# 4.5 CULTURAL RESOURCES

This section evaluates potential impacts on cultural resources (i.e., archaeological, historical or built-environment, and paleontological resources) that could occur in association with the Land Use Element/ Zoning Code Amendments (i.e., future development of property in the commercial districts) and improvements associated with the Mobility Element Update.

## 1. ENVIRONMENTAL SETTING

## a. Regulatory Framework

Numerous laws and regulations require federal, state, and local agencies to consider the effects of a Proposed Project on cultural resources. These laws and regulations establish a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office and the Advisory Council on Historic Preservation). The National Historic Preservation Act (NHPA) of 1966, as amended, CEQA, and the California Register of Historical Resources (California Register), Public Resources Code (PRC) 5024, are the primary federal and state laws governing and affecting preservation of historic resources of national, state, regional, and local significance. Other relevant regulations at the local level include the Town's General Plan. A description of the applicable laws, regulations, and guidelines is provided in the following paragraphs.

### (1) Federal Level

#### (a) National Environmental Policy Act of 1969

The National Environmental Policy Act (NEPA) directs federal agencies to prepare a detailed statement of the environmental impacts of any "major federal action significantly affecting the quality of the human environment." These statements are usually known as Environmental Assessments (EA) or Environmental Impact Statements (EIS). The "human environment" consists of many aspects, including what NEPA terms "cultural resources." Under NEPA, cultural resources include historic properties as defined under Section 106 of the NHPA which is described in more detail in the following Section. Cultural resources also include the cultural use of the physical and natural environment, social institutions, lifeways, religious practices, and other cultural institutions.

#### (b) Section 106 of the National Historic Preservation Act of 1966 (Section 106)

Compliance with Section 106 requires a sequence of steps, often referred to as the "Section 106 process." The steps include (1) identification of the area that will be affected by the proposed undertaking ("area of potential effect" [APE]); (2) identification of historic or archaeological properties; (3) evaluation of the eligibility of the properties for listing on the National Register of Historic Places; (4) determination of the level of effect of the undertaking on eligible properties; and (5) consultation with concerned parties and agreement in the form of a Memoranda of Agreement (MOA) on avoidance, minimization, or mitigation of adverse effects on eligible properties. These steps are described in more detail, as follows:

As defined in the NHPA (36 CFR 800.16(d)), an APE "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. The area of potential effect is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking." Federal agencies define the cultural resources APE in consultation with the State Historic Preservation Office (SHPO). The APE may or may not match the footprint of the project area.

Identification of historic or archaeological properties is done by means of pedestrian survey and research in appropriate historical and archaeological archives. The Secretary of the Interior has set out guidelines for qualifications for archaeologists and historians responsible for identifying, evaluating, recording, and providing treatment for historical and archaeological resources (36 CFR 61). These guidelines are updated and published by the National Park Service (NPS 1983).

Evaluation of archaeological and historical property significance follows the significance criteria of the National Register of Historic Places (National Register). The National Register was established by the NHPA in 1966 to serve as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment." (36 CFR § 60.2). The National Register recognizes properties that are significant at the national, state and local levels. Guidelines for nomination require that significant resources exhibit aspects of important themes in American history, architecture, archaeology, engineering, and culture and possess integrity of location, design, setting, materials, workmanship, feeling, and association and that;

a. are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or

d. that have yielded or may be likely to yield, information important to history or prehistory

In addition to meeting the Criteria for Evaluation, a property must have integrity. "Integrity is the ability of a property to convey its significance."[1] According to *National Register Bulletin 15 (NRB)*, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity: location, design, setting, materials, workmanship, feeling, and association. In assessing a property's integrity, the National Register criteria recognize that properties change over time, therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity.[2]

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[1] National Register Bulletin 15, *p. 44.*

[2] *"A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, association requires the presence of physical features that convey a property's historic character. Because feeling and association depend on individual perceptions, their retention alone is never sufficient to support eligibility of a property for the National Register." Ibid, 15, p. 46.*

For properties that are considered significant under National Register Criteria A and B, the *National Register Bulletin, How to Apply the National Register Criteria for Evaluation* states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).[3]

In assessing the integrity of properties that are considered significant under National Register Criterion C, the *National Register Bulletin, How to Apply the National Register Criteria for Evaluation* provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.[4]

Archaeological sites, in contrast to historical resources, are most often eligible under Criterion D for their "information potential." For properties eligible under Criterion D, less attention is given to their overall condition, than if they were being considered under Criteria A, B, or C. Archeological sites, in particular, do not exist today exactly as they were formed as there are always cultural and natural processes that alter the deposited materials and their spatial relationships. For properties eligible under Criterion D, integrity is based upon the property's potential to yield specific data that addresses important research questions.[5]

Adverse effects occur when an undertaking may directly or indirectly alter characteristics of a historic property that qualify it for inclusion in the National Register. Examples of adverse effects include physical destruction or damage; alteration not consistent with the Secretary of the Interior's Standards; relocation of a property; change of use or physical features of a property's setting; visual, atmospheric, or audible intrusions; neglect resulting in deterioration; or transfer, lease, or sale of a property out of Federal ownership or control without adequate protections (36 CFR 800.5(a)). Effects of the proposed undertaking on eligible properties are determined by analysis and agreement between federal agencies, the SHPO, and other concerned parties.

The California SHPO, the Office of Historic Preservation (OHP), established by the NHPA to implement historic preservation management at the state level, is mandated to review National Register nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with Federal agencies during Section 106 review. Concurrence of the OHP on site evaluations and recommendations with respect to National Register eligibility and project effects will be required.

MOAs on avoidance, minimization, or mitigation of adverse effects on eligible properties are developed through the course of the project by federal agencies, SHPO, and other parties concerned with the preservation and disposition of cultural resources, including Native American groups with affiliation to the project site.

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3 *Ibid.*

4 *"A property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. The property is not eligible, however, if it retains some basic features conveying massing but has lost the majority of the features that once characterized its style." Ibid.*

5 *National Register Bulletin 15, p. 46.*

The Section 106 review process should run parallel and be integrated with the NEPA process and the results of Section 106 compliance should be completed and incorporated into the final NEPA Environmental Assessment.

### (c) Paleontological Resources Preservation Act (PRPA)[6]

On March 30, 2009, the Paleontological Resources Preservation Act (PRPA) became law when President Barack Obama signed the Omnibus Public Land Management Act (OPLMA) of 2009, Public Law 111-011. P.L. 111-011, Title VI, Subtitle D on Paleontological Resources Preservation (OPLMA-PRP) (123 Stat. 1172; 16 U.S.C. 470aaa) requires the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on Federal land using scientific principles and expertise. The OPLMA-PRP includes specific provisions addressing management of these resources by the Bureau of Land Management (BLM), the National Park Service (NPS), the Bureau of Reclamation (BOR), the Fish and Wildlife Service (FWS), and the U.S. Forest Service (USFS) of the Department of Agriculture.

The OPLMA-PRP affirms the authority for many of the policies the Federal land managing agencies already have in place for the management of paleontological resources such as issuing permits for collecting paleontological resources, curation of paleontological resources, and confidentiality of locality data. The statute establishes new criminal and civil penalties for fossil theft and vandalism on Federal lands. The OPLMA-PRP only applies to Federal lands and does not affect private lands. It provides authority for the protection of paleontological resources on Federal lands including criminal and civil penalties for fossil theft and vandalism.

Consistent with existing policy, the OPLMA-PRP also includes provisions allowing for casual or hobby collecting of common invertebrate and plant fossils without a permit on Federal lands managed by the BLM, the BOR, and the U.S. Forest Service, under certain conditions. Casual collecting is not allowed within the National Parks or other lands managed by the National Park Service. As directed by the Act, the Federal agencies will begin developing regulations, establishing public awareness and education programs, and inventorying and monitoring federal lands.

## (2) State Level

### (a) California Register of Historical Resources

The California OHP, as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions.

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[7] The criteria for eligibility

[6] *Discussion adapted from http://www.blm.gov*

[7] *California Public Resources Code § 5024.1(a).*

for the California Register are based upon National Register criteria.[8] Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.[9]

To be eligible for the California Register, a prehistoric or historic property must be significant at the local, state, and/or federal level under one or more of the following criteria:

a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
b. Is associated with the lives of persons important in our past;
c. 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
d. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally Determined Eligible for the National Register.
- California Registered Historical Landmarks from No. 770 onward.
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5.[10]
- Individual historical resources.
- Historical resources contributing to historic districts.
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

[8] *California Public Resources Code § 5024.1(b).*

[9] *California Public Resources Code § 5024.1(d).*

[10] *Those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register.*

### (b) California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a proposed project would have a significant effect on archaeological or historical resources (PRC Sections 21000 *et seq*.). As defined in Section 21083.2 of the PRC a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition, CEQA Guidelines section 15064.5 broadens the approach to CEQA by using the term "historical resource" instead of "unique archaeological resource." The CEQA Guidelines recognize that certain historical resources may also have significance. The CEQA Guidelines recognize that a historical resource includes: (1) a resource in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in PRC section 5020.1 (k) or identified as significant in a historical resource survey meeting the requirements of PRC section 5024.1 (g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of section 21084.1 of the PRC and section 15064.5 of the CEQA Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site is to be treated in accordance with the provisions of PRC section 21083, which is a unique archaeological resource. The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. (CEQA Guidelines §15064.5(c)(4)).

Paleontological resources are afforded protection by environmental legislation set forth under CEQA. Appendix G (part V) of the *CEQA Guidelines* provides guidance relative to significant impacts on paleontological resources, stating that "a project will normally result in a significant impact on the environment if it will …disrupt or adversely affect a paleontological resource or site or unique geologic feature." The *Guidelines* do not define "directly or indirectly destroy," but it can be reasonably interpreted as the physical damage, alteration, disturbance, or destruction of a paleontological resource. The *Guidelines* also do not define the criteria or process to determine whether a paleontological resource is significant or "unique." Section 5097.5 of the PRC specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, California Penal Code Section 622½ states that damage or removal of archaeological or historical resources (which may be interpreted to include paleontological resources) on public or private lands constitutes a misdemeanor.

### (3) Local Level

#### (a) Town of Mammoth Lakes General Plan

The Town's General Plan sets forth goals and policies to encourage the role of the Town in identifying and conserving the area's cultural resources. Applicable goals and policies are contained in the Arts, Culture, Heritage, and Natural History Element as well as the Parks, Open Space, and Recreation Element. Specific goals and policies are provided in Section 2.c below.

## b. Existing Conditions

### (1) Prehistoric Background

In terms of environmental change and recognized cultural developments, prehistory is most easily discussed and understood chronologically. Table 1, *Chronology of the High Sierra and Eastern Slopes*, of the Cultural Resources Assessment contained in Appendix F of this Draft EIR, provides the detailed chronologies of the prehistory of the western Great Basin including the eastern slope of the Sierra Nevada. According to Table 1, regional phases begin with the Pre-Archaic Phase (12,000 to 7,500 years ago) and continue through the Early Archaic Phase (7,500 to 4,000 years ago), the Middle Archaic Phase (7,500 to 4,000 years ago), and the Late-Archaic Phase (1,500 to 400 years ago).

#### (a) Pre-Archaic (ca. 12,000-7,500 Years Before Present [YBP])

Little is known of Paleo-Indian peoples in inland southern California, and the cultural history of this period follows that of North America in general. Recent discoveries in the Americas have challenged the theory that the first Americans migrated from Siberia, following a route from the Bering Strait into Canada and the Northwest Coast some time after the Wisconsin Ice Sheet receded (ca. 14,000 YBP), and before the Bering Land Bridge was submerged (ca. 12,000 YBP). A coastal migration route somewhat before that time is also possible. The timing, manner, and location of this crossing are a matter of debate among archaeologists, but the initial migration probably occurred as the Laurentide Ice Sheet melted along the Alaskan Coast and interior Yukon. The earliest radiocarbon dates from the Paleo-Indian Period in North America come from the Arlington Springs Woman site on Santa Rosa Island. These human remains date to approximately 13,000 YBP (Johnson, et al. 2002). Other early Paleo-Indian sites include the Monte Verde Creek site in Chile (Meltzer, et al. 1997) and the controversial Meadowcroft Rockshelter in Pennsylvania. Both sites have early levels dated roughly at 12,000 YBP. Life during the Paleo-Indian Period was characterized by highly mobile hunting and gathering. Prey included megafauna such as mammoth and technology included a distinctive flaked stone toolkit that has been identified across much of North America and into Central America. They likely used some plant foods, but the Paleo-Indian toolkit recovered archaeologically does not include many tools that can be identified as designed specifically for plant processing.

The rate of movement from the coast to inland California locations such as the Mammoth Lakes region is not known (see Rockman 2003), but may have been relatively rapid. Many early California sites, characterized as Late Paleoindian/Early Archaic period, are located near pluvial desert valley lakes formed by glacial meltwaters that are now evaporated or much reduced in size (Moratto 1984). Lakeshore occupation sites often include artifacts such as large projectile points (e.g., Lake Mohave or Mojave), flaked stone debitage, and fire-affected rock concentrations.

The megafauna that appear to have been the focus of Paleo-Indian life went extinct during a warming trend that began approximately 10,000 years ago, and both the extinction and climatic change (which included warmer temperatures in desert valleys and reduced precipitation in mountain areas) were factors in widespread cultural change. Subsistence and social practices continued to be organized around hunting and gathering, but the resource base was expanded to include a wider range of plant and game resources. Technological traditions also became more localized and included tools specifically for the processing of plants and other materials. This constellation of characteristics has been given the name "Archaic" and it was the most enduring of cultural adaptations to the North American environment.

### (b) Early Archaic Period (ca. 7,000-4,000 YBP)

The Early Archaic in the Mammoth Lakes region is known as the Little Lake Phase, dating from ca. 7,500 to 3,150 YBP. Between 7,500 and 5,500 YBP, the period is not as well-defined for the rest of the Western Great Basin. The climate in the middle Holocene was generally hot and dry. During this time, people used base camps adjacent to rivers, and used temporary task-based camps at higher altitudes on a seasonal basis. These lithic scatters higher than 6,000 feet above mean sea level are thought to be hunting camps. Diagnostic tools of the Early Archaic include Pinto and Little Lake series projectile points. The Early Archaic economy was still organized around hunting of large game.

### (c) Middle Archaic Period (ca. 4,000-1,500 YBP)

Bettinger and Taylor (1974) refer to the Middle Archaic as the Newberry Phase (3,150-1,350 YBP) in the southern section of the Eastern Sierra Front. The Middle Archaic is characterized by a transition from the Early Archaic emphasis based on hunting to a more diversified subsistence base that included the exploitation of plant and small animal resources. Grinding stones appear in the archaeological record for the first time in the region. This is consistent with the archaeological remains recovered from Mammoth Creek Cave and Hot Creek Shelters. Large bifaces were fashioned to export raw material. Elko and Humboldt series dart points were common. Site types include quarries, multipurpose camps located in upland valleys, and seed camps located near springs and creeks. Base camps contained features such as pithouses, storage areas, and burials. Seasonal camps were often reoccupied year after year. Kobari and others (1980) suggest that high altitude resources were also exploited as hunting camps were located at high elevations, such as the Casa Diablo and Long Valley Caldera.

### (d) Late Archaic (ca. 1,500-400 YBP)

The Late Archaic in the region is subdivided into the Haiwee Phase (1,350 to 650 YBP) and the Marana Phase (650 YBP to EuroAmerican contact). During this time, a wide range of resources and ecozones were exploited. There was an increased emphasis on plant resources, and small game hunting replaced large game hunting. There were many technological changes during the Late Archaic. For example, the bow and arrow replaced the atlatl and darts. Diagnostic artifacts include Rose Spring, Eastgate, and Desert Side-Notched projectile points and brownware ceramics (after 900 YBP). Rosegate projectile points are characteristic of the Haiwee Phase, while small Desert Side-Notched and Cottonwood arrow points, and brownware ceramics define the Marana. Steatite disk beads are also common. Obsidian trade was thought to be east-west from Mono Lake and Long Valley Caldera over the Sierra Nevada. As the climate again oscillated to a warmer and drier regime, the area also experienced significant human population increase. With the shift to dryer conditions came a shift to piñon exploitation. Higher elevations continued to be exploited at this time (Bettinger 1977). After 750 YBP, wild crop irrigation and lowland base camps were

common. It was during the Late Archaic that flat slab schist milling stones, milling slicks, and bedrock mortars apparently first appeared. The Marana Phase sites are thought to represent Owens Valley Paiute pre-contact sites, as the Owens Valley Paiute were the occupants of the region at the time of contact.

### (e) Ethnographic Context

The following ethnographic summary of the Owens Valley Paiute is derived in part from the Cultural Resources section of *Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes General Plan Update* (Town of Mammoth Lakes 2005). In addition, Sven Liljeblad and Catherine S. Fowler (1986) provide a comprehensive synthesis of the Owens Valley Paiute.

Traditionally, groups of Owens Valley Paiute have occupied an area from the town to approximately 60 miles to the east and 100 miles to the south. A ten to 15 mile-wide band of land immediately north-northeast of the Town was jointly used by Owens Valley Paiute and Northern Paiute groups from Mono Lake. This territory includes all of Owens Valley, Round Valley, Long Valley, Fish Lake Valley, and Deep Springs Valley. While both Paiute groups speak Western Numic languages, the Northern Paiute speak Northern Paiute and the Owens Valley Paiute speak Owens Valley Paiute (Nancy Peterson Walter 2005). Other neighboring groups, on the west side of the Sierra Nevada (the Monache) and south of the Town on both flanks of the mountains (Monache and Owens Valley Paiute) speak other dialects of Mono and share many cultural bonds.

The Owens Valley Paiute occupied the Owens Valley on a year-round basis with many semi-sedentary settlements located on major rivers and streams along the west side of the valley. Closer to the town, in both Long Valley and in the Mammoth Basin, the pre-contact and historic use of the area by the Owens Valley Native American groups has been vaguely documented. However, according to Wally Woolfenden, the ethnographic notes of F.S. Hules and F.J. Essene from the 1930s, and oral interviews of local people from the 1970s clearly document the year-round occupation of Long Valley by the Long Valley Paiute (a subgroup of the Owens Valley Paiute), during the 1800s and 1900s. Jeff Burton cites the work of Emma Lou Davis, Matthew Hall (1983), E.W. Gifford, and Helen Doyle in suggesting that Long Valley included an indigenous population of Northern Paiute in historic times, and provided resources and refuge on an occasional basis to Northern Paiute from Mono Lake, to Monache and Miwok from the west side of the Sierra, and to surrounding Mono-speaking groups of Paiute from Benton, Round Valley, and Owens Valley.

In contrast to the Owens Valley Paiute, the Long Valley Paiute are said to have been highly mobile in historic times, constantly moving in search of food resources and often utilizing resources beyond Long Valley. This movement included frequent trips over the Sierra crest, through Mammoth Pass, in order to collect acorns and to fish and hunt in the San Joaquin River drainage, and area within North Fork Mono Territory. Such trips sometimes occurred in winter, at which time moccasins and snowshoes were worn for snow travel.

In the vicinity of Mammoth Lakes, Mammoth Mountain is reported by Julian Steward as being a scared place as it stands on the border between the Monache (western Mono) and the Owens Valley Paiute (eastern Mono), and is considered to be the place of origin in all Mono-speakers' traditional myths. The actual locations of human origin there are marked by particular geographic features. Elsewhere in Mammoth Basin, ethnographic use by Long Valley Paiute and others is assumed to be seasonal rather than year round.

Owens Valley Paiute groups traded extensively with their neighbors in order to acquire additional foods as well as ornaments, money, and other commodities. Items traded included salt, piñon pine nuts, seeds,

obsidian, sinew-backed bows, rabbit skin blankets, deerskins, moccasins, mountain sheepskin, fox skin leggings, balls of tobacco, baskets, basketry water bottles waterproofed with pitch, wooden hot rock lifters, and red and white pigments, in exchange for shell money (e.g., disc beads, tubular clam beads, and more recently, glass beads), acorns and acorn meal, finely-constructed Yokuts baskets, cane for arrows, manzanita berries, squaw berries, and elderberries from the Monache. The Mono Paiute traded salt, piñon pine nuts, piagi (i.e., Pandora moth larvae), brine fly larvae, rabbit skin blankets, baskets, pumice stones, and red and white pigments to the Sierra Miwok, in exchange for shell money, acorns, baskets, arrows, a fungus used in paints, manzanita berries, elderberries, and squaw berries.

In Owens Valley, the population was sedentary, with year-round occupation in permanent villages and short-term visits to temporary camps for resource procurement. Leadership was hereditary, and headmen were responsible for organizing communal work projects and festivals that may have served to redistribute resource surpluses as well as to fulfill other social functions. As for the other groups using Long Valley, the Monache and the Southern Sierra Miwok groups were probably similar in their social organization to the Owens Valley Paiute, with at least some hereditary rulers and semi-permanent villages. Some researchers have postulated that any indigenous Long Valley groups that may have existed would have followed a pattern closer to that of the Mono Lake Paiute (and other Great Basin groups) than that of Owens Valley Paiute, due to similarities in environmental constraints. However, Long Valley residents may have been closely tied to the Owens Valley Paiute through kinship and trade.

Long Valley offered a variety of food resources during snow-free months. In the spring, Tui chub, speckled dace, and Owens sucker may have been dished from creeks, while roots, wild onions and greens along creeks and meadows might have replenished dwindling winter stores. Small game, deer, and antelope could have been hunted nearby. In the summer, grass seeds may have been collected from meadows and drier upland areas. Fall subsistence activities of both the Mono Lake and Owens Valley Paiute revolved around the collection of piñon. Piagi are another food resource available every two years in the Jeffery pine forests. Piagi were collected as they descended the Jeffery pine trees during mid to late summer. Nancy Peterson Walter, a local ethnologist, has extensive knowledge of the Owens Valley Paiute's exploitation of piagi (Fowler and Walter 1985). Also, there are several recorded archaeological sites in the region that are associated with piagi exploitation (Weaver and Basgall 1986).

Much of the trade and travel likely occurred during the summer months, when the high Sierra passes were free of deep snow. Inter- and intra-regional trade may have had extensive ramifications for subsistence and settlement systems of the Owens Valley and Long Valley areas. It is proposed that an elaborate exchange system might account for the relatively complex sociopolitical organization of the Owens Valley Paiute.

### (2) Historic Background[11]

The historic context developed below presents important themes associated within the historical development of Mammoth Lakes, California, where the proposed project is located. Research indicates the property is associated with the following historical themes: the Explorers, Early Ranching, Mining and

[11] *Adapted from J.F Burton, Further Investigations of the Snowcreek Archaeology Site, Mammoth Lakes, California, Trans-Sierran Archaeological Research to Trans-Sierran Archaeology No. 21, July 1992 and C.L Furnis, An archaeological Reconnaissance Report for the Lake Mary Road Bike Route, Mammoth Lakes, Mono County, California, Final Report, December 18, 2001.*

Settlement (1829-1880); Gold Discovery and Boom (1870-1900); Transportation (1877 – 1940); Early Development of Recreation (1900-1950); and Post World War II Tourism (1945 – 1960).

### (a) The Explorers, Early Ranching, Mining, and Settlement (1829 – 1880)

The first Euro American contact with Owens Valley, eastern California and western Nevada, is thought to have occurred when the English fur trapper Peter Skene Ogden of the Hudson's Bay Company who wandered into Owens Valley thinking he reached the Great Salt Lake en-route to the Colorado River in 1829 to 1830.[12] Four years later, the first documents explorer of the eastern Sierra is Joseph Walker who crossed the Sierra Nevada at Walker Pass, then proceeded north through Owens Valley, then over to Benton Hot Springs, and east into present day Nevada. In the 1840s and 1850s, various emigrant guides and U.S. military personnel passed through the region, but few said it was an inviting place to settle. Their reports of the eastern Sierra front probably saved the area from settlement, which began in earnest in the early 1860s.

Ranching began in Owens Valley by the Paiute in 1861 as a way of supplying food to the early mining camps in Inyo and Mono counties. European-American settlement soon supplanted most Paiute settlements, with conflict and concomitant forced removal of most Owens Valley Paiute to Fort Tejon, California, by the United States troops. It was not until the late 1870s that permanent settlement took place at Mammoth Lakes, though a few individuals had combed the area in search of the Lost Cement Mine in the summer of 1861.

### (b) Gold Discovery and Boom (1870 – 1900)

A gold mining claim, the Alpha, was staked on the slope of Mineral Hill (now called Red Mountain) in June 1877, initiating the establishment of the Lake Mining District.[13] Shortly after other claims followed and in 1878 most of these claims were purchased by a group of San Francisco investors who formed the Mammoth Mining Company. The mining district included the Mammoth Mining Company headquarters, mill, a small settlement, and mines were established approximately 0.5 mile north of the mines at Mill City, remnants of which are located within the project site. In the late 1870s, four camps were established near the mining activity with a fluctuating population of a thousand. The four camps were Mineral Park, located about one-mile north of Mineral Hill in a meadow, Mill City, located about 0.5 mile north of Mineral Hill, the largest camp, Mammoth City, located at the foot of Mineral Hill, and finally, Pine City, located west of the mines and approximately 1,500 feet north of Lake Mary.

A sawmill built at Mineral Park provided most of the industry for the camp, though a brewery, saloons, stores, hotel, stable, boardinghouse, and toll house represented other commercial endeavors, in addition to some 12 or so cabin residences. Mammoth City reportedly had 400 or 500 residents in 1880, while the smaller Pine City (also called Lake City) boasted a population of 17 persons in the same year, which included one engineer, one grocer, one toll road operator, one laborer, two miners, three blacksmiths, and four housewives. Both communities were within or in the vicinity of the Town. An unknown number of Paiute were said to have participated in mining and settlement at the Mammoth area in the 1870s and 1880s.

[12] *Peter Matranga, The Sherwin Project: A Cultural Resources Inventory and Assessment Mammoth Lakes, Mono County, California, Research Archeology, Project No. MO/I-2007(P), July 2007, 24.*

[13] *USDA Forest Service: Heritage Resource Site Record, Hayden Cabin (CA-MNO-2760-H), 1993, 1.*

Although surrounded by lakes, the mining camps and the mill were situated so that they required water to be transported to them by means of ditches and flumes. In 1878, one covered flume was constructed from the north end of Twin Lakes to Mill City, the Bodle Ditch, while a second flume and diversion works were erected bringing water for domestic use to Pine City and to Mammoth City, farther up the road. Fragments of the Bodle Ditch are located within the Town. Presumably, the ditches continued in use until the mining camps were abandoned, mostly by the early 1880s.

The Lake Mining District boom was short-lived. By 1880, the Mammoth Mining Company folded, along with the surrounding mining camps;[14] and Mammoth City burned down the same year. Only a few people lingered on in the area thereafter. Other mines a few miles south of Pine City operated through the 1880s, while renewed attempts at working the Mammoth Mine on Red Mountain took place in the 1890s. Because these mines were abandoned in the late 19th century and left to deteriorate, few historic structures or associated mine features are extant.

### (c) Transportation (1877 – 1940)

In order to move people, animals, food, equipment, and supplies in and out of the area, roads were needed; however, roads did not exist in the area prior to 1877. There were established Paiute trails over the Sierra, to the east, north, and south along the valleys; however, these trails could not support wagons and stagecoaches. Fortunately, the mining towns established in the 1860s already had links to the outside world. Roads were soon constructed to Benton (east) and to Bodie (north), since each town already had connections with Carson City, and indirectly with Reno, and the transcontinental railroad. Jim Sherwin constructed a toll road south from Mammoth City to Round Valley in the late 1870s that connected to a road he constructed from Bishop Creek to Round Valley in the early 1870s, providing the Lake District with access to railroads, markets and larger population centers through the Mojave Desert.

Forging links to the west was another matter. This required a route directly over the crest of the Sierra Nevada, traversing elevations of over 9,000 feet through Mammoth Pass. The result was the Fresno Flats Road which became a toll trail west of Lake Mary. J.S. French located and developed the 54-mile long trail and led saddle trains over the mountains to Fresno Flats (now Oakhurst) and back twice a week. This service and trail enabled miners and other goods from the San Joaquin Valley of California to directly travel to Mammoth City and the other camps. Beef cattle were moved over this trail, providing fresh meat for the Mammoth mountain-dwellers. According to Adele Reed, the Fresno Flats Trail was still in use in the 1930s, serving prospectors, sheepherders, USFS personnel, and Native Americans.[15]

### (d) Early Development of Recreation (1900 – 1950)

At the turn of the century the community moved out of the lakes basin, where the failed mines were located, to Old Mammoth. The local economy once dependent upon mining, shifted towards tourism. A topographic map from 1913 demonstrates the population shift. Old Mammoth in 1913 was comprised of seven buildings located adjacent to an early road network. As the population grew, hotels, sawmills, stores, and barns were established.

[14] *USDA Forest Service: Heritage Resource Site Recor, Hayden Cabin (CA-MNO-2760-H), 1993, 1.*
[15] *Adele Reed, Old Mammoth, Palo Alto, Ca: Genny Smith Books, 1982.*

Charles F. Wildasinn and his family built the first resort, the Wildasinn Hotel, around the turn-of-the-century, located between Mammoth Creek and Windy Flat meadow and located within the Town[16] Later he added a small store. In 1918, Charles Summers established Mammoth Camp and constructed a hotel, boardinghouse, barn, and corrals. Later in 1923, a garage was constructed at Mammoth Camp, signifying the era of the automobile. In the early 1920s, a greater number of summer residents came to the area to camp and fish. Small cabins were built, as well as a post office. Unfortunately in 1927 a fire destroyed most of Mammoth Camp.

In 1908, The Home Lumber Company purchased and moved the Wildasinn Sawmill from the north side of Mammoth Creek to the vicinity of the present-day Shady Rest Campground.[17] The mill is depicted on the 1913 topographic map with the notation of "sawmill" and a scatter of seven buildings. The mill operated intermittently from 1908 to 1920. In 1920, interest in the mill was purchased by Fred and Arthur Hess and renamed the Hess Lumber Company. Under the new owners the mill operated from until 1930. In 1926 the mill was burned and rebuilt. After the death of Fred Hess in 1930, the mill and equipment was dismantled and moved to Bishop, California.

### (e) Automobile Transportation, Tourism and Infrastructure (1917-1945)

In 1917, the first Ranger Station for the Mammoth Ranger District was established in the Inyo National Forest located along the road to the Lakes Basin (Old Mammoth Road) in Mammoth Meadow.[18] The site of the first ranger station is depicted on the Topographic map from 1914, in the Antelope Valley to the east of Mammoth. The Ranger station was located in one of three recreational residence tracts, created as part of the Forest Service effort to attract campers, hunters, and fisherman to the National Forest. The Ranger station began to issue 99 year permits to build summer cabins in the 1920s. Nearly 100 cabins were constructed before World War II.[19]

After 1920, several resorts and campgrounds were established around the lakes and hundreds of small family cabins were built. One such cabin was the Hayden Cabin, constructed by the civil engineer Walter Emmett Hayden constructed between 1927 and 1938, as a summer residence. In 1925, the first rented tent houses were erected at Lake Mary, followed a few years later by the Crystal Trap Lodge situated at the south end of Lake Mary. In 1923, the Wildyrie resort was developed at Lake Mary, and around this same time, the Tamarack Lodge housed fishermen at Twin Lakes. Support and related services followed, including packers, guides, ice-harvesting, dairies, gas stations, restaurants, bakeries, and more.

After World War I, the transportation infrastructure was improved and the region experienced increasingly intense development and seasonal recreational use. Old Mammoth Road, which had served as the main thoroughfare since 1877, needed substantial improvement to support and attract additional tourism. The construction of Lake Mary Road in 1920 opened up the Lakes Basin to automobile traffic, and State Highway 203 was constructed in 1937. Branching off from Highway 395 near Casa Diablo, SR 203 was constructed north of the old road and made the Mammoth area more accessible to summer tourists. Most of the

[16] *USDA Forest Service: Heritage Resource Site Record, Hayden Cabin (CA-MNO-2760-H), 1993, 1.*
[17] *Evaluation of Significance: Archaeological Reconnaissance Form. Home Lumber Company Sawmill (CA-Mno-622). Mammoth County Park Expansion/Hazard Reduction. 1975.*
[18] *USDA Forest Service: Heritage Resource Site Record, Hayden Cabin (CA-MNO-2760-H), 1993, 2.*
[19] *USDA Forest Service: Heritage Resource Site Record, Hayden Cabin (CA-MNO-2760-H), 1993, 1.*

community, along with businesses, migrated to the new highway and built the town of new Mammoth, the present town of Mammoth Lakes, at the intersection of Old Mammoth Road and SR 203. The 1914 topographic map as revised in 1934 demonstrates the shift in population.

The Mammoth Ranger station relocated to near the new highway in 1938, and two houses for rangers were also constructed.[20] During this time the Civilian Conservation Corps (CCC), was building roads and campgrounds at the Lakes Basin, Convict Lake, and near camp headquarters at Shady Rest.

#### (f) Post World War II Tourism (1945 - 1960)

After the end of World War II, the Mammoth area was Southern California's most popular destinations for winter and summer sports and leisure. Winter skiing became a new major attraction at Mammoth in the 1940s, bringing enthusiasts and additional, specialized developments to the area from that time forward to the present. The 1953 Topographic map demonstrates the rapid growth of the Mammoth Lakes area. There are higher concentrations of buildings around the road networks of Old Mammoth and Mammoth Lakes in comparison to older topographic maps.

## 2. METHODOLOGY AND THRESHOLDS

## a. Methodology and Results

The analysis presented in the section is based on record searches. Given the broad programmatic nature of the Project, no pedestrian surveys were conducted. A number of Multi-Use Paths (which are proposed as part of this Mobility Element Update) were previously analyzed in the Environmental Impact Report for the Trail System Master Plan (TSMP) performed by PCR in 2011. A total of 38 Multi-Use Paths (MUPs) are proposed as a part of the Mobility Element Update, including 15 MUPs that were previously described as part of the TSMP project (MUP 2-1 through 4-5) and 23 newly proposed MUPs that have not been described (MUP N-1 through N-22). Although MUPs previously proposed for the TSMP project are in the same general location, some of the MUPs have a slightly altered conceptual alignment. One (1) MUP (MUP 3-3) was previously proposed for the TSMP project but is not proposed as a part of the Mobility Element Update and has not been completed. MUPs 3-1, 3-4, 3-7 and 3-11 were previously proposed for the TSMP project and are now complete.

#### (1) Cultural Resources Records Search

On August 24, 2015, PCR archaeologist, Mrs. Fatima Clark conducted an in-house records search at the Eastern Information Center (EIC) at the University of California, Riverside and focused on plotting cultural resources within a one-quarter mile radius of the Mobility Element Update and the Land Use Element/ Zoning Code Amendments (i.e., commercially designated lands) project areas. On September 8, 2015, Mrs. Clark requested all copies of the cultural resource California Department of Parks and Recreation (DPR) Site Forms for resources that had been recorded within a one-quarter mile radius of the project areas. The purpose of the records search is to determine whether or not there are previously recorded archaeological or historical resources within the project areas that require evaluation and treatment. The results also provide a basis for assessing the potential for project areas to contain buried cultural resources.

[20] *Adele Reed, Old Mammoth, Palo Alto, Ca: Genny Smith Books, 1982.*

The results of PCR's cultural resources records search through the EIC revealed that a total of 86 archaeological or historical resources are located within or in the immediate vicinity of the Mobility Element Update project area while six resources are located within or in the immediate vicinity of the Land Use Element/ Zoning Code Amendments project area. The resources identified in the Mobility Element Update are summarized in **Table 4.5-1** through **Table 4.5-4** by project component (i.e., Multi Use Path, Proposed Roads, Existing Class III Route, and Planned Class II Bike Lane) and **Table 4.5-5** for the Land Use Element/ Zoning Code Amendments project area. The majority of resources within both project areas are prehistoric archaeological resources (approximately 90 percent of all resources) that are described as lithic scatters, although midden, temporary camp sites, grinding slicks, bedrock mortars, and a hearth feature have also been identified. The historic period resources (approximately 10 percent of all resources) include historic archaeological resources and historic built environment resources and include can scatters, debris scatters (cans, ceramics, glass, structural remains, stone foundations), a lodge complex, a Civil Conservation Corps Camp, cabins, an earthen ditch, a metal pipeline and a recreational/residential tract.

**Table 4.5-1**

**Known Archaeological and Historical Resources Recorded Within or In the Immediate Vicinity of the Mobility Element Update Project Area (Multi-Use Path)**

| Designation | Description (Age) | Project Component |
|---|---|---|
| CA-MNO-529 | Temporary camp site (prehistoric) | MUP N-21 |
| CA-MNO-561 | Lithic scatter (prehistoric) | MUP 4-5 |
| CA-MNO-714 | Lithic scatter, bedrock mortars and metates (prehistoric) | MUP 3-5 |
| CA-MNO-770 | Sparse lithic scatter (prehistoric) | MUP 4-5 |
| CA-MNO-832 | Caterpillar procurement site, light flake scatter (prehistoric/historic) | MUP N-13 |
| CA-MNO-836 | Lithic and can scatter (prehistoric/historic) | MUP N-12 |
| CA-MNO-840 | Historic dump (1930-1940) | MUP N-13 |
| 26-000871 | Lithic scatter and cemetery (prehistoric/historic) | MUP N- 4 |
| CA-MNO-904 | Lithic scatter (prehistoric) | MUP N-20 |
| CA-MNO-906 | Lithic scatter (prehistoric) | MUP 2-1 |
| CA-MNO-907 | Lithic scatter (prehistoric) | MUP 2-1 |
| CA-MNO-2225 | Midden deposit with points, bifaces, flake tools, and thinning flakes (prehistoric) | MUP N-4 |
| CA-MNO-2482 | Lithic scatter (prehistoric) | MUP N-21 |
| CA-MNO-2720 | Obsidian lithic scatter (prehistoric) | MUP N-21 |
| CA-MNO-2721 | Lithic scatter (prehistoric) | MUP N-21 |
| CA-MNO-2684 | Lithic scatter (prehistoric) | MUP 4-4 |
| CA-MNO-2770 | Lithic scatter (prehistoric) | MUP 3-1 |
| CA-MNO-2773 | Lithic scatter (prehistoric) | MUP N-6 |
| CA-MNO-2777 | Debitage scatter (prehistoric) | MUP 4-4 |
| CA-MNO-2778 | Lithic scatter (prehistoric) | MUP 4-4 |
| CA-MNO-2784 | Lithic scatter (prehistoric) | MUP 4-4 |
| CA-MNO-2785 | Lithic scatter and debris scatter (prehistoric/historic) | MUP 4-4 |
| CA-MNO-3298/26-3378 | Crystal Crag Resort (historic) | MUP N-22 |
| CA-MNO-3411/26-3588 | 1920's trash pit (historic) | MUP N-22 |
| CA-MNO-3412/26-3589 | Can scatter (historic) | MUP N-22 |
| CA-MNO-3454/26-3639 | Flake scatter(prehistoric) | MUP N-13 |
| CA-MNO-3526/26-3758 | Lithic scatter (prehistoric) | MUP N-13 |

**Table 4.5-1 (Continued)**

**Known Archaeological and Historical Resources Recorded Within or In the Immediate Vicinity of the Mobility Element Update Project Area (Multi-Use Path)**

| Designation | Description (Age) | Project Component |
|---|---|---|
| CA-MNO-3532/26-3764 | Obsidian flakes (prehistoric) | MUP N-12 |
| CA-MNO-3541/26-3773 | Projectile point (prehistoric) | MUP N-13 |
| CA-MNO-3791/26-4261 | Stone foundation, pits/mines (historic) | MUP N-22 |
| CA-MNO-4955/26-6603 | Lithic scatter (prehistoric) | MUP 4-2 |
| CA-MNO-4956/26-6604 | Lithic scatter (prehistoric) | MUP 4-2 |
| CA-MNO-4995/26-6676 | Lithic scatter (prehistoric) | MUP N-13 |
| CA-MNO-5288/26-7394 | Refuse (cans, ceramics, glass, structural remains, etc) (Historic) | MUP N-11 |
| CA-MNO-5289/26-7395 | Lithic scatter (prehistoric) | MUP N-12 |
| CA-MNO-5809/26-8039 | Lithic scatter (prehistoric) | MUP N-13 |
| CA-MNO-5810/26-8040 | Refuse (cans, ceramics, glass, structural remains, etc) (Historic) | MUP N-11 |
| CA-MNO-5811/26-8041 | Lithic scatter (prehistoric) | MUP N-12 |
| CA-MNO-5849/26-8069 | Lithic scatter (prehistoric) | MUP N-22 |
| Ca-MNO-5850/26-8070 | Lithic scatter (prehistoric) | MUP N-22 |
| CA-MNO-5851/26-8071 | Large rock mound with 3 depressions and scatter of historic material (prehistoric and historic) | MUP N-22 |
| 26-000621 | Lithic scatter (prehistoric) | MUP N-12 |
| 26-000623 | Traces of Civil Conservation Corps Camp (historic) | MUP N-12 |
| 26-000624 | Remains of cabin (historic) | MUP N-12 |
| 26-000722 | Obsidian debris, grinding slicks, bedrock mortars, hearth, projectile points (prehistoric) | MUP N-21 |
| 26-000831 | Light lithic scatter (prehistoric) | MUP N-12 |
| 26-000847 | Lithic scatter (prehistoric) | MUP 4-2, N-13 |
| 26-001529 | Lithic scatter and milling station (prehistoric) | MUP 3-13 |
| 26-5009 | Flake (prehistoric) | MUP 4-2, N-13 |
| 26-5499 | Projectile point (prehistoric) | MUP N-13 |
| 26-6083 | Obsidian core fragment (prehistoric) | MUP 4-4 |
| 26-6086 | Obsidian flakes (3) (prehistoric) | MUP 4-4 |
| 26-6087 | Obsidian flakes (5) (prehistoric) | MUP 4-4 |
| 26-6091 | Obsidian flakes (3) (prehistoric) | MUP 4-4 |
| 26-6095 | Obsidian flakes (3) (prehistoric) | MUP 4-4 |
| 26-6110 | Bottle base (historic) | MUP 4-4 |
| 26-6239 | Two concrete headstones (historic) | MUP N-6 |
| 26-6638 | Lithic scatter (prehistoric) | MUP N-12 |
| 26-6688 | Lake Mary Recreational Residence Tract (Historic) | MUP N-22 |
| 26-7961 | (1) Obsidian flake (prehistoric) | MUP N-22 |
| 26-7962 | (1) Obsidian flake (prehistoric) | MUP 4-2 |

*Source: South Central Coastal Information Center*

**Table 4.5-2**

**Known Archaeological and Historical Resources Recorded Within or In the Immediate Vicinity of the Mobility Element Update Project Area (Proposed Roads)**

| Designation | Description | Project Component |
|---|---|---|
| CA-MNO-714/26-714 | Lithic scatter (prehistoric) | Proposed Road |
| CA-MNO-770 | Lithic scatter (prehistoric) | Proposed Road |
| CA-MNO-1202 | Lithic scatter (prehistoric) | Proposed Road |
| CA-MNO-3403/26-3573 | Lithic scatter (prehistoric) | Proposed Road |
| 26-4205 | Lithic scatter (prehistoric) | Proposed Road |

*Source: South Central Coastal Information Center*

**Table 4.5-3**

**Known Archaeological and Historical Resources Recorded Within or In the Immediate Vicinity of the Mobility Element Update Project Area (Existing Class III Route, Planned Class II Bike Lane)**

| Designation | Description | Project Component |
|---|---|---|
| CA-MNO-880 | Basalt lithic scatter (prehistoric) | Planned Class II Bike Lane |
| CA-MNO-905 | Heavy density lithic scatter (prehistoric) | Planned Class II Bike Lane |
| CA-MNO-1925 | Lithic scatter (prehistoric) | Planned Class II Bike Lane |
| CA-MNO-2484 | Lithic scatter (prehistoric) | Planned Class II Bike Lane |
| CA-MNO-3750/26-4216 | Lithic scatter (prehistoric) | Planned Class II Bike Lane |
| CA-MNO-4197/26-4731 | Earthen ditch and metal pipeline (historic) | Planned Class II Bike Lane |
| 26-721 | Obsidian chipping waste scatter (prehistoric) | Existing Class III Route/Planned Class II Bike Lane |
| 26-000847 | Lithic scatter (prehistoric) | Planned Class II Bike Lane |
| 26-3601 | Obsidian flakes (prehistoric) | Planned Class II Bike Lane |
| 26-3822 | Wooden timbers (Historic) | Planned Class II Bike Lane |
| 26-4217 | Lithic scatter (prehistoric) | Planned Class II Bike Lane |
| 26-5008 | Sawn wooden stump of pole used on Snowdrift 12 kV line (historic) | Planned Class II Bike Lane |
| 26-5230 | Lithic scatter (prehistoric) | Existing Class III Route/Planned Class II Bike Lane |
| 26-6642 | Lithic scatter (prehistoric) | Planned Class II Bike Lane |

*Source: South Central Coastal Information Center*

**Table 4.5-4**

**Known Archaeological and Historical Resources Recorded Within or In the Immediate Vicinity of the Mobility Element Update Project Area (Future Traffic Signals, Future Bridges, Planned Parking, and Planned Staging)**

| Designation | Description | Project Component |
|---|---|---|
| CA-MNO-561 | Lithic scatter (prehistoric) | Planned Staging |
| CA-MNO-2562 | Lithic scatter (prehistoric) | Planned Staging |
| CA-MNO-2682 | Lithic scatter (prehistoric) | Planned Staging |
| 26-4907 | Obsidian flakes (prehistoric) | Planned Staging |
| 26-4916 | Flake scatter (prehistoric) | Planned Staging |
| 26-4917 | Flake scatter (prehistoric) | Planned Staging |

*Source: South Central Coastal Information Center*

**Table 4.5-5**

**Known Archaeological and Historical Resources Recorded Within or In the Immediate Vicinity of the Land Use Element/ Zoning Code Amendments Project Area**

| Designation | Description | Project Component |
|---|---|---|
| CA-MNO-561 | Lithic scatter (prehistoric) | Planned Staging |
| CA-MNO-2562 | Lithic scatter (prehistoric) | Planned Staging |
| CA-MNO-2682 | Lithic scatter (prehistoric) | Planned Staging |
| 26-4907 | Obsidian flakes (prehistoric) | Planned Staging |
| 26-4916 | Flake scatter (prehistoric) | Planned Staging |
| 26-4917 | Flake scatter (prehistoric) | Planned Staging |

*Source: South Central Coastal Information Center*

The majority of the resources (n=61) have been recorded within or in the immediate vicinity of the Multi Use Paths (MUPs) (see Table 4.5-1). A total of five resources (all prehistoric) have been recorded within or in the immediate vicinity of the Proposed Roads (see Table 4.5-2). A total of 14 resources (prehistoric and historic) have been recorded within or in the immediate vicinity of the Existing Class III Route/Planned Class II Bike Lanes (see Table 4.5-3). A total of five resources (all prehistoric) have been recorded within the Planned Staging areas; however, none have been recorded within the Future Traffic Signals, Future Bridges or Planned Parking areas (see Table 4.5-4). In addition, no resources have been recorded within the Future Pedestrian Routes. A total of six resources (all prehistoric) have been recorded within the commercially designated lands associated with the Land Use Element/ Zoning Code Amendments project area (see Table 4.5-5). .

## (2) Paleontological Resources Records Search

The paleontological resources records search consisted of an examination of geologic maps and paleontological locality records. In particular, the University of California Museum of Paleontology (UCMP)

online database was accessed to determine if known vertebrate fossil localities are present inside or in the vicinity of the project. Results of the record search indicate whether or not there are previously recorded paleontological resources within the project areas that require evaluation and treatment. The results also provide a basis for assessing the sensitivity of the project areas for additional and buried paleontological resources.

The records search revealed that there are no known vertebrate, invertebrate, plant, microfossil, or other fossil localities from the UCMP online database that have been previously identified within the project areas or the surrounding vicinity. The closest vertebrate fossil locality in the database is located more than 30 miles to the north. Initial consultation of collection records and geologic maps indicated that the Town area has no history of fossil resources, largely because the terrain was glaciated and is dominated by igneous and metamorphic rocks which are not conducive to retaining paleontological resources.

### (3) Sacred Lands File Search and Native American Consultation

On June 23, 2015, the Town commissioned a Sacred Lands File (SLF) search and Native American contact list request for the Planning Area and Land Use Element/ Zoning Code Amendments Project Area through the California Native American Heritage Commission (NAHC) and conducted follow-up consultation by letter with Native American groups and/or individuals identified by the NAHC as having affiliation with the project vicinity. Each Native American group and/or individual listed was sent a project notification letter and map and was asked to convey any knowledge regarding prehistoric or Native American resources (archaeological sites, sacred lands, or artifacts) located within the project or surrounding vicinity. The letter included information such as the project location and a brief description of the proposed project. Results of the SLF search and follow-up consultation would provide information as to the nature and location of additional prehistoric or Native American resources to be incorporated in the impact analysis whose records may not be available at the EIC.

Results of the SLF search through the NAHC did not indicate any known Native American cultural resources from the NAHC archives within the Planning Area or Land Use Element/ Zoning Code Amendments Project Area. Pursuant to NAHC suggested procedure and in compliance with Senate Bill 18, the Town sent follow-up letters via certified mail on August 26, 2015 to the nine (9) Native American individuals and organizations identified by the NAHC as being affiliated with the vicinity of the Planning Area and Land Use Element/ Zoning Code Amendments Project Area to request any additional information or concerns they may have about Native American cultural resources that may be affected by the proposed project.

As of the release of the Draft EIR, the Town has received no responses from the Native American community. The NAHC SLF records search results letter, the Native American contact list, and other Native American consultation documentation are available, as appropriate, at Town Hall.

## b. Thresholds

For purposes of this EIR, the Town has utilized the checklist questions in Appendix G of the *CEQA Guidelines* as thresholds of significance to determine whether the Project would have a significant environmental impact regarding cultural resources. The project would result in a significant impact to cultural resources if the project would:

**CUL-1** Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5

**CUL-2** Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5,

**CUL-3** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

**CUL-4** Disturb any human remains, including those interred outside of formal cemeteries.

## c. Applicable General Plan Goals/Policies and Adopted Mitigation Measures

### (1) General Plan

The Town's General Plan sets forth goals and policies to encourage the role of the Town in identifying and conserving the area's cultural resources. Applicable goals and policies are provided below:

#### (a) Arts, Culture, Heritage, and Natural History Element

**GOAL A.3:** Encourage public art and cultural expression throughout the community.

- **Policy A.3.A:** Support continued development of the historic Hayden Cabin museum site.
- **Policy A.3.B:** Encourage development of arts, culture, and heritage facilities and venues.
  - **Action A.3.B.1:** Encourage artists' residences connected to galleries.
  - **Action A.3.B.2:** Maintain a strategic public art, cultural, and heritage plan.
- **Policy A.3.C:** Support local history and heritage education in the community.
  - **Action A.3.C.1:** Support and promote programs and events celebrating local history and diversity.
- **Policy A.3.D:** Be stewards of the cultural, historical and archeological resources in and adjacent to town.
- **Policy A.3.E:** Allow the adaptive use of historic buildings.
  - **Action A.3.E.1:** Develop and maintain a cultural resources database of historic and archaeological resources within the Planning Area.
  - **Action A.3.B.2:** Maintain a strategic public art, cultural, and heritage plan.

#### (b) Parks, Open Space, and Recreation Element

**GOAL P.2:** Provide additional parks within Town.

- **Policy P.2.D:** Increase understanding and appreciation of the cultural, natural, and historical resources of the region and Town through the development of programs, facilities, and interpretive signage.

### (2) General Plan Update Mitigation Measures

The Mitigation Monitoring and Reporting Program (MMRP) for the Town of Mammoth Lakes General Plan Update includes mitigation measures applicable to cultural resources. Since this is an adopted measure, for purposes of this EIR, these measures are applied where relevant and necessary to address the significant impacts of the Project. The following mitigation measures are from the Town's adopted General Plan MMRP:

**GPMM 4.14-1:** A qualified historic archaeologist approved by the Town shall perform the following tasks prior to development approvals on any part of the Town:

- Subsequent to a preliminary Town review, if evidence suggests the potential for historic resources, a field survey conducted using methodology that meets or exceeds state and federal guidelines for historical resources within portions of the project area not previously surveyed for cultural resources shall be conducted.
- Subsequent to a preliminary Town review, if evidence suggests the potential for historic resources, the Town Archives shall be contacted for information on historical property records. A qualified cultural resources professional shall be contracted to review the records search data collected by PCR Services Corporation on behalf of the Town of Mammoth Lakes as part of the Draft General Plan Update process.
- Subsequent to a preliminary Town review, if evidence suggests the potential for sacred land resources, the Native American Heritage Commission shall be contacted for information regarding sacred lands.
- Inventory all historical resources within the project area, including archaeological and historic resources older than 50 years, using appropriate State record forms and following guidelines in the California Office of Historic Preservation's handbook "Instructions for Recording Historical Resources". The archaeologist will then submit two (2) copies of the completed forms to the Town for the assignment of trinomials.
- Evaluate the significance and integrity of all historical resources within the project area, using criteria established in the CEQA Guidelines for important archaeological resources and/or 36 CFR 60.4 for eligibility for listing on the National Register of Historic Places.
- Propose mitigation measures and recommend conditions of approval to eliminate adverse project effects on significant, important, and unique historical resources, following appropriate CEQA and/or National Historic Preservation Act's Section 106 guidelines.
- Prepare a technical resources management report, documenting the inventory, evaluation, and proposed mitigation of resources within the project area, following guidelines for Archaeological Resource Management Reports prepared by the California Office of Historic Preservation, Preservation Planning Bulletin 4(a), December 1989. Submit one copy of the completed report, with original illustrations, to the Town for permanent archiving.

**GPMM 4.14-2:** If cultural materials or archaeological remains are encountered during the course of grading or construction, the developer shall cease any ground disturbing activities near the find. A qualified archeologist will be retained to evaluate significance of the resources and recommend appropriate treatment measures. Treatment measures may include avoidance, preservation, removal, data recovery, protection, or other measures developed in consultation with the Town and the developer. In addition, the Town shall:

- Enact interim measures to protect undesignated sites from demolition or significant modification without an opportunity for the Town to establish its historic value.
- Require, where appropriate, the incorporation of historic sites and buildings within new developments, using their special qualities as a theme or focal point.
- Encourage the use of the State Historic Building Code on buildings of historic significance that can allow modification without imposing some of the potentially detrimental provisions of the current building codes.
- Educate the public about the area's archaeological heritage.

**GPMM 4.14-3:** Prior to the approval of any projects that propose to demolish or significantly alter a potentially significant historic resource as defined pursuant to applicable state and federal laws, the applicant shall complete an historic survey report using methodology that meets or exceeds state and federal guidelines to determine potential historic significance. The determination of resource significance shall be made in accordance with CEQA Guidelines Section 15064.5. Where appropriate for a standing historic structure that will not be preserved in place, conservation can include documentation to Historic American Building Survey (HABS) standards and/or relocation.

**GPMM 4.14-4:** A qualified archaeologist shall perform the following tasks prior to development activities on any part of the Town:

- Subsequent to a preliminary Town review, if evidence suggests the potential for prehistoric resources, a field survey for prehistoric resources within portions of the project area not previously surveyed for cultural resources shall be conducted.
- Subsequent to a preliminary Town review, if evidence suggests the potential for sacred land resources, the Native American Heritage Commission for information regarding sacred lands shall be consulted.
- Inventory all prehistoric resources using appropriate State record forms and submit two (2) copies of the completed forms to the Town.
- Evaluate the significance and integrity of all prehistoric resources within the project area, using criteria established in the CEQA Guidelines for important archaeological resources.
- If human remains are encountered on the project site, the Mono County Coroner's Office shall be contacted within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other involved agencies. If the Coroner determines that the remains may be Native American, contact the Native American Heritage Commission for notification to the most likely descendants of the descendent and follow the required protocols specified in Public Resources Code Section 5097.98.
- All resources and data collected within the project area should be permanently curated at an appropriate repository within the Town or County.

**GPMM 4.14-5:** If cultural materials or archaeological remains are encountered during the course of grading or construction, the developer shall cease any ground disturbing activities near the find. A qualified archeologist approved by the Town will be retained to evaluate significance of the resources and recommend appropriate treatment measures. Treatment measures may include avoidance, preservation, removal, data recovery,

protection, or other measures developed in consultation with the Town and the developer. With the assistance of the archaeologist, the Town shall:

- Consider establishing provisions to require incorporation of archaeological sites within new developments, using their special qualities as a theme or focal point.
- Educate the public about the area's archaeological heritage.
- Propose mitigation measures and recommend conditional of approval to eliminate adverse project effects on significant, important, and unique prehistoric resources, following appropriate CEQA guidelines.
- Prepare a technical resources management report, documenting the inventory, evaluation, and proposed mitigation of resources within the project area. Submit one copy of the completed report, with original illustrations, to the Town for permanent archiving.

**GPMM 4.14-6:** If during grading and excavation an archaeological resource is found, construction shall be temporarily diverted, redirected or halted as appropriate. Any discovery of such resources shall be treated in accordance with federal, state, and local regulations, including those outlined in the CEQA Guidelines Section 15064.5 (e) and as appropriate, the Native American Historical, Cultural and Sacred Sites Act. For archaeological remains, conservation of a resource for which preservation in place is not feasible, relocation and if that is not feasible, documentation shall be required.

**GPMM 4.14-7:** Should the existence of, or the probable likelihood, of Native American or other human remains be found during development of a site, the landowner shall contact the County Coroner and no further excavation or disturbance of the site or nearby area shall be permitted until the County Coroner determines that no investigation of the cause of death is required. If the remains are determined to be Native American, the Coroner shall, as required by Public Resources Code Section 5097.98, notify the Native American Heritage Commission, which shall contact the most likely descendants and those descendants shall have 24 hours to inspect and make a recommendation to the landowner as to the appropriate means for removal and non-destruction of the remains and artifacts found with the remains. If an agreement cannot be reached between the landowner and the descendants, the Native American Heritage Commission shall mediate the disagreement, and if resolution is not reached, the landowner shall reinter the remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance. The applicant may develop a prospective agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission.

### (3) Trails System Master Plan Mitigation Measures

The adopted MMRP for the Town of Mammoth Lakes Trails System Master Plan (TSMP) also includes mitigation measures applicable to cultural resources. Since this is an adopted measure, for purposes of this EIR, these measures are applied where relevant and necessary to address the significant impacts of the Project. The following mitigation measures are from the Town's adopted TSMP MMRP:

**TSMM 4.D-1:** The Old Mammoth City neighborhood is a previously identified California Point of Historical Interest, and therefore, improvements on or adjacent to the point of interest that have the potential to directly impact this resource or its setting, must be designed to comply with the Secretary of the Interior's Standards. Additionally, the Old Mammoth Town Site (CA-MNO-3H) was previously identified as containing both prehistoric and historic subsurface remains as well as existing potential historic structures. Construction of MUP 2-1, Bridge MUP 3-4, Tunnel X2-18, and MUP 4-5 have the potential to significantly impact both archaeological resources and historic structures associated with the Old Mammoth Town Site (CA-MNO-3H). Likewise, the Ranger Station and/or CCC Camp administration buildings/campground in the vicinity of the Shady Rest Sawmill Cutoff Road, on USFS lands, are previously surveyed resources that require reevaluation by qualified surveyors, if determined necessary. Prior to designing or implementing projects in this area, the Town shall engage a qualified historic preservation consultant to review the proposed projects. A qualified architectural historian, historic architect, or historic preservation professional is someone who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Architectural History, or Architecture, pursuant to 36 CFR 61, and has at least 10 years experience in reviewing architectural plans for conformance to the Secretary's Standards and Guidelines. The Town shall undertake and complete construction in a manner consistent with the preservation consultant's recommendations to ensure that the Project meets the Secretary of the Interior's Standards for Rehabilitation. The preservation consultant shall review the final construction drawings for conformance to the Secretary of the Interior's Standards and prepare a memo commenting on the final Project. A Project that conforms to the Secretary of the Interior's Standards is considered fully mitigated under CEQA. For projects on federal lands, upon completion of any report on findings, the State Historic Preservation Officer shall be consulted to allow for Section 106 review and concurrence with the study findings. In the event eligible or designated historic resources or key contributing features are demolished for construction park facilities, mitigation shall include completion of a Historic American Building Survey report per State and Federal guidelines.

**TSMM 4.D-2:** The Hayden Cabin is listed on the California Register and new adjacent construction, additions, or rehabilitation to the Hayden Cabin or its contributing property setting visible from the Hayden Cabin, other than surface trail or minor paving improvements, must comply with the Secretary of the Interior's Standards. Prior to designing or implementing such improvements in this area the Town shall engage a qualified historic preservation consultant to review the proposed Project. A qualified architectural historian, historic architect, or historic preservation professional is someone who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Architectural History, or Architecture, pursuant to 36 CFR 61, and has at least 10 years experience in reviewing architectural plans for conformance to the Secretary's Standards and Guidelines. The Town shall undertake and complete construction in a manner consistent with the preservation consultant's recommendations to ensure that the Project meets the Secretary of the Interior's Standards for Rehabilitation. The preservation consultant shall review the final construction drawings for conformance to the Secretary of the Interior's Standards and prepare a memo commenting on the final Project. A Project that conforms to the Secretary of the Interior's Standards is considered fully mitigated under CEQA. In the event eligible or designated historic resources or key contributing features are demolished for construction park facilities, mitigation shall include completion of a Historic American Building Survey report per State and Federal guidelines.

**TSMM 4.D-3:** The Town shall conduct a Phase I Cultural Resources Assessment of individual project areas to identify any archaeological resources within the area of a proposed project component. The Area of Potential Effect (APE) will be the focus of the analyses for projects located on federal lands per Section 106. The Phase I assessment shall include cultural resources records searches through the Eastern Information Center (as needed) and the Inyo National Forest Field Office, a Sacred Lands File search through the Native American Heritage Commission and follow-up Native American consultation, and a pedestrian survey of the Project area (Note: Surveys may not be required in areas of the TSMP and SHARP that have already been surveyed unless resources were identified, such a determination should be made in consultation with the Inyo National Forest). For projects on federal lands, upon completion of any report on findings, the State Historic Preservation Officer shall be consulted to allow for review and concurrence with the study findings.

- If resources are identified during the Phase I assessment, then a Phase II assessment shall be required, as described in Mitigation Measure 4.D.-4;
- If no resources are identified as part of the assessment, no further analyses or mitigation shall be warranted, unless it can be determined that the project has a high potential to encounter buried archaeological or historical resources;
- If it determined that there is a moderate or high potential to encounter buried archaeological resources, appropriate mitigation shall be developed and implemented. Appropriate Mitigation may include realignment of the trail to avoid the sensitive area, in which case no additional mitigation would be required. If avoidance is not possible, appropriate mitigation may include but not be limited to the following:

Archaeological Monitoring During Construction: A qualified archaeologist shall be retained by the Town and approved by the reviewing agencies prior to the commencement of the Project. The archaeologist shall monitor all ground-disturbing activities and excavations within the Project area. If archaeological resources are encountered during implementation of the Project, ground-disturbing activities shall temporarily be redirected from the vicinity of the find. The archaeologist shall be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find and determine appropriate treatment that may include the development and implementation of a testing/data recovery investigation or preservation in place. The archaeologist shall prepare a final report about the find to be filed with the Town and the CHRIS-EIC, as required by the California Office of Historic Preservation. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the eligibility with respect to the California and National Registers. The Town, in consultation with the archaeologist, shall designate repositories to curate any material in the event that resources are recovered on Town property. If the resources are encountered on private land, the landowner shall determine appropriate curation in consultation with the archaeologist and Lead Agency. If archaeological resources are encountered on federal lands, ground-disturbing activities shall cease in the immediate vicinity of the find and the Inyo National Forest shall be contacted immediately. The Inyo National Forest shall provide direction as to the appropriate evaluation, treatment, and curation of the find.

**TSMM 4.D-4:** If resources are identified during the Phase I assessment, a Phase II Cultural Resources Assessment may be warranted if improvements or new public access is proposed in the vicinity of such resources, or if an alternate alignment is not selected. The Phase II assessment shall evaluate the resource(s) for listing in the California Register of Historical Resources (per CEQA) and the National Register of Historic Places (per Section 106). If enough data is obtained from the Phase I assessment to conduct a proper evaluation, a Phase II assessment may not be necessary. Methodologies for evaluating a resource can include, but are not limited to: subsurface archaeological excavations, additional background research, and coordination with interested individuals in the community.

**TSMM 4.D-5:** If, as a result of the Phase II assessment, resources are determined eligible for listing, potential impacts to the resources shall be analyzed and if impacts are significant and cannot be avoided, mitigation measures shall be developed and implemented to reduce impacts to the resources. If avoidance is not feasible, then Phase III Cultural Resources Assessments shall be implemented. Phase III assessments can include, but are not limited to: additional subsurface archaeological excavations (i.e., data recovery) and/or archaeological monitoring during ground-disturbing activities. For projects on National Forest lands, coordination and concurrence with the Inyo National Forest and State Historic Preservation Officer regarding treatment or mitigation shall be required. The performance standard for this mitigation measure is to reduce potential impacts to archaeological resources to a less than significant level.

**TSMM 4.D-6:** If archaeological resources are encountered during implementation of the Project, ground-disturbing activities should temporarily be redirected from the vicinity of the find. The Town shall immediately notify a qualified archaeologist of the find. The archaeologist should coordinate with the Town as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeologist. Treatment may include the implementation of an archaeological testing or salvage program. All archaeological resources recovered will be documented on California Department of Parks and Recreation Site Forms to be filed with the CHRIS-EIC. The archaeologist shall prepare a final report about the find to be filed with the Town and the CHRIS-EIC, as required by the California Office of Historic Preservation. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the eligibility with respect to the California and National Registers. The Town, in consultation with the archaeologist, shall designate repositories to curate any material in the event that resources are recovered on Town property. If the resources are encountered on private land, the landowner shall determine appropriate curation in consultation with the archaeologist and Lead Agency. The archaeologist shall also determine the need for archaeological monitoring for any ground-disturbing activities in the area of the find thereafter. If archaeological resources are encountered on federal lands, ground-disturbing activities shall cease in the immediate vicinity of the find and the Inyo National Forest shall be contacted immediately. In such cases, the Inyo National Forest shall provide direction as to the appropriate evaluation, treatment, and curation of the find.

**TSMM 4.D-7:** If human remains are encountered unexpectedly during construction excavation and grading activities, pursuant to California Health and Safety Code Section 7050.5, the Applicant shall halt ground-disturbing activities within the area of the human remains and notify the County Coroner. If the remains are determined to be of Native American

descent, the coroner shall have 24 hours to notify the California Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendant of the deceased Native American, who shall have 48 hours from notification by the NAHC to inspect the site of the discovery of Native American remains and to recommend to the Applicant or landowner means for treating and disposition, with appropriate dignity, the human remains and any associated grave goods. The Applicant or landowner shall reinter the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance. If the remains are determined to be of Native American descent and are located on federal lands, the coroner has 24 hours to notify the NAHC and the Inyo National Forest of the discovery. The Inyo National Forest shall take the appropriate steps to comply with the federal Native American Graves Protection and Repatriation Act (NAGPRA). NAGPRA stipulates that Native American remains and associated funerary objects belong to lineal descendants. If the descendants cannot be identified, then those remains and objects, along with unassociated funerary or sacred object and objects of cultural patrimony belong to the tribe on whose lands the remains were found or the tribe having the closest relationship to them.

**TSMM 4.D-8:** If paleontological resources are encountered during implementation of the Project, ground-disturbing activities shall temporarily be redirected from the vicinity of the find. The Town shall immediately notify a qualified paleontologist of the find. The paleontologist shall coordinate with the Town as to the immediate treatment of the find until a proper site visit and evaluation is made by the paleontologist. Treatment may include the implementation of salvage excavations or preservation in place. The paleontologist shall prepare a final report on the find that shall include appropriate description of the fossils, treatment, and curation. A copy of the report shall be filed with the Town and an appropriate paleontological institution, and shall accompany any curated fossils. The paleontologist shall also determine the need for paleontological monitoring for any ground-disturbing activities in the area of the find thereafter. If paleontological resources are encountered on federal lands, ground-disturbing activities shall cease in the immediate vicinity of the find and the Inyo National Forest shall be contacted immediately. In such cases, the Inyo National Forest shall provide direction as to the appropriate evaluation, treatment, and curation of the find.

## 3. ENVIRONMENTAL IMPACTS

**Threshold CUL-1:** The project would result in a significant impact if the project would cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

***Impact Statement CUL-1:*** *Project-related demolition, construction, maintenance, and/or improvement activities would have the potential to cause a potentially significant impact to historical resources. Compliance with GPMM 4.14-1 and 4.14-3 and applicable policies in the General Plan would reduce impacts to historical resources to a less than significant level.*

As discussed earlier, the results of the cultural resources records search through the EIC have indicated that several known built environment historic resources have been recorded within or in the immediate vicinity of the Mobility Element Update project area. Moreover, the Land Use Element/ Zoning Code Amendments project area is located in a densely urbanized area of the Town with numerous structures that would likely meet the 45-year age threshold to be considered a potential historical resource. Therefore, it is possible that

additional built environment historic resources are present within the Project Areas that have yet to be evaluated for eligibility for listing in the local, State, and/or federal registers. In the event the Project results in redevelopment or other improvements on a project-by-project basis that have the potential to demolish or substantially alter historic resources, impacts on historic resources would be significant. Accordingly, GPMM 4.14-1 and GPMM 4.14-3 would address this potential impact and therefore, compliance with these adopted mitigation measures would reduce impacts to a less than significant level.

### Mitigation Measures

Compliance with adopted GPMM 4.14-1 and GPMM 4.14-3 would reduce potentially significant impacts to historical resources to a less than significant level.

**Threshold CUL-2:** The project would result in a significant impact if the project would cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

***Impact Statement CUL-2:*** *Project-related demolition, construction, maintenance, and/or improvement activities would have the potential to cause a potentially significant impact to archaeological resources. Compliance with TSMM 4.D-3 through TSMM 4.D-6 and applicable policies in the General Plan would reduce impacts to archaeological resources to a less than significant level.*

As discussed earlier, the results of the cultural resources records search through the EIC have indicated that 86 archaeological or historical resources are located within or in the immediate vicinity of the Mobility Element Update project area while six resources are located within or in the immediate vicinity of the Land Use Element / Zoning Code Amendments project area. These resources include prehistoric archaeological resources such as temporary and permanent occupation sites (e.g., lithic/ground stone/shell scatters, midden deposits, large habitation sites, and bedrock milling stations) and trails. They also include historic archaeological resources such as remnants of historic period homesteads and refuse dumps and scatters. The current contents and condition of these resources are unknown as some of these resources were recorded as early as 1958 (and as late as 2013) and therefore it is likely that at least some of the resources have been partially or completely displaced or destroyed by modern development or some other cultural (e.g., looting, road construction) or natural (e.g., erosion, flood events) process since their initial recordation. In addition, the exact boundaries of these resources and their horizontal (across the surface) and vertical (below the surface) extent may either be unknown or inconclusive for the same reason and/or if no subsurface archaeological investigations have taken place at the resource. Moreover, the Proposed Project is conceptual at this stage and therefore the associated excavation parameters for the Project elements in the specific areas of the 50 resources are currently unknown. However, it can be assumed that components of the Proposed Project that include excavations into native soils/sediments (as opposed to artificial fill or bedrock) would have the potential to impact these 50 resources or additional archaeological resources within the Project Area that have yet to be discovered. Therefore, impacts to archaeological resources are considered potentially significant and adopted mitigation measures TSMM 4.D-3 through TSMM 4.D-6 would serve to address this potential impact. Revisions to TSMM 4.D-3 are recommended below to broaden the applicability of the measure to account for other components in the Mobility Element Update.

### Mitigation Measures

While TSMM 4.D-3 is applicable to the Mobility Element Update, revisions are recommended and shown in redline/strikethrough to broaden the applicability of the measure to address all components in the Mobility Element Update.

**TSMM 4.D-3:** The Town shall conduct a Phase I Cultural Resources Assessment of individual project areas to identify any archaeological resources within the area of a proposed project component. The Area of Potential Effect (APE) will be the focus of the analyses for projects located on federal lands per Section 106. The Phase I assessment shall include cultural resources records searches through the Eastern Information Center (as needed) and the Inyo National Forest Field Office, a Sacred Lands File search through the Native American Heritage Commission and follow-up Native American consultation, and a pedestrian survey of the Project area. ~~(Note: Surveys may not be required in areas of the TSMP and SHARP that have already been surveyed unless resources were identified, such a determination should be made in consultation with the Inyo National Forest).~~

- If resources are identified during the Phase I assessment, then a Phase II assessment shall be required, as described in Mitigation Measure 4.D.-4
- If no resources are identified as part of the assessment, no further analyses or mitigation shall be warranted, unless it can be determined that the project has a high potential to encounter buried archaeological or historical resources;
- If it determined that there is a moderate or high potential to encounter buried archaeological resources, appropriate mitigation shall be developed and implemented. Appropriate Mitigation may include ~~realignment of the trail~~ redesign of the project to avoid the sensitive area, in which case no additional mitigation would be required. If avoidance is not possible, appropriate mitigation may include but not be limited to the following: […]

**Threshold CUL-3:** The project would result in a significant impact if the project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

***Impact Statement CUL-3:*** *Project-related construction, maintenance, and improvement activities would have the potential to cause a potentially significant impact to paleontological resources. Compliance with TSMM 4.D-8 and applicable policies in the General Plan would reduce impacts to paleontological resources to a less than significant level.*

As discussed earlier, the paleontological resources records search revealed that there are no known vertebrate, invertebrate, plant, microfossil, or other fossil localities from the UCMP online database that have been previously identified within the Project Area or the surrounding vicinity. The closest known vertebrate fossil locality is located more than 30 miles north of the project. Initial consultation of collection records and geologic maps (Jennings 1977) indicate that the Mammoth Lakes area has no history of fossil resources largely because the terrain is dominated by igneous and metamorphic rocks which are not conducive to retaining paleontological resources. Pleistocene glacial deposits overlie the basement and volcanic rocks in the project and throughout the Town. Results of previous geotechnical studies for projects within the Town indicate that the lower portions of the Town and the UGB are underlain by undocumented fill (in developed areas), Quaternary younger alluvium, and Quaternary Tioga Till (i.e., glacial till) (Sierra Geotechnical Services, Inc. 2005). Apart from glacial deposits, there are no sediments old enough to produce fossils inside

or within the vicinity of the Project and it is unlikely that shallow excavations associated with the proposed Project will encounter these deposits. However, there is a low to moderate potential to encounter paleontological resources in glacial deposits within the proposed project area. Accordingly, adopted mitigation measure TSMM 4.D-8 would address this potential impact. Additional measures have been added below to TSMM 4.D-8 to include industry standard methodologies set forth by the Society for Vertebrate Paleontology.

### Mitigation Measures

While TSMM 4.D-8 addresses the protection of paleontological resources and serves to reduce potentially significant impacts, some revisions are recommended to include industry standard methodologies. The recommended additional language is shown in underline.

**TSMM 4.D-8:** If paleontological resources are encountered during implementation of the Project, ground-disturbing activities shall temporarily be redirected from the vicinity of the find. The Town shall immediately notify a qualified paleontologist of the find. The paleontologist shall coordinate with the Town as to the immediate treatment of the find until a proper site visit and evaluation is made by the paleontologist. Treatment may include the implementation of salvage excavations or preservation in place. <u>If preservation in place is not feasible, the paleontologist shall implement a paleontological salvage program to remove the resources form the project site. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the University of California Museum of Paleontology or the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.</u> The paleontologist shall prepare a final report on the find that shall include appropriate description of the fossils, treatment, and curation. A copy of the report shall be filed with the Town and an appropriate paleontological institution, and shall accompany any curated fossils. The paleontologist shall also determine the need for paleontological monitoring for any ground-disturbing activities in the area of the find thereafter. If paleontological resources are encountered on federal lands, ground-disturbing activities shall cease in the immediate vicinity of the find and the Inyo National Forest shall be contacted immediately. In such cases, the Inyo National Forest shall provide direction as to the appropriate evaluation, treatment, and curation of the find.

**Threshold CUL-4:** The project would result in a significant impact if the project would disturb any human remains, including those interred outside of formal cemeteries.

***Impact Statement CUL-4:*** *Project-related demolition, construction, maintenance, and improvement activities would have the potential to cause a potentially significant impact to human remains. Compliance with TSMM 4.D-7 and applicable policies in the General Plan would reduce impacts to human remains resources to a less than significant level.*

As discussed earlier, no known human remains have been identified from the EIC records within the project area. However, these findings do not preclude the existence of previously unknown human remains located below the ground surface, which may be encountered during construction excavations associated with the Proposed Project. Similar to the discussion regarding archaeological resources above, it is also possible to encounter buried human remains during construction given the proven prehistoric and historic occupation of the region, the identification of multiple surface and subsurface archaeological resources within and in the immediate vicinity of the project area, and the favorable natural conditions that would have attracted prehistoric and historic inhabitants to the area. Accordingly, TSMM 4.D-7 would address this potential impact.

### Mitigation Measures

Compliance with TSMM 4.D-7 would reduce potentially significant impacts to human remains to a less than significant level.

## 4. CUMULATIVE IMPACTS

The development of vacant parcels and redevelopment of already developed parcels under the Land Use Element/Zoning Code Amendments and the road improvements and MUPs identified in the Mobility Element Update are primarily within the UGB of the Town. Although cultural resources are present within these areas, a number of mitigation measures are proposed to protect known and previously unknown resources that occur within the Town. With the implementation of these mitigation measures and compliance with policies outlined in the General Plan and design features, the cultural resources within the Town would be protected. In addition to this Project, there are a total 26 related projects currently in the Town of Mammoth Lakes. The related projects are primarily within the Town's UGB and would be subject to the same policies contained in the General Plan. As such, impacts from the Project would not be considered cumulatively significant.

## 5. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the adopted mitigation measures, including recommended revisions, would ensure that impacts regarding cultural resources would be less than significant.