

**ARCHAEOLOGICAL MONITORING PLAN:**

MAGNOLIA PLACE PROJECT  
(APNS 032-311-120 AND 032-311-130)  
106-110 & 120 TILTON AVENUE, SAN MATEO, CALIFORNIA

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January 2009

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## INTRODUCTION

This *Archaeological Monitoring Plan* was prepared in response to the possibility that prehistoric archaeological deposits could be inadvertently damaged during construction of a condominium complex with subterranean garage proposed at 106-110 and 120 Tilton Avenue (the Project Area) in the City of San Mateo. Archaeological monitoring safeguards legally protected cultural resources, prehistoric or historic, that may exist on the identified Project Area, and which may be adversely affected by the proposed Project. The City of San Mateo is the lead agency and therefore the Project is subject to the California Environmental Quality Act (CEQA) and Public Resources Code, Sections 5024.5 and 5097.9. In consideration of CEQA requirements and City of San Mateo policy, the following *Archaeological Monitoring Plan* developed for O’Riordan Construction (hereafter Client) defines terms, stipulates procedures and specifications, and provides time and space to fulfill permit conditions during construction of the Project.

The Project Area is located within an archaeologically sensitive area because CA-SCL-318, a prehistoric shellmound site, is recorded at the intersection of North San Mateo Drive and Tilton Avenue. Holman & Associates completed a pedestrian survey and subsurface hand auger testing within the Project Area. The findings of these investigations were documented in two reports prepared for O’Riordan Construction (Wiberg 2008a, 2008b). Testing identified scant prehistoric archaeological materials (shellfish fragments, carbon and faunal bone) near the surface in several borings. While it appears that the prehistoric materials identified do not represent a California Register eligible cultural resource, archaeological monitoring by a qualified archaeologist is recommended during project construction. This measure will provide a final opportunity to identify important archaeological materials within the Project Area and reduce adverse impacts to a less than significant level if significant cultural resources are encountered.

## CONTEXT OF ARCHAEOLOGICAL SENSITIVITY

The Project Area is situated near the boundary of flat floodplain and San Francisco Bay/estuary environs. San Mateo Creek, which originates in the coastal hills above Crystal Springs Reservoir, flows in an easterly direction approximately 275 meters south of the Project Area. Like other watercourses in the Bay Area, the channel and banks of San Mateo Creek may have migrated historically in response to subsidence and flooding. Consequently, landscape altering processes (particularly alluvial deposition) may obscure the visibility of prehistoric archaeological resources along San Mateo Creek. The archaeological landscape has also been greatly altered by urban development, and many of the archaeological sites recorded at the end of the nineteenth and early twentieth centuries along the banks of San Mateo Creek have been completely destroyed or obscured by construction of roadways, residential neighborhoods and commercial development. Oftentimes the rich shellmidden was hauled off for use in gardens and planter boxes, possibly accounting for the widespread but diffuse distribution of prehistoric cultural materials (mostly shellfish fragments) in yards and gardens near the Project Area. However, despite the scale of urban development in the vicinity of the Project Area, intact subsurface cultural materials associated with some of the ancient shellmounds may be present under the

built environment, and surface indicators may not be reliable for identifying the presence/absence of significant subsurface deposits.

A number of archaeological surveys have been conducted in San Mateo over the last 100 years. Probably the most important study was Nelson's 1908 survey along the margins of San Francisco Bay which documented more than 40 shellmounds in San Mateo (Nelson 1909). Between 1896 and 1936 Jerome Hamilton also recorded and mapped sites in San Mateo County (Hamilton 1936). Hamilton recorded numerous sites, including nine shellmounds along the banks of San Mateo Creek between Highway 101 and El Camino Real. Hamilton's map is contained in a study commissioned by the City of San Mateo in 1983 (Chavez 1983). The Chavez study reviews the archaeological record for San Mateo and discusses cultural resource management and mitigation procedures. This document and recent archaeological studies completed for a variety of nearby "in-fill" development projects are probably the basis for the San Mateo Planning Division designating the Project Area archaeologically sensitive.

Documenting and understanding the local archaeological record is problematical. Frequently notes and records prepared by early archaeologists have been lost or contain incomplete and/or conflicting information (Salzman 1984:54). As discussed by Clark (2008) for a nearby archaeological evaluation, conflicting numbering and mapping of sites by different researchers is confusing, a situation that has been compounded by an evolving development landscape. By the time Hamilton published his findings in 1936 the area adjacent to San Mateo Creek had already been developed and many of the sites leveled. Nonetheless one should not conclude that significant deposits no longer exist in the vicinity of the recorded locations. Excavation of other shellmounds along the Peninsula thought to have been destroyed has revealed significant subsurface deposits. Thus, intact archaeological deposits and features (including Native American mortuary remains) may still reside in subsurface deposits under streets and buildings in the vicinity of the Project Area.

