

5. Environmental Analysis

5.5 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) evaluates the McKinley Elementary School Campus Master Plan Project's (Proposed Project) potential impacts to paleontological resources in the City of Santa Monica. The analysis in this section is based in part on the following technical report:

- *Cultural and Paleontological Resources Assessment for the McKinley Elementary Campus Master Plan Project*, Cogstone, September 2022
- *Geotechnical Exploration Report, New Classroom Building, McKinley Elementary School, 2401 Santa Monica Boulevard, Santa Monica, Los Angeles County, California*, Leighton Consulting, Inc., November 2021

A complete copy of these technical reports are provided in Appendix F and Appendix H of this DEIR.

The SMMUSD determined that an EIR would be required for this Proposed Project and issued an Initial Study/Notice of Preparation (IS/NOP) on January 13, 2023. A California Environmental Quality Act (CEQA) scoping meeting was conducted on January 31, 2023. No comment letters were received in response to the NOP related to geology and soils including paleontological resources. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.5.1 Environmental Setting

State and local laws, regulations, plans, or guidelines related to paleontological resources that are applicable to the Proposed Project are summarized in this section.

5.5.1.1 REGULATORY BACKGROUND

State

California Public Resources Code

Requirements for paleontological resource management are included in California PRC Division 5, Chapter 1.7, Section 5097.5, which states:

A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

These statutes prohibit the removal, without permission, of any paleontological site or feature from land under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, local agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others. PRC Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor and requires

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reasonable mitigation of adverse impacts to paleontological resources from developments on public (i.e., state, county, city, and district) land.

California Code of Regulations

Title 14, Section 4307: No person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, paleontological features, or features of caves.

Regional

Society for Vertebrate Paleontology Professional Standards

The Society for Vertebrate Paleontology (SVP) has established standard guidelines for acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most California State regulatory agencies accept the SVP standard guidelines as a measure of professional practice.

As defined by the SVP (2010: 11), significant nonrenewable paleontological resources are:

fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

Numerous paleontological studies have developed criteria for the assessment of significance for fossil discoveries. In general, these studies assess fossils as significant if one or more of the following criteria apply:

- 1) The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
- 2) The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
- 3) The fossils provide data regarding the development of biological communities or interaction between palaeobotanical and paleozoological biotas;
- 4) The fossils demonstrate unusual or spectacular circumstances in the history of life; or
- 5) The fossils are in short supply and/or are in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

A geologic unit known to contain significant fossils is considered “sensitive” to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or

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indirectly disturb, or destroy, fossil remains. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP, 1995:23).

Fossils are contained within surficial sediments, or bedrock, and are, therefore, not observable, or detectable, unless exposed by erosion or human activity. In summary, paleontologists cannot know either the quality or quantity of fossils 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 based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if these remains are significant, successful mitigation and salvage efforts may be undertaken in order to prevent adverse impacts to these resources.

Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its “Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources,” the SVP (2010: 1-2) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential:

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcanoclastic formations (e. g., ashes or tephra), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.). Rock units which contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and rock units which may contain new vertebrate deposits, traces, or trackways are also classified as having high potential.
- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e.g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.
- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain

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significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.

- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

For geologic units with high potential, full-time monitoring is generally recommended during any Proposed Project-related ground disturbance (SVP, 2010). For geologic units with low potential, full-time monitoring will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the paleontologic potential of the rock units present within the Proposed Project's area.

Local

City of Santa Monica General Plan

The Land Use and Circulation Element of the Santa Monica General Plan includes the following policies, and actions that relates to paleontological resources:

Goal HP1: Preserve and protect historic resources in Santa Monica through land use decision-making process.

- **Policy HP1.10.** Review proposed development for potential impacts on unique archeological resources, paleontological resources, and incorporate appropriate mitigation measures to protect or document resources.

5.5.1.2 REGIONAL GEOLOGIC SETTING

The Proposed Project's Site is within the Los Angeles Basin, a sedimentary basin which includes the coastal plains of Los Angeles and Orange counties and out to Catalina Island, California. This region is bounded by the Santa Ana Mountains to the east, the Santa Monica Mountains to the north, and the San Joaquin Hills to the south. The marine Los Angeles Basin began to develop in the early Miocene, about 23 million years ago. Through time the basin transitioned to terrestrial deposition by the middle Pleistocene, about 1 million years ago.

The area is part of the coastal section of the northernmost Peninsular Range Geomorphic Province and is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Subparallel faults branching off from the San Andreas Fault to the east create the local mountains and hills. The Peninsular Ranges Geomorphic Province is located in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east (Cogstone 2022).

