

3A.5 CULTURAL RESOURCES – LAND

This section contains a program-level evaluation of cultural resources. However, impacts to cultural resources would be the same under each individual development phase as under the program (entire SPA) analysis.

3A.5.1 AFFECTED ENVIRONMENT

ARCHAEOLOGICAL SETTING

The earliest well-documented entry and spread of humans into California occurred at the beginning of the Paleo-Indian Period (10,000–6,000 years Before Present [B.P.]). Social units are thought to have been small and highly mobile. Known sites have been identified within the contexts of ancient pluvial lake shores and coastlines, as evidenced by the presence of such characteristic hunting implements as fluted projectile points and chipped stone crescent forms. Prehistoric adaptations over the ensuing centuries have been identified in the archaeological record by numerous researchers working in the area since the early 1900s, as summarized by Fredrickson (1974) and Moratto (1984). Because of the Central Valley's plentiful resources and temperate climate, the valley was well populated prehistorically and served as the location for some of the more substantial village sites known in California.

Lillard et al. (1939) and others conducted numerous studies that form the core of the current state of knowledge about early archaeology of the upper Central Valley. Little has been found archaeologically that dates to the Paleo-Indian or the Lower Archaic time periods (6000–3000 B.P.); however, archaeologists have recovered a great deal of data from sites occupied by the Middle Archaic period (3000–1000 B.P.). The lack of sites from earlier periods may be because of high sedimentation rates that have left the earliest sites deeply buried and inaccessible. During the Middle Archaic Period, the broad regional patterns of foraging subsistence strategies gave way to more intensive procurement practices. Subsistence economies were more diversified, possibly including the introduction of acorn processing technology. Human populations were growing and occupying more diverse settings. Permanent villages that were occupied throughout the year were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period (1000–500 B.P.). Exchange systems become more complex and formalized. Evidence of regular, sustained trade between groups was seen for the first time.

Several technological and social changes characterized the Emergent Period (1800–200 B.P.). The bow and arrow were introduced, ultimately replacing the dart and atlatl. Territorial boundaries between groups became well established. It became increasingly common that distinctions in an individual's social status could be linked to acquired wealth. Exchange of goods between groups became more regularized with more goods, including raw materials, entering into the exchange networks. In the latter portion of this period, exchange relations became highly regularized and sophisticated. The clamshell disk bead became a monetary unit for exchange, and increasing quantities of goods moved greater distances. Specialists arose to govern various aspects of production and exchange.

Three specific cultural manifestations are well represented in archaeological assemblages in the general vicinity of the SPA. These assemblages are discussed in detail in Moratto (1984) and summarized here:

The Windmill Pattern (3,000–1,000 B.P.) of archaeological assemblages included an increased emphasis on acorn use as well as a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay artifacts, and worked shell and bone were hallmarks of Windmill culture. Widely ranging trade patterns brought goods in from the Coast Range and trans-Sierran sources as well as from closer trading partners. Distinctive burial practices identified with the Windmill Pattern also appeared in the Sierra Nevada foothills, indicating possible seasonal migration into the Sierra Nevada.

The Berkeley Pattern (1,000–500 B.P.) represented a greater reliance on acorns as a food source than was seen previously. Distinctive stone and shell artifacts distinguished this pattern from earlier or later cultural expressions. The Berkeley Pattern appears to have developed in the San Francisco Bay Area and was spread through the migration of Plains Miwok groups. The later Augustine Pattern (500 B.P. to Historic Era) may have been stimulated by the southern migration of Wintuan people from north of the Sacramento Valley. Their culture was marked by a population increase resulting from more intensive food procurement strategies, as well as by a marked change in burial practices, increased trade activities, and a well-defined ceramic technology.

ETHNOGRAPHIC SETTING

By virtue of its geographic position, the SPA lies within traditional Nisenan (sometimes referred to as the Southern Maidu) territory. The Nisenan belong to the Penutian linguistic family within which Kroeber (1925) recognized three Nisenan dialects—Northern Hill Nisenan, Southern Hill Nisenan, and Valley Nisenan. The Nisenan territory included the drainages of the Yuba, Bear, and American Rivers, and the lower drainages of the Feather River. The Nisenan ranged from the Sierra Nevada crest to nearly sea level at the Sacramento River.

Native Americans, including the Nisenan, of the western Sierra Nevada foothills lived in relatively permanent settlements, visiting the higher reaches primarily during the summer months (Moratto 1984). Permanent settlements ranged from a handful of people to several hundred, and tended to be situated near water, preferably on slightly raised ground. A major village might include dwellings, granaries, sweat houses, a headman’s house, and dance house, or other ceremonial structures. The people of the villages would gather a wide variety of fruits, nuts, greens, bulbs, roots, and seeds, processing and storing many of them for winter. Fish, birds, deer, small game, and many other animals were hunted.

Sustained Nisenan contact with Euro-American groups came late in the vicinity of the SPA. Limited encounters with explorers and trappers during the late 18th and early 19th centuries left the Nisenan social, political, and economic systems relatively unaffected (Wilson and Towne 1978). Their lifeways remains largely intact until the 1833 “malaria” epidemic that swept through many Central Valley tribes including the Valley Nisenan. This was one of several major events to impact the tribe with another of the most significant being the discovery of gold and the start of the Gold Rush in 1848–1849. By 1860, disease, violence, forced relocation, and environmental destruction had greatly affected Nisenan populations and traditional cultural systems. For the remainder of the 19th century and well into the 1900s the Nisenan people were largely a marginalized population. However, during the latter decades of the 20th century the Nisenan began to revitalize their culture. Through new-found economic, political, and social influence the Nisenan once again constitute a thriving native community reinvesting in traditional lifeways and culture.

HISTORIC SETTING

Early Settlement

The earliest Euro-Americans to venture into the project region included Gabriel Moraga and a group of Spanish explorers in 1806–1808 who ventured into the vicinity of Sacramento, and fur trappers and explorers associated with the Hudson’s Bay Company in the 1820s. Jedediah Smith, also with Hudson’s Bay Company at the time led a group of trappers along the edge of the foothills to the American River in search of a pass over the Sierra Nevada in 1826. Kit Carson and John C. Fremont crossed the mountains near Lake Tahoe and descended to Sutter’s Fort traveling along the South Fork of the American River in 1844. These expeditions, however, had little lasting impression on the landscape or the native inhabitants of the region.

Historic-era developments in the SPA vicinity appear to have been few prior to the discovery of gold at Sutter’s Mill in El Dorado County and the ensuing Gold Rush. The western portion of the SPA was originally part of the *Rancho Rio de los Americanos* Mexican land grant—more than eight leagues (about 35,500 acres) granted to William Leidesdorff and purchased by Joseph L. Folsom in 1848 after Leidesdorff’s death (Hoover et al.

1990:288). This grant extended from the eastern border of John Sutter's New Helvetia settlement (east of Sacramento) along the south bank of the American River to the western edge of present-day Folsom. (EDAW 2006: 6)

Gold Rush Period

During the Gold Rush of 1848–1849 and the following years, local settlement and development activity skyrocketed and rich mining districts such as Folsom, Coloma, Shingle Springs, and Placerville were heavily worked and gave rise to thriving communities still in existence today. Following the discovery of gold at Coloma in January 1848, mining camps along the American River sprang up as numerous fortune-seekers traversed the area between Sacramento and the Sierra Nevada foothills. Additional gold discoveries in spring 1848, including at Mormon Island (in the northeast corner of Sacramento County), fueled the early, rapid, and diverse settlement of the foothill region.

Early mining focused on the gravels and sands of the American River, Alder Creek, and numerous waterways within the SPA. Mining camps arose along these waterways and river bars including “Negro Bar” where African-American miners settled and started working local gravels as early as 1849. By 1850 the population of Negro Bar had reached 336 only to double again by the following year. However, flooding in 1852 forced the settlement to move east and above the river on bluffs at the site of present-day Folsom (Gudde 1975; Hoover et al. 1990:289). Just south of town was a north-south trending ridge of particularly rich gravels referred to as Willow Springs Hill at the south of which ran Alder Creek. It was along this creek and within the SPA that John P. Rhodes established his claim in 1848 after arriving in California via the “northern” route in 1846; having avoided the southern route from Salt Lake, Utah that proved longer and ultimately disastrous for the Donner-Reed party that same year. John Rhodes would eventually help organize the first relief party that rescued several members of the ill-fated group (Wilson 1986:86). Rhodes only arrived in the Folsom area in 1848 after purchasing a portion of the *Rancho Omochumnes* on the Cosumnes River with the intention of establishing a farm and ranch. However, once gold was discovered on his property he filed a claim on Alder Creek after which time the general area became known as Rhoad's Diggings (Wilson 1986:84).

