
IV. ENVIRONMENTAL IMPACT ANALYSIS

E. CULTURAL RESOURCES

1. HISTORIC RESOURCES

A Cultural Resources Reconnaissance for the proposed project was prepared by SWCA Environmental Consultants in October 2005 to analyze the potential cultural resources impacts associated with the proposed project. A summary of the Cultural Resources Reconnaissance with respect to potential historical resources impacts is set forth below. The Cultural Resources Reconnaissance, which is incorporated herein by this reference, is included in its entirety as Appendix G-1 to this Draft EIR.

ENVIRONMENTAL SETTING

Literature Search

On August 3, 2005, a record search was undertaken by SWCA archaeologist Joan Brown at the South Central Coastal Information Center, California State University, Fullerton to acquire information regarding archaeological sites and investigations within the study area and a one-mile radius of the study area. A check was also made of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, and the listing of California Historical Landmarks. According to the files, 11 cultural resources studies were accomplished within the one-mile radius. None of those studies included the current project area or resulted in the recordation of resources. A bibliography of the studies is included as Appendix B.

Jim Steely, SWCA Architectural Historian performed additional research at the Bolton Hall Museum, Tujunga; the La Crescenta Library, Los Angeles County; and the Japanese National Museum Archives.

RESEARCH METHODOLOGY

In addition to the literature reviews, SWCA Environmental Consultants conducted a cultural resources pedestrian reconnaissance of the property to determine the presence or absence of surficial cultural resources. SWCA Architectural Historian Jim Steely examined the property in September 2005. No historic artifactual material was observed during the archaeological survey. See Appendix G-1 for details of the research methodology.

Historic Overview

The first Europeans to observe what would come to be called southern California were members of the A.D. 1542 expedition of Juan Rodriguez Cabrillo. However, Cabrillo and other early explorers only sailed along the coast and did not travel far inland until several centuries later. The first recorded Euro-American entry into the immediate vicinity of the project area comes from diary accounts of the 1769-70 Portolá Expedition. On their two treks north from San Diego to locate Monterey Bay they passed through Los Angeles County. The first expedition occurred in late July 1769. After crossing the Los Angeles River near the future site of *El Pueblo de Nuestra Señora* (Los Angeles) they came close to the Verdugo

Hills on August 5th when the expedition crossed over Sepulveda Pass into the San Fernando Valley, eleven miles to the south.

Known as *reducción*, the process of converting the local Native American population through baptism and subsequent relocation to the mission grounds, started in this region with the efforts of the Franciscan padres at Mission San Gabriel. This process initially involved the Eastern Gabrielino of the plains as far south as the Santa Ana River and west to the Los Angeles River.

Mission San Fernando del Rey was founded in 1797, twenty-six years after the San Gabriel Mission was established. As this new mission started to grow, its priests pushed into the lands of other tribes located to the north and west, and also converting *Tongva* people along the Los Angeles River and its tributaries. While mission life did give the Indians some skills needed to survive in a rapidly changing world, considerable amounts of traditional cultural knowledge was lost during this era, in large part due to population decimation brought on by introduced diseases for which the people had no immunity.

With the founding of the Pueblo of Los Angeles in December of 1781, civilian settlers came into the region soon followed by retiring military men and their families from the Spanish garrisons. Throughout southern California several of the soldiers were given vast tracts of land, known as ranchos, in order to start farms and ranches. These colonists enlisted the labor of the surrounding Indian population to work their field and cattle herds.

As the decades passed, the ranchos came to be operated as virtually self-contained economic units. Their owners, or rancheros, maintained strict class distinctions, referring to themselves as *dons*. The *pobaldores* (family farmers), new arrivals from Mexico, and the Native Americans (both neophytes from the disintegrating missions and *cimarrones*, or gentile Indians) comprised the new generation of workers, soldiers, artisans, peons, and vaqueros who conducted the labor to maintain the rancheros and their ranchos. The ranchos were successful in producing great quantities of cattle that, after being rendered into hides and tallow, gave the *dons* the means to trade for goods throughout the world.

Following the Mexican revolution in 1812, governmental control of California shifted to Mexico in 1821. Over the proceeding decade the influence of rancheros and other decedents of settlers who now saw themselves as Californios, continued to grow while that of the Franciscan missions waned. In 1834, the missions were formally secularized and in the subsequent years the formerly extensive mission lands were divided into further private land grants, claimed by the growing ranchero class.

Following the Mexican-American War of 1846 and the transfer to United States governmental control, a Land Claims Commission was established to regularize land titles under the new legal system. In addition to the new land title system, a legislature dominated by Americans passed a number of laws that were designed to break up these large land holdings. A combination of new land taxes, extensive fencing regulations, and other “incentives” led many ranchers to sell off large portions of their holdings to the arriving agriculturalists.

During this time of legal and economic upheaval there was a steady stream of American settlers coming into the region from the east. It was not until the 1880s, however, with the arrival of the railroads that a great influx of immigrants entered California. Known as the “Boom of the 80s”, it was in this decade that land development became an intensive new industry.

Project Site Area, 1882-1933

The project area is situated primarily on a small enclave of the Rancho La Cañada that juts into Las Barras Canyon. The northwest corner of the property, in the hills, comes from the Rancho San Rafael. The boundaries of the ranchos, along with that of Rancho Tujunga and open land used by the two missions meets at a corner just one mile due north of the golf course, and so surveyors likely established a *lindero*, or property marker, at that spot in Blanchard Canyon. Otherwise, during the Spanish and Mexican era there would have been little formal boundary between these two tracts and cattle would have roamed free between them, and probably those from the Rancho Tujunga and Mission San Gabriel as well.

The “Boom of the [18]80s” brought Anglo settler Phillip Bengue in 1882 to the southward sloping valley between the Verdugo Hills and the San Gabriel Mountains. “The outstanding recollection [some 60 years later] of the elderly pioneer was a band of Indians camped on the meadow to the south of the dry stream-bed,” wrote a local old timer for the *Montrose Ledger*’s regular column “In the Crescenta-Canada Valley” on November 11, 1947. “The reason for the encampment was a well of fine, cool water, the only source of refreshment for many miles.”

