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ASM Project Number: 43610

14 November 2023

Mr. Larry Trowsdale
President
SBC Solar
82532 2nd Street
Trona, CA 93562

RE: Cultural Resources Survey, Trona SBC Solar, Inyo County

Dear Mr. Trowsdale:

This letter documents completion of a Phase I survey for the 10-acre (ac) SBC Solar Project (Project), near Trona, Inyo County, California (Figure 1). This inventory was conducted to assist in compliance with the California Environmental Quality Act (CEQA). Peter A. Carey, M.A., RPA, served as Principal Investigator.

In summary, no previous studies have been conducted within the Project study area, and there are no known cultural resources within the Project study area. Two cultural resources - a mid-20th refuse scatter (SBC-SITE-1) and an isolated milling slab (SBC-ISO-1) – were identified during the Phase I survey. Isolated finds are categorically not eligible for inclusion in the California Register of Historical Resources (CRHR). Site SBC-SITE-1 is recommended not eligible for the CRHR. A determination of no impact to significant or unique cultural resources is recommended for the Project.

Project Description and Location

The proposed Project consists of the construction of a new solar power generation facility for SBC Solar. The Project is located at 2500 Bri-Mar Lane in a rural area 2.5-miles (mi) north of Trona in the Searles Valley. Major cross streets are Trona Wildrose Road to the east, Turtle Rock Road to the west. Sparse residential housing and open, undeveloped desert is present around the 10-ac study area. Approximately half of the study area has been cleared of vegetation and is entirely disturbed.

Regulatory Context: California Environmental Quality Act

CEQA is applicable to discretionary actions by state or local lead agencies. Under CEQA, lead agencies must analyze impacts to cultural resources. Significant impacts under CEQA occur when "historically significant" or "unique" cultural resources are adversely affected, which occurs when such resources could be altered or destroyed through project implementation. Historically significant cultural resources are defined by eligibility for or by listing in the California Register of Historical Resources (CRHR). In practice, the federal NRHP criteria for significance applied

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under Section 106 are generally (although not entirely) consistent with CRHR criteria (see PRC § 5024.1, Title 14 CCR, Section 4852 and § 15064.5(a)(3)).

Significant cultural resources are those archaeological resources and historical properties that:

(A) Are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Are associated with the lives of persons important in our past;

(C) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

(D) Have yielded, or may be likely to yield, information important in prehistory or history.

Unique resources under CEQA, in slight contrast, are those that represent:

> 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.
>
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC § 21083.2(g)).

Preservation in place is the preferred approach under CEQA to mitigating adverse impacts to significant or unique cultural resources.

Pre-Contact Archaeological Background

The following summary provides a brief overview of the prehistory of the study area region. The reader is referred to paleoenvironmental reconstructions by Elston (1982), Weide (1982), and Grayson (2011), as well as cultural historical syntheses by Hester (1973), Bettinger and Taylor (1974), Warren (1984), Sutton (1988a, 1988b, 1996) and Whitley et al. (1988), and the latest NAWS China Lake ICRMP update (NAWS CLEMD 2012), for more detail.

Pre-Clovis Period (before 12,000 Y.B.P.)

The initial occupation of North America is still a topic of research and debate, with the date of initial human entry onto the continent not yet known, and little understood about the lifeways of the earliest occupants. This Late Pleistocene occupation is generally referred to as the Pre-Clovis (cultural) Period, dated at earlier than 12,000 years before present (Y.B.P.). During this period, many of the valley floors of the Mojave Desert and the Great Basin where filled with a large lake system, including Pleistocene Lake China near Ridgecrest. Although a number of claims have been made for Pre-Clovis sites in the Mojave Desert generally (see Davis 1978), these have either been disproven or remain controversial and uncertain. Possible Pre-Clovis petroglyph dates for the Coso

Range have been proposed by Whitley (2013, Whitley and Dorn 1993), but still require verification by additional tests.

Paleoindian Period (12,000–9,000 Y.B.P.)