Rhoad's diggings, however, suffered from only a seasonal availability of enough water to work large claims and wash the placer gold from the local gravels. Although small individual operators could profitably work their claims in the area early on, large-scale mining had to wait until an extensive water-conveyance system could be built. This finally occurred in 1851 with the establishment of the Natoma Water Company (reorganized as the Natoma Mining Company in 1852) by Amos P. Catlin, an attorney from New York and a small group of investors. Although their chief aim was to “drain the lower end of Mormon Island and the upper end thereof by means of a race on the southern side of said island” (Castenada et al. 1984:28,30) for the purposes of supplying water to claims in Folsom, the company eventually branched out. In doing so, part of their system extended to Rhoad's Diggings with the Rhoads Branch Ditch that was completed by the summer of 1853 (Wilson 1986:84). With a reliable large source of water being transported to the Rhoad's Diggings, miners rushed into the area and by late 1853 the new town of Prairie City boasted a population of somewhere between 2,500 and 3,500 and over 100 buildings including 15 stores, 10 boarding houses, a school, and an express office (Hatheway and McKenna 1987:11–12).

By the mid-1850s, mining operations had expanded well beyond simple small-scale operations to placer mining on an industrial scale and the exploitation of rich quartz veins also present in the Rhoad's Diggings area. In 1855 John Gass and a Colonel Hagan constructed the first steam-powered stamp mill at the diggings and two years later a second, and larger, mill was established by a French company at a cost of \$50,000 (Wilson 1986:84, 88). However, as the easiest placer deposits began to diminish, most of the initial group of miners to arrive in the area began to move away; most returning to farming or other endeavors that many of them left at home in a search of easy riches. As their numbers decreased, the population of Chinese miners in particular began to rise as they started to work less accessible claims and the piles of tailings that still held a considerable amount of gold. By

1866, there were only 48 independent miners still working in the Prairie City Mining District (adjacent to Rhoad's Diggings) with 35 of them being of Chinese descent (Werner et al. 1994:57).

Later Period: Large-Scale Mining

As individual miners and small operations began to be phased out with large companies consolidating multiple claims in and around the Alder Creek area, access to the deeper and/or more extensive gold deposits required the use of ground sluicing, low and high-pressure "hydraulicking", and drifting, all of which required the movement of large quantities of water. (Detailed information on these techniques including associated archaeological manifestations can be found in Lindstrom 1988, and 1989, and Maniery 1992. The most prominent firm working in the SPA and vicinity following the initial "rush" was The Natoma Mining Company whose ditch systems provided steady water supplies from the American River to the mining districts in and around present-day Folsom including those at Alder Creek. Also in the Folsom area, another large-scale mining technique commonly used originated fairly early on in the region. Miners, many probably Chinese (June Chan, personal communications with Mary Maniery, 1993: Crawford 1894:226 in Maniery 1994), began excavating deep tunnels and shafts into the banks of the American River in order to follow potentially rich gravel deposits. By the 1860s to the 1870s this practice was in common usage and shafts and tunnels extended throughout the river terrace where the town of Folsom is located.

Drift and ground sluicing operations continued along with large-scale hydraulic and tunneling operations well into the 1890s. However, smaller drift and sluicing claims were still being worked by both Euro-American and Chinese miners employed by smaller independent companies. The Natoma Mining Company also employed Chinese on their lands during the mid-late 1800s. This included their operations on Mississippi Bar (north of the SPA), which they acquired in 1864 (Castenada et al. 1984). The Natoma Mining Company, through persistent claim acquisition and consolidation efforts, effectively ended small, independent mining company operations in the Folsom area. By the turn of the century the smaller drift and ground sluicing operations in the Folsom area had been primarily replaced by the larger dredging operations. The first mention of large scale dredging was the Doan Mining Dredger that operated near Mississippi Bar in 1894. However, this operation was apparently short-lived (Crawford 1894:226 and 1896:316–318 in Maniery 1992:25). W. P. Bonright and Company was the first to establish a successful dredging operation at their newly acquired property at Mississippi Bar. This steam powered bucket line dredge manufactured by the Risdon Iron Works of San Francisco was constructed in 1898 and began operations in 1899.

The Natoma Mining Company, reorganized as Natomas Consolidated of California, acquired all of the smaller dredging operations by 1916 and operated until 1962, with a short period during World War II when operations were suspended. A 1950 aerial photograph depicts one of their dredges working the river gravels at the base of the bluffs, just north of Mississippi Bar. Other operations in the SPA and vicinity included those of Folsom #2 in the vicinity of the town of Folsom in the early 1900s, and those of the General Dredging company that operated a small "doodlebug" drag line dredge between 1938 and 1942, north of Willow Creek and south of Folsom.

Agriculture and Transportation

The low, well-watered foothills of the SPA and vicinity were also the focus of ranching activities that supported the booming towns in the eastern Sacramento and western El Dorado County areas. When many of the early small-scale mining opportunities began to drop off in the late 1800s, disenchanted miners of the region turned to agriculture. To a certain extent, the small communities such as Clarksville, to the east of the SPA, White Rock, located to the south, and Prairie City to the west, served as support centers for local miners, ranchers, and farmers and as stops along Sacramento-Placerville Road (present White Rock Road) that extended from Sacramento to Placerville and the gold fields.

The early-to-mid 20th century saw relatively little change to the rural agricultural character of the area with the exception of some improved transportation elements (U.S. Highway 50 [U.S. 50]), regional mining (conversion

from placer to dredge mining), and commercial development including that of Aerojet General Corporation that manufactured liquid and solid propellant rocket engines on their property west of the SPA beginning in the early 1950s (ECORP Consulting [ECORP] 2007:8). White Rock Road, which forms the southern boundary of the SPA, was designated as a portion of the Lincoln Highway, the nation's first interstate automobile route, in the early decades of the 20th century and thus established the roadways of the area as some of the most traveled in the nation. (EDAW 2006: 6). The development of such transportation routes and the growth of Sacramento and its environs, however, are rapidly changing the character of the Folsom area from rural to suburban with residential and commercial development increasing throughout the region.

DOCUMENTED CULTURAL RESOURCES

Methodology for Identifying Documented Resources

In order to determine if any potentially significant cultural resources are present within or in the immediate vicinity of the SPA, AECOM cultural resources specialists conducted a records search through the North Central Information Center (NCIC) of the California Historical Resources Information System at California State University, Sacramento (record search retrieved May 14, 2007). ECORP also consulted with the Native American Heritage Commission (NAHC) to determine if any sites or properties of particular cultural significance to the Native American community were present that could be affected by the project. The NAHC response indicated that there were no sites found in the Sacred Lands file. The NAHC included a list of five individuals and organizations that might have information on or concerns with the project. On November 17, 2008 and January 5, 2009 contact letters were sent to the individuals and groups on the NAHC list, along with maps of the SPA and requests for information (Appendix E1). Follow-up telephone calls were conducted in December 2008 and January 2009. As a result of this effort, Rose Enos of Auburn, California responded and requested that she be notified if Native American burial sites are discovered.

The NCIC records search indicates that the entire SPA has been inventoried previously for cultural resources (Table 3A.5-1) and that approximately 260 prehistoric and historic-era districts, sites, features, and isolated artifacts have been identified (Appendix E2). The density of identified historic and prehistoric resources suggests that the entire SPA is also sensitive for additional undiscovered prehistoric and historic cultural resources. Thus, the SPA is considered highly sensitive for historic and prehistoric resources.

Identified Resources

Cultural resources identified within the SPA include: (1) traces of early Native American habitation including lithic artifact scatters and bedrock mortars; and (2) the remains of historic-era activities, in particular, those related to Gold Rush-era and later mining operations. The latter consist of the remains of small placer and quartz mines, numerous ditches and remains of similar water conveyance infrastructure, cabin sites, and other structure foundations, tailings piles, and refuse scatters.

