



CALIFORNIA STATE UNIVERSITY, LONG BEACH

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DEPARTMENT OF ANTHROPOLOGY

Date: March 2, 2010

To: Niki Cutler, Principal Planner  
City of Rolling Hills Estates

Cc: Members of the City Council  
City of Rolling Hills Estates

From: Carl Lipo, Associate Professor  
Department of Anthropology  
California State University Long Beach

Re: Chandler Ranch/ Rolling Hills Country Club Project

I am a professor of Anthropology at California State University Long Beach who specializes in archaeological methods and who has worked in southern California for the past 8 years. Over the past two years, I have become involved in the documentation of a previously unrecorded archaeological deposit (CA-LAN-3863) that is located on the Chandler Preserve (currently managed by the Palos Verdes Land Conservancy). Through my involvement with this project and local residents, I have learned that there is an active proposal to develop the land just north of this side as part of the Chandler Ranch/Rolling Hills Country Club Project.

This project, as you are aware, has been put through the EIR review process. In terms of cultural resources, the EIR report states that recorded sites in the project impact area are no longer extant and that, consequently, only monitoring need be done to check for remains that might be uncovered during the construction process. This recommendation is fairly "standard practice" in California despite the fact that finds discovered during construction typically result in large-scale destruction of the archaeological record as well as costly delays to construction.

General problems with this EIR recommendation aside, the Chandler Ranch/Rolling Hills Country Club project warrants additional consideration. There are a number of key facts upon which I make this claim.

- (1) Previously recorded findings do provide systematic coverage of subsurface deposits.*  
In the center of the planned project area, two archaeological deposits are known to exist: CA-LAn-276 and CA-LAn-277. Both of these "sites" were recorded by local archaeological enthusiast F.H. Racer who described archaeological materials on Palos

Verdes during the 1930s. Racer was not a professional archaeologist nor was he trained in systematic data collection. His records consist of locations where pot-hunters and farmers noted finding artifacts associated with prehistoric Native American occupation. As such, these "sites" reflect places where plowing or erosion exposed cultural remains. His list of sites, however, cannot be taken as a systematic search of the region. Thus, places where sites are *not known* cannot be assumed to be places without cultural deposits since it means that these are places where no one has yet systematically looked. In addition, the boundaries of locations drawn for sites simply indicate areas where farmers/pot-hunters found large, easily recognized artifacts such as stone bowls, mortars and pestles, etc. As I'll note below, this does not mean that places without sites are absent of significant cultural resources: the large new finding on the Chandler Preserve is just such a case where archaeological identification has occurred in the last several years.

These farmer/pot-hunter locations were turned into "site records" in the 1960s by archaeologist D.L. True. True used Racer's 1930s descriptions to create standardized "site records" that formed the official registration database for California. The product of this process is the collection of site records currently held at statewide archaeological information centers such as the one at CSU Fullerton. Once again, this process does not necessarily mean that anyone went out to look for cultural remains. Indeed, these records largely consist of quotes from Racer's original accounts.

Given the history of the existing site records for cultural remains in this area, one cannot rely on described locations and boundaries as being the only places that might contain archaeological remains. In fact, given the Chandler Preserve finding we know that this assumption is in error. Consequently, the EIR statement that declares that no further study or pre-construction investigation is required is in error.

(2) *Modern surface use as a golf course does not allow good evaluation of subsurface deposits*

One of the major problems with archaeological studies is that they often rely on the surface to be an indicator of the buried subsurface deposits. When there is regular ground disturbance due to plowing or from animal burrows relatively shallow buried deposits can often be identified by surface examination. In the case of studies of the Chandler Ranch/Rolling Hills Country Club project, however, surface information is unlikely to reveal information about the subsurface. With thick grassy turf and sand traps, golf courses have a highly stable and managed surface with little turbation to bring buried items to the surface.

Consequently, any evaluation of the Chandler Ranch/Rolling Hills Country Club project area for buried cultural materials must include systematic and wide-scale *subsurface* inspection. This can be accomplished in a cost-effective and efficient way through a program of coring, ground penetrating radar and other kinds of near-surface remote sensing. Given that these studies were not conducted for the project area (except for limited trenching and excavation in the "site" areas), the basis upon which EIR recommendations are made is inadequate.

(3) *Known deposits are described as being 8-15 feet below the surface.*

The site records for CA-LAN-276 describes this deposit as having human remains and many large artifacts. Of course, there is particular concern over the possibility of encountering human remains during the course of construction as this kind of finding would result in a major disturbance that would necessitate work-stoppage, agency review, and many upset citizens.

My main concern about this deposit is that was originally described as being 8-15 feet below the surface. Yet, the work conducted as part of the EIR evaluation was limited to just the top 3-feet (or 1 meter). Thus, these excavations had little to no chances of encountering a deeply buried deposit such as that described in the site record. As a result, the empirical basis upon which the EIR recommendations were made is insufficient, as the lack of findings cannot be relied upon to indicate that no buried materials remain extant in the project area.

