes in ornaments, beads and other artifacts. After A.D. 1000, changes in bead types suggest the operation of a highly complex economic system by the time the Spanish arrived. Following the 1542 Cabrillo voyage, many small Chumash settlements were abandoned and some of the largest historic towns were founded. This change in population distribution is attributed to growth in importance of trade centers and the development of more integrated political confederations. The Chumash economic system enabled them to make efficient use of diverse environments within their territory. Acorns and seeds were traded between the islands, mainland and interior populations who lacked marine resources traded with coastal populations for fish and other seafood. Most religious ceremonies had their roots in the Early Period when objects similar to those used historically were placed in mortuary associations or owned by religious leaders. References for the Chumash include: Carrico and Wlodarski (1983), Dillon & Boxt (1989), Grant (1978), Hudson et al. (1977), Hudson & Underhay (1978), Hudson (1979), Hudson & Blackburn (1979-87), C. King (1994, 2000), Kroeber (1925), Landberg (1965), Leonard (1971), Miller (1988), Gibson (1991), and Santa Barbara Museum of Natural History (1986, 1991).

3.2 Ethnographic Information

The Spanish viewed the Chumash as unique among California Indians due to their knowledge of the sea, canoe

building expertise, ceremonial organization, their interest in acquiring and displaying possessions, willingness to work, and their extensive trade networks. According to C. King (1982) the protohistoric Chumash maintained the most complex bead money system documented in the world. Information from Schumacher & Bowers in 1877-1878, Rogers in the 1920s, Harrington in the 1930s, and Woodward & Van Valkenburgh in the late 1920s and 1930s, suggests that the Chumash were divided into political provinces, with each containing a capital where villages now exist. Based on C. King (1975), and Applegate (1974, 1975) the following placenames exist in the region:

Alqilko'wi	"white of the eye" - Village in Little Sycamore Canyon, west of Point Dume
Humaliwo	"[The surf] sounds loudly"? - Village at what is now Malibu
Lisiqishi	Village at Arroyo Sequit, west of Point Dume
Lohostohni	Village at Trancas Canyon, west of Point Dume
Muwu	"beach" - Village at what is now the mouth of Mugu Lagoon
Niko	"water?" - in Malibu, east of Point Dume
Seq'is	"beachworm" - now Arroyo Sequit
Shuwalahsho	"sycamore" - Village in Big Sycamore Canyon
Sumo	"abundance" - village at mouth of what is now Zuma Canyon

3.3 History

From the voyages of Cabrillo in 1542 and Vizcaino in 1602 through the Mexican and American Periods, land use patterns changed little in the Santa Monica Mountains. The Portola-Crespi Expedition of 1769 passed through Calabasas and Agoura while returning to San Diego. Juan Bautista de Anza (1773-1775/1776) helped establish the Franciscan missions and Spanish settlements in the region, and opened the door to future development of the region. A branch of the El Camino Real passed through Calabasas and Agoura after leaving the San Fernando Valley, a route that was frequently traveled by Native American, soldier, explorer and civilians. Today, the Ventura Freeway (Highway 101) follows the former alignment of the El Camino Real.

By the 1840's and 50's, cattlemen, sheepherders, squatters and ranch owners were acquiring portions of former Mexican land grants in the region. Legendary landowners such as Miguel Leonis the co-owner (along with his wife Espiritu), of Rancho El Escorpion to the north of the project area, Domingo Carrillo and Nemisio Dominguez of Rancho Las Virgenes, and Matthew Keller of Rancho Topango Malibu Sequit, owned much of region. To the west, Don Pedro Alacantara Sepulveda built an adobe (which still stands, and is under the jurisdiction of the State Park system) for his wife Maria Magdalena Soledad Dominguez circa 1853. Under the direction of King Philip of Spain, Rancho Las Virgenes, Rancho El Paraje de Las Virgenes or El Rancho de Nuestra Senora La Reina de Las Virgenes as it was first called, was granted to Miguel Ortega. It was one of the smallest of all the California grants, consisting of only 17,760 acres. Later, under the United States flag, the grant was filed under the ownership of Dona Maria Antonia Machado del Reyes. Her heirs, Jose Reyes and Maria Altgracia Reyes de Vejar, built a home of adobe, "The Reyes Adobe", close to a natural spring near Strawberry Peak, and it was last owned by Jacinta Reyes.

According to the City of Agoura Hills website (www.ci.agoura-hills.ca.us), Don Pedro (Pierre) Agoure came to California when he was 17 in 1871. He was a shepherd and swashbuckler. The son of a French farmer, he adopted the style of the Spanish, tacked a "Don" to his name and used the name Pierre. By the early 1900s Agoura was used as a stage stop, having one of the wells used to provide water for travelers located where Agoura and Cornell Roads meet. Travelers enjoyed Ladyface Mountain, which was a Chumash lookout. Folklore suggests that Ladyface was named because of the profile resembled a lady lying on her back and searching the heavens for the return of her lover.

During 1924, Ira and Leon Colody purchased the George Lewis Ranch in what is now known as Old Agoura. This land was known as Independence Acres. Shortly thereafter, this area became known as "Picture City" and was used for many backdrops for motion pictures. In 1928 the Postal Department selected the name of Agoure and chose to change the last letter "e" to an "a" for ease of pronunciation. During 1955, the first water started flowing into the Las Virgenes area, and in 1959 the Las Virgenes Municipal Water District was formed. During the late 1960s the Hillrise, Liberty Canyon and Lake Lindero housing tracts were begun. During the 1970's, schools and shopping centers were constructed. During 1982, the residents of the City of Agoura Hills voted in favor of cityhood by a 68% majority. Agoura Hills became the 83rd City in Los Angeles County. Today large portions of land in the region are protected by the Santa Monica Mountains National Recreation Area for the enjoyment of all.

IV. Background Research Synthesis

A record search performed on February 28, 2008 by professional archaeologist Wayne Bonner, at the South Central Coastal Information Center, California State University, Fullerton (SCCIC), indicated that no previously recorded prehistoric or historic archaeological sites or isolates exist on the property. Also, the following results apply within a ½ -mile radius of the subject property:

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V. Field Reconnaissance Program

5.1 Methodology

A field reconnaissance which entails the inspection of all land surfaces that can reasonably be expected to contain cultural resource remains without major modification of the land surface was performed for the lot on March 2, 2008.

5.2 Crew

The survey crew consisted of Principal Investigator, ***Robert Wlodarski*** who has a: B.A. in History and Anthropology; M.A. in Anthropology from California State University Northridge (CSUN); 35 years of professional experience in California archaeology; over 1200 projects completed to date; certification in field archaeology, and theoretical/ archival research by the Register of Professional Archaeologists [RPA]; is a registered California historian by the California Committee for the Promotion of History [CCPH]; and meets NPS Standards & Guidelines for Archaeology and Historic Preservation; and ***Matthew Conrad***, B.A in Anthropology from CSUN who is currently completing requirements for a M.A degree in Geography from CSUN, while working for Robert Lopez; USDA Forest Service, MBA, WH Bonner and HEART as a Survey Archaeologist and a Project Manager.

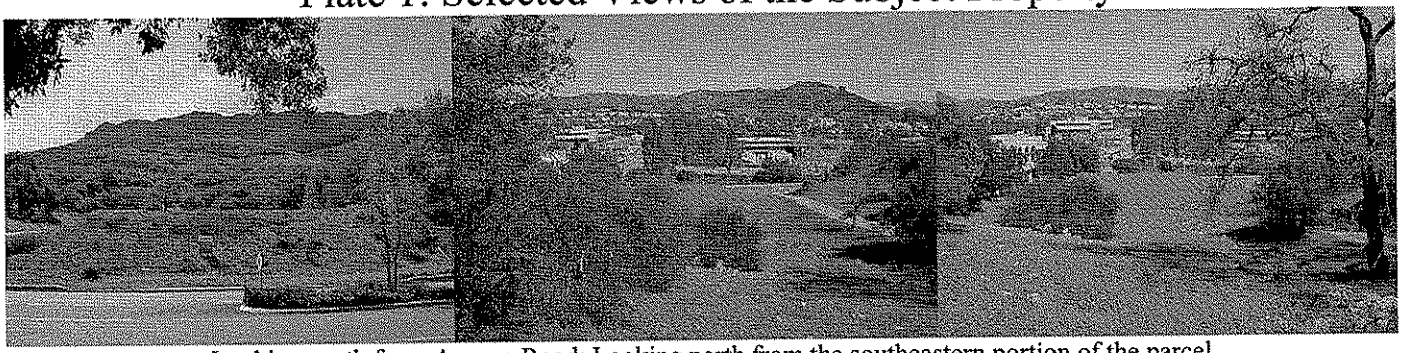
5.3 Results

The parcel was inspected for surface indications of cultural resources. All exposed terrain and fortuitous exposures such as rodent burrows and excavated or cleared areas, were thoroughly inspected for signs of cultural resources. The following observations were made while in the field:

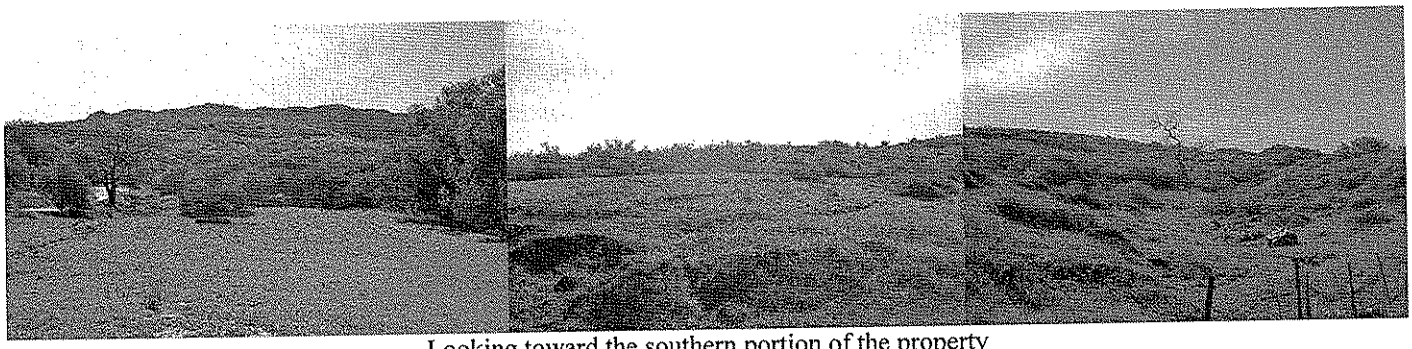
- The property is situated on the south side of Highway 101 Freeway, and to the west of Kanan-Dume Road. The parcel consists of terraced terrain that slopes from south to north and is bordered by Agoura Road on the north, open space on the south and a mixture of developed and open space land on the east and west.
- Access is off Agoura Road on the south via a road trends north-south along the eastern boundary of the property.
- The southern portion of the property is dominated by oak trees with moderate vegetation coverage, while the central and northern portions are dominated by man-made terraces that drop to Agoura Road on the north.
- Ground surface visibility was good-to-very-good throughout.
- The southern portion of the property appears to be the least disturbed portion of the parcel.
- Ground surface disturbances in the past appear to have including disking and vegetation clearance and terracing.
- There is gopher disturbance throughout and a concrete and stone trough occurs in the southern part of the parcel.

The results of the Phase 1 archaeological study yielded no visible indications of prehistoric or historic archaeological resources within the parcel. However, the nature of a pedestrian survey can only confidently assess the potential for encountering surface cultural resource remains. Due to the extreme cultural resource sensitivity of the area (two previously recorded archaeological sites: CA-LAN-1021 and CA-LAn-1027, lie within 100 feet of the subject property to the east and west) and because human remains were found in association with CA-LAN-1027, archaeological monitoring is recommended during the initial grading of any portion of the parcel proposed for development. Plate 1 illustrates selected views of the subject property.

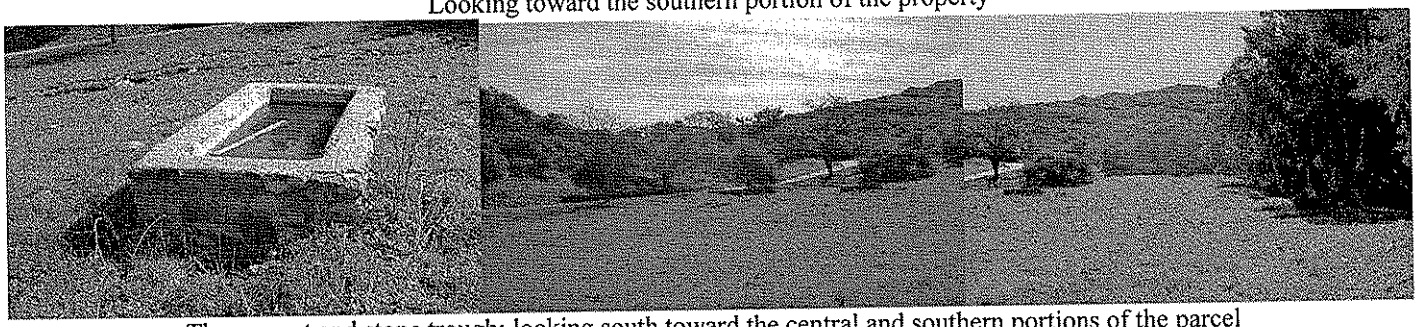
Plate 1: Selected Views of the Subject Property



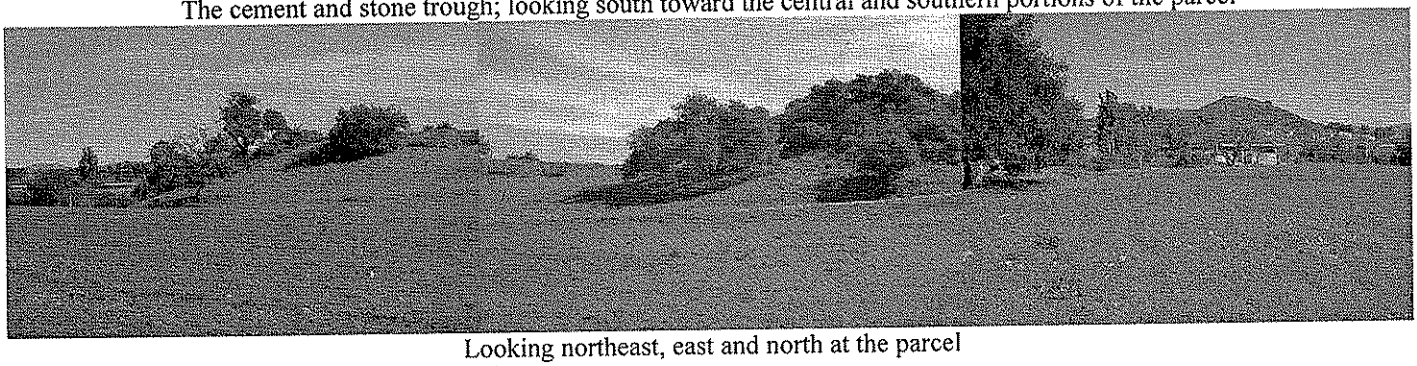
Looking south from Agoura Road; Looking north from the southeastern portion of the parcel



Looking toward the southern portion of the property



The cement and stone trough; looking south toward the central and southern portions of the parcel



Looking northeast, east and north at the parcel

5.4 Recommendations

It is recommended that a RPA qualified archaeologist is on-site during the initial grading of the upper three feet of soil to ensure that buried cultural resource remains are not inadvertently destroyed during construction related activities. Often, clients prefer to perform limited permitted pre-construction grading under the supervision of a RPA qualified archaeologist monitoring. The major advantage to pre-construction grading is that if anything significant is discovered, it can be dealt with without delaying or stopping major construction, which is often time-consuming and expensive.

Construction-related activities include any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing). Should unanticipated cultural resource remains be encountered during land modification activities, work must cease, and the Planning Director or Lead Agency contacted immediately to determine appropriate measures to mitigate adverse impacts to the discovered resources. Cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits.

If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of the Native American Heritage Commission.

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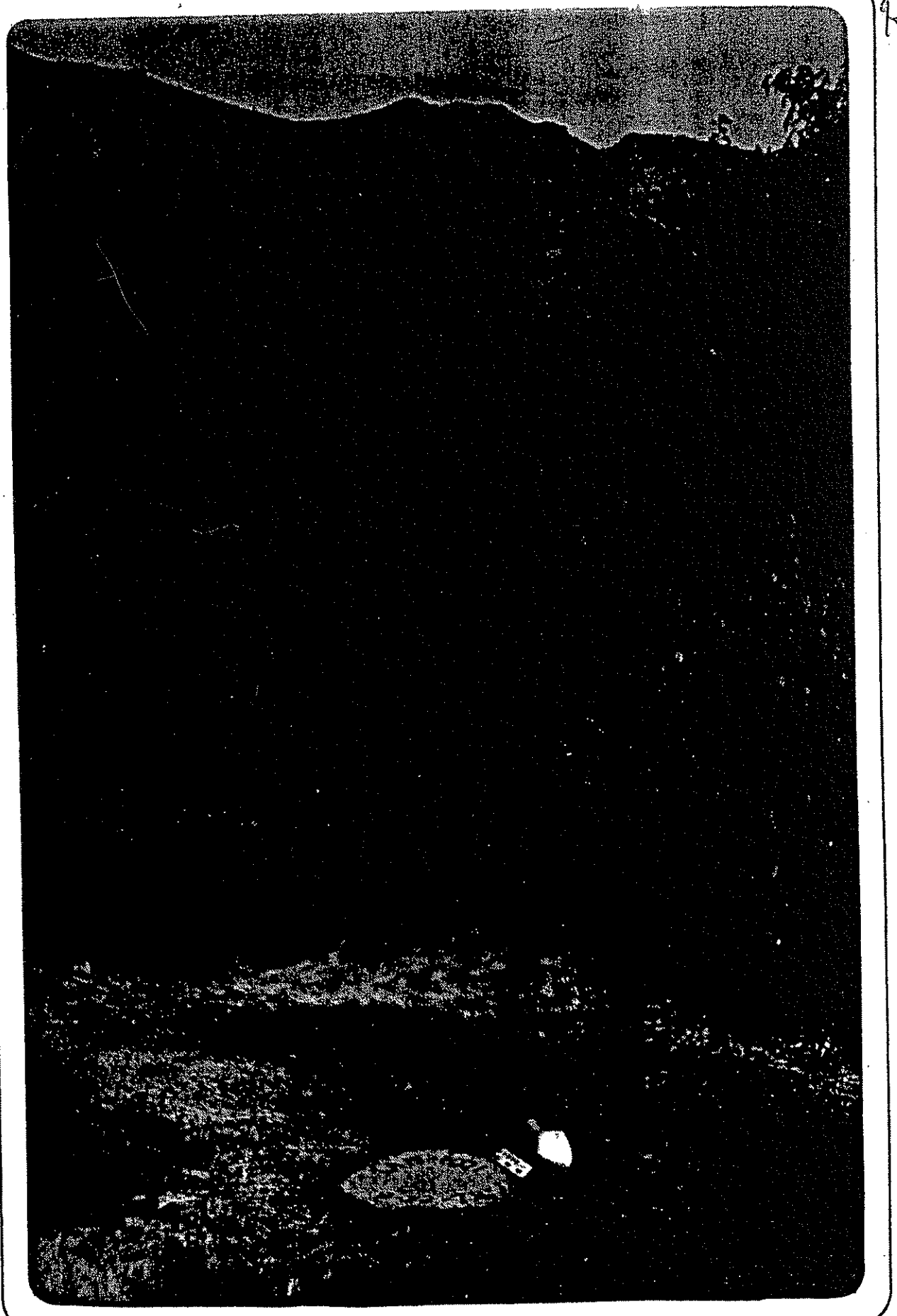
Appendix E

Archaeological Report

ARCHEOLOGICAL REPORT



97-CUP-009

SYSTEMATIC ARCHAEOLOGICAL TESTING AT LAN-1021 -- AN EVALUATION OF POTENTIAL IMPACTS FROM THE PROPOSED CONSTRUCTION OF THE MILLER AND FOLSE OFFICE COMPLEX IN AGOURA, LOS ANGELES COUNTY, CALIFORNIA.

