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Appendix C Cultural Resources

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FINAL REPORT

ARCHAEOLOGICAL SURVEY OF THE SLC-40 LANDING PAD PROJECT, CAPE CANAVERAL SPACE FORCE STATION, BREVARD COUNTY, FLORIDA

APRIL 2024



FINAL REPORT

ARCHAEOLOGICAL SURVEY OF THE SLC-40 LANDING PAD PROJECT, CAPE CANAVERAL SPACE FORCE STATION BREVARD COUNTY, FLORIDA

**SEARCH PROJECT NUMBER: 240026
ARPA PERMIT NUMBER: CCAFS-2024-002
PREPARED FOR:**

**SPACE EXPLORATION TECHNOLOGIES
CAPE CANAVERAL
BREVARD COUNTY, FL**

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ACRONYMS AND ABBREVIATIONS

45 SW	45 th Space Wing
ac	acre
AD	Anno Domini
APE	Area of Potential Effects
AFB	Air Force Base
BC	Before Christ
BP	Before Present
bs	below surface
CCAFS	Cape Canaveral Air Force Station
CCSFM	Cape Canaveral Space Force Museum
CCSFS	Cape Canaveral Space Force Station
CRAS	Cultural Resource Assessment Survey
FDHR	Florida Division of Historical Resources
FMSF	Florida Master Site File
FSRD	Florida State Road Department
HPZ	high probability zone
KSC	Kennedy Space Center
NAS	Naval Air Station
NASA	National Aeronautics and Space Administration
NPS	National Park Service
NRHP	National Register of Historic Places
Project	Archaeological Survey of the SLC-40 Landing Pad Project
SHPO	State Historic Preservation Officer
SLC	Space Launch Complex
SLD	Space Launch Delta
SpaceX	Space Exploration Technologies Corporation
USAF	US Air Force
USDA	US Department of Agriculture
USGS	US Geological Survey

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1 INTRODUCTION

In March 2024, SEARCH Inc. (SEARCH), conducted a Phase I archaeological survey for the proposed expansion of facilities at Space Launch Complex 40 (SLC-40; Project) at Cape Canaveral Space Force Station (CCSFS) in Brevard County, Florida (**Figure 1-1**). The proposed undertaking for the Project includes the construction of a concrete landing pad for the Falcon 9 reusable rocket booster, which will be built immediately east of the SLC-40 launch pad.

The archaeological survey was conducted to support compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations under 36 CFR 800, which require federal agencies to take into account the effects to historic properties as a result of undertakings within their jurisdiction, and to locate, record, and evaluate the potential significance for National Register of Historic Places (NRHP) eligibility of cultural resources within the Area of Potential Effects (APE). The US Space Force is the lead federal agency for this undertaking and is represented by the Space Launch Delta 45 (SLD 45) cultural resource manager (CRM). Prior to the survey; a Statement of Work was prepared by SEARCH and approved by the CRM, an ARPA permit (Number: CCAFS-2024-002) was obtained in accordance with the Archaeological Resources Protection Act (ARPA), and An AF Form 332 (Base Civil Engineer Work Request) and AF Form 103 (Base Civil Engineering Work Clearance Request) was approved in accordance with CCSFS policy.

For the purposes of this archaeological survey, the APE corresponds to the 4.5-hectare (ha; 11-acre [ac]) Project area that may be subject to ground-disturbing effects during the construction activities. Proposed construction activities include the landing pad, which will be constructed at grade, and ancillary facilities such as utility lines and a small, single-story structure. As the proposed facilities are consistent with the built environment at CCSFS they are not anticipated to create adverse visual effects to nearby historic properties.

The Phase I archaeological survey was conducted in accordance with the Florida Division of Historical Resources' (FDHR) recommendations for such projects, as stipulated in the FDHR's *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*, and complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code. The principal investigator is a professional archaeologist who meets the qualifications established in the Secretary of the Interior's Standards and Guidelines (48 FR 44716, 29 September 1983).

The Phase I archaeological survey included pedestrian survey and the excavation of 38 shovel tests (STs) which resulted in the expansion of one previously recorded resource boundary, Site 8BR04011. SEARCH recommends Site 8BR04011 ineligible for listing in the NRHP. No further cultural resources work is recommended in support of the proposed Project.



Figure 1-1. Location of the Project.

2 ENVIRONMENTAL OVERVIEW

This chapter presents information concerning the natural environment in the Project vicinity and the surrounding region. It includes discussions about Project location, the physiography and geology (climate, flora and fauna, and present-day land use), soils, and paleoenvironment. These data contribute to understanding the precontact and historic settlement patterns in the region, support the development of an appropriate research design for the Phase I archaeological survey, and facilitate the interpretation of survey results.

2.1 LOCATION

The APE is adjacent east of SLC-40 and 225 meters (m; 738 feet [ft]) west of the intersection of Rocket Road and Cape Road and abuts the perimeter fencing surrounding the launch complex. A parking lot and associated SLC-40 facility buildings are in the northwest corner of the APE. The interior of the APE is highly disturbed from activities associated with the construction of SLC-40, which was originally built in the 1960s. A dirt road follows a north-south trajectory just west of the center of the APE. Former access road footprints are present throughout the APE.

2.2 PHYSIOGRAPHY AND GEOGRAPHY

The Project is in the Cape Canaveral physiographic province within the larger Eastern Flatwoods District, as defined by Brooks (1981). This province originated as a sequence of barrier islands and lagoons in Plio-Pleistocene and recent times and are generally low, flat areas consisting of broad expanses of prairies, ridges, and a variety of coastal features (Gregory et al. 2019:9). The area is characterized by an accreted series of coastal ridges over coquina and sand shell from the Middle and Late Pleistocene and excessively drained dunes and ridges on coastal plain marine terraces (Brooks 1981). The native vegetation typically consists of cabbage palm, running oak, saw palmetto, common seagrape, sea oats, bays, and oaks (**Figure 2-1** and **Figure 2-2**, U.S. Geological Survey [USGS] Natural Resources Conservation Service [NRCS] 2024). Elevation within the APE averages 3 m (10 ft) above mean sea level (Google Earth 2024).

Barrier islands on the east coast of Florida are comprised of Holocene quartz sand formed by wind and wave action from the Atlantic Ocean. The APE lies on one of these barrier islands. The underlying bedrock is Miocene limestone that makes up part of the Floridan aquifer. Chert-bearing limestones of the Hawthorn group are deeply buried along the east coast of Florida, and the nearest source of good-quality tool stone is found in the Ocala cluster, approximately 160 kilometers (km; 100 miles [mi]) northwest (Gregory et al. 2019:19).



Figure 2-1. Project location on current aerial imagery.



Figure 2-2. Typical environment in the APE.

2.3 SOILS

Soils within the APE are mostly classified as excessively drained Palm Beach sand which occurs on dunes and ridges on marine terraces of coastal plains (**Table 2-1; Figure 2-3**). A small portion of the APE is classified as urban land, modified by the construction activities that occurred at SLC-40. (USGS NRCS 2024).

Table 2-1. Soil Map Units and Drainage Classifications.

Soil Map Unit	Drainage Class	Acreage	Percentage
Palm Beach sand, 0 to 8 percent slopes	Excessively drained	10.52	98.02
Urban land, 0 to 2 percent slopes	N/A	0.21	1.98
Total		10.73	100.0



Figure 2-3. Mapped soil units within the APE.

2.4 PALEOENVIRONMENT

Between 18,000 and 12,000 years before present (BP), Florida was a much cooler and drier place than it is today. Melting of the continental ice sheets led to a major global rise in sea level (summarized for long time scales by Rohling et al. 1998) that started from a low stand of 120 m (394 ft) at 18,000 BP. The rise was slow while glacial conditions prevailed at high latitudes but became very rapid toward the end of the Pleistocene and the beginning of the Holocene. Conditions became rapidly warmer and wetter during the next three millennia. By about 9000 BP, a warmer and drier climate began to prevail. These changes were more drastic in northern Florida and southern Georgia than in southern Florida, where the “peninsular effect” and a more tropically influenced climate tempered the effects of the continental glaciers that were melting far to the north (Watts 1969, 1971, 1975, 1980). Sea levels, though higher, were still much lower than at present. Surface water was limited, and extensive grasslands probably existed that may have attracted mammoth, bison, and other large grazing mammals. By 6000–5000 BP, the climate had changed to one of increased precipitation and surface water flow. By the late Holocene, circa (ca.) 4000 BP, the climate, water levels, and plant communities of Florida attained essentially modern conditions. These have been relatively stable with only minor fluctuations during the past 4,000 years.

3 CULTURAL OVERVIEW

The following cultural context for eastern Florida consists of a Native American culture history and a historical summary of Brevard County. The precontact Native American culture history consists of a three-part chronology, with each period based on distinct cultural and technological characteristics recognized by archaeologists. The three temporal periods that predate the written record are Paleoindian, Archaic, and Post-Archaic; dates associated with these periods are presented in years BP. The historical summary of Brevard County reviews the early European exploration and settlement in the region beginning in the sixteenth century, the establishment of Brevard County in the nineteenth century, and the major events of the twentieth century, including the development of CCSFS.

3.1 NATIVE AMERICAN CULTURE HISTORY

3.1.1 Paleoindian Period (12,000–10,000 BP)

The most widely accepted model for the peopling of North and South America is that Asian populations migrated to North America over the Beringia land bridge that formerly linked Siberia and Alaska some 12,000 years ago. However, archaeological data are mounting in support of migrations that date to before 12,000 years ago (Adovasio et al. 1990; Dillehay et al. 2008). Regardless of the precise timing of the first occupations of North and South America, the current evidence suggests that Florida was inhabited by humans by about 12,000 years ago. Claims for an earlier occupation (e.g., Purdy 1981, 2008) are controversial. The best evidence for earlier occupation comes from the Sloth Hole and Page-Ladson sites in Jefferson County, where radiocarbon dates predating 12,000 BP have been obtained from levels containing lithic waste flakes, but no diagnostic tool forms (Dunbar 2002, 2006; Hemmings 1999, 2004). Both sites are inundated river sites, and although the contexts are thought to be intact, there is a possibility of the downward movement of artifacts from the overlying artifact-bearing levels.

The conventional view of Paleoindian existence in Florida has been that people were nomadic hunters and gatherers within an environment quite different from that of the present. Excavations at the Harney Flats site in Hillsborough County (Daniel and Wisenbaker 1987) have altered this view, and many archaeologists now believe that people during the Paleoindian period lived part of the year in seasonally inhabited occupation sites near critical resources, such as fresh water.

3.1.2 Archaic Period (10,000–2500 BP)

During the subsequent Archaic period (10,000–2500 BP), human populations began to expand outward from north-central Florida as the climate became wetter and water sources more prevalent. After the demise of Pleistocene fauna, human subsistence strategies became more diverse and included new plant, animal, and aquatic species. People began to live in larger groups, use different types of stone tools, and inhabit more of what is now Florida.

The Early Archaic (10,000–7000 BP) represented a continuity of the Paleoindian occupation of Florida and occurred during a time of rising sea levels, a gradual warming trend, and the spread of oak hardwood forests and hammocks. Numerous small Early Archaic special activity and camp sites have been identified throughout the East Central Florida region (Milanich 1994). The Middle Archaic (7000–5000 BP) was a wetter period, with the intrusion of mixed pine and oak into the hardwood forest. As conditions became wetter, large river systems and wetlands developed, and people began to exploit the resources associated with these aquatic habitats. This trend continued into the Late Archaic period (5000–2500 BP); however, there is evidence that the environment became slightly drier during this period and that aquatic habitats were fewer and not as deep (Russo 1986). Precontact populations in Brevard County were likely much smaller than in more populated locales along the lower St. Johns River.

The earliest pottery was tempered with plant fibers. The people who made fiber-tempered pottery practiced a lifestyle of hunting, gathering, and incipient horticulture. One of the centers of early pottery production was along the Atlantic Coast between southern South Carolina and northern Florida. Fiber-tempered pottery was made with naturally occurring clays; plant fibers were added to the clay as a tempering agent to strengthen it. Traditionally, manufacture of this ware was believed to span approximately 1,500 years, with plain and decorated variants (e.g., incised, and punctated types) undergoing periods of stylistic popularity (Bullen 1972). Radiometric analysis, however, suggests that the production of fiber-tempered wares, at least in the Middle St. Johns River Valley, spanned a shorter interval from about 4100–3600 BP (Randall and Sassaman 2005) with stylistic variability attributable to ethnic, sociopolitical, and functional factors more than to temporal trajectory (Sassaman 2003).

3.1.3 Post-Archaic Period (2500–500 BP)

By 2500 BP, regional adaptations were well established. Archaeologists subdivided the state into geographic areas that share similar archaeological traits. The APE is within the Indian River region of the East and Central Lake archaeological region. The Indian River region extends from the Indian River–St. Lucie county line northward along the Atlantic coast to Merritt Island in Brevard County (Milanich 1994; Rouse 1951). The western boundary extends about 32 km (20 mi) inland to the St. Johns River drainage and tributaries.

Irving Rouse (1951) first described archaeological cultures in the Indian River area as Malabar. His chronology framed Malabar as a local variant of the St. Johns tradition, which grew out of the Orange pottery of the Late Archaic period. Mostly known from sites in its core area of northeast Florida, the St. Johns tradition is characterized by chalky pottery first produced beginning about 2500 BP. Increased population and settlement numbers, construction of sand burial mounds, continued economic dependence on aquatic resources, and greater emphasis on plant cultivation accompanied the changed ceramic production (Goggin 1952:40; Milanich 1994:243–274). Significant amounts of sand-tempered pottery also characterize Indian River pottery assemblages. This pottery may indicate influence from adjacent culture areas. Some vessels were likely made from the same local clays as the St. Johns wares (Espenshade 1983).

Table 3-1 presents the post-Archaic ceramic chronology of the Indian River region. Cordell's (1985) analysis of pottery from several sites in Brevard County largely informs the sequence. The sequence appears to be applicable to other portions of the Indian River region and the east and central archaeological region of Florida (Milanich 1994). Dates assigned to these periods are estimates extrapolated from Milanich's chronology for the entire East and Central Lakes archaeological region (Milanich 1994:247).

Table 3-1. Post-Archaic Ceramic Chronologies in the Indian River Region.

Years BP	Period	Distinguishing Traits
500–250	Period III	Introduction of European artifacts. St. Johns Check Stamped continues.
1250–500	Period II	St. Johns Check Stamped appears in combination with St. Johns Plain. Sand-tempered plain remains at about 10 percent. Belle Glade Plain remains a minority type.
1500–1250	Late Period I	St. Johns Plain returns to dominance as sand-tempered plain decreases to about 10 percent. Slight increase in Belle Glade Plain (3 percent).
2000–1500	Middle Period I	St. Johns Plain is still predominant, but sand-tempered plain increases to about 30 to 40 percent of assemblages. Belle Glade Plain present in very small amounts (less than 1 percent).
2500–2000	Early Period I	Decrease in fiber-tempered pottery. St. Johns Plain is the dominant ware. Minor representation of sand-tempered plain.

Sources: Carr et al. 1995; Cordell 1985; Milanich 1994

In the above table, Malabar I corresponds to the Early Period and into Period II. Malabar II is characterized by the appearance of St. Johns Check Stamped pottery, beginning in Period II, and continuing through Period III (Milanich 1994:250; Rouse 1951). The Indian River region was not widely influenced by Mississippian culture. Some exotic goods have been identified in Malabar II contexts, although sparse and infrequent (Penders 2012). Interaction was more frequent between coastal groups and interior groups of the Indian River region. Most sites recorded within CCSFS are along the Banana River.

Interior sites include small, special-use campsites and larger, multicomponent sites featuring extensive midden deposits that may indicate permanent habitation. Russo's (1986) analysis of faunal remains from interior sites denotes a dependence on aquatic resources, including turtles, waterfowl, fish, and freshwater mussels. Throughout the post-Archaic period, wetland resources expanded. Water sources deepened, providing suitable habitats for more and larger fish, such as bass and pickerel. During the dry months (winter and spring), water sources shrank and provided habitat for fish species, such as bowfin and gar, that favor shallow, muddy-bottomed ponds. Terrestrial animals, including deer, raccoon, and rabbit, also were exploited. Dietary emphasis was definitively on freshwater wetland resource acquisition.

Coastal sites were present in many locations along the Indian River lagoon, the adjacent uplands, and on the barrier islands. Although modern development destroyed many of these sites, a few have been investigated and provided information on coastal adaptations. Evidence suggests that the coast was utilized seasonally during the winter and spring months of the year when interior wetlands were less abundant. The data indicate that some sites were small, extractive sites occupied by only a few individuals, while other larger sites served as habitation sites. People

exploited marine fish, shellfish (especially coquina), and some terrestrial animals for food (Milanich 1994:252–253). It is unclear whether the same populations moved back and forth between the coast and the interior, or whether separate populations inhabited these two areas.

Mortuary practices intensified in the Malabar I and II periods. Shell and sand mounds were commonly built in the Indian River region but are not easy to differentiate between Malabar I or Malabar II periods (Rouse 1951; Penders 2012). At CCSFS, mounds are located adjacent or in proximity to habitation areas, unlike other areas of Florida where mounds are positioned away from associated occupation sites (Penders 2012). A review of the FMSF indicates that there are no mounds within the APE. The DeSoto Grove burial mound (8BR00083) is approximately km (2.5 mi) south.

3.2 POSTCONTACT CONTEXT

The following is a historic context of Brevard County from European exploration to the present.

