

Technical Memorandum

To: Lauren Rhodes and Jan Green Rebstock, Environmental Management Group, Bureau of Engineering, Department of Public Works, City of Los Angeles; Kari Derderian and Clare Lahey, Bureau of Transit Services, Los Angeles Department of Transportation, City of Los Angeles

From: Courtney Richards, M.S., Principal Paleontologist, Paleo Solutions, Inc.
Greg King, Cultural Resource Specialist, Parsons

Date: July 28, 2022

Re: Los Angeles Department of Transportation Electric Bus Maintenance Facility
- Paleontological Resources Analysis

1.0 PURPOSE AND ORGANIZATION OF THIS MEMO

The purpose of this memorandum is to document the results of the paleontological resources analysis as it relates to the potential environmental impacts associated with the construction and operation of the Los Angeles Department of Transportation's (LADOT) Electric Bus Maintenance Facility (EBMF or project). This technical memo is prepared in support of the Initial Study to be prepared in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines and the Environmental Assessment to be prepared in compliance with the National Environmental Policy Act (NEPA).

2.0 PROJECT LOCATION

2.1 Project Location and Setting

The City of Los Angeles (the City) is proposing to construct the EBMF on the 5.5 acre land located at 740 and 800 East 111th Place in South Los Angeles (Assessor's Parcel Numbers [APNs] 6071-022-009 and 6071-022-013). The project site is located on light industrial zoned land and has been recently utilized as a logistics warehouse for solar panels. The site is within Council District 8's jurisdiction in the Southeast Los Angeles Community Planning Area of the City (Figures 2-1 and 2-2). The proposed project will be operated by the Los Angeles Department of Transportation (LADOT).