07-CUP-009
07-OTP-017
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October 20, 1979

-ABSTRACT-

Systematic archaeological tests conducted on and around site LAN-1021 revealed that virtually all intact deposits are situated on the east side of the old paved road along the western edge of the site. No *in situ* materials were found west of the old paved road. The site is centered along the low ridge or terrace approximately fifty meters from the area of proposed construction. A low profile, garden office complex is scheduled to be built on the subject property, west of the old paved road. Construction, if properly planned and executed, will have no direct impact upon the archaeological site. The presence of the office complex may have a positive impact upon this prehistoric site if it serves to limit further development of the site area. However, unless minor changes are made in the architectural plan the construction will eliminate most of the oak trees on the property, and a portion of a dwarf chaparral forest. Preliminary analysis of the data collected at LAN-1021 indicates that the site is a Middle Horizon camp of some kind, possibly a hunting camp or special activity site. The archaeological specimens are tentatively dated at 0 to 1000 A.D. No historically significant sites or resources will be affected by the proposed project.

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I - INTRODUCTION

Background Information

During the month of May, 1979, an archaeological record search and preliminary field check was conducted for a small parcel of undeveloped land in the community of Agoura in the western part of Los Angeles County, California. The parcel, situated at the foot of Ladyface Mountain on the northern flank of the Santa Monica Mountains, was examined by Ms. Donna Day (1979) who noted several stone artifacts on the surface, and recorded the locality as an archaeological site. The locality was designated site number LAN-1021 -- the 1021st archaeological site recorded in the County of Los Angeles (Appendix A).

Subsequent investigations of the parcel and adjacent properties have demonstrated that the main body of LAN-1021 is located on a ridge or terrace above, and to the east of the parcel examined by Ms. Day (Singer 1979). Both cited reports stressed the need for additional systematic testing of the site to determine the nature and extent of the deposits, and to adequately assess actual and potential impacts to the identified cultural resource.

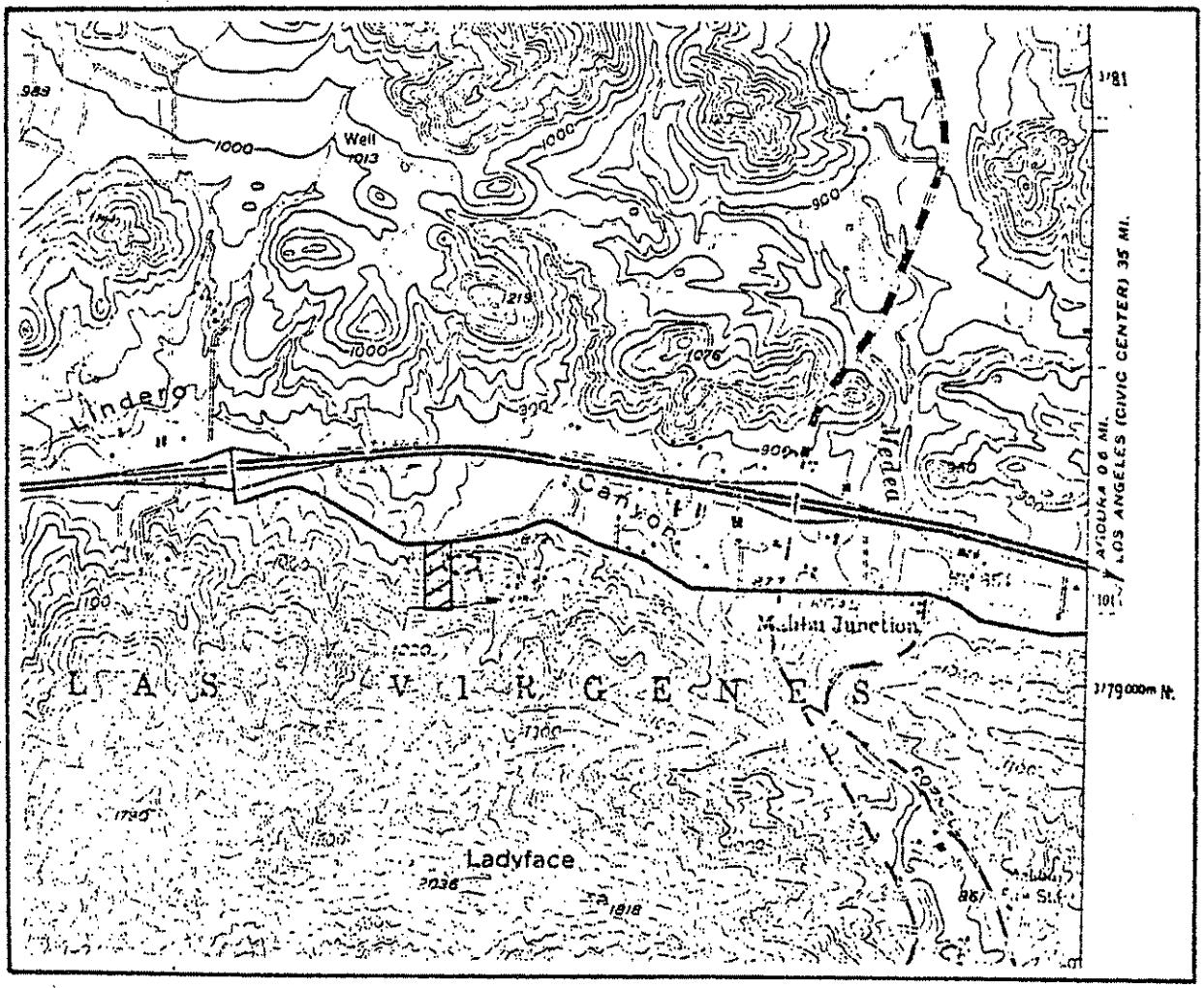
The following report decuments a series of systematic archaeological tests carried out at LAN-1021, and elsewhere, which were designed to accomplish several things. First, they were designed to gather data on the age and distribution

of the artifacts found at LAN-1021, and to determine the extent of the deposits actually situated on the subject parcel, the Miller and Folse property at the western edge of the site.

The second objective was to acquire material data - that is to say artifacts - from the site which could be used as educational media, examples of local prehistoric tools, ornaments, etcetera. Such objects could be displayed in the Agoura public library, or at a local meeting hall or small museum. This idea was generated by Mr. Rene Folse, of Miller and Folse, and is supported by many local archaeologists and Native Americans. An agreement for additional testing was prepared by Miller and Folse and signed in July, 1979. Fieldwork and preliminary analysis was completed in October of the same year. A sample of one hundred and twenty-nine specimens has been collected and catalogued (Appendix B), a permanent datum plug has been placed in the site (Appendix C), and thirty-five color photographs have been taken of the site and vicinity (Appendix D). These data are supplemented by notes, records, maps and drawings in the text of this report.

Test Proceedures

A series of proceedures and investigative techniques were used to acquire and analyze various kinds of data from and about site LAN-1021. These are, in operational order,



THOUSAND OAKS, CALIF.
NE/4 TRIUNFO PASS 15' QUADRANGLE
N3407.5—W11845/7.5
1950
AMS 2252 III NE-SERIES V895

MAP 1 - U.S.G.S. Topographic map showing the location of the subject property and archaeological site LAN-1021.

(1) archival research, (2) correspondence with local archaeologists and Native American Indians, (3) design and implementation of an on-site and off-site sampling program, (4) detailed analysis and mapping of all materials and sampled areas, (5) thorough evaluation and reporting of data.

Permission to conduct systematic tests at LAN-1021 was granted by Dr. Lawrence Barr, the owner of the site, Mr. Rene Folse, one of the purchasers of the subject property at the western edge of the site, and by representatives of two local Native American Indian organizations. Mr. Jamie Karl worked at the site during the setting of the datum plug, representing the Candelaria American Indian Council of Oxnard. Mr. Charles Cooke also inspected the site (see Photos #9 and #10), and gave advice during various aspects of the work. All persons involved in these investigations are listed in Appendix E.

The present study centers around a rectangular parcel totaling 1.6 acres (0.64 hectares), situated immediately south of, and perpendicular to, Agoura road, on the south side of the Ventura Freeway (MAP #1). The firm of Miller and Folse is purchasing the subject property, from Dr. Barr, in order to construct a low profile, "garden office complex" to accomodate their law offices. Many low profile buildings have recently been erected in the general area, however, none of them form integral parts of the natural chaparral or woodland environment around them. Few even incorporate

elements of the natural flora which often surrounds them.

A multitude of plants and animals in and about the Santa Monica Mountains once supported prosperous Indian communities. These towns, villages and other sites were all but abandoned by the middle of the last century, and many have now disappeared entirely. Most of the larger, lowland sites in the region have been heavily damaged or destroyed by construction during the past fifty years. In the Agoura area, most sites on the north side of the Ventura Freeway are gone, while many on the steeper south side remain somewhat intact.

Test Results

Evidence from the systematic tests, and analysis of data from LAN-1021 and elsewhere, indicates that this deposit is one of a series of prehistoric sites that once overlooked Lindero Canyon. Sampling and analysis also shows that no intact deposit exists on the subject property; the few artifacts found at the western edge of the site are not *in situ*. Six stone pieces were recovered from the entire subject property, west of the old paved road, whereas more than one hundred artifacts were collected from the surface of a small sampled area only fifty meters away, east of the road. The nearest *in situ* artifacts were observed about twenty to twenty-five meters east of the road.

Subsurface tests in the area of potential direct impact,

that is the western edge of the site, yielded no evidence of buried archaeological material of any kind.

Historical materials and features on the subject property include only modern trash and debris, the old paved road, and a cement and rock equestrian watering trough, all of which is less than forty years old, and of no particular significance. The nearby Reyes Adobe will not be affected by the proposed construction.

Architectural plans supplied by Mr. Folse show that three buildings are scheduled for construction, along with seventy parking spaces, driveways, and amenities. These features will cover approximately half the total area of the lot. Unfortunately, the plans provided do not appear to have considered preservation of the major trees or plants on the property (ie. five large oaks and portions of a dwarf chaparral forest). Minor alterations of the architectural plans, and careful construction techniques, can easily preserve these natural plants, thus preserving part of the balanced natural environment.

The test data and archaeological evidence show that the proposed construction project can be designed to minimize potential impacts to the intact portions of the archaeological site, LAN-1021. Since virtually all of the site is situated on an adjacent property, construction may have no direct impact on the resource, but precautions should be made to

avoid indirect adverse affects.

II - AGOURA PREHISTORY

Regional Culture History

Because the only cultural resources directly involved here are prehistoric sites, the following discussion will pay little or no attention to events or materials less than two hundred years old. The past two centuries are but the last few moments in a much longer story of human settlement and occupation in the Agoura area. Ventureño Chumash Indians occupied the region when the first European colonists arrived in 1769, and there is firm evidence now of earlier peoples as far back as perhaps 6000 B.C. The oldest site in the region, a recently discovered deposit still without a number, has been tentatively dated at 4000 to 6000 years old, and may fall within the earliest cultural period, the Millingstone Horizon (Wallace 1955). Most sites in the region are somewhat younger, falling into the Middle and Late Horizons of local prehistory.

Sites in the near vicinity include villages, seasonal camps, quarries and cemetaries dated to the Middle Horizon (3000 B.C. to 500 A.D.), and the Late Horizon (500 A.D. to 1800 A.D.).

Previous Research

Many prehistoric sites along the interior flanks of the Santa Monica Mountains are associated with natural resources vital to the existence of the prehistoric cultures which operated here. These resources include water, plants, animals, rocks, and minerals. Archaeological research in the area began nearly one hundred years ago, however, the first comprehensive analysis of a local culture sequence was attempted shortly after World War II.

Treganza and Bierman (1958) and Johnson (1966) defined the Topanga Culture, an archaeological culture centered in the Topanga Canyon drainage to the east. Much other work has been done along the coast (cf. Anderson 1978). Excavations conducted during the early 1960's provided data for a synthesis of the Malibu-Las Virgenes drainage by King, Blackburn and Chandonet (1968). In 1969 and 1970 other publications appeared which documented work done at the Late Horizon, Medea Creek Village Site in Agoura (L. King 1969, Singer and Gibson 1970).

Current research in the area includes numerous surveys and some testing of generally smaller camp sites and other localities. Recent work in the upper Medea Creek drainage area ("Oak Park") has contributed little to our basic understanding of local cultural development. The author is now attempting to develop a regional model which will help explain the distribution of sites in the foothill and mountain

regions. Data from LAN-1021 is being integrated into the model, as are other information and site data.

Recent Developments

Agoura is the name applied to a portion of the Malibu-Las Virgenes drainage, located on the north side of the Santa Monica Mountains, and encompassing Lindero Canyon Creek and a portion of Medea Creek. To the west is Russell Valley (now Westlake) which drains into Triunfo Canyon on the opposite side (south) of Ladyface Mountain. Until the early part of the 18th Century this region was the territory of the Ventureño Chumash and probably fell within the jurisdiction of the village at Medea Creek.

The Medea Creek Village (LAN-243) was probably founded around 1200 A.D. and was continuously occupied until shortly before 1800 A.D. An earlier village, LAN-41, has been identified downstream from LAN-243 but has not been tested or sampled.

Several hundred meters northwest of the subject property, on the opposite side of the Freeway, are three sites of interest: the Reyes Adobe, LAN-671, and LAN-776 (photos #14 through #16 and #38). The Reyes Adobe still exist, but the other localities were destroyed in September, 1979. Some work has been done at these latter sites by Chace and Associates, but no reports are published at this time. No information is available on the Reyes Adobe.

Sites LAN-671 and LAN-776 appear to have been Middle Horizon deposits, the former a moderate size campsite, and the latter a quarry workshop with three or four different types of stone materials. Part of LAN-671 may extend westward under the Reyes Adobe (Nancy Walter, personal communication).

III - ARCHAEOLOGICAL TESTS

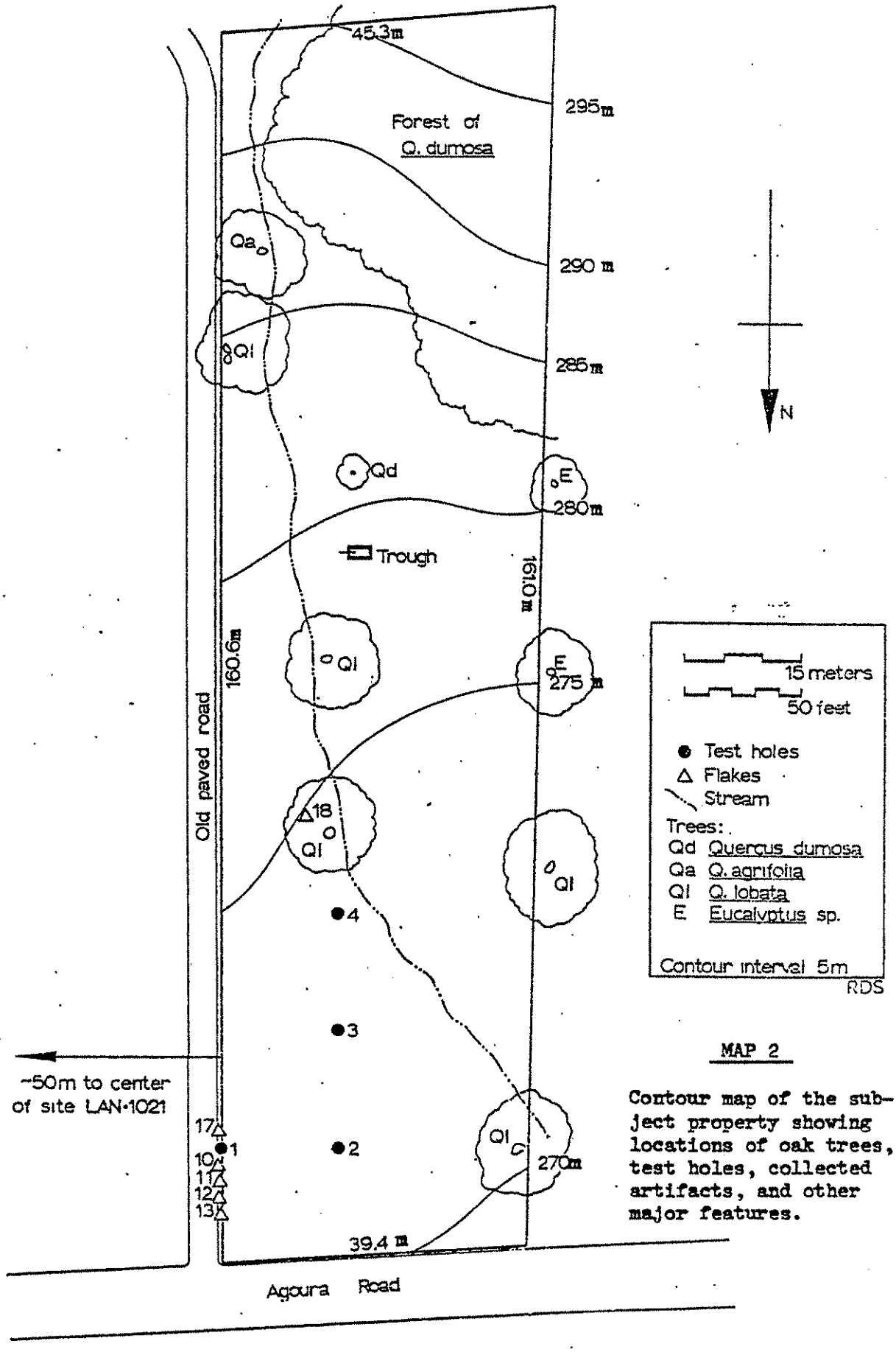
Purpose of the Tests

Systematic tests at LAN-1021 were designed to minimize damage to the site, and, at the same time, clearly delineate the nature and extent of the site deposits. Artifact samples were collected in several site areas in order to generate sufficient data to estimate the age and scope of the deposits, and for possible future display and education use. These data can and will be compared with other collections and information from the Agoura area, and incorporated into the corpus of archaeological knowledge on the Southern Chumash Indians.

