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SAN LUIS OBISPO

November 16, 2023

Ben Rosenfeld
Pacific Medical Buildings LLC
3394 Carmel Mountain Road, Suite 200
San Diego, CA 92121

Subject: Paleontological Resources Assessment for the Mead Valley Wellness Village Project, Unincorporated Riverside County, California

Dear Mr. Rosenfeld:

LSA conducted a Paleontological Resources Assessment for the Mead Valley Wellness Village Project (project) in unincorporated Riverside County, California. The purpose of the assessment was to determine whether paleontological resources may be present within the project site, determine whether those resources might be impacted by development of the project, and make recommendations to mitigate any potential impacts to paleontological resources.

PROJECT LOCATION AND DESCRIPTION

The project site is located near the city of Perris and is bordered by Water Street to the south, Placentia Avenue to the north, a vacant lot to the west, and Harvill Avenue to the east. The project site is depicted on Figure 1 (Attachment B) on the United States Geological Survey (USGS) *Perris, California* 7.5-minute topographic map in Township 4 South, Range 4 West, Section 13, San Bernardino Baseline and Meridian (USGS, 1979).

The project proposes to construct several buildings that would support a variety of behavioral health services. These facilities include a residential substance use treatment building, a building to provide services such as outpatient care, primary care, and adult mental health urgent care, a supportive housing building, a mental health rehabilitation center and crisis recovery treatment facility, recovery residence, and a children's mental health urgent care/respite facility. The proposed project would also include outdoor areas, driveways, and surface parking spaces. Development of the project will involve new site grading, construction of the new buildings and structures, and installation of new wet and dry utilities, landscaping, signage, and lighting. Based on personal communication[1], excavation associated with this project is not expected to extend deeper than 25 feet.

[1] Rosenfeld, Bob. PMB. Personal communication, February 7, 2023.

REGULATORY ENVIRONMENT

State of California

Under State law, paleontological resources are protected by the California Environmental Quality Act (CEQA) and Public Resources Code (PRC) Section 5097.5.

California Environmental Quality Act (Public Resources Code 21000 et seq.)

CEQA's purpose is to provide a statewide policy of environmental protection. As part of this protection, State and local agencies are required to analyze, disclose, and, when feasible, mitigate the environmental impacts of, or find alternatives to, proposed projects. The *State CEQA Guidelines* (California Code of Regulations [CCR] 15000 et seq.) provide regulations for the implementation of CEQA and include more-specific direction on the process of documenting, analyzing, disclosing, and mitigating the environmental impacts of a project. To assist in this process, Appendix G of the *State CEQA Guidelines* provides a sample checklist form that may be used to identify and explain the degree of impact a project will have on a variety of environmental aspects, including paleontological resources (Section VII[f]). As stated in Section 15002(b)(1-3) of the *State CEQA Guidelines*, CEQA applies to governmental action, including activities that are undertaken by, are financed by, or require approval from a governmental agency.

California Public Resources Code, Section 5097.5

This law protects historic, archaeological, and paleontological resources on public lands within California and establishes criminal and civil penalties for violations. Specifically, Public Resources Code Section 5097.5 states that "No person shall knowingly or willfully excavate upon, remove, destroy, injure, or deface any … paleontological or historical feature, situated on public lands" and that public lands include lands "… under the jurisdiction of the state, or any city, county, district, authority, or public corporation, or any agency thereof."

County of Riverside

The County of Riverside's General Plan (County of Riverside, 2015) sets forth the goals, policies, and programs the County of Riverside (County) uses to manage future growth and land uses. Chapter 5: Multipurpose Open Space Element of the General Plan contains the following policies designed to protect paleontological resources. For reference to Figure OS-8, see the County of Riverside General Plan (County of Riverside, 2015).

> **OS 19.6.** Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8, a paleontological resource impact mitigation program (PRIMP) shall be filed with the County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.
>
> **OS 19.7.** Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the County Geologist shall be notified and a paleontologist

shall be retained by the project proponent. The paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.

OS 19.8. Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.

OS 19.9. Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

METHODS

LSA examined geologic maps of the project site and reviewed relevant geological and paleontological literature to determine which geologic units are present within the project site and whether fossils have been recovered from those or similar geologic units in the region. A fossil locality search request was submitted to the Natural History Museum of Los Angeles County (NHMLAC) to determine the status and extent of previously recorded paleontological resources within and surrounding the project site. On August 10, 2023, LSA Paleontologist Paul Alms, M.Sc., conducted a pedestrian field survey of the project site. This survey involved walking parallel transects over the project site to document and collect any paleontological resources that may have been present and to note the sediments at the surface.