(4) *Trenching and subsurface studies were done with consideration for golf course surface but not known archaeological deposits.*

During the archaeological investigations, the lack of surface evidence for a prehistoric deposit, meant that trenches were placed in relatively arbitrary locations.. This decision, however, means that findings from these trenches cannot be specifically used to evaluate the likelihood of buried deposits as recorded by Racer.

Resolving this problem would require one of two approaches. First, analysis of historic maps, historic aerial photos and other kinds of imagery might have provided a better basis for determining the approximate location of CA-LAN-276 and CA-LAN-277. Given that the golf course has resulted in a dramatically modified surface, such historic resource would be a reasonable way to base sub-surface sampling decisions. Second, extensive subsurface evaluation might have been done using coring to create a systematic grid of sampled points over the region considered to be the previous location of the deposit. This strategy would have strengthened the argument (if nothing were found) that the deposit is no longer extant. Based on what was done, however, the conclusions made in the EIR are likely based on flawed inferences from limited observations.

(5) *Modern and appropriate methods not employed during archaeological studies.*

Since the 1970s, archaeology has seen an explosion of techniques that provide information about subsurface deposits without requiring major excavations. These techniques are cost-effective and vastly cheaper than typical unit excavations especially when large areas must be studied. In addition, many have the ability to resolve features deep beneath the surface: a feature not possible with traditional surface inspection or shovel-based excavations. Of these techniques, coring, magnetometer, resistivity, ground penetrating and conductivity might be profitably used to evaluate the area for the potential for buried deposits. The specific choice of tools would have to be decided based on soil composition, expected deposit conditions and depth. However, it is certain that these approaches would provide additional, more extensive and better information than the set of shallow excavations and trenches conducted to generate data for the EIR.

Importantly, the results of such studies could be profitably used to pinpoint areas for further excavation and/or detailed monitoring.

Based on this fact, it appears that the information used to generate the EIR recommendations is inadequate, as the studies did not use modern, up-to-date means for investigating the project area.

- (6) *Existing of large previously unknown deposit just south of project (and potentially overlapping with the project impact area), not taken into consideration in current EIR mitigation measures.*

My involvement in this project comes from working with local residents to record a relatively large prehistoric deposit located just south of (and adjacent to) the Chandler Ranch/Rolling Hills Project area. This deposit, CA-LAN-3863, has a wide variety of artifacts that suggest an occupation that began at least 3,000 B.C. The fact that such a large deposit was only just recently noticed and recorded points to the major problem with assuming that the only existing deposits that might be impacted are the ones recorded in state records. As I mentioned in my point #1, these records tell us only where people have found artifacts, not where cultural material is *not* located.

In addition, the "boundaries" circumscribing the sites are entirely arbitrary as they are made on the basis of surface observations in conditions where vegetation and other kinds of surface litter obscure artifacts. Given the proximity of CA-LAN-276 to CA-LAN-3863, it is entirely possible that artifacts for these two sites are continuous with one another and represent one or more occupations throughout prehistory. If so, impact to the archaeological record needs to be considered as a whole since the northern area may represent some specialized functional use that is linked directly with the one to the south. The destruction of the CA-LAN-276, if still extant, could directly diminish the integrity of CA-LAN-3863.

At the time of investigations that formed the basis for the EIR, CA-LAN-3863 was not currently identified as a prehistoric deposit. If it were, potential impacts to this deposit would have been considered and work would have been done to assess its relation with nearby resources. Now that this deposit is known, however, the EIR should be reconsidered in light of this new information as it is currently based on inadequate information.

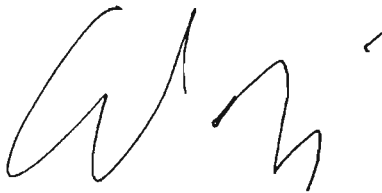
- (7) *Recommendations in the EIR were made on an arbitrarily restricted set of options.*

While it is common practice to recommend monitoring when recorded archaeological deposits are not located during the course of investigations, this recommendation is far from the only one possible. In this particular case, monitoring has relatively limited potential for evaluating the project area as a whole. Individuals can only be at one place at a time and there is no way of knowing where buried deposits might turn up given existing descriptions of the locations of artifacts and extent of modern surface modifications. Given that there is a possibility of human remains being found in deeply buried deposits, this issue is of significant concern.

Rather than simply monitoring construction, a recommendation might have been made for "controlled" grading that would allow monitors (archaeology and Native American) to observe the subsurface as it is exposed in a systematic fashion. This recommendation would have enabled construction to continue but would allow those concerned with protecting resources an opportunity to make sure that as each 10-20cm block of dirt were removed, the surface is examined for cultural materials. By recommending a controlled stripping of the area, it might be possible to minimize the destruction of materials while also moving forward with the project.

Overall, it is my professional judgment that the portions of the EIR that address cultural resources are inadequate and flawed. Thus, I recommend that the details of the cultural resource impact and mitigation plan be revisited. At your convenience, I would be happy to discuss these issues with you and your staff.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Lipo', written in a cursive style.

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