The tests were also meant to determine what impact, if any, the proposed construction project might have on the site itself, and to mitigate any adverse impacts, if possible.

Surface and Subsurface Samples

Repeated examinations of the subject property resulted



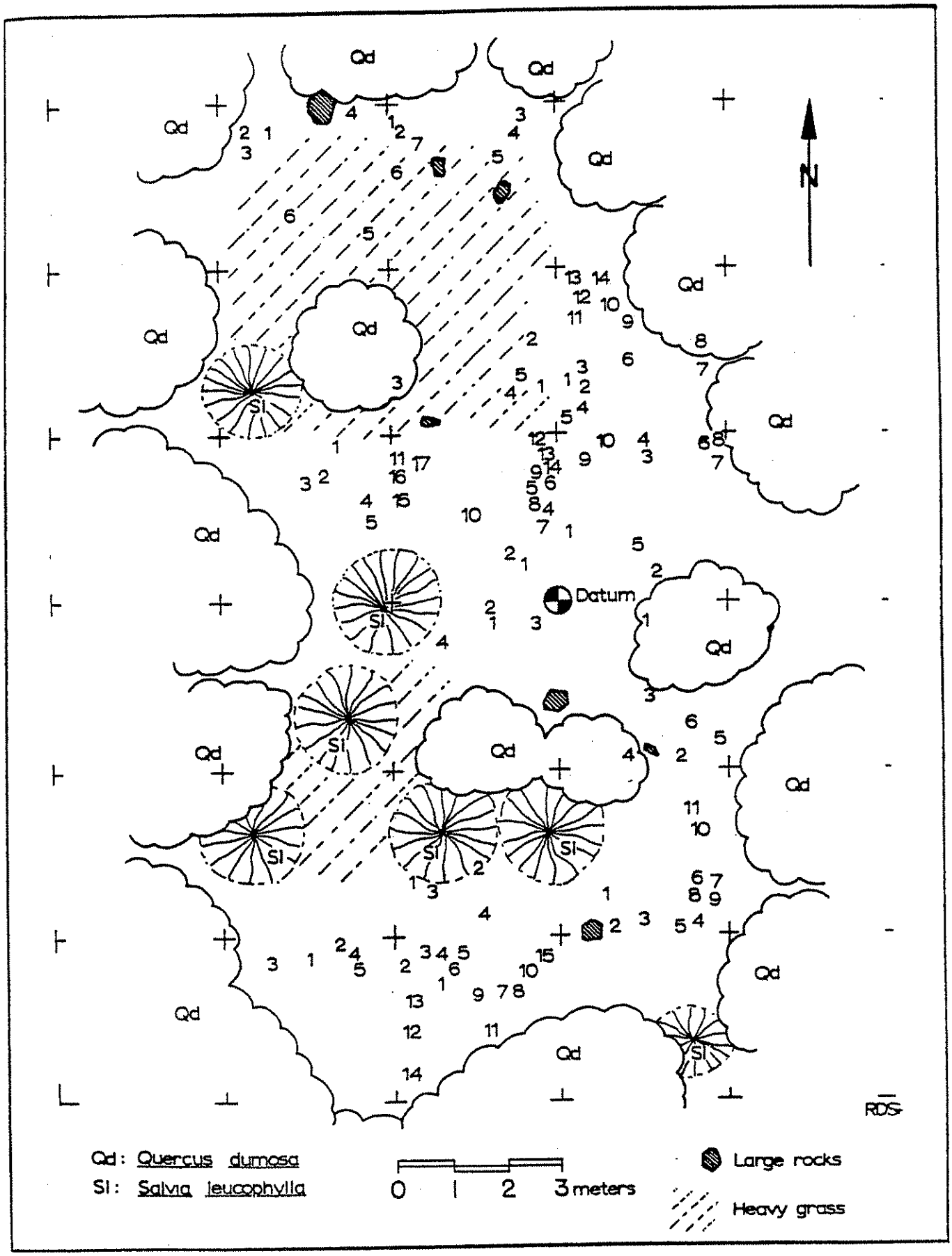
MAP 2

Contour map of the subject property showing locations of oak trees, test holes, collected artifacts, and other major features.

in the recovery of only six stone artifacts from the area west of the old paved road. This was in sharp contrast to the hundreds of pieces observed on the surface some fifty meters east of the subject property in the main site area. Both areas were thoroughly inspected on four seperate occasions between June and Spetember, 1979. Three surveyors, two local Indians, and fifteen college students examined all exposed surfaces, and participated in data collection and/or analysis (Appendix E).

Map 2 shows the distribution of the six pieces collected from the subject property. All six were found on the surface of the disturbed ground within a few meters of the old paved road. This map also shows the locations of the subsurface test holes, oak trees, and other features on the property. A complete set of color slides, showing various site areas and archaeological specimens, is included with this report (Appendix D).

A permanent site datum, consisting of a concrete plug set into a hole and having it's top level with the site surface, was placed near the center of LAN-1021 (photos #4 and #5). This zone had a high density of surface materials and was systematically collected and mapped. Map 3 shows the location of the datum plug and the thirteen collection areas (units) surrounding it. Each unit consisted of an area three meters by three meters with the axes oriented parallel to the cardinal compass points. Units were designated according



MAP 3 - Sketch map of sampled area near LAN-1021 datum. Numbers correspond to specimens in sample units (see Appendix B).

to the coordinates of their northwest corner (see Appendix B).

Something less than the entire one hundred and seventeen square meters in the sample area was actually collected, primarily because of the heavy grass cover, and the large bushes which surround the datum. Yet, more than one hundred specimens were collected here including stone tools and débitage, cooking stones, and bone fragments. In addition to those from the main site area, and the subject property west of the old paved road, artifacts were recovered from the cut bank on the south side of Agoura Road (photos #9 through #13), and along the foot path which runs across the southwest edge of the site (photo #8).

Subsurface sampling was limited to one test hole in the main site area (the datum hole), and four test holes on the subject property at the western edge of the site. Test holes were excavated with a post-hole digging tool and by hand with a pointing trowel. Except for the slightly larger datum hole, the test holes measured approximately twenty centimeters in diameter, and were unexcavatable beyond fifty centimeters depth because of large rocks or highly compacted soil (Appendix C). No archaeological material of any kind was recovered from the subsurface tests, including the datum hole.

Site Geology

The same rock materials exposed in the test holes, and on the surface of the subject property, are also visible in

the cut bank along Agoura Road, and on the eastern side of the old paved road next to the property at the western edge of the site. Large and small boulders and blocks of andesite and basaltic rocks are easily seen and collected (photo #9 through #11, and #23). A small pillow basalt flow was also noted in the small stream channel on the subject property, about ten meters north of the water trough.

Fine grained andesite rocks from this area were collected and used for tools in prehistoric times, as were various forms of basalts, chalcedony nodules and veins, colored chalcedonic cherts, and occasionally, contact metamorphics like cherty siltstone. These rocks are characteristic elements of the Conejo Volcanics Formation, which forms the mountains in this area (Blackerby 1965).

The soils on the subject property are thin, clayey, and full of rocks. They are also somewhat darker and thicker than those apparent in the main site area. But a slightly darkened cultural deposit (midden) is detectable in the main site area, particularly near the datum plug.

Vegetation

Oak trees are especially abundant on the northern side of Ladyface Mountain. The rocky volcanic soil supports a mixed chaparral and oak woodland - savannah community. Dominant species include three varieties of oaks -- Quercus agrifolia, Quercus dumosa, and Quercus lobata -- and purple

sage -- Salvia leucophylla. The main site area is covered with dense chaparral (with Q. dumosa and S. leucophylla and an unidentified native (?) grass), while the subject property has several large trees, a dwarf forest (mostly Q. dumosa), and large areas of introduced grasses and annual weeds.

The Artifacts

Only one hundred and twenty-nine archaeological specimens have thus far been collected at LAN-1021, and one hundred and eleven of these are from a small area near the site datum. The systematically sampled area around the datum is believed to be about five percent of the total area of the site. Therefore, the entire site deposit probably contains in excess of two thousand individual specimens (if we incorrectly assume that it has no subsurface component).

Table 1 summarizes the sample data collected from different parts of the site. The specimens are separated into categories by form and by material, and the figures clearly indicate the importance of local rock materials. Photos #6 through #8 show only the specimens collected from the northern, southern, and western parts of the site.

The two most striking aspects of the LAN-1021 artifact sample are (1) the total absence of grinding implements, and (2) the apparent lack of marine shell fragments. No seed processing equipment (manos or metates) or pulverizing tools (mortars or pestles) have been found, nor has a single piece

TABLE 1 - Archaeological specimens collected at LAN-1021.

TYPE OF SPECIMEN	MATERIALS: ANDESITE	QUARTZITE	CHALCEDONY	MONTEREY CHERT	CHERTY SILTSTONE	FUSED SHALE	CHALCEDONIC CHERT	CRANITE	LIMONITE	BONE	TOTALS
COBBLESTONES AND FRAGMENTS		6									6
HAMMERSTONES AND FRAGMENTS		2						1			3
FLAKE AND BLADE KNIVES	4	1									5
FLAKE AND BLADE SCRAPERS	11			1		1					13
GRAVER	1										1
PERFORATOR		1									1
CORE SCRAPERS	2										2
CORES AND FRAGMENTS	5		4	1							10
MISC. TOOL FRAGMENTS	2										2
UNMODIFIED FLAKES	58	6	5	4	1	4	2				80
BIFACE KNIVES AND POINTS				1	1						2
PIGMENT LUMP									1		1
MAMMAL BONE FRAGMENTS										3	3
TOTALS	83	16	9	7	2	5	2	1	1	3	129 PIECES

of shell or bead been retrieved. Interestingly, several tiny pieces of burned, large mammal bone have been found, and one may be a worked fragment. These pieces come from the sample units in the main site area. Also, one small, unmodified lump of yellow ocher pigment was found less than two meters north of the datum plug.

Andesite artifacts, tools and flakes, are the most prominent elements in this assemblage. Andesite pieces comprise sixty-four percent of all specimens recovered, and nearly seventy percent of all artifacts. Lesser quantities of quartzite and several other materials are represented. The quartzite, in the form of rounded cobblestones, and the other siliceous materials in Table 1, were undoubtedly carried to the site from distant sources.

Only one material (stone) listed in Table 1 does not occur in the general vicinity of LAN-1021. The so-called fused shale from Grimes Canyon occurs near the Santa Clara River, about thirty kilometers north of the Santa Monica Mountains and the site area. Chalcedony sources are fairly common, several being recorded, while cherty siltstone, chalcedonic chert, and Monterey Chert sources are relatively scarce on the northern flank of the mountains (only one known source for each). Quartzite and granite cobblestones can be found in the streambeds which drain the hills to the north, but the only materials which occur naturally on the site itself are andesites, basalts (no specimens recovered),

and possibly some chalcedony.

To this point, the site has yielded a fairly narrow range of artifacts and tool forms. Only one graver and one perforator have been found. The most frequent tools are scrapers of various types, and knives. Cores and hammerstones are present along with biface manufacturing débitage, and two fragmentary bifaces. These two pieces were both recovered from the surface near the southwestern edge of the site (photo #8). The larger piece is a percussion flaked basal fragment (convex) made of reddish cherty siltstone; an unfinished projectile point or small knife. The other biface is another basal fragment, again convex, but smaller than the first, and made of black Monterey chert; an unfinished projectile point. Both pieces appear to have broken during manufacture -- snapped along their midlines while being shaped or thinned.

Age of the Site

Several lines of evidence are used to date the site deposits, all of which involve comparisons with other deposits and materials of known ages. Relative dating techniques must be employed because no material was recovered which would readily yield an absolute date (eg. charcoal for radiocarbon analysis or obsidian for hydration analysis). As mentioned, beads and shells were not found, but the two biface forms are more or less temporally diagnostic. The smaller point generally appears in the archaeological record around 1000 A.D.;

the larger one can be older, especially because it's made from a material (cherty siltstone) extensively used during the Middle Horizon in this area. The lack of shell also argues for a date well before 1000 A.D. An occupation span of perhaps a millenium (circa 0 to 1000 A.D.) can be postulated based upon several factors: (1) the relatively light degree of patination and weathering on the stone artifacts, (2) the various kinds of débitage, (3) the relative proportions of certain materials, namely cherty siltstone and fused shale, and (4) the two different biface tool fragments.

Interpretation of Prehistoric Materials

Sites of this configuration are believed to have been hunting and harvesting camps occupied by family or clan groups during the spring and fall months (Singer 1978). Unlike villages and most later, lowland gathering or harvesting camps, they contain little or no marine shells, and a minimal amount of groundstone. Similar sites occur within the mountains (eg. LAN-956), and along the interior flanks of the Santa Monicas both east and west of LAN-1021 (LAN-976 and VEN-536/537, respectively).

From such sites men and adolescent boys ventured into the mountains and canyons to hunt and trap while women, girls, young children, and older people collected and gathered wild plants for food and raw materials. Accumulated goods may have been processed and temporarily stored, prior to being

transported back to the village.

Another possibility is that LAN-1021 may have been a temporary site of special significance of purpose. However, the present sample of material from the site is insufficient to verify such a hypothesis. The artifacts and other data collected so far indicate three different activities were carried out at the site: (1) wood and/or fiber working (various kinds of scrapers); (2) projectile point manufacture (unfinished, small bifaces and biface thinning débitage); (3) butchering of game animals (charred bone fragments and large flake knives). Seeds and nuts or acorns may have been gathered here, but only the slightest evidence exists for their processing (ie. one fragment of an angular hammerstone used to shape or roughen the surfaces of groundstone implements).

The Watering Trough

One item of minor historical interest, but questionable significance, is situated near the center of the sugject property -- a rectangular, cement and stone equestrian watering trough about twenty years old (photos #24 and #25). Constructed of split local rocks and cement mortar, the trough has walls thirty centimeters thick, and overall dimensions of 1.5 X 1.0 X 3.0 meters. Water was supplied by a one inch galvanized steel pipe which originates on the eastern side of the old paved road, at the foot of the graded terrace south of the main site area of LAN-1021.

No foundations or other structures exist on the property. Evidence of historic modification is limited to the introduced vegetation which covers the northern two-thirds of the lot. The field was obviously used to graze horses until recently. The stables are still situated on the aforementioned graded terrace south of LAN-1021.

IV - CONCLUSIONS AND RECOMMENDATIONS

Potential Impacts

Tests conducted at LAN-1021 revealed a number of important things about the site deposits. Most importantly, the tests demonstrated that no intact deposits, or significant artifacts or feature exist on the subject property, and that all undamaged parts of the site are located east of the area of proposed development.

The planned office complex may have little or no measurable, direct impact on the archaeological site. The mapping and sampling reported here has effectively mitigated the potential, direct impacts on the property in question. Further indirect adverse impacts can be avoided if all construction activity is restricted to the subject property, and Agoura Road. Construction traffic and parking should be kept away from the old paved road, and people should be discouraged from entering or crossing the archaeological site area.

Currently, the area is easily accessable and is traversed

by horses and pedestrians. Restricting access will reduce fire danger as well as minimize potential adverse impacts to the intact deposits. Sparse traffic on the existing paths, however, can easily be tolerated without too much damage to the site.

If the planned buildings provide an unobscured view of the site area, persons in the offices can watch the site and guard against vandalism - a definitely positive impact.

Building Design

The architectural drawing provided by Mr. Folse clearly shows that the three structures are situated well away from the archaeological site. Their construction should not affect the cultural resources, but as shown on the present plans, it may have an adverse impact on the natural vegetation. These plans, prepared by Ebbe Videriksen A.I.A., Sherman Oaks, dated 2-6-79, are not specific about the preservation of the five mature oaks on the property. The drawing shows seventeen large trees, only two seem to correspond with existing trees. Also, the smallest of the three structures, as shown, would severly damage the dwarf oak forest at the southern end of the property.

Minor alterations in the locations of some planned features, and the southernmost structure, can eliminate most of the potential damage to the local microenvironment. Some or all of the large oaks should be spared, and the impact to the

dwarf forest minimized. For example, unobtrusive pathways in the Japanese style can be constructed within the dwarf forest, or under the large oaks.