Historic Gold Rush-Era Resources

The largest single documented "site" consists of CA-Sac-308H; a landscape encompassing several historic mining districts containing the remnants of mining operations ranging from the earliest days of the Gold Rush to mid-20th century dredges. The densest portion of the mining remains (including those within CA-Sac-308H) is found in the northwest corner of the SPA and includes portions of historic mining landscapes referred to as the Alder Creek Historic Placer Mining District, the Natomas-Aerojet Dredge Field District, the Prairie Diggings Placer Mining District, the American River Mining District, and individual loci, features, and sites related to these districts. Although this "site" is well documented in the archaeological literature (see Lindstrom 1989; PAR 1991; Tordoff 1994; and Windmiller 2005) it has been recorded in a somewhat piecemeal fashion in response to various development projects over the past 20 years. This repeated partial documentation has led to an unsynthesized documentation of the site as a single complex and cultural landscape. However, it is clear that this "site"

**Table 3A.5-1
Summary of Previous Cultural Resource Investigations**

Report Title	NCIC File No.	Author and Date	Resources Identified
<i>Sacramento Country Day School, Folsom Campus, Archaeological Resources Inventory, Folsom, Sacramento County, California</i>	5871	Windmiller (2005)	Twelve historic archaeological resources related to early homesteading and mining
<i>A Cultural Resource of Aerojet General Corporation, Sacramento Plant, Sacramento County, California</i>	4519	Lindstrom (1989)	Two mining districts, two historic home sites, one historic refuse scatter, and six isolated historic features
<i>Determination of Eligibility and Effect for the Sunridge Park Project Area, Sacramento County, California</i>	5850	Peak et. al. (2004)	None
<i>Archaeological Inventory Survey, Folsom South Development Project, 1,443 acres on White Rock Road, Sacramento County, California</i>	6997	Genesis (2006)	Three prehistoric sites, mortar groups and mortar sites with middens, 14 historic sites related to mining and ranching, and one multi-component site
<i>Historic Study Report, Proposed Interchange and Auxiliary Lanes on Highway 50, Eastern Sacramento County, California</i>	3840	Tordoff (1994)	Evaluations of five historic archaeological resources, including two mining districts, three segments of a water conveyance system, and two homestead-related sites
<i>Historic Property Survey Report, Proposed Interchange and Auxiliary Lanes on Highway 50, Eastern Sacramento County, California</i>	4521 A & B	Noble (1994)	Twelve historic archaeological resources related to the American River Placer Mining District
<i>Archaeological Survey Report for the East Bidwell Street/ Scott Road Interchange Project on Route 50, Sacramento, California</i>	3749	Jones & Stokes (1995)	None, though previously recorded sites were visited and updated
<i>Historic Property Survey Report for the State Route 50/Empire Ranch Road Interchange Project</i>	8119	LSA (2006)	None
<i>Cultural Resource Assessment of the Proposed White Rock Springs Golf Course, Sacramento County, California</i>	4479	Peak et. al. (1993)	Three archaeological resources: prehistoric mortar site CA-Sac-222, the White Rock Springs Ranch site, and a rock wall
<i>Cultural Resource Assessment of the Proposed White Rock Springs Golf Course, Sacramento County, California-revised final report</i>	4480	Peak et. al. (1994)	Same as above
<i>Positive Historic Property Survey Report for the U.S. Highway 50 HOV Lanes Project, Sunrise Boulevard to El Dorado Hills Boulevard, Sacramento and El Dorado Counties, California</i>	3636	PAR (1998)	Two historic archaeological resources related to ranching
<i>CA-0578A/US 50, 14751 White Rock Road, Sacramento County, California</i>	4470	Earth Tech (2000)	None
<i>Pacific Bell Mobile Services, 14751 White Rock Road, Folsom, Sacramento County: Site # SA-065-C3</i>	1907	Derr (1997)	None
<i>Historic Study Report and Historic Resource Evaluation Report for 16 Sites, Highway 50 Interchange Project, Post Mile 15.8 to 23.1, Sacramento County, California</i>	4520	PAR (1992)	Evaluation of 16 historical and archaeological resources all related to ranching, mining, and transportation from 1848-present

**Table 3A.5-1
Summary of Previous Cultural Resource Investigations**

Report Title	NCIC File No.	Author and Date	Resources Identified
<i>Archaeological Survey Report, Highway 50 Interchange Project, Post Mile 15.8 to 23.1, Sacramento County, California</i>	4525	PAR (1991)	17 historical and archaeological resources all related to ranching, mining, and transportation from 1848-present
<i>Carpenter Ranch Cultural Resources inventory, Folsom, Sacramento County, California</i>	-----	Windmiller (2006)	129 Archaeological sites (52 possibly eligible) and two potential historic districts
<i>Cultural Resources Survey Report, Folsom Area South Group-30 acre parcel, Sacramento County, California</i>	-----	ECORP (2006)	Five historic archaeological resources related to early homesteading and mining
<i>Folsom Heights Property Development Project, Sacramento County, California</i>	-----	EDAW (2006)	Two historic archaeological resources related to homesteading, and a segment of White Rock Road/Lincoln Highway
Source: NCIC 2007, data compiled by EDAW/AECOM (now AECOM) in 2008			

represents a unique landscape exhibiting the full range of placer mining techniques in use in California from the earliest days of the Gold Rush up until the early 1960s when the last of the gold dredges ceased operations in this area. As such many of the constituent elements of the landscape may be eligible for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR), and some of the elements have already been recommended as NRHP-eligible (and thus CRHR-eligible).

Apart from consideration of CA-Sac-308H as a unique site (cultural landscape) with many contributing elements, numerous other mining-related sites and features have been identified within the SPA. These include stone and earth dams, ground sluice remains, prospect pits, placer tailings, and mine shafts. One of the most prominent types of mining-related features situated within the SPA consists of water conveyance ditches associated with the Alder Creek and Rhoads Diggings historic mining districts (contained within CA-Sac-308H). Although relating many early individual mining features or structures to specific individuals or mining firms can be difficult, many of these ditches were mapped and constructed in the 1850s by mining companies such as the Natomas Company. Other well-dated mining-related sites include the remains of a house constructed in 1855 (temporary site number CR-82) and the site of the 1855 Gass and Hagan steam mill in the Rhodes Diggings historic mining district (temporary site number CR-97).

In addition to water conveyance ditches, mine tailings, and prospect pits, another class of feature situated within the SPA has potential for providing extensive historical information on the ethnicity and daily lives of early Gold Rush-era miners. A number of possible residences or small cabin remains are found throughout and near the CA-Sac-308H landscape area. These often consist of rough stone footings or foundations or, more commonly, the collapsed remains of stone fireplace chimneys. These cabin sites are often closely associated with small placer diggings and many may date to the earliest period of Gold Rush mining in the Folsom area. Although many similar cabin sites and small-scale diggings probably existed in the vicinity prior to dredge mining in the late 19th century, relatively few now remain and most appear to be in excellent and relatively undisturbed condition. While much is known regarding the grand scheme of mining developments in the Folsom area during the 19th and early 20th centuries, little has been recorded on the early lifeways of the individual miners. These cabin sites, given their spatial association with early mining sites and landscapes, are almost certainly related to gold mining activities and may represent an unusual resource capable of providing detailed information on the Gold Rush miner's lifeways.

Other Historic-Era Resources

Other historic-era resources within the SPA include the remains of ranch and farm complexes, refuse scatters, ranch fences, stone walls, and roadways. Some sites not directly related to mining can also be dated to specific periods and/or associated with known individuals. These include the 1870s Goulinson homestead (CA-Sac-739H), the (probable) Grover Russi homestead and ranch complex (CA-Sac-606H), and the Cecil Brown residence (CA-Sac-682H).

Two major historic transportation routes, a segment of the Southern Pacific Railroad (SPRR), and White Rock Road either pass directly through the SPA (the SPRR) or form a portion of its boundary (White Rock Road). The SPRR is eligible for NRHP listing as a system, but the segment of lines situated within the SPA has not been formally evaluated for potential eligibility for NRHP listing. However, White Rock Road, aside from having been established and used heavily during the Gold Rush period, was also designated as a portion of the Lincoln Highway. The Lincoln Highway, the nation's first interstate automobile route was designated in the early decades of the 20th century. The Lincoln Highway, consisting of a route patched together from pre-existing roads and newly built "seedling miles" intended to spur economic growth, started in Times Square, New York City, and ended in Jack London Square in Oakland. At the time, the Federal government had nothing to do with the designation and construction of the route. Henry Joy, President of the Packard Motor Car Company, and Carl Fisher, owner of the Indianapolis Motor Speedway were primarily responsible for the establishment of the Lincoln Highway Association in 1913 and all its activities. Mr. Joy and Mr. Fisher, and other automobile manufacturers and industrialists of the day, had a vested interest in the growth and improvement of roadways in the United States; a better and more extensive road network meant increased sales.