Charleston Dow [who later bought the property from Bengue] was a youngster when he first visited the Valley in 1906 and he well remembers the old stone cabin erected in the canyon by Phil Bengue.... Dow recalls [in 1947] the rutty road that passed the place, running north-westerly past the Fehlhaber ranch, through Horse Thief Pass into the Monte Vista Valley that later became Sunland and Tujunga.... The road through the Verdugo Canyon was a winding affair, passing around large rocks and tall sycamores (Longman 1992).

“The CCC camp,” the old timer continued, “was established on the premises in 1933 and named Las Tunas Canyon CCC by the government. It was at that time that the site found itself in the limelight for the first time.” (Longman 1992).

Civilian Conservation Corps in Rural Los Angeles County, 1933-1942

The Civilian Conservation Corps (CCC) emerged as the first operational program on the New Deal list of federal public works programs to battle the Great Depression, with the CCC's inauguration on April 5, 1933. President Franklin D. Roosevelt and his closest advisors envisioned a “Forest Army” of young men recruited across the nation and assigned to remote camps for conservation work, including clearing, planting, fire fighting, road building, and recreation improvements. The CCC recruited young men aged 17-28 as “enrollees” for six-month commitments and assignments.

One of the early strategies for the CCC resulted in large-scale recruiting of urban youths from eastern cities and shipping them to western public lands for their six-month enrollments. The program proved enormously and immediately popular and its recruiters reached their limit of 300,000 (including 25,000 "local experienced men" with trade skills, and 25,000 older war veterans assigned to their own camps) within a month after its establishment. USDA and Interior selected job sites in cooperation with the Army, who ensured water supplies, transportation networks, and local availability of food supplies. Through Congressional pressure to inject the maximum Depression-relief funds directly into local communities, the Army leased private parcels for CCC camps and contracted with local carpenters to build barrack compounds. The USDA Forest Service, itself founded in 1905 to manage national forests and promulgate conservation practices on all forested lands including private holdings, received and directed the greatest number of CCC companies in the nation.

Sometime in May 1933 the USDA Forest Service identified the need for multiple CCC projects for its Angeles National Forest lands in the foothills and San Gabriel Mountains of northern Los Angeles County. The Army scouted suitable campsites—water, transportation, supplies—and settled on one camp at Castiac northwest of San Fernando, and one camp at Tujunga north of Glendale (NACCCA 2005). For the Tujunga camp, the Army identified spring-fed land at the junction of Las Barras Canyon (now called Tuna Canyon) and Verdugo Wash (now drained by the Blanchard Canyon Channel). Tujunga residents Charleston and Leeta Dow owned the land (Charleston arrived in the Tujunga area in 1906) and leased to the Army for \$30 per month about 60 acres bounded on the south, west, and north by the Verdugo Hills (or Mountains), and on the east by Tujunga Canyon Boulevard. On May 31, 1933, about 200 young men of CCC Company 548 arrived to establish the "La [or Las] Tuna Canyon" camp, thereby extending the name of connecting Tuna Canyon to the west into Las Barras Canyon, and erasing Las Barras from future maps. The Forest Service assigned project number "F-135" to the camp, indicating "Federal" land and the 135th CCC project identified on all Forest Service lands (NACCCA 2005).

To accommodate the new CCC compound, Army contractors cleared a natural plain on the parcel's east side. The compound eventually consisted of seven barracks (including the four largest buildings of 50-man capacity), a mess hall, an administration building, an office building, and the infirmary. Other structures separated from the living and office area included garages and shelters for motorized equipment and a blacksmith shop. The earliest assignments for Company 548 performing Project F-135 included forest-access roads and water retention tanks with 2,000 to 5,000 gallon capacity in Angeles National Forest above Sunland, Tujunga, and La Crescenta.

On April 21, 1934, CCC Company 902 transferred to the La Tuna Canyon camp. The USDA Forest Service project for La Tuna Canyon also changed with the switch to Company 902, now "P-223" indicating "Private" forestland and the 223rd project so assigned (NACCCA 2005).

Camp work projects expanded onto the vast private holdings in the Verdugo Hills, San Gabriel Mountains, and Crescenta Valley to restore hardwood groves and drainages after severe fires and flooding throughout the region in the winter of 1933-1934. The CCC enrollees of Company 902 cleared brush and cut numerous fire trails and culverts, and built at least four steel forest-fire lookout towers on strategic

mountain elevations. They also built a recreation road to the 1931 Big Tujunga Dam with 12 campsites featuring concrete picnic tables and cooking hearths, and another road through La Tuna Canyon to Brand Park in north Glendale. The new Blanchard Canyon Channel for more effective drainage of Big Tujunga Wash was built by other New Deal-assisted labor in 1934 and passed between the CCC compound and Tujunga Canyon Boulevard, redefining the Dow property and the CCC camp's eastern boundary (this channel is now lined with concrete and defines the east boundary of Verdugo Hills Golf Course). The La Tuna Canyon CCC camp was abandoned in the fall of 1941, although the Army's new priorities postponed its decade-long routine of dismantling vacated CCC camps, with no funding or manpower for the job.

Japanese-American Internment During World War II, 1941-1946

The surprise attack by Japan on Pearl Harbor, Hawaiian Territory, on December 7, 1941, set in motion a series of events that forever changed the people of the United States. Not only did it result in the direct engagement of the nation in the military conflict of World War II, but it also caused the country to look inward in an effort to root out perceived domestic espionage, which resulted in the singling out of sub-groups of the nation's population as likely suspects. The notion that the Empire of Japan could launch an attack on the United States without assistance from someone within the U.S. seemed implausible to the reeling country in the days and weeks after the attack. Additional attacks beyond Hawaii on the U.S. mainland seemed quite plausible in the initial confusion. And with the anger and fear that followed in those days and weeks, domestic partners in Japan's plot were sought out.