Summary

Archaeological site LAN-1021 is situated on the low ridge or terrace immediately east of the area of proposed construction. The site is thought to be a hunting and harvesting camp, between one thousand and two thousand years old. The proposed development should have no direct impact upon the site if proper precautions are exercised. However, without some minor design changes, the construction could severely impact the local chaparral and oak woodland environment. The construction of a low profile, garden office complex on the subject property could also have a positive impact on both cultural and natural resources in the Agoura area.

V - REFERENCE MATERIAL

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APPENDIX A

Copy of LAN-1021 Site Record Form.

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

SITE No. CA-LAN-1021

1. Previous Site Designation — 2. Temporary Field No. —
3. USGS Quad Thousand Oaks 7½' X 15' ____ Year 1967 revised
4. UTM Coordinates 336600mE 3779250mN
5. Twp. 1N Range 18W ; — ¼ of — ¼ of Sec. —
6. Location Atop small hill or ridge immediately south of Agoura Rd. and about 200m west of the main entrance to Hidden Trails Camp. Site is east of a secondary access road to the camp with small amounts of material on west side of secondary road; most materials observed on top of hill.
7. Contour 920-940' 8. Owner & Address —
9. Prehistoric X Ethnographic ____ Historic ____ 10. Site Description Concentrations of lithic artifacts and small middens observed within heavy chaparral atop hill overlooking Lindero Canyon.
11. Area 50 x 100 meters, 5000 square meters. 12. Depth of Midden 1m (estimated)
13. Site Vegetation Oaks & Chaparral Surrounding Vegetation same
14. Location & Proximity of Water Lindero Cyn. Creek is 100m north of site.
15. Site Soil Variable with dark midden Surrounding Soil Variable but dark and clayey
16. Previous Excavation Burials reportedly uncovered during const. of Hidden Trails Camp
17. Site Disturbance circa 1960. Extensive disturbance south and east of site area. Areas
18. Destruction Possibility north and west of site being developed now.
19. Features Very likely.
20. Burials Maybe.
21. Artifacts Cores and core tools of andesite and chalcedony, and flakes and flake tools of andesite, chalcedony, black chert, quartzite and fused shale. Andesites appear to dominate the assemblage with many large flakes (knives?). One small unfinished point (base fragment) of black chert recovered with small surface collection from disturbed area at southwest edge of site.
22. Faunal Remains Burned fragments of large mammal bone observed but no shell.
23. Comments Site yielded no groundstone but otherwise seems similar to VEN-536 and possibly to LAN-976.
24. Accession No. LAN-1021 25. Sketch Map yes by CAS where over
26. Date Recorded June 6, 1979 27. Re Recorded By Clay A. Singer
28. Photo Roll No. — Frame No. — Film Type(s) — Taken By —

% Destroyed 55 How bulldozing Test Excavated no %, if known.

National Register Status: Listed ____ Potential ____ No Determination X Nominated ____ Ineligible ____

State Historical Landmark (No.) ____ Point of Historical Interest ____

SPECIAL ATTRIBUTES (Place an X in only those spaces which pertain to the site)

Midden/Habitation Debris X Lithic and/or Ceramic Scatter X

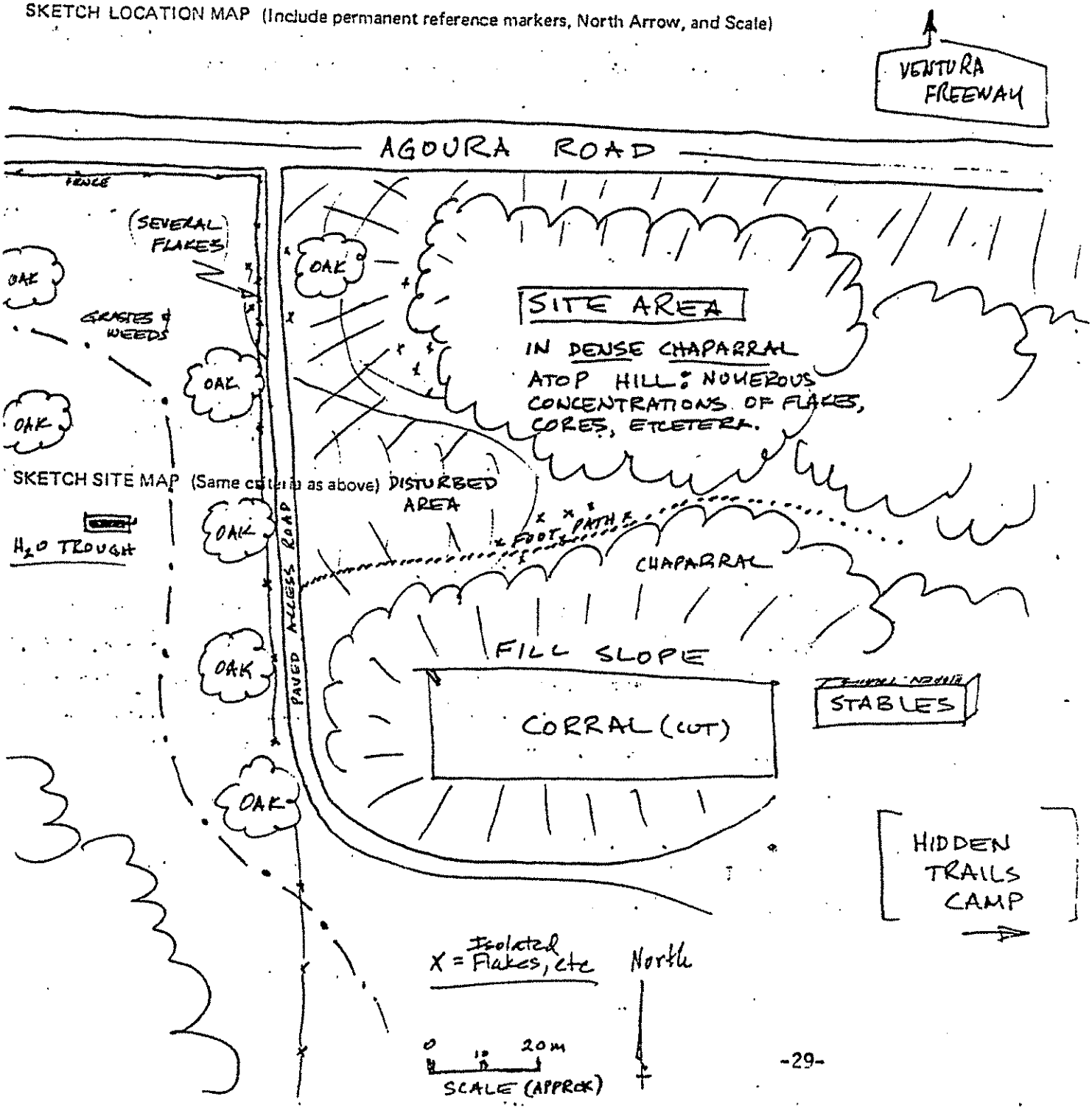
Bedrock Mortars/Milling Surfaces ____ Petroglyphs/Pictographs ____ Stone Features X

Burials ? Caches ____ Hearths/Roasting Pits ____ Housepits ____ Structure Remains ____

Underwater ____ Open Air X Rockshelter ____ Cave ____ Quarry ____ Trails ____

REMARKS ____

SKETCH LOCATION MAP (Include permanent reference markers, North Arrow, and Scale)



APPENDIX B

Copy of LAN-1021 Artifact Catalogue.

ARCHAEOLOGICAL FIELD CATALOG

Accession No: LAN1021- Collector: Clay A. Singer Page No. 1

Site: CA-LAN-1021 Date: June 6, 1979 Date Cataloged: 7v179

n No.	Field No.	Provenience	Depth	Material	Object	No. Pieces	Remarks, Assoc.
	1	Surface of foot path SW edge of site.	-	Black Chert	Base of unfinished projectile point	1	small convex base
	2	- / -	-	Chalcedony	Core fragment	1	cortex with iron stains
	3	- / -	-	Chalcedony	Core (burned/crazed)	1	two types of cortex
	4	- / -	-	Chalcedony	Core (milky white)	1	no cortex
	5	- / -	-	Chalcedony	Microblade core (zoned white to clear)	1	fresh iron sta no cortex
	6	- / -	-	Andesite	Core (glassy, basaltic)	1	some cortex
	7	- / -	-	Andesite	Flake graver	1	corner struck flake
	8	- / -	-	Andesite	Flake (2nd decort.)	1	no platform
	9	- / -	-	Andesite	Flake fragment-proximal end of patinated bladelike piece.		(new break)
	10	Surface west of road on west edge of site	-	Andesite	Large flake knife?	1	edge bifacial worked
	11	- / -	-	Andesite	Large flake knife?	1	edge essential ly unifacial
	12	- / -	-	Andesite	Chunky flake (natural?)	1	much cortex
	13	- / -	-	Quartzite	Flake (battered, worn, natural?)	1	edges smooth

Site: CA-LAN-1021 Collector: Clay A. Singer Date: October 1979 Date Cataloged:

...m No.	Field No.	Provenience	Depth	Material	Object	No. Pieces	Remarks, Assoc.
...-1021	14	Surface of path south edge of site	-	Cherty Siltstone	Biface preform.	1	basal frag. (red)
	15	Cut bank along Agoura Road - 30cm below surf.	-	Andesite	Flake knife	1	62m east of west edge of site
	16	-/-	-	Andesite	Irregular flake	1	58m east of west edge of site
	17	Surface of road on west edge of site	-	Cherty Siltstone	Irregular flake	1	shows recent damage
	18	Surface of disturbed area - west edge of site.		Andesite	Secondary decort. flake	1	60m south of Agoura Rd.
		SURFACE SAMPLE NEAR SITE DATUM.					NUMBERS ON SKETCH MAP
	19	N9/W6 Surface	-	Chalcedony	Blade-like flake	1	#1
	20	-/-	-	Andesite	Flake	1	#2
	21	-/-	-	-/-	Small retouch flake	1	#3
	22	-/-	-	Quartzite	Angular hammer frag.	1	#4
	23	-/-	-	-/-	Flake knife	1	#5
	24	-/-	-	White Chert	Small flake	1	#6
	25	N9/W3 Surface	-	Andesite	Notched scraper on large flake	1	#1
	26	-/-	-	-/-	Large flake knife ?	1	#2
	27	-/-	-	-/-	Flake	1	#3
	28	-/-	-	Quartzite	Flake	1	#4
	29	-/-	-	Andesite	Flake	1	#5
	30	-/-	-	-/-	Flake	1	#6
	31	-/-	-	Quartzite	Spall - burned frag. from cobble.	1	#7
	32	N6/W3 Surface	-	Andesite	Flake	1	#1
	33	-/-	-	Quartzite	Cobble fragment	1	#2
	34	-/-	-	Andesite	Tool fragment-transverse resharpening flake from scraper	1	#3
	35	-/-	-	Chalcedony	Flake - burned and crazed	1	#4
	36	-/-	-	Quartzite	1st decortication flake - burned	1	#5
	37	N6/W0 Surface	-	Chacedonic chert	Spall or flake ?	1	#1
	38	-/-	-	Andesite	Flake	1	#2

:cession No: LAN-1021

te: LAN-1021

Collector: C.A. Singer
Date: October 1979

Date Cataloged: Oct.'79

No.	Field No.	Provenience	Depth	Material	Object	No. Pieces	Remarks, Assoc.
.021	39	N6/W0 Surface	-	Andesite	Flake	1	#3
	40	-/-	-	-/-	Flake	1	#4
	41	-/-	-	Fused Shale	Flake	1	#5
	42	-/-	-	Black Chert	Small retouch flake	1	#6
	43	-/-	-	Quartzite	Flake	1	#7
	44	-/-	-	Limonite	Small unworked lump	1	#8
	45	-/-	-	Andesite	Core	1	#9
	46	-/-	-	Bone	Fragment of mammal longbone	1	#10
	47	-/-	-	Andesite	Flake	1	#11
	48	-/-	-	-/-	Flake with burin-like tip	1	#12
	49	-/-	-	Fused Shale	Small retouch flake	1	#13
	50	-/-	-	Andesite	Scraper fragment - similar to #34	1	#14
	51	N3/W6 Surface	-	Quartzite	2nd decortication flake	1	#1
	52	-/-	-	Chalcedonic Chert	Flake	1	#2
	53	-/-	-	Black Chert	Small retouch flake	1	#3
	54	-/-	-	Andesite	Small retouch flake	1	#4
	55	-/-	-	Fused Shale	Small retouch flake	1	#5
	56	-/-	-	Bone	Tiny fragment - burned and possibly worked	1	#6
	57	N3/W3 Surface	-	Chalcedony	Spall or flake	1	#1
	58	-/-	-	Andesite	Flake	1	#2
	59	-/-	-	-/-	Tiny flake	1	#3
	60	-/-	-	Gray Chert	Utilized flake scraper	1	#4
	61	-/-	-	Andesite	Flake	1	#5
	62	-/-	-	-/-	Small flake	1	#6
	63	-/-	-	-/-	Flake	1	#7
	64	-/-	-	Mottled Chert	Flake	1	#8
	65	-/-	-	Andesite	Flake	1	#9

Accession No: LAN-1021

ARCHAEOLOGICAL FIELD CATALOG

Page No. 4

Site: LAN-1021

Collector: C.A. Singer
Date: October 1979

Date Cataloged: Oct.'79

m No.	Field No.	Provenience	Depth	Material	Object	No. Pieces	Remarks, Assoc.
-1021	66	N3/W3 Surface	-	Andesite	Flake	1	#10
	67	-/-	-	Quartzite	2nd decortication flake	1	#11
	68	-/-	-	Andesite	Core	1	#12
	69	-/-	-	-/-	Flake	1	#13
	70	-/-	-	-/-	Flake	1	#14
	71	-/-	-	-/-	Flake	1	#15
	72	-/-	-	-/-	Flake	1	#16
	73	-/-	-	-/-	Flake	1	#17
	74	N3/W0 Surface	-	Quartzite	Large spall - burned	1	#1
	75	-/-	-	Granite ?	Hammerstone?--burned cobble,abraded?end	1	#2
	76	-/-	-	Andesite	Side scraper on blade like flake-inverse retouch	1	#3
	77	-/-	-	-/-	Flake	1	#4
	78	-/-	-	-/-	Tiny flake	1	#5
	79	-/-	-	-/-	Flake	1	#6
	80	-/-	-	Fused Shale	Small retouch flake	1	#7
	81	-/-	-	Andesite	Side scraper on blade with inverse retouch	1	#8
	82	-/-	-	-/-	Flake	1	#9
	83	-/-	-	Quartzite	Cobble fragment	1	#10
	84	-/-	-	-/-	Perforator or burin on end of flake	1	#11
	85	N0/W3 Surface	-	Andesite	Core fragment	1	#1
	86	-/-	-	-/-	Blade knife	1	#2
	87	-/-	-	-/-	Flake	1	#3
	88	-/-	-	-/-	Flake	1	#4
	89	N0/W0 Surface	-	Quartzite	Cobble hammerstone	1	#1
	90	-/-	-	Chalcedony	Flake	1	#2
	91	-/-	-	Andesite	Flake	1	#3
	92	-/-	-	Bone	Small burned fragment	1	#4

Accession No: LAN-1021 ARCHAEOLOGICAL FIELD CATALOG Page No. 5

Site: LAN-1021 Collector: C.A. Singer Date Cataloged: Oct. '79

Date: October 1979

n No.	Field No.	Provenience	Depth	Material	Object	No. Pieces	Remarks, Assoc.
-1021	93	NO/WO Surface	-	Andesite	Flake	1	#5
	94	-/-	-	-/-	Flake	1	#6
	95	S3/W3 Surface	-	Andesite	Utilized flake scraper	1	#1
	96	-/-	-	-/-	Core	1	#2
	97	-/-	-	-/-	Utilized flake scraper	1	#3
	98	-/-	-	-/-	Flake	1	#4
	99	S3/WO Surface	-	Andesite	Core scraper-notched	1	#1
	100	-/-	-	Quartzite	Spall or flake	1	#2
	101	-/-	-	Andesite	Flake	1	#3
	102	-/-	-	Chalcedony	Large flake with matrix	1	#4
	103	-/-	-	Andesite	Flake	1	#5
	104	-/-	-	-/-	Small retouch flake	1	#6
	105	-/-	-	-/-	Flake	1	#7
	106	-/-	-	-/-	Flake	1	#8
	107	-/-	-	-/-	Flake knife and scraper Multifunction tool	1	#9
	108	-/-	-	-/-	Utilized flake scraper	1	#10
	109	-/-	-	-/-	Nosed flake scraper	1	#11
	110	S6/W6 Surface	-	Andesite	Blade-like side scraper	1	#1
	111	-/-	-	-/-	Flake	1	#2
	112	-/-	-	-/-	Flake	1	#3
	113	-/-	-	-/-	Flake	1	#4
	114	-/-	-	-/-	Flake	1	#5
	115	S6/W3 Surface	-	Andesite	Flake	1	#1
	116	-/-	-	-/-	Utilized flake scraper	1	#2
	117	-/-	-	-/-	Flake	1	#3
	118	-/-	-	-/-	Flake	1	#4
	119	-/-	-	-/-	Flake	1	#5

Accession No: LAN-1021 ARCHAEOLOGICAL FIELD CATALOG

Page No. 6

Site: LAN-1021

Collector: C.A.Singer

Date: October 1979

Date Cataloged: Oct. '79

m No.	Field No.	Provenience	Depth	Material	Object	No. Pieces	Remarks, Assoc.
-1021	120	S6/W3 Surface	-	Andesite	Flake	1	#6
	121	-/-	-	-/-	Utilized flake scraper	1	#7
	122	-/-	-	-/-	Core scraper	1	#8
	123	-/-	-	-/-	Flake	1	#9
	124	-/-	-	Black Chert	Core fragment	1	#10
	125	-/-	-	Quartzite	Burned cobble fragment	1	#11
	126	-/-	-	Andesite	Flake	1	#12
	127	-/-	-	-/-	Flake	1	#13
	128	-/-	-	-/-	Flake	1	#14
	129	-/-	-	Fused Shale	Utilized flake scraper	1	#15

APPENDIX C

Log of Test Holes at LAN-1021.

LOG OF TEST HOLES - Western edge of site LAN-1021 (September 30, 1979). Locations shown on Map 2.