Prior to the construction of U.S. 50, White Rock Road was part of the main west-east route extending from Sacramento into the Sierra Nevada foothills. White Rock Road represents a portion of the original 1913-designated route and remained part of this privately-designated and maintained road system until the 1920s. In 1921 the Federal government passed the Federal Highway Act which, like a similar act passed in 1916, provided \$75 million of matching funds to the states for highway construction. However, unlike the 1916 act, the 1921 act required the states to identify 7% of its total mileage as "primary;" only these roads would be eligible for Federal funds. The Lincoln Highway, already an established and maintained route, was prime for designation as a primary road worthy of Federal funding. By the late 1920s, the Lincoln Highway in California was no longer a private enterprise and had been fully absorbed into the Federal highway system with the exception of many local segments one of which was White Rock Road. Although this portion of the old Lincoln Highway has been repaved repeatedly over time, much of the general setting of the roadway has changed little from the early decades of the 20th century. Much of the surrounding land is still devoted to ranching and agriculture and many period culverts, bridges, and associated features such as drainage ditches likely dating to the teens and twenties are still in place. Consequently, portions of White Rock Road retain enough integrity to the Lincoln Highway period to be considered potentially eligible for NRHP listing.

Identified Prehistoric Resources

In addition to the dense cluster of historic-era sites within and near the SPA, clear evidence of early Native American occupation has also been documented in the form of numerous prehistoric sites and features within the SPA. Within the northwest portion of the SPA in particular, which was heavily disturbed by mining, numerous prehistoric sites likely once existed. The potential that "significant" (under CEQA) remnants of these sites occur within the SPA is high. Generally, Native American populations tended to settle in the vicinity of perennial water sources such as those found in the northwest portion of the SPA. With fewer such water sources and drainages documented elsewhere in the SPA, such locales are somewhat sparse. However, several prehistoric sites consisting of lithic artifact scatters and bedrock or boulder mortars have been recorded. The most important of these (CA-Sac-222) exists in the southeast portion of the SPA and consists of the actual "white rocks" after which White Rock Road was named. Noted in early historic accounts of the region, this unusual white quartzite outcrop also exhibits a series of deep mortar holes resulting from extensive early Native American processing of plant

foods, almost certainly acorn. In addition, scatters of lithic artifacts have been documented in the immediate vicinity of the boulder outcrop, suggesting that important subsurface remains may be present. Consequently, due to a direct association with an important historic-era roadway (White Rock Road), their status as an important local landmark, and the likelihood that important deposits of early prehistoric materials are present, this site was recommended eligible for NRHP listing (Solano Archaeological Services 2008).

Summary of Identified Resources

Regardless of their type and cultural/temporal associations, research has demonstrated that numerous cultural sites, features, artifacts, and landscapes are situated within the SPA. While the highest density of recorded resources occurs in the northwest corner of the SPA, the overall density of identified cultural resources suggests that the entire SPA is highly sensitive for historic and prehistoric resources. The number of identified resources indicates a strong likelihood that additional undiscovered resources occur within the SPA.

Identified resources constitute the remains of a long series of human activities from prehistoric habitation and resource processing, to early historic mining, ranching, and transportation. Although the entire SPA has been subjected to detailed archaeological surveys and historical investigations, much of this research has been conducted in a piecemeal fashion and to date no consideration has been given to the documentation and interpretation of the most notable “site” documented in the area—the historic mining landscape presently labeled CA-Sac-308H. This landscape, along with most of the other prehistoric and historic-era resources documented within the SPA, has not been formally evaluated for significance per NRHP/CRHR criteria. Regardless of their association or eligibility, the large number of cultural resources documented indicates that the SPA has long been the focus of intensive activity for thousands of years and due to its largely intact nature, is unique in the Sacramento/Folsom region.

3A.5.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA or “Section 106”) and its implementing regulations require Federal agencies to consider the effects of their undertakings on cultural resources that are listed on or eligible for listing on the NRHP. These resources are defined as “historic properties” in the Section 106 process. For this project, the U.S. Army Corps of Engineers (USACE) must also satisfy the requirements of Section 106 because permitting under the Clean Water Act (CWA) is an undertaking as defined in the Section 106 regulations (36 Code of Federal Regulations [CFR] Part 800.16[y]). Other Federal permits and authorizations that are necessary, such as a take permit under the Federal Endangered Species Act (ESA), also require compliance with the requirements of Section 106. Accordingly, all five action alternatives under consideration require compliance with Section 106 because these alternatives (the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit [no USACE 404 permitting] alternatives) would require some level of Federal authorization and permitting. To determine whether these undertakings could affect historic properties, cultural resources (including archaeological, historical, and architectural properties) must be identified, inventoried, and evaluated for listing in the NRHP.

Federal agencies typically perform four primary steps to satisfy the requirements of Section 106. These steps consist of the following actions:

1. Initiate the Section 106 process by consulting with the state historic preservation officer (SHPO) (36 CFR Part 800.3). Determine the area of potential effects (APE) and perform an inventory of cultural resources within the APE and evaluate those resources for the NHRP to determine which resources constitute historic properties subject to management under Section 106 (36 CFR Part 800.4).

2. Identify other consulting parties such as Native American tribes that attach cultural religious significance to resources within the APE, and interested members of the public (36 CFR 800.3[f]).
3. Assess the effects of the undertaking on identified historic properties within the APE (36 CFR Part 800.5).
4. Resolve adverse effects on historic properties, if any (36 CFR Part 800.6).

Because Section 106 only requires that Federal agencies manage cultural resources eligible for, or listed in the NRHP, it is useful to review the criteria for NRHP listing. The NRHP is a register of districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. The regulations provided in 36 CFR Part 60.4 describe the criteria to evaluate cultural resources for inclusion in the NRHP. Cultural resources can be significant on the national, state, regional, or local level. Properties may be listed in the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- a) are associated with events that have made a significant contribution to the broad patterns of our history;
- b) are associated with the lives of persons significant in our past;
- c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess a artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting the significance criteria, potentially historic properties must possess integrity to be considered eligible for listing in the NRHP. Integrity refers to a property's ability to convey its historic significance (National Park Service 1991). Integrity is a quality that applies to historic resources in seven specific ways: location, design, setting, materials, workmanship, feeling, and association. A resource must possess two, and usually more, of these kinds of integrity, depending on the context and the reasons the property is significant.

Integrity is the ability of a resource or a group of resources to convey a sense of the past as it relates to one or more areas of significance. If significance has been established, it is necessary to determine if the resource retains the qualities for which it is significant. The evaluation of integrity is often subjective, but it must be grounded in an understanding of a resource's physical features and how they relate to its significance. Resources that have been substantially altered may not retain sufficient integrity to reflect their original character. Integrity may be diminished by a single major change or a cumulative effect of numerous minor changes.

There are seven aspects or qualities that in various combinations define integrity. A resource that retains its integrity will possess several, and usually most, of the following aspects: location, setting, design, materials, workmanship, feeling, and association.

Phased Identification, Evaluation, and Management of Cultural Resources under Section 106

Because intensive cultural resources surveys have not been conducted on the entire site, and because the project would involve phased development which has not yet been finalized, USACE has determined that cultural resources would be managed under a Programmatic Agreement (PA), the execution of which satisfies the requirements of Section 106 sufficiently for other Federal actions to proceed (Appendix E3 contains correspondence between USACE and SHPO concerning the use of a PA for this project). USACE under the authority of Section 404 of the Clean Water Act (33 USC Section 1344), may issue permits for subsequent projects within the proposed SPA and for permit applicants that have submitted or will submit applications to USACE for a Section 404 permit for their respective individual projects within the SPA. The PA will be executed before a Record of Decision (ROD) is issued for this EIS.

These applicants are expected to proceed with project-specific development independently of one another with a potential build-out timeframe of 20 years within the SPA. Because USACE has determined that subsequent projects within the SPA may have an effect on Historic Properties that are either included in, or are eligible for inclusion in the NRHP, USACE, in consultation with SHPO, has determined that compliance with Section 106 will be achieved through the execution of a PA pursuant to 36 CFR Section 800.14. Phased identification, evaluation, treatment, and mitigation for projects within the SPA (and infrastructure such as the off-site water alignment and water treatment plant) will occur under the PA in the following manner:

- ▶ USACE has defined the Specific Plan's Area of Potential Effect (APE) which includes all areas where effects could occur from construction of the individual projects within the SPA, and associated infrastructure. Future project design changes may require redefining the SPA APE and the development projects within it. Each Section 404 permit application will have its own project-specific APE designated by USACE and approved by SHPO. If some of the projects are merged or segregated, a project will be defined as the area to which a specific Section 404 permit application applies.
- ▶ Because each project will require an individual Section 404 permit and the projects will be independent of one another, management steps required for historic properties (e.g., historic districts) that span more than one individual 404 permit must be completed before all affected Section 404 permits are executed. Therefore, USACE will ensure that such steps be conducted prior to the issuance of separate Section 404 permits for each applicant in order to separate the projects from one another.
- ▶ Using the existing research conducted on SPA historic districts to date, the evaluation of significance, a portion of the resolution of adverse effect (the archival research and documentation), and the development of a work plan for the remaining identification and evaluation will be carried out in advance of Section 404 permit approval. The work will be conducted at a level (determined adequate by USACE and SHPO) that will allow the remaining resolution of adverse effects (data recovery plan [DRP]/historic property treatment plan [HPTP] of archaeological features and mapping) to be carried out on a project-specific basis by individual applicants independently of one another. A "Preliminary Historic Properties Synthesis" will result from this work. The Preliminary Historic Properties Synthesis will also form the basis for a Historic Properties Synthesis for resources of the historical period that will serve as a mitigation document (Historic Properties Synthesis) for the SPA and will be reviewed and approved by the SHPO.
- ▶ After the initial synthesis is prepared and approved, all applications for project-specific 404 permits in the SPA will require that the APE for that permit area be drawn (or re-drawn) by USACE and approved by the SHPO as a subset of the larger SPA APE and USACE will acquire an updated records and literature search. Field survey work will commence as required by USACE in consultation with the SHPO.
- ▶ SHPO and USACE will complete and report the results of all required intensive surveys of the undertaking's APE in a manner consistent with applicable federal standards and guidelines.
- ▶ Evaluation Plans (EPs) will be prepared to guide evaluation of cultural resources within the APE of each development project that have not been previously evaluated and USACE will submit the EP for concurrent review to the SHPO, and appropriate Native American tribes.
- ▶ USACE, in consultation with SHPO, will ensure that determinations of eligibility are made in accordance with the NRHP eligibility criteria set forth in 36 CFR 60.4 for all resources within the APE. All cultural resources determined eligible are Historic Properties as defined in 36 CFR 800.16(l)(1).
- ▶ USACE will apply the Criteria of Adverse Effect pursuant to 36 CFR 800.5(a)(1) to all Historic Properties within the APE that will be affected by the project. Determinations of Effect (DoE) will be made in consultation with the SHPO and other interested parties.

- ▶ USACE, in consultation with SHPO, will ensure that a Memorandum of Agreement (MOA) is developed, signed, and implemented for each development project where there will be adverse effects to Historic Properties (eligible resources). The MOA will contain stipulations to mitigate anticipated effects on Historic Properties that will result from a specific project and will require compliance with the work plan in the Preliminary Historic Properties Synthesis. The MOA for a specific development project will require development of an HPTP for Historic Properties that will be avoided and for Historic Properties that cannot be avoided and were determined eligible under criteria (a) through (c) (36 CFR 60.4). The MOA will require development of a DRP as required.
- ▶ USACE will ensure that draft HPTPs and DRPs are submitted to the SHPO, and appropriate Native American tribes and individuals for review and comment. USACE may also request comment by the ACHP.
- ▶ The results of the implementation of the MOA, HPTP, and DRP will be documented in a comprehensive confidential technical report(s) that follow the guidelines of the Secretary of the Interior and the California Office of Historic Preservation. USACE will ensure that draft mitigation documents and the revised Historic Properties Synthesis are submitted to the SHPO and appropriate individuals for review and comment.
- ▶ In consultation with the appropriate Native American tribes, USACE will identify Historic Properties of traditional religious and cultural importance. USACE will seek comments from all potentially interested Native American tribes. The interested public, including Native American tribes, will be invited to provide input on the identification, evaluation, and proposed treatment of Historic Properties. Depending on the specific nature of the undertaking, this will be done through letters of notification, public meetings, and site visits.
- ▶ Notices to Proceed (NTP) with construction may be issued by USACE for individual development projects, under any of the following conditions: 1) USACE and the SHPO have determined that there are no cultural resources within the APE for a particular Section 404 permit; and 2) USACE and SHPO have determined that there are no Historic Properties within the APE for a particular Section 404 permit; or 3) USACE, after consultation with the SHPO and interested persons, has implemented an adequate treatment plan for Historic Properties in the development project that will be adversely affected, and the fieldwork stipulated in the HPTP and/or DRP(s) has been completed; the Historic Properties Synthesis document has been updated and modified; USACE has accepted a summary of the fieldwork performed and a schedule for completing the reports for that work. USACE will not issue an NTP for a development project that includes a portion of a NRHP-eligible district that will be adversely affected until all development projects that include a portion of that district have completed the preparation of the Historic Properties Synthesis.
- ▶ If potentially NRHP-eligible resources are discovered during construction, ground disturbing activities will cease until the provisions of 36 CFR 800.13(b) (discoveries without prior planning) are met. USACE will provide the SHPO and the ACHP an opportunity to review and comment on proposed treatment in accordance with Stipulation 7.

The SHPO will consult with the ACHP on the intent to develop and execute the PA as described above. In the event that the ACHP does not join in the consultation, USACE will proceed the requirements set forth in 36 CFR Section 800.6(b)(1).

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Environmental Quality Act

The requirements of CEQA apply to all action alternatives that require discretionary action by local agencies (the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit [no USACE Section 404-permitting] alternatives). CEQA requires that state and local

agencies consider impacts on historical resources, unique archaeological resources, and interred human remains. The State CEQA Guidelines define a “historical resource” to include more than one category of resources. The first category is “resource(s) listed or eligible for listing on the CRHR.” (California Code of Regulations [CCR] Section 15064.5[a][1]; see also California Public Resources Code [California PRC] Sections 5024.1 and 21084.1.) A historical resource may be eligible for inclusion in the CRHR, as determined by the State Historical Resources Commission or the lead agency, if the resource:

- ▶ is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; or
- ▶ is associated with the lives of persons important in our past; or
- ▶ embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- ▶ has yielded, or may be likely to yield, information important in prehistory or history.

In addition, a resource is presumed to constitute a “historical resource” if it is included in a “local register of historical resources” unless “the preponderance of evidence demonstrates that it is not historically or culturally significant.” (CCR Section 15064.5[a][2].)

Another category of “historical resources” is those deemed significant pursuant to criteria set forth in California PRC Section 5024.1(g), as follows:

[a] resource identified as significant in an historical survey may be listed in the California Register if the survey meets all of the following criteria:

- (1) The survey has been or will be included in the State Historic Resources Inventory.
- (2) The survey and the survey documentation were prepared in accordance with...procedures and requirements [of the State Office of Historic Preservation].
- (3) The resource is evaluated and determined by the [State Office of Historic Preservation] to have a significance rating of Category 1 to 5 on [the California Department of Parks and Recreation Historic Resources Inventory Form].
- (4) If the survey is five years or more old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historic resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Resources identified by such surveys are presumed to be historically or culturally significant unless the preponderance of the evidence demonstrates otherwise.

The final category of “historical resources” is an optional one, which a lead agency may opt to consider or not consider. According to the State CEQA Guidelines (CCR Section 15064.5[a][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 may be considered to be an historical resource, provided the

lead agency's determination is supported by substantial evidence in light of the whole record.

In addition to the obligation to consider impacts on "historical resources," CEQA and the State CEQA Guidelines require consideration of unique archaeological sites (California PRC Section 21083.2, 14 CCR Section 15064.5). A "unique archaeological resource" is defined in CEQA (California PRC Section 21083.2[g]) as 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:

- (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
- (2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or
- (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If data recovery through excavation is the only feasible mitigation, a DRP that makes provisions for adequately recovering the scientifically consequential information from and about the historical resource shall be prepared and adopted before any excavation is undertaken (CCR Section 15126.4[b][3][C]). Other acceptable methods of mitigation under the State CEQA Guidelines (CCR Section 15126.4) include excavation and curation or study in place without excavation and curation (if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource).