Figure 2-1 Regional Map

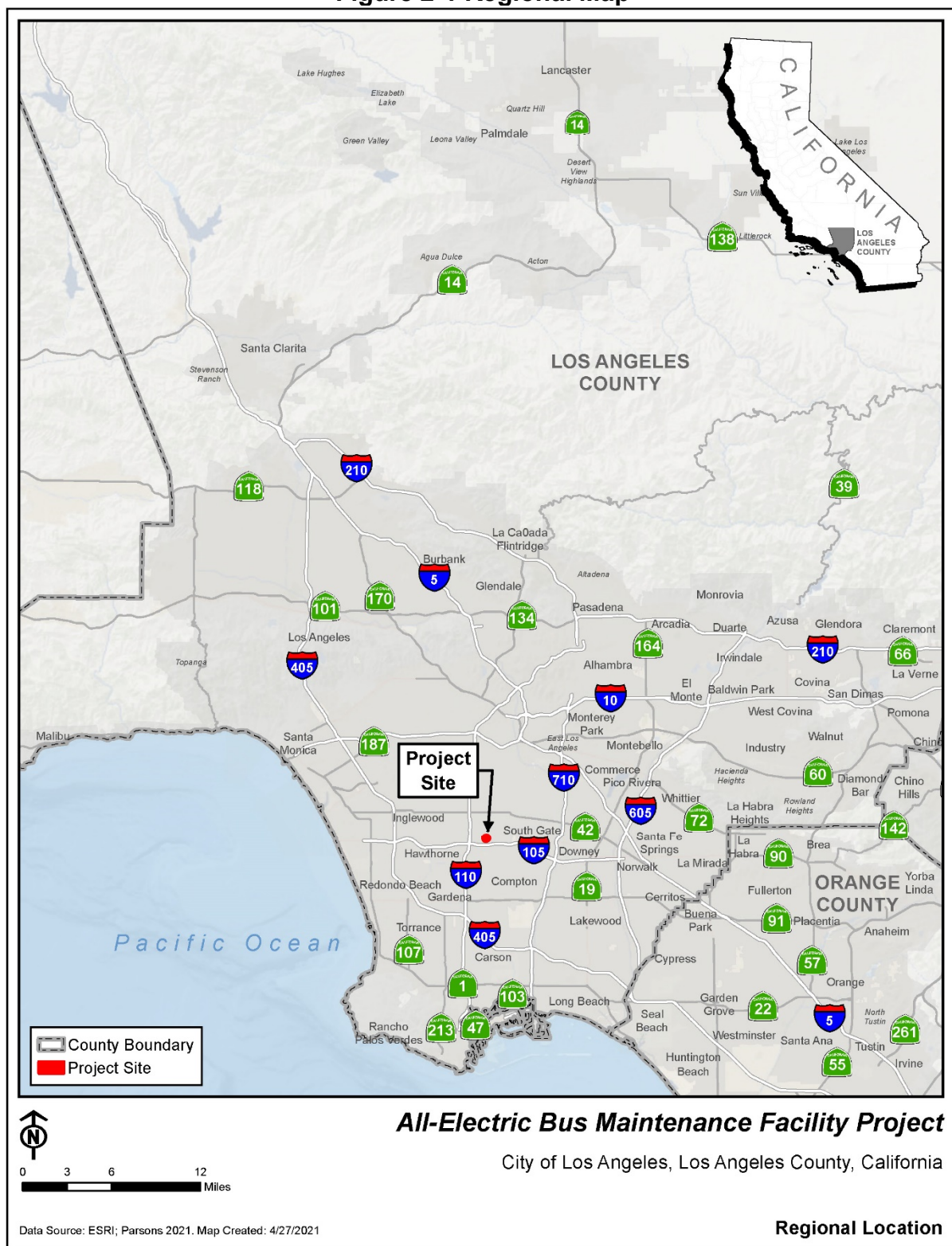
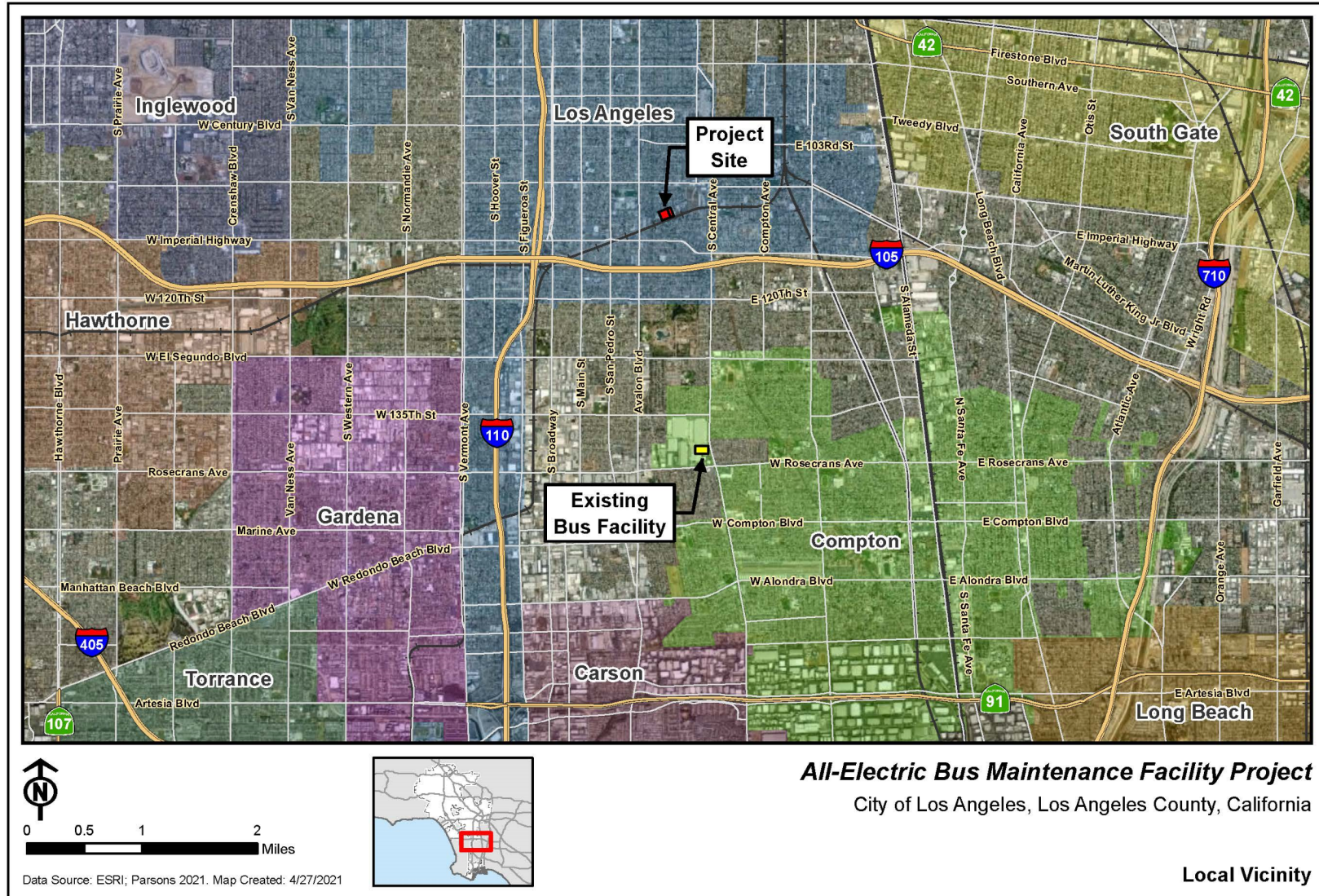