3.2.1 European Exploration and Early Settlement (1513–1821)

The area that is now Brevard County served as an important stage for many early European expeditions in North America. Some historians believe that the Italian captain John Cabot sailed south along the Brevard County coast during his 1498 explorations (Dovell 1952; Eriksen 1994). There is also evidence that Spanish ships raided indigenous coastal villages to capture and enslave people. When Juan Ponce de León came to Florida, he found a local who understood Spanish. Ponce de León left Puerto Rico on March 3, 1513 with three ships. After sailing on a northwesterly course for 30 days, the ships landed either north of Cape Canaveral or in the vicinity of modern-day Melbourne Beach (Eriksen 1994; Gannon 1996; Milanich 1995). Ponce de León sighted land during the Feast of Flowers (Pascua Florida) and called it La Florida (Milanich 1995). Ponce de León remained at this initial landing place for six days before pulling anchor and sailing toward Jupiter Inlet, where he landed to restock firewood and water for the ships. The fleet rode the countercurrents of the Gulf Stream to Biscayne Bay and eventually rounded the southern tip of the peninsula (Gannon 1996; Milanich 1995). The island off the Brevard County coast became known as *Canaveral*, the Spanish term for canebrake. Many sixteenth-century maps depict Cape Canaveral, which is one of the oldest place names in North America (Eriksen 1994).

The Gulf Stream off the Brevard County coast emerged as an important thoroughfare for the transportation of New World supplies to Europe. Spanish treasure galleons rode this warm current from Havana through the Bahama Channel. Wrecks occurred regularly in the treacherous shoals around Cape Canaveral, and the local Native American tribe, the Ais, often recovered the cargo. The Spanish crown realized the importance of this trade route, and when they heard that the French had established a colony, Fort Caroline, on the St. Johns River near modern-day Jacksonville, they decided to act. The Spanish Crown tasked Pedro Menéndez de Avilés, a highly respected officer in the Spanish navy, with eradicating French influence in the area and starting a colony in la Florida (Milanich 1995). The French colony awaited supplies and reinforcements

coming from France under the command of Jean Ribault. Menéndez felt it crucial to reach and destroy Fort Caroline before Ribault arrived. In August 1565, Menéndez, with his fleet of 10 ships, sighted Cape Canaveral (Gannon 1996; Milanich 1995). The Spanish force searched for six weeks along the northern Florida coast before they found the French fort. A tropical storm had scattered the French defenses and left the fort an easy target for Menéndez to destroy. During the gale, a ship of French colonists had wrecked somewhere near Cape Canaveral. While Menéndez marched south along the coast to meet the wayward French force, he kept a detailed description of the area, including Brevard County. The Spanish constructed the garrison Santa Lucia on the high plateau near Jupiter Inlet as a line of defense for the new colony (Eriksen 1994; Milanich 1995).

In 1605, Spain sent a delegation under the command of Álvaro Mexía to the Brevard County area. Spanish officials charged the diplomat with placating the Ais and mapping the region. His mission proved successful. Mexía became an honorary chief of the tribe and explored the Indian and Banana Rivers (which the Spanish called Río de Ais and Ulumay Lagoon). Mexía's maps detail many Native American settlements along the shores of Mosquito Lagoon (at the north end of the Indian River). It is possible that his entourage spread orange seeds along the banks of the Indian River (Eriksen 1994).

On July 24, 1715, a flotilla of 11 Spanish ships carrying 14 million pesos in gold, silver, and jewels left Havana for Europe. A few days into the voyage, 10 of the 11 ships wrecked off the East Florida coast between St. Lucie and Mantanzas. Approximately 700 sailors died, and an additional 1,500 washed up on the coast. The Ais aided the Spaniards by providing them with supplies and instructions for gathering food in the dunes. The Spanish government, desperate to recover the lost treasure, established an encampment of salvagers in the vicinity of the present-day Sebastian State Park in the far southern portion of Brevard County. Salvagers recovered only one-third of the lost cargo (Eriksen 1994).

In the mid-1700s, European colonial powers fought a worldwide war, the Seven Years War, as a means to consolidate their colonial holdings. After the British victory in the Seven Years War in 1763, they traded Havana to Spain for Florida. The British divided the colony along the Apalachicola River into East and West Florida. In 1765, the botanist John Bartram and his son William searched for the St. Johns River headwaters (Eriksen 1994; Tebeau 1980 [1971]). The two were the first Europeans to document the Brevard County region (Eriksen 1994). In 1783, the Treaty of Paris restored Florida to Spain, whose control of the territory would remain tenuous (Tebeau 1980 [1971]). Vicente Manuel de Zéspedes, the Spanish governor, wrote to the king in 1785 that isolated groups of Americans had settled in the area (Eriksen 1994; Tebeau 1980 [1971]). Immigrants from the tribes north of Florida now numbered 5,000 to 6,000 in the colony. The majority of these "Seminoles" remained west of the St. Johns River. The area known as the Mosquito Coast included present-day Brevard County (Eriksen 1994).

The American colonies declared their independence from British rule in 1776. The last naval battle of the American Revolutionary War took place off the coast of Cape Canaveral on March 10, 1783, when the British HMS Sybil gave chase to two Continental Navy Ships that were carrying

silver from Cuba to support the Continental Army. The battle resulted in a victory for the American side with the HMS Sybil badly damaged and fleeing from the fight (FDHR 2006). In 1783, the Treaty of Paris ended the American Revolution and returned Florida to Spain.

3.2.2 American Territorial Period through the Civil War (1812–1861)

Florida became a territorial possession of the United States after President James Monroe ratified the Adams-Onís Treaty on February 22, 1821. The United States government appointed General Andrew Jackson governor of the territory later that same year (Eriksen 1994; Tebeau 1980 [1971]). Jackson partitioned Florida into two counties: Escambia to the west and St. Johns to the east. In 1824, the area encompassing most of east-central Florida, including Brevard County, officially became Mosquito County.

In 1835, the Second Seminole War brought conflict to east Florida. Along with a severe freeze in 1835, the war decimated Mosquito County's population, as most everyone fled to safe havens outside the county (Shofner 1995:36). The war ended in 1842, and on March 14, 1844, the territorial government created St. Lucie County (present-day Brevard County), from Mosquito County (Carter 1962:994–995; Dunn 1998:34).

On March 3, 1845, Florida became the twenty-seventh state admitted to the Union (Eriksen 1994). Judge Theodore Washington Brevard settled in Tallahassee two years later. He spent 12 years as state comptroller and became the namesake for Brevard County on January 6, 1855, when it was founded. This new county encompassed more than 18,130 square km (7,000 square mi) and had its seat of government in the small town of Susannah, north of Fort Pierce (Eriksen 1994; Fernald and Purdum 1992; Morris 1995). John Houston established Arlington, the first permanent US settlement in southern Brevard County, in 1854 (Eriksen 1994).

On January 10, 1861, Florida seceded from the Union. Brevard County remained far removed from the battlefields to the north but still played an important role in the war. The settlers along the Indian River engaged in salt production for the Confederate Army. Blockade runners frequently utilized the inlets and bays of the Indian River and Mosquito Lagoon during their smuggling ventures (Tebeau 1980 [1971]).

3.2.3 Late Nineteenth Century (1861–1899)

Prior to the 1880s, water transportation, by sea and river, was the dominant mode of long-distance travel for most of Florida's residents. Due to Florida's low population, underdevelopment, and lack of capital, railroads entered the state slowly. By the mid-1800s, Florida had only one successful rail line, and it connected Tallahassee to the Gulf of Mexico at St. Marks (Brown 1991:13–14). Most of Florida's roads were bumpy, waterlogged (during summer months), sand-laden trails that even ox teams had a difficult time traversing. With the arrival of Henry Flagler and Henry Plant in the 1880s, trains began to cross the Florida landscape. Railroads generally brought growth to the communities and regions they touched (Covington 1957:136, 169; Johnson 1966:129).

In 1879, citizens elected Titusville as the permanent seat of government for Brevard County. The population of the Indian River area rapidly expanded due to a solid economic base of agriculture and recreational fishing. Titusville became a stop on the Jacksonville, Tampa, and Key West Railway in 1885. In 1890, a group of wealthy Harvard graduates founded the 7,284-ha (18,000-ac) Canaveral Club, which is now the Merritt Island National Wildlife Refuge. In 1893, the Florida East Coast (FEC) Railway line came to Titusville and Eau Gallie (Eriksen 1994).

3.2.4 Twentieth Century to Present (1900–Present)

By the end of the nineteenth century, Florida had concerted an effort in road development across the state. With the proliferation of railroads, farmers, merchants, and others advocated for improved roads to transport goods and people to and from the railroad depots. During the 1910s and 1920s, the number of automobiles in the state and nation increased, exerting more pressure on the government to construct and improve roads. Prior to 1924, only 1,204 km (748 mi) of hard-surfaced road existed in the state. By 1928, this number had grown to 2,556 km (1,588 mi), and 95 km (59 mi) in the process of being paved (Jackson 1992; Kendrick 1964; Tebeau 1980 [1971]). Not surprisingly, as car ownership increased and roads improved, train dominance diminished.

In 1917, Brevard County achieved its modern-day dimensions when the southern portions of the county became St. Lucie and Okeechobee Counties, and the western portion became Osceola County (Fernald and Purdum 1992). The center of population in the county shifted from Titusville in the north to Eau Gallie, Cocoa, and Melbourne in the south. A bridge constructed from Cocoa to Merritt Island opened a link to the many small communities on the coast. By the mid-1920s, four bridges spanned the Banana River, and new towns were established along the beaches as a result of these bridges (Eriksen 1994).

Cape Canaveral and the islands off the coast had been primarily isolated until the construction of bridges connecting them to the mainland (Lethbridge 2021). However, even after the construction of bridges, they remained sparsely settled for several more decades (Hiller 2005). By 1936, only two settlements remained evident near Cape Canaveral: Canaveral and Artesia (Florida State Road Department [FSRD] 1936). At the dawn of World War II (WWII), roughly 100 people called Cape Canaveral home (Lethbridge 2021). The community would subsequently boom during and after the war years beginning with the establishment of Naval Air Station (NAS) Banana River in 1939. Located on land south of Cocoa Beach, NAS Banana River remained in operation until 1947, at which time it was deactivated and placed in caretaker status (Eriksen 1994). In September 1948, NAS Banana River was transferred from the US Navy to the US Air Force (USAF). Subsequently renamed Patrick Air Force Base (AFB), the station was reactivated and rolled into a larger entity known as the Joint Long-Range Proving Ground (JLRPG). Established by President Harry S. Truman in May of 1949, the JLRPG was created for the purpose of test firing missiles and placed under the administration of the USAF. In addition to the facilities at Patrick AFB, the JLRPG consisted of Cape Canaveral and a missile range extending into the Atlantic Ocean and over the Bahama Islands. Over the coming decades, all three installations would be renamed. For the purposes of clarity, the current names of these installations will be

used for the remainder of this context. The base's missile range was given its current name, Eastern Range, on October 1, 1990. Patrick AFB was renamed Patrick Space Force Base (SFB) on December 9, 2020. On that same day, Cape Canaveral was designated CCSFS (Cape Canaveral Space Force Museum [CCSFM] 2024a; Slovinac 2014:5-6).

In July 1950, and under the direction of the US Army Corps of Engineers (USACE), work began on Cape Canaveral to construct mission-related infrastructure projects including Port Canaveral and Space Launch Complexes (SLCs; formerly referred to as 'Launch Complex') 1, 2, 3, and 4. Later that month, on July 24, a modified German V-2 rocket designated Bumper 8 was launched from the still incomplete SLC-3. The event was significant as it represented the first successful missile launch from CCSFS. During the 1950s, the USAF utilized the installation to develop advanced missile technology, specifically cruise missiles, Intermediate Range Ballistic Missiles (IRBMs) and Intercontinental Ballistic Missiles (ICBMs). Concurrently, CCSFS was used by other branches of the military to test unmanned spacecraft including satellites and space launch vehicles. These efforts led to the launch of America's first satellite, Explore 1, from Cape Canaveral's SLC-26A on February 1, 1958. The achievement announced America's entry into the Space Race with the Soviet Union and led to the eventual establishment of the National Aeronautics and Space Administration (NASA) in July 1958. Roughly four years later, NASA would purchase nearby Merritt Island and establish the John F. Kennedy Space Center (KSC). Completed in July 1962, the KSC was without operational SLCs until 1965. As a result, NASA crews relied on CCSFS to launch spacecraft associated with the agency's initial spaceflight programs, Project Mercury and Project Gemini. The uptick in demand for use of CCSFS' facilities led to a construction boom on Cape Canaveral during the first half of the 1960s (Slovinac 2014:6-11; Snyder et al. 2019:49). SLC-40 was among the structures completed during this period. Deemed operational in 1965, SLC-40 was the first complex on the Cape to feature a launch control center, or blockhouse, outside of the blast zone. This change was attributed to advances in communications technology and data transmission. Additionally, SLC-40 was the first of two such complexes to accommodate the Titan III series launch vehicles. A modified variant of the Titan II missile, the Titan III was developed by the USAF as a heavy lift launch vehicle designed specifically for military, but also civilian payloads and satellites (CCSFM 2024b; Snyder et al. 2019:49).

During the latter half of the 1960s, historic launch operations at CCSFS began to decline as NASA further consolidated its programs with its own facilities. By the dawn of the twenty-first century, many of the installation's SLCs and support structures were deactivated including SLC-40. The latter complex was placed on standby status in 2005. During its roughly four decades of service for the USAF, SLC-40 was the site of 55 Titan III and Titan IV missions. Subsequently, SLC-40 was re-activated in 2007 and leased to Space Exploration Technologies Corporation, or SpaceX, to launch its Falcon 9 rocket. The complex was renamed SLC-40 shortly after the lease was approved and remains in operation to this day (CCSFM 2024b; Slovinac, 2014:9-14; Snyder et al. 2019:49).

4 HISTORIC MAP AND AERIAL PHOTOGRAPH REVIEW

SEARCH examined historic maps and aerial photographs to identify past land use within and in the vicinity of the APE. The earliest maps studied were General Land Office (GLO) survey maps. Government land surveyors created GLO maps during the nineteenth century as part of the surveying, platting, and sale of public lands. In Florida, these maps show landscape features such as vegetation, waterbodies, roads, and Spanish land grants. The level of detail in GLO maps varies, with some also depicting structures, Native American villages, railroads, and agricultural fields. A GLO map of Florida Township 22 South, Range 37 East shows no development within the APE (**Figure 4-1**; GLO 1859).

Brevard County maps were studied for the years 1859–1943. The most notable change in the vicinity of the APE during this time was the addition of Highway 401 (modern day Cape Road and Highway A-1-A), completed circa 1936 (Florida Department of Transportation [FDOT], 1936). There are no signs of development within the APE during that time bracket. A 1943 aerial photograph and a 1949 USGS topographic map continue to show no signs of development within the APE (**Figure 4-2–Figure 4-3**) (United States Department of Agriculture [USDA] 1943, USGS 1949).

By 1951, an aerial photograph depicts several structures along Highway A-1-A (which corresponds partially with modern day Cape Road), including the first structures of the DeSoto Beach residential community approximately 1.6 km (1.0 mi) south of SLC-40 (**Figure 4-4**; Penders 2013; USDA 1951). No structures are within the APE.

A 1958 Cape Canaveral Missile Test Annex Area Map shows signs of development within the APE. A road is apparent crossing into the APE from the north. To the west of the road, is a tent site labeled “983”. To the east of the road, and along the APE’s eastern boundary is a dwelling marked “970”. A group of buildings is apparent roughly 0.15 km (0.10 mi) to the east of the APE and on the west side of Highway A-1-A. The group consists of six dwellings and one interim bivouac area (**Figure 4-5**) (Pan American World Airways, Inc 1958).

A 1964 aerial photograph shows SLC-40 under construction and Rocket Road connecting SLC-40 to Cape Road (**Figure 4-6**; USSF 1964). At least two permanent structures (one is 8BR03299 and the other is adjacent to the southern APE boundary on Rocket Road), and several temporary structures are visible within the APE (Range Planning Department 1964; **Figure 4-7**). Structure 8BR03299 is a supply and issue shop constructed of concrete blocks and completed in 1964 (Range Planning Department 1964). The temporary structures are likely related to the SLC-40 construction activity. Six structures are visible in the 1964 aerial photograph at the intersection of Rocket Road and Cape Road approximately 182 m (597 ft) east of the APE. Among these structures are two storage buildings, a paint shop and storage building and a dwelling. All of the aforementioned structures were completed of concrete blocks in 1950.

By 1967, the APE contained two structures, namely the supply and issue shop and an electric substation. The latter structure appears to the south of Rocket Road and to the east of the supply

and issue shop. Roughly two years later, in 1969, only the supply and issue shop appears within the APE (**Figure 4-8** and **Figure 4-9**).

A lone structure, the supply and issue shop (8BR03299), is visible in the northwest corner of the APE on a 1970 USGS topographic map (**Figure 4-10**; USGS 1970). Three concrete pads which may have supported temporary structures used to build SLC-40 that are no longer extant are visible in the east-central and south-central portions of the APE. An unimproved turnaround or traffic circle appears within the APE. On a 1972 aerial photograph provided by USSF (USSF 1972) the 1964 supply and issue shop is visible in the northwest corner (**Figure 4-11**). The road and traffic circle remain. Two unimproved roads are apparent within the APE; the first enters the APE from the east before turning south below the traffic circle. The second road enters the APE from the south before turning west out of the APE. The road then re-enters the APE and crosses its northwest corner.

In a 1994 aerial photograph (**Figure 4-12**; Google Earth 1994) present-day Rocket Road crosses the APE north–south. The six structures at the intersection of Rocket Road and Cape Road east of the APE are no longer extant. To the west of Rocket Road, two buildings are visible within the APE (8BR03299 in the northwest corner and 8BR02802 approximately 100 m [327 ft] south). The structure on the southern boundary of the APE on Rocket Road is present, and a radio tower is approximately 30 m (98 ft) north. Several unimproved roads are apparent between the building in the northwest corner (8BR03299) and Rocket Road. Another structure is adjacent south of the traffic circle. A parking lot is apparent above the traffic circle. Finally, at least four unimproved roads are visible. The first appears to the northeast of the traffic circle and runs north to south. The other three are visible to the southeast of the traffic circle. One follows east to west, while the other two travel north to south (Google Earth 1994).