The reduction of the Pleistocene lakes to shallow sloughs and swamps during the Terminal Pleistocene corresponds to the start of the Paleoindian Period, dating from about 12,000 to 9,000 Y.B.P. The hallmarks of this cultural period are fluted, collaterally-flaked and basally-thinned and -ground Clovis and Folsom spear points initially, followed by a series of large, well-flaked but unfluted, lanceolate points, some of which are stemmed. Substantial evidence of Paleoindian use of eastern California has been found in a number of areas, including NAWS China Lake (e.g., Davis 1978; Giambastiani and Bullard 2010). Paleoindian sites in the Great Basin and Mojave Desert are commonly (though not exclusively) found immediately above the lake bottoms, signaling the fact that adaptation to the drying lake system was an important aspect of early prehistoric lifeways. Currently there is no firm evidence indicating that eastern California Paleoindian peoples significantly relied on big-game hunting (or scavenging).

Early Archaic (9,000–6,000 Y.B.P.)

The Early Archaic period (sometimes called the Western Pluvial Lakes Tradition, Lake Mojave, San Dieguito or Death Valley I) represents the early Holocene in paleoenvironmental terms. Its hallmark is generally considered to be the widely dispersed but ambiguously dated Western Stemmed Tradition spear points. These include the local variants known as Lake Mohave and Silver Lake points. Davis (1978; Davis, Brott and Weide 1969) identified and discussed the importance of a number of Early Archaic sites in the Owens Valley region. These are located in both the China Lake Basin and the Panamint Valley in former lacustrine environments, and are indicative of lakeshore use if not occupation. Work at Early Holocene central Mojave Desert sites, primarily at Fort Irwin, in contrast has revealed considerable variability in lithic assemblages and materials, while also documenting relative continuity between early and middle Holocene faunal assemblages (Basgall 1993).

Middle Archaic (6,000–4,000 Y.B.P.)

Regardless of date of initial occupation of the region, substantial habitation did not occur until later, with the start of the Middle Archaic (or Pinto) Period, lasting from about 6,000 to 4,000 Y.B.P. The Middle Archaic corresponds to the Altithermal paleoenvironmental period, an extended time of dry climatic conditions.

Handstones and millingstones are much more abundant in Middle Archaic assemblages than previously, represented by bulky, well-worn, shaped variants that were routinely transported and maintained (Basgall 2000). In eastern California and the Mojave Desert, Middle Archaic population densities overall remained low. Subsistence focused partly on game procurement but the importance of plant resources increased substantially. Faunal assemblages from many Pinto sites indicate that large artiodactyls were exploited, but hunting emphasized small game such as rabbits, hares, rodents, and reptiles (Basgall 1990). The fact that milling implements are comparable in frequency to later assemblages implies that Middle Archaic populations had already become broad-spectrum foragers (Basgall and Giambastiani 2000).

Late Archaic (4,000-1,500 Y.B.P.)

The Late Archaic Period (also called Elko, Gypsum or Newberry) lasted from about 4,000 to 1,500 years Y.B.P. This correlates with improved and wetter environmental conditions across the far west. The start of the Late Archaic in the region is posited to represent the initial establishment of the primary settlement and subsistence systems that are currently archaeologically visible (Whitley 1994, 1998). The Late Archaic also witnessed the beginning of the intensive exploitation of the Coso Sugarloaf obsidian quarry, an event that apparently correlates with the beginning of the inland-to-coastal obsidian trade in south-central California. The primary temporal diagnostics for the Late Archaic are Elko and Gypsum series projectile points.