Figure 2-2 Project Location Map



The project site is located between East 111th Place and East Lanzit Avenue, east of South Avalon Boulevard, and has a relatively flat topography. Small clusters of light-industry land uses can be found in the immediate vicinity of the project site, with adjacent land uses surrounding the project site comprised mostly of multi-family and single-family residences but also encompassing land supporting other activities, including commercial and community-oriented social services, such as education and health facilities. The area is largely urbanized and nearly built-out with little remaining vacant land. There are no natural features or major land formations, surface water bodies, or waterways near the project site.

The site is bounded by East 111th Place to the northwest, with single family residences across the street and by the Union Pacific Railroad (UPRR) tracks and Lanzit Avenue to the south, with single family residences beyond the tracks and street. Two buildings exist on the site: a 32,000-square-foot warehouse built in 1957 at the eastern section and a 118,800-square-foot warehouse built in 1956 at the central and western sections. The buildings sit back to back and the eastern and western ends of the site are paved as internal driveways and parking areas. The Animo James B. Taylor Charter Middle School is immediately to the east and the Kedren Health Community Center (which provides primary care, mental health care, and a Headstart/State preschool) is immediately to the west.

The project site is designated as Limited Industrial in the Southeast Los Angeles Community Plan and is zoned M1-1-CPIO (Limited Industrial Zone, Height District 1, Community Plan Implementation Overlay District). This site is in Section 5, Township 3 South, Range 13 West and specifically at the following latitude/longitude: 33 56' 4.65"N 118 15' 35.9"W.

Access to the site is provided by two driveways off East 111th Place, a street that is designated as a local collector with one lane in each direction and allows daytime on-street parking on each side. The UPRR rail line runs parallel to East Lanzit Avenue south of the project site. Imperial Highway and Interstate 105 (I-105) are located approximately three and seven blocks south of the project site, respectively.

Figure 2-3 presents an aerial view of the project site and its general vicinity.

Figure 2-3 Aerial View of Project Site and its Immediate Vicinity

3.0 PROPOSED PROJECT DESCRIPTION

LADOT operates and maintains its existing bus fleet from its South Los Angeles Bus Maintenance Facility, located at 14011 South Central Avenue in Compton. This current facility is not owned by the City and is leased through LADOT's operations services contractor. The existing facility does not have sufficient capacity to accommodate the additional maintenance and storage requirements of the proposed transition to electric buses and expanded charging needs of an all-electric bus fleet.

LADOT proposes to build a bus maintenance facility at the project site to serve its future electric bus fleet. The proposed EBMF is planned as a modern maintenance facility to support a larger and cleaner zero-emissions bus fleet, consisting of 130 all-electric battery bus vehicles for the DASH and Commuter Express services provided by LADOT. The EBMF would be used to store and dispatch electric buses for daily service and would provide repair and maintenance services, parking, charging, and inspection functions. The proposed facility would eventually replace the existing LADOT bus maintenance facility located at 14011 South Central Avenue (approximately 2 miles south of the new facility).

After demolition of the existing buildings on the site, the City proposes to construct several buildings and structures, including a two-story operations building to provide dispatch and administrative functions, a maintenance building with 10 bus maintenance bays, a service building, a bus wash building, Battery-Electric Bus (BEB) parking/charging area, and a

second-story parking deck for up to 360 employee/visitor vehicles, with the canopy above the parking deck topped with a 2,000-kilowatt photovoltaic (PV) system. Electrification equipment, including electrical transformers, switch cabinets, and bus chargers, is also proposed.

The EBMF would provide preventive maintenance inspections, BEB charging, light maintenance and repair, emergency maintenance, interior vehicle cleaning, and exterior vehicle washing. It would also accommodate administrative and operations functions and be used as a report base for bus operators. It would include space for employee parking, conference meeting rooms, operations and maintenance staff offices, dispatcher workstations, employee report and recreation rooms, and areas with lockers, showers, and restrooms for operations and maintenance personnel.

The proposed project facility would accommodate as many as 70 of the 30-foot-long DASH buses and 60 of the 45-foot-long Commuter Express buses, comprising a total of 130 BEBs that would be assigned to the new South Los Angeles EBMF. The facility would include surface parking spaces for 130 BEBs in an area located east of the Maintenance Building. The BEBs running easterly from Avalon Boulevard would enter the site through the west entrance driveway on East 111th Place, check in with the onsite security guard, and proceed into the site to the southern section for service and washing. Otherwise, BEBs requiring repairs would park at the bus bays along the western section. Other BEBs may directly run in a counterclockwise direction and park at the central area for charging. The BEBs would leave the site through the east exit driveway and run westerly on East 111th Place to Avalon Boulevard. Vehicles driven by bus operators, proposed project staff, other employees, and visitors would enter and exit through the center driveway that connects to a ramp leading to the second-level parking deck.