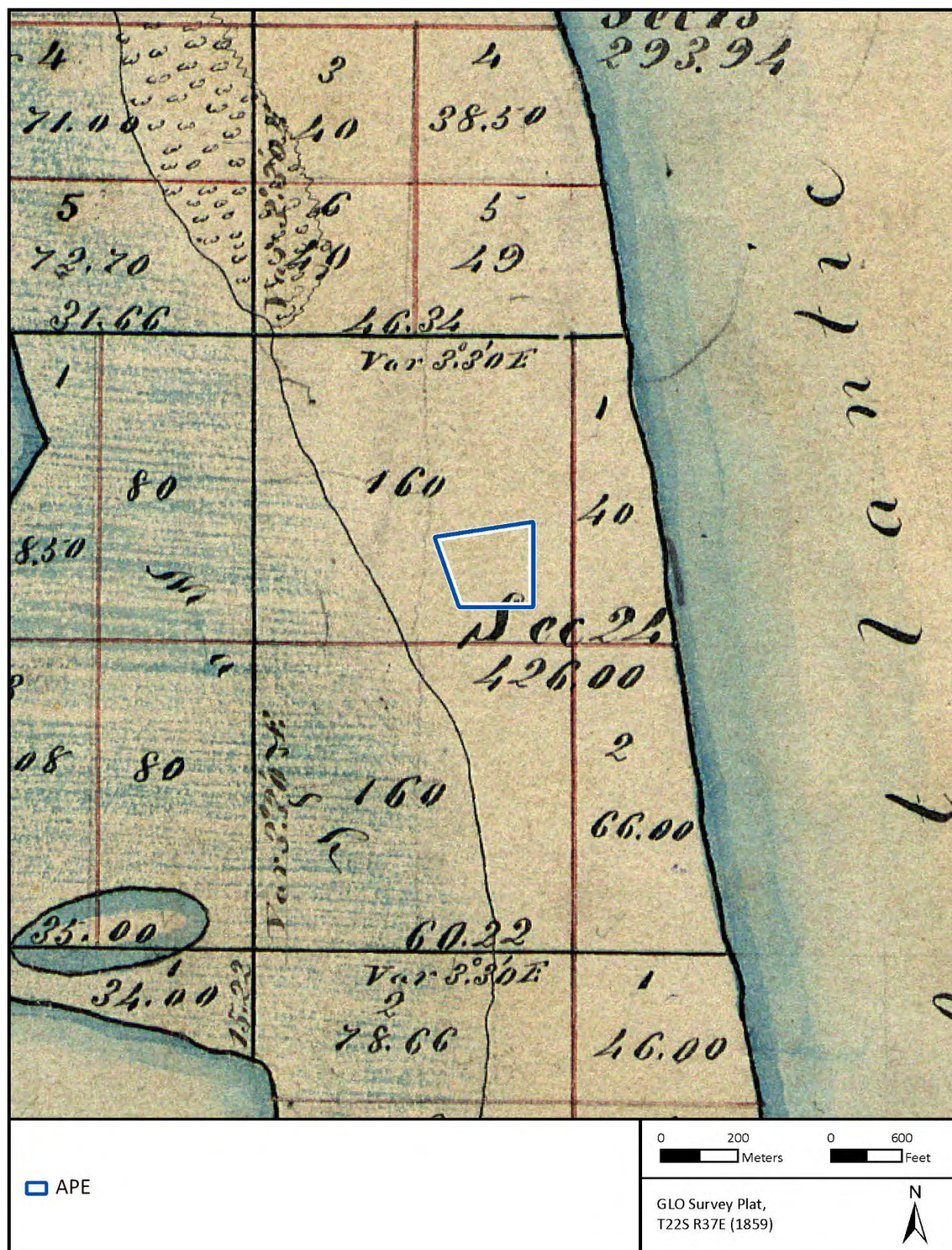


Figure 4-1. APE on 1859 GLO map (GLO 1859).

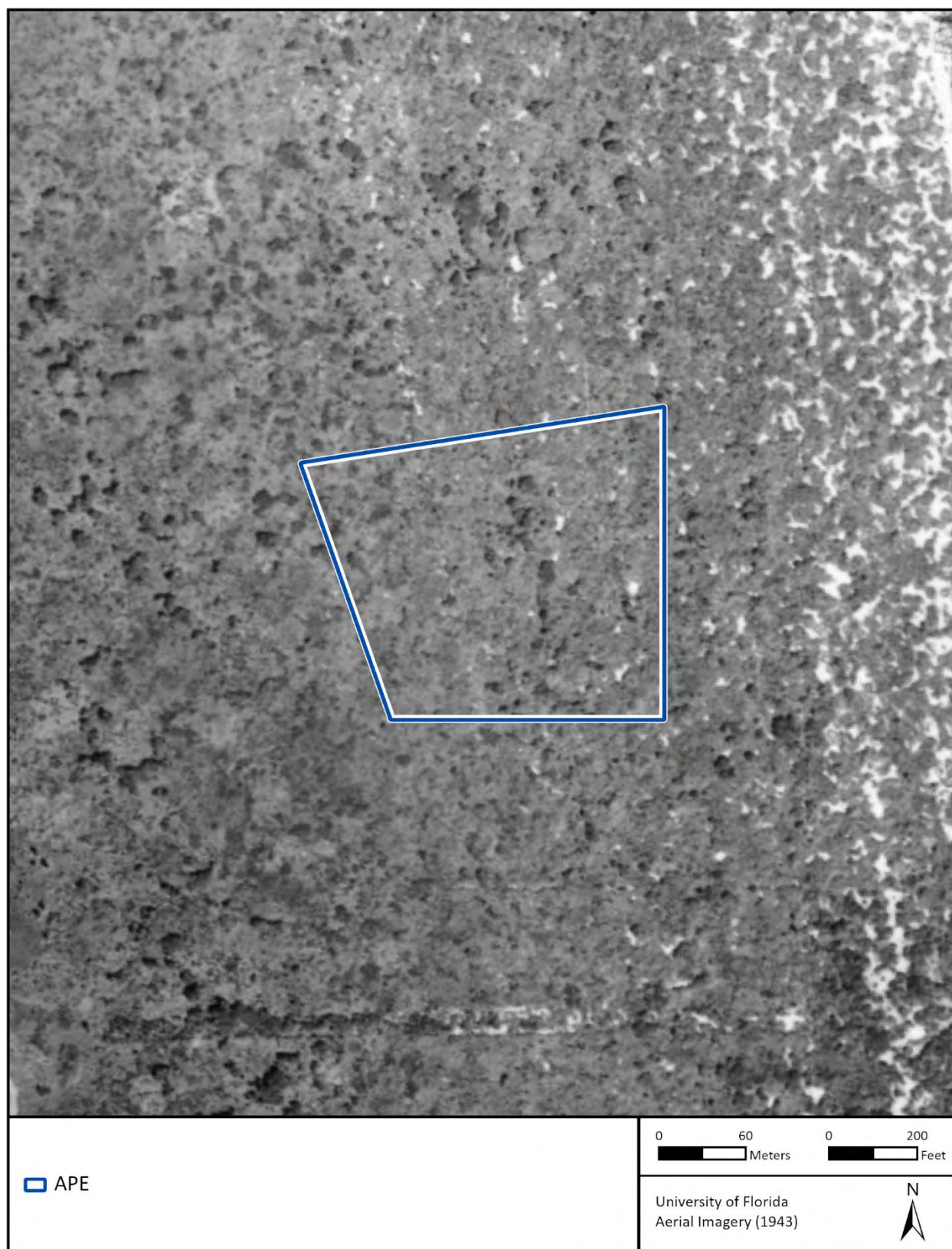


Figure 4-2. APE on 1943 USDA aerial photograph (USDA 1943).

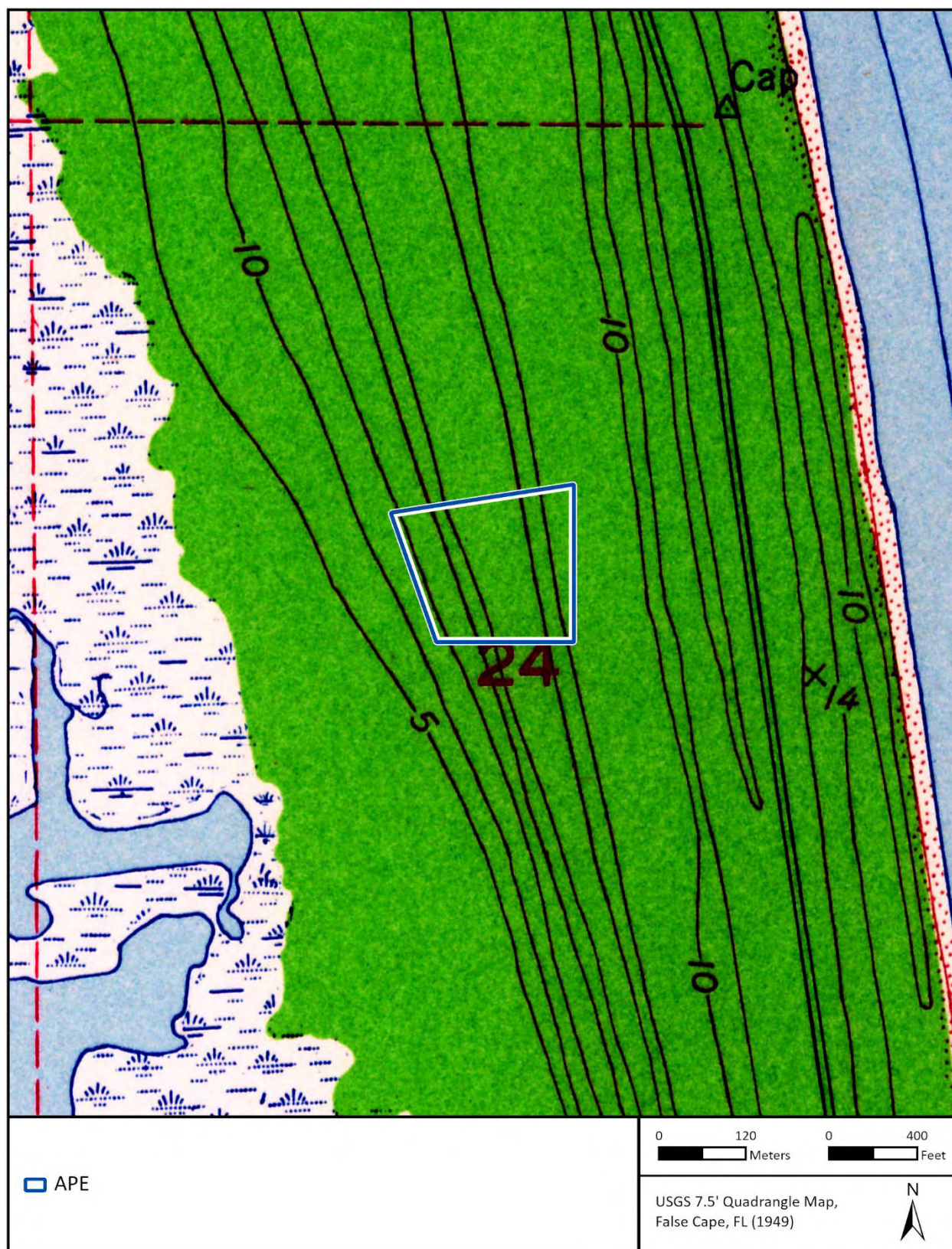


Figure 4-3. APE on 1949 USGS topographic map (USGS 1949).



Figure 4-4. APE on a 1951 aerial photograph (USDA 1951).

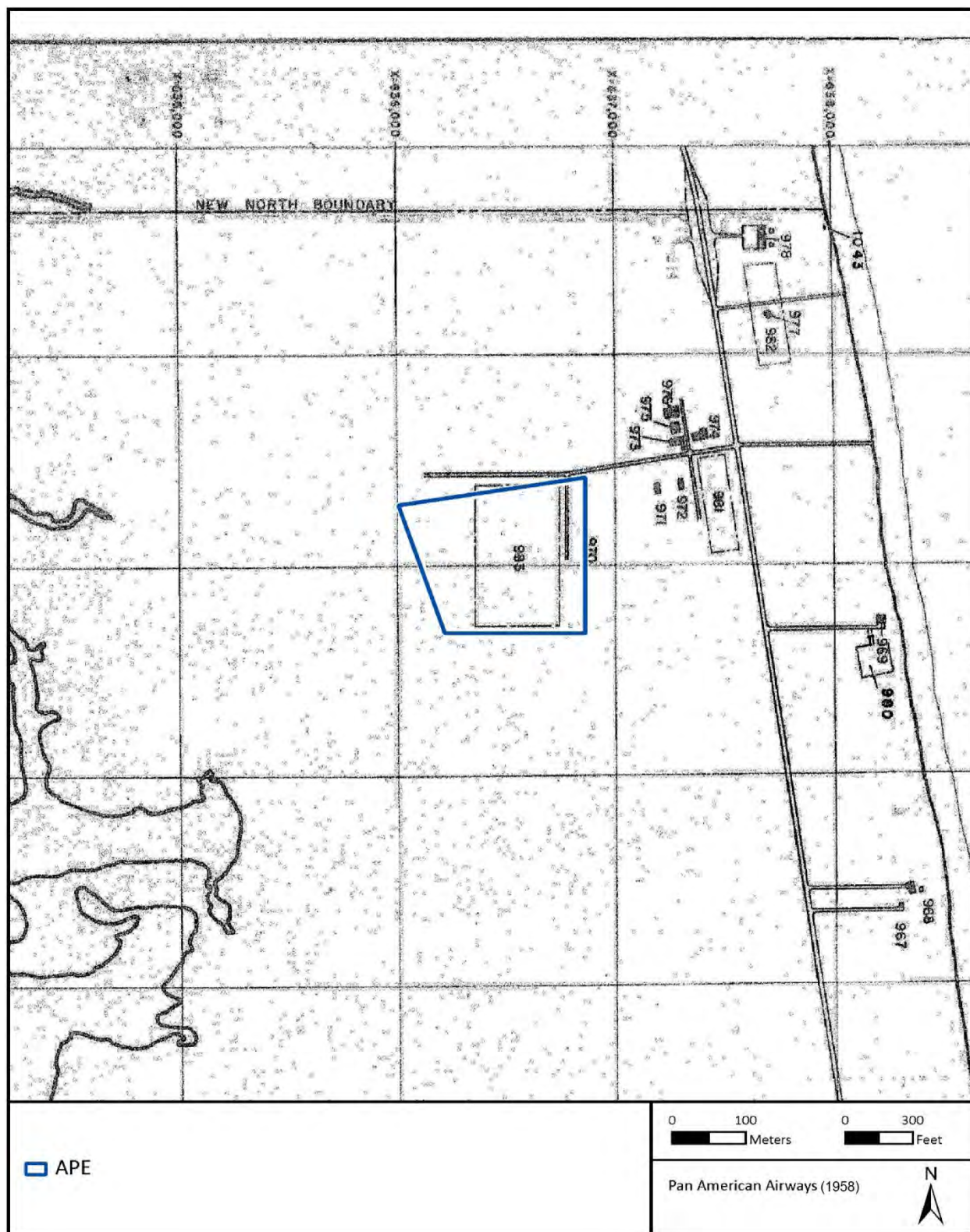


Figure 4-5. APE on 1958 Cape Canaveral Missile Test Annex Area Maps (Pan American Airways, Inc. 1958).



Figure 4-6. APE on 1964 USSF aerial photograph (USSF 1964).

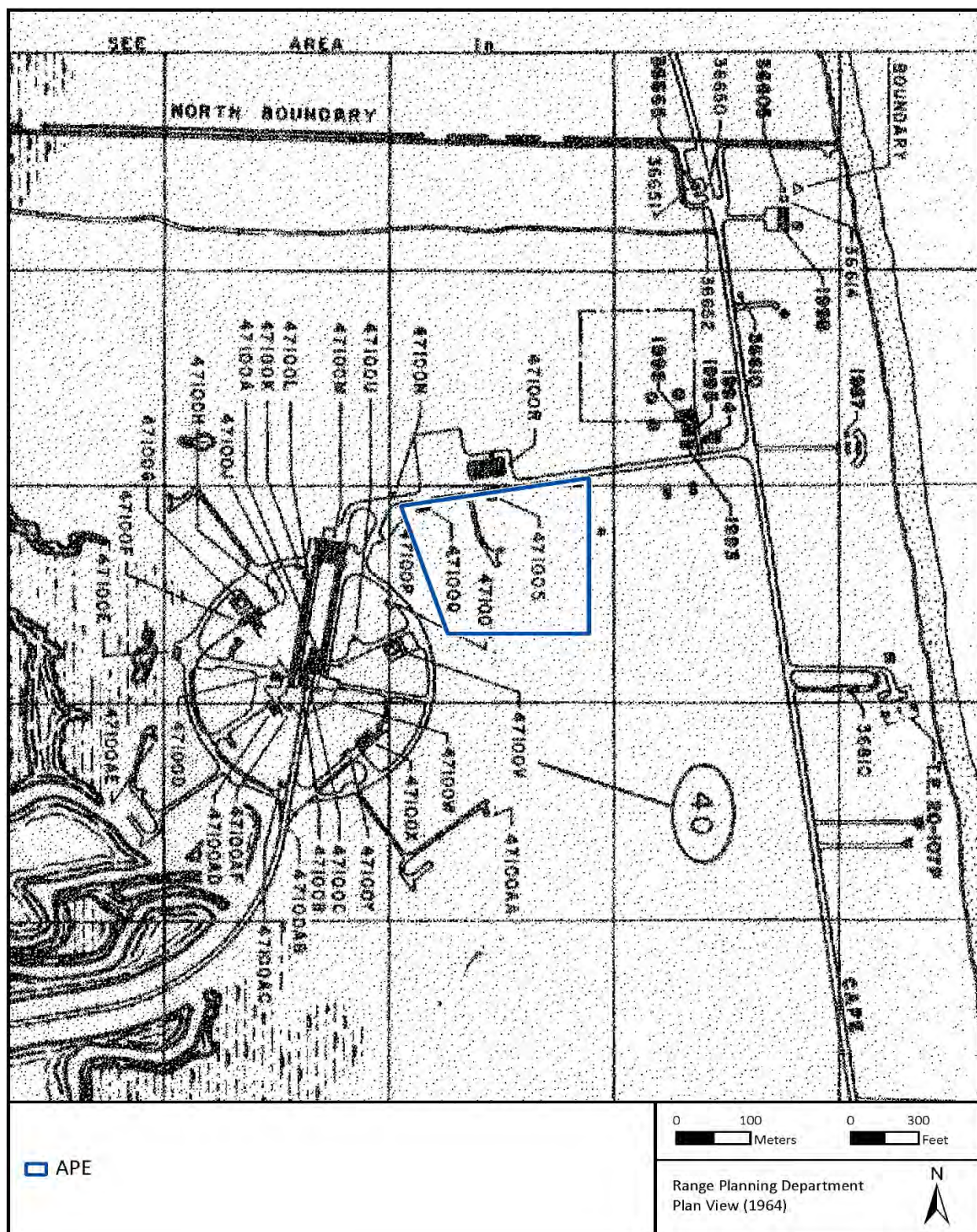


Figure 4-7. APE on Cape Kennedy Air Force Station Building Schedules and Locations Master Plan (Range Planning Department 1964).