In a nation where racism at many levels in many regions was still rampant, suspicion naturally fell on the relatively large contingent of Japanese and Japanese-Americans living on the West Coast of America. The overt suspicion began in the halls of the federal government and soon spread to the general population, who adopted the philosophy that since the Japanese in America looked like the enemy, they must be the enemy, or at least be aiding the enemy. The surprise nature of the attack on Pearl Harbor prompted the blanket perception that the Japanese were, as a "race," devious and sneaky, regardless of where they were living. Racially-motivated assaults on Japanese immigrants and their American-born children along the West Coast escalated over the months following the Pearl Harbor attack. Individuals were beaten, shops were torched or otherwise damaged, and the Japanese in America were generally made to feel unwelcome.

For immediate reasons of mutual protection, or perhaps fulfillment of plans already in place before December 7, the next day—Monday, December 8—the Immigration and Natural Service commandeered the La Tuna Canyon CCC camp. According to a report written by the “Officer in Charge” the following May:

C.C.C. Camp 902, 6330 Tujunga Canyon Boulevard, Tujunga, California, was taken over by the U.S. Department of Justice, Immigration and Naturalization Service, for the detention of alien enemies as of December 8, 1941, and for identification purposes, took the name “Tuna Canyon Detention Station, Immigration and Naturalization Service”....

The first alien enemies were received [at least 95 by December 25] as of December 16, 1941, and since that date the Station has operated as a clearing-house for the male Japanese enemy aliens arrested in Southern California. (Scott 1942:1)

Even with early incarcerations, government concerns regarding the potential for sabotage and espionage among the Japanese population along the coast quickly continued to grow. As a result, President Franklin Roosevelt authorized Executive Order 9066 in February 1942, providing for the mandatory evacuation of persons of "enemy nationalities" from specific areas of the United States. Although the brunt of the Executive Order fell on individuals of Japanese ancestry, those of German and Italian descent were also subject to the order. A number of these non-Oriental individuals also found their way to the Tuna Canyon Station as well.

Executive Order 9066 bestowed the authority to military commanders to designate areas "from which any or all persons may be excluded." Under this order, Military Area Nos. 1 and 2 were established throughout most of California and other portions of the West Coast. All Japanese and Americans of Japanese ancestry, as well as all Germans and Italians and their descendants, were to be removed from the exclusion area to areas further inland, where, it was believed, the suspected espionage could not take place, or at least would be far less effective. Announcements of the mandatory evacuation were made a month later via newspaper, posters, and other means along the West Coast noting that persons of Japanese ancestry had until early April to leave the designated exclusion areas and noting that failure to do so would result in forcible relocation of all those who remained. Those individuals and families who had relatives elsewhere in the country or the means to relocate themselves left the area. Those who did not remained in the area and were subject to forced removal.

On March 11, 1942, the Wartime Civilian Control Administration (WCCA) was created and given the task of building temporary holding facilities to hold Japanese and Japanese-Americans that were being forcibly relocated away from the West Coast. Known euphemistically as "Assembly Centers," most of these temporary facilities were located on large fairgrounds and racetracks, where horse stalls were converted to living quarters. In general, these temporary centers held detainees from late March 1942 to mid-October 1942, at which time the detainees were transferred to other facilities farther inland .

On March 18, 1942, by Executive Order 9102, the Department of the Interior created the War Relocation Authority (WRA), a civilian agency, to establish more permanent detention centers outside of the exclusion areas. Internment camps were constructed and existing facilities were refurbished in seven states in the western part of the country. Each of these camps housed thousands of internees, both Japanese immigrants (the Issei) and American citizens of Japanese descent (the Nisei). Native Alaskans from the Aleutians and elsewhere in Alaska, and Japanese-Americans in some areas of South America, were also brought to relocation camps in the mainland United States. Ultimately, roughly 113,000 individuals of Japanese ancestry were detained in these camps.

Tuna Canyon Detention Station

The hastily established Tuna Canyon Detention Station of 1941 near Tujunga in the hills north of Los Angeles (present site of the Verdugo Hills Golf Course) was one of the first temporary facilities. A former CCC camp with residential infrastructure for about 300 men, the Tuna Canyon camp was operated by the INS as part of the DOJ, and purportedly held detainees who had been arrested by the FBI. Other camps of similar operation in California were established at Angel Island, Pomona, San Pedro, Santa Anita, and Sharp Park.

The detainees held in the temporary detention facilities such as the one at Tuna Canyon were subject to hearings or trials run by the DOJ. Following the hearings, the majority of the detainees were temporarily sent to camps run by the U.S. Army. After May 1943, these detainees were returned to the DOJ camps for detention throughout the remainder of the war. It should be noted that available records indicate that "no person of Japanese ancestry living in the United States was ever convicted of any serious act of espionage or sabotage during the war years."

The Tuna Canyon station utilized the complete CCC camp compound, apparently neither adding nor taking away buildings, but fencing the compound within at least part of the original Dow property lease area. "Officer in Charge" M.H. Scott summarized his assets as "seven (7) Barracks, one (1) infirmary, one (1) mess hall, and one (1) administration building and one (1) office building" (Scott 1942:1). Tujunga historian Marlene Hitt summarized several news reports, including the December 18, 1941, *Record-Ledger of the Verdugo Hills* in its description of the camp, headlined "Plan to Intern 250 Japanese Aliens in Tuna Canyon CCC Camp—Bunk Houses Are Enclosed With High Fence."

The location was approximately where Sister Elsie's [a legendary Catholic nun c. 1850] goats once were and where the Verdugo Hills Golf Course is now. During the week preceding that date [December 16, 1941], workmen had prepared the CCC camp to serve as a camp for "alien enemies" taken into custody by the FBI. Men from the Department of Immigration and Naturalization were hurriedly completing the organization of guards.