Hildebrandt and McGuire (2002; McGuire and Hildebrandt 2005) suggest that this period included intensive big game hunting and that the Coso petroglyphs represent a hunting cult associated with a subsistence emphasis on bighorn sheep, reflecting an example of costly signaling theory. Garfinkel (e.g., Garfinkel et al. 2010) concurs with their interpretation, though he has also admitted that, due to environmental constraints, the Cosos never supported a bighorn population of any significant size. As noted by Whitley (e.g., 1994), however, there is no faunal evidence for intensive or systematic bighorn sheep hunting in the Coso Range while the intensification in regional petroglyph production occurred after roughly 2000 Y.B.P. Codding and Jones (2007), in addition, have shown that the original argument for costly signaling theory was seriously overstated while, using laboratory measurements of calorical output, Flaherty (2012) has demonstrated that petroglyph manufacture did not constitute a physically-costly activity that would meet the requirements of the theoretical model.

Haiwee (1,500-800 Y.B.P.)

The Haiwee (also called the Rose Spring or Saratoga Springs) Period is differentiated from the earlier Late Archaic/Elko Period by the introduction of the bow and arrow and a change from spear to arrow points at circa A.D. 500 (cf. Yohe 1992). Following the original hypothesis of Grant (1968), Hildebrandt and McGuire (2002; McGuire and Hildebrandt 2005; Gilreath and Hildebrandt 2008), and Garfinkel (2006, 2007; Garfinkel et al. 2010) have speculated that this technological change increased the efficiency of big game hunting leading to over-hunting and a reduction in bighorn herd size, and a resulting intensification in the hypothesized hunting cult rituals that produced Coso rock art. These archaeologists suggest that, partly due to the extirpation of the herds from overkill but also because of the putative lack of discussion of rock art in the ethnographic record, the creation of pecked petroglyphs ended circa A.D. 1200 – 1300. One implication of this theory is a complete cultural discontinuity between the prehistoric inhabitations of the region and the Numic speakers of the subsequent time-period.

Whitley (1994, 1998, 2013), in contrast, has presented chronometric and other evidence demonstrating continued rock art production into the historic period and evidence that that petroglyph-making rituals also intensified during this period. This intensification was associated with rain shamanism resulting from droughts due to the Medieval Climatic Anomaly, a period of global climatic instability. Perhaps more importantly, excavations in the Cosos demonstrate that big-game was a small component of the diet during this time period (Whitley et al. 1988).

Numic (800-140 Y.B.P.)

The Numic (Late Prehistoric, Shoshone or Marana) Period runs from about 800 Y.B.P. to the Historic Period, and corresponds to the Little Ice Age. It is distinguished from the previous Haiwee interval by the introduction of brown-ware ceramics and a change in projectile points: from Rose Spring to Desert Side-notched and Cottonwood Triangular types. The Numic Period is considered to represent the appearance of the historical/ethnographic aboriginal pattern of life-ways.

The relationship between the Numic and earlier inhabitants in the Great Basin is controversial, and no consensus has been achieved on this topic among archaeologists (see papers in Madsen and Rhode 1994). Based on one linguistic reconstruction (Lamb 1958), the eastward spread of the three Numic languages (Shoshone and Northern and Southern Paiute) across the Great Basin is hypothesized to have occurred roughly 1000 years ago. Eastern California, including specifically the study area, is however understood as the origin point for this outward migration, indicating cultural continuity in this region between the Numic and earlier periods.

Some archaeologists nonetheless have interpreted the theorized language change in terms of population movements and ethnic group replacements, and have linked this perspective to observable prehistoric subsistence changes (e.g., Bettinger and Baumhoff 1982; Garfinkel 2007). The resulting Numic spread hypothesis suggests that Numic-speaking peoples migrated out of eastern California at about A.D. 1200 – 1300, out-competing and replacing an earlier Pre-Numic population in the remainder of the Great Basin. Archaeologists who support the hunting cult interpretation of the Coso petroglyphs (Hildebrandt and McGuire 2002; McGuire and Hildebrandt 2005; Gilreath and Hildebrandt 2008; Garfinkel 2006, 2007; Garfinkel et al. 2010) view their argument as a component of the Numic spread theory. These researchers suggest that Scratched style petroglyphs (i.e., fine-lined incisings) were made by Numic peoples to cancel the power or deface the earlier pecked engravings. Ritter (1994), however, demonstrated both that there is no correlation between the placement of the Scratched and pecked petroglyphs and that there is no evidence that Scratched motifs are exclusively late dating. Equally problematic is the fact that, while the linguistic hypothesis suggests that the language replacement occurred 1000 or more years ago, these archaeologists have attempted to correlate it with later-dating archaeological evidence. If the linguistic hypothesis is correct, these changes in the archaeological record rightly occurred after rather than because of the possible language change and ethnic replacement.