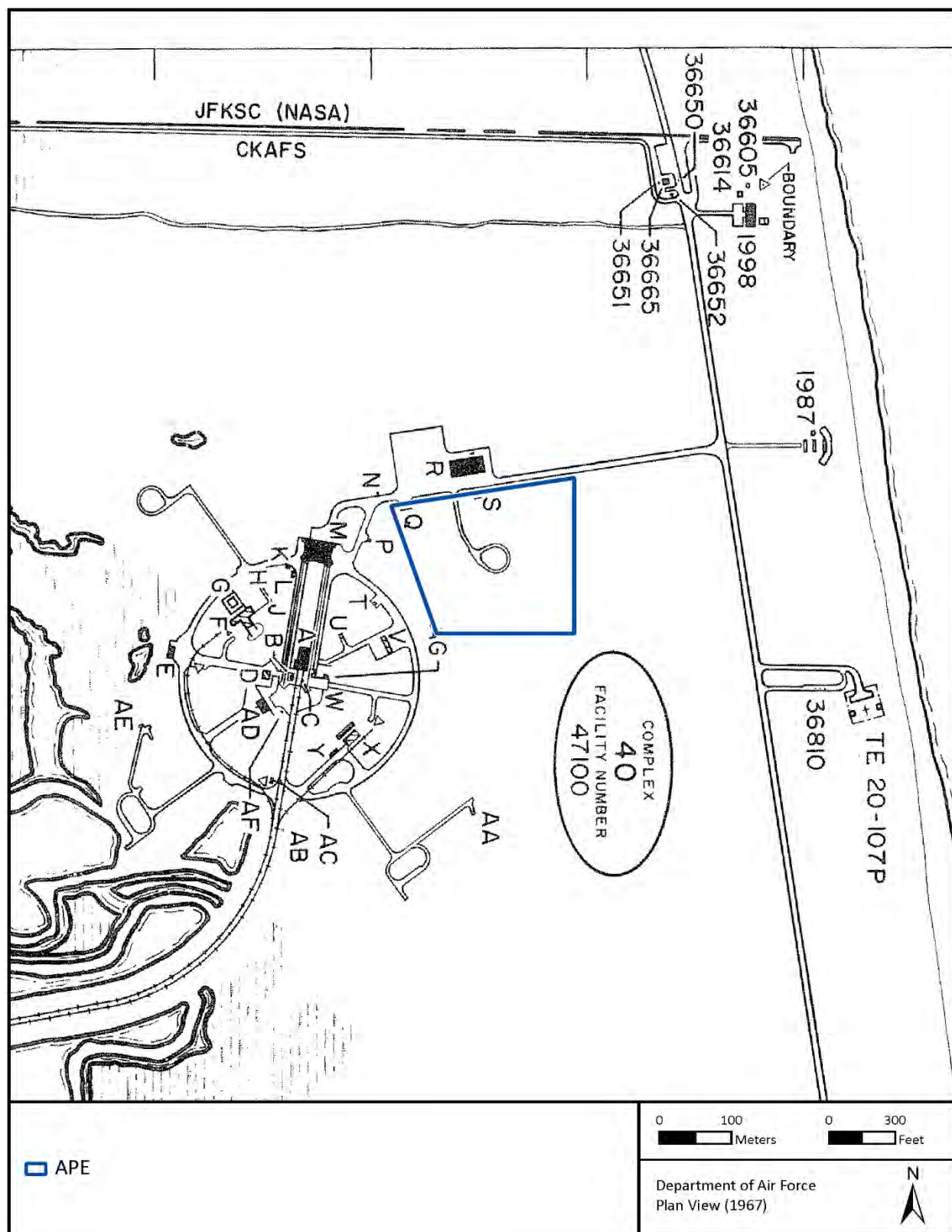


Figure 4-8. APE on the Air Force Systems Command Master Plan (Department of the Air force 1967).

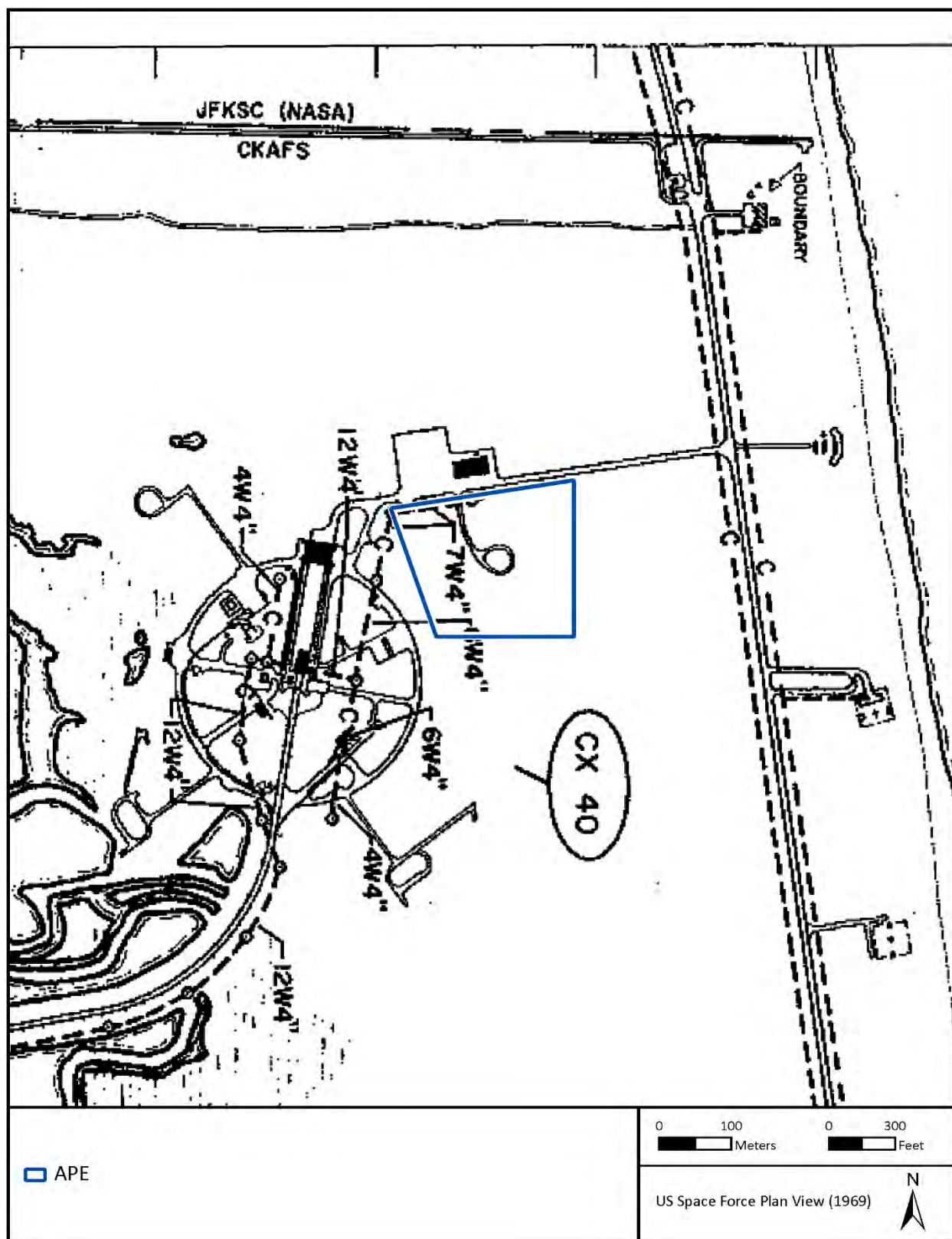


Figure 4-9. APE on map of SLC-40 in the Basic Information Guide: Cape Kennedy (USSF 1969).

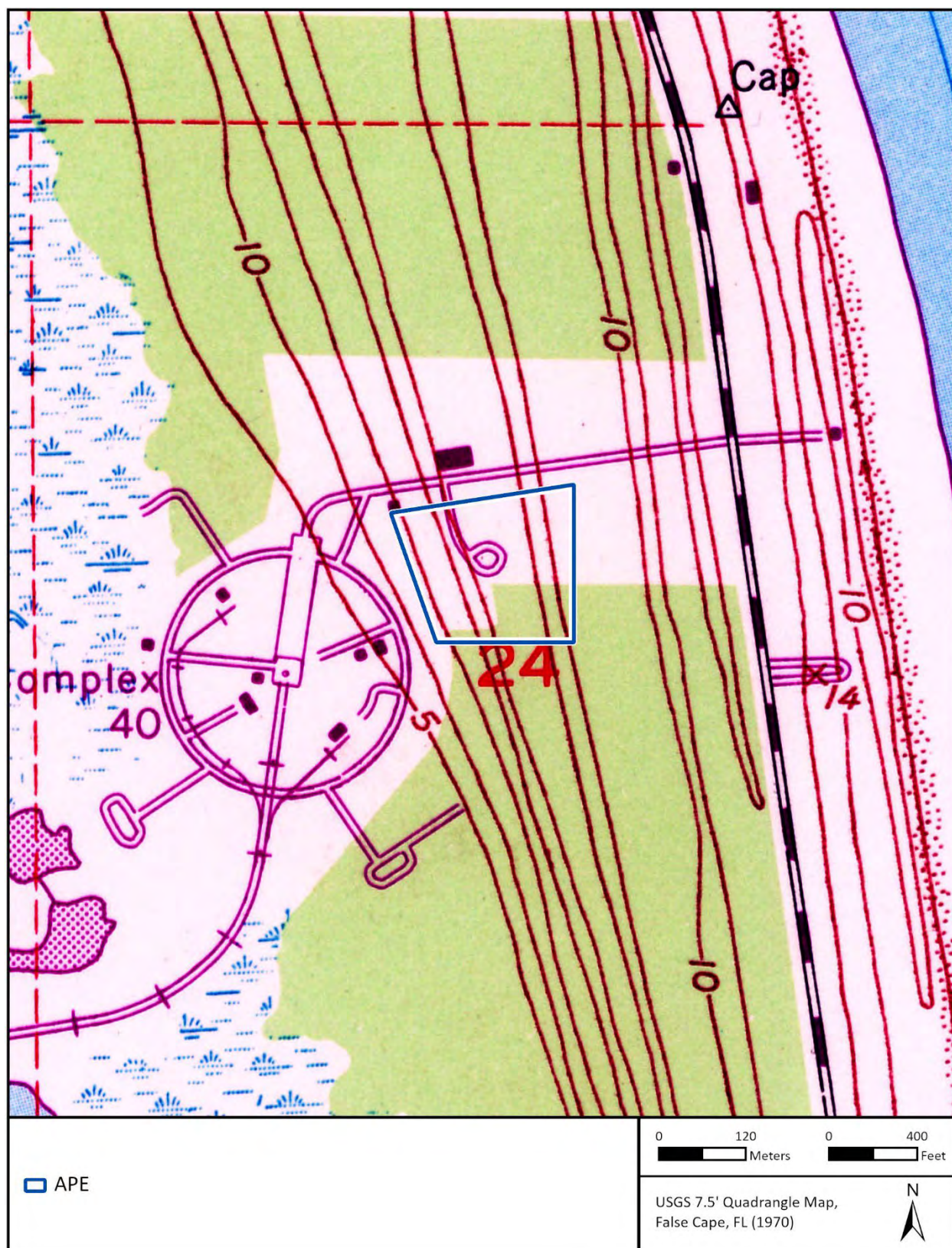


Figure 4-10. APE on 1970 USGS topographic map (USGS 1970).



Figure 4-11. APE on 1972 USSF aerial photograph (USSF 1972).



Figure 4-12. APE on 1994 aerial photograph (Google Earth 1994).

5 FLORIDA MASTER SITE FILE REVIEW

Prior to fieldwork, SEARCH archaeologists conducted a review of Florida Master Site File (FMSF) data (updated January 2024) to identify previously conducted surveys and cultural resources within 1.6 km (1.0 mi) of the APE. The review identified 16 previous cultural resource surveys, 14 archaeological sites, 24 architectural resources, and one resource group within 1.6 km (1.0 mi) of the APE (**Figure 5-1**). Two architectural resources are within the APE. Three of the 16 previously conducted surveys are intersected by the APE. Results of the review are presented below.

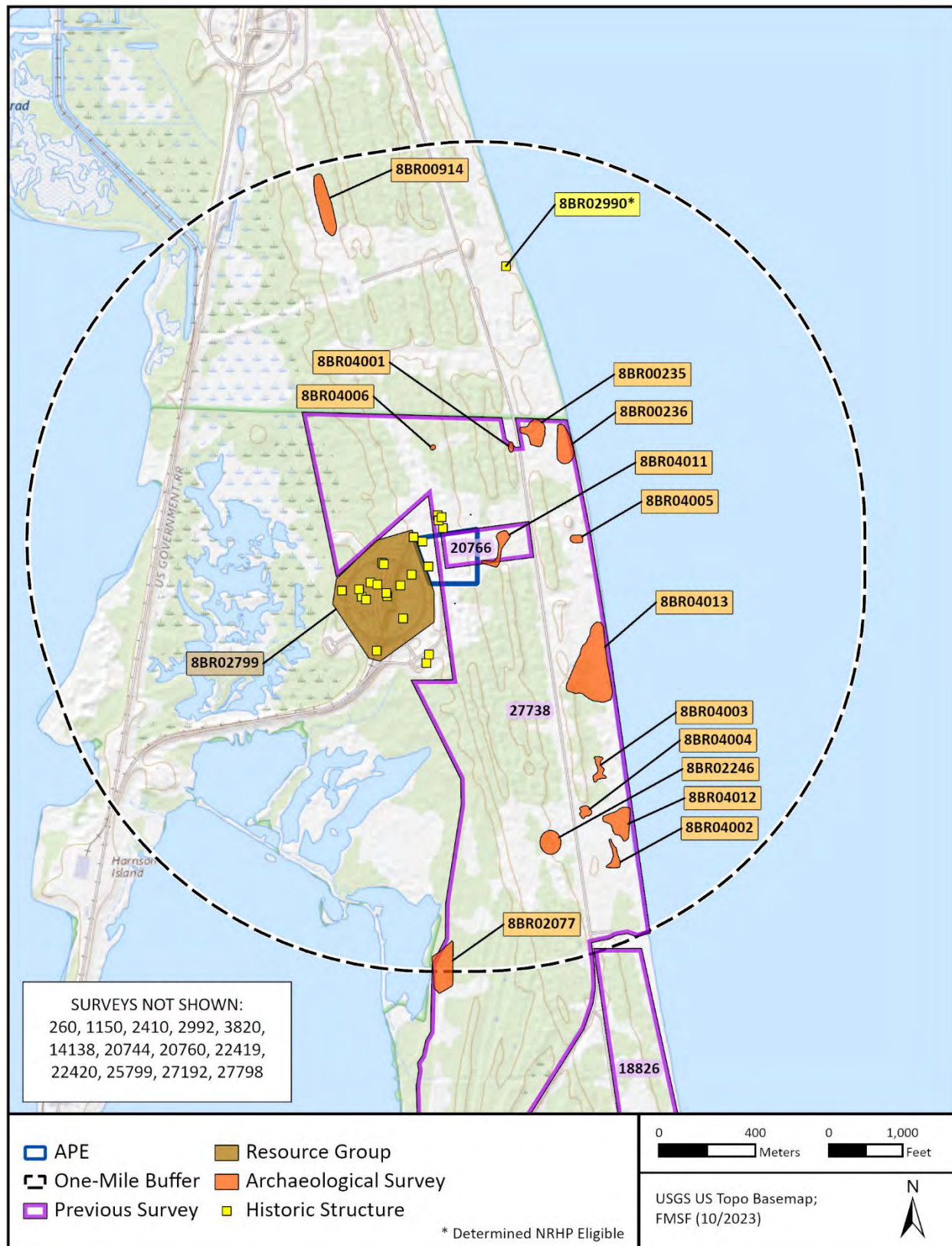


Figure 5-1. Previous cultural resources and surveys within 1.6 km (1.0 mi) of the APE.

5.1 CULTURAL RESOURCE SURVEYS

Sixteen cultural resource surveys have been conducted within 1.6 km (1.0 mi) of the APE (**Table 5-1**; see **Figure 5-1**). Three of these surveys are intersected by the APE. The surveys were conducted in accordance with Section 106 compliance and are described below.

Table 5-1. Previous Cultural Resource Surveys within 1.6 km (1.0 mi) of the APE.