The buildings at Tuna Canyon camp included four large dormitories or bunk houses, a mess hall, a library, a recreation room, a work shop, a barber shop, a tool house, two shops for repairing cars and trucks, a blacksmith shop, a shower room, and two large garages for the storage of cars. All were enclosed by a 12-foot heavy woven wire fence with strands of barbed wire on top and electric lights placed at intervals to aid armed guards in frustrating any attempt at escape (Hitt 2002:147).

By the time of Scott's May 1942 report, his facility had detained and processed 1,490 males of Japanese ancestry, most subsequently transferred (probably by train from Glendale) in generally 100, 200, and 300-man groups to Fort Missoula, Montana, Fort Lincoln, North Dakota, and Santa Fe, New Mexico. As of May 25, 1942, Scott reported 76 men "still in detention" at the facility, representing a constant rising and falling number incarcerated throughout the war.

Following the pattern of many other detention stations, the Tuna Canyon station also held males of Italian and German descent, some extradited from South American countries, and even some Poles according to local memories. “Italians, Poles, Germans and Japanese were funneled through the camp on Tujunga Canyon and sent out to camps north and east. They lost everything.” remembered a resident to historian Hitt in her publication on local history *After Pearl Harbor* (Hitt n.d.a:57).

Post-World War II Overview, 1946-1960

“After the war,” wrote the *Montrose Ledger*’s historical columnist on November 13, 1947, “Los Angeles County purchased 10½ acres of the Dow property and established a school for boys (no criminals) between the ages of 11 and 15 years. In 1960 the property became the Verdugo Hills Golf Course, and its developers removed these buildings and re-shaped most of the relatively level parts of the property into terraces for their 18-hole golf course. The course’s separate driving range and maintenance area on the property’s eastern edge, however, reveal the former location of the CCC/INS compound. Perhaps some of the oldest oak trees along the driving range edges survive from the 1930s and 1940s when they shaded CCC enrollees and Japanese American detainees.

Also after the war, the southern California region continued to grow and so did the population centers north of downtown Los Angeles. The aging Verdugo Hills agricultural colonies of Tujunga, La Crescenta, La Cañada, and Montrose absorbed many new residents and businesses along their common spine of Foothill Boulevard. After its long-envisioned construction in 1966, La Tuna Canyon Road became the route of local traffic between the foothill communities of the San Gabriel and San Fernando Valleys. In the 1970s the Foothill Freeway (State Highway 210, built to Interstate Highway standards) was designed to link the many “suburban cities and communities that surround Los Angeles to its north and south, and allow access to the San Fernando Valley without having to pass through the congestion of Downtown Los Angeles”. Construction started in 1971 and it soon passed west through Pasadena and La Cañada-Flintridge, ending at the intersection of Honolulu Avenue and La Tuna Canyon Road (the entrance to the Verdugo Hills Golf Course). To relieve traffic from the burgeoning residential developments in both valleys, in 1977 the Foothill Freeway was pushed through the Verdugo Hills, providing another link between two major portions of metropolitan Los Angeles.

The Cultural Landscape in 2005

Conversion of the Dow family’s former CCC/INS property to an 18-hole golf course about 1960 adapted the level eastern plain to a driving range and maintenance area, and created numerous independent terraces on the balance of the property for tees and holes. Construction of La Tuna Canyon Road in 1966 divided the extreme southeast corner of the property and further revised drainage courses, probably adding the stone retaining walls and drain surfaces extant near the c. 1960 Pro Shop. Between 1989 and 2002 a narrow perimeter lane was cut along the foothill perimeter of the golf course, probably as a firebreak to protect the hills.

The present golf course consists of several buildings and their host landscape: parking lot, Pro Shop, and driving range shelter along La Tuna Canyon Road; disconnected parking lot on south side of La Tuna

Canyon Drive; driving range and maintenance compound along Blanchard Canyon Channel; 18-hole course on varying terraces in the central and western parts of the property; low hills to the north and west.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Section 21084.1 of the California Public Resources Code and Section 15064.5 of the CEQA Guidelines, the proposed project would have a significant impact on the environment if it would cause a substantial adverse change in the significance of an historical resource.

Project Impacts

The 1933-1946 events that took place on and around the project site are significant. While cultural fabric from the period of significance is gone, the landforms are remarkably intact and evoke strong memories and associations for local residents and former INS Tuna Canyon Detention Station detainees and their families. Local newspapers and the *Los Angeles Times* have published numerous articles on the CCC and INS camp occupancies (e.g. Kirka 1995a, 1995b; Hitt 2002, n.d.b), particularly after the National Archives and Records Administration declassified records of the detention station in 1998 (Scott 1942:1–5). Oral history projects of the Japanese American National Museum in Los Angeles have recorded memories of detainees at the INS station during World War II (e.g. Kaneko 1984). And personnel at the golf course (in 2005) report occasional visits from Japanese American families, relating stories of their 1940s experiences at this place.

Under the four Criteria for the National Register of Historic Places (A–D) and related Criteria for the California Register of Historical Resources (1–4), the property is best evaluated under Criterion A/1: association with New Deal's Civilian Conservation Corps and national policy for forest conservation on private lands, and with World War II national immigration and security policies and their impacts on Japanese Americans and deportee aliens, and Criterion D/4: potential to yield information on events and actions of the World War II Home Front that were little recorded and covertly performed, through U.S. policy and employees and through detainees held at Tuna Canyon Detention Station. The prime surviving resource at Tuna Canyon from the 1933–1946 period is the general landscape, retaining strong integrity of location and setting, somewhat lesser of feeling and association. However, all associated buildings and improvements have been removed, causing loss of integrity of materials, workmanship, and design, thus rendering the property ineligible for designation under national or California historical registers.