The construction schedule for the proposed project has not been determined. For environmental analysis purposes, it is assumed construction would be completed in 24 months following the final engineering design and bidding process in 2023. Any required remediation would be completed prior to the start of construction activities. Assuming no or limited remediation is necessary, project construction is tentatively scheduled to begin in mid-2024 and would be completed by mid-2026. Construction activities at the proposed project site would include mobilization and staging; building demolition; site clearing, grading and paving; new structure construction, equipment installation, and minor landscaping and finishing.

Approximately 312 employees would be working onsite, and the facility is planned to be open 24 hours per day, 7 days per week. Staff would be onsite on two or three shifts, which would be staggered depending on their work responsibilities.

3.1 Existing Conditions

The project area is located in the northern section of the Peninsular Ranges Geomorphic Province. A geomorphic province is a geographical area of distinct landscape character, with related geophysical features, including relief, landforms, orientations of valleys and mountains, type of vegetation, and other geomorphic attributes (Harden, 2004).

The Peninsular Ranges Geomorphic Province consists of northwest-southeast-trending, fault-bounded discrete blocks, with mountain ranges, broad intervening valleys, and low-lying coast plains (Yerkes et al., 1965; Norris and Webb, 1990). Within California, the province extends approximately 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican border, extending southward approximately 775 miles to the tip of Baja California, and it is bound on the east by the right-slip San Andreas Fault Zone, the Eastern Transverse Ranges, and the Colorado Desert (Norris and Webb, 1990; Hall, 2007). Most of the geomorphic province is located offshore and includes the Santa Catalina and San Clemente Islands (Hall, 2007). Topographically on the mainland, the Peninsular Ranges are steeper on the eastern slopes, where they are truncated by normal faults like the Elsinore or San Jacinto faults, and are more gradual on their western slopes toward the Pacific Ocean, similar to the topography of the Sierra Nevada (Norris and Webb, 1990; Prothero, 2017). Within the province, the highest elevations are found in the eastern-most block, with San Jacinto Peak reaching approximately 10,805 feet in elevation and various summits of the Santa Rosa Mountains averaging 6,000 feet in elevation (Norris and Webb, 1990). Westward toward the coast, elevations are less dramatic.

3.2 Geologic Map and Literature Review

Geologic mapping by Dibblee and Minch (2007) indicates that the project area is entirely underlain by Holocene-age alluvial gravel, sand, and clay (Attachment A). While not mapped within the project area, Pleistocene-age older alluvium is mapped within a half-mile of the project area (Attachment A) and is likely present in the project area at depth. Additionally, aerial photographs and field surveys indicate the site is developed, and artificial fill is also likely present at the surface in previously disturbed portions of the site. Therefore, both Pleistocene-age older alluvium and artificial fill are also included in this analysis.

3.2.1 Artificial Fill (Recent)

Artificial fill comprises recent deposits of previously disturbed sediments emplaced by construction operations and are found in areas where recent construction has taken place. Color is highly variable, and sediments are mottled in appearance. While not mapped in the project area, these sediments are likely to be encountered in previously developed areas. Any fossil resources contained within these sediments will have been removed from their original deposition locations and, therefore, lack significant stratigraphic contextual data. Artificial fill is, therefore, considered to have a low potential for producing significant paleontological resources based on Society of Vertebrate Paleontology (SVP) guidelines (2010).

3.2.2 Younger Surficial Deposits (Holocene)

Younger surficial sediments in the project area are Holocene in age (approximately less than 11,700 years old) and consist of alluvial gravel, sand, and clay primarily derived from the Santa Monica Mountains (Dibblee and Minch, 2007). Younger sedimentary deposits

are generally less topographically developed and have less dissected surfaces, compared to older sedimentary units. Younger surficial sediments, particularly those that are less than 5,000 years old, are typically too young to contain fossilized material, but they may increase in age with depth and may also overlie other sensitive older deposits at variable depth. Therefore, late Holocene-age younger surficial sediments have a low potential for producing significant paleontological resources and middle and early Holocene-age sediments at depth have a high potential per SVP guidelines (2010).