FMSF Survey No.	Survey Report Title	Year	Consultant
20766*	A Cultural Resources Assessment Survey for the New SpaceX Hangar Complex, Cape Canaveral Air Force Station, Brevard County, Florida	2013	Thomas E. Penders
27738*	Phase I Archaeological Survey of 2138.3 Acres at Cape Canaveral Air Force Station, Brevard County, Florida	2019	New South Associates
27798*	Historic Building Inventory and Evaluation of Space Launch Complexes 37, 40, 41, and 46, Cape Canaveral Space Force Station, Brevard County, Florida	2021	Argonne National Laboratory
18826	A Cultural Resource Assessment Survey of Land Management Unit 5, Cape Canaveral Air Force Station, Brevard County, Florida	2012	Thomas E. Penders
260	Cultural Resource Reconnaissance of Merritt Island National Wildlife Refuge	1978	John W. Griffin
1150	An Architectural and Engineering Survey and Evaluation of Facilities at Cape Canaveral Air Force Station, Brevard County, Florida	1984	David F. Barton
2410	An Archaeological Survey of Cape Canaveral Air Force Station, Brevard County, Florida	1984	David F. Barton
2992	Archaeological Survey of Established Zones of Archaeological Potential (ZAPs) in the Launch Complex Area (Option 1), of the Kennedy Space Center	1991	Joan G. Deming
3820	Historic Properties Survey, Cape Canaveral Air Force Station, Cape Canaveral, Florida	1993	Charles E. Cantley
14138	Historic Properties Survey Cape Canaveral Air Force Station, Brevard County, Florida	1994	Charles E. Cantley
20744	Architectural Survey and Evaluation of 45 Facilities that have Reached the Age of 45-50 Years, John F. Kennedy Space Center, Brevard County, Florida	2013	David L. Price
20760	Architectural Survey and Evaluation of NASA-owned Facilities at Cape Canaveral Air Force Station	2013	David L. Price
22419	Dig and Identify Report 06-19-2015 through 09-31-2015 Permit #2015.02 – Brevard County, Florida	2015	Robert Pritchett
22420	Remote Sensing Archaeological Report Permit #2015.04 – Brevard County, Florida	2015	Robert Pritchett
25799	Cold War era Historic Architectural Survey for the CCASF, Brevard County, Florida	2018	Ellen Turco
27192	Global Marine Exploration, Inc. Dig and Identify Report 08-19-2015 through 09-19-2015 Permit #2015.04 – Brevard County Florida	2015	Global Marine Exploration, Inc.

* Within APE

FMSF Survey No. 20766 was conducted by Thomas E. Penders of the 45th Space Wing (45 SW) in 2013 in support of a new SpaceX hangar complex. The survey covered 1.3 ha (3.0 ac) and included the excavation of 12 STs. No archaeological sites or features were identified. The excavation of

STs and use of a metal detector identified modern trash and debris that were likely associated with the area's use for staging during the construction of SLC-40 and subsequent modifications (Penders 2013). Survey 20766 is intersected by the northeast portion of the current APE.

FMSF Survey No. 27738 was conducted in spring 2018 and winter 2019 by New South Associates. The survey included a Phase I archaeological survey of 513.21 ha (1,268.17 ac), and approximately two-thirds of the APE intersects the previously surveyed area. The survey revisited seven archaeological sites and recorded 14 new archaeological sites. Sixteen Archaeological Occurrences (AO) were identified. Of the 2,673 excavated STs, 111 were positive for pre-contact or historic cultural materials (Gregory et al. 2019). One revisited site was recommended eligible for the NRHP. None of the cultural resources were identified within the APE.

FMSF Survey No. 27798 was conducted in 2021 by the Argonne National Laboratory (Sennott et al. 2021). The survey included an historic building inventory of SLCs 37, 40, 41, and 46. Twenty-three structures were inventoried in association with SLC-40 including two within the APE. The structures were recommended ineligible for the NRHP.

5.2 CULTURAL RESOURCES

Review of FMSF data identified 14 previously recorded archaeological sites within 1.6 km (1.0 mi) of the APE (**Table 5-2**; see **Figure 5-1**). None of these resources are within the APE. Most of the archaeological sites were documented for FMSF Survey No. 27738 (Snyder et al. 2019). Results are summarized below (see **Table 5-2**).

Table 5-2. Previously Recorded Cultural Resources within 1.6 km (1.0 mi) of the APE.

Archaeological Sites			
FMSF No.	Name	Type	SHPO Evaluation
8BR00235	The Cloisters	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR00236	North Boundary Site	Historic; Nineteenth-century American, 1821–1899	Not evaluated
8BR00914	The LC 41 South Site	Pre-contact; St. Johns II; AD 800–1500; midden/campsite	Not evaluated
8BR02077	Sarah	Pre-contact; Malabar II; midden/campsite	Insufficient Information
8BR02246	Oyster and Pipe	Historic; Nineteenth-century American, 1821–Present	Not evaluated
8BR04001	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04002	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04003	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04004	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04005	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04006	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04011*	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04012	--	Historic; Twentieth-century American, 1900–Present	Ineligible
8BR04013	--	Historic; Twentieth-century American, 1900–Present	Ineligible

*Adjacent to APE

Site 8BR04011 was identified during FMSF Survey No. 27738 as mid-twentieth century building remains and a surface and subsurface scatter. Artifacts observed and collected include glass, metal, ceramics (non-aboriginal), plastic materials, and structural materials. The site is likely the remnants of an outbuilding related to SLC-40, originally built between 1951 and 1969. Due to the poor depositional integrity from demolition and relocation activities, the site was determined ineligible for the NRHP (Snyder et al. 2019).

5.2.1 Architectural Resources and Resource Groups

Review of FMSF data identified 24 architectural resources and one resource group within 1.6 km (1.0 mi) of the APE (see **Figure 5-1**). Twenty-three of the structures are included in architectural resource group 8BR02990 and were identified as part of an historic building inventory (FMSF Survey No. 27798; Sennott et al. 2021). Results are summarized below (**Table 5-3**).

Table 5-3. Previously Recorded Architectural Resources within 1.6 km (1.0 mi) of the APE.

Architectural Resources			
FMSF No.	Name	Date	SHPO Evaluation
8BR02395	Facility 47138 (Storage Building)	1993	Ineligible
8BR02472	Facility 47132 (Refrigeration Building)	1965	Ineligible
8BR02801	Facility 33011 (Observation and TV Tower)	1991	Ineligible
8BR02802*	Facility 41905 (GN2 Metering Station)	1996	Ineligible
8BR02803	Facility 42001 (Observation and TV Tower)	1991	Ineligible
8BR02804	Facility 47104 (Fabrication Shop)	2009	Ineligible
8BR02805	Facility 47105 (Launch Pad)	1964	Ineligible
8BR02806	Facility 47108 (Emergency Power Shelter)	1964	Ineligible
8BR02807	Facility 47109 (Falcon Support Building)	1964	Ineligible
8BR03124	Facility 47110 (Protective Clothing building)	1965	Ineligible
8BR03125	Facility 47112 (Fuel Holding Area)	1965	Ineligible
8BR03158	Facility 47114 (Oxidizer Holding Area)	1965	Ineligible
8BR03162	Facility 47115 (Air Conditioning shelter)	1965	Ineligible
8BR03175	Facility 47117 (POL Storage Building)	1965	Ineligible
8BR03185	Facility 47137 (Storage Building)	1993	Ineligible
8BR03298	Facility 47118 (Information Bay)	1965	Ineligible
8BR03299*	Facility 47120 (Supply and Issue Shop)	1964	Ineligible
8BR03300	Facility 47127 (Security Entry Control)	1989	Ineligible
8BR03344	Facility 47131 (Fan House #2)	1965	Ineligible
8BR04312	Facility 47139 (EEAP Shelter)	1993	Ineligible
8BR04313	Facility 47141 (Lightning Protection tower)	1993	Ineligible
8BR04314	Facility 47148 (Former Fuel Holding Area)	1965	Ineligible
8BR04315	Facility 47152 (Integration Facility)	2008	Ineligible
8BR02990	Beach House	1962	Eligible
Architectural Resource Groups			
FMSF No.	Name	Date	SHPO Evaluation
8BR02799*	Space Launch Complex 40 Documentation	1964	Ineligible

*Within APE

Resource group 8BR02799 (SLC-40) was inventoried in 2021 (Sennott et al. 2021). CCSFS constructed SLC-40 from 1962–1965 in support of the Titan IIIC missions on an area of dredged land in the Banana River area immediately west of the APE. A fenced perimeter and circular road enclose several inventoried Industrial-style, 1960s-era support structures. The layout of the facility conforms to the typical layout of support facilities designed for the Titan missions of this period. The first modifications to SLC-40 took place during the early 1980s and early 1990s. These updates replaced many of the original support facilities and launch platform structures in support of the Titan IV project. In 2007, SpaceX further refurbished and rebuilt several support facilities, launch structures, and other infrastructure to support their Falcon 9 program. SLC-40 was recommended not eligible for listing in the NRHP due to a lack of integrity of the structures inventoried. Large-scale demolitions, alterations, and modifications throughout the 1980s, 1990s, and early 2000s relied on standard designs to build multiple, near-identical facilities. These facilities are only partial representations of the original 1960s launch system and are redundant examples of more complete launch complexes of the same period and design at CCSFS.

Structures 8BR02802 and 8BR03299 are inventoried with resource group 8BR02799 and within the APE. The structures were evaluated as ineligible for the NRHP (Sennott et al. 2021). Structure 8BR02802 is a GNS metering station built in 1996. The structure is in the northwest corner of the APE adjacent to SLC-40. Structure 8BR03299 is a supply and issue shop built in 1964 in the northeast corner of the APE on Rocket Road.

6 RESEARCH DESIGN

The goal of this Phase I archaeological survey was to identify cultural resources (e.g., archaeological sites, cemeteries, historic-age structures, resource groups, or linear resources) that could be adversely affected by the proposed Project. The research design included background research and a field survey. The background research involved a review of relevant archaeological and historical literature, environmental data, and previous cultural resource surveys conducted near the Project. This information was used to determine zones of archaeological probability within the APE to guide the fieldwork sampling strategy and develop a Statement of Work. The research design and methods followed FDHR's *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. Prior to fieldwork, SEARCH prepared a statement of work that outlined the specific methods proposed for the survey of the APE, which was reviewed and approved by the SLD 45 CRM.

6.1 NRHP CRITERIA

Cultural resources identified within the APE were evaluated according to the criteria for listing in the NRHP. As defined by the National Park Service (NPS), the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

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

NRHP-eligible districts must possess a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development (NPS 1997 [1990]). NRHP-eligible districts and buildings must also possess historic significance, historic integrity, and historical context.

6.2 BACKGROUND RESEARCH

Prior to fieldwork, SEARCH conducted background research using the FMSF database to identify previously conducted surveys and previously recorded cultural resources within 1.6 km (1.0 mi) of the Project. Background research consisted of the collection, review, and analyses of several

data types, including census data, municipal records, the county property appraiser website, historic maps, and aerial photographs.

6.3 ARCHAEOLOGICAL SITE DEFINITION

An archaeological site is defined as three or more artifacts, “not known to be distant from their original context, which fit into a hypothetical cylinder of 30 m diameter, regardless of depth below surface” (FDHR 2003:19).

6.3.1 Archaeological Probability

The probability of encountering archaeological sites within a survey area is typically based on environmental factors such as relative elevation, soil drainage, proximity to sources of fresh water, and proximity to previously recorded cultural resources or historic map features. To guide the development and execution of the archaeological field methods, SEARCH developed a sensitivity model for precontact archaeological sites within the APE. The model considered variables including proximity of archaeological sites documented in the FMSF to the APE, past use and disturbance, and incorporated the State Historic Preservation Officer’s (SHPO) guidelines for cultural resource assessment surveys (CRAS) contained in Module 3: Guidelines for Use by Historic Preservation Professionals (FDHR 2003). The model classified the APE as a high probability zone (HPZ) due to the area’s association with past events on Cape Canaveral and proximity to Site 8BR04011.

6.4 METHODS

6.4.1 Field Methods

The field methodology employed within the APE for this survey consisted of (1) pedestrian survey, (2) photography of landscape features and general conditions across the APE, and (3) subsurface shovel testing.

Following FDHR guidelines, shovel test excavation was conducted according to the potential for encountering subsurface archaeological deposits. The pedestrian survey included inspection of the ground surface and the surroundings for evidence of precontact and historic archaeological sites, and elements of the historic built environment.

Shovel tests measured 50.0 cm (19.6 in) in diameter and were excavated to a minimum depth of 100.0 cm (39.4 in) below surface (bs), unless prevented by groundwater inundation or impenetrable zones, such as rubble/fill, limestone, or clay. Soil was screened through 0.60 cm (0.25 in) hardware mesh. In areas where shovel testing was infeasible or unsafe due to the presence of disturbed deposits, standing water, roads, buried utilities, or other obstructions, “no-dig” points were taken, or the shovel tests were offset.

The APE was systematically shovel tested at 25 m (82 ft) intervals in consideration of high archaeological potential due to the proximity of previously recorded resource (Site 8BR04011) and the historic activity known to have occurred in the area. Shovel tests were placed at reduced intervals for archaeological site delineation (typically 12.5 m [41.0 ft]). If artifacts were found on the surface or subsurface within APE, their context was considered to determine if they should be associated with site 8BR04011 or the nearby AOs (BS6 and BS13) that were previously documented outside the APE (FMSF Survey No. 27738; Snyder et al. 2019).

Field crews were equipped with Apple iPhones paired to an EOS Arrow 100 global positioning system (GPS) capable of submeter accuracy. Using ESRI software, digital maps were maintained through ArcGIS Online depicting the APE. Cultural materials, soil strata, Munsell color, soil texture, depth, and environmental setting of each shovel test was recorded using the ESRI Survey 123 application. The Universal Transverse Mercator coordinates of all shovel tests were recorded with GPS devices based on the 1983 North American Datum. Shovel tests were backfilled upon completion of documentation.

A photograph log was kept, including relevant information necessary to accurately document the location and condition of the photographed item. Minimally, data recorded in the photograph log included the shovel test number, date, photograph orientation, recorder, description of the photographed item, frame/exposure number, and an accurate location from which the photograph was taken. Environmental attributes of different areas were documented, including fauna and flora (if present), land use (e.g., agricultural, pasture, commercial), and other notable features (e.g., canals). The field crew kept detailed daily field notes recording survey activities and observations, including descriptions of terrain, vegetation, soils, landforms, shovel test profiles, and standing structures observed during the survey.

6.4.2 Laboratory Methods

In accordance with the Scope of Work approved by the SLD 45 CRM prior to the survey, only diagnostic artifacts with potential to yield further information through laboratory analysis would be collected. No diagnostic artifacts were identified and no artifacts were collected for lab analysis.

6.4.3 Procedures to Address Unexpected Discoveries

Reasonable effort was made during this investigation to identify and evaluate potential locations of cultural resources within the APE; however, the possibility remains that additional evidence of cultural resources may be encountered. Should evidence of unrecorded cultural resources be discovered during construction activities, SEARCH recommends avoidance of the work area and contacting the SLD 45 CRM for further guidance. Evidence of cultural resources includes pottery, stone tools, bone or shell tools, trash pits, and historic building foundations or road surfaces.

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7 SURVEY RESULTS

The APE extends off the northeastern quadrant of SLC-40 in an area of open grasses, saw palmetto, and shrub oak. The archaeological survey included the excavation of 38 shovel tests and systematic pedestrian survey of the APE that resulted in the expansion of one previously recorded resource, Site 8BR04011 (**Figure 7-1** and **Appendix C: Shovel Test Log**).

The APE includes developed and disturbed areas adjacent to the launch complex and patches of dense vegetation to the east. The vicinity of SLC-40 has been heavily modified and is maintained as an open grassy area (**Figure 7-2**). This footprint of disturbance is apparent in historic aerial photography (see **Figure 4-6**; USSF 1964). The top stratum in this heavily modified area is an up to 30.0 cm (11.8 in) thick gray (10YR 5/1 or 10YR 6/1) compacted sand with 75% shell inclusions, pebbles, and sometimes chunks of asphalt (**Figure 7-3**). In shovel tests where this compaction was penetrable, the underlying stratum was identified as a Statum II of very pale brown (10YR 8/2) sand that was excavated up to 100.0 cm (39.3 in) bs. Due to the disturbance exhibited in the ST profiles in the western portion of the APE, STs were not offset to avoid obstructions or disturbances such as roads and utilities. Survey limitations in the western portion of the APE included developed and disturbed areas associated with the launch complex activities (such as staging areas and structures) and buried infrastructure and utilities (**Figure 7-4–Figure 7-6**). Excavations avoided disturbance of gopher tortoise burrows that were present throughout the APE (**Figure 7-7** and **Figure 7-8**).

The eastern portion of the APE includes a large concrete pad and patches of dense vegetation (**Figure 7-9** and **Figure 7-10**). This area is outside of the direct SLC-40 disturbance footprint; however, the northern portion was graded, and several structures and equipment occupied the area during the SLC-40 construction (see **Figure 4-6**; USSF 1964). STs were offset in this area to avoid disturbances as appropriate depending on the limit of the disturbance and APE boundary. Generally, two strata were identified in the eastern portion of the APE (**Figure 7-11** and **Figure 7-12**). The thickness of Stratum I varied depending on the level of prior disturbance and was absent in places. Stratum I, if present, is an up to 20.0 cm (7.8 in) thick gray or grayish brown (10YR 5/1, 10YR 6/1 or 10YR 5/2) sand over light gray or very pale brown (10YR 7/2, 10YR 7/1 or 10YR 8/2) sand excavated up to 100.0 cm (39.3 in) bs. In some shovel tests, Stratum I extended to 100.0 cm (39.3 in) bs and a Statum II was not identified. The variability in depth of Stratum I is likely due to the prior leveling of sand ridges across the northeastern quadrant of the APE.

Several modern surface finds were observed within the APE. These objects include modern trash and materials that are likely distant from their original context. A ferrous metal strap over 2.0 m (6.5 ft) long and a metal ring approximately 23 cm (9 in) in diameter was identified embedded into the sand (**Figure 7-13**). The materials are likely parts or machinery pieces related to the activities on SLC-40 and may have been dislodged or discarded during activities associated with the staging area. The ferrous metal strap and ring are not unique to a time period or activity.