Because of the significance of events associated with the property, the SWCA Evaluator (in 2005) recommends commemoration of the site through designation as a California Historical Landmark (CHL). CHLs in the thematic landmark group "Temporary Detention Camps for Japanese Americans," are already designated as CHL No. 934 at Arcadia and Pomona in Los Angeles County (Office of Historic Preservation 2005). Such an additional designation would not be intended to preserve the present resources at Verdugo Hills Golf Course, but to commemorate associated events through interpretation at

the site, to encourage sensitive development of the overall landscape, and to accommodate visitors to the site through ease of parking, observation, and meditation. As a result of this study, the site was recorded as an historic resource with the State of California Office of Historic Preservation. The site was assigned the Primary Number 19-186980 by the South Central Coastal Information Center.

This project parcel was described in the 1947 *Montrose Ledger's* article as being the site of a former "Indian Camp". Additionally, ethnographic studies indicate that the Verdugo Hills area contained Native American villages. Because of the potential for buried archaeological material, both historic and prehistoric, to be located within the project area, it is recommended that a qualified archaeologist monitor future ground-disturbing activities in native soil. It is possible that in-place native soil is still present in the oak grove remnant on the south side of La Tuna Canyon Road, the flat grass and oak covered lot in the northeast along Tujunga Canyon Road, along the drainages on the hillside, and within the current driving range. In the event that archaeological resources are discovered during construction, the monitor must be empowered to temporarily halt or divert construction in the immediate vicinity of the discovery while it is evaluated for significance. Construction activities could continue in other areas. If the discovery proves to be significant, additional investigation, such as evaluation and data recovery excavation, may be warranted.

MITIGATION MEASURES

E.1-1 Because of the significance of events associated with the property, commemoration of the site through designation as a California Historical Landmark (CHL) in the thematic landmark group "Temporary Detention Camps for Japanese Americans," is recommended. Such an additional designation is not intended to preserve the present resources at Verdugo Hills Golf Course, but to commemorate associated events through interpretation at the site, to encourage sensitive development of the overall landscape, and to accommodate visitors to the site through ease of parking, observation, and meditation.

CUMULATIVE IMPACTS

Implementation of the proposed project in combination with the 28 related projects in the project vicinity would result in the continued development, or redevelopment, in the general project area. Impacts to cultural resources tend to be site-specific and are assessed on a site-by-site basis. While the extent of cultural resources, if any, that occur at the related projects sites is unknown, implementation of the same, or similar mitigation measures as listed above, would also reduce potential impacts at the related project sites to less than significant levels. Consequently, cumulative impacts are expected to be less than significant.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts on historical resources would be mitigated to a less than significant level.

IV. ENVIRONMENTAL IMPACT ANALYSIS
E. CULTURAL RESOURCES
2. ARCHAEOLOGICAL RESOURCES

A Cultural Resources Reconnaissance for the proposed project was prepared by SWCA Environmental Consultants in October 2005 to analyze the potential cultural resources impacts associated with the proposed project. A summary of the Cultural Resources Reconnaissance with respect to potential historical resources impacts is set forth below. The Cultural Resources Reconnaissance, which is incorporated herein by this reference, is included in its entirety as Appendix G-1 to this Draft EIR.

ENVIRONMENTAL SETTING

A cultural resources documentary research and a pedestrian reconnaissance for the proposed Verdugo Hills Golf Course project was conducted by SWCA Environmental Consultants to determine the presence or absence of surficial cultural resources. The fieldwork consisted of a survey of the approximately 60-acre parcel. SWCA archaeologist Stephen O'Neil conducted the reconnaissance on August 31, 2005. See Appendix G-1 for details of the research methodology.

The study was completed under the provisions of the California Environmental Quality Act (CEQA). Public Resources Code SS5024.1, Section 15064.5 of the guidelines, and Sections 21083.2 and 21084.1 of the Statutes of CEQA were also used as the basic guidelines for the cultural resources study. The study area is located on the USGS 7.5-Minute Burbank Quadrangle, in Section 29, Township 2 North Range 13 West (San Bernardino Base and Meridian). It is bordered on the east by Honolulu and Tujunga Canyon Roads, and on the south by La Tuna Canyon Road.

The literature review and archival research for the project was completed during the period July through September 2005. The field examinations were completed in Augusts and September of 2005. The literature review at the South Central Coastal Information Center, located at California State University, Fullerton, revealed that no cultural resources were recorded within a one-mile radius of the current study area. No prehistoric or historic artifactual material was observed during the archaeological survey.

A detailed discussion of the archaeological record and cultural chronology of southern California, and ethnographic overview (including social organization, religion and ceremonial life, local settlements) is presented in the Cultural Resources Report (see Appendix G-1).

Native American Consultation

A letter was faxed to Mr. Rob Wood of the Native American Heritage Commission, on July 27, 2005, requesting that a search be made of their sacred lands file and that a current Native American contact list be sent to SWCA. A letter and the requested contact list were subsequently received by SWCA from Mr. Wood on August 9, 2005. A copy of the correspondence is contained in Appendix G-1. On August 11, 2005, SWCA archaeologist, Joan Brown, sent letters to the 11 individuals and groups on the contact list

describing the project and requesting information and comments. A copy of that letter is also in Appendix G-1. As of the date of the report preparation there had been no response to those letters.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project would have a significant impact on the environment if it would:

- Cause a substantial adverse change in the significance of a unique archaeological resource (as defined in Section 21083.2(g) of the California Public Resources Code); or
- Disturb any human remains, including those interred outside of formal cemeteries.

Project Impacts

This project parcel was described in the 1947 *Montrose Ledger's* article as being the site of a former "Indian Camp". Additionally, ethnographic studies indicate that the Verdugo Hills area contained Native American villages. Because of the potential for buried archaeological material, both historic and prehistoric, to be located within the project area, it is recommended that a qualified archaeologist monitor future ground-disturbing activities in native soil. It is possible that in-place native soil is still present in the oak grove remnant on the south side of La Tuna Canyon Road, the flat grass and oak covered lot in the northeast along Tujunga Canyon Road, along the drainages on the hillside, and within the current driving range. In the event that archaeological resources are discovered during construction, the monitor must be empowered to temporarily halt or divert construction in the immediate vicinity of the discovery while it is evaluated for significance. Construction activities could continue in other areas. If the discovery proves to be significant, additional investigation, such as evaluation and data recovery excavation, may be warranted.