One of the shellmiddens (designated H-11) recorded by Jerome Hamilton around 1930 was mapped at the southeast corner of North San Mateo Drive and Tilton Avenue. As recorded by Hamilton, the site was elevated two feet above the surrounding land surface and measured approximately 50 feet wide, making it one of the smaller shellmounds recorded by Hamilton underlying downtown San Mateo. Hamilton also noted that much of the site had already been destroyed, presumably damaged when San Mateo Drive was graded. In 1990, H-11 was formally recorded (now designated CA-SMA-318) and a site record form was filed with the Northwest Information Center (NWIC) at Sonoma State University (Bocek 1990). Bocek recorded patches of ashy soil containing shellfish fragments (mussel and oyster) on the east side of San Mateo Drive, extending approximately 30 m (100 feet) south and east of the southeast corner of the Tilton Avenue-San Mateo Drive intersection; some archaeological materials were also noted on properties on the north side of Tilton Avenue.

## EXTENDED PHASE I TESTING

The results of a pedestrian survey of the Project Area for prehistoric archaeological resources were not reliable because most of the property was obscured by structures and asphalt driveway/parking lot. Since it was not possible to determine whether intact archaeological deposit associated with CA-SMA-318 was present within the Project Area, or precisely establish the depth and integrity of native soil beneath existing infrastructure, subsurface testing was recommended to obtain more comprehensive information about the presence/absence of CA-SCL-318 deposits within the Project Area.

### Subsurface Testing Methods and Findings

A total of 26 auger units were bored in the front and back yards of the two parcels comprising the Project Area, located within open areas of the property. The borings, which ranged in depth from 12-130 cm (5-51 inches) below surface, revealed a sparse to moderate density prehistoric archaeological deposit (shellmidden) in the northern half of the Property. The prehistoric deposit is a very dark brown to very dark grayish brown silt loam—the modern surface of the floodplain. This soil has been altered by the accumulation of cultural and organic materials and is considered a culturally modified soil, or anthrosol. It contains fragments of marine/estuarine shellfish shells (California Oyster, Macoma Clam and Bay Mussel), pieces of fire-affected rock and occasional pieces of dietary bone. Two small polished bone fragments were recovered that may be portions of bone tools. Many of the auger units containing shellmidden also contained historic material, most commonly pieces of brick and concrete, glass and ceramic shards, and butchered bone. Several borings revealed historic sheet refuse underlying shellmidden deposit, clearly indicating redeposited shellmidden. At most locations the culturally modified soil was underlain by a compact dark brown to dark yellowish brown silt clay C-horizon. It is important to note that submidden deposits (soils below the primary archaeological deposit) frequently contain features—e.g., ovens, trash pits, and Native American mortuary features—that can extend several feet below the base of the midden. Also, prehistoric shellmidden sites in the Bay Area sometimes contain older non-shellmidden components which are more difficult to identify in small hand-auger samples.

In sum, hand-augering identified subsurface prehistoric archaeological deposits within the Project Area. The deposit is a typical shellmidden, containing mostly shellfish fragments with occasional other cultural constituents. The deposit may be part of CA-SMA-318 (Hamilton's site # 11) recorded at the intersection of San Mateo Drive and Tilton Avenue. While the materials are likely associated with CA-SMA-318, it is not clear whether the deposit is redeposited or the highly disturbed remains of a primary *in situ* archaeological site. The shellmidden deposit frequently contained historic items and sometimes was encountered stratigraphically above disturbed soil layers. These findings are suggestive of redeposited material or a significantly disturbed archaeological site.

## **Rationale for Archaeological Monitoring**

Subsurface hand auger testing identified scant, presumably disturbed near-surface archaeological materials in the Project Area. While the archaeological materials do not appear to be California Register eligible, even disturbed archaeological deposit can contain displaced human remains and artifacts. To address the possibility that significant prehistoric archaeological materials may be encountered during project construction, archaeological monitoring has been recommended as a safeguard measure. A qualified professional archaeologist should initially monitor all construction activities that could potentially impact archaeological deposits. However, monitoring should be discontinued as soon the archaeologist is satisfied that construction will not disturb important deposits.

## **MONITORING PLAN**

To address the possibility that unidentified but potentially important prehistoric cultural resources may be encountered during Project development, a program of monitoring by a qualified professional archaeologist is required for construction components that could potentially impact native soil. Monitoring is defined as active observation of earth-moving or other work that could adversely affect cultural resources within the Project Area and includes, as warranted by circumstances: observation, data recording, data recovery, archaeological excavation, photography, laboratory analysis and cataloging, ancillary special studies, and production of a written report that meets current professional archaeological standards. Such monitoring activities are conducted by qualified archaeologists.