Other archaeologists, partly based on different historical linguistic reconstructions as well as archaeological evidence, reject the Numic spread hypothesis and argue that Numic-speaking peoples have been in-place, throughout the Great Basin, for a much longer period of time (e.g., Aikens and Witherspoon 1986; Loendorf 1999; Whitley et al. 1999a, 1999b).

Historic Context

The early history of the Inyokern region involved three different Euro-American groups. Prior to about 1860, the history of the region primarily involved various explorers who traversed the Mojave Desert. For example, Pedro Fages crossed the southern Mojave Desert in 1772; Fr. Garcés crossed the west end in 1776; Jedediah Smith, similarly, went across the western end in 1827, as did John C. Fremónt and his guide Kit Carson in 1844. The Rogers and Manly party - the Jayhawkers or Death Valley '49ers – crossed the region in their dramatic 1849 expedition across

the Mojave Desert. And Lt. Edward Beale, at the lead of a caravan of camels, came across the southern side of the Mojave in his 1857 trip to Fort Tejon (Bancroft 1963; Settle 1963:61; Boyd et al. 1982).

The first white settlers in the region headed to the well-watered Owens Valley in the 1850s and 1860s for ranching and small-scale agriculture. The alkali soils of the valley were not seen as productive by early visitors and there was an initial focus on grazing and grazing crops. By the end of the century, with the help of irrigation and rail transportation, commercial fruit and vegetable crops were growing (Vorster 1992).

As more settlers came to the valley and the population rose, tensions between the settlers and the native populations flared, eventually leading to the Owens Valley Indian War of 1862-1863. The war began with skirmishes between groups of settlers and the Owens Valley Paiute and their Shoshone and Kawaiisu (*Nuwu, Nuwuwu*) allies. Eventually, the United States intervened and established Camp Independence, later becoming Fort Independence. In 1863, after numerous battles and even an attempt at peace, large numbers of Owens Valley Paiute were removed from the valley to Fort Tejon and the war ended (Whitley et al. 2006).

The end of the Owens Valley Indian War following the establishment of Fort Independence increased mining efforts in the area. Numerous silver, lead, and zinc mines were established in the mountains east of Owens Lake. A collection of mines in the Inyo Mountains, known as the Cerro Gordo Mines, produced ore that would then be smelted on site to create ingots, which would eventually be transported to Los Angeles. When operations grew through the 1870s, larger and more efficient smelters were built on the shore of Owens Lake.

Success of the mines was hindered by lengthy transportation times, partly due to the large Owens Lake. To reduce transportation times, ferries were used to transport ore and ingots across Owens Lake from Keeler on the east shore to Cartago on the west shore. Additionally, the Virginia and Truckee Railroad constructed the narrow-gauge Carson & Colorado Railroad along the east side of Owens Lake to assist in transport. For this same purpose, the Los Angeles-Panamint Road was built in 1874 the east side of the Inyo Mountains in the vicinity of the study area. Major mining operations were mostly abandoned in the area by the mid-20th century.

Records Search

An archival records search was conducted at the Eastern Information Center (IC), University of California, Riverside, for the study area in Section 32 (T24S/R43E; MDBM), Inyo County, California. This records search was completed in order to determine whether the study area had been previously surveyed for cultural resources, and/or whether any such resources were known to exist on it. The records search was completed to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest.