The State CEQA Guidelines Section 15064.5[e] and the California Health and Safety Code Section 7050.5 require that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. The NAHC will designate a Most Likely Descendant (MLD) who is empowered to dispose of the remains with appropriate dignity as provided for in California Public Resources C Section 5097.98.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Sacramento County General Plan

The following goals and policies of the Sacramento County General Plan (1993) are applicable only to the proposed off-site detention basin east of Prairie City Road under all five action alternatives. There are no Sacramento County goals and policies that are applicable to the No Project Alternative.

Objective: Comprehensive knowledge of archeological and historic site locations.

- ▶ **Policy CO-155:** Utilize the California Archaeological and Sacramento History and Science Division to assist in determining need for survey.
- ▶ **Policy CO-158:** Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain *in situ*. Excavation and reburial shall occur when *in situ* preservation is not possible or when the archaeological significance of the site merits excavation and recording procedure. On-site re-interment shall have priority. The project developer shall provide the burden of proof that off-site re-interment is the only feasible alternative. Re-interment shall be the responsibility of local tribal representatives.
- ▶ **Policy CO-159:** The cost of all excavation conducted prior to completion of the project shall be the responsibility of the project developer.

- ▶ **Policy CO-160:** Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.
- ▶ **Policy CO-161:** As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.
- ▶ **Policy CO-162:** As a condition of approval for discretionary projects which are in areas of cultural resource sensitivity, the following procedure shall be included to cover the potential discovery of archaeological resources during development or construction:

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Sacramento County Department of Environmental Review and Assessment shall be immediately notified. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the site with appropriate specialists, as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

El Dorado County General Plan

The following goal and policies of the El Dorado County General Plan (2004) are applicable only to the two proposed local roadway connections from the Folsom Heights property off-site into El Dorado Hills under the Proposed Project Alternative. There are no El Dorado County goal and policies that are applicable to the No Project Alternative or other four action alternatives.

Lane Use Element

- ▶ **Policy 7.5.1.3:** Cultural resource studies (historic, prehistoric, and paleontological resources) shall be conducted prior to approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, the Museum of Paleontology, University of California, Berkeley, field surveys, subsurface testing, and/or salvage excavations. The avoidance and protection of sites shall be encouraged.
- ▶ **Policy 7.5.1.6:** The County shall treat any significant cultural resources (i.e., those determined California Register of Historical Resources/National Register of Historic Places eligible and unique paleontological resources), documented as a result of a conformity review for ministerial development, in accordance with CEQA standards (El Dorado County General Plan 2004:154).

City of Folsom General Plan

The City of Folsom (City of Folsom 1993) General Plan is focused on resources currently located within the downtown Historic District. There are no City of Folsom goals and policies that are applicable to the Proposed Project or the alternatives under consideration.

3A.5.3 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the State CEQA Guidelines and Section 106 of the NHPA. These thresholds also encompass the factors taken into account under NEPA to determine the significance of an action in terms of its context and the intensity of its impacts. The Proposed Project or alternatives under consideration were determined to result in a significant impact related to cultural resources if they would do any of the following:

- ▶ cause a substantial adverse change in the significance of a unique archaeological resource or an historical resource as defined in Section 21083.2 of CEQA and Section 15064.5 of the State CEQA Guidelines, respectively. The State CEQA Guidelines (CCR Section 15064.5) define “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings;
- ▶ disturb any human remains, including those interred outside of formal cemeteries; or
- ▶ result in adverse effects on a historic property as defined per the Section 106 regulations. An adverse effect is found under Section 106 if a Federal action would “alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association (36 CFR 800.5[a][1]).”

Under CEQA, a substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Under Section 106, adverse effects are effects that damage the qualities that make an historic property eligible for the NRHP, or the ability of that property to convey the significance that makes it eligible.

Paleontological resources are addressed in Section 3A.7, “Geology, Soils, Minerals, and Paleontological Resources - Land,” of this EIR/EIS.

ANALYSIS METHODOLOGY

Investigations into potential cultural resources issues for the project included a review of materials provided by a record search conducted by the NCIC of the California Historical Resources Information System. Other referenced materials included site documents, maps, and survey and evaluation reports archived at AECOM’s Sacramento office and ECORP’s Rocklin office (see Appendix E2).

Research also consisted of consultation with the Native American community through the NAHC to determine if any sites or other properties of cultural significance to local native peoples were within or in the immediate vicinity of the SPA. In general, few of the cultural resources documented in the SPA have been evaluated for inclusion in the NRHP or the CRHR. However, in some cases preliminary statements of potential eligibility can be made. For example, presently unevaluated historic-era cabin sites located within documented Gold Rush-era mining districts may retain important archaeological data that could provide new information on the lifeways and ethnicity of early miners. Generally, and for the purposes of this EIR/EIS, such sites are considered to be potentially significant per NRHP/CRHR criteria and are considered as such for the impact analysis presented below.

Using the available information on known cultural resources and significance considerations described above, an assessment of development activities related to the Proposed Project and the alternatives under consideration were evaluated for their potential to disturb these resources through direct action (e.g., development of roads and utility

lines through known site areas) or indirect activity (e.g., increasing visibility of and access to sensitive cultural resources that could lead to vandalism or looting).

IMPACT ANALYSIS

Impacts that would occur under each alternative development scenario are identified as follows: NP (No Project), NCP (No USACE Permit), PP (Proposed Project/Action), RIM (Resource Impact Minimization), CD (Centralized Development), and RHD (Reduced Hillside Development). Impacts that are significant under CEQA are also considered adverse effects under the NHPA. The impacts for each alternative are compared relative to the PP at the end of each impact conclusion (i.e., similar, greater, lesser).

IMPACT 3A.5-1 Possible Destruction of or Damage to Known Prehistoric and Historic-Era Cultural Resources from Ground-Disturbance or Other Construction-Related Activities. *Construction activities during project implementation could result in the destruction of or damage to known prehistoric and historic-era cultural resources that are potentially eligible for or listed on the CRHR or NRHP.*

On-Site and Off-Site Elements

NP

Under the No Project Alternative, up to 44 rural residences could be developed and agricultural activities could continue under the existing AG-80 land use and zoning designation. Existing agricultural activities would also continue in the Water Study Area, since no off-site water facilities would be constructed in this alternative. Agricultural production could damage or destroy cultural resources that occur within the SPA or the Water Study Area. The policies in the Sacramento County General Plan that would protect cultural resources under a tentative subdivision map do not apply to private land that is zoned for agricultural use, because they are generally mutually exclusive. Because agricultural activities could encounter and potentially destroy known prehistoric and historic-era cultural resources, this **direct** impact is **potentially significant**. **No indirect** impacts would occur. *[Greater]*

NCP, PP, CD, RHD

The SPA and areas where off-site elements would be constructed contain numerous identified prehistoric and historic-era cultural resources as documented in Appendix E2. While the densest concentration of resources occur in the northwest corner of the SPA, documented prehistoric and historic cultural resources occur throughout the SPA. Many of these resources have not been specifically evaluated for eligibility for listing on the NRHP or the CRHR, but the quality and range of identified resources as described in Appendix E2 suggests that many of these resources are likely eligible for listing in these registers. Construction that would be implemented as part of the No USACE Permit, Proposed Project, Centralized Development, Reduced Hillside Development, and Alternatives would likely result in direct adverse impacts to these resources. These **direct** impacts are considered **significant**. **No indirect** impacts would occur. *[Similar]*

Mitigation Measure 3A.5-1a: Prepare, Execute, and Implement a Programmatic Agreement.

For all action alternatives that require Federal permitting and authorization, USACE shall satisfy the requirements of Section 106 of the NHPA. A PA shall be prepared that requires the following measures:

- ▶ For each development phase of the specific plan and associated Federal permits and authorizations, USACE, as the Federal Section 106 lead (or USACE designee) shall prepare an APE map and shall consult with the SHPO on the APE, as described above.