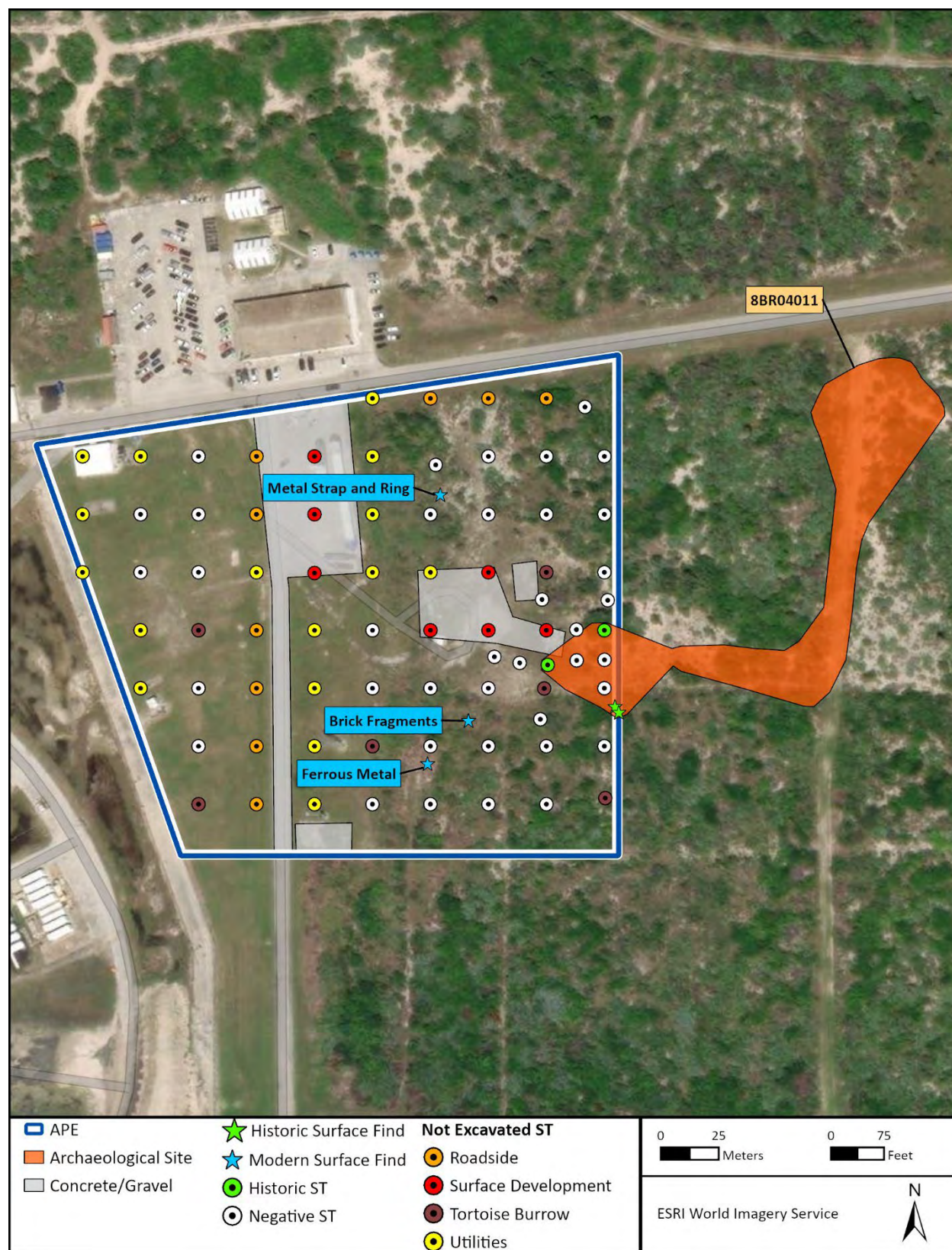


Figure 7-1. Results of the archaeological survey.



Figure 7-2. Overview of APE from ST N725E500, facing east.



Figure 7-3. Typical soil profile adjacent to SLC-40, ST N725E550.



Figure 7-4. Western portion of APE showing graded area with concrete, gravel, and asphalt.



Figure 7-5. Western portion of APE showing development and infrastructure.

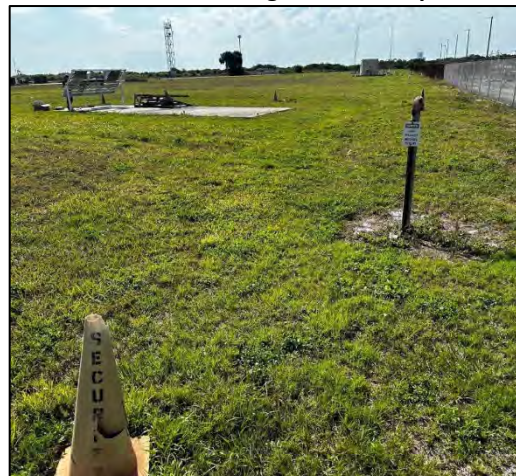


Figure 7-6. Western portion of APE showing buried infrastructure and utilities.



Figure 7-7. Gopher Tortoise burrow, ST N700E550.



Figure 7-8. Gopher tortoise within APE.



Figure 7-9. Overview of eastern portion of APE, showing concrete pad.



Figure 7-10. Eastern portion of APE, showing dense vegetation.



Figure 7-11. Typical soil profile in eastern portion of APE, ST N675E700.



Figure 7-12. Typical soil profile in eastern portion of APE, ST N800E725.



Figure 7-13. Overview of metal strap and ring.

Five fragments of ferrous metal, some retaining orange paint and partially melted, are clustered on top of the ground cover in the southeast portion of the APE (**Figure 7-14**). The fragments are likely recent and related to launch activities on SLC-40. An isolated cluster of five brick fragments was observed in the southeastern portion of the APE approximately 30.0 m (98.4 ft) south of an abandoned concrete turnaround and equipment staging area. The fragments are less than 2.0 cm (0.7 in), and some appear to be recently broken and redeposited on the surface (**Figure 7-15**). No structures are in the vicinity. Vehicle traffic and debris from transporting materials around SLC-40 may have fragmented and deposited the brick fragments in their current location. A gopher tortoise burrow is adjacent, and the activity may have also contributed to the fragments' secondary deposition.



Figure 7-14. Ferrous metal.



Figure 7-15. Brick fragments.

7.1 REVISITED ARCHAEOLOGICAL RESOURCES

7.1.1 Site 8BR04011

Site Description

Site 8BR04011 is a low density mid-twentieth century historic scatter with structural remnants east of SLC-40. The site was originally identified during a survey conducted by New South Associates in the spring of 2018 and winter 2019 (FMSF Survey No. 27738; Snyder et al. 2019). Site 8BR04011 includes several small concrete rubble piles in the southern portion and scattered architectural materials in the northern portion. The site was reported to be within the coastal strand vegetation zone in an area of dense palmetto scrub, and outside of the current APE.

Survey Results

The archaeological survey identified a sparse surface and subsurface scatter of non-diagnostic historic materials within the APE (see **Figure 7-1** and **Figure 7-16–Figure 7-18**). The scatter extends the southwestern portion of the site boundary approximately 55.0 m (180.4 ft), approximately 32.0 m (104.9 ft) of which is within the APE. Two surface finds were identified in the APE approximately 30.0 m (98.4 ft) west of the previous Site 8BR04011 boundary; an aqua glass bottle broken into 15 fragments, and a group of two twisted aluminum fragments. Eight STs were excavated within 50.0 m (164.0 ft) of the site boundary; two were positive for cultural material. Five radials were excavated although ST radials were offset or restricted due to APE boundary proximity, gopher tortoise burrows, and proximity to a concrete pad and buried utilities (**Figure 7-19–Figure 7-20**). The shovel test excavations identified two strata adjacent to the concrete pad on the western extent of the site (**Figure 7-21**). Stratum I is up to 20.0 cm (7.8 in) deep light brownish gray (10YR 6/2) sand over a Stratum II of light gray (10YR 7/2) sand that was excavated to 100.0 cm (39.3 in) bs. Shovel test excavations identified three soil strata in the eastern portion of the site (**Figure 7-22**). Stratum I is 14.0–50.0 (5.5– 19.6 in) deep light brownish gray or grayish brown (10YR 6/2 or 10YR 5/2) sand over a Stratum II of very dark brown or dark grayish brown (10YR 2/2 or 10YR 4/2) sand to a depth of 35.0–70.0 cm (13.7–27.5 in), underlain by a Stratum III of light gray (10YR 7/1) sand that was excavated to a depth of 100.0 cm (39.3 in) bs. Twenty artifacts were identified on Site 8BR04011 (**Table 7-1** and **Figure 7-23–Figure 7-28**).



Figure 7-16. Results of the archaeological survey, Site 8BR04011.



Figure 7-17. Overview of 8BR04011, facing east from ST N675E700.



Figure 7-18. Overview of 8BR04011, facing west from ST N700E725.



Figure 7-19. Concrete pad adjacent north of Site 8BR04011.



Figure 7-20. Gopher tortoise burrow at southern radial of N675E700.



Figure 7-21. Typical soil profile, ST N675E700



Figure 7-22. Typical soil profile, ST N700E725

Table 7-1. Artifacts identified on Site 8BR04011.

Provenience	Stratum	Depth (cmbs)	Description	Count
N675E700	I	0–10	Ferrous metal disc	1
N675E700	I	10–20	Ferrous metal bolt	1
N700E725	I	0–10	Ferrous metal perforated strap	1
SF-01	Surface	Surface	Aqua bottle glass	15
SF-02	Surface	Surface	Aluminum fragments	2
Total				20



Figure 7-23. Site 8BR04011, SF-01, bottle glass.



Figure 7-24. Site 8BR04011, SF-02, aluminum fragment.



Figure 7-25. Site 8BR04011, SF-02, aluminum fragment.



Figure 7-26. Ferrous metal bolt, ST N675E700.



Figure 7-27. Ferrous metal disc, ST N675E700.



Figure 7-28. Ferrous metal perforated strap, ST N700E725.

Interpretations

The artifacts identified on Site 8BR04011 were at or near the surface and represent a secondary deposit from a mid-twentieth century structure (Snyder et al. 2019). The structure is visible in an historic aerial photograph (see Figure 4-6 [USSF 1964]) and was likely associated with the construction of the original SLC-40 complex. The building was demolished in the early 1990s during renovations to the facility. Artifact density in the APE is less than in the portion of the site reported outside the APE, near the focal area of the structure's former position. No features or intact subsurface deposits were identified. The artifacts are not diagnostic but are like materials identified during the previous survey (Snyder et al. 2019).

NRHP Assessment and Management Recommendations

Site 8BR04011 was determined to be not eligible for the NRHP following the previous survey. The current survey contributed no new and significant information. Site 8BR04011 has limited research potential based on the absence of diagnostic artifacts, low artifact density, and lack of intact deposits. Site 8BR04011 may have been associated with operations at SLC-40 from the mid- to late 1900s but is not significant with a known specific event that has contributed to national, state, or local history and is therefore not eligible under Criterion A. There is no known significant person(s) associated with Site 8BR04011; therefore, it is not eligible under Criterion B. The structure is no longer extant on Site 8BR04011 and therefore retains no distinctive characteristics; the site is therefore not eligible under Criterion C. Further investigation would not likely produce new and significant historical data, and it is therefore not eligible under Criterion D. SEARCH recommends no further archaeological work at Site 8BR04011.

8 SUMMARY AND CONCLUSION

In April 2024, SEARCH conducted a Phase I archaeological survey for the proposed expansion of facilities at SLC-40 at CCSFS in Brevard County, Florida. The proposed undertaking for the Project includes the construction of a concrete landing pad for the Falcon 9 reusable rocket booster, which will be built immediately east of the SLC-40 launch pad.

The Phase I archaeological survey resulted in the boundary expansion of one previously recorded resource, Site 8BR04011. SEARCH recommends Site 8BR04011 ineligible for listing in the NRHP. No further cultural resources work is recommended in support of the proposed Project.

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APPENDIX A:
FDHR SURVEY LOG

Ent D (FMSF only) _____



Survey Log Sheet

Florida Master Site File
Version 5.0 3/19

Survey # (FMSF only) _____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Manuscript Information

Survey Project (name and project phase)

Archaeological Survey of the SLC-40 Landing Pad Project, CCSFS, Brevard County, FL

Report Title (exactly as on title page)

Archaeological Survey of the SLC-40 Landing Pad Project, Cape Canaveral Space Force Station, Brevard County, Florida

Report Authors (as on title page)

1. Leeanne Mahoney

3. _____

2. _____

4. _____

Publication Year 2024

Number of Pages in Report (do not include site forms) 62

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)

On file at SEARCH, Orlando, FL. Project No. 240026

Supervisors of Fieldwork (even if same as author) Names

Leeanne Mahoney and Bill Werner

Affiliation of Fieldworkers: Organization

Southeastern Archaeological Research

City Orlando

Key Words/Phrases (Don't use county name, or common words like *archaeology*, *structure*, *survey*, *architecture*, etc.)

1. _____ 3. _____ 5. _____ 7. _____
2. _____ 4. _____ 6. _____ 8. _____

Survey Sponsors (corporation, government unit, organization, or person funding fieldwork)

Name Space Exploration Technologies

Organization _____

Address/Phone/E-mail _____

Recorder of Log Sheet Leeanne Mahoney

Date Log Sheet Completed 4-18-2024

Is this survey or project a continuation of a previous project? ☒ No ☐ Yes:

Previous survey #s (FMSF only) _____

Project Area Mapping

Counties (select every county in which field survey was done; attach additional sheet if necessary)

1. Brevard 3. _____ 5. _____
2. _____ 4. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

1. Name FALSE CAPE Year 2015 4. Name _____ Year _____
2. Name _____ Year _____ 5. Name _____ Year _____
3. Name _____ Year _____ 6. Name _____ Year _____

Field Dates and Project Area Description

Fieldwork Dates: Start 3-21-2024 End 4-5-2024 Total Area Surveyed (fill in one) _____ hectares 11.00 acres

Number of Distinct Tracts or Areas Surveyed _____

If Corridor (fill in one for each) Width: _____ meters _____ feet Length: _____ kilometers _____ miles

Research and Field Methods

Types of Survey (select all that apply): ☒ archaeological ☐ architectural ☐ historical/archival ☐ underwater
☐ damage assessment ☐ monitoring report ☐ other(describe): _____

Scope/Intensity/Procedures

Pedestrian inspection, shovel testing at 25-m intervals, 1/4" screen, to 100 cmbs, 50 cm diameter

Preliminary Methods (select as many as apply to the project as a whole)

☐ Florida Archives (Gray Building) ☐ library research- *local public* ☐ local property or tax records ☒ other historic maps ☐ LIDAR
☐ Florida Photo Archives (Gray Building) ☐ library-special collection ☐ newspaper files ☒ soils maps or data ☐ other remote sensing
☒ Site File property search ☐ Public Lands Survey (maps at DEP) ☒ literature search ☐ windshield survey
☒ Site File survey search ☐ local informant(s) ☐ Sanborn Insurance maps ☒ aerial photography
☒ other (describe): Information provided by CCSFS CRM

Archaeological Methods (select as many as apply to the project as a whole)

☐ Check here if **NO** archaeological methods were used.
☐ surface collection, controlled ☐ shovel test-other screen size ☐ block excavation (at least 2x2 m) ☐ metal detector
☐ surface collection, uncontrolled ☐ water screen ☐ soil resistivity ☐ other remote sensing
☒ shovel test-1/4" screen ☐ posthole tests ☐ magnetometer ☒ pedestrian survey
☐ shovel test-1/8" screen ☐ auger tests ☐ side scan sonar ☐ unknown
☐ shovel test 1/16" screen ☐ coring ☐ ground penetrating radar (GPR)
☐ shovel test-unscreened ☐ test excavation (at least 1x2 m) ☐ LIDAR
☐ other (describe): _____

Historical/Architectural Methods (select as many as apply to the project as a whole)

☒ Check here if **NO** historical/architectural methods were used.
☐ building permits ☐ demolition permits ☐ neighbor interview ☐ subdivision maps
☐ commercial permits ☐ windshield survey ☐ occupant interview ☐ tax records
☐ interior documentation ☐ local property records ☐ occupation permits ☐ unknown
☐ other (describe): _____

Survey Results

Resource Significance Evaluated? ☒ Yes ☐ No

Count of Previously Recorded Resources 1 Count of Newly Recorded Resources _____

List Previously Recorded Site ID#s with Site File Forms Completed (attach additional pages if necessary)

8BR04011

List Newly Recorded Site ID#s (attach additional pages if necessary)

Site Forms Used: ☐ Site File Paper Forms ☒ Site File PDF Forms

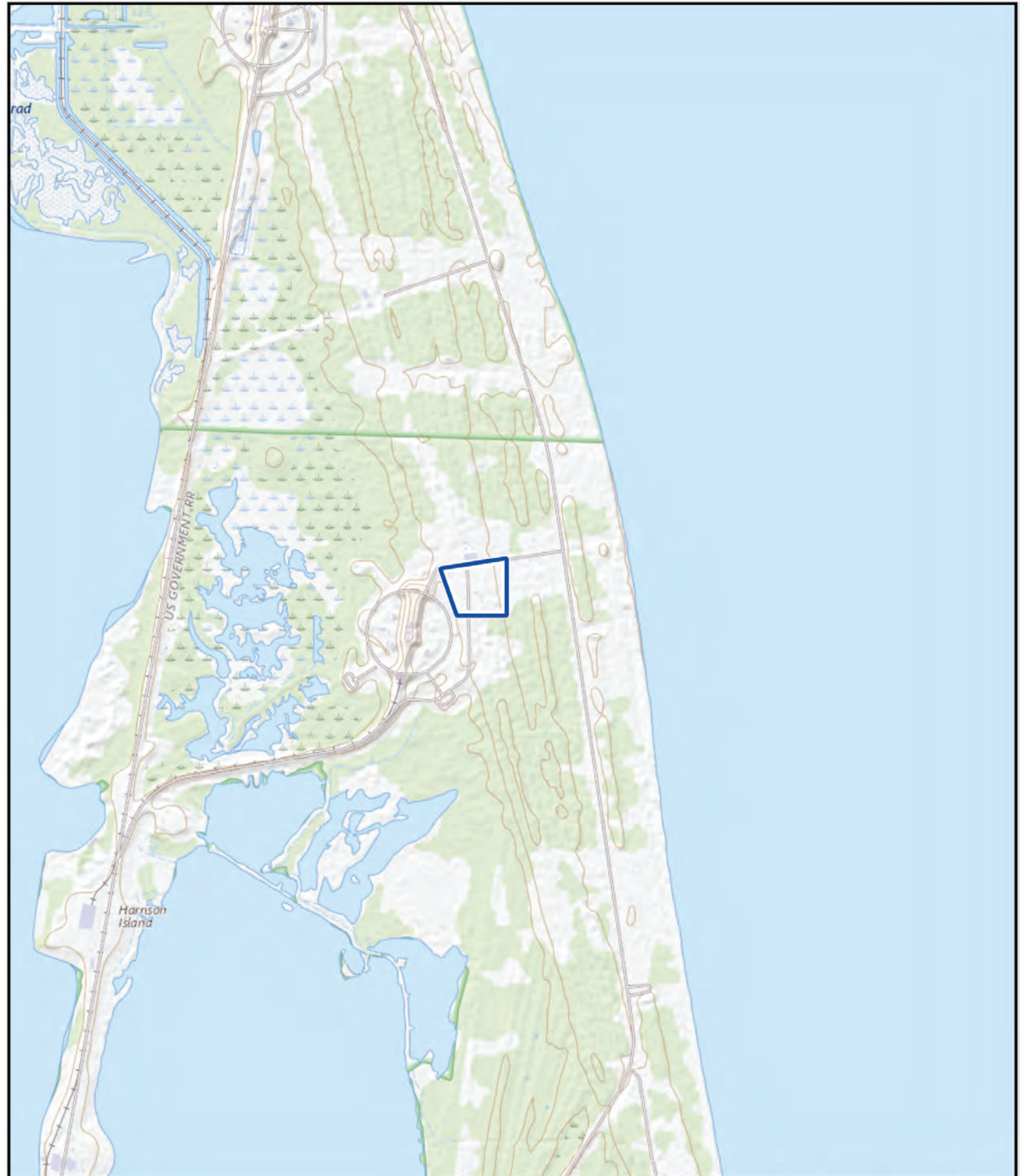
REQUIRED: Attach Map of Survey or Project Area Boundary