Evaluation of Impacts

Would the project cause a substantial adverse change in the significance of a unique archaeological resource (as defined in Section 21083.2(g) of the California Public Resources Code)?

There are no known archaeological resources on the project site; therefore, the development of the proposed project would not be expected to cause a substantial adverse change in the significance of any unique or non-unique archaeological resource. Notwithstanding the above, there remains the potential for unknown/buried cultural resources to be present on the site which could be adversely affected by the proposed project. This is considered a potentially significant. Therefore, as discussed above, mitigation is required. Mitigation Measures E.2-1, E.2-2 and E.2-3 require that if cultural remains are encountered that work in the area of the remains be temporarily halted while the remains are evaluated and curated. Implementation of these measures would reduce potential impacts to a less-than-significant level.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

There are no known human remains on the project site; therefore, the development of the proposed project would not be expected to disturb any human remains, including those interred outside of formal cemeteries. Notwithstanding the above, there remains the potential for unknown burials to be present on the site which could be adversely affected by the proposed project. This is considered a potentially significant. Therefore, as discussed above, mitigation is required. Mitigation Measure E.2-3 require that if human remains are unearthed during construction, no further disturbance shall occur until the Los Angeles County Coroner has made the necessary findings as to origin and disposition in accordance with California Health and Safety Code Section 7050.5. If the remains are determined to be those of a Native American, the Native American Heritage Commission (NAHC) in Sacramento shall be contacted before the remains are removed in accordance with Section 21083.2 of the California Public Resources Code. Implementation of this measure would reduce potential impacts to a less-than-significant level.

CUMULATIVE IMPACTS

There are no known archaeological resources on the project site. Therefore, the proposed project, in combination with related projects in the vicinity, would not be expected to result in a cumulative impact on archaeological resources.

MITIGATION MEASURES

The proposed project would not adversely affect any known archaeological resources. However, there is the potential that unknown unique archaeological resources could be disturbed during the course of project development. The following measures are recommended to provide direction in the event such resources are discovered:

- E.2-1** If buried cultural materials are exposed during construction, work shall be halted in the immediate vicinity of the find until a qualified archaeologist can assess their significance.
- E.2-2** If the finds are termed significant (i.e., a unique archaeological resource), the archaeologist and a Native American Observer shall be permitted to remove the items in a professional manner for further laboratory evaluation.
- E.2-3** If human remains are unearthed during construction, no further disturbance shall occur until the Los Angeles County Coroner has made the necessary findings as to origin and disposition in accordance with California Health and Safety Code Section 7050.5. If the remains are determined to be those of a Native American, the Native American Heritage Commission (NAHC) in Sacramento shall be contacted before the remains are removed in accordance with Section 21083.2 of the California Public Resources Code.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Because no known unique archaeological resources would be affected by the proposed project, impacts are expected to be less than significant. However, because there is the potential that unknown resources could be encountered during the course of project development, implementation of the recommended mitigation measures would ensure that no significant impacts occur to a unique archaeological resource.

IV. ENVIRONMENTAL IMPACT ANALYSIS

E. CULTURAL RESOURCES

3. PALEONTOLOGICAL RESOURCES

A Paleontological Assessment for the proposed project was prepared by SWCA Environmental Consultants in August 2005 to analyze the potential fossil resources impacts associated with the proposed project. A summary of the Paleontological Assessment with respect to potential fossil resources impacts is set forth below. The Paleontological Assessment, which is incorporated herein by this reference, is included in its entirety as Appendix G-2 to this Draft EIR.

ENVIRONMENTAL SETTING

Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms they represent no longer exist. Thus, once destroyed, a fossil can never be replaced

SWCA Environmental Consultants conducted the paleontological assessment to assess the potential for fossils to occur on the project site. More specifically, the study was conducted to evaluate the paleontological sensitivity of geologic units underlying the project area and to provide recommendations for the mitigation of potential paleontological resources encountered during project-related ground disturbances. The study was conducted in accordance with guidelines set forth by the Society of Vertebrate Paleontology (1995).

The assessment included 1) a paleontological literature review and museum records search 2) a paleontological field survey and 3) preparation of the technical report that includes recommended mitigation measures. The museum records search was performed on July 14, 2005. The paleontological field survey was conducted on August 1, 2005.

Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. There is a direct correlation between fossils and the geologic formation in which they are preserved; therefore, paleontological sensitivity is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific location.

In 1995, the Society of Vertebrate Paleontology published standard guidelines for the mitigation of adverse impacts to paleontological resources in which the assessment of paleontological sensitivity in geologic units is defined and categorized by the following:

- **High Potential** - *Rock units from which vertebrate or significant invertebrate fossils or suites of plant fossils have been recovered and are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include, but are not limited to, sedimentary formations and some volcanic formations which contain significant non-renewable paleontologic resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical, and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.*
- **Low Potential.** *Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils. Such units will be poorly represented by specimens in institutional collections.*
- **Undetermined Potential.** *Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials.”*

Fossils are considered to be scientifically significant if they meet or potentially meet any one or more of the following criteria:

- **Taxonomy** - fossils that are scientifically judged to be important for representing rare or unknown taxa, such as defining a new species.
- **Evolution** – fossils that are scientifically judged to represent important stages or links in evolutionary relationships, or fill gaps or enhance under-represented intervals in the stratigraphic record.
- **Biostratigraphy** – fossils that are scientifically judged to be important for determining or constraining relative geologic (stratigraphic) age, or for use in regional to interregional stratigraphic correlation problems.
- **Paleoecology** – fossils that are scientifically judged to be important for reconstructing ancient organism community structure and interpretation of ancient sedimentary environments.