TEST HOLE NUMBER	DEPTH BELOW SURFACE	DESCRIPTION OF EXCAVATED MATERIAL
POZO #1	0-15 cm	Loose, friable, dark brown adobe soil with concrete fragmennt and small, round, granite pebbles. Very dry.
	15-45 cm	Compact, moist, dark brown adobe soil with small andesite and basalt pebbles.
	45 cm	Large andesite rock.
POZO #2	0-20 cm	Loose, friable, dark brown adobe soil. No rocks. Very dry and cracked like #1.
	20-35 cm	Compact, moist, dark brown adobe soil.
	35-40 cm	Same but stickier (more clay and water), and a few small pebbles of basalt and andesite.
	45 cm	Very compact.
POZO #3	0-20 cm	Loose, friable, dark brown adobe soil. Very dry and cracked like others.
	20-45 cm	Increasingly compact, moist, dark brown adobe soil. No rocks.
POZO #4	0-20 cm	Same as above. No rocks.
	20-45 cm	Same as above - increased moisture and compaction. Extremely dense and sticky at 45 cm.
DATUM HOLE (NO/WO)	0-10cm	Loose, friable, fine silty to clayey soil with no rocks. Light tan in color.
	10-40cm	Rocks! Many mediun size, subangular pieces of andesitic and basaltic rocks. All have weathered exterior surfaces; no signs of burning or other modification. Soil is sparse and more reddish.

APPENDIX D

Catalogue of Color Slides of LAN-1021.

COLOR PHOTOGRAPHS (35mm slides) OF SITE LAN-1021 - C.A. Singer 9/79

1. No photo.
2. No photo.
3. No photo.
4. Concrete datum plug placed near the center of site; view looking southwest into heavy chaparral on top of site (Salvia leucophylla, and Quercus dumosa in background).
5. Same as #4 but looking southward at a small forest of Quercus dumosa (scrub oaks), and the recently burned-over slopes on the north face of Ladyface Mountain.
6. Stone artifacts recovered from the western edge of the site (pieces numbered 10 through 13, 17, and 18). These pieces were all found on the surface, in disturbed areas west of the paved access road.
7. Same as #6 reverse view of artifacts.
8. Stone artifacts from the northern and southern margins of the site. Numbers 15 and 16 are from the cut bank along the south side of Agoura Road, all others are from the surface of the footpath in the disturbed southwestern portion of the site.
9. Charles Cooke examining the cut bank along the south side of Agoura Road. Photographic scale marks the location of artifact number 17 in situ, approximately 50cm below surface.
10. Same as #9.
11. Andesite flake knife (artifact number 17) in situ below surface in cut bank.
12. Flake knife number 17 removed from cut bank - ventral face.
13. Same as #12, but reverse view - dorsal face.
14. Western edge of site with Agoura Road in the middle background; view looking northwest toward Reyes Adobe and site LAN-671.
15. Same as #14.
16. Another view of the western edge of the site; looking northwestward toward LAN-671 (oaks in far background), and LAN-776 (hill with dirt road in background, upper right corner). Ventura Freeway (U.S. 101) occupies the middle area of the photo.
17. Another view similar to #14.
18. View of the slopes of Ladyface Mountain and the forest of Quercus dumosa; looking southwest from the northwestern corner of the site.
19. The northwestern part of the site where the artifacts in #6 were found. View looking northwest at the disturbed, grassy areas, and the paved access road.
20. Same as #19.
21. View looking northward at the western part of the site. The main site areas are above the truck to the east (right). Note the disturbed ground in the left foreground.
22. Same as #21. Note the disturbed grassy area and the chaparral on the hillside, also the Ventura Freeway in the background.
23. A naturally exfoliating small andesite boulder near the concrete and stone water trough.

24. Concrete and local stone watering trough for horses located near the southwest corner of the site; view looking northward.
25. Same as #24; view looking westward.
26. View looking northeastward at the western edge of the site with the Ventura Freeway in the middle distance. The Ventureño village called "Agua Amarga" was located about one kilometer to the right of the hill in the background, along Medea Creek.
27. Looking northeastward directly toward the Medea Creek village site (LAN-243).
28. Looking northeast at the hill - the main part of the site.
29. Same as #28. The site datum is midway between the two vehicles atop the hill.
30. View of the disturbed western edge of the site; looking southward from the northwesternmost part of the site near Agoura Road.
31. The main site area viewed from the spot where artifact number 18 was recovered (andesite flake under live oak in disturbed soil).
32. Paved access road through the western edge of site; same view as #16.
33. Looking north at the paved access road and the disturbed soil where artifacts number 10 through 13, and 17 were found.
34. Another view of the access road, same as #33.
35. Stone artifacts on the surface near the site datum; pieces number 7, 8, and 11 from sample area S6/W3 (not catalogue numbers).
36. Looking northwestward at LAN-776 (hill in middle background) from the main part of the site, about two meters southeast of the site datum. The oaks in the left background mark the location of LAN-671, immediately east of the Reyes Adobe. Note the disturbed grassy area, the Salvia leucophylla (gray bush), and the Quercus dumosa (green bushes) surrounding the datum.
37. The northwestern part of the site as seen from the edge of the hill-top about 15 meters west of the site datum. The artifacts numbered 10 through 13, and 17 were found on the surface behind the jeep.
38. Same as #37. Note the corollas on the Salvia leucophylla in the foregroung.

APPENDIX E

List of Project Personel and Consultants.

PROJECT PERSONEL - LAN-1021 TEST

Project Director and Principal Investigator

Clay A. Singer - Archaeologist, Santa Monica

Field and Laboratory Personel

Ross D. Sackett - Cartographer and Surveyor
Ruthbeth Finerman - Surveyor and Typist
Members of the Fall 1979 Archaeological Field Training Class (Anthropology 476 AC) from California State University, Northridge, C.A. Singer, instructor.

Consulting Archaeologists

Nancy P. Walter - District VII Archaeologist, Society for California Archaeology.
Paul V. Aiello - Archaeologist and Professor of Anthropology, Ventura College.
Chester D. King - Archaeologist, Topanga Canyon.
Charles Rozaire - Archaeologist and Curator of Archaeology, Los Angeles County Museum of Natural History.
Alex N. Kirkish - Archaeologist(former Ventura County Archaeologist), El Centro.

Native American Consultants

Charles Cooke - Chairman, Southern Chumash Tribal Council, Newbury Park.
Jamie Karl - Archaeological Monitor, Candelaria American Indian Council, Oxnard.

Appendix F

Geotechnical Reports

Date: March 28, 2008
GDI #: 07.00103.0161

CITY OF AGOURA HILLS - GEOTECHNICAL REVIEW SHEET

To:	Valerie Darbouze
Project Location:	29760 Agoura Road, Agoura Hills, California.
Planning Case #:	07-CUP-009/07-OTP-012/07-SPA-001
Building & Safety #:	None
Geotechnical Report:	Gorian and Associates, Inc. (2008b), "Response to City [redacted] Review Letter Dated February 29, 2008 Regarding Proposed Gupta Corporate Offices, 29760 Agoura Road, City of Agoura Hills, California," Work Order No. 1687-1-0-202, dated March 14, 2008.
References:	Gorian and Associates, Inc. (2008a), "Geotechnical Site Feasibility Evaluation, Proposed Gupta Corporate Offices, 29760 Agoura Road, City of Agoura Hills, California," Work Order No. 1687-1-0-201, dated February 19, 2008.
Previous Reviews:	November 30, 2007; February 29, 2008

FINDINGS

Planning/Feasibility Issues

☒ Acceptable (with conditions)

☐ Response Required

Geotechnical Report

☐ Acceptable as Presented

☒ Response Required

REMARKS

Gorian Associates, Inc. (GAI, consultant) provided a response to the geotechnical review letter by the City of Agoura Hills dated February 29, 2008 regarding the proposed development at the site located at 29760 Agoura Road, City of Agoura Hills, California. The proposed development includes the construction of a two-story office building over one level of subterranean parking.

The City of Agoura Hills – Planning Department reviewed the current submittal and the referenced reports and review letters from a geotechnical perspective for compliance with applicable codes, guidelines, and standards of practice. GeoDynamics, Inc. (GDI) performed the geotechnical review on behalf of the City. Based upon our review, the consultant has provided sufficient information to demonstrate the feasibility of the project. Additional investigation/analysis will be necessary to support specific grading recommendations and to comply with conditions of approval outlined in previous review letters issued by Slosson and Associates (November 20, 1989) and Bing Yen and Associates (November 7, 1989). These previous conditions of approval are reiterated below. This work should be provided prior to approval of specific development plans and in conjunction with responses to the Report Review Comments prior to Building Plan-Check Approval. Plan-Check comments should be addressed in Building & Safety Plan Check. A separate geotechnical submittal is not required for Plan-Check comments.

Conditions of Approval

- Additional investigation/analysis should be performed to obtain geotechnical data to further characterize existing geotechnical at the site, and address proposed grading including the suitability of the existing fill and underlying alluvium for structural support.
- The will conditions of approval outlined in previous review letters issued by Slosson and Associates (November 20, 1989) and Bing Yen and Associates (November 7, 1989) should be complied with.

- A mud/debris flow mitigation system should be designed by the project civil engineer with input from the geotechnical consultant. The design and any accompanying calculations and comments should be forwarded to the City for review.
- The consultant should re-evaluate or confirm settlement estimations in accordance with current standards of practice, based on the final footing loads and locations.

Report Review Comments

1. The consultant should provide a geotechnical review of current development plans. The geotechnical review report should provide geotechnical recommendations to address all aspects of the proposed development consistent with current applicable codes, guidelines, and standards of practice based on adequate subsurface exploration and testing. The report should utilize the grading plan as a base map for an updated geotechnical map and provide cross sections through critical areas such as slopes and the subterranean level.
2. The consultant indicates that a subdrain was installed below the fill and identifies a general alignment. Earlier reports (GAI, 1987) indicate that the subdrain was scheduled to be attached to a storm drain. The consultant should verify that the storm drain connection was completed and that the subdrain is clear and functioning as intended. The consultant should provide recommendations for areas where this subdrain may be intercepted by excavations planned for the subterranean garage.
3. The consultant should provide recommendations to accommodate any potential for differential ground movement expansion/settlement where subterranean parking may transition from a subgrade of compacted fill to a subgrade of bedrock.
4. The consultant should discuss the potential for daylighted joint surfaces and daylighted wedges defined by intersecting joint surfaces, and potential implications for temporary excavations and lateral surcharges on retaining walls.
5. The consultant should verify earlier settlement estimates based on additional borings and laboratory testing.
6. The consultant references a review of mudflow potential prepared in December of 1988. No copy of this assessment was provided for review, and no copy of that report is available in files retained from Bing Yen and Associates, the geotechnical reviewer for the City of Agoura Hills at the time those reports were approved. The approval letters issued in November of 1989 indicate that some potential for mudflow was identified, and continued to require mudflow mitigation as a condition of approval. The consultant should submit an assessment of the potential for mudflow hazard at the site. In particular, there is an existing fill slope located offsite southeast of the property. This slope is deeply eroded, with arcuate cracks extending some distance behind the crest. The mudflow assessment should include an evaluation of potential impacts on the subject property in the event saturated materials in this slope were to fail. Mitigation measures should be provided as necessary.
7. The previous reviewer appears to have raised issues of over-sized material in the existing compacted fill, and that the oversized material was not documented in the Rough Grading Compaction Report dated March 28, 1987. The consultant should provide a detailed discussion of material types encountered during the proposed future subsurface exploration and indicate whether "oversized" materials are anticipated during future excavations in the compacted fill. Mitigation measures should be provided as necessary.

Plan-Check Comments

1. The name, address, and phone number of the Consultant and a list of all the applicable geotechnical reports shall be included on the building/grading plans.
2. The grading plan should include the limits and depths of overexcavation of the building pad and flatwork areas as recommended by the Consultant.

3. The following note must appear on the grading and foundation plans: "*Tests shall be performed prior to pouring footings and slabs to determine the expansion index of the supporting soils, and foundation and slab plans should be reviewed by the Geotechnical Consultant and revised, if necessary, accordingly.*"
4. The following note must appear on the grading and foundation plans: "*Excavations shall be made in compliance with CAL/OSHA Regulations.*"
5. The following note must appear on the foundation plans: "*All foundation excavations must be observed and approved, in writing, by the Project Geotechnical Consultant prior to placement of reinforcing steel.*"
6. Foundation plans and foundation details shall clearly depict the embedment material and minimum depth of embedment for the foundations.
7. Drainage plans depicting all surface and subsurface non-erosive drainage devices, flow lines, and catch basins shall be included on the building plans.
8. Final grading, drainage, and foundation plans shall be reviewed, signed, and wet stamped by the consultant.
9. Provide a note on the grading and foundation plans that states: "*An as-built report shall be submitted to the City for review. This report prepared by the Geotechnical Consultant must include the results of all compaction tests as well as a map depicting the limits of fill, locations of all density tests, outline and elevations of all removal bottoms, keyway locations and bottom elevations, locations of all subdrains and flow line elevations, and location and elevation of all retaining wall backdrains and outlets. Geologic conditions exposed during grading must be depicted on an as-built geologic map.*"

If you have any questions regarding this review letter, please contact GDI at (805) 496-1222.

Respectfully Submitted,

GeoDynamics, INC.

Ali Abdel-Haq
Geotechnical Engineering Reviewer
GE 2308 (exp. 12/31/09)

Christopher J. Sexton
Engineering Geologic Reviewer
CEG 1441 (exp. 11/30/08)

REFERENCES

Bing Yen and Associates (1988), "Geotechnical Engineering Review of Ladyface Mountain Office Center (OCHS Construction Project), Agoura Road, Agoura Hills, California", BCY No.: 53-223A, dated December 22, 1988.

Buena Engineers, Inc. (1980), "Seismic Profiling, Agoura Gardens, Agoura Road, Los Angeles County, California", Job No. B-10829-T1, Dated April 2, 1980.

Gorian and Associates, Inc., (1987), "Rough Grading Compaction Test Report fo Off-Site Fill Adjacent to Northeast Corner of tract 40477, City of Agoura Hills, California", Work Order No.: 1069-1-21; Log No.: 11447; dated March 28, 1987.

Gorian and Associates, Inc., (1990), "Response to City of Agoura hills Review Letters of November 7 and 20, 1989 Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California", Work Order No.: 1687-1-13; Log No.: 14033; dated January 25, 1990.

Gorian and Associates, Inc., (2007), "Proposal, Geotechnical Site Update Evaluation, Proposed Office Building, East of 29800 Agoura Road, Agoura Hills, California", Proposal No.: 4833-10; dated August 10, 2007.

Slosson and Associates (1988), "Review of Response to Review Letter Regarding Ladyface Mountain Office Center, Agoura Road, Agoura hills, California" S&A No.: 881004, dated December 28, 1988.

GORIAN & ASSOCIATES, INC.

Applied Earth Sciences
Geotechnical
Engineers
and Geologists

3595 Old Conejo Road
Thousand Oaks
California 91320-2122
805 375-9262
818 889-2137
805 375-9263 fax

MAR 17 2008

March 14, 2008

Dr. Vinod K. Gupta
31225 La Baya Drive
Westlake Village, CA 91362

Work Order: 1687-1-0-202

Subject: **Response to City of [redacted] Review Letter Dated February 29, 2008 Regarding Proposed Gupta Corporate Offices, 29760 Agoura Road, City of Agoura Hills, California.**

INTRODUCTION

Our responses are provided herein to the city of Agoura Hills (GeoDynamics, Inc.) review dated February 29, 2008 of our response report of February 19, 2008 for the proposed Gupta Corporate Offices at 29760 Agoura Road in Agoura Hills. Only responses are provided to the Planning/Feasibility Comments. Responses to the Report Review comments will be provided at the appropriate phase of design as discussed with the reviewer. A copy of the February 29, 2008 review letter is attached for reference.

COMMENT 1

Suitability of the existing fill for future structural support, the potential for differential movement due to variable subgrade materials and fill thickness, the expansion potential for on-site materials, and the stability of natural and manufactured slopes.

RESPONSE

The stability of the slopes was previously addressed in our referenced report of December 8, 1988, which was recently provided to the reviewer. The slopes are considered stable with respect to the proposed development which is relatively similar to that reviewed for our report of December 8, 1988.

In our referenced report of July 19, 1988, it was recommended from a preliminary standpoint the soils be considered to be in the medium (51-90) to highly (91-130) expansive categories. The final expansion should be determined after the rough grading is competed for the pad.

Remedial grading will be necessary to prepare the pad for support of the building. In addition, at the appropriate phase of design additional borings will be excavated to aid evaluation of the fill, differential settlement, and structural support. The fill if necessary can be removed and reconstructed based on the results of the addition exploration and evaluation.

COMMENT 2

The consultant should also provide orthogonal cross sections thought the subterranean level and adjacent slopes. The sections should depict the contact between various units, existing and proposed grades and groundwater conditions.

RESPONSE

The cross sections and map from our referenced report of December 8, 1988 are attached for reference. The currently proposed development is relatively similar to that reviewed for our report of December 8, 1988.

Please contact us if you have questions regarding the information and recommendations contained in this report, or require additional consultation.

Respectfully,
Gorian and Associates, Inc.

By: Jerome J. Blunck, GE 151
Principal Geotechnical Engineer

Attachments: References
Cross Sections A and B from Gorian December 8, 1988.
Geotechnical Map from Gorian December 8, 1988

Distribution: Addressee (2)
Neal Scribner Architecture (1)
City of Agoura Hills (4)
Attention: Valerie Darbouze, Associate Planner

REFERENCES

Gorian and Associates, Inc., March 28, 1987, *Rough Grading Compaction Test Report for Off-Site Fill Adjacent to Northeast Corner of Tract 40477, City of Agoura Hills, California.* Work Order: 1069-1-21, Log Number: 11447.

Gorian and Associates, Inc., July 19, 1988, *Geotechnical Investigation Update, Proposed Ladyface Mountain Office Center, Agoura Hills, California.* Work Order: 1687-1-10, Log Number: 12573.