3.2.3 Older Surficial Sediments (Pleistocene)

Older surficial sediments in the project region are Pleistocene in age and include older alluvium. The older alluvium consists of gray to light brown pebble-gravel, sand, and silt clay (Dibblee and Minch, 2007). Compared to younger Holocene-age surficial deposits, Pleistocene-age older surficial deposits typically have moderately- to well-developed soil horizons, are more topographically developed, and have moderately to well dissected surfaces, except where obscured by erosion.

Specimens recovered from Pleistocene-age sediments in Los Angeles County include frog (cf. *Rana* sp.), tortoise (*Emys marmorata*), scaled reptile (Squamata), snake (Serpentes), pheasant (*Parapavo californicus*), quail (*Callipepla*), shearwater (*Ardenna grisea*), western grebe (*Aechmophorus occidentalis*), loon (*Gavia* sp.), duck (Anatidae), diving goose (*Chendytes lawi*), ray-finned fish (Teleostei), eagle ray (*Myliobatis*), shark (Chondrichthyes), white shark (*Carcharodon* sp.), perch (*Rhacochilus vacca*), speckled sanddab (*Citharichthys* sp.), white croaker (*Genyonemus lineatus*, *Merluccius productus*, *Merluccius productus*), rodent (*Neotoma*, *Thomomys*, *Dipodomys* cf. *agilis*, *Microtus californicus*, *Peromyscus* sp., *Notiosorex crawfordi*), rabbit (*Lepus californicus*, *Sylvilagus*), horse (*Equus* sp., *Equus simplicidens*), tapir (*Tapirus haysii*, *Tapirus* cf. *californicus*), cat (Felinae), black bear (*Ursus americanus*), bison (*Bison*), mammoth (*Mammuthus primigenius*, *Mammuthus* cf. *columbi*), mastodon (*Mammut pacificus*), ground sloth (Megalonychidae, *Megalonyx* sp., *Paramylodon harlani*), camel (*Camelops* sp., *Camelops* cf. *hesternus*, *Hemiauchenia* sp.), deer (*Odocoileus* cf. *hemionus*), dire wolf (*Canis* cf. *dirus*), coyote (*Canis* cf. *latrans*), lynx (*Lynx rufus*), saber-toothed cat (*Smilodon* sp.), whale (Cetacea), sea otter (*Enhydra* sp.), seal (Otariidae, Phocidae), sea lion (*Phoca* cf. *vitulina*, *Zalophus* sp.), and dolphin (*Lissodelphis*) (Paleobiology Database [PBDB], 2021; University of California Museum of Paleontology [UCMP], 2021). Pleistocene-age surficial sediments are considered to have a high potential for producing significant paleontological resources based on SVP guidelines (2010).

3.3 Paleontological Records Search Results

According to the Natural History Museum of Los Angeles County (NHMLA), there are no previously recorded fossil localities within the project area. However, there are several localities nearby from Pleistocene-age sediments similar to the Pleistocene-age older alluvium that is likely present at depth within the project area (Bell, 2021; Attachment B).

Locality LACM IP 2690 located northeast of the project area on 103rd Street, produced fossil invertebrates such as snails (*Stagnicola*, *Callianax*, *Euspira*, *Megastrea*, *Lirobittium*,

Neobernaya, *Turritella*), bivalves (*Tivela*, *Penitella*, *Cyclocardia*, *Tellina*, *Lucinisca*, *Epilucina*, *Nutricola*), barnacle (*Megabalanus*), scaphopod (*Dentalium*), and sand dollar (*Dendraster*) from an unknown depth. Locality LACM VP 1225 located northwest of the project area on West 99th Street, produced a fossil mammoth (*Mammuthus*) from a depth of 15 to 20 feet. Locality LACM VP 3365 located southwest of the project area in the unincorporated community of Athens produced a fossil mammoth (*Mammuthus*) from an unknown depth. Locality LACM VP 3266 located southwest of the project area near the intersection of West Athens Boulevard and Menlo Avenue produced uncatalogued vertebrate fossils from a depth of 15 to 18 feet. Locality LACM IP 7 located southeast of the project area in Compton produced oysters and pecten (species not reported) from a depth of 735 feet during well excavations. Locality LACM VP 3382 located southeast of the project area near the intersection of Artesia Boulevard and Williams Avenue in Compton produced a fossil mammoth (*Mammuthus*) from a depth of 5 feet (Bell, 2021; Attachment B).

4.0 REGULATORY SETTING

4.1 Federal

4.1.1 National Environmental Policy Act (NEPA)

The National Environmental Policy Act of 1969, [NEPA] as amended (Public Law [Pub. L.] 91-190, 42 United States Code [USC] 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258 § 4(b), Sept. 13, 1982) recognizes the continuing responsibility of the Federal Government to "preserve important historic, cultural, and natural aspects of our national heritage . . ." (Sec. 101 [42 USC § 4321]) (#382). With the passage of the Paleontological Resources Preservation Act (PRPA) (2009), paleontological resources are considered to be a significant resource and it is therefore now standard practice to include paleontological resources in NEPA studies in all instances where there is a possible impact.