SHPO USE ONLY

SHPO USE ONLY

SHPO USE ONLY

Origin of Report: ☐ 872 ☐ Public Lands ☐ UW ☐ 1A32 # _____ ☐ Academic ☐ Contract ☐ Avocational
☐ Grant Project # _____ ☐ Compliance Review: CRAT # _____
 Type of Document: ☐ Archaeological Survey ☐ Historical/Architectural Survey ☐ Marine Survey ☐ Cell Tower CRAS ☐ Monitoring Report
☐ Overview ☐ Excavation Report ☐ Multi-Site Excavation Report ☐ Structure Detailed Report ☐ Library, Hist. or Archival Doc
☐ Desktop Analysis ☐ MPS ☐ MRA ☐ TG ☐ Other: _____
 Document Destination: Plottable Projects Plotability: _____ 



 APE

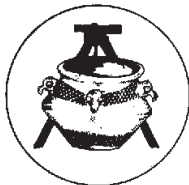
0 400 0 1,000
Meters Feet

USGS US Topo Basemap



APPENDIX B:
FMSF RESOURCE FORMS

☐ Original
☒ Update



ARCHAEOLOGICAL SITE FORM

FLORIDA MASTER SITE FILE

Version 5.0 3/19

Consult Guide to Archaeological Site Form for detailed instructions

Site #8 _____
 Field Date _____
 Form Date _____
 Recorder # _____

Site Name(s) 8BR4011 Multiple Listing (DHR only) _____
 Project Name Archaeological Survey of the SLC-40 Landing Pad Survey # (DHR only) _____
 Ownership: ☐ private-profit ☐ private-nonprofit ☐ private-individual ☐ private-nonspecific ☐ city ☐ county ☐ state ☒ federal ☐ Native American ☐ foreign ☐ unknown

LOCATION & MAPPING

USGS 7.5 Map Name FALSE CAPE ☒ USGS Date 2018 Plat or Other Map _____
 City/Town (within 3 miles) Port Canaveral In City Limits? ☐ yes ☒ no ☐ unknown County Brevard ☒
 Township 22S Range 37E Section 24 ¼ section: ☐ NW ☐ SW ☐ SE ☐ NE Irregular-name: _____
 Township _____ Range _____ Section _____ ¼ section: ☐ NW ☐ SW ☐ SE ☐ NE
 Landgrant _____ Tax Parcel # _____
 UTM Coordinates: Zone ☐ 16 ☒ 17 Easting 541831 Northing 3159793
 Other Coordinates: X: _____ Y: _____ Coordinate System & Datum WGS84

Address / Vicinity / Route to:

200 m E of Launch Complex 40, 200 m W of the Samuel Phillips Parkway, and 50 m S of the E entrance to LC-40.

Name of Public Tract (e.g., park) _____

TYPE OF SITE (select all that apply)

SETTING	STRUCTURES OR FEATURES	FUNCTION
☒ Land (terrestrial) ☐ Lake/Pond (lacustrine) ☐ River/Stream/Creek (riverine) ☐ Tidal (estuarine) ☐ Saltwater (marine)	☐ log boat ☐ agric/farm building ☐ burial mound ☐ building remains ☐ cemetery/grave ☐ dump/refuse ☐ earthworks (historic)	☐ road segment ☐ shell midden ☐ shell mound ☐ shipwreck ☐ subsurface features ☐ surface scatter ☐ well
☐ Wetland (palustrine) ☐ usually flooded ☐ usually dry ☐ Cave/Sink (subterranean) ☐ terrestrial ☐ aquatic	☐ fort ☐ midden ☐ mill ☐ mission ☐ mound, nonspecific ☐ plantation ☐ platform mound	☐ campsite ☐ extractive site ☐ habitation (prehistoric) ☐ homestead (historic) ☐ farmstead ☐ village (prehistoric) ☐ town (historic) ☐ quarry (prehistoric)

Other Features or Functions (Choose from the list or type a response.)

1. _____ 2. _____

CULTURE PERIODS (select all that apply)

ABORIGINAL	NON-ABORIGINAL
☐ Alachua ☐ Archaic (nonspecific) ☐ Archaic, Early ☐ Archaic, Middle ☐ Archaic, Late ☐ Belle Glade ☐ Cades Pond ☐ Caloosahatchee ☐ Deptford	☐ First Spanish 1513-99 ☐ First Spanish 1600-99 ☐ First Spanish 1700-1763 ☐ First Spanish (nonspecific) ☐ British 1763-1783 ☐ Second Spanish 1783-1821 ☐ American Territorial 1821-45 ☐ American Civil War 1861-65 ☐ American 19th Century ☒ American 20th Century ☐ American (nonspecific) ☐ African-American
☐ Englewood ☐ Fort Walton ☐ Glades (nonspecific) ☐ Glades I ☐ Glades II ☐ Glades III ☐ Hickory Pond ☐ Leon-Jefferson ☐ Malabar I ☐ Malabar II	☐ St. Johns (nonspecific) ☐ St. Johns I ☐ St. Johns II ☐ Santa Rosa ☐ Santa Rosa-Swift Creek ☐ Seminole (nonspecific) ☐ Seminole: Colonization ☐ Seminole: 1st War To 2nd ☐ Seminole: 2nd War To 3rd ☐ Seminole: 3rd War & After

Other Cultures (Choose from the list or type a response. For historic sites, give specific dates.)

1. _____ 2. _____ 3. _____ 4. _____

OPINION OF RESOURCE SIGNIFICANCE

Potentially eligible individually for National Register of Historic Places? ☐ yes ☒ no ☐ insufficient information

Potentially eligible as contributor to a National Register district? ☐ yes ☒ no ☐ insufficient information

Explanation of Evaluation (required if evaluated; use separate sheet if needed)

Overall site integrity is low due to building demolition and likely relocation. Additional research or excavation at the site is unlikely to yield additional data that could indicate important historic associations or information.

Recommendations for Owner or SHPO Action

No further work recommended

DHR USE ONLY

OFFICIAL EVALUATION

DHR USE ONLY

NR List Date _____	SHPO – Appears to meet criteria for NR listing: ☐ yes ☐ no ☐ insufficient info	Date _____	Init. _____
☐ Owner Objection	KEEPER – Determined eligible: ☐ yes ☐ no	Date _____	
	NR Criteria for Evaluation: ☐ a ☐ b ☐ c ☐ d (see <i>National Register Bulletin</i> 15, p. 2)		

FIELD METHODS (select all that apply)

SITE DETECTION

- ☐ no field check
☒ literature search
☐ informant report
☐ remote sensing
☒ exposed ground
☐ posthole tests
☐ auger tests
☐ unscreened shovel
☐ screened shovel
☒ screened shovel-1/4"
☐ screened shovel-1/8"
☐ screened shovel-1/16"

SITE BOUNDARY

- ☐ bounds unknown
☐ none by recorder
☐ literature search
☐ informant report
☐ remote sensing
☒ exposed ground
☐ posthole tests
☐ auger tests
☐ unscreened shovel
☒ screened shovel
☐ block excavations
☐ estimate or guess

Other methods; number, size, depth, pattern of units; screen size (attach site plan)

SITE DESCRIPTION

Extent/Size (m²) _____ Depth/stratigraphy of cultural deposit (describe below)

Current survey extends southwestern site boundary by 55 m. Subsurface artifacts were identified from 0-20 cmbs in light brownish-gray (10YR 6/2) sand.

Temporal Interpretation - Components (check one): ☒ single component ☐ multiple component ☐ uncertain

Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations:

The site appears to be the relocated remains of a recent historic outbuilding for Launch Complex 40, originally built between 1951 and 1969.

Integrity - Overall disturbance: ☐ none seen ☐ minor ☐ substantial ☐ major ☒ redeposited ☐ destroyed-document! ☐ unknown

Disturbances / threats / protective measures

Graded roads, push piles, structure demolition

Surface collection: area collected _____ m² # collection units _____ | Excavation: # noncontiguous blocks _____

ARTIFACTS

Total Artifacts # 20 ☒ count ☐ estimate Surface # 17 Subsurface # 3

COLLECTION SELECTIVITY

- ☐ unknown ☐ unselective (all artifacts)
☒ selective (some artifacts)
☐ mixed selectivity

SPATIAL CONTROL

- ☐ uncollected ☐ general (not by subarea)
☐ unknown ☒ controlled (by subarea)
☐ variable spatial control
☐ other (describe in comments below)

ARTIFACT CATEGORIES and DISPOSITIONS

- ☐ Glass
☐ Metal
☐
☐
☐
☐
☐
☐

select a disposition from the list below for each artifact category selected at left

- A - category always collected
 S - some items in category collected
 O - observed first hand, but not collected
 R - collected and subsequently left at site
 I - informant reported category present
 U - unknown

Artifact Comments

Surface artifacts left in situ. Subsurface artifacts reburied. Surface artifacts (CT=17; 15 aqua bottle glass, 2 aluminum fragments. Subsurface artifacts (CT=3; ferrous metal).

DIAGNOSTICS (type or mode, and frequency: e.g., Suwanee ppk, heat-treated chert, Deptford Check-stamped, ironstone/whiteware)

1. _____ N= _____ 4. _____ N= _____ 7. _____ N= _____
 2. _____ N= _____ 5. _____ N= _____ 8. _____ N= _____
 3. _____ N= _____ 6. _____ N= _____ 9. _____ N= _____

ENVIRONMENT

Nearest fresh water: Type River ☒ Name Banana River Distance from site (m) 800
 Natural community COASTAL STRAND ☒ Topography Dune-coastal ☒ Elevation: Min _____ m Max 5 m
 Local vegetation Saw palmetto, scrub oak, cultivated sabal palm, various shrubs and grasses
 Present land use Cape Canaveral Space Force Station (CCSFS)
 SCS soil series Palm Beach sand Soil association _____

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type All materials at one location ☒ Maintaining organization Cape Canaveral Air Force Station ☒
 Document description Report, forms File or accession #'s _____
 2) Document type _____ ☒ Maintaining organization _____ ☒
 Document description _____ File or accession #'s _____

RECORDER & INFORMANT INFORMATION

Informant Information: Name _____
 Address / Phone / E-mail _____
 Recorder Information: Name Leeanne Mahoney Affiliation Southeastern Archaeological Research ☒
 Address / Phone / E-mail 8298 Bayberry Road, Jacksonville, FL 32256; (407) 236-7711; leeanmahoney@searchinc.com

**Required
Attachments**

1 PHOTOCOPY OF 7.5' USGS QUAD MAP WITH SITE BOUNDARIES MARKED and SITE PLAN
 Plan at 1:3,600 or larger. Show boundaries, scale, north arrow, test/collection units, landmarks and date.



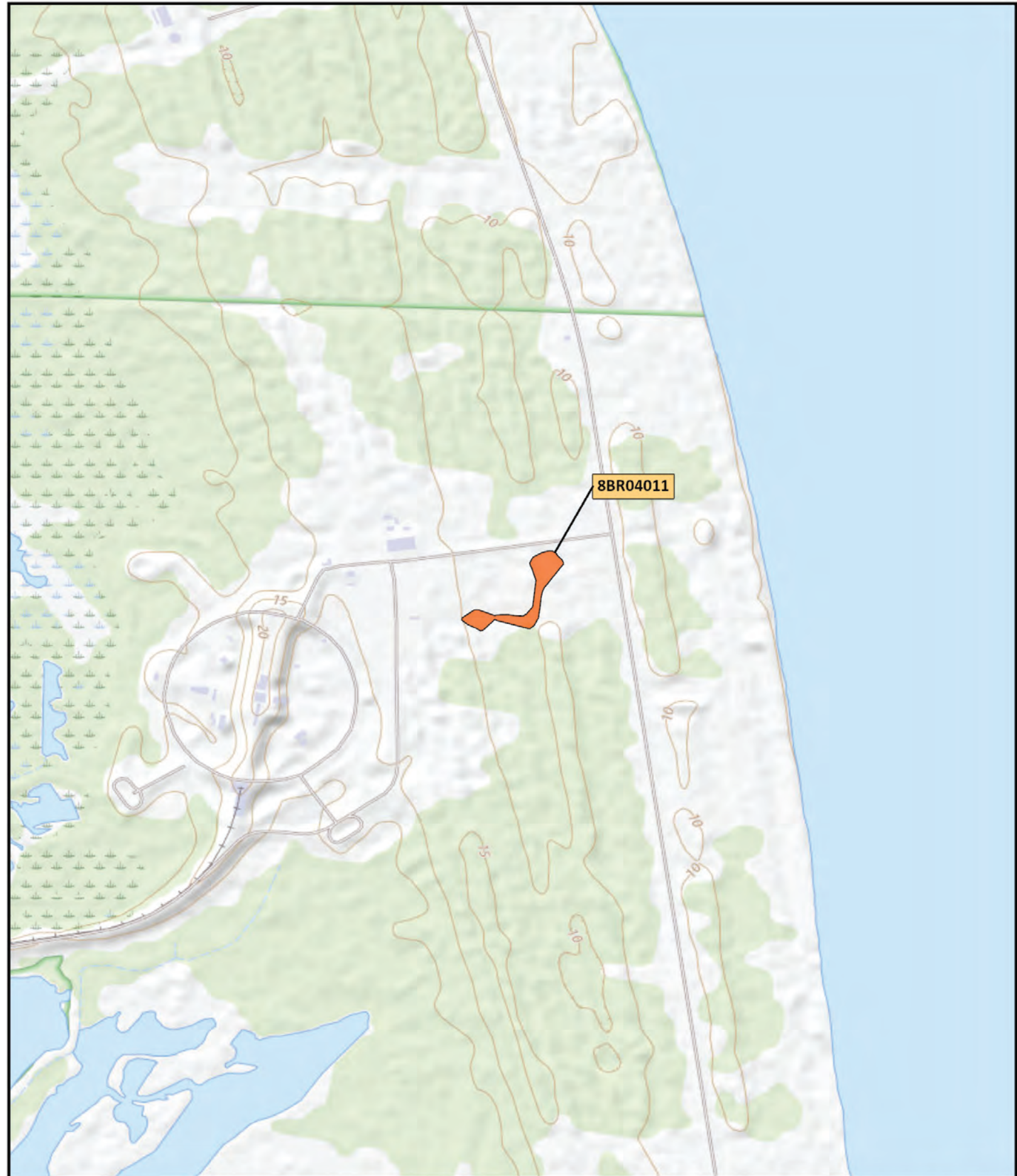
8BR04011

Archaeological Site

0 50 0 150
Meters Feet

Maxar Vivid Aerial Imagery (2022)