Gorian and Associates, Inc., December 8, 1988, *Response to City of Agoura Hills Review Letters, Geotechnical dated September 1, 1988 and Geologic dated September 13, 1988, Regarding Ladyface*

Mountain Office Center, Agoura Road, Agoura Hills, California. Work Order: 1687-1-11, Log Number: 12920.

Gorian and Associates, Inc., October 18, 1989, *Response to City of Agoura Hills Review Letters, Geotechnical dated December 22, 1988 and Geologic dated December 28, 1988, Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California*. Work Order: 1687-1-12, Log Number: 13759.

Gorian and Associates, Inc., January 25, 1990, *Response to City of Agoura Hills Review Letters of November* 7 and 20, 1989 Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California. Work Order: 1687-1-13, Log Number: 14033

Gorian and Associates, Inc., December 14, 2007,*Geotechnical Feasibility, Proposed Gupta Corporate Offices,* 29760 Agoura Road, City of Agoura Hills, California. Work Order: 1687-1-0-200.

Gorian and Associates, Inc., February 19, 2008, Geotechnical Site Feasibility Evaluation, Proposed Gupta Corporate Offices, 29760 Agoura Road, City of Agoura Hills, California. Work Order: 1687-1-0-201.

Date: February 29, 2008
GDI #: 07.00103.0161

CITY OF AGOURA HILLS - GEOTECHNICAL REVIEW SHEET

To:	Valerie Darbouze
Project Location:	29760 Agoura Road, Agoura Hills, California.
Planning Case #:	07-CUP-009/07-OTP-012/07-SPA-001
Building & Safety #:	None
Geotechnical Report:	Gorian and Associates, Inc. (2008), "Geotechnical Site Feasibility Evaluation, Proposed Gupta Corporate Offices, 29760 Agoura Road, City of Agoura Hills, California," Work Order No. 1687-1-0-201, dated February 19, 2008.
References:	See Attachment
Previous Reviews:	November 30, 2007

FINDINGS

Planning/Feasibility Issues

☐ Acceptable as Presented

☒ Response Required

Geotechnical Report

☐ Acceptable as Presented

☒ Response Required

REMARKS

The submittal for this project includes the above-referenced Geotechnical Site Feasibility Evaluation prepared by Gorian and Associates, Inc (GAI). This report updates previous studies prepared by GAI between 1987 and 1990. These earlier reports were reviewed and conditionally approved by Slosson and Associates (1989) and Bing Yen and Associates (1989), the previous geologic and geotechnical reviewers for the City of Agoura Hills. The previous approval was conditioned on requirements that the consultant provide additional evaluation/mitigation of the debris/mudflow hazard at the site and that the consultant verify settlement estimates provided in the reviewed reports. The current report is intended only to re-establish the previous conditional feasibility-level approval without addressing in detail either the mudflow or settlement issues. The proposed development includes the construction of a two-story office building over one level of subterranean parking.

The City of Agoura Hills – Planning Department reviewed the current submittal and the referenced reports and review letters from a geotechnical perspective for compliance with applicable codes, guidelines, and standards of practice. GeoDynamics, Inc. (GDI) performed the geotechnical review on behalf of the City. Based upon our review, the Consultant should respond to the following Planning/Feasibility Comments prior to the consideration of approving Case 07-CUP-009/07-OTP-012 (Dr. Vinod Gupta) by the Planning Commission. The Geotechnical Report Review comments should be addressed by the consultant prior to Building Plan-Check Approval. Plan-Check comments should be addressed in Building & Safety Plan Check. A separate geotechnical submittal is not required for plan-check comments.

Planning/Feasibility Comments

1. The site was rough graded in 1987. Fill was placed at the site. Current development plans include a cut slope approximately 10 ft high, a two-story office building with subterranean parking, and rebuilding an existing 2:1 gradient fill slope. The current feasibility evaluation study (GAI 2008) provides preliminary recommendations for feasibility-level approval. However, some information requested in the previous review letter dated November 30, 2007 is not provided. For the feasibility-level approval of this project, the consultant should identify geotechnical/geologic hazards in relation

to the proposed development and provide feasible mitigation measures. Such geo-hazards that should be further addressed by the consultant include the suitability of the existing fill for future structural support, the potential for differential movement due to variable subgrade materials and fill thickness, the expansion potential of on-site materials, and the stability of natural and manufactured slopes. The consultant should also provide orthogonal cross sections through the subterranean level and adjacent slopes. The sections should depict the contact between various units, existing and proposed grades, and groundwater conditions. Geotechnical data from previous geotechnical activities/investigations at the site may be utilized and the need for additional investigations may be deferred to later stages if available pertinent data is sufficient to characterize geotechnical conditions at the site for the feasibility-level.

Report Review Comments

1. The consultant should provide a geotechnical review of current development plans. The geotechnical review report should provide geotechnical recommendations to address all aspects of the proposed development consistent with current applicable codes, guidelines, and standards of practice based on adequate subsurface exploration and testing. The report should utilize the grading plan as a base map for an updated geotechnical map and provide cross sections through critical areas such as slopes and the subterranean level.
2. The consultant indicates that a subdrain was installed below the fill and identifies a general alignment. Earlier reports (GAI, 1987) indicate that the subdrain was scheduled to be attached to a storm drain. The consultant should verify that the storm drain connection was completed and that the subdrain is clear and functioning as intended. The consultant should provide recommendations for areas where this subdrain may be intercepted by excavations planned for the subterranean garage.
3. The consultant should provide recommendations to accommodate any potential for differential ground movement expansion/settlement where subterranean parking may transition from a subgrade of compacted fill to a subgrade of bedrock.
4. The consultant should discuss the potential for daylighted joint surfaces and daylighted wedges defined by intersecting joint surfaces, and potential implications for temporary excavations and lateral surcharges on retaining walls.
5. The consultant should verify earlier settlement estimates based on additional borings and laboratory testing.
6. The consultant references a review of mudflow potential prepared in December of 1988. No copy of this assessment was provided for review, and no copy of that report is available in files retained from Bing Yen and Associates, the geotechnical reviewer for the City of Agoura Hills at the time those reports were approved. The approval letters issued in November of 1989 indicate that some potential for mudflow was identified, and continued to require mudflow mitigation as a condition of approval. The consultant should submit an assessment of the potential for mudflow hazard at the site. In particular, there is an existing fill slope located offsite southeast of the property. This slope is deeply eroded, with arcuate cracks extending some distance behind the crest. The mudflow assessment should include an evaluation of potential impacts on the subject property in the event saturated materials in this slope were to fail. Mitigation measures should be provided as necessary.
7. The previous reviewer appears to have raised issues of over-sized material in the existing compacted fill, and that the oversized material was not documented in the Rough Grading Compaction Report dated March 28, 1987. The consultant should provide a detailed discussion of material types encountered during the proposed future subsurface exploration and indicate whether "oversized" materials are anticipated during future excavations in the compacted fill. Mitigation measures should be provided as necessary.

Plan-Check Comments

1. The name, address, and phone number of the Consultant and a list of all the applicable geotechnical reports shall be included on the building/grading plans.

2. The grading plan should include the limits and depths of overexcavation of the building pad and flatwork areas as recommended by the Consultant.
3. The following note must appear on the grading and foundation plans: "*Tests shall be performed prior to pouring footings and slabs to determine the expansion index of the supporting soils, and foundation and slab plans should be reviewed by the Geotechnical Consultant and revised, if necessary, accordingly.*"
4. The following note must appear on the grading and foundation plans: "*Excavations shall be made in compliance with CAL/OSHA Regulations.*"
5. The following note must appear on the foundation plans: "*All foundation excavations must be observed and approved, in writing, by the Project Geotechnical Consultant prior to placement of reinforcing steel.*"
6. Foundation plans and foundation details shall clearly depict the embedment material and minimum depth of embedment for the foundations.
7. Drainage plans depicting all surface and subsurface non-erosive drainage devices, flow lines, and catch basins shall be included on the building plans.
8. Final grading, drainage, and foundation plans shall be reviewed, signed, and wet stamped by the consultant.
9. Provide a note on the grading and foundation plans that states: "*An as-built report shall be submitted to the City for review. This report prepared by the Geotechnical Consultant must include the results of all compaction tests as well as a map depicting the limits of fill, locations of all density tests, outline and elevations of all removal bottoms, keyway locations and bottom elevations, locations of all subdrains and flow line elevations, and location and elevation of all retaining wall backdrains and outlets. Geologic conditions exposed during grading must be depicted on an as-built geologic map.*"

If you have any questions regarding this review letter, please contact GDI at (805) 496-1222.

Respectfully Submitted,

GeoDynamics, INC.

Ali Abdel-Haq
Geotechnical Engineering Reviewer
GE 2308 (exp. 12/31/09)

Christopher J. Sexton
Engineering Geologic Reviewer
CEG 1441 (exp. 11/30/08)

REFERENCES

Bing Yen and Associates (1988), "Geotechnical Engineering Review of Ladyface Mountain Office Center (OCHS Construction Project), Agoura Road, Agoura Hills, California", BCY No.: 53-223A, dated December 22, 1988.

Buena Engineers, Inc. (1980), "Seismic Profiling, Agoura Gardens, Agoura Road, Los Angeles County, California", Job No. B-10829-T1, Dated April 2, 1980.

Gorian and Associates, Inc., (1987), "Rough Grading Compaction Test Report fo Off-Site Fill Adjacent to Northeast Corner of tract 40477, City of Agoura Hills, California", Work Order No.: 1069-1-21; Log No.: 11447; dated March 28, 1987.

Gorian and Associates, Inc., (1990), "Response to City of Agoura hills Review Letters of November 7 and 20, 1989 Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California", Work Order No.: 1687-1-13; Log No.: 14033; dated January 25, 1990.

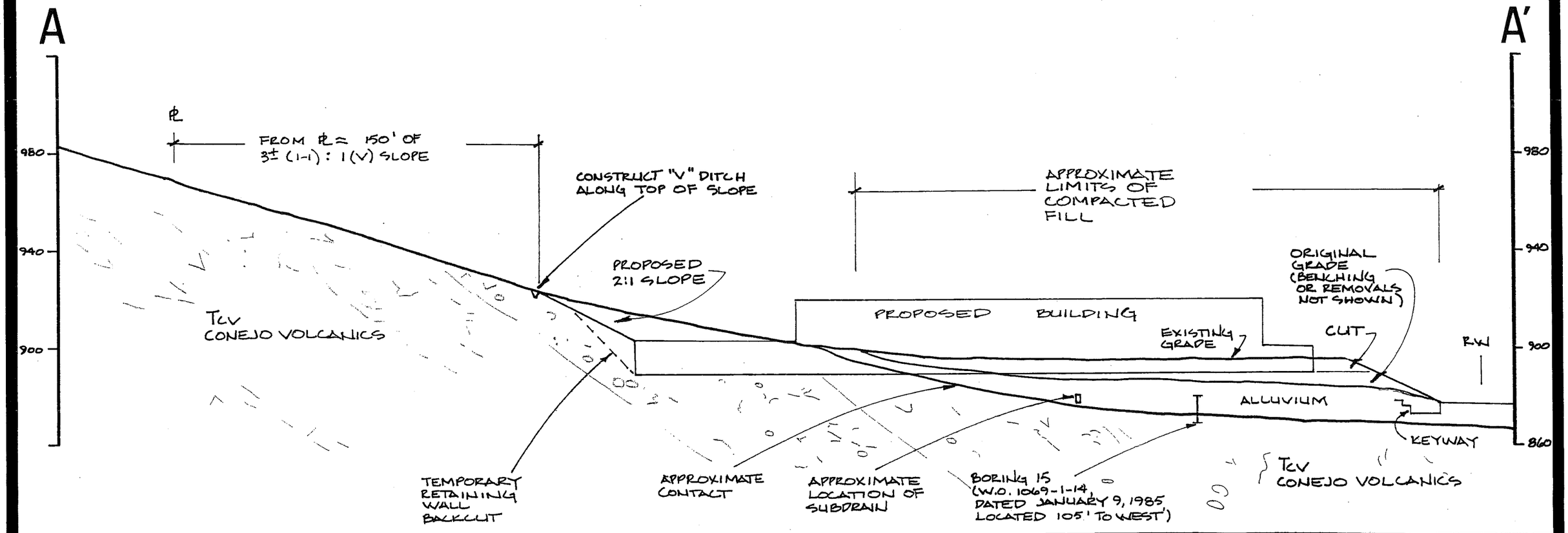
Gorian and Associates, Inc., (2007), "Proposal, Geotechnical Site Update Evaluation, Proposed Office Building, East of 29800 Agoura Road, Agoura Hills, California", Proposal No.: 4833-10; dated August 10, 2007.

Slosson and Associates (1988), "Review of Response to Review Letter Regarding Ladyface Mountain Office Center, Agoura Road, Agoura hills, California" S&A No.: 881004, dated December 28, 1988.

GEOTECHNICAL CROSS SECTION

FOR

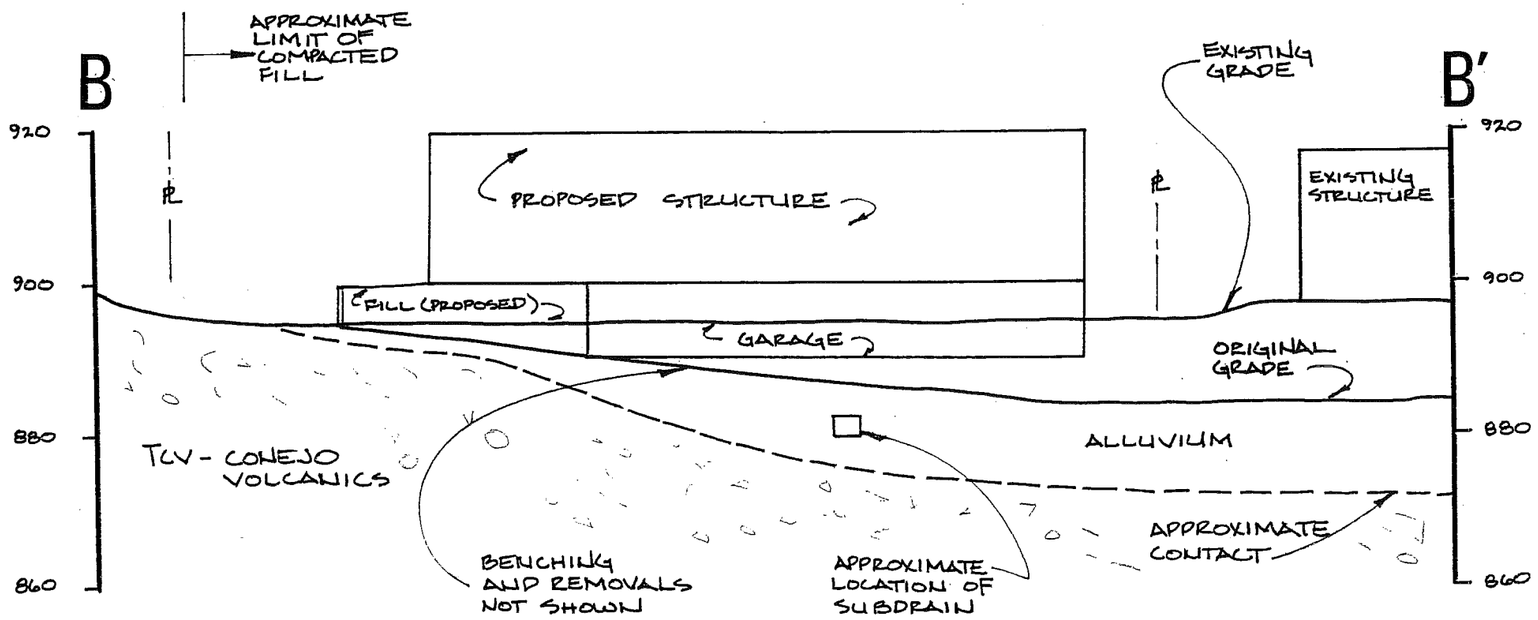
LADYFACE MOUNTAIN OFFICE CENTER



SOIL AND FOUNDATION ENGINEERS — GORIAN AND ASSOCIATES, Inc. — APPLIED EARTH SCIENCES

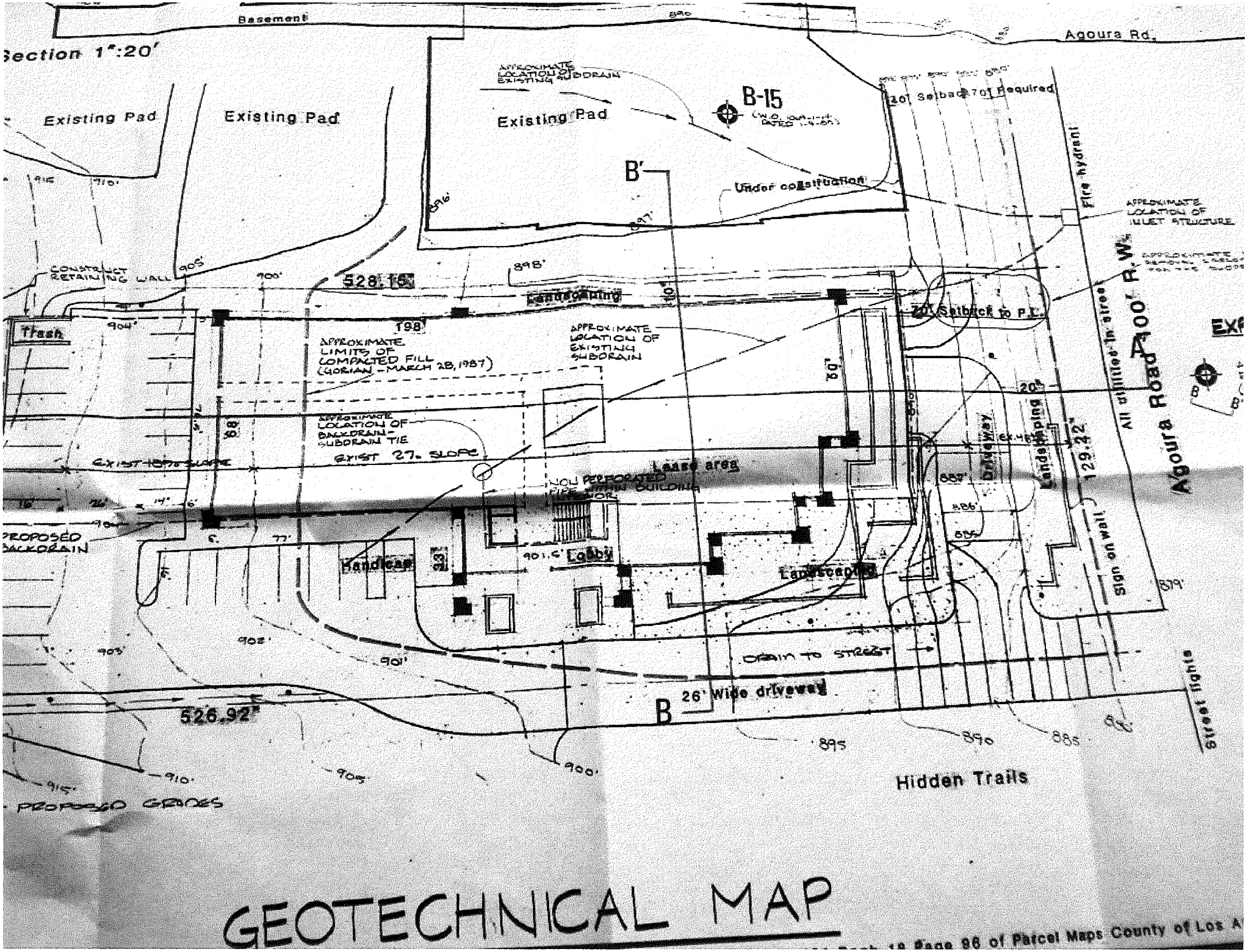
JOB NUMBER: 1687-1-10	DATE: 12-8-88	
SCALE: 1"=40'	APPROVED BY:	DRAWN BY: MAP
		LOG NO: 12420

GEOTECHNICAL CROSS SECTION
LADYFACE MOUNTAIN OFFICE CENTER



SOIL AND FOUNDATION ENGINEERS — GORIAN AND ASSOCIATES, Inc. — APPLIED EARTH SCIENCES

JOB NUMBER: 1687-1-11	DATE: 12-8-88	
SCALE: 1"=20'	APPROVED BY: JJ	DRAWN BY: MAP
		LOG NO: 12420



GEOTECHNICAL MAP

Book 19 Page 96 of Parcel Maps County of Los A

Date: November 30, 2007
GDI #: 07.00103.0161

CITY OF AGOURA HILLS - GEOTECHNICAL REVIEW SHEET

To: Valerie Darbouze

Project Location: 29760 Agoura Road, Agoura Hills, California.