Construction that requires monitoring includes demolition activities that could disturb native soil, any earthmoving—e.g, grading or excavation for foundations, footings or the subterranean garage, and trenching for underground utilities. Monitoring will continue until it is determined that excavation has reached the maximum depth at which important remains could be expected to occur. Prior to construction the extent of monitoring required for the proposed Project will be assessed by the archaeologist. To facilitate this assessment specified information must be furnished by the Client: (1) plans, blueprints, conceptual drawings, etc., detailing proposed impacts to the Project Area (grading or excavation prints will normally be sufficient); and (2) the proposed construction schedule or activity to be monitored, with types of excavation and/or earth-moving identified.

Any changes in Project construction (or related off-site facilities) that could potentially impact native soil will require review by the Project archaeologist to determine whether further impact assessment or monitoring is required. If potential exists for archaeological deposits in the revised Project area(s), the Project archaeologist should be provided maps showing the new areas and a description of activities that will take place; a determination will then be made regarding the need and scope of any further work.

If cultural materials are encountered during construction work will be halted in the area until the Project archaeologist evaluates the find. If the Project archaeologist determines the discovery is

important, appropriate mitigation measures will be formulated and implemented. Furthermore, the State Health and Safety Code (Section 7050.5) states that if human remains are exposed during construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to their origin and disposition pursuant to Public Resources Code 5097.98 (*See Below*).

Additionally, if prehistoric or historic-era archaeological resources are encountered anywhere during project construction when no archaeologist is present, work in the area must halt until the Project archaeologist can evaluate the nature and significance of the find and formulate appropriate evaluation and/or mitigation measures.

### **Native American Participation**

Important archaeological materials and prehistoric Native American human remains could be disturbed if archaeological deposits are encountered during Project construction. In accordance with professional archaeological standards, if significant prehistoric archaeological materials are encountered during construction the local Native American community should be provided the opportunity to partake in the treatment and management of those resources through participation in the monitoring program. One of the Native American individuals/organizations listed by the Native American Heritage Commission (NAHC) for San Mateo County should to be retained and compensated to monitor construction, and work with the Project archaeologist to develop appropriate mitigation measures and make recommendations for the treatment of human remains if discovered.

### **Monitoring Procedures**

Archaeological monitoring will involve the close inspection of excavations and other activities within the Project Area. The Site Supervisor, Foreman, or similar onsite authority, must be informed of the Monitor's presence and authority to halt and/or relocate construction work. The Supervisor shall inform all construction personnel of the monitor's role. The monitor will follow excavations and construction as closely as conditions require, making all reasonable efforts for safety and noninterference with construction.

The number and placement of monitors will be determined by the Project archaeologist after consultation with the Client or their designated representative(s). Duration of monitoring shall be determined daily by the Project archaeologist. The Project sponsor will be notified in writing at the completion of monitoring, and if any additional monitoring or other archaeological work is needed.

The monitor(s) will maintain a daily log documenting what construction activities were monitored, descriptions and provenience of any archaeological discoveries or artifacts collected, and other pertinent information. Monitoring will continue until excavation has reached the maximum depth at which important deposits can be expected. Should potentially significant remains be found, the monitor would be empowered to redirect construction activities until the discovery is evaluated. If archaeological deposits or features are encountered the following procedures will be followed:

- All work will stop within 50 feet of the discovery, the find will be clearly flagged and secured, and the monitor will immediately notify his supervisor and the construction contractor's field supervisor of the discovery.
- Following notification, the monitor will make a preliminary assessment of the find to determine whether the find is an isolated artifact or recent deposit. If the find is determined to be isolated or recent, construction will be allowed to resume.
- If the monitor determines the discovery is potentially significant, the monitor will notify their supervisor, who will evaluate the discovery and formulate appropriate mitigation measures if necessary.

### **Discovery of Archaeological Deposits**

CEQA requires that all potentially significant archaeological deposits be evaluated to demonstrate whether the resource is eligible for inclusion on the California Register of Historic Resources (CRHR), even if discovered during construction. If archaeological deposits are encountered they will be evaluated and mitigated simultaneously in the timeliest manner practicable, allowing for recovery of materials and data by standard archaeological procedures. For prehistoric archaeological sites, this data recovery involves the hand-excavated recovery and analysis of a small sample of the deposit. Historic resources are also sampled through hand excavation, though architectural features may require careful mechanical exposure and hand excavation.