According to the IC records, a total of three previous surveys had been conducted within Project study area (Table 1). One previous linear resource, P-14-002147/CA-INY-2147H, consisting of a segment of the late 19th century Los Angeles - Panamint Road, was reported by the IC to bisect the Project study area. However, an examination of historic USGS quadrangles shows the alignment of the historic linear resource as to the west and outside of the study area. The previous resource P-14-002147 does not exist within the study area and no resources associated with it were identified. The results of the records search are presented in Appendix A.

Table 1. Survey reports within 0.5-mi of the Study Area

Report No.	Year	Author (s)/Affiliation	Title
IN-00158	1978	Irwin, Charles N.	The Slate Range Radar Site Archaeological Reconnaissance Report
IN-00246	1986	Underwood, Jackson/ Dames and Moore	Summary Of Archaeological Survey for The Argus Cogeneration Expansion
IN-01139	1976	Unknown /Bureau of Land Management	Geothermal Lease Applications CA-1065 through CA-1069: Cultural Resources Inventory - Methodology

Methods and Results

The Phase I survey of the 10-ac study area was completed on 6 October 2023 by ASM Associate Archaeologist Ross Way, B.A., with assistance in the field by Robert Robinson, Native American monitor/Tribal Historic Preservation Officer (THPO) for the Kern Valley Indian Community. The study area is located in open desert and the east half of the parcel had been previously disturbed by removal of vegetation (Figures 2). The study area is bisecting by multiple dirt roads including Bri-Mar Road. A private residence and laydown yard is immediately north of the study area. Modern debris in the form of plastics, cardboard, glass, aluminum, and industrial debris were noted within.

The study area was examined by walking parallel 15-meter transects. Ground visibility was generally variable with some of the study area having been overgrown with seasonal grasses. As such, these areas of denser vegetation were examined purposively and opportunistically to determine whether they contained cultural resources, using narrower transects, and with particular attention paid to rodent burrow spoils piles, cut-banks, cleared edges of disturbed areas, and other spots with better ground surface visibility.

Two cultural resources - a mid-20th refuse scatter (SBC-SITE-1) and an isolated milling slab (SBC-ISO-1) – were identified during the Phase I survey. Site records for the identified resources are presented in Appendix B.

SBC-SITE-1

The site consists of sparse historic debris scatter located adjacent to an intersection of two dirt roads (Figure 3). Approximately 30 assorted cans and glass bottle fragments dating to the mid-20th century were observed. The site measures approximately 15-ft in diameter and is situated at an elevation of 1,685-ft amsl.

SBC-ISO-1

SBC-ISO-1 was identified by Native American monitor Robert Robinson as a milling slab on an isolated granitic boulder that measures 63.5-cm by 68.5-cm. The isolate is situated at the intersection of two unnamed dirt roads. No other granite boulders are located in the area and the boulder was likely transported by machinery from a drainage to the west and south of the study area where granite boulders are more prevalent.

Summary and Recommendations

Two cultural resources - a mid-20th refuse scatter (SBC-SITE-1) and an isolated milling slab (SBC-ISO-1) – were identified during the course of the Phase I survey of the Trona SBC Solar Project study area. SBC-SITE-1 is a dump site dating to the mid-20th century. The site is in poor condition and lacks associative context. The site is recommended as not CRHR eligible/significant, under any criteria. SBC-ISO-1 is an isolated granitic milling slab in a secondary context. Isolated finds are categorically not eligible for inclusion in the CRHR.

In conclusion, no significant cultural resources were encountered within the Project study area. The development and use of the Sections 32 (T24S/R43E, MDBM) study area does not have the potential to result in adverse impacts to significant or unique cultural resources. A determination of no significant impact is recommended for the proposed Trona SBC Solar Project.

Please feel free to contact me if you have any questions.