- ▶ Once SHPO, USACE, and other consulting parties agree on the project-specific APE, USACE or permit applicant (or designee, as directed by USACE) shall perform an inventory for cultural resources in the phase-specific APE consistent with the Secretary of the Interior’s Standards and Guidelines for Identification (48 Federal Register [FR] 44720-23) and submit this inventory to the SHPO and any other relevant consulting parties for review as required under the PA. The same document shall evaluate identified resources for listing on the NRHP per the criteria provided above and the Secretary of the Interior’s Standards and Guidelines for Evaluation (48 FR 44723-26).
- ▶ Once the inventory is complete, USACE (or designee, as directed by USACE) shall prepare a Finding of Effect (FOE) to assess the effect of the buildout of the individual development phase upon identified historic properties by applying the Criteria of Adverse Effect pursuant to 36 CFR 800.5(a) (1). If the FOE identifies adverse effects, the project applicant or USACE, or designee) shall prepare treatment measures and protocols to minimize these impacts to the extent possible. These treatment measures shall be appended to the PA in a treatment plan prepared for the specific project development phase. Treatment measures may include, but are not limited to, avoidance and preservation in places where possible. Where avoidance is not possible or feasible, treatment shall consist of either: 1) recovery of a suitable sample of material from archaeological sites that have the potential to contribute to research, or 2) documentation of historic resources to capture their significance and relationship to important historical themes. Documentation of historical resources shall be performed according to the Historic American Building Survey or Historic American Engineering Record (HABS/HAER) specifications or an equivalent standard when existing architecture or engineered features are subject to adverse effects. Where appropriate, treatment plans may specify the preparation and circulation of interpretive brochures, narrative descriptions, and photographic documentation for the general public.
- ▶ A geoarchaeological overview of the SPA may be stipulated and implemented in the PA, as determined by USACE, in order to assess the likelihood for buried cultural deposits. Focused geoarchaeological studies may be subsequently required for portions of the SPA and vicinity of off-site elements that are considered highly sensitive to determine if additional inventory or monitoring should be performed during construction as determined by USACE.
- ▶ Resources that may be discovered inadvertently during construction will be handled pursuant to 36 CFR Part 800.13(b) (discoveries without prior planning).

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, and Caltrans) in coordination with USACE and the SHPO to ensure that mitigation is consistent with the PA.

Implementation: USACE (or designee) and the project applicant(s) of all project phases (as directed by USACE)

Timing: The PA shall be prepared and executed (signed) prior to issuance of any Federal permit or authorization for any aspect or component of the specific plan project. Preparation of the phase-specific APE and inventory and evaluation of properties within the APE shall be performed prior to any ground-disturbing work in the APE for any Federal permitting or authorization of individual development phases. Implementation of treatment measures for identified historic properties may be performed during construction and ground-disturbing work provided that no ground-disturbing work is performed in the vicinity of resources subject to adverse effects and within an appropriate radius of the resource as determined by USACE, prior to completion of all treatment measures. The exact radius in which construction shall

not occur shall be determined based upon the nature of the resource the potential for outlying undiscovered elements of that resource.

Enforcement: USACE and the project applicant(s) of all project phases (as directed by USACE), with oversight by the SHPO.

Mitigation Measure 3A.5-1b: Perform an Inventory and Evaluation of Cultural Resources for the California Register of Historic Places, Minimize or Avoid Damage or Destruction, and Perform Treatment Where Damage or Destruction Cannot be Avoided.

Management of cultural resources eligible for or listed on the CRHR under CEQA mirrors management steps required under Section 106. These steps may be combined with deliverables and management steps performed for Section 106 provided that management documents prepared for the PA also clearly reference the CRHR listing criteria and significance thresholds that apply under CEQA. Prior to ground-disturbing work for each individual development phase or off-site element, the applicable oversight agency (City of Folsom, El Dorado County, Sacramento County, or Caltrans), or the project applicant(s) of all project phases, with applicable agency oversight, shall perform the following actions:

- ▶ Retain the services of a qualified archaeologist to perform an inventory of cultural resources within each individual development phase or off-site element subject to approval under CEQA. Identified resources shall be evaluated for listing on the CRHR. The inventory report shall also identify locations that are sensitive for undiscovered cultural resources based upon the location of known resources, geomorphology, and topography. The inventory report shall specify the location of monitoring of ground-disturbing work in these areas by a qualified archaeologist, and monitoring in the vicinity of identified resources that may be damaged by construction, if appropriate. The identification of sensitive locations subject to monitoring during construction of each individual development phase shall be performed in concert with monitoring activities performed under the PA to minimize the potential for conflicting requirements.
- ▶ For each resource that is determined eligible for the CRHR, the applicable agency or the project applicant(s) of all project phases (under the agency's direction) shall obtain the services of a qualified archaeologist who shall determine if implementation of the individual project development phase would result in damage or destruction of "significant" (under CEQA) cultural resources. These findings shall be reviewed by the applicable agency for consistency with the significance thresholds and treatment measures provided in this EIR/EIS.
- ▶ Where possible, the project shall be configured or redesigned to avoid impacts on eligible or listed resources. Alternatively, these resources may be preserved in place if possible, as suggested under California Public Resources Code Section 21083.2.
- ▶ Where impacts cannot be avoided, the applicable agency or the project applicant(s) of all project phases (under the applicable agency's direction) shall prepare and implement treatment measures that are determined to be necessary by a qualified archaeologist. These measures may consist of data recovery excavations for resources that are eligible for listing because of the data they contain (which may contribute to research). Alternatively, for historical architectural, engineered, or landscape features, treatment measures may consist of a preparation of interpretive, narrative, or photographic documentation. These measures shall be reviewed by the applicable oversight agency for consistency with the significance thresholds and standards provided in this EIR/EIS.
- ▶ To support the evaluation and treatment required under this mitigation measure, the archaeologist retained by either the applicable oversight agency or the project applicant(s) of all project phases shall prepare an appropriate prehistoric and historic context that identifies relevant prehistoric,

ethnographic, and historic themes and research questions against which to determine the significance of identified resources and appropriate treatment.

- ▶ These steps and documents may be combined with the phasing of management and documents prepared pursuant to the PA to minimize the potential for inconsistency and duplicative management efforts.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: The applicable oversight agency and the project applicant(s) (at the agency’s direction) of all project phases

Timing: Before issuance of building permits and ground-disturbing activities.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
 3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For the U.S. 50 interchange improvements: Caltrans.

RIM

The Resource Impact Minimization Alternative was designed to avoid construction or development activities within the dense cluster of cultural resources that occurs in the northwest portion of the SPA. Thus, adverse impacts to the majority of the known cultural resources in the SPA would be avoided under this alternative. However, documented cultural resources occur throughout the SPA, both within the SPA and in the vicinity of off-site elements. The quality and range of identified resources as described in Appendix E2 suggests that some of these resources that would be adversely affected by the Resource Impact Minimization Alternative are likely eligible for listing on the NRHP or CRHR. Because construction activity under the Resource Impact Minimization Alternative could result in damage or destruction of these resources, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur. *[Lesser]*

Mitigation Measure: Implement Mitigation Measures 3A.5-1a and 3A.5-1b.

Implementation of Mitigation Measures 3A.5-1a and 3A.5-1b would substantially reduce the level of direct impacts on identified cultural resources under the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives, but not to a less-than-significant level. Because this potential impact would not be fully reduced and because it would not be feasible to avoid all direct impacts to identified resources, ground-disturbing work could still result in direct impacts to cultural resources, some of which are likely to be eligible for listing on the CRHR and NRHP. Additionally, some of the off-site elements (two roadway connections in El Dorado County and detention basin in Sacramento County) fall under the jurisdiction of El Dorado and Sacramento Counties; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Even if the affected county(ies) cooperate in allowing and enforcing the mitigation, the impacts to the off-site elements would not be fully reduced to a less-than-significant level. Therefore, under all alternatives, impacts to identified cultural resources are considered **potentially significant and unavoidable**.

IMPACT Possible Destruction of or Damage to Previously Undiscovered Cultural Resources from Ground-Disturbance or Other Construction-Related Activities. *Construction activities during project implementation could result in the destruction of or damage to "significant" (under CEQA) undiscovered cultural resources.*

3A.5-2

On-Site and Off-Site Elements

NP

Under the No Project Alternative, existing patterns of agricultural land use would continue under the AG-80 zoning and land use designation in the SPA, and would also continue in the Water Study Area because no off-site water facilities would be constructed. Because agricultural production and construction of rural residences include ground-disturbing work, these activities could potentially damage or destroy previously unknown and undiscovered cultural resources. If these resources were determined to be "significant" under CEQA, any damage or destruction would be considered a significant impact. Because there are no Sacramento County General Plan policies that would protect these cultural resources on private land that is zoned for agricultural use, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur. *[Greater]*

NCP, PP, CD, RHD

The density of documented resources within the SPA and in the vicinity of the off-site elements suggests that the entire project footprint is also sensitive for previously unidentified and currently unknown cultural resources. These resources may be obscured by surface vegetation or thin overlying strata of culturally sterile soils, with little surface manifestation; thus, it is unlikely that a surface inventory effort would not identify all cultural resources that could be disturbed or destroyed by ground-disturbing construction activities associated with the No USACE Permit, Proposed Project, Centralized Development, and Reduced Hillside Development Alternatives. If these resources were determined to be "significant" under CEQA, disturbance or destruction would be a significant impact. Therefore, **direct** impacts to previously undiscovered cultural resources are considered **potentially significant**. **No indirect** impacts would occur. *[Similar]*

Mitigation Measure 3A.5-2: Conduct Construction Personnel Education, Conduct On-Site Monitoring if Required, Stop Work if Cultural Resources are Discovered, Assess the Significance of the Find, and Perform Treatment or Avoidance as Required.