4.2 State

4.2.1 California Environmental Quality Act (CEQA)

The procedures, types of activities, persons, and public agencies required to comply with CEQA are defined in the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations) and further amended January 4, 2013 and December 28, 2018. One of the questions listed in the CEQA Environmental Checklist is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (State CEQA Guidelines Appendix G, Section VII, Part F).

4.2.2 California Public Resources Code

California Public Resources Code (Chapter 1.7), Sections 5097 and 30244, include state level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts to paleontological resources resulting from development on state lands, and define the excavation, destruction, or removal of paleontological “sites” or “features” from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097, “state lands” refers to lands owned by, or under the jurisdiction of, the state or any state agency. “Public lands” is defined as lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

4.3 Local

4.3.1 City of Los Angeles General Plan Conservation Element

Section 3 of the Conservation Element of the General Plan (City of Los Angeles, 2001) requires that measures be taken to protect the City's archaeological and paleontological resources for historical, cultural, research and/or educational purposes. One policy and one program support this requirement. This policy requires that the City continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities. The program requires permit processing, monitoring, and enforcement and periodic revision of regulations and procedures by the Department of Building and Safety, Department of City Planning and Cultural Affairs and/or the lead agency responsible for project implementation.

5.0 IMPACT ANALYSIS

5.1 CEQA Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines and the City's Thresholds, Project impacts are analyzed for significance as follows:

- a) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

References: CEQA Statute and Guidelines Appendix G, Section VII; L.A. CEQA Thresholds Guide (2006) (Section D.1)

Comment: A significant impact could occur if grading or excavation activities associated with the project were to disturb unique paleontological resources or unique geologic features that presently exist within the project site.

Less than significant impact with mitigation incorporated. The project site is located within an area mapped as late Holocene-age deposits that have been subject to disturbances from development activities and has low

paleontological sensitivity. However, the paleontological sensitivity within the project area increases with depth as the sediments transition to middle to early Holocene- and Pleistocene-age deposits. The proposed depths of excavation are 8 feet below ground surface for utility relocations and 15 feet below ground surface for building foundations, and fossils have been reported in the project vicinity at depths as shallow as 5 feet. Therefore, ground-disturbing activities during Project construction could impact subsurface paleontological resources if native (i.e., previously undisturbed) sediments belonging to geologic units with high paleontological potential are encountered during construction. Disturbance of subsurface paleontological resources would be less than significant with the implementation of mitigation measures MM-PAL-1 through MM-PAL-4. Impacts on paleontological resources would be less than significant after mitigation.

5.2 NEPA Analysis

The determination of impacts under NEPA is based on the context and intensity of the change that would be generated by the project alternatives.

Context—For this analysis, the context would be the likelihood that fossils would be encountered during ground disturbance, in combination with the probability that the affected fossils are scientifically important.

Intensity—Paleontological resources are nonrenewable and any loss because of project impacts could result in the permanent unavailability of the fossil specimen and associated data for scientific research and education, as well as the loss of the information about the Earth's history that the resource could have potentially provided.

5.2.1 No Build Alternative

Under the No Build Alternative, the Project would not be constructed and there would be no ground disturbance within high paleontological potential sediments. Therefore, the No Build Alternative would not result in adverse effects on paleontological resources.

5.2.2 Build Alternative

Construction of the Build Alternative could affect geologic units identified as having high paleontological potential and scientifically important paleontological resources contained within. Therefore, excavations that encounter sensitive geologic units underlying areas mapped as Holocene-age deposits have the potential to result in adverse effects on paleontological resources. Implementation of MM-PAL-1 through MM-PAL-4 would avoid significant adverse impacts to paleontological resources.

6.0 RECOMMENDED MEASURES

Based on the analysis above, mitigation measures to reduce the significant adverse impacts of the project include:

- MM-PAL-1** A qualified paleontological monitor (i.e., one who meets the qualification standards established by the Society of Vertebrate Paleontology [SVP, 2010]) shall be retained prior to construction and shall remain on call during all ground disturbing activities. Worker Environmental Awareness Program (WEAP) training shall be provided to all construction and managerial personnel involved with the project's ground disturbing activities. The WEAP training shall provide an overview of paleontological resources and outline the regulatory requirements for their protection. The WEAP shall also cover the proper procedures to be followed in the event of a fossil discovery during construction. The WEAP training may be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.
- MM-PAL-2** The qualified paleontological monitor will monitor project-related excavation activities in high paleontological deposits, if encountered in the subsurface. Project-related excavation activities greater than 5 feet depth shall be monitored on a part-time (i.e., spot-checking) basis to check for the presence of underlying paleontologically sensitive sediments. If paleontologically sensitive deposits are observed, full-time monitoring will be implemented in those areas. Excavations determined to be entirely within previously disturbed sediments or late Holocene-age deposits do not require paleontological monitoring or continued spot-checking.
- MM-PAL-3** In the unanticipated event that fossil resources are discovered, they shall be protected from further excavation, destruction, or removal. Work will be halted within 25 feet of the discovery until they can be evaluated by a qualified paleontologist (i.e., one who meets the SVP professional standards for Principal Investigator or Project Paleontologist). If determined to be scientifically important, the paleontological resources will be recovered, prepared to the point of curation, identified, and curated at the Natural History Museum of Los Angeles County or another accredited repository along with associated field data.
- MM-PAL-4** After ground-disturbing activities are completed, a memo report documenting the methods and results of paleontological monitoring will be prepared by the qualified paleontologist and submitted to the City of Los Angeles.

Impacts would be less than significant after mitigation.

7.0 REFERENCES

Bell, A. 2021. Paleontological Resources for the LADOT All-Electric Bus Maintenance Facility Project. Records search letter prepared by the Natural History Museum of Los Angeles County, dated July 4, 2021.

City of Los Angeles. 2001. City of Los Angeles General Plan.

City of Los Angeles. 2006. L.A. CEQA Thresholds Guide: Your Resource for Preparing CEQA Analyses in Los Angeles.

County of Los Angeles. 2015. Los Angeles County General Plan 2035.

Dibblee, T.W., Jr, and Minch, J.A. 2007. Geologic map of the Venice and Inglewood Quadrangles, Los Angeles County, California: Dibblee Foundation Map DF-322, scale 1:24,000.

Hall, C.A.H., Jr. 2007. Introduction to the Geology of Southern California and Its Native Plants: University of California Press, Berkeley.

Harden, D.R. 2004. California Geology, Second Edition, Pearson Prentice Hall, Upper Saddle River, New Jersey, 552 p.

Norris, R.M., and Webb, R.W. 1990. Geology of California, 2nd Edition, John Wiley & Sons, Inc., N.Y., 571 p.

Paleobiology Database (PBDB). 2021. Database Search. Available online here: <https://paleobiodb.org/>

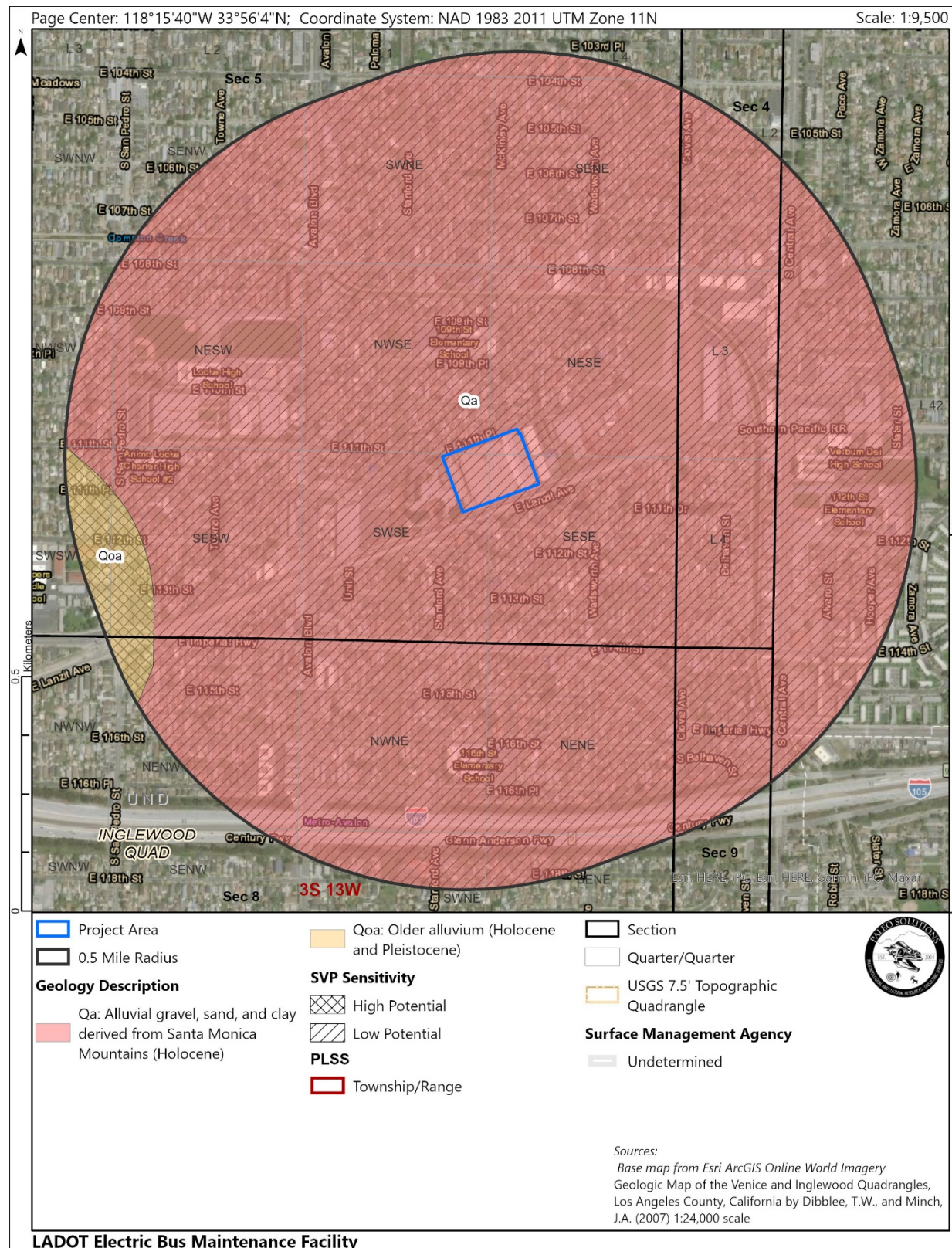
Prothero, D.R. 2017. California's Amazing Geology: CRC Press Taylor & Francis Group, New York, 480 p.

Society of Vertebrate Paleontologists (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources.

University of California Museum of Paleontology (UCMP). 2021. Online search of the University of California Museum of Paleontology database.

Yerkes, R.F., McCulloh, T.H., Schoellhamer, J.E., and Vedder, J.G. 1965. Geology of the Los Angeles Basin, California: An Introduction: Professional Paper.

Attachment A – Geology and Paleontology Sensitivity Map



Attachment B – Paleontological Records Search Results



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

July 4, 2021

Paleo Solutions, Inc.
Attn: Elisa Barrios

re: Paleontological resources for the LADOT All-Electric Bus Maintenance Facility Project

Dear Elisa:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the LADOT All-Electric Bus Maintenance Facility project area as outlined on the portion of the Inglewood USGS topographic quadrangle map that you sent to me via e-mail on June 30, 2021. 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.

Locality Number	Location	Formation	Taxa	Depth
LACM IP 2690	South of railroad tracks; crossing 103 St., Watts	Unknown formation (Pleistocene)	Acorn barnacle (<i>Megabalanus</i>), scaphopod (<i>Dentalium</i>), (<i>Stagnicola</i>), pond snails (<i>Callianax</i>), moon snail (<i>Euspira</i>), turban snail (<i>Megastrea</i>), Venus clam (<i>Tivela</i>), piddock (<i>Penitella</i>), cardita (<i>Cyclocardia</i>), tellin (<i>Tellina</i>), lucine (<i>Luciniscia</i> , <i>Epilucina</i>), cerith (<i>Lirobittium</i>), sand dollar (<i>Dendraster</i>), cowry (<i>Neobernaya</i>), tower shell (<i>Turritella</i>), dwarf-venus (<i>Nutricola</i>)	Unknown
LACM VP 1225	354 W 99th St., Los Angeles	Unknown formation (Pleistocene)	Mammoth (<i>Mammuthus</i>)	15-20 ft bgs
LACM VP 3365	Athens on the Hill, Los Angeles (more precise information not available)	Unnamed formation (Pleistocene)	Mammoth (<i>Mammuthus</i>)	Unknown
LACM VP	W Athens Blvd &	Unnamed formation	Uncatalogued vertebrates	15-18 ft bgs

3266	Menlo Ave	(Pleistocene, calcareous siltstone)		
LACM IP 7	near Compton (more precise locality not available)	Unknown formation (Pleistocene)	Oysters on a fragment of pecten	735 ft bgs (collected from well excavations)
LACM VP 3382	NE of the intersection of Artesia Blvd and Williams Ave., Compton	Unknown formation (Pleistocene; brown clay silt)	Mammoth (<i>Mammuthus</i>)	5 ft bgs

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

This records search covers only the records of the Natural History Museum of Los Angeles County ("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