5. Environmental Analysis

5.2 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Mercury Lane Residential Project to impact cultural and paleontological resources in the City of Brea. With the update of the CEQA Guidelines approved in December 2018, impacts to paleontological resources moved to the Geology and Soils section of the Appendix G checklist. However, Geology and Soils questions had been scoped out of the DEIR. Therefore, this EIR analyzes paleontological resources as part of this section. See Chapter 8, *Impacts Found Not to Be Significant*, for an analysis of the projects impacts to geology and soils.

Cultural resources consist of archaeological and historical resources. Paleontological resources are the fossilized remains of plants and animals. Archaeology is the branch of paleontology that studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, cultural use or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. The analysis in this section is based in part on the following information:

 Records Search Results for BREA-03.1, Berry Street and Mercury Lane in the City of Brea, South Central Coastal Information Center (SCCIC), June 9, 2018

A complete copy of this study is included in Appendix C of this DEIR.

5.2.1 Environmental Setting

5.2.1.1 REGULATORY BACKGROUND

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

National Register of Historic Places

The National Register of Historic Places (NRHP) is authorized by National Historic Preservation Act of 1966 (Code of Federal Regulations, Title 36, Chapter I, Part 60). It is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria.

The NRHP includes districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The NRHP is administered by the National Park Service. Properties are nominated to the NRHP by the State Historic Preservation Officer of the state in which the property is located, by the Federal Preservation Officer for properties under federal ownership or control, or by the Tribal Historic Preservation Officer if a property is on tribal lands.

To be eligible for listing in the National Register, a resource must meet at least one of the following criteria:

- A. Are associated with events that have made a significant contribution to the broad patterns of history.
- B. Are associated with the lives of persons significant in our past.
- C. Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

A final critical component of eligibility is "integrity." Integrity refers to the ability of a property to convey its significance and the degree to which the property retains the identity, including physical and visual attributes, for which it is significant under the four basic criteria. The NRHP criteria recognize seven aspects or qualities of integrity: location, design, setting, materials, workmanship, feeling, and association.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act was established within the Omnibus Public Land Management Act of 2009, which regulates the management, collection, and curation of paleontological resources from National Forest System lands.

Preservation of American Antiquities

The Federal Antiquities Act of 1906 was enacted with the primary goal of protecting cultural resources in the United States. As such, it explicitly prohibits appropriation, excavation, injury, and destruction of "any

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5. Environmental Analysis CULTURAL AND PALEONTOLOGICAL RESOURCES

historic or prehistoric ruin or monument, or any object of antiquity" on lands owned or controlled by the federal government without permission of the secretary of the federal department with jurisdiction. It also establishes criminal penalties, including fines and/or imprisonment, for these acts. Neither the Antiquities Act itself nor its implementing regulations specifically mention paleontological resources. However, several federal agencies—including the National Park Service, the Bureau of Land Management, and the US Forest Service—have interpreted objects of antiquity to include fossils. Consequently, the Antiquities Act also represents an early cornerstone for efforts to protect the nation's paleontological resources.

Native American Graves Protection and Repatriation Act

NAGPRA is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

State Regulations

California Register of Historical Resources

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The CRHR is the authoritative guide to the state's significant historical and archeological resources.

The CRHR program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA.

To be eligible for listing in the CRHR, a resource must meet at least one of the following criteria:

- A. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- B. Associated with the lives of persons important to local, California or national history.
- C. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
- D. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation. (PRC Section 5024.1[c])

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. In summary, resources must retain enough of their historic character or appearance

to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if, under Criterion D, it maintains the potential to yield significant scientific or historical information or specific data.

California Public Resources Code

Archaeological, paleontological, and historical sites are protected pursuant to a wide variety of state policies and regulations enumerated under the Public Resources Code (PRC). In addition, cultural and paleontological resources are recognized as a nonrenewable resource and therefore receive protection under the California Public Resources Code and CEQA.

- PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the CRHR and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.
- PRC Sections 5079 to 5079.65 defines the functions and duties of the Office of Historic Preservation, which is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.
- PRC Sections 5097.9 to 5097.991 provides protection to Native American historical and cultural resources and sacred sites and identifies the powers and duties of the Native American Heritage Commission. It also requires notification of discoveries of Native American human remains to descendants and provides for treatment and disposition of human remains and associated grave goods.

Local Ordinances

City of Brea General Plan

The City of Brea General Plan (2003) identifies Historic Brea—which includes neighborhoods in the southwest portion of the city—as well as goals to preserve Brea's unique historic and cultural resources and neighborhoods. Further, the community resources element of the general plan includes a section on historic resources and provides goals for preserving historical resources, encouraging rehabilitation, and ensuring all residents are aware of the importance of historic preservation. Moreover, the General Plan indicates that the City Council and the Brea Historical Society—which was founded in 1971 to collect and preserve the City's historical materials and resources—recognize residents who renovate and restore historic structures to reflect their time period by presenting them with the Brea Historic Preservation Award.

City of Brea Municipal Code

Chapter 20.60, Historic Preservation, of the City of Brea Municipal Code promotes the historic, cultural, educational, economic, and general welfare of the community by ensuring development is consistent with the land use, housing, and historic resource elements of the Brea General Plan; establishing mechanisms to identify and preserve historic and architectural characteristics of Brea; and encouraging preservation, restoration, and rehabilitation of resources, thereby preventing blight. Chapter 20.60 also includes criteria for what is potentially a local historic resource:

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- If the resource exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;
- If the resource is identified with persons or events significant in local, state, or national history;
- If it embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
- If it is representative of the work of a notable builder, designer, or architect;
- If it contributes to the significance of a historic area, being a geographically definable area possessing a concentration of historic or scenic properties or thematically related grouping of properties which contribute to each other and are unified aesthetically by plan or physical development;
- If it embodies elements of architectural design, detail, materials, or craftsmanship that represent a significant structural or architectural achievement or innovation;
- If it reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;
- If it is one of the few remaining examples in the city, region, state, or nation possessing distinguishing characteristics of an architectural or historical type or specimen.

5.2.1.2 EXISTING CONDITIONS

The project site is vacant and undeveloped, surrounded by light industrial land and general industrial and commercial office uses. The project site is west of Brea Downtown. It includes one California pepper tree near the access gate for the eastern half of the site.

Cultural Setting

Prehistoric Resources

The Puente and Carbon Canyon hills lie within an area considered by archaeologists and ethnologists to have been inhabited prehistorically by the Gabrieleno. Only a small portion of Brea has been surveyed for archeological resources, so the full extent of archeological resources in Brea is not known (Brea 2003b).

Historical Resources

The land that comprises the City of Brea used to be part of land holdings of the San Gabriel Mission, established in 1771 by the Franciscan Padres. During the Mission period and subsequent Rancho era, vast herds of Mexican cattle pastured on all the land in and surrounding Brea. In 1863, Brea and thousands of acres of rancho lands were acquired by Abel Stearns, who later leased land to sheep ranchers (Brea 2003a).

Sheep ranching and oil production were the predominant business activities during the latter half of the 1800s, and the Puente Hills and Brea Canyon supported substantial petroleum production. The first village in

Brea was called Olinda and was originally situated where Carbon Canyon Regional Park lies today. Along with the oil boom, land in and around the city began converting from sheep ranchers to orange groves (Brea 2003a).

Cultural Resources Records Search

The South Central Coastal Information Center (SCCIC) conducted a records search for the project area and a one-mile radius. The search includes a review of all recorded archaeological and built-environment resources and a review of cultural resource reports. The California Points of Historical Interest, California Historical Landmarks, CRHR, NRHP, and the California State Historic Properties Directory listings were also reviewed as part of the SCCIC records search. According to the records search results, no archaeological resources were found within the project site; however, one archaeological resource was identified within the one-mile radius.

Paleontological Setting

The bedrock in the Puente Hills is composed of Miocene deposits called the Puente Formation. The Puente Formation is a fossiliferous deposit composed mostly of diatomaceous shales and possible vertebrate fossil fauna. The Puente Formation is well documented to contain abundant fossil specimens, including whales, porpoises, fish, sea lions, shark teeth, other bony fish, leaves, and marine invertebrates. In addition, significant vertebrate fossils, principally land mammals and birds, have been found in Quaternary (Pleistocene Ice Age and recent) terrestrial deposits throughout Orange County (Brea 2003b). The Los Coyotes area in the northern portion of Orange County is identified as one of the most prolific and scientifically valuable fossil deposits in the nation (Orange 2005). Subsurface resources such as archaeological and paleontological sites are abundant in the southern portion of Orange County, along the coasts and in creek areas (Orange 2005).

5.2.2 Thresholds of Significance

CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated the with lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (PRC Section 5024.1; California Code of Regulations, Title 14, Section 4852)

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The fact that a resource is not listed in the California Register of Historical Resources, not determined to be eligible for listing, or not included in a local register of historical resources does not preclude a lead agency from determining that it may be a historical resource.

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

- C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to PRC Section 15064.5.
- C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to PRC Section 15064.5.
- C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.
- C-4 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

City of Brea Significance Criteria

Historic Resources

Chapter 20.60, Historic Preservation, Section 20.60.030, Criteria for Designation of Individual Historic Resources, provides supplemental criteria to those listed in CEQA Guidelines Section 15064.5 to evaluate historic in the City of Brea:

- If the resource exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;
- If the resource is identified with persons or events significant in local, state, or national history;
- If it embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
- If it is representative of the work of a notable builder, designer, or architect;
- If it contributes to the significance of a historic area, being a geographically definable area possessing a concentration of historic or scenic properties or thematically related grouping of properties which contribute to each other and are unified aesthetically by plan or physical development;
- If it embodies elements of architectural design, detail, materials, or craftsmanship that represent a significant structural or architectural achievement or innovation;
- If it reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;

• If it is one of the few remaining examples in the city, region, state, or nation possessing distinguishing characteristics of an architectural or historical type or specimen.

5.2.3 Plans, Programs, and Policies

- RR CUL-1 Cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.
- RR CUL-2 Native American historical and cultural resources and sacred sites are protected under PRC Sections 5097.9 to 5097.991, which require that descendants be notified when Native American human remains are discovered and provide for treatment and disposition of human remains and associated grave goods.
- RR CUL-3 The removal, without permission, of any paleontological site or feature is prohibited from lands under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof (PRC Section 5097.5). This applies to agencies' own activities, including construction and maintenance, and permit actions by others.
- RR CUL-4 Adverse impacts to paleontological resources from developments on public (state, county, city, and district) lands require reasonable mitigation. (PRC Section 5097.5)
- RR CUL-5 If human remains are discovered within a project site, disturbance of the site must stop until the coroner has investigated and made recommendations for the treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative. If the coroner has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. (California Health and Safety Code Section 7050.5)

5.2.4 Environmental Impacts

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

Impact 5.2-1: Development of the project would not impact an identified historic resource. [Threshold C-1]

A SCCIC records search was conducted for the project that included a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports. The California Points of Historical Interest, California Historical Landmarks, CRHR, NRHP, and the California State Historic Properties Directory listings were also reviewed.

Based on the results of the records search, the project site is within a one-mile radius of the historic Brea Canyon (SCCIC 2018). The project site is within one-mile of 352 California State Historic Properties Directory listings, one NRHP listing, and two CRHR listings (SCCIC 2018). However, the project site is not identified as a state or national historic resource. According to Figure CR-6, Historic Resources, of the City

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5. Environmental Analysis CULTURAL AND PALEONTOLOGICAL RESOURCES

of Brea General Plan, there are no resources on the project site identified by the City of Brea Historic Resources, CRHR, or NRHR (Brea 2003a). According to Figure CR-6, the original location of the "Good Old Brea Clock," which was located at the intersection of Madrona Avenue and Birch Street, approximately 0.25-mile east of the project site, was the nearest locally designated historic resource to the project site. Currently, the project site is vacant and undeveloped; construction would occur within the footprint of the project site. Therefore, the proposed project would not result in impacts to historic resources.

Level of Significance before Mitigation: Based on the analysis above, no impact would occur.

Impact 5.2-2: Development of the project could impact archaeological resources. [Threshold C-2]

Only a small portion of Brea has been surveyed for archeological resources, so the full extent of archeological resources in Brea is not known (Brea 2003b). The project site is undeveloped, in an area where the surface and subsurface appear to have been previously disturbed. The proposed project would require connections to utility lines, ground clearing, excavation, grading, and other construction activities. According to the records search, Archaeological Determinations of Eligibility (i.e. archaeological resources assessed by the Office of Historic Preservation with respect to National Register eligibility) have not been made on the project site or within a one-mile radius of the project site (SCCIC 2018). However, one archaeological resource has been identified within a one-mile radius, but not on the project site (SCCIC 2018). Additionally, according to the Native American Heritage Commission's Sacred Land Files record search (see Section 5.10, Tribal Cultural Resources), no tribal resources were found on the project site.

Although archaeological resources were not identified on the project site, it is possible that subsurface archaeological resources exist and may be encountered during construction activities that disturb soil. If any are encountered, the City would comply with CEQA Guidelines Section 15064.5, which requires the lead agency to determine if the discovered resource is unique or historically significant, and if so to treat it in accordance with the provisions of PRC Section 21083.2.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.2-2 would be potentially significant.