Sincerely,

Peter A. Carey, M.A., RPA
Director

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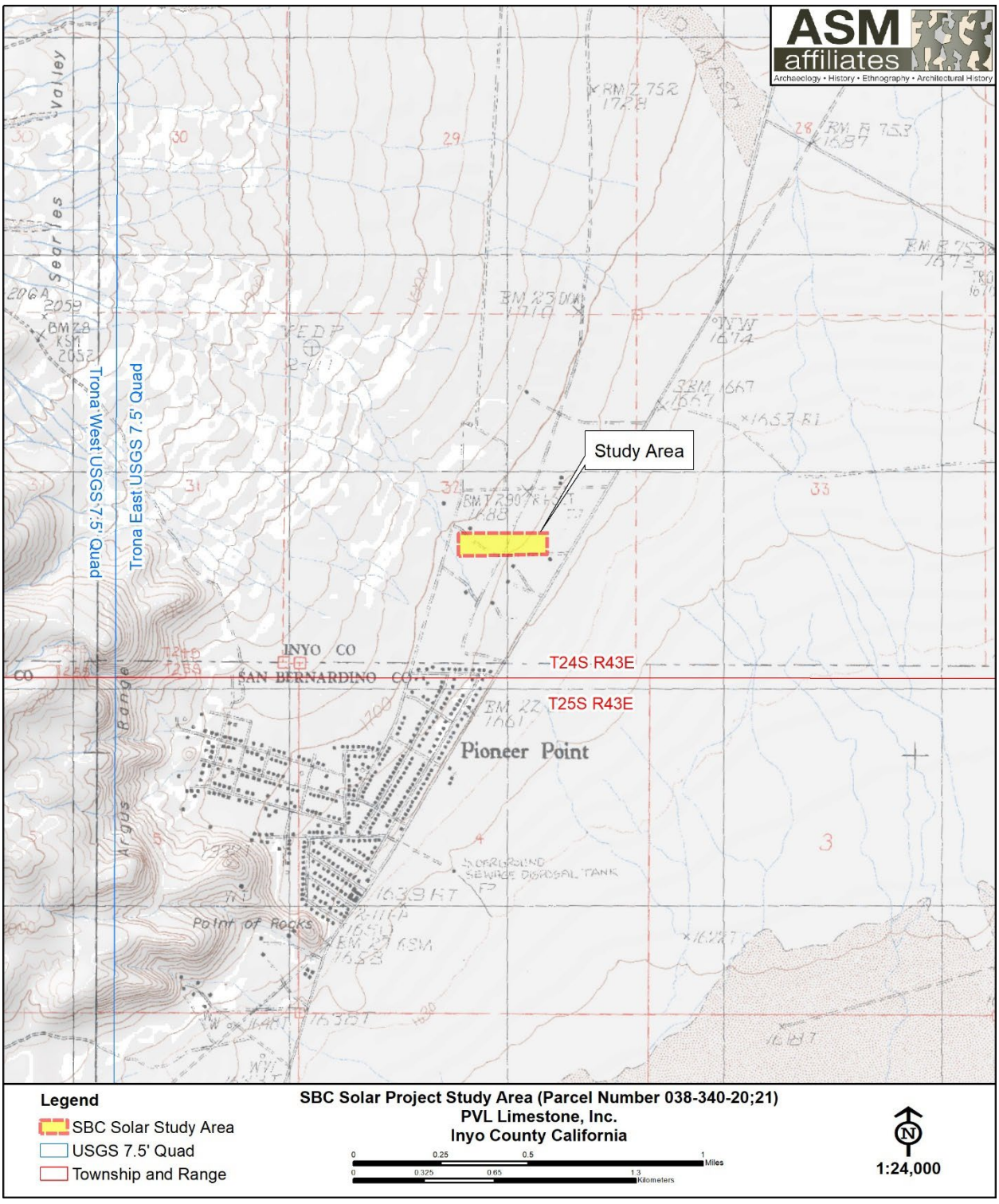

Figure 1. Location of the Trona SBC Solar Project, Trona, Inyo County, California.

Figure 2. Overview of the study area, looking east.

Figure 3. Overview of site SBC-SITE-1, looking south-southwest.

Appendices