Planning Case #: 07-CUP-009/07-OTP-012 (Dr. Vinod Gupta)

Building & Safety #: None

Geotechnical Report: Gorian & Associates, Inc. (1990), "Response to City of Agoura Hills Review Letter of November 7 and 20, 1989, Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California," Work Order: 1687-1-13, dated January 25, 1990.

Gorian & Associates, Inc. (1987), "Rough Grading Compaction Test Report for Office-Site Fill Adjacent to Northeast Corner of Tract 40477, City of Agoura Hills, California," Work Order: 1069-1-21, dated March 28, 1987.

Plans: CVE Engineering, Inc. (2007), "Grading Plan, A Professional Building for Dr. Gupta, Sheets 1 through 5," dated October 5, 2007.

Neal Scribner Architect (2007), "Architectural Plans, Gupta Corporate Offices, Sheets 1-3," undated.

Previous Reviews: December 22, 1988 (by Bing Yen & Associates, Inc.).

FINDINGS

Planning/Feasibility Issues

☐ Acceptable as Presented

☒ Response Required

Geotechnical Report

☐ Acceptable as Presented

☒ Response Required

REMARKS

The recent submittal includes the above referenced reports and plans, and a proposal by Gorian & Associates, Inc. (GAI) for the preparation of a geotechnical update report for the proposed site development. The subject site is approximately 1.65 acres and situated on a hillside. Proposed development includes the construction of a two-story office building with associated parking and access roads. The previous reports prepared by GAI for the proposed site development were reviewed and approved by Bing Yen & Associates, the previous geotechnical reviewers for the City of Agoura Hills, in a letter December 22, 2007. Some grading activities took place at the site in 1987 (GAI, 1987).

Geodynamics, Inc. (GDI) reviewed the referenced report from a geotechnical perspective for compliance with applicable codes, guidelines, and standards of practice. GDI performed the geotechnical review on behalf of the City of Agoura Hills – Planning Department. Based upon our review, the Consultant should respond to the following Planning/Feasibility comments prior to the consideration of approving Case 07-CUP-009/07-OTP-012 (Dr. Vinod Gupta) by the Planning Commission. The Geotechnical Report Review comments should be addressed by the consultant prior to Building Plan-Check Approval. Plan-Check comments should be addressed in Building & Safety Plan Check. A separate geotechnical submittal is not required for plan-check comments.

Planning/Feasibility Comments

1. The previously approved geotechnical reports for the subject site are older than 1 year and the findings should be updated by the project geotechnical consultant. The geotechnical update report should discuss and address changes to the geotechnical conditions at the subject site since the earlier submittals, if applicable, based on the current proposed site development plans. Based on our review, additional field exploration, laboratory testing, and geotechnical analyses may be necessary to address changes to the proposed site development plans. The update report should include all previous geotechnical data pertinent to the subject site to provide a stand-alone document. Geotechnical recommendations should be provided as necessary.

   Note: The findings of the geotechnical update report are subject to review and upon the City's review; may require additional responses by the consultant prior to approval from a geotechnical standpoint.

Plan-Check Comments

1. The name, address, and phone number of the Consultant and a list of all the applicable geotechnical reports shall be included on the building/grading plans.
2. The following note must appear on the grading and foundation plans: *"All retaining wall excavations shall be reviewed by the project engineering geologist for the presence of adversely oriented joint surfaces. Adverse surfaces shall be evaluated and supported in accordance with recommendations of the project geotechnical engineer."*
3. The grading plan should include the limits and depths of overexcavation for the swimming pool, the road and flatwork areas as recommended by the Consultant.
4. The following note must appear on the grading and foundation plans: "*Excavations shall be made in compliance with CAL/OSHA Regulations.*"
5. The following note must appear on the foundation plans: "*All foundation excavations must be observed and approved, in writing, by the Project Geotechnical Consultant prior to placement of reinforcing steel.*"
6. Foundation plans and foundation details shall clearly depict the embedment material and minimum depth of embedment for the foundations.
7. Drainage plans depicting all surface and subsurface non-erosive drainage devices, flow lines, and catch basins shall be included on the building plans.
8. Final grading, drainage, and foundation plans shall be reviewed, signed, and wet stamped by the consultant.
9. Provide a note on the grading and foundation plans that states: "*An as-built report shall be submitted to the City for review. This report prepared by the Geotechnical Consultant must include the results of all compaction tests as well as a map depicting the limits of fill, locations of all density tests, outline and elevations of all removal bottoms, keyway locations and bottom elevations, locations of all subdrains and flow line elevations, and location and elevation of all retaining wall backdrains and outlets. Geologic conditions exposed during grading must be depicted on an as-built geologic map.*"

If you have any questions regarding this review letter, please contact GDI at (805) 496-1222.

Respectfully Submitted,

GeoDynamics, INC.

Ali Abdel-Haq
Geotechnical Engineering Reviewer
GE 2308 (exp. 12/31/07)

Christopher J. Sexton
Engineering Geologic Reviewer
CEG 1441 (exp. 11/30/08)

GORIAN AND ASSOCIATES, Inc.
Soil and Foundation Engineers
Applied Earth Sciences

07CUP-009
07OTP-012
(GUPTA)

January 25, 1990

Miller & Folse
101 Moody Court
Thousand Oaks, California 91359

Work Order: 1687-1-13
Log Number: 14033

Subject: Response to City of Agoura Hills Review Letters of November 7 and 20, 1989 Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California.

References: See attached list

Gentlemen:

As requested by the City of Agoura Hills, this letter contains an item by item response to the Geologic and Geotechnical Engineering Review Letters by Slosson and Associates, and Bing Yen and Associates, respectively (see references for complete citations), regarding the referenced reports and responses to previous review letters. These review letters recommend approval of our Geotechnical Site Investigation Update for the proposed Ladyface Mountain Office Center, provided that requested information and design criteria are submitted for City Review.

766 Lakefield Road, Suite A, Westlake Village, Calif. 91361
(805) 497-9363 (805) 987-0821 (818) 889-2137
FAX (805) 373-6938

GEOLOGIC ENGINEERING REVIEW LETTER (Slosson and Associates)

Item Number 1:

"In response to Item 3, the Consultant has recommended a minimum gradient of 1% for the basement garage wall backdrain layout. It is the reviewer's understanding that the standard of care in the industry would provide for a minimum 2% gradient for such drains. Our recommendation to the City Engineer is for a minimum 2% gradient to be required to provide an additional safety factor in maintaining positive drainage of the system."

Response:

Section 407 of the UPC allows for a minimum drainage gradient of 1%, where a 2% drainage gradient is impractical. Due to length of the dewatering system, a 2% drainage pipe gradient would require a pipe set 6" below slab grade at the south end of the building to drop substantially below the footing depth in the northern part of the building. We do not recommend trenching deeper than the adjacent footing, as the drain material backfill can not be expected to provide adequate lateral support. Although the actual drainage design is the responsibility of the consulting civil engineer, we are of the opinion that a 2% drainage gradient for this design is impractical.

Item Number 2:

"With regard to mudflow hazard at the site (Item 6), the Consultant has indicated that while the potential for mudflow is low, some potential exists. It is the Consultant's opinion the "Retention or diversion of a possible mudflow should be per the project civil engineer's design." The design of a diversion retention system to mitigate the mudflow hazard should be accomplished by the project civil engineer with input (i.e., depth and areal distribution of materials susceptible to failure) from the Consultant. It is our opinion that this should be done as a condition of approval of the submittal. Any design, calculations and comments should be forwarded to the City for review.

Response: Please refer to our previous response (Gorian and Associates, Inc. October 18, 1989) in which we provided an estimate of depth and areal distribution of materials susceptible to failure as input for the civil engineer's design.

Item Number 3: **"In response to Item 7, the Consultant has stated that: "...the compacted engineered fills on-site were placed in general accordance with the spirit and intent of the City of Agoura Hills grading code." In our opinion, the City's excavation and grading ordinance should have been met or exceeded, both physically and literally, rather than merely being in accorded with in spirt and intent. It should also be pointed out that the Consultant's report dated March 28, 1987, which summarized and certified the placement of existing fill on the site makes no mention that some of the oversized materials were incorporated into the fill and processed properly. With the knowledge that the fill has been certified, and the Consultant's indication that, "...no notable voids were present around any of the rock exposed in the eroded area," it is the Building Official/City Engineer's prerogative to approve the current reports in view of the oversized rock material."**

Response: Acknowledged.

Item Number 4: **We are in concurrence with Bing Yen and Associates (City's geotechnical reviewer) that the Consultant should review and sign the final grading plans. These plans should contain the above-mentioned mud-flow mitigation to be designed by the project civil engineer with input from the Consultant. In addition, a note should be included on the plan that all recommendations of the geotechnical/ geological Consultant (Gorian and Associates reports) should be adhered to, including addendum reports generated by this review process."**

Response: We routinely review "final" grading plans and sign them if they meet our approval, provided we are requested to do so by our clients. The other

comments should be forwarded to the project's design civil engineer.

GEOTECHNICAL REVIEW SHEET (BING YEN & ASSOCIATES)

Remark Number 1: **"A mud/debris flow mitigation system is either designed and/or approved by the Consultant. The design and any accompanying calculations and comments should be forwarded to the City for review."**

Response: Please refer to the response to Item Number 3 presented above.

Remark Number 2: **"The Consultant reevaluate or confirm his settlement estimates based on the final "footing loads and locations". This reevaluation should be submitted to the City in writing for review."**

Response: We can provide this reevaluation when final structural building plans and loads are known.

Remark Number 3: **"In addition, it is our recommendation that the following items be completed prior to the issuance of the grading permit. 1) The consultant evaluate the as-graded expansion potential of the site. The evaluation should be submitted to the City. 2) The Consultant Review and sign the final grading plans. Any Comments should be forwarded to the city for Review."**

Response: We recommend performing an expansion index test on exposed significant soil types after the building pad has been constructed to finished grade as per our previous report (Gorian and Associates, Inc., July 20, 1988). Although we stated that foundations and slabs should be considered to be designed for an E.I. of 51 to 90, we believe that

structural considerations rather than soil expansiveness will control foundation and slab design. We agree that the project geotechnical consultant should review and sign the final grading plans.

-o-

We trust that this information fulfills the needs of the project at this time. If you have any questions or require additional information, please do not hesitate to call.

Respectfully submitted,

GORIAN AND ASSOCIATES, INC.

By: Jerome J. Blanck
GE 151

REGISTERED PROFESSIONAL ENGINEER
JEROME JOHN BLANCK
No. 151
Exp. 12/31/92
GEOTECHNICAL
STATE OF CALIFORNIA

By: Scott T. Simmons
EG 1193

REGISTERED GEOLOGIST
SCOTT T. SIMMONS
No. EG 1193
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Attachments: Reference Sheets

Distribution: Addressee (6)

REFERENCES

1) Bing Yen and Associates, September 1, 1988, Geotechnical Review of Ladyface Mountain Office Center, Agoura Road. BCVN 53-223.

2) Bing Yen and Associates, December 22, 1988, Geotechnical Engineering Review of Ladyface Mountain Office Center (OCHS Construction Project), Agoura Road, City of Agoura Hills. BCY No. 53-223A.

3) Bing Yen and Associates, November 7, 1989, Geotechnical Engineering Review of Ladyface Mountain Office Center (OCHS Construction Project), Agoura Road, City of Agoura Hills. BYA No. 52-223A.

4) Gorian and Associates, Inc., March 28, 1987, Rough Grading Compaction Test Report for Off-site Fill Adjacent to Northeast Corner of Tract 40477, City of Agoura Hills, California. Work Order: 1069-1-21, Log Number: 11447.

5) Gorian and Associates, Inc., July 19, 1988, Geotechnical Update, Proposed Ladyface Mountain Office Center, Agoura Hills, California. Work Order: 1687-1-10, Log Number: 12573.

6) Gorian and Associates, Inc., December 8, 1988, Response to City of Agoura Hills Review Letters, Geotechnical dated September 1, 1988 and Geologic dated September 13, 1988, Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California.. Work Order: 1687-1-11, Log Number: 12920.

7) Gorian and Associates, Inc., October 18, 1989, Response to City of Agoura Hills Review Letters, Geotechnical dated December 22, 1988 and Geologic dated December 28, 1988, Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California.. Work Order: 1687-1-12, Log Number: 13759.

8) Slosson and Associates, September 13, 1988, Geologic Review of Ladyface Mountain Office Center, Agoura Road. S&A # 881004.

9) Slosson and Associates, December 28, 1988, Review of Response to Review Letter Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills,, California; S&A 881004.

10) Slosson and Associates, November 20, 1989, Geologic Review of Ladyface Mountain Office Center (OCHS Construction Project), Agoura Road, Agoura Hills, California; S&A #881004.

BING YEN & ASSOCIATES
Geotechnical Consultants, Established 1979

December 22, 1988

BCY No. 53-223A

Dana Riccard, Associate Planner
City of Agoura Hills
30101 Agoura Road, Suite 102
Agoura Hills, CA 91301

SUBJECT Geotechnical Engineering Review of Ladyface Mountain Office Center (OCHS Construction Project), Agoura Road, Agoura Hills, California.

REFERENCE "Geotechnical Site Investigation Update", Proposed Ladyface Mountain Office Center, Agoura Hills, California by Gorian and Associates dated July 20, 1988.

"Geotechnical Engineering Review Letter", Ladyface Mountain Office Center, Agoura Hills, California by Bing Yen and Associates dated September 1, 1988.

Dear Ms. Riccard:

We have reviewed the following document in response to the above referenced review:

"Response to City of Agoura Hills Review Letters", Geotechnical dated September 1, 1988 and Geologic dated September 13, 1988, Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California.

Our above referenced review letter outlined several items that necessitated a response from the Consultant (Gorian and Associates). Our comments regarding the responses to those items are addressed below in the order originally presented.

1. Item number one was addressed adequately by the Consultant.

2. Item number two was adequately addressed by the Consultant.

3. Item number three requested the Consultant to address the surficial and gross stability of the site's natural slopes to the south and to address failure potential along daylighted joint planes. Although the Consultant addressed the gross stability, no mention was made regarding surficial stability. In addition, the "referenced" June 5, 1985 report could not be found in the references of the subject report. The Consultant should address the surficial stability on the site's southerly slope and make appropriate recommendations for the height of freeboard behind the retaining wall.

38 Musick Avenue, Irvine, CA 92718 Tel. (714)583-1919 FAX (714)583-1793

With regards to possible failures along daylighted joint planes, the Consultant states that "there should not be any daylighted and intersecting joint sets exposed on slopes flatter than 1(h):1(v). If this is the case, wouldn't it be prudent to lay back the temporary cut for the retaining wall at an angle less than 45 degrees?

4. The Consultant states that an analysis of a fifty-foot high fill slope is contained in the referenced June 5, 1985 report. The calculations were found in the Gorian report dated October 15, 1979 and adequately address this item.

5. Item number five of our referenced review identified an erosion gully on the west end of the north facing fill slope. The Consultant has stated that the gully should be repaired with compacted fill placed on horizontal benches. The repair and extent of repair should be shown on the grading plans.

6. It is our understanding from the responses to this item and the information contained in referenced reports by the Consultant that all cuts for this project will be laid back at 1:1 and that no vertical cuts will be made. If this is the case, we would recommend to the City that this be clearly stated by the Consultant. Aside from instability created by daylighted joint planes (see Item 3), the temporary stability of excavations laid back at 1:1 has been adequately addressed by the Consultant.

7. Item number seven has been adequately addressed by the Consultant.

8. Comments regarding item number eight are contained in our response to item number eleven.

9. Item number nine was adequately addressed by the Consultant.

10. It is our recommendation to the City that the building permit be withheld until the results of the lot by lot expansion tests and any associated foundation design changes are submitted.

11. It is our understanding from the Consultant's response that the foundations may be founded on three different materials. However, this is not clear as the report by Gorian and Associates dated October 15, 1979 contains a statement regarding the overexcavation of cut-fill transition areas. The foundation bearing recommendations still need to be clarified by the Consultant.

The Consultant goes on to say that differential settlements across daylight fill areas will be on the order of 1/4 inch, but that "detailed" settlements cannot be given until footing loads and locations are known. Due to the facts that (1) the foundations appear to be spanning three different materials, (2) the existing fill is founded on alluvium with a relative compaction of 85%, and (3) no settlement calculations have been presented, we recommend that approval of this report be withheld until the "detailed settlements" are given. All appropriate information concerning the basis for the Consultant's settlement estimations should be submitted for review.

The Consultant should also address differential expansion as the three different bearing materials have been reported to have expansion potentials ranging from low to high.

We hope that these comments are useful in your review of this project. If you have any questions or comments, please feel free to call.

Sincerely,

Gregory Paul Silver
Project Engineer

Review by:

Bing C. Yen, Ph.D.
Registered Geotechnical Engineer #917

cc Slosson and Associates

SLOSSON AND ASSOCIATES
CONSULTING GEOLOGISTS
14046 OXNARD STREET
VAN NUYS, CALIFORNIA 91401

AREA CODE 818 787-4555 785-0835

December 28, 1988
S&A 881004

TO: City of Agoura Hills
30101 Agoura Road, Suite 102
Agoura Hills, California 91301

Attention: Dana Riccard

SUBJECT: Review of Response to Review Letter Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills, California.

We have received and reviewed the following document in response to our geologic review letter dated September 13, 1988 pertaining to the subject site:

"Response to City of Agoura Hills Review Letters, Geotechnical dated September 1, 1988 and Geologic dated September 13, 1988, Regarding Ladyface Mountain Office Center, Agoura Road, Agoura Hills California", prepared by Gorian and Associates, dated December 8, 1988.

Based upon our review of the consultants responses and other pertinent documents, we present the following comments on an item-per-item basis:

Item 1

Acknowledged.

Item 2

The consultant's amended recommendation for all manufactured slopes to be constructed at a 2:1 gradient is both

prudent and in compliance with the grading ordinances. Despite the consultant's indication that "No adverse geologic conditions are anticipated.", it is imperative that an engineering geologist observes and maps the exposed materials in the proposed cuts. Based upon our observations at the site directly east of and adjacent to the subject site, basalt flow planes with dips as shallow as 15-20 degrees north could be encountered at the subject site. Such dips, if exposed, would likely be adverse to the stability of proposed slopes.

Item 3

Our understanding of the basement garage wall backdrain is that it will be connected to and outletted through the lower portion of the existing subdrain. In addition, the upper portion of the existing subdrain which will be intersected by the basement wall will be connected to the backdrain and consequently outletted through the lower portion of the subdrain. What is the recommended gradient for the backdrain pipe such that all groundwater collected by the backdrain will reach the subdrain tie-in and subsequently be outletted? This should be depicted in detail on the grading plan.

Item 4

No comment necessary.

Item 5

Acknowledged.

Item 6

It is the consultant's opinion that "...due to the overall slope gradients and the 6"-8" thick soil zone present behind the proposeed development, the potential for a damaging mudflow is low." However, the consultant's indication that a mudflow scar exists on the slope above Tract 40477 is, in our opinion, some evidence that mudflows and/or debris flows could affect the subject site.

In a report prepared by the consultant titled "Additional Geotechnical Report Regarding Rockfall and Mudslide Hazards, Tentative Tract 40477..." dated June 11, 1981, the consultant recommended that "Areas of fill which daylight into natural canyon bottoms should be protected by debris fences,

catch basins, deflection walls or berms from possible mud and debris flows which may occur during periods of prolonged rainfall." In addition, the reviewer noted that during a fire-flood sequence (worst case scenario), the debris production potential might possibly be as much as 500 cubic yards for the watershed above the site utilizing data from L.A. County Flood Control District Hydrology Manual, 1971. With this in mind, we question the effectiveness of a paved swale and a 2-foot high splash wall in protecting the proposed development from a potential mudslide or debris flow. What are the design specifications for the splash walls as depicted on the grading plan. Are the walls intended for impact and/or deflection; and, are they of sufficient height and/or storage capacity?

With regard to the rockfall/boulder rolling potential at the site, the consultant has conducted a small scale rockfall/boulder rolling test in the vicinity of the subject property; and in their opinion the site should be safe from rolling rocks and rockfall hazard. We question the validity of the consultant's boulder rolling test inasmuch as boulders larger than those tested might mobilize on the steeper areas of the slope during seismic shaking or a soil slip. During our reconnaissance of the slope above the site, we noted several subangular boulders up to 4 feet in the maximum dimension, both within the swales and on steeper areas of the slope (approximately 2:1). These boulders would appear to possess a greater potential energy than the smaller boulders tested on a shallower slope by the consultant; however, the subangular nature of the boulders might tend to limit the distance the boulders could travel. Therefore, it is the opinion of this office that the possibility of rolling boulders affecting the subject site may be remote.

Item 7

If the fill slope fronting Agoura Road was constructed in accordance with the City Grading Ordinance, how does the consultant explain the oversize boulders (>12") observed by the reviewer in the eroded drainage ditch in the slope face?

Item 8

This item has been deferred to the office of Bing Yen and Associates, as the consultant suggests.

December 28, 1988
S&A# 881004

City of Agoura Hills
Ladyface Mountain Office Center

Item 9

Inasmuch as a broken/disconnected drain line was observed in the storm drain box wall, it is the consultant's prerogative to investigate possible non-functioning or malfunctioning drains which might affect site stability.

Item 10

No comment necessary.

Item 11

The comment with regard to cut/fill quantities should be addressed by the project design civil engineer. These questions were raised to inform the City of possible fill export operations at the site, inasmuch as the City Grading Ordinances regulate such operations to a certain extent.

It is apparent that the consultant has adequately addressed some of the review items, however it is recommended that the City require further clarification for some of the items (as questioned above) prior to approval of the submittal.

If you have any questions regarding this letter, please contact our office.

Michael B. Phipps
Staff Engineering Geologist

Thomas L. Slosson
Supervising Engineering Geologist
RG 4204, CEG 1327

James E. Slosson, Ph.D.
Chief Engineering Geologist
RG 48, CEG 22, GP 829

MBP/TLS/JES:nj
cc: Bing Yen and Associates

Earth Engineers, Inc.
ENGINEERING
TESTING • INSPECTION
1781 CALLENS ROAD • VENTURA, CALIFORNIA 93003 • PHONE (805) 642-6727 or (805) 497-2401

80-4-24
Job No B-10829-T1

April 2, 1980

Project: Agoura Gardens
Agoura Road
Los Angeles County
California

Subject: Seismic Profiling

The above referenced ares is located along Agoura Road's south side, immediately west of Hidden Trails School in Agoura area of Los Angeles County, California. A minor north plunging ridge trends through the property.

The purpose of this study is to evaluate this property for grading difficulty due to hard and semi-hard sub-surface units using a Seaman Nuclear "SNC 2560" seismograph. Energy for the intrumentation was a plate impact source, utilizing a single single geophone system. On March 27, 1980, this property was visited by members of this laboratory and four seismic probes were placed as shown on attached Plate A.

Results of this survey and interpretations were made by plotting time vs. distance, as indicated on next page.

Table 1

Seismic Probes

Probe	Depth (ft)	Veolocity (fps)	Assumed Probable Material
1	0-5	688	A
	5-27.5'	3023	VWV
	27.5'+	7629	WV
2	0-2.5'	1000	A
	2.5-14.5	2105	VWV
	14.5'+	4878	WV
3	0-4	982	A
	4-29.5	3667	VWV
	29.5'+	9867	WFV
4	5.5-24	3386	VWV
	24+	9213	WFV

A = Alluvium, VWV = Very weathered volcanics (some fracturing), WFV = Weathered and fractured volcanics, WV = Weathered volcanics

In the above table moderate to light ripping will range from 0 to 3500 fps using heavy equipment, caterpillar D8 on D9 or equivalent equipment. Very hard ripping can be anticipated at velocities over 5000 fps. It is not possible to determine the rippability cut-off point due to many variables (i.e., size of equipment, number of ripper teeth, amount and degree of fracturing of rock).

This report is not to be construed as a geological report, but should be made a part of prior geologic report prepared by this laboratory, "Engineering Geology and Preliminary Soil Investigation of Agoura Gardens of Agoura Gardens Buildings, Agoura Road, in California", February 1980.

Should any questions arise with reference to this report, please contact the undersigned.

Respectfully submitted,

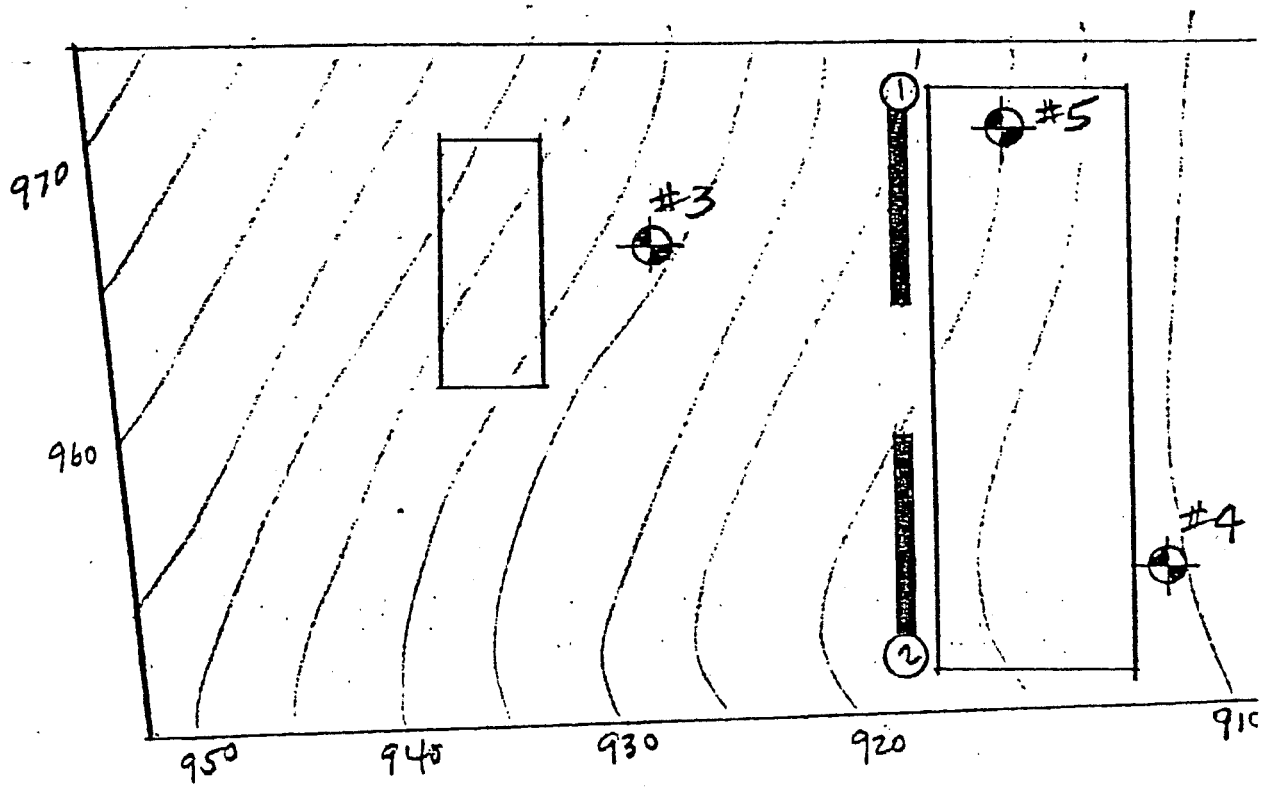
BUENA ENGINEERS, INC.

F. D. Didier, Jr.
CEG 475

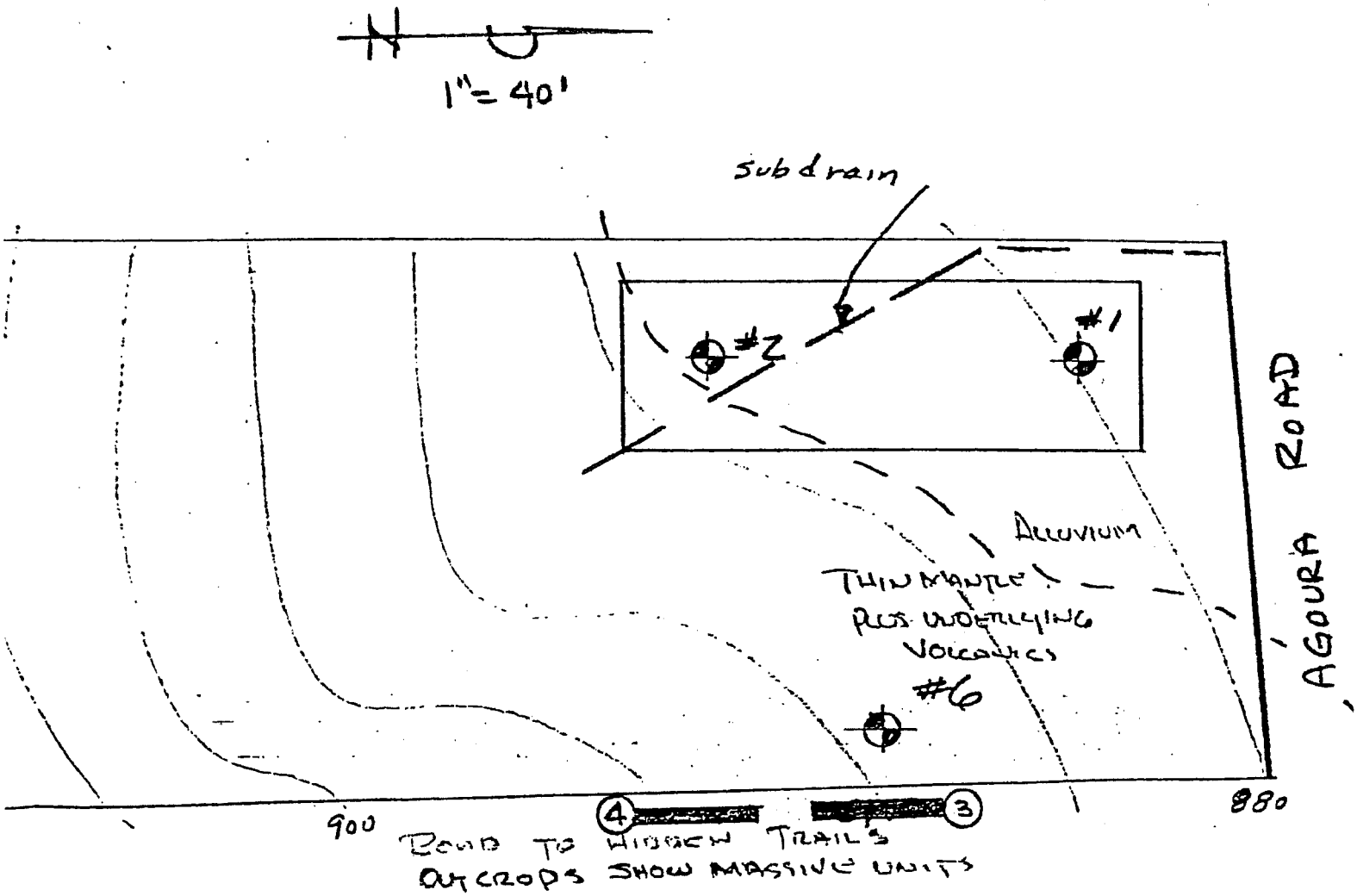
FDD/nas

Copies: 2 - Miller & Folse 2 - Ebbe Viderksen 1 - TO file 1 - Vta file

Lee Hagett



NOTE: WITH EXCEPTION OF ALLUVIUM AT NW C
ENTIRE ARE OF PROPERTY IS UNDERLAIN WITH C
VOLCANICS - MIOCENE TOPANGA SERIES.



SEISMIC PROB MAP	
AGOURA GARDEN	
BUENA ENGINEERS, INC	
DATE: 2-20-80	JOB NO 0-20

Piedmont Development Company

LETTER OF TRANSMITTAL

DATE: April 15, 1987

TO: MILLER & FOLSE
101 Moody Court
P. O. Box 5013
Thousand Oaks, CA 91359

ATTN: Mr. Rene Folse

RE: Agoura Hills Business Park

DESCRIPTION OF ENCLOSURE(S)

Enclosed please find the following material:

(1) Final Soils Report dated March 28, 1987 from Gorian & Associates regarding Rough Grading Compaction Test Report for Off-Site Fill Adjacent to North-east Corner of Tract 40477, City of Agoura Hills, CA., and

(2) Copy of Piedmont Development's April 15, 1987 letter to Hank Van Dyke at the City of Agoura Hills.

REMARKS:

For your information and files, please find the enclosed materials.

BY: Susan Montgomery

SUSAN MONTGOMERY
Project Coordinator

Enclosures

cc: Randy P. McGrane

SENT VIA:
__XXX_ First Class Mail
_____ Messenger
_____ Federal Express
_____ Hand Delivered

1336 5Th Street, Santa Monica, CA 90401, (213) 451-1655

Piedmont Development Company

April 15, 1987

Mr. Hank Van Dyke
CITY OF AGOURA HILLS
30101 Agoura Road, Suite 102
Agoura Hills, CA 91301

RE: Final Soils Report: Off-Site Sewer
Final Soils Report: Off-Site Fill

Dear Mr. Van Dyke:

Enclosed with this letter are two copies each of the Final Soils Reports for the above referenced areas.

These are for your review, comments and files.

As always, if you have any questions, please do not hesitate to contact me.

Sincerely,

RANDY P. McGRANE
Project Director

Enclosures

cc: Behrouz Soroudi
Rene Folse/Miller & Folse

RMG:sem

1336 5Th Street, Santa Monica, CA 90401, (213) 451-1655