Impact 5.2-3: Development of the project could impact paleontological resources or unique geologic features. [Threshold C-4]

The City of Brea overlays Miocene deposits, known as the Puente Formation, and Quaternary (Pleistocene Ice Age and recent) terrestrial deposits that contain fossils (Brea 2003b). The project site is currently vacant and does not include unique geologic features. The proposed project would require ground clearing, excavation, grading, and other construction activities to accommodate utility requirements. Due to the ground disturbance associated with construction, there is potential that natural landform beneath the site would be encountered during construction and that subsurface resources and/or paleontological resources would be discovered.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.2-3 would be potentially significant.

Impact 5.2-4: Grading activities could potentially disturb human remains, but compliance with existing regulations would ensure that impacts are less than significant. [Threshold C-3]

The project site is currently vacant and would require utility connections, ground clearing, excavation, grading, and other construction activities. California Health and Safety Code Section 7050.5 requires that if human remains are discovered on a project site, disturbance of the site must stop, and the coroner must investigate and recommend how the remains should be treated. If the coroner has reason to believe the remains are Native American, he or she must contact the Native American Heritage Commission.

Level of Significance before Mitigation: After application of RR CUL-5, above, Impact 5.2-4 would be less than significant.

5.2.5 Cumulative Impacts

The area considered for cumulative impacts to historic and archaeological resources is within a one-mile radius of the project site, the same area as the records search. Over 350 previously recorded historical and/or archaeological resources identified within one mile of the project site, according to the records search conducted by SCCIC. Other projects in the region could demolish or otherwise alter historical and archaeological resources. Other projects would be required to comply with CEQA Guidelines Section 15064.5, which requires the lead agency to determine if discovered resources are unique or historically significant, and if so, to avoid or mitigate impacts to such resources in accordance with the provisions of PRC Section 21083.2. The project would not result in a cumulatively considerable impact to cultural or paleontological resources.

5.2.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.2-1 and 5.2-4.

Without mitigation, the following impacts would be **potentially significant**:

- Impact 5.2-2 Development of the project could result in the discovery of subsurface archaeological resources.
- Impact 5.2-3 Development of the project could result in the discovery of paleontological resources.

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5.2.7 Mitigation Measures

Impact 5.2-2

CUL-1

Prior to issuance of grading permits, a qualified archaeological monitor shall be identified to be on call during ground-disturbing activities. If archeological resources are discovered during excavation and/or construction activities, construction shall stop within 25 feet of the find, and the qualified archeologist shall be consulted to determine whether the resource requires further study. The archeologist shall make recommendations to the City of Brea to protect the discovered resources. Archeological resources recovered shall be provided to an accredited museum such as the John D. Cooper Center in Fullerton or any other local museum or repository willing and able to accept and house the resource to preserve for future scientific study.

Impact 5.2-3

CUL-2

Prior to construction, (1) a field survey for paleontological resources consisting of record search, survey, background context, and project-specific recommendations shall be conducted by a qualified paleontologist; or (2) a qualified paleontologist shall monitor all excavations below five feet. If unique paleontological resources are discovered during excavation and/or construction activities, construction shall stop within 25 feet of the find, and the qualified paleontologist shall be consulted to determine whether the resource requires further study. The paleontologist shall make recommendations to the City of Brea to protect the discovered resources. Any paleontological resources recovered shall be provided for curation at a local curation facility such as the Los Angeles County Natural History Museum, the John D. Cooper Center in Fullerton, or any other local museum or repository willing and able to accept and house the resource to preserve for future scientific study.

5.2.8 Level of Significance After Mitigation

Impact 5.2-2

Mitigation Measure CUL-1 would require that a qualified archeological monitor be on-call in the event that cultural resources are uncovered during ground disturbing activities. In the event resources are uncovered, mitigation measure CUL-1 requires that the resources are recovered and deposited at a local museum or repository. Due to the low potential to uncover archeological resources onsite and the size of the project site, a 25-foot buffer would be sufficient to ensure that resources would be protected in the vicinity of the find. Mitigation measure CUL-1 would reduce potential impacts to archeological and historic resources to a level that is less than significant. Impact 5.2-2 would be less than significant with mitigation.

Impact 5.2-3

Mitigation measure CUL-2 requires a field survey prior for paleontological resources. If resources are discovered during the field survey or during ground disturbing activities, the resources would be recovered and deposited at a local museum or repository. Due to the low potential to uncover paleontological resources onsite and the size of the project site, a 25-foot buffer would be sufficient, and would not halt construction across the entire project site. Mitigation measure CUL-2 would reduce potential impacts to paleontological resources to a level that is less than significant. Impact 5.2-3 would be less than significant with mitigation.

5.2.9 References

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