RESULTS

Literature Review

The project site is in the Peninsular Ranges Geomorphic Province, a 900-mile-long, northwest-southeast trending structural block with similarly trending faults that extends from the Transverse Ranges in the north to the tip of Baja California in the south and includes the Los Angeles Basin (California Geological Survey, 2002; Norris and Webb, 1976). The total width of this province is 225 miles, extending from the Colorado Desert in the east, across the continental shelf, to the southern Channel Islands (Santa Barbara, San Nicolas, Santa Catalina, and San Clemente) in the west (Sharp, 1976). This province is characterized by a series of mountain ranges and valleys that trend in a northwest-southeast direction roughly parallel to the San Andreas Fault Zone (Norris and Webb, 1976; Sharp, 1976). It contains extensive pre-Cenozoic (more than 66 million years ago [Ma]) igneous and metamorphic rocks covered by Cenozoic (less than 66 Ma) sedimentary deposits (Norris and Webb, 1976).

Geologic mapping by Morton and Miller (2006) shows that the entire project site is underlain by Very Old Alluvial Fan Deposits. While not mapped by Morton and Miller (2006), the geotechnical report prepared for this project noted undocumented Artificial Fill in the project site from previous development of structures and nearby roads (Geotechnical Professionals, Inc., 2023). These geologic

units and their paleontological sensitivities are described in more detail below. Dates for the geologic time intervals referenced in this report are derived from the *International Chronostratigraphic Chart* published by the International Commission on Stratigraphy (Cohen et al., 2023).

Artificial Fill

Artificial Fill consists of sediments that have been removed from one location and transported to another location by human activity, rather than by natural means. In some instances, the Artificial Fill may consist of re-worked native sediment within a project site, while in others, the material may have been transported many miles, and composition is dependent on the source and purpose. Artificial Fill will sometimes contain modern debris such as asphalt, wood, bricks, concrete, metal, glass, plastic, and even plant material. The geotechnical report prepared for this project identified Artificial Fill from the surface to a depth of 2 to 5 feet across the project site but noted the Artificial Fill was difficult to distinguish from the underlying native sediments (Geotechnical Professionals, Inc., 2023).

While Artificial Fill may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered important for scientific study, and Artificial Fill has no paleontological sensitivity.

Very Old Alluvial Fan Deposits

The Very Old Alluvial Fan Deposits formed during the middle to early Pleistocene (129,000 years ago to 2.58 Ma) (Morton and Miller, 2006) from sediment carried by rivers and streams down the mountains. They were deposited at the mouths of canyons, along the sides of hills flanking river and stream valleys, and within the valleys themselves. These deposits consist of moderately to well consolidated silt, sand, gravel, and conglomerate (Morton and Miller, 2006). They show some soil development and dissection by erosional gullies (Morton and Miller, 2006).

The Very Old Alluvial Fan Deposits formed during an interval that spans three North American Land Mammal Ages (NALMA): the Rancholabrean (11,000 to 240,000 years ago), the Irvingtonian (240,000 years ago to 1.8 Ma), and the Blancan (1.8 to 4.75 Ma) (Bell et al., 2004; Sanders et al., 2009). Fossils are known in similar Rancholabrean, Irvingtonian, and Blancan deposits from excavations for roads, housing developments, and quarries, as well as scientific investigations within the Southern California area (Bell et al., 2004; Miller, 1971; Pajak et al., 1996). These fossils include mammoths, mastodons, horses, camels, saber-toothed cats, coyotes, deer, peccaries, and sloths, as well as smaller animals like rodents, rabbits, birds, reptiles, and fish. As such, the Very Old Alluvial Fan Deposits are considered to have high paleontological sensitivity.

Fossil Locality Search

According to the locality search conducted by the NHMLAC, there are no known fossil localities within the project site. However, the museum has records of several fossil localities near the project from unknown Pleistocene sediments similar in age and depositional environment to those found in the project site. LACM 5168, located at Point Marina Drive in the East Bay section of Canyon Lake less than 10 miles south of the project site, produced remains of horse (*Equus*). LACM CIT570–

CIT572 yielded remains of horse (*Equus*), peccary (*Platygonus*), and camel (*Camelops*) from Lake Elsinore. Fossils of animals from the elephant clade (Proboscidea) and of hoofed mammal (Ungulata) were found at LACM 7261 at Skinner Reservoir in Auld Valley. At the junction of Jackrabbit Trail and Gilman Springs Road in San Jacinto Valley, LACM 4540 produced fossils from the horse family (Equidae). Finally, LACM 1207 produced remains of cloven-hoofed mammal (Bovidae) from a location on a hill east of a sewage disposal plant 1 mile north-northwest of Corona. A copy of the letter describing the locality search results from the NHMLAC is provided in Attachment C.