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5.5.1.3 LOCAL GEOLOGY AND PALEONTOLOGY

According to geologic mapping, the Proposed Project's area is mapped at the surface as middle to late Pleistocene (774,000 to 11, 700 years ago) old alluvial fan deposits and Holocene (less than 11,700 years ago) alluvial fan deposits. Various amounts of modern artificial fill are present on-site from the previous development of the school and were noted during the pedestrian survey (Cogstone 2022). The geologic units are summarized below, based on information contained in Appendix F in oldest to youngest geochronological order.

Old alluvial fan deposits, middle to late Pleistocene

Alluvial fan deposits are typically deposited along the outer slopes of valleys from local mountains via the mouths of canyons. These deposits have been uplifted or otherwise removed from the area of recent sedimentation. Sediments are characterized as slightly to moderately indurated, silts to boulder conglomerates, with slightly to moderately dissected fan surfaces, and moderately to well-developed pedogenic soils (Cogstone 2022).

Alluvial fan deposits, Holocene

Like the old alluvial fan deposits, these Holocene alluvial fan deposits are deposited along the outer slopes of valleys from local mountains. The Holocene alluvial fan deposits consist of unconsolidated silt, sand, and gravel, with some boulders and cobbles (Campbell et al. 2014).

Artificial fill, modern

In California, most artificial fill is less than 100 years old and is associated with construction activities. The Proposed Project's Area has been previously developed and contains various amounts of artificial fill placed during prior development (Leighton Consulting, Inc. 2021).

5.5.1.4 PALEONTOLOGICAL RESOURCES

Paleontological resources are fossils, or recognizable remains or evidence of past life on Earth, including bones, shells, leaves, tracks, burrows, and impressions. Paleontological resources are generally found within sedimentary rock formations. The City of Santa Monica rests on surface deposits of younger and older Quaternary alluvium, derived primarily from the Santa Monica Mountains to the north. The younger (i.e., Holocene, past 11,700 years) alluvial deposits do not contain significant vertebrate fossils, but these deposits are underlain by older (i.e., Pleistocene, 11,700 to 1.6 million years) Quaternary deposits that contain significant vertebrate fossils at varying depths, beginning as shallow as 6 feet beneath the ground surface. The campus is mapped as middle to late Pleistocene older alluvium and late Pleistocene to Holocene young alluvium. A records search and surveys were conducted for the Proposed Project, as described below.

Methods Used to Identify Known Paleontological Resources

To evaluate the Proposed Project's potential effects on significant cultural resources, a paleontological resources assessment of the Proposed Project's Site was completed, which included archival research and a pedestrian

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survey. This assessment included a desktop review of geologic mapping and scientific literature, and a museum records search by the Los Angeles County Natural History Museum (NHMLA). The methodology and results of these studies are summarized below.

Paleontological Record Search

A record search of the campus was obtained from the NHMLA. Additional records from the University of California Museum of Paleontology database, the PaleoBiology Database, and print sources were also reviewed for fossil records near to the Proposed Project (Cogstone 2022). The NHMLA did not report any fossil localities at the Proposed Project's Site; however, as shown in Table 5.5-1, *Fossil Localities*, there are several fossil localities located near the campus. The records search revealed that all of the fossils previously recovered within a 10-mile radius were a minimum of six feet deep in deposits mapped as Pleistocene at the surface.

Table 5.5-1 Fossil Localities

Common Name	Taxon1	Location	Approximate Distance from the Proposed Project's Site (Miles)	Formation Mapped at the Surface	Age	Locality	Depth
American Lion	<i>Felis Atrox</i>	South of Olympic Blvd. on Michigan Ave. east of Cloverfield Blvd., Santa Monica	0.5	Younger alluvial fan (Qya)	Pleistocene	LACM 5462	6 feet
Ground sloth	<i>Paramylon</i>	Near Rose Ave. and Penmar Ave., Santa Monica	2.5	Younger alluvial fan (Qya)	Pleistocene	LACM 7879	>11 feet bgs
Horse	<i>Equus</i>		-				
Bison	<i>Bison sp.</i>	Southeast corner of Airport Blvd. and Manchester Ave.	10	Older alluvium (Qoe)	Pleistocene	LACM 4942	16 feet
Mammoth	<i>Mammuthus sp.</i>		-				
Hare	<i>Lepus</i>		-				
Elephant	<i>Proboscidea</i>	Los Angeles International Airport, Tom Bradley International Terminal	10	Older alluvium (Qoe)	Pleistocene	LACM 3264	25 feet
Mastodon	<i>Mammut sp.</i>	Manchester Ave. and Airport Blvd., Westchester	10	Older alluvial fan (Qoa)	Pleistocene	LACM 1180	13.5 feet
Horse	<i>Equus sp.</i>	Culver City East	8	Younger alluvial fan (Qya)	Pleistocene	unlisted	unknown
Camel	<i>Camelops sp.</i>						
Camel	<i>(Camelops sp.)</i>	Outfall Sewer at Exposition Blvd., Culver City	6	Younger alluvial fan (Qya)	Pleistocene	LAMC 3366	Shallow but unknown
Mastodon	<i>Mammut sp.</i>	Outfall Sewer at Rodeo, Culver City	7	Younger alluvial fan (Qya)	Pleistocene	LAMC 3367	Shallow but unknown

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Table 5.5-1 Fossil Localities

Common Name	Taxon ¹	Location	Approximate Distance from the Proposed Project's Site (Miles)	Formation Mapped at the Surface	Age	Locality	Depth
Horse	<i>Equus sp.</i>	Outfall Sewer Section 15, Sentous Ave. east of Ballona Creek, Culver City	10	Younger alluvial fan (Qya)	Pleistocene	LAMC 3368	Shallow but unknown
Horse	<i>Equidae</i>	Outfall Sewer Section 10, Culver City	10	Younger alluvial fan (Qya)	Pleistocene	LAMC 3369	Shallow but unknown
Saber-toothed cat	<i>Smilodon sp.</i>	Outfall Sewer saber-tooth, Culver City	10	Younger alluvial fan (Qya))	Pleistocene	LAMC 3370	Shallow but unknown
Antique bison	<i>Bison antiquus</i>	Outfall Sewer Trench 19, Culver City	10	Younger alluvial fan (Qya))	Late Pleistocene	LACM 3371	Shallow but unknown
Horse	<i>Equus sp.</i>	Outfall Sewer, Culver City	10	Younger alluvial fan (Qya)	Late Pleistocene	LACM 3372	Shallow but unknown
Camel	<i>Camelops sp.</i>		-				
Deer	<i>Odocoileus sp.</i>		-				
Antique bison	<i>Bison antiquus</i>		-				
Bottae's pocket gopher	<i>Thomomys bottae</i>		-				
Mammoth	<i>Mammuthus sp.</i>	Near Jacob St. and Sentney Ave., west of Ballona Creek Culver City	8	Younger alluvial fan (Qya)	Pleistocene	LACM 4250	Unknown
Horse	<i>Equus sp.</i>	Near Rose Ave. and Penmar Ave., Santa Monica	3	Younger alluvial fan (Qya)	Pleistocene	LACM 7879	> 11 feet

Source: Cogstone 2022

¹ group of one or more populations of an organism

Surveys

A survey of the campus was conducted by a trained paleontologist on May 4, 2022. The pedestrian survey consisted of 10-meter wide transects because the Proposed Project's Site is developed. Ground visibility within the Proposed Project's Site was very poor (less than 2 percent) due to hardscaping and landscaping. All exposed areas with alluvial fans had been hardscaped and landscaped. Digital photographs were taken of the campus, including ground surface visibility and items of interest (see Appendix F) (Cogstone 2022).

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Paleontological Sensitivity

The Potential Fossil Yield Classification (PFYC) system, developed by professional resource managers within the Bureau of Land Management (BLM), has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings. The probability for finding significant fossils in a project area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to a study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria. See Appendix F of this DEIR for the Paleontological Sensitivity Ranking Criteria matrix.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

As described in Table 5.5-2, *Paleontological Sensitivity Survey*, the older alluvium less than five feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits; and older alluvium sediments more than five feet below the modern surface are assigned a moderate potential (PFYC 3). Young alluvium deposits less than 20 feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits; and young alluvium deposits more than 20 feet below the modern surface are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area. Artificial fill has very low potential for fossils (PFYC 1).

Table 5.5-2 Paleontological Sensitivity Survey

Rock Unit	PFYC Rankings				
	5. Very High	4. High	3. Moderate	2. Low	1. Very Low
Older alluvium, middle to late Pleistocene			More than five feet deep	Less than five feet deep	
Young alluvium, late Pleistocene to Holocene			More than 20 feet deep	Less than 20 feet deep	
Artificial fill, modern					X
Source: Cogstone 2022					

5.5.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- G-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other

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substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)

- ii) Strong seismic ground shaking.
 - iii) Seismic-related ground failure, including liquefaction.
 - iv) Landslides.
- G-2 Result in substantial soil erosion or the loss of topsoil.
- G-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- G-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform building Code (1994), creating substantial direct or indirect risks to life or property.
- G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
- G-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The IS/NOP, included as Appendix B of this DEIR, substantiates that impacts associated with the following thresholds would be less than significant; therefore, these impacts will not be further addressed in this DEIR:

- Threshold G-1
- Threshold G-2
- Threshold G-3
- Threshold G-4
- Threshold G-5

These impacts are addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.5.3 Environmental Impacts

5.5.3.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the IS/NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1: Buildout of the Proposed Project would not directly or indirectly destroy a unique paleontological resource. [Threshold G-6]

No known paleontological resources were identified within the Proposed Project's Site based on the paleontological records search and pedestrian reconnaissance survey; however, as shown in Table 5.5-1, there

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are several fossil localities located within five miles of the campus. The records search revealed that all the fossils previously recovered within a 10-mile radius were a minimum of six feet deep in Pleistocene deposits.

As shown in Table 5.5.-2, the campus has low to moderate paleontological sensitivity. Although no paleontological resources were previously found on the campus, construction of the Proposed Project would require excavation and grading; thus, increasing the potential to uncover paleontological resources. Therefore, ground-disturbing activities could impact sediments with the potential to yield significant paleontological resources either at the surface or at depth. If fossils are encountered during Project-related earthwork, then they would be at risk of damage or destruction from construction activities. Ground-disturbing activities for the Proposed Project could therefore result in a **significant impact** to unique paleontological resources. **Mitigation Measure GEO-1**, which would include paleontological monitoring during excavations into native sediments of older alluvium below a depth of five feet and native sediments of young alluvium below a depth of 20 feet, in order to reduce potential impacts to any unknown paleontological resources located within the campus.

5.5.4 Mitigation Measures

Impact 5.5-1

GEO-1

Prior to the commencement of any on-site excavation or grading activities, the District shall retain a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist). The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall be responsible for ensuring the employee training provisions are implemented during implementation of the Proposed Project, and shall report to the Proposed Project's Site in the event potential paleontological resources are encountered.

A Paleontological Resources Management Plan (PRMP) shall be prepared by the Qualified Paleontologist that incorporates all available geologic data for the Project in order to determine the necessary level of effort for monitoring based on the planned rate of excavation and grading activities, the materials being excavated, and the depth of excavation. The PRMP establishes the ground rules for the entire paleontological resource mitigation program. The Qualified Paleontologist will implement the PRMP as the project paleontologist, program supervisor, and principal investigator. The PRMP shall incorporate the results of the paleontological resources assessments, geotechnical investigation, and the final engineering/grading plans for the project including pertinent geological and paleontological literature, geologic maps, and known fossil locality information. The PRMP shall include processes and procedures for paleontological monitoring, fossil salvaging (if needed), reporting, and curation (if needed). The PRMP shall also require the Qualified Paleontologist to prepare a report of the findings of the monitoring efforts after construction is completed. The PRMP shall also require the Qualified Paleontologist to obtain a curatorial arrangement with a qualified repository (e.g., Los Angeles County Natural History Museum) prior to construction if significant paleontological resources are discovered and require curation.

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A paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials, shall work under the direction of the Qualified Paleontologist and shall be on-site during excavations into native sediments of older alluvium below a depth of five feet and native sediments of young alluvium below a depth of 20 feet. Drilling or pile driving activities, regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth or context. The only instance in which such fossils will meet significance criteria is if the fossil is a species new to the region.

In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Fossil remains collected during the monitoring and salvage portion of the program shall be cleaned, repaired, sorted, and catalogued. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections, such as the Los Angeles County Natural History Museum.

A final Paleontological Monitoring and Data Recovery Report shall be completed that outlines the results of the monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

5.5.5 Level of Significance After Mitigation

Potential impacts to unknown paleontological resources that could qualify as unique paleontological resources, would be mitigated to less than significant through the implementation of **Mitigation Measure GEO-1**. Impact to paleontological resources would be **less than significant**.

5.5.6 Cumulative Impacts

Paleontological impacts related to the Proposed Project would be specific to the campus and would not combine to result in cumulative impacts. Compliance with state and local regulations would be required of all developments in the City and within the District. Similarly, all development projects would also require site-specific paleontological analysis that could lead to mitigation requiring monitoring and recovery, identification, and curation of any resources discovered. The Proposed Project has included a mitigation measure that would reduce the potential for project-related activities to contribute to cumulative impacts to paleontological resources. The Proposed Project's contribution to cumulative paleontological resource impacts would be less than cumulatively considerable; therefore, project impacts would be **less than significant**.

5.5.7 References

Cogstone. 2022, August. *Archaeological and Paleontological Resources Assessment for the McKinley Elementary School Campus Master Plan Project, City of Santa Monica, Los Angeles County, California*.

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