### **Discovery of Human Remains**

Certified professional archaeologists are legally and ethically bound to strive for cooperation with local Native Americans regarding prehistoric archaeological materials and particularly human remains and associated artifacts. If possible human remains are encountered within the Project Area, it will be the responsibility of the Project archaeologist to make an initial identification of the remains, and then to initiate the process required by State Law: notification of the County Coroner, and the Native American Heritage Commission (NAHC) if the remains are those of prehistoric Native Americans (under Section 7050.5 of the Health and Safety Code and Sections 5097.94, 5097.98, and 5097.99 of the Public Resources Code). The NAHC will designate a Most Likely Descendant (MLD) with legal responsibility for the remains. The MLD may provide consultation concerning methods of removal, storage, analysis, and eventual reburial of any and all Native American remains and associated artifacts. If the designated MLD(s) does not respond or is not willing to be involved, procedures regarding human remains will be the responsibility of the Project archaeologist and Client.

### **Reporting of Monitoring Results and Curation of Materials**

Archaeologists are responsible to make data available both within the discipline and to the public. Regardless of whether or not significant archaeological resources are discovered during monitoring at the Project Area, a descriptive monitoring closure report must be completed for

submission to the City of San Mateo and the Northwest Information Center (NWIC) at Sonoma State University. The monitoring report shall contain at a minimum: field notes or formal written descriptions (and maps) of the Project Area, cultural resources, monitoring procedures and results, impacts to the resources, data recovery methods, a catalog or reference to availability of a catalog of recovered data, and the curated location of recovered materials and records.

If significant archaeological materials are recovered a comprehensive technical report will be required to describe and interpret findings and data, prepared in accordance with professional standards and guidelines for archaeological documentation. Reporting would include complete cataloging and analysis of artifacts and specimens retrieved during data recovery and preparation of a technical report that documents and interprets important scientific information. Artifacts and specimens recovered would be cataloged and prepared for permanent curation. Certain data may require study by qualified experts, including: radiocarbon dating; obsidian hydration measurement; x-ray fluorescence (geochemical) analysis; artifact analyses; study of dietary remains; and osteological analysis of human remains.

Lastly, all archaeological materials recovered that are not subject to Native American agreements—i.e, human remains and associated materials—will require curation at a recognized archaeological storage facility in California, unless other arrangements are specified in writing. Any human remains and associated artifacts will have to be repatriated in a location that will not be subject to further disturbance. The reburial location is subject to recommendations of the Native American MLD. Following repatriation, a legal description and map showing the reburial location should be prepared by the project engineers and filed with the NAHC, NWIC and the City of San Mateo.

## REFERENCES CITED

Bocek, Barbara

1990 Site Record Form for CA-SMA-318 [Hamilton Mound 11]. On file at the Northwest Information Center of the California Historical Resources Information System, CSU Sonoma, Rohnert Park.

Chavez, David

1983 DRAFT: Citywide Archaeological Investigations, City of San Mateo, California. Report prepared for the Department of Community Development, Planning Division, City of San Mateo. On file at the Northwest Information Center of the California Historical Resources Information System, CSU Sonoma, Rohnert Park.

Clark, Matthew R.

2008 Archaeological Reconnaissance of the Sanchez/Griepenstroh Parcel (APN 032-334-120), 22 North Delaware Street, San Mateo, San Mateo County, California, On file at the Northwest Information Center, California Historical Resources Information System, Sonoma State University.

Hamilton, Jerome

1936 Indian Shellmounds of San Mateo Creek and Vicinity, San Mateo County. Map on file at the San Mateo County Historical Association Archives, Redwood City, California, and the Northwest Information Center of the California Historical Resources Information System, CSU Sonoma, Rohnert Park.

Nelson, Nels C.

1909 Shellmounds of the San Francisco Bay Region. University of California Publications in American Archaeology and Ethnography 7(4):309-356.

Salzman, Sally

1984 Archaeological Research in San Mateo County, California. Unpublished M.A. Thesis, Department of Anthropology, San Francisco State University.

Wiberg, Randy S.

2008a Archaeological Survey Report, Magnolia Place Project (APNs 032-311-120 and 032-311-130), 106-110 & 120 Tilton Avenue, San Mateo, San Mateo County. Prepared for O'Riordan Construction, San Mateo. On file at the Northwest Information Center, California Historical Resources Information System, Sonoma State University.

2008b Extended phase 1 Subsurface Archaeological Testing: Magnolia Place Project, 106-110 & 120 Tilton Avenue, San Mateo, San Mateo County [APNs 032-311-120 AND 032-311-130]. Report prepared for O'Riordan Construction, San Mateo. On file at the Northwest Information Center, California Historical Resources Information System, Sonoma State University.