- **Taphonomy** – fossils that are scientifically judged to be exceptionally well or unusually/unique preserved, or are relatively rare in the stratigraphy.

Resource Assessment Summary

Due to the nature of the fossil record, paleontologists cannot know either the quality or quantity of fossils present in a given geologic unit prior to natural erosion or human-caused exposure. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or the type of depositional environments(s) represented by the unit and its potential to preserve fossils. The following table summarizes the geologic units underlying the Verdugo Hills Golf Course project area, and their paleontological sensitivities.

**Table IV.E-1
Paleontological Resource Sensitivity Summary**

Geologic Unit	Age	Known Fossil Types	Sensitivity
Quaternary alluvial fan deposits	Pleistocene	Vertebrates and Invertebrates	High
Gneissoid quartz diorite	Mesozoic	None	None

Gneissoid Quartz Deposits

The north central region of the project area is mapped as gneissoid quartz diorite. Gneissoid quartz diorite is porphyritic and is composed of feldspar and hornblende phenocrysts within a very fine-grained ground mass. It is late Mesozoic to possibly early Cretaceous in age. There is zero potential for this geologic formation to contain fossils, as it is plutonic in origin and has undergone metamorphism.

Quaternary Alluvial Fan Deposits

The surrounding Verdugo Mountains and San Gabriel Mountains are the primary source of transported sand and gravel comprising the Pleistocene and Holocene age alluvium and alluvial fan deposits that underlie much of the project area. Quaternary alluvial fan deposits are of Pleistocene age and are composed of slightly consolidated gravels and sands.

Quaternary alluvial fan deposits are considered to have high paleontological sensitivity because they are known to contain significant fossil resources. Pleistocene older alluvium of similar lithologies elsewhere in Los Angeles County and southern California has been reported to contain locally abundant and scientifically significant vertebrate, invertebrate and plant fossils. These localities have yielded fossils of extinct Ice-Age mammals, including mammoths, mastodons, ground sloth, dire wolves, short-faced bears,

saber-toothed cats, large and small horses, large and small camels, bison, and other fauna similar to fossil specimens recovered from the Rancho La Brea asphalt deposits in Los Angeles, CA.

Assessment Methodology

Personnel

The paleontological field survey was conducted by Julia Frazier, M.S. Jessica DeBusk requested the museum records search, reviewed published and unpublished literature, and authored this technical report. All work was conducted under the supervision of Cara Corsetti, Qualified Paleontologist and SWCA Paleontology Program Director.

Records Search

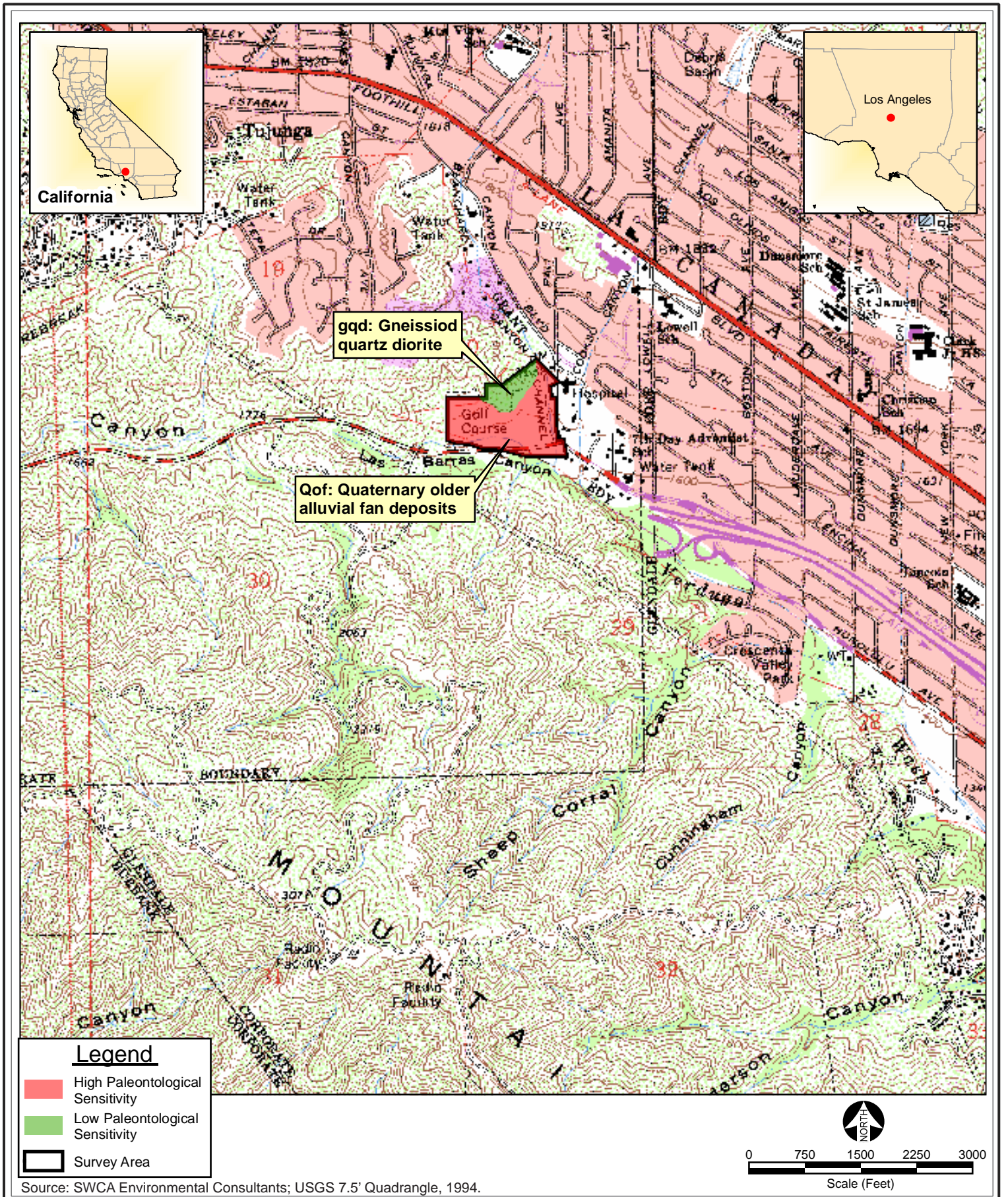
A museum records search and literature review was conducted for the purposes of 1) determining whether there are any documented fossil localities in or near the project area, 2) to identify and assess the underlying geologic units, and 3) to determine the paleontological sensitivity of the geologic formations contained within the project area.