To reduce potential impacts to previously undiscovered cultural resources, the project applicant(s) of all project phases shall do the following:

- ▶ Before the start of ground-disturbing activities, the project applicant(s) of all project phases shall retain a qualified archaeologist to conduct training for construction workers, to educate them about the possibility of encountering buried cultural resources, and inform them of the proper procedures should cultural resources be encountered.
- ▶ As a result of the work conducted for Mitigation Measures 3A.5-1a and 3A.5-1b, if the archaeologist determines that any portion of the SPA or the off-site elements should be monitored for potential discovery of as-yet-unknown cultural resources, the project applicant(s) of all project phases shall implement such monitoring in the locations specified by the archaeologist.
- ▶ Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, or architectural remains be encountered during any construction activities, work shall be suspended in the vicinity of the find and the appropriate oversight agency(ies) (identified below) shall be notified immediately. The appropriate oversight agency(ies) shall retain a qualified archaeologist who shall conduct a field investigation of the specific site and shall assess the significance of the find by

evaluating the resource for eligibility for listing on the CRHR and the NRHP. If the resource is eligible for listing on the CRHR or NRHP and it would be subject to disturbance or destruction, the actions required in Mitigation Measures 3A.5-1a and 3A.5-1b shall be implemented. The oversight agency shall be responsible for approval of recommended mitigation if it is determined to be feasible in light of the approved land uses, and shall implement the approved mitigation before resuming construction activities at the archaeological site.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Before and during ground-disturbing activities.

- Enforcement:**
1. For actions taken to satisfy the requirements of Section 106: the SHPO and USACE.
 2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 3. For the two roadway connections off-site into El Dorado Hills: El Dorado County Development Services Department.
 4. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 5. For the U.S. 50 interchange improvements: Caltrans.

RIM

Because buildout of the specific plan under the Resource Impact Minimization Alternative would avoid most of the known cultural resources in the SPA, it is probable that potential impacts to many of the previously unknown cultural resources would be avoided or minimized as well. However, because previously unknown cultural resources could be encountered anywhere in the SPA or within the off-site elements, ground-disturbing activities under the Resource Impact Minimization Alternative may still adversely affect unknown cultural resources. If these resources were determined to be “significant” under CEQA, disturbance or destruction would be a significant impact. Therefore, **direct** impacts to previously undiscovered cultural resources are considered **potentially significant**. **No indirect** impacts would occur. *[Lesser]*

Mitigation Measure: Implement Mitigation Measure 3A.5-2.

Implementation of Mitigation Measure 3A.5-2, and Mitigation Measures 3A.5-1a and 3A.5-1b if required, would reduce the potentially significant impacts from possible damage or destruction of previously unknown cultural resources under the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives, but not to a less-than-significant level. Although construction worker personnel training would be conducted, construction monitoring would occur (if determined to be necessary by the qualified archaeologist), and evaluation and treatment of resources after they are discovered as required under Section 106 and CEQA would occur, the potential remains that “significant” (under CEQA) cultural deposits could be disturbed during construction and other ground-disturbing activities before they can be identified and protected under all action alternatives. Additionally, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, or Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Even if the affected county(ies)/Caltrans

cooperate in allowing and enforcing the mitigation, the impacts to the off-site elements would not be fully reduced to a less-than-significant level. Therefore, under all of the action alternatives, potential impacts to previously unknown cultural resources are considered **potentially significant and unavoidable**.

IMPACT Possible Destruction of or Damage to Interred Human Remains during Construction. *Ground-*
3A.5-3 *disturbing activities could inadvertently disinter and/or destroy buried human skeletal remains.*

On-Site and Off-Site Elements

NP, NCP, PP, RIM, CD, RHD

Under the No Project Alternative, existing agricultural land uses and construction of up to 44 rural residences consistent with the AG-80 zoning under the Sacramento County General Plan would continue, but no off-site facilities would be constructed. These activities could inadvertently disinter and destroy interred human remains. Under the five action alternatives, while no documented prehistoric or historic burial sites occur within the SPA or in the vicinity of the off-site elements, the density and number of identified resources suggests that there is at least the potential that interred human remains exist in the project footprint. Ground-disturbing activities associated with the No Project, No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development alternatives may inadvertently disinter or destroy these remains. Therefore, this **direct** impact is considered **potentially significant**. No indirect impacts would occur. *[Similar]*

Mitigation Measure 3A.5-3: Suspend Ground-Disturbing Activities if Human Remains are Encountered and Comply with California Health and Safety Code Procedures.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, including those associated with off-site elements, the project applicant(s) of all project phases shall immediately halt all ground-disturbing activities in the area of the find and notify the applicable county coroner and a professional archaeologist skilled in osteological analysis to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or public lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]).

After the coroner's findings are complete, the project applicant(s), an archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting on notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.

Upon the discovery of Native American remains, the procedures above regarding involvement of the applicable county coroner, notification of the NAHC, and identification of an MLD shall be followed. The project applicant(s) of all project phases shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have at least 48 hours after being granted access to the site to inspect the site and make recommendations. A range of possible treatments for the remains may be discussed: nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment. As suggested by Assembly Bill (AB) 2641 (Chapter 863, Statutes of 2006), the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery

of additional remains. AB 2641(e) includes a list of site protection measures and states that the project applicant(s) shall comply with one or more of the following requirements:

- ▶ record the site with the NAHC or the appropriate Information Center,
- ▶ use an open-space or conservation zoning designation or easement, or
- ▶ record a document with the county in which the property is located.

The project applicant(s) or its authorized representative of all project phases shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify an MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The project applicant(s) or its authorized representative may also reinter the remains in a location not subject to further disturbance if it rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Upon the discovery of suspected human remains.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
 3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For the U.S. 50 interchange improvements: Caltrans.

Implementation of Mitigation Measure 3A.5-3 would reduce the potentially significant impact associated with the possible destruction of human remains under the No Project, No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives to a **less-than-significant** level by immediately suspending work in the vicinity of the discovery and complying with state laws requiring contact with the applicable county coroner and a professional archaeologist to determine the nature of the find, and subsequent contact with the NAHC and appropriate treatment if the remains are determined to be those of a Native American. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation.

3A.5.4 RESIDUAL SIGNIFICANT IMPACTS

With implementation of Mitigation Measure 3A.5-3, potential impacts to previously unknown human remains would be reduced to a **less-than-significant** level. Implementation of Mitigation Measures 3A.5-1a, 3A.5-1b, and 3A.5-2 would minimize significant and potentially significant impacts to cultural resources to the extent feasible. These mitigation measures require that for each individual development phase dependent on Federal and local permitting and authorization, cultural resources must be inventoried, evaluated, and avoided where feasible (Mitigation Measures 3A.5-1a, 3A.5-1b). When resources cannot be avoided, appropriate documentation or data

recovery excavation must be performed. Locations of known cultural resources must be monitored for the potential discovery of cultural resources under Mitigation Measure 3A.5-2. Beyond the inventory, evaluation, treatment, and monitoring required in this document, there are no other feasible mitigations measures that may be performed to minimize potentially significant impacts on cultural resources. Therefore, impacts on identified and previously undiscovered cultural resources would be potentially **significant and unavoidable**.

In addition, some of the off-site elements fall under the jurisdiction of El Dorado County, Sacramento County, or Caltrans; therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of mitigation measures for these interchange improvements. Because the City does not control implementation of mitigation measures for off-site improvements constructed in areas under the jurisdiction of these other agencies, Impacts 3A.5-1 through 3A.5-3 are considered potentially significant and unavoidable for off-site improvements which would be located in the jurisdiction of El Dorado County, Sacramento County, or Caltrans.

This page intentionally left blank.