Field Survey

The rectangular-shaped project site consists of flat, vacant land that has evidence of being tilled. The site has an interior dirt road along the perimeter of the site, with north to south roads down the center of the site and halfway between the center and the western border. Visibility in the majority of the site was extremely poor (less than 1 percent) due to heavy vegetation. Sediment was only visible along the dirt roads within the site, as well as intermittent exposures created by ants or gophers. Visibility in these locations was good (approximately 50 to 100 percent) with sediment consisting of beige to brown, poorly sorted, medium-to-coarse-grained sand with silt and rare pebbles, consistent with the Artificial Fill noted in the geotechnical report (Geotechnical Professionals, Inc., 2023), as well as the Very Old Alluvial Fan Deposits mapped by Morton and Miller (2006). There was one distinct pile of Artificial Fill in the southwest corner consisting mostly of asphalt, aggregate, and trash. No paleontological resources were observed during the survey.

RECOMMENDATIONS

The project site contains Artificial Fill, which has no paleontological sensitivity, and Very Old Alluvial Fan Deposits, which have high paleontological sensitivity. With a maximum depth of 25 feet, excavation for this project is expected to extend into deposits with high paleontological sensitivity. While the project site has no known paleontological resources, in order to mitigate potential impacts to undiscovered unique paleontological resources, LSA recommends the following mitigation measures:

Mitigation Measure PAL-1 A qualified, professional paleontologist who meets the standards set by the Society of Vertebrate Paleontology (SVP) shall be retained to develop and implement a Paleontological Resources Impact Mitigation Program (PRIMP) for this project before commencement of ground-disturbing activities. The PRIMP shall adhere to the performance standards and practices from the SVP Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP, 2010). These procedures shall include the methods that will be used to protect unique paleontological resources in the event of an unanticipated discovery within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of ground disturbance.

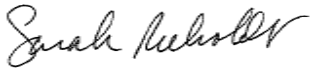
Mitigation Measure PAL-2 Ground-disturbing activities in deposits with high paleontological sensitivity (i.e., Very Old Alluvial Fan Deposits) shall be monitored by a qualified paleontological monitor following the PRIMP. No monitoring is required for excavation in deposits with no paleontological sensitivity (i.e., Artificial Fill). If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction in a 50-foot radius of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and the paleontologist or paleontological monitor shall be contacted to assess the find for scientific significance. If determined to be scientifically significant, the fossil shall be collected from the field. The qualified paleontological monitor shall follow the SVP's 2010 Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources if the resource requires salvage.

Mitigation Measure PAL-3 Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program.

Implementation of these Mitigation Measures will ensure that project impacts to scientifically significant paleontological resources will be mitigated to a level that is less than significant.

Sincerely,

LSA Associates, Inc.



Sarah Rieboldt, Ph.D.
Associate/Principal Paleontologist

Attachments: A – References
B – Figure 1: Regional and Project Location
C – Results of the Fossil Locality Search at the Natural History Museum of Los Angeles County