 Archaeological Site

0 200 0 500
 Meters  Feet

USGS US Topo Basemap



APPENDIX C:
SHOVEL TEST LOG

Excavation ID	Status	Stratum	Depth	Vegetation	Termination	Munsell	Texture	Inclusions	Notes
P24007_N775E600	not_excavated			urban	not_excavated				No dig due to asphalt parking lot. Currently in use.
P24007_N750E600	not_excavated			urban	not_excavated				No dig due to in use blacktop surface/in use parking lot.
P24007_N725E600	not_excavated			urban	not_excavated				No dig due to blacktop surface and asphalt parking lot. Ground electric utility cover in photos.
P24007_N700E600	not_excavated			urban	not_excavated				No dig due to proximity of buried utilities. Note concrete surface to the east with rebar or bolts sticking out. Electric boxes north and structures south.
P24007_N675E600	not_excavated			grass	not_excavated				No dig to to proximity of buried ground utilities infested from large tower to the south and lighting. Proximity to access road 10m west
P24007_N625E600	not_excavated			grass	not_excavated				Open grass, no dig due to light tower with below ground component. Surface concrete to the south. Access road 10m west.
P24007_N650E600	not_excavated			grass	not_excavated				In use tower to the east. Buried electric cables extending from it in indeterminate direction. Access road 10m west. Lights 20m south. No dig.
P24007_N625E575	not_excavated			grass	not_excavated				No dig to to 5m proximity to road.
P24007_N650E575	not_excavated			grass	not_excavated				No dig due to 5m proximity to road. Possible roadside drainage or utility depression follows road spanning north south.
P24007_N675E575	not_excavated			grass	not_excavated				No dig due to proximity to road. Possible utility/drainage trench spans north south along road.
P24007_N700E575	not_excavated			grass	not_excavated				No dig due to proximity to road and possibly buried subsurface utilities.
P24007_N725E575	not_excavated			grass	not_excavated				No dig due to proximity of road and electric utilities on access gate.
P24007_N750E575	not_excavated			grass	not_excavated				No dig due to roadside proximity. Possible subsurface utilities.
P24007_N775E575	not_excavated			grass	not_excavated				No dig due to roadway proximity and drainage to the immediate northwest. Blacktop surface directly east.
P24007_N775E525	not_excavated			urban	not_excavated				No dig due to proximity of buried utilities and building to the west.
P24007_N775E525	not_excavated			urban	not_excavated				No dig due to standing structure, road, buried utilities. Structure in use.
P24007_N775E500	not_excavated			urban	not_excavated				No dig due to proximity of building and road and buried utilities.
P24007_N750E500	not_excavated			grass	not_excavated				No dig due to presence of subsurface utilities and proximity to roadway.
P24007_N725E500	not_excavated			urban	not_excavated				No dig due to buried utilities and proximity to road and launchpad fencing.
P24007_N800E675	not_excavated			mixed_hard	not_excavated				Not excavated due to 5m within roadway.
P24007_N800E650	not_excavated			brush	not_excavated				Not excavated due to within 5m of roadway.
P24007_N800E625	not_excavated			birch_pine	not_excavated				No dig due to within 5m of roadway and helium gas pipeline
P24007_N800E700	not_excavated			mixed_hard	not_excavated				Within 5 m of roadway
P24007_N775E725	negative		1 0-15	mixed_hard		10YR 6/2	Sa	None	
P24007_N775E725	negative		2 15-110	mixed_hard		10YR 7/1	Sa	None	
P24007_N750E725	negative		1 0-19	mixed_hard		10YR 6/2	Sa	None	
P24007_N750E725	negative		2 19-100	mixed_hard		10YR 7/2	Sa	None	
P24007_N725E725	negative		1 0-25	mixed_hard		10YR 6/2	Sa	None	
P24007_N725E725	negative		2 25-70	mixed_hard		10YR 6/4	Sa	None	
P24007_N725E725	negative		3 70-100	mixed_hard		10YR 7/1	Sa	None	
P24007_N700E725	historic		2 0-50	mixed_hard		10YR 6/2	Sa	None	
P24007_N700E725	historic		2 50-70	mixed_hard		10YR 2/2	Sa	None	
P24007_N700E725	historic		3 70-100	mixed_hard		10YR 7/1	Sa	None	
P24007_N675E725	negative		1 0-20	mixed_hard		10YR 6/1	Sa	None	
P24007_N675E725	negative		2 20-45	mixed_hard		10YR 4/1	Sa	None	
P24007_N675E725	negative		3 45-100	mixed_hard		10YR 7/1	Sa	None	
P24007_N650E725	negative		1 0-100	mixed_hard		10YR 7/2	Sa	None	
P24007_N650E725	not_excavated			mixed_hard	not_excavated				No dig, gopher tort. hole, cannot offset due to APE boundry
P24007_N625E700	negative		1 0-100	mixed_hard		10YR 7/2	Sa	None	
P24007_N650E700	negative		1 0-20	mixed_hard		10YR 6/2	Sa	None	
P24007_N650E700	negative		2 20-100	mixed_hard		10YR 7/2	Sa	None	
P24007_N675E700	historic		1 0-20	grass		10YR 6/2	Sa	None	
P24007_N675E700	historic		2 20-100	grass		10YR 7/2	Sa	None	
P24007_N700E700	not_excavated			urban	not_excavated				No dig, concrete pad and underground utilities
P24007_N725E700	not_excavated			grass	not_excavated				No dig due to gopher tort. holes and concrete pad
P24007_N750E700	negative		1 0-40	grass		10YR 6/2	Sa	None	
P24007_N750E700	negative		2 40-60	grass		10YR 7/1	Sa	None	
P24007_N750E700	negative		3 60-100	grass		10YR 7/2	Sa	None	
P24007_N775E700	negative		1 0-100	mixed_hard		10YR 5/2	Sa	None	
P24007_N775E675	negative		1 0-14	mixed_hard		10YR 6/2	Sa	None	
P24007_N775E675	negative		2 14-100	mixed_hard		10YR 7/2	Sa	None	
P24007_N750E675	negative		1 0-17	grass		10YR 5/2	Sa	None	
P24007_N750E675	negative		2 17-100	grass		10YR 7/2	Sa	None	
P24007_N725E675	not_excavated			grass	not_excavated				No dig, gravel on surface, compaction
P24007_N700E675	not_excavated			grass	not_excavated				No dig, gravel on surface, compaction
P24007_N700E650	not_excavated			grass	not_excavated				No dig, gravel on surface, compaction, underground utilities
P24007_N725E650	not_excavated			grass	not_excavated				No dig, undground utilities
P24007_N725E625	not_excavated			grass	not_excavated				No dig, underground utilities, helium pipeline running north and south.
P24007_N750E625	not_excavated			grass	not_excavated				No dig, underground utilities, helium pipeline running north and south.
P24007_N775E625	not_excavated			grass	not_excavated				Proximity to road pad.
P24007_N675E525	not_excavated			grass	not_excavated				No dig, underground utilities, helium pipeline running north and south.
P24007_N775E550	negative		1 0-10	disturbed	disturbed	10YR 6/1	Sa	None	Proximity to road pad, drainage ditch
P24007_N750E550	negative		1 0-50	grass	disturbed	10YR 6/1	Sa	None	No dig, underground utilities, helium pipeline running north and south.
P24007_N750E525	negative		1 0-10	grass	>100cm	10YR 5/1	SaLo	None	Mottled with layers of 10 YR 5/1 and 5/2
P24007_N750E525	negative		2 10-20	grass	>100cm	10YR 8/1	Sa	None	
P24007_N750E525	negative		3 20-100	grass	>100cm	10YR 8/3	Sa	None	
P24007_N725E525	negative		1 0-12	grass	>100cm	10YR 5/1	SaLo	None	
P24007_N725E525	negative		2 12-100	grass	>100cm	10YR 8/2	Sa	None	
P24007_N700E525	not_excavated			grass	not_excavated				Extremely Compacted soil with fill, also proximity to helium pipe

P24007_N725E550	negative	1 0-30	grass	disturbed	10YR 6/1	Sa	None	Full shell inclusion 75%. Bert disturbed and compacted. No dig due to active gopher tortoise burrow
P24007_N700E550	not_excavated		grass	not_excavated				
P24007_N675E550	negative	1 0-20	grass	disturbed	7.5YR 7/3	Sa	None	Very disturbed fill, pebbles, chunks of asphalt
P24007_N625E550	not_excavated		grass	not_excavated				No dig due to gopher tortoise burrow
P24007_N650E550	negative	1 0-10	grass	disturbed	10YR 5/1	SaLo	None	
P24007_N650E550	negative	2 10-35	grass	disturbed	10YR 8/1	Sa	None	
P24007_N650E550	negative	2 35-40	grass	disturbed	10YR 6/1	Sa	None	Sandy fill/crushed rock and shell
								Sand with crushed rock and shell-appears to be a fill layer, possibly placed on top for the pipeline
P24007_N650E550	negative	4 40-60	grass	disturbed	10YR 8/2	Sa	None	
P24007_N625E625	negative	1 0-30	grass	disturbed	10YR 5/1	Sa	None	
P24007_N650E625	not_excavated		grass	not_excavated				No dig due to gopher tortoise burrow and radar tower ~ 10m
P24007_N625E625	negative	1 0-25	brush	disturbed	10YR 5/2	Sa	45% round p	Also crushed shell
P24007_N700E625	negative	1 0-15	brush	disturbed	10YR 5/1	Sa	None	
P24007_N700E625	negative	2 15-20	brush	disturbed	10YR 2/1	Sa	None	
P24007_N700E625	negative	3 20-45	brush	disturbed	10YR 6/2	Sa	None	
P24007_N750E650	negative	1 0-100	mixed_hard	>100cm	10YR 8/2	Sa	None	Slightly disturb in top 30cm with gravel
P24007_N775E650	negative	1 0-18	mixed_hard	>100cm	10YR 6/2	Sa	None	
P24007_N775E650	negative	2 18-100	mixed_hard	>100cm	10YR 7/2	Sa	None	
P24007_N800E725	negative	1 0-20	mixed_hard	>100cm	10YR 6/1	Sa	None	
P24007_N800E725	negative	2 20-100	mixed_hard	>100cm	10YR 8/1	Sa	None	
P24007_N800E725	negative	1 0-10	brush	disturbed	10YR 6/3	Sa	None	Disturbed with inclusions of c ompacted shell and rock
P24007_N800E725	negative	2 10-35	brush	disturbed	10YR 8/1	Sa	None	Disturbed with shell and rock and an inclusion of 10YR 5/6 on the NE wall
P24007_N800E725	negative	3 35-40	brush	disturbed	10YR 4/1	Sa	None	
P24007_N675E675	negative	1 0-40	grass	>100cm	10YR 6/2	Sa	None	
P24007_N675E675	negative	2 40-100	grass	>100cm	10YR 6/3	Sa	None	
P24007_N625E650	negative	1 0-18	mixed_hard	>100cm	10YR 6/2	Sa	None	
P24007_N625E650	negative	2 18-100	mixed_hard	>100cm	10YR 7/2	Sa	None	
P24007_N650E650	negative	1 0-40	mixed_hard	>100cm	10YR 5/2	Sa	None	
P24007_N650E650	negative	2 40-100	mixed_hard	>100cm	10YR 7/2	Sa	None	
P24007_N650E675	negative	1 0-20	mixed_hard	>100cm	10YR 5/2	Sa	None	
P24007_N650E675	negative	2 20-100	mixed_hard	>100cm	10YR 6/1	Sa	None	
P24007_N625E675	negative	1 0-20	brush	>100cm	10YR 5/1	Sa	None	
P24007_N625E675	negative	2 20-100	brush	>100cm	10YR 6/1	Sa	None	
R1	negative	1 0-5	grass	disturbed	10YR 2/2	SaLo	None	
R1	negative	2 5-5	grass	disturbed	10YR 8/2	Sa	None	Gravel fill
R2	not_excavated		grass	not_excavated				Gopher tortoise burrows
R3	negative	1 0-8	mixed_hard	>100cm	10YR 5/2	Sa	None	
R3	negative	2 8-100	mixed_hard	>100cm	10YR 7/1	Sa	None	
R4	negative	1 0-17	grass	>100cm	10YR 5/3	Sa	None	
R4	negative	2 17-100	grass	>100cm	10YR 7/1	Sa	None	
R5	negative	1 0-11	grass	>100cm	10YR 5/2	Sa	None	
R5	negative	2 11-100	grass	>100cm	10YR 7/1	Sa	None	
R6	negative	1 0-8	grass	>100cm	10YR 6/2	Sa	None	
R6	negative	2 8-100	grass	>100cm	10YR 7/2	Sa	None	
R7	negative	1 0-8	grass	>100cm	10YR 6/3	Sa	None	
R7	negative	2 8-100	grass	>100cm	10YR 7/2	Sa	None	
R8	negative	1 0-22	brush	>100cm	10YR 7/2	Sa	None	
R8	negative	2 22-100	brush	>100cm	10YR 7/1	Sa	None	
R9	negative	1 0-14	grass	>100cm	10YR 5/2	Sa	40% subangular gravel	
R9	negative	2 14-35	grass	>100cm	10YR 4/2	Sa	None	
R9	negative	3 35-60	grass	>100cm	10YR 5/1	Sa	None	
R9	negative	3 60-68	grass	>100cm	10YR 6/3	Sa	None	
R9	negative	5 68-75	grass	>100cm	10YR 4/1	Sa	None	
R9	negative	6 75-100	grass	>100cm	10YR 6/3	Sa	None	

From: [NICELY, MEGAN E CIV USSF SSC 45 CES/CEIE-C](#)
To: [Brian Pownall](#)
Cc: [Extranet Contact - Eva Long](#); [Leske, Andrew H \(FAA\)](#)
Subject: FW: SLC-40 Draft Report
Date: Tuesday, July 23, 2024 7:42:31 AM
Attachments: [image009.jpg](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)
[image014.png](#)
[image015.png](#)
[image016.jpg](#)
[image017.png](#)

For inclusion in the EA/project record.

From: Victoria Menchaca <VictoriaMenchaca@semtribe.com>
Sent: Monday, July 22, 2024 4:17 PM
To: NICELY, MEGAN E CIV USSF SSC 45 CES/CEIE-C <megan.nicely.1@spaceforce.mil>; PENDERS, THOMAS E CIV USSF SSC 45 CES/CEIE <thomas.penders@spaceforce.mil>
Cc: BLAYLOCK, MICHAEL A CIV USSF HQSF 45 CES/CEIE <michael.blaylock.4@spaceforce.mil>; Long, Eva (FAA) <Eva.Long@faa.gov>; THPO Compliance <THPOCompliance@semtribe.com>
Subject: [Non-DoD Source] RE: SLC-40 Draft Report

Text, letter? ? Description automatically generated



July 22, 2024

Thomas E. Penders, MS, RPA
3365 Heather Drive
Titusville, Florida 32796
Email: thomas.penders@spaceforce.mil
Phone: 321-307-0075

Subject: Proposed expansion of facilities at LC-40, Cape Canaveral Space Force Station, Brevard County, Florida
THPO Compliance Tracking Number:
0034499

In order to expedite the THPO review process:

1. Please correspond via email and provide documents as attachments.
2. Please send all emails to THPOCompliance@semtribe.com,

3. Please reference the THPO Compliance Tracking Number if one has been assigned.

Dear Mr. Penders:

Thank you for contacting the Seminole Tribe of Florida Tribal Historic Preservation Office (STOF THPO) Compliance Section regarding the Proposed expansion of facilities at LC-40, CCSFS, Brevard County, Florida.

The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the documents and additional information that you have kindly provided and completed our assessment pursuant to Section 106 of the National Historic Preservation Act (16 USC 470) as amended and its implementing regulations (36 CFR 800). We have no objections or other comments at this time. Please notify our office if any archaeological, historical, and/or burial resources are inadvertently discovered during project implementation and feel free to contact us with any questions or concerns.

Sincerely,
Victoria L. Menchaca, MA, Compliance Analyst II
STOF THPO, Compliance Section
Phone: 863-458-8195
Email: victoriamentchaca@semtribe.com

From: NICELY, MEGAN E CIV USSF SSC 45 CES/CEIE-C <megan.nicely.1@spaceforce.mil>
Sent: Friday, June 21, 2024 12:19 PM
To: THPO Compliance <THPOCompliance@semtribe.com>; Victoria Menchaca <VictoriaMenchaca@semtribe.com>; Danielle Simon <daniellesimon@semtribe.com>
Cc: PENDERS, THOMAS E CIV USSF SSC 45 CES/CEIE <thomas.penders@spaceforce.mil>; BLAYLOCK, MICHAEL A CIV USSF HQSF 45 CES/CEIE <michael.blaylock.4@spaceforce.mil>; Long, Eva (FAA) <Eva.Long@faa.gov>
Subject: FW: SLC-40 Draft Report

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

To accompany the CRAS that was submitted last week, please find the attached cover letter for this report. We request your review on the findings contained within this report. Please respond with any comments you may have. A printed copy is being mailed to your office.

Thank you,

v/r

Megan Nicely
NEPA Program Manager
45 CES/CEIE-C
WP: 321-853-6642 / CP: 386-316-0812

From: PENDERS, THOMAS E CIV USSF SSC 45 CES/CEIE <thomas.penders@spaceforce.mil>
Sent: Friday, June 14, 2024 12:52 PM
To: Putman, Ethan D. <Ethan.Putman@dos.myflorida.com>; CompliancePermits@dos.myflorida.com; THPO Compliance <THPOCompliance@semtribe.com>; Victoria Menchaca <VictoriaMenchaca@semtribe.com>; Danielle Simon <daniellesimon@semtribe.com>
Cc: BLAYLOCK, MICHAEL A CIV USSF HQSF 45 CES/CEIE <michael.blaylock.4@spaceforce.mil>; JANISE, TAYLOR M CIV USSF HQSF 45 CES/CEIE-C <taylor.janise.1@spaceforce.mil>; NICELY, MEGAN E CIV USSF SSC 45 CES/CEIE-C <megan.nicely.1@spaceforce.mil>
Subject: FW: SLC-40 Draft Report

This CRAS is in response to the SLD 45 requiring a Phase I archaeological survey for the proposed landing pads. A printed copy will be sent to you.

Tom Penders

From: Bill Werner <Bill.Werner@searchinc.com>
Sent: Friday, June 14, 2024 10:43 AM
To: NICELY, MEGAN E CIV USSF SSC 45 CES/CEIE-C <megan.nicely.1@spaceforce.mil>; PENDERS, THOMAS E CIV USSF SSC 45 CES/CEIE <thomas.penders@spaceforce.mil>; Brian Pownall <Brian.Pownall@spacex.com>
Cc: LeeAnne Mahoney <leeanne.mahoney@searchinc.com>
Subject: [Non-DoD Source] RE: SLC-40 Draft Report

Hi Megan,

Please find the electronic copy attached. We are resending the package of reports to Brian, and he will bring them to you.

Thanks,
Bill

Bill Werner, MA

Senior Project Manager, Oil & Gas Sector Leader
SEARCH Florida - Jacksonville Office
Bill.Werner@searchinc.com 904-861-2833 office 904-557-1744 cell

SEARCH - SEARCH2O Harness the Power of the Past
Archaeology – Maritime Archaeology – Cultural Heritage



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From: NICELY, MEGAN E CIV USSF SSC 45 CES/CEIE-C <megan.nicely.1@spaceforce.mil>
Sent: Friday, June 14, 2024 10:37 AM
To: Bill Werner <Bill.Werner@searchinc.com>; PENDERS, THOMAS E CIV USSF SSC 45 CES/CEIE <thomas.penders@spaceforce.mil>; Brian Pownall <Brian.Pownall@spacex.com>
Cc: LeeAnne Mahoney <leeanne.mahoney@searchinc.com>
Subject: RE: SLC-40 Draft Report