The Vertebrate Paleontology section of the Natural History Museum of Los Angeles County conducted the records search of the project area and the immediate vicinity. Published and unpublished literature and geologic maps were reviewed and mitigation measures specific to this project were developed in accordance to SVP professional standards and guidelines (1995).

The museum records search performed at the LACM revealed one scientifically significant vertebrate fossil locality occurring just west of the project site, though none have been previously recorded within the project boundaries. Locality LACM 1146 produced fossilized remains of mastodon, camel, and horse of Late Pleistocene age in sediments similar to those underlying the Verdugo Hills project.

Field Survey

A comprehensive field survey of the Verdugo Hills project area was conducted in which the surface was examined for fossils and the previously mapped geologic formations were verified. During the field investigation, the underlying geologic units were found to be obscured by dense vegetation. The reconnaissance field survey was conducted to inspect the parcel for 1) surface fossils, 2) exposures of potentially fossil-bearing geologic units, and 3) areas in which fossil-bearing geologic units could be exposed during grading activity. The combined results of the records search, literature review and field survey were used to evaluate the paleontological sensitivity of the geologic formations underlying the Verdugo Hills project area. See Figure IV.E-1 for the resulting paleontological sensitivity map for the project site.



Source: SWCA Environmental Consultants; USGS 7.5' Quadrangle, 1994.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project would have a significant impact on the environment if it would directly or indirectly destroy a unique paleontologic resource or site.

Project Impacts

There are two geologic units underlying the Verdugo Hills Golf Course project area 1) Mesozoic gneissoid quartz diorite and 2) Quaternary alluvial fan deposits. There were no fossils discovered during the field survey; however, Quaternary alluvial fan deposits underlying much of the project area are considered to have a high paleontological sensitivity rating. Ground disturbing activities related to the proposed development of the project site is likely to result in adverse impacts to significant paleontological resources unless proper mitigation measures are implemented. The recommended mitigation measures are: (1) that full-time paleontological monitoring be conducted during all ground disturbances occurring in Quaternary older alluvial fan deposits, as this geologic unit is determined to have high paleontological resource sensitivity; (2) excavations occurring in gneissoid quartz diorite should be monitored on a part-time basis to ensure that surrounding paleontologically sensitive sediments are not impacted; (3) a qualified paleontologist should be retained to develop and implement a paleontological monitoring, mitigation and treatment plan; (4) all fossils and associated data recovered during construction monitoring should be repositied in a public museum or other approved curation facility.

CUMULATIVE IMPACTS

Development of the proposed project in combination with the 28 related projects listed in Table III-1 in Section II.D (Related Projects) would increase the potential for encountering paleontological resources in the area. The potential that one or more of these related projects might encounter paleontological resources during the course of development is determined by such factors as whether paleontological resource bearing strata occur at any given related project site and the type of proposed development activities at that site. However, not all paleontological resources are of equal scientific value. While some have the potential to be scientifically important due to rarity or their ability to provide new information, many fossils are common and have little scientific value. Therefore, the significance of cumulative impacts to paleontological resources is not determined simply by the frequency of the encounter but more to the point by the nature of that encounter. Furthermore, the mere fact of an encounter does not imply an adverse impact. With appropriate mitigation, such an encounter may lead to the recovery of scientifically important fossil remains that would not have been exposed without these activities. Considering that the discovery of paleontological resources is a fairly rare event, the discovery of scientifically important fossils is an even rarer event, and the discovery of rare fossils may lead to their recovery rather than their destruction, it is not anticipated that there would be a significant adverse cumulative impact to paleontological resources.

MITIGATION MEASURES

The following mitigation measures have been developed in accordance to Society of Vertebrate Paleontology (1995) standards and meet the paleontological requirements of the California Environmental Quality Act (CEQA). These mitigation measures have been used throughout California and have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

- E.3-1** All project-related ground disturbance occurring in Quaternary older alluvial fan deposits shall be monitored by a qualified paleontological monitor on a full-time basis, as these geologic units are determined to have a high paleontological sensitivity rating. Ground disturbance occurring in Cretaceous gneissoid quartz diorite shall be monitored on a part-time basis to ensure that surrounding paleontologically sensitive material is not impacted.
- E.3-2** A Qualified Paleontologist shall be retained to supervise construction monitoring and to implement appropriate mitigation measures throughout the course of the project. Paleontological monitoring shall include inspection of exposed rock units during active excavations. The monitor shall have authority to temporarily divert grading away from exposed fossils in order to professionally and efficiently recover the fossil specimens and collect associated data.
- E.3-3** At each fossil locality, field data shall be recorded, stratigraphic sections shall be measured, and appropriate scientific samples collected and submitted for analysis.
- E.3-4** Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and repositied in a designated paleontological curation facility. A likely repository is the Natural History Museum of Los Angeles County.
- E.3-5** The Qualified Paleontologist shall prepare a final monitoring and mitigation report to be filed with the client, the lead agency, and the repository.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Because no known unique paleontological resources would be affected by the proposed project, impacts are expected to be less than significant. However, because there is the potential that unknown resources could be encountered during the course of project development, implementation of the recommended mitigation measures would ensure that no significant impacts occur to a unique paleontological resource.