ATTACHMENT A

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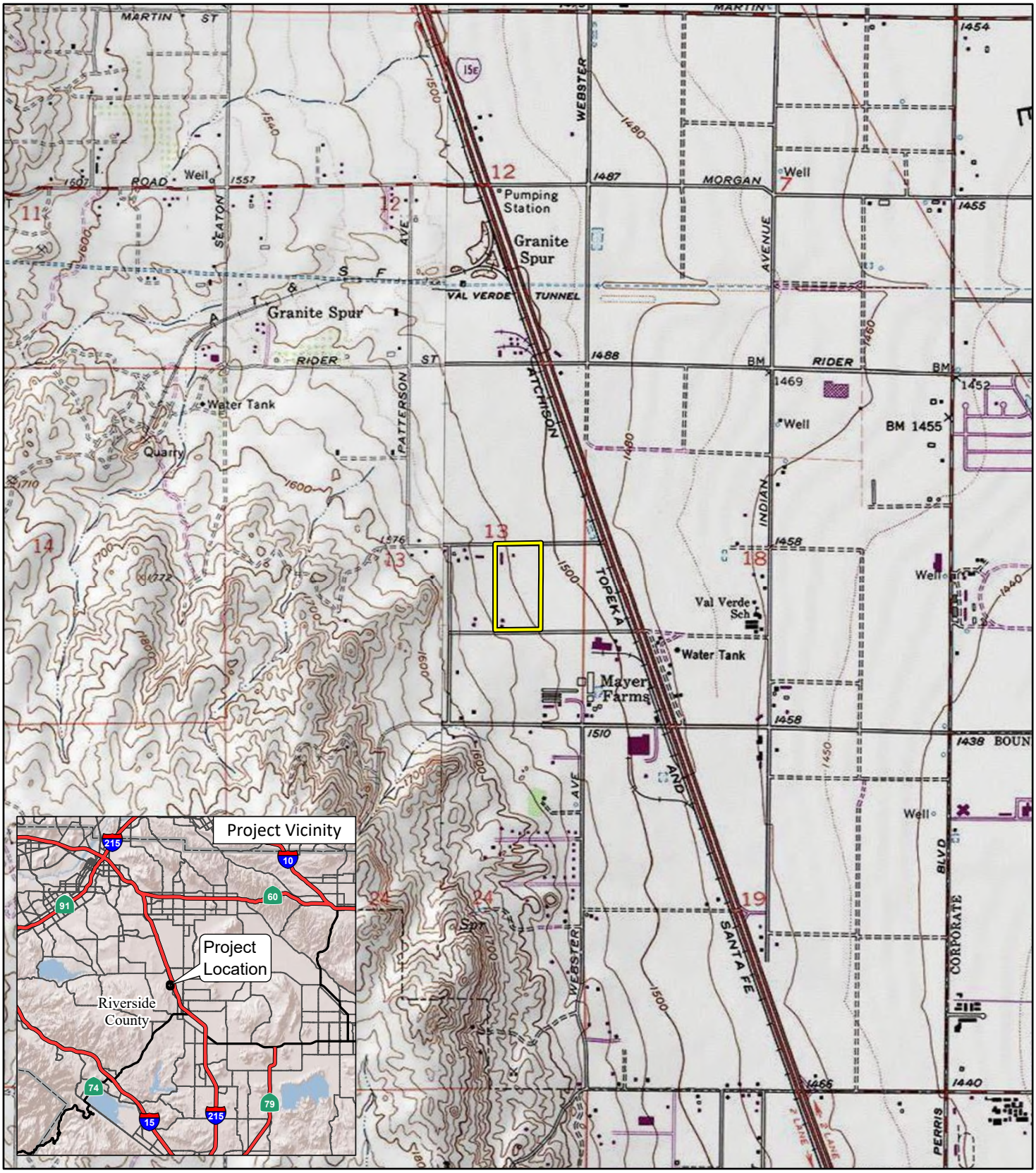
ATTACHMENT B

FIGURE 1: REGIONAL AND PROJECT LOCATION



LSA

FIGURE 1

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FEET

SOURCE: USGS 7.5' Quad - Perris (1979); Steele Peak (1978), CA

Mead Valley Wellness Village Campus Project

Regional and Project Location

J:\PMB2201\GIS\Pro\Riverside County Behavioral Health Project\Riverside County Behavioral Health Project.aprx (11/7/2023)

ATTACHMENT C

RESULTS OF THE FOSSIL LOCALITY SEARCH AT THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

August 13, 2023

LSA

Attn: Jacob Biewer

re: Paleontological resources for the Riverside County Behavioral Health Campus Project (LSA Proj. # PMB2101)

Dear Jacob:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Riverside County Behavioral Health Campus project area as outlined on the portion of the Perris USGS topographic quadrangle map that you sent to me via e-mail on August 3, 2023. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM VP 5168	Point Marina Drive in East Bay Section of Canyon Lake	Unknown formation (Pleistocene; clay)	Horse (*Equus*)	Unknown
LACM VP CIT570 - CIT572	Lake Elsinore	Unknown Formation (Pleistocene)	Horse (*Equus*); peccary (*Platygonus*); camel (*Camelops*)	Unknown
LACM VP 7261	Skinner Reservoir, Auld Valley	Unknown formation (Pleistocene, arenaceous silt)	Elephant clade (Proboscidea); ungulate (Ungulata)	Unknown
LACM VP 4540	junction of Jackrabbit Trail & Gilman Springs Road; San Jacinto Valley	Unnamed Formation (Pleistocene, gravel pit)	Horse Family (Equidae)	Unknown
LACM VP 5464	Approximately 1/2 mile northwest of Rancho California Road adjacent to	Pauba Formation (dark brown sandy-silty clay)	Bison (*Bison*)	Unknown, collected during grading

	(northwest of) future Humber Drive			
LACM VP 1207	Hill on east side of sewage disposal plant; 1 mile N-NW of Corona	Unknown formation (Pleistocene)	Bovidae	Unknown

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,

Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice