CULTURAL RESOURCE ASSESSMENT SURVEY FOR THE I-95 INTERCHANGE AT PIONEER TRAIL, VOLUSIA COUNTY, FLORIDA

FINANCIAL MANAGEMENT NO. 436292-1-21-01
SEARCH PROJECT NO. 180061

PREPARED FOR

STANTEC
AND
FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT 5

BY

SEARCH

MAY 2019

THE ENVIRONMENTAL REVIEW, CONSULTATION, AND OTHER ACTIONS REQUIRED BY APPLICABLE FEDERAL ENVIRONMENTAL LAWS FOR THIS PROJECT ARE BEING, OR HAVE BEEN, CARRIED OUT BY THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) PURSUANT TO 23 U.S.C. § 327 AND A MEMORANDUM OF UNDERSTANDING DATED DECEMBER 14, 2016, AND EXECUTED BY THE FEDERAL HIGHWAY ADMINISTRATION AND FDOT.

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EXECUTIVE SUMMARY

This report presents the findings of a Phase I cultural resource assessment survey (CRAS) conducted in support of a proposed interchange at Pioneer Trail on Interstate 95 (I-95) at Milepost 19.032 in Volusia County, Florida. The project includes three interchange alternatives and the construction of four retention ponds. The Area of Potential Effect (APE) was defined to include the existing and proposed right-of-way for the interchange alternatives with a buffer extending to the back or side property lines or a distance no greater than 100 meters (330 feet). The APE for the proposed ponds includes the pond footprint, plus a 100-foot (30-meter) buffer. The architectural history survey was conducted within the APE, while the archaeological survey was conducted within the existing and proposed right-of-way and within the pond footprints.

The archaeological survey included the excavation of 40 shovel tests within the project APE. No artifacts were recovered and no archaeological sites or occurrences were identified within the APE. No further archaeological survey is recommended in support of the proposed project.

The architectural survey resulted in the identification and evaluation of two previously recorded historic linear resources within the I-95 at Pioneer Trail APE: Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660). These resources follow the same route in the project APE. In 2013, the State Historic Preservation Officer (SHPO) stated that there was insufficient information to provide an eligibility determination for listing the overall historic linear resources, 8VO07656 and 8VO07660, in the National Register of Historic Places (NRHP), and that segments of 8VO07656 and 8VO07660 would need to be evaluated separately. Fort Kingsbury to New Smyrna Road (8VO07656) is locally significant under NRHP Criterion A as a pioneer trail used during the settlement and development of Volusia County and during the Seminole Wars. Pioneer Trail (8VO07660) is locally significant under Criterion A as a pioneer trail used during the settlement and development of Volusia County during the Seminole Wars (SEARCH 2013). Based on the results of the current survey, it is the opinion of SEARCH that the segments of resources 8VO07656 and 8VO07660 within the I-95 at Pioneer Trail APE are locally significant under Criterion A but lack the necessary historic integrity to convey their significance. Therefore, both are recommended ineligible for listing in the NRHP.

FDOT Bridge No. 790066 is a concrete stringer bridge built in 1969. The bridge is a post-1945 concrete bridge excluded from Section 106 consideration (Federal Register 2012:68793), and as such, the bridge was not recorded or evaluated by the present study. No additional architectural survey is recommended.

Given the results of the CRAS, it is the opinion of SEARCH that the proposed I-95 interchange at Pioneer Trail will have no effect on cultural resources listed or eligible for listing on the NRHP. No further work is recommended.

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INTRODUCTION

This report presents the findings of a Phase I cultural resource assessment survey (CRAS) conducted in support of a proposed interchange at Pioneer Trail on Interstate 95 (I-95) in Volusia County, Florida (**Figure 1**). The Florida Department of Transportation (FDOT), District 5, is proposing the construction of an interchange with retention ponds at Milepost 19.032 on I-95. This interchange will be constructed between two existing interchanges: State Road (SR) 421/Dunlawton Avenue, approximately 4.25 miles (6.8 kilometers) to the north, and SR 44/Lytle Avenue, approximately 2.75 miles (4.43 kilometers) to the south. This project is federally funded.

The project Area of Potential Effects (APE) was developed to consider any visual, audible, and atmospheric effects that the project may have on cultural resources. The APE was defined to include parcels adjacent to the interchange alternatives, extending to the back or side property lines or a distance no greater than 100 meters (330 feet) from the outermost edge of the interchange alternatives footprint. For the proposed ponds, the APE was defined to include the proposed pond footprint and a 100-foot (30-meter) buffer (**Figure 2**). The architectural history survey was conducted within the entire APE, while the archaeological survey was conducted only within the existing and proposed interchange right-of-way and pond footprints.

The purpose of the survey was to locate, identify, and bound any archaeological resources, historic structures, and potential districts within the project's APE and assess their potential for listing in the National Register of Historic Places (NRHP). This study was conducted to comply with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, and the Archeological and Historic Preservation Act of 1979, as amended. The study also meets the regulations for implementing NHPA Section 106 found in 36 CFR Part 800 (*Protection of Historic Properties*). This study also complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code. All work was performed in accordance with Part 2, Chapter 8 of the FDOT's Project Development & Environment (PD&E) Manual (revised January 2019) as well as 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. The Principal Investigator for this project meets the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-42).

Located within the project APE, FDOT Bridge No. 790066 is a concrete stringer structure constructed in 1969. According to the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* (Federal Register 2012:68793–68795), the Program Comment "relieves federal agencies from the Section 106 requirement to consider the effects of undertakings on the bridge types identified in Section V of this Program Comment" (Federal Register 2012:68793). Concrete stringer structures such as FDOT Bridge No. 790066 are identified in Section V of the Program Comment, and as such this

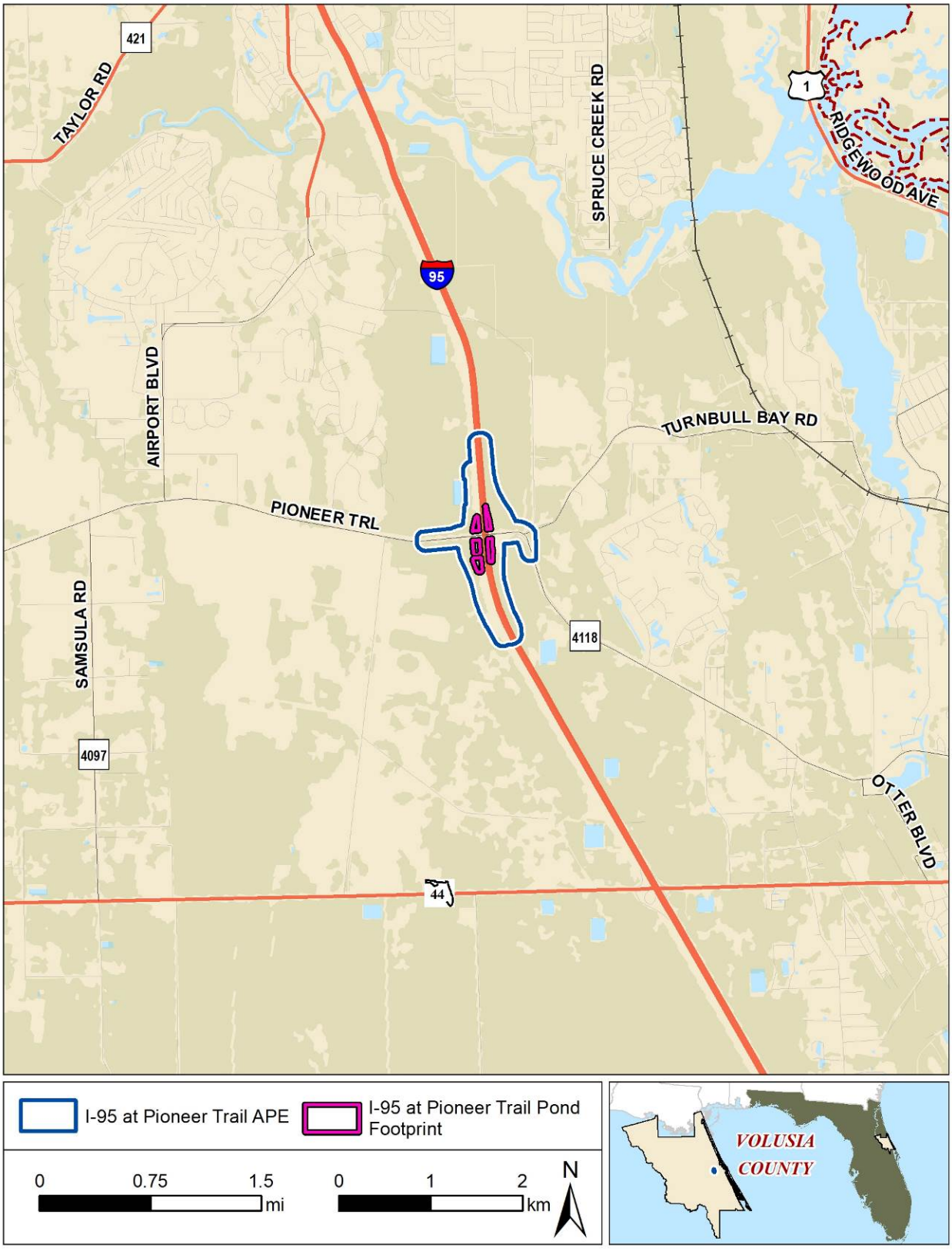

Figure 1. Location of the I-95 at Pioneer Trail APE, Volusia County, Florida.

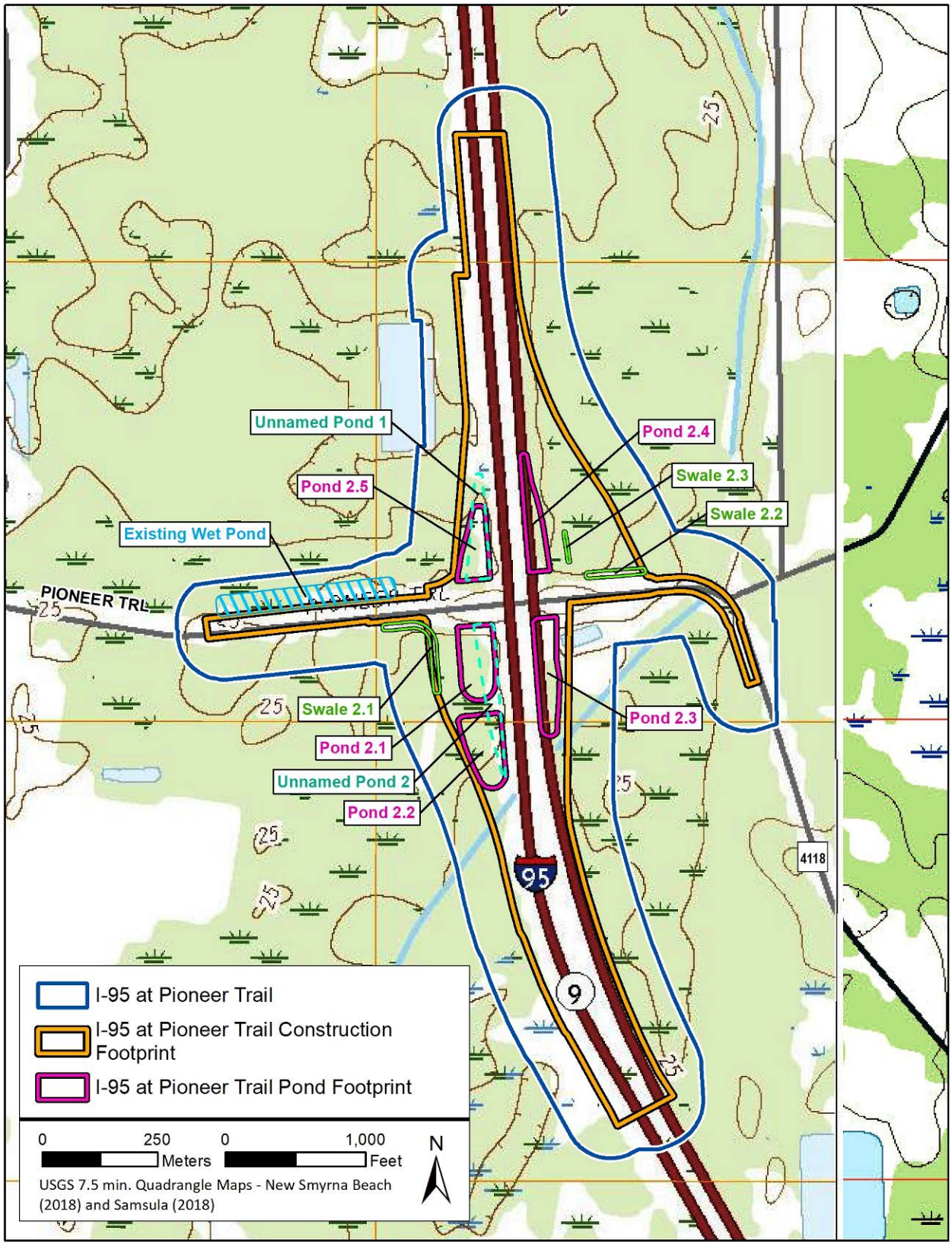

Figure 2. I-95 at Pioneer Trail APE, Volusia County, Florida.

bridge was not recorded and evaluated during the current project. Further discussion of the application of the Program Comment is provided in the Architectural Field Methods section of this document. The Section 106 responsibilities of FDOT and the Federal Highway Administration (FHWA) have been completed with regard to FDOT Bridge No. 790066.

Steven RabbySmith, MA, RPA, served as the Principal Investigator for this project; Mikel Travisano, MS, served as the Principal Investigator for Architectural History. The report was written by Mr. RabbySmith, Mr. Travisano, Michael Foster, MA, RPA, Briane Shane, MID, and Allen Kent, PhD. The fieldwork was conducted by Mr. Foster, Dave Boschi, MA, RPA, and Jordan Loucks, PhD, RPA. Melissa Dye, MA, RPA, conducted the quality-control review, and Katy Harris, MS, Rasha Slepow, BS, and Ali Sundook, BA, edited and produced the document.

PROJECT LOCATION AND ENVIRONMENT

LOCATION AND MODERN CONDITIONS

The project area is in the north-central portion of east Florida, approximately 2.5 miles (4 kilometers) northwest of Glencoe in central eastern Volusia County, within Sections 4, 5, 8, and 9 of Township 17 South, Range 33 East. The APE is within the Eastern Flatwoods physiographic district, which began as a sequence of barrier islands and lagoons formed during the Plio-Pleistocene and recent time (Brooks 1981). Also known as the "Coastal Lowlands," elevations are generally less than 90 feet (27 meters) above sea level (amsl) (Brooks 1981). Specifically, the project APE lies within the Volusia Ridge Sets province, which is characterized as accreted coastal deposits that consist of four distinct parts: (1) a flatwoods plain with subdued beach ridge sets, known as the "Talbot Terrace," that are generally 40 feet (12 meters) in elevation; (2) an eastern boundary sand ridge with a crest of 46 feet (14 meters) in elevation; (3) a flatwoods plain formed by an eastern set of beach ridges, known as the "Pamlico Terrace," with elevations generally ranging from 25 to 30 feet (8 to 9 meters) amsl; and (4) a high coastal ridge, known as the "Atlantic Coastal Ridge," with a general elevation of 55 feet (17 meters) amsl that overlies coquina deposits (Brooks 1981). Soils within the APE are primarily poorly drained Pomona fine sand and very poorly drained Pomona-St. Johns Complex with smaller amounts of very poorly drained Plummer and Surrency fine sands, as well as moderately well drained Albany fine sand (**Figure 3**).

PALEOENVIRONMENT

Between 18,000 to 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 meters at 18,000 BP. The rise was slow while glacial conditions prevailed at high latitudes

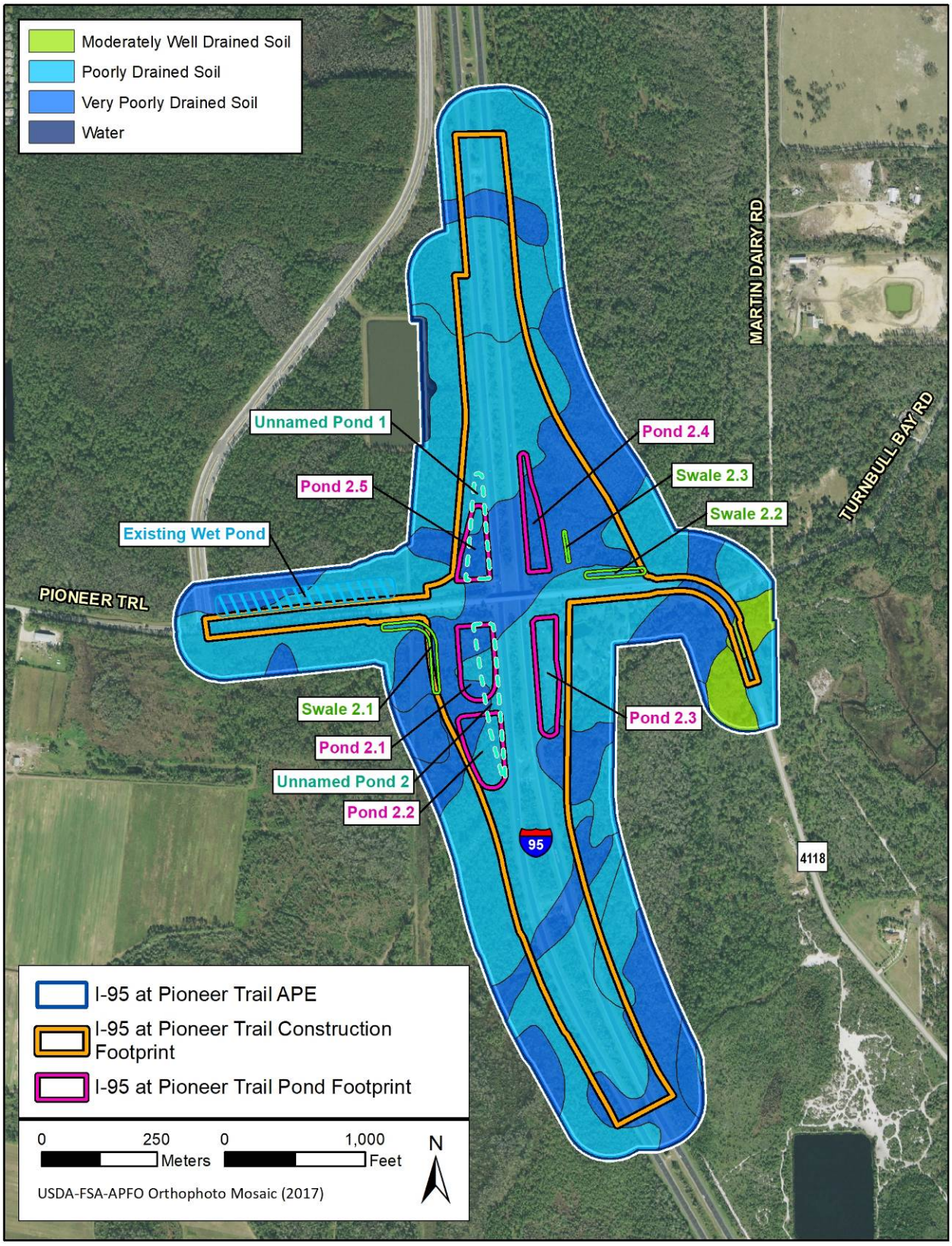

Figure 3. Soil drainage within the I-95 at Pioneer Trail APE.

but became very rapid in the latest Pleistocene and earliest Holocene. It became warmer and wetter rather rapidly 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, which 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, 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.

HISTORIC OVERVIEW

This chapter provides a historic overview of the project area, beginning with a summary of Native American culture history that is divided into broad timeframes, including the Paleoindian period, the Archaic period, the Mississippian period, and the Woodland period following standard archaeological practices, and ending with a summary of post-contact history.

NATIVE AMERICAN CULTURE HISTORY

Paleoindian Period

Current evidence indicates that the first inhabitants of Florida entered the area approximately 15,000 years ago. The sea level was much lower than today, and the Florida peninsula was wider and drier. Most of the known Paleoindian sites are located in north and west-central Florida, where karst springs and chert were available. Florida's earliest Native Americans were probably nomadic hunter-gatherers who relied on now-extinct mammals (i.e., mammoth, mastodon, horse, dire wolf) and wild plant foods for their subsistence (Milanich 1994). By the late Paleoindian period, however, it appears that people were spending part of each year in large habitation sites located near freshwater springs and lithic raw material sources (Daniel and Wisenbaker 1987). Purdy (1981) has suggested that the Paleoindian populations followed rivers through north and central Florida, exploiting the resources of the Florida Highlands and the Gulf Coast. The Paleoindian tool assemblage contains lanceolate-shaped projectile points, blades, end scrapers, thumbnail scrapers, gouges, and Edgefield scrapers, reflecting a reliance on hunting and butchering of animals as well as the use of well-made scraping tools for woodworking, hide scraping, and other tasks. Lanceolate Suwannee and Simpson projectile points are commonly found on sites in the karst regions of north and central Florida, although they are sometimes found in south Florida as well. The Paleoindian Database of the Americas (PIDBA) reports three Paleoindian points from Volusia County, including Clovis, Redstone, and

Suwannee types (Anderson et al. 2010; PIDBA 2011). In addition, the Florida Master Site File (FMSF) database identifies three sites from which Paleoindian points have been reported in Volusia County: the Dean Sligh site (8VO00451), located on the shore of Lake Monroe in southern Volusia County, the Samuel Butts site (8VO05266), and the Samuel Butts Ancient Coquina Quarry (8VO09269), both of which are in the City of Daytona, west of the Indian River.

Archaic Period

Around 8000 BC, the environment and physiology of Florida underwent pronounced changes. These changes were interconnected and included a gradual warming trend, a rise in sea levels, a reduction in the width of peninsular Florida, and the spread of oak-dominated forests and hammocks throughout much of the state (Milanich 1994; Smith 1986).

Concomitant with these environmental changes were alterations in native subsistence strategies, which became more diverse due to the emergence of new plant, animal, and aquatic species. Also occurring at this time was a significant increase in population numbers and density, with native groups developing regional habitat-specific adaptations and material assemblages (Milanich 1994; Smith 1986:10). Along the coasts, settled communities began to develop, while in the interior, a more mobile lifestyle appears to have been practiced. A variety of site types reflect these different regional adaptations: residential base camps, short-term settlements, specialized procurement camps, quarries, and cemeteries (Milanich 1994:75-85).

The Early Archaic period (8000–5000 BC) was arid and warm and characterized by the spread of oak hardwood forests (Watts and Hansen 1988). Early Archaic campsites and habitation sites tend to be located in the same places that earlier Paleoindian sites are located, primarily around springs and spring-fed rivers. The FMSF database reports only two Early Archaic sites recorded in Volusia County: the JD site (8VO00627) and the Fort Florida Midden site (8VO00048). Both sites are located in close proximity to high-volume waterways. The JD site is located near the coast on the north side of Strickland Bay, which is between present-day Daytona Beach and New Smyrna Beach. The Fort Florida Midden site is located in southwestern Volusia County near the confluence of the St. Johns River and the Wekiva River.

The Middle Archaic period (5000–3000 BC) coincided with the climatic episode known as the Hypsithermal, a period in which temperatures peaked and rainfall diminished, while the subsequent Late Archaic saw an increase in precipitation and the intrusion of mixed pine and oak into the hardwood forests. As conditions became wetter, riparian and lacustrine adaptations became increasingly common, particularly along the coasts where relatively sedentary habitations occur (Russo 1991; Ste. Claire 1990). By contrast, the interior Archaic hunter-gatherers remained fairly mobile (Austin 1996; Chance 1983). By the Late Archaic period (3000–1000 BC), there was a trend toward more sedentary occupations and more circumscribed territories as conditions became increasingly similar to the modern environment.

Around 2000 BC, a major technological innovation of the Late Archaic was the development of fired-clay pottery. Referred to as Orange pottery by archaeologists, this early ceramic ware was

tempered with vegetal fibers, consisting of either thin strands of palmetto or Spanish moss (Bullen 1972; Griffin 1945). Bullen (1972) divided this period into four subperiods (Orange 1-4) that dated from 2000 BC to about 500 BC; however, research conducted by Sassaman (2003) in the middle St. Johns River region has resulted in the refinement of the Orange period, with radiometric analysis illustrating that the phase spanned a much shorter interval from about 2000 to 1500 BC. With regard to vessel form, early pots were hand-molded and tended to be thick-walled, whereas some of the later vessels were thinner and formed by coiling. Horticulture preceded the early fiber-tempered pottery, which appeared simultaneously in three areas of the southeastern United States (Sassaman 1993).

The Middle and Late Archaic periods saw an increase in human activity within Volusia County. This increased activity was particularly intensive around the St. Johns River, although Middle and Late Archaic sites also are common in the eastern portion of the county, along rivers and creeks that empty into the Intracoastal Waterway. Along the lower portion of the Tomoka River, just east of the Ormond Beach Municipal Airport, are two sites that date to the latter portion of the Archaic period: the Tomoka River site (8VO02568) and Alissa's Site (8VO07495). Both sites consist of moderately dense artifact scatters, with Orange series pottery present at both. Late Archaic fiber-tempered sites have been documented in New Smyrna Beach, mostly along the modern Indian River.

Some Archaic-period peoples in central and south Florida practiced a unique mortuary custom of interring their dead in wetland cemeteries. One of the most famous is located at the Windover site in Titusville (Doran 2002). Other wetland cemeteries have been documented in Hardee, Sarasota, and Collier Counties. Evidence of Middle Archaic burials in east Florida includes the Harris Creek site (8VO00024) at Tick Island, where burials were interred in specially prepared terrestrial locations, including a low sand mound (Aten 1999).

Woodland and Mississippian Periods

Following the Archaic period there began a gradual development of more complex forms of political, social, and religious community life throughout much of Florida, including Volusia County. This was accompanied by the establishment of more formal, settled communities and increased regional diversity. This regional diversity, due primarily to local adaptation to varied ecological conditions within the state, has traditionally been described in terms of cultural periods based on variations in ceramic types.

The post-Archaic culture on Florida's northeast coast is referred to as St. Johns. This native culture began around 500 BC or earlier (cf. Sassaman 2003) and lasted until after historic settlement occurred in St. Augustine in AD 1565 (Milanich 1994:246-248). The St. Johns culture arose out of the preceding Late Archaic, Orange-period cultures of the region. Clear continuities in incised design motifs exist between the Orange fiber-tempered ceramics and the chalky and incised wares of the early St. Johns periods (Bullen 1972; Rouse 1951). Many early St. Johns culture sites occupy the same locations as the preceding Orange-period cultures, further supporting this developmental relationship (Milanich 1994:254-255). The common

ceramic type on the northeast Atlantic Coast was a soft paste ware containing sponge spicules and referred to as St. Johns. This pottery was sometimes decorated with incised lines, and after AD 750, paddle stamping became a common decoration. Pre-AD 750 assemblages are commonly assigned to the St. Johns I period, and those post-dating AD 750 are assigned to the St. Johns II period. The period of time after AD 1565 is referred to as the Spanish Mission period. The main archeological indicator of the Spanish Mission period is the presence of artifacts of European manufacture and the introduction of Old-World domesticated plants and animals.

St. Johns I sites in Volusia County are concentrated along the St. Johns River and the eastern coastal boundary; however, during the St. Johns II period, native populations began to increasingly move deeper into the interior of the county. For example, sites such as the Campbell Oaks site (8VO01973) and the Muck Lake site (8VO03463), both located east of the present city of DeLand, suggest an increasing trend of St. Johns II groups moving farther away from the high-subsistence-resource riverine and coastal zones. This movement away from these environments may represent an alteration in subsistence strategies, with a greater reliance on horticulture and agriculture.

The St. Johns I period is divided into three subperiods (I, Ia, and Ib) on the basis of observable changes in material culture, most notably ceramics (Goggin 1952:40; Milanich 1994:247). People of the St. Johns I culture (500 BC–AD 100) were foragers who relied primarily on hunting, fishing, and wild-plant collecting. During this time, the resources found near freshwater wetlands, swamps, and the coastal zones were typically the most heavily exploited. St. Johns I sites are typically shell middens in coastal zones that contain St. Johns Plain and St. Johns Incised pottery.

At St. Johns Ia sites (AD 100–500), St. Johns Plain and Incised pottery continued to be produced, and a red-painted St. Johns variant called Dunns Creek Red also was made. Exotic Hopewellian artifacts also occur in burial mounds. Weeden Island pottery (a primarily Gulf Coast ware) has been recovered from late St. Johns Ia sites, and was apparently acquired through trade. The St. Johns Ib period (AD 500–750) is similar to the Ia period, with the carryover of St. Johns Plain and Incised wares and Dunns Creek Red, but Weeden Island pottery becomes more common, particularly in burial mounds; however, the majority of everyday ceramics are plain. As the St. Johns culture progressed, sand mounds continued to be constructed and became larger through time.

The St. Johns II period is divided into three subperiods (IIa, IIb, and IIc). As populations grew, the number and size of mounds and villages increased. The emergence of check stamping marks the beginning of the St. Johns II period around AD 750 and, along with plain pottery, dominates the assemblages throughout the period. During St. Johns IIa (AD 750–1050), incised and punctated wares, possibly a reflection of Gulf Coast influences, occur with some frequency in mounds and middens. Late Weeden Island pottery continued to be traded into the St. Johns region and is recovered in sand burial mounds.

The St. Johns II culture reached its apex in terms of social, political, and ceremonial complexity during the St. Johns IIb period (AD 1050–1513). Classic Mississippian traits such as the construction of large truncated mounds and the presence of Southern Cult burial paraphernalia in association with perceived elite burials are evident (Milanich 1994; Smith 1986), indicating influence from northwest Florida. Some sand burial mounds were quite large and ceremonially complex, including truncated pyramidal mounds with ramps or causeways leading up to their summits (Milanich 1994:269-270). The rise in the number of St. Johns village and mound sites implies greater cultural complexity compared to that of the earlier St. Johns I period (Milanich 1994:267-274; Miller 1998). Shell and bone ornaments, worked copper, and other exotic materials and artifacts occur with some frequency in burial mounds (Goggin 1952; Milanich 1994).

In addition to the exploitation of aquatic resources for subsistence, it has been suggested that there was an increased dependence on horticulture during St. Johns II times (Goggin 1952; Milanich 1994:263-264); however, no direct evidence of corn agriculture in prehistoric St. Johns-period sites has been recovered, although indirect evidence is provided by corncob impressions on ceramic pots and clay effigies of corncobs, squash, and gourds (Milanich 1994:264-265). Corncobs and kernels have been recovered at Hontoon Island (Newsom 1987:74-75) and at the Riverbend site (8VO02567) on the Tomoka River in Volusia County (Russo et al. 1989), but in archaeological deposits that date to the historic Spanish Mission period.

POST-CONTACT HISTORY

Early Spanish Exploration and Colonization, 1513–1763

The earliest attempts to colonize Florida by Europeans occurred during the early sixteenth century with the entradas of Ponce de Leon (1513, 1521), Panfilo de Narvaez (1528), and Hernando de Soto (1539–1540). These early efforts were largely unsuccessful and were followed by a similarly unsuccessful attempt in Pensacola by Tristan de Luna (1559–1561). These failures to colonize Florida caused King Phillip II to abandon the effort. He changed his mind, however, when he learned that the French were building settlements and military fortifications on Florida's east coast (Lyon 1983).

One of these, Fort Caroline, was established near the mouth of the St. Johns River near present-day Jacksonville in 1564. The French settlement not only undermined Spanish claims to Florida, it threatened Spanish fleets loaded with gold that sailed through the Straits of Florida. Consequently, King Phillip sent Pedro Menendez de Aviles to Florida with orders to expel the French. Menendez arrived in Florida in 1565, quickly dispatched the French, and established St. Augustine. Chosen for its strategic location, St. Augustine existed as a military outpost and as a base for missionaries, who were sent to convert the native peoples to Catholicism (Deagan 1983).

Although the French occupation of Florida lasted only 15 months, they had many opportunities to interact with native groups in the region. After the fall of Fort Caroline and the establishment of St. Augustine, the Saturiwa and their allies, who were hostile to the Spanish, mounted a series of raids on the Spanish garrisons in the area. Governor Menendez, upset by these constant attacks, decided that it was time to deal with the native peoples. Menendez's plan was to immobilize the Saturiwa by traveling south and forging an alliance with Saturiwa's allies and enemies. At the end of August 1566, he proceeded in three small vessels with 100 men up the St. Johns River (Lyon 1983:168). He was ambushed by the Mayaca at a narrows in the river south of Lake George and had to retreat.

Tensions between the Spanish and the native peoples continued to escalate. In the summer of 1567, the Mayaca joined forces with Saturiwa, the Nocoroco (whose village was on the Tomoka River), and the Potano (located within modern Alachua County) to wage war on the Utina (Lyon 1983:198). In 1568, the Saturiwa allied themselves with the French in attacking and burning several Spanish forts including the fort at San Mateo at the mouth of the St. Johns River (Lyon 1983:199-201). San Mateo was eventually abandoned for good in 1569 (Milanich 1995:162), heralding the end of Spanish interest in peninsular Florida until the seventeenth century. Instead, the Spanish shifted their focus towards the area of the Atlantic coast north of St. Augustine.

British Period 1763–1784

In 1763, Spain ceded Florida to Great Britain. Florida was then divided at the Apalachicola River into East and West Florida. The area of modern-day Volusia County was part of East Florida, and St. Augustine served as the capitol of East Florida (Fabel 1996). The British extended huge grants of land to investors who promised to develop the interior of the territory. Richard Oswald, a Scotsman of renown in British governmental circles, received two tracts of 20,000 acres each. One was located along the Halifax and Tomoka Rivers at present-day Tomoka State Park and was known as Mount Oswald. An absentee landowner, Oswald relied on local representatives to run his operation which cultivated rice and indigo on several plantations. Without the labor of dozens of slaves, these efforts likely would not have been successful. Another grant recipient, John Moultrie of South Carolina, also chose land on the Tomoka River. He called his plantation Rosetta (Strickland 1980).

One of the largest English efforts to establish a colony in Florida was at Smyrnea in modern-day New Smyrna Beach. In 1768, a Scottish physician, Dr. Andrew Turnbull, established a plantation on his 20,000-acre land grant and raised indigo, rice, and other crops. Turnbull brought over 1,200 indentured servants, primarily Minorcans, from Europe to work his land and established a settlement for his workers along the Indian River (Griffin 2000).

Several years of drought eventually brought Turnbull's effort to ruin, and by 1777 the colony was completely abandoned after the colonists revolted and relocated to St. Augustine. The impact of the New Smyrna plantation, however, would last much longer than the colony itself. By the time of their departure from the settlement, Turnbull's workers had cleared more than 3,000 acres of land, covered the county with an intricate and extensive canal system, and the

remains of building foundations from the plantation are present (Griffin 2000:63). Additionally, its importance to British settlement efforts is made apparent by the British government financing the construction of King's Road, the southern portion of which went from St. Augustine to Turnbull's settlement.

Completed in 1775 during the British period of Florida history, the King's Road stretched from New Smyrna in Volusia County to the St. Marys River in Nassau County. The road connected St. Augustine with points northward and southward, providing a land alternative to sea travel. From both a commercial and military standpoint, the 150-mile road was vital. When the Spanish returned to Florida in 1784, they maintained the road which continued to serve as a major corridor in the region into the early American period when it became known alternatively as the "Road to Jacksonville" or the "Road to St. Augustine." The King's Road dwindled in importance as the nineteenth century drew to a close (Adams et al. 1997; Coomes 1975).

Second Spanish Period 1784–1821

In 1783, the Treaty of Paris returned Florida to the Spanish; however, English-speaking settlers continued to reside in the countryside. The combination of former British subjects, Spanish soldiers and returning families, their slaves, white and black immigrants from the United States and Caribbean, and the Seminoles made East Florida, including present-day Volusia County, a culturally and racially heterogeneous area (Coker and Parker 1996:158-159).

Foreign, particularly American, settlement of East Florida was encouraged by a royal order issued by the King of Spain to Governor Quesada of Florida on October 20, 1790. The order authorized Quesada to grant lands to foreigners under certain conditions. Under the order, 100 acres could be allotted to each head of a family and 50 acres to other members. Quesada added his own terms to the royal order, requiring 10 years continued residence before full title was granted or an oath of allegiance to the Spanish King. Enrique White, Quesada's successor, revised the terms for issuing grants on October 12, 1803, reducing the amount of land that could be granted to 50 acres for the head of a family, 25 acres for each child or servant older than 16, and 15 acres for each child or servant between the ages of eight and 15 (Hoffman 2002).

The revised terms also required that cultivation of the granted lands must begin within one month or forfeiture would occur. Some modification to White's terms was made by Governor Kindelan in 1815, whereby land titles were delivered upon proof that the grantees had cleared the land and made certain improvements. Kindelan's terms continued until 1817, when four years residence upon the land was required to establish ownership (Gold 1927:34). One of the most notable of these land grants was a 3,000-acre plot along the Halifax River given to Samuel Williams in 1804. The Williams plot makes up the bulk of what is now Daytona Beach (Cardwell and Cardwell 2004:7).

Title to much of the land in present-day Volusia County rests upon these old Spanish land grant concessions. The eighth article of the treaty ceding Florida to the United States by Spain in

1821 provided "that all grants of land made before the 24th of January 1818, by Spain, shall be ratified and confirmed to the same extent that the same grants would be valid if the territories had remained under the dominion of Spain" (Gold 1927:34, 35).

Spanish control over Florida during the period from 1784 to 1821 remained tenuous. The influx of foreign nationals into northern Florida, combined with the growing sentiment that the United States should control the territory, eventually led to the deterioration of Spanish dominance in the area. Spanish authority in Florida slowly waned until 1819, when the United States purchased the territory for $5 million. The United States officially took over Florida in 1821, with Andrew Jackson serving as the first Territorial Governor (Coker and Parker 1996).

Early American Settlement and the Seminole Wars, 1821–1861

With the establishment of Florida as a territory of the United States, two large counties divided along the Suwannee River were created—Escambia County to the west of the river and St. Johns County to the east. On December 29, 1824, St. Johns County itself was divided, with a portion of it becoming Alachua, Nassau, Monroe, and Mosquito Counties. Mosquito County encompassed an area south of St. Johns County that was 190 miles long and 60 miles wide. New Smyrna eventually emerged as the county seat of Mosquito County on January 29, 1835 (Morris 1998).

Disputes between the Seminoles and white settlers led to three successive wars, the first taking place between 1817 and 1818, predominantly in the northern part of Florida. In 1823, the Treaty of Moultrie Creek formed an Indian Reservation in the interior of Florida (Mahon 1985). The treaty restricted the Seminoles to just 4 million acres of land and isolated them from the coast of Florida (Mahon 1985:50). This treaty, as well as subsequent treaties (the Treaty of Payne's Landing [1832] and the Treaty of Fort Gibson [1833]) were unpopular with the Seminoles. This dissatisfaction led to years of conflict with white settlers and the US military culminating in the Second Seminole War (1835–1842). A major source of tension between white people and the Seminoles was slavery. For decades, runaway slaves had sought and found refuge among the Seminoles, who incorporated them as members of their frontier communities. This comradeship between black people and the Seminoles served as a beacon to slaves living on plantations in Florida and neighboring states. Therefore, pro-slavery forces were adamant about the removal of the Seminoles from Florida (Landers 1996; Mahon 1985).

At the start of the Second Seminole War, several large and prosperous plantations that had been developed in previous decades in present-day Volusia County were destroyed. In response to requests from settlers, the United States established a chain of forts as a protective measure, including one in New Smyrna in 1837. After pursuing the Seminoles to the Everglades, the US government ended the war in 1842, and reservation boundaries were established further south (Mahon 1985).

Following the war, the US government attempted to encourage settlement into Florida by passing the Armed Occupation Act in 1842. The act made available for homesteading 80,972

hectares (200,000 acres) south of Gainesville to the Peace River. Homesteads of 65 hectares (160 acres) were given to any head of a family or single man, 18 years of age or older, who would agree to cultivate at least 2 hectares (5 acres), build a dwelling, and live on the land for five years (Tebeau 1971:149). The Homestead Acts of 1866 and 1876 provided further incentives to settlers (Tebeau 1971:266, 294).

As the war with the Seminoles drew to a close, Enterprise emerged as the focus of new settlement in what would later become Volusia County. Settlement of the locale began in 1841, when Major Cornelius Taylor, along with a group of other settlers, established homesteads in the vicinity of Green Spring. Settlement increased as traffic along the St. Johns River expanded and people from coastal areas moved inland to relocate along the shores of Lake Monroe. Among these new settlers was James Brock, who, in 1852, built a hotel on a shell bluff above Lake Monroe, about a mile from the old site of Enterprise. The hotel served as a catalyst for the new town site of Enterprise (Nance 1962: 224). Volusia County was established from a portion of Mosquito County in 1854 and named for a landing called "Volusia" near Lake George on the St. Johns River (Morris 1974:147). The origin of the name is unknown, but may be from a Frenchman or Belgian named "Veluche."

By the 1850s, remaining Seminoles led by Billy Bowlegs saw the ever-expanding reach of white civilization as a threat. Conflict continued, eventually resulting in the Third Seminole War or Billy Bowlegs War (1855–1858). Unlike the previous war, much of the action of this war was set in south Florida. Three years later, the war ended, and Billy Bowlegs and his followers were sent to lands in the west (Covington 1982). An estimated 200 Seminoles were left behind, whose descendants live in south Florida today (Tebeau 1966:50).

The Civil War and the Late Nineteenth Century, 1861–1900

On January 10, 1861, Florida seceded from the United States as a slave state, becoming the third state to join the Confederacy. Volusia County's delegate to the Secession Convention was the Reverend James H. Chandler, who at the time was the county judge. During the war, Union soldiers raided the western part of the county three times in search of cattle and horses, while destroying the town of DeLeon Springs and plantations in the area. In eastern Volusia County, federal gunboats bombarded New Smyrna and burned stockpiles of oak timber abandoned by loggers at the beginning of the war. The gunboats were also after blockade runners at Mosquito Inlet, which was an important shipping point in the area (Hebel 1955:4).

Farmers with cattle did particularly well during the war. The war, in fact, was a major turning point in the establishment of the cattle industry in Volusia County. During the Civil War, cattlemen were exempt from military service due to the large demand for beef from the Confederate Army. Cattlemen in Volusia County contributed to the war effort by sending tons of beef to Confederate troops (Hebel 1955:26). Beef became such a valuable commodity during the war that the Confederacy organized a "Cow Cavalry" to protect herds of cattle from Union raiders (Schene 1976).

With the end of the Civil War in 1865, an influx of new settlers came to Florida. Some were Southerners looking for new homes. Others were former slaves in search of a new beginning, and still others were Northerners looking for new economic opportunities. Among these economic opportunists were cattlemen in search of a milder climate, longer pasture-growing season, and an extensive territory of grassland for their herds. Many of these cattlemen settled in Volusia County, where they established large cattle ranches (Hebel 1955:26).

Prior to the establishment of railroads through the area, Volusia County cattlemen drove their herds to market along established cattle trails. Ranchers separated the animals intended for market from the common herd and generally began the cattle drive in September. The closest cattle market was at Jacksonville, but prior to the railroad ranchers would also drive their cattle as far north as Savannah, Georgia, or Charleston, South Carolina. For these longer cattle drives, cattlemen crossed the St. Johns River at Cowford (present-day Jacksonville) or Palatka. The trip to Savannah generally took four to five weeks, with cattlemen moving the herds slowly to prevent loss of weight (Hebel 1955:27).

A physician and a veteran of the Union Army, J. M. Hawks purchased several hundred acres of land in Volusia County in 1865 with the intention of starting a colony. Five years later, he settled the land and began attracting other settlers to his new community, which he called Hawks Park. In later years, it would become Edgewater (Sikes 1993). Mathias Day, Jr., an entrepreneur from Ohio, moved to eastern Volusia County in 1870 to establish a settlement. Day purchased 2,144.5 acres of the Samuel Williams' grant from Williams' daughter, Christina Reft, and laid out the town of Daytona. By 1873, there were 20 homes, a mercantile business, and a post office in Day's settlement, in addition to the Palmetto House and a sawmill. In July 1876, the settlement was incorporated and named Daytona in honor of Day (Cardwell and Cardwell 2004). Also during this period, the Bostrom family settled in what would become Ormond Beach.

The rebuilding and expansion of rail lines through Volusia County greatly reduced the time required to transport livestock to market, while spurring further growth of the cattle industry in the vicinity around Osteen. Cattle shipping centers such as Osteen and Haw Creek subsequently emerged to facilitate the transport of cattle to northern markets (Hebel 1955:26). In Volusia County, the Florida East Coast Railway (FEC) and one of its predecessor lines, the Jacksonville, Tampa, and Key West Railroad (JT&KW), provided the catalyst for much of the development in the area. The completion of the JT&KW branch line in December 1885 encouraged growth in the community of Osteen and provided cattle ranchers in the area with a new means of transportation. It also spurred the establishment of new trackside communities, such as Kalamazoo. Located three miles east of Osteen, Kalamazoo was a small rural cattle community along the JT&KW corridor with about 100 people living in the area by 1905. Many of the residents worked at nearby stockyards or assisted local ranchers in bringing their cattle to the Kalamazoo depot (Schene 1976:121).

During the 1880s, citrus groves were an important source of income for Volusia County residents (Webb 1885:109). The Town of New Smyrna was incorporated in 1887 with a

population of 150. Development continued with the extension of Henry Flagler's FEC along the eastern coast of the county in the 1890s. The arrival of the railroad brought further changes to the community. The railroad hastened development in the area by encouraging tourism and opening up new markets for citrus growers and commercial fisherman (Fitzgerald, 1993[1939]). Hurt by the Great Freeze of the mid-1890s, agriculture nevertheless recovered as the twentieth century began (Strickland 1980).

Twentieth Century to Recent Times, 1900–present

Shortly after the turn of the century, automobiles came to Volusia County, and it was not long before it was realized that the hard-compacted sand of the Daytona beaches was an ideal surface for a racecourse. Beginning in 1903, men from around the world brought their cars to Daytona to break the world's speed records. Publicity for these events earned Daytona the nicknames "World's Most Famous Beach" and the "Birthplace of Speed" (Atwell and Clarida 1998:8). Races continued on the beach until 1959, when with the Daytona International Speedway opened.

In the 1930s, Volusia County boosters marketed their land as "the most productive in Florida" and invited outsiders, particularly Northerners, to tourist centers of Daytona Beach, DeLand, and New Smyrna. The diversity of soil types to be found won the county the nickname of "Versatile Volusia." Many varieties of fruits and vegetables were produced. Approximately 1.5 million boxes of citrus were produced in the county annually. At least three orange varieties were born here—the Enterprise, the Hamlin, and the Lue Gim Gong. Cattle raising remained important, as did commercial fishing. On the St. Johns, Indian, and Halifax Rivers, freight steamers could still be seen. Daytona Beach offered year-round entertainment alongside "the world's finest beach" (Florida Chamber of Commerce 1935:278). DeLand, the county seat, was home to Stetson University. New Smyrna attracted historical interest as one of the oldest settlements in Florida. The lure was unmistakable: by 1935, the population had grown to 50,591 as compared to 42,725 in 1930 (Florida Chamber of Commerce 1935).

The federal government's efforts to relieve the Great Depression could be seen across Volusia County in the 1930s and particularly at Daytona. The Works Progress Administration (WPA) provided hundreds of the area's men with jobs. Some of Daytona's most interesting architectural resources are the result of projects completed by the WPA, including the band shell, the boardwalk, and the armory (Atwell and Clarida 1998). By 1939, the economy was back on the upswing in Daytona. The United States' entry into World War II provided a boost to the economy through military contracts awarded to the Daytona Beach Works for the construction of boats for the Navy (Atwell and Clarida 1998:8). In addition to these contracts, Daytona Beach also saw the addition of a US Navy Air Base and was host to a Women's Army Corps (WAC) Training Center and a US Convalescent Hospital (Atwell and Clarida 1998). Indeed, World War II (1941–1945) was evident in Volusia County as numerous service men and women trained here, and the coast was active with German submarine patrols (Strickland 1980).

World War II precipitated another cattle boom in Volusia County. Thousands of acres were cleared for permanent pastures. In 1952, land suitable for pasture sold for $27 per acre. Inquiries for pasture land became so great that the Agricultural Extension Service began providing information on available properties to interested buyers. The Soil Conservation Service was another valuable resource for ranchers buying land, since it furnished seed and planting materials for new pastures (Hebel 1955:29). By the mid-1950s, there were nearly 12,000 acres of improved pasture in grasses and clovers in the county, while the number of cattle increased from approximately 10,000 in 1940 to approximately 25,000 in 1954 (Hebel 1955:29).

In the late 1950s, the Miami-based Mackle Brothers purchased 12,000 acres in the Enterprise area of southwestern Volusia County for the development of a new city called Deltona. Patterned on other Mackle developments in Florida, such as Port Charlotte and Port St. Lucie, the community was notable at the time because it was to be a self-contained community with its own utilities, water, sewer, churches, schools, recreation, shopping center, and industrial area. Model houses were built at the site in 1962, and a nationwide advertising campaign was begun (*Daytona Beach Morning Journal* 1962).

Long known for its beaches and racetrack, Daytona Beach was losing attention to the newly-developed Disney World at the start of the 1970s. An advertising campaign successfully reversed the situation, luring college students away from Fort Lauderdale to Daytona's 27 miles of beaches and generating millions in new revenue for the city (Mormino 2005).

Presently, tourism is vital to Volusia County's economy, but the picture is fairly diversified. Major employers in recent years are the Volusia County School Board (8,998 employees), Halifax Staffing (6,330 employees), and Publix Supermarkets (2,798 employees). DeLand is the county seat. Deltona is the largest city followed by Daytona Beach and Port Orange. There are three airports in the county. The opportunities for post-secondary education in Volusia County have expanded in the twentieth century. Embry-Riddle Aeronautical, Stetson University, Bethune Cookman College, University of Central Florida (Daytona campus) as well as several junior colleges and vocational/technical schools are well established (Enterprise Florida 2010).

BACKGROUND RESEARCH

FLORIDA MASTER SITE FILE REVIEW

FMSF data from April 2019 was reviewed to identify any previously recorded cultural resources within the project APE. The FMSF review indicates that five previous cultural resource surveys have been conducted within the current project area (**Figure 4; Table 1**). FMSF Survey No. 4449 conducted a survey of historic properties in Port Orange. While this survey did not incorporate subsurface testing, it did identify a number of historic structures and other cultural resources. FMSF Survey No. 11228 conducted an archaeological survey of a large parcel of land situated

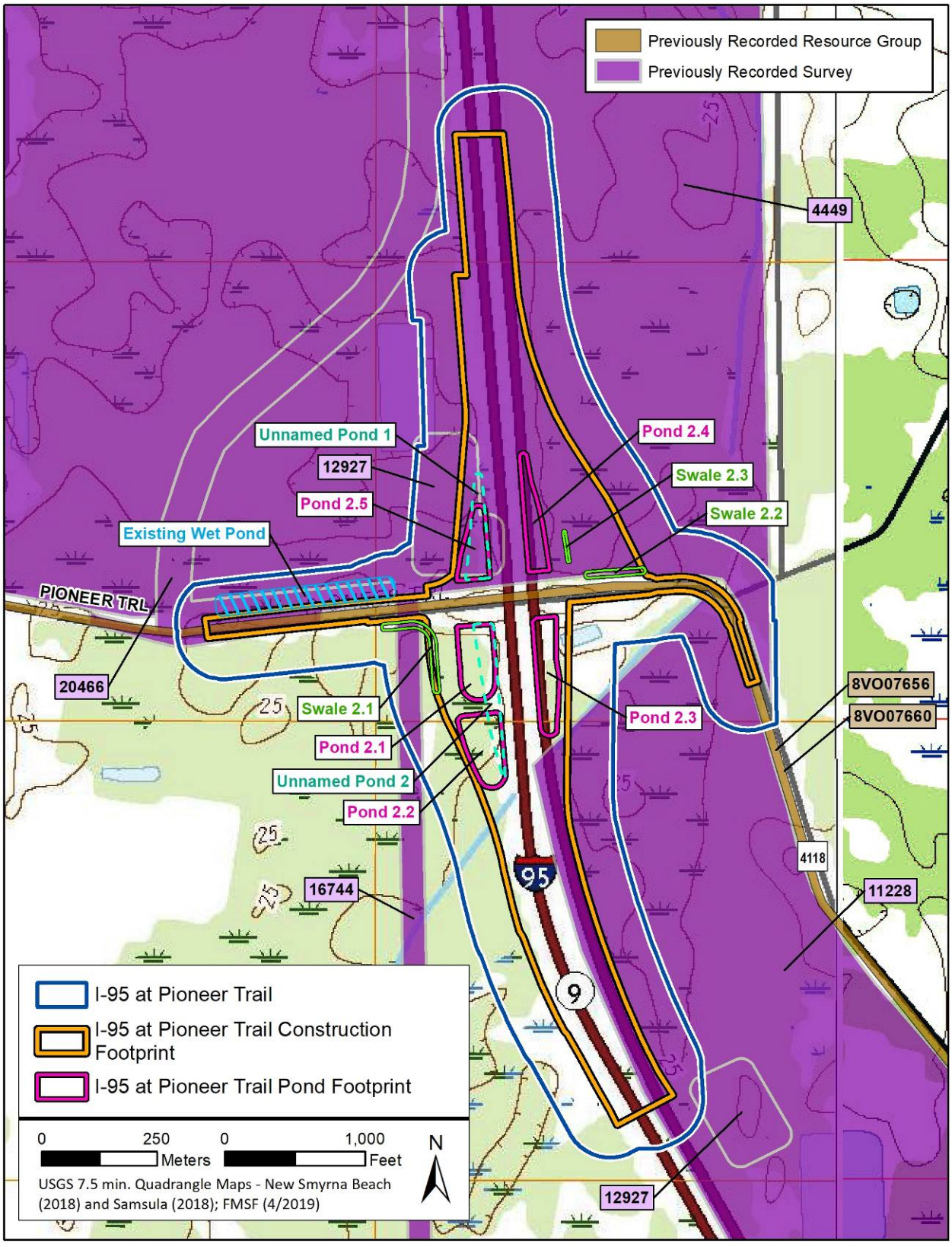

Figure 4. Previously documented cultural resources within the I-95 at Pioneer Trail APE.

Table 1. Previous Cultural Resource Assessment Surveys within the I-95 at Pioneer Trail APE.

FMSF No.	Title	Year	Reference
20466	Cultural Resource Assessment Survey of the South Williamson Boulevard Extension Corridor, Volusia County, Florida	2013	SEARCH, Inc.
16744	Cultural Resources Reconnaissance Survey, Gaco-Pirolo 230kV Transmission Line, Volusia County, Florida	2009	South Arc, Inc.
11228	An Archaeological and Historical Survey of the Nevel Property in Volusia County, Florida	2004	Panamerican Consultants, Inc.
12927	Cultural Resource Assessment Survey of I-95 from SR50 in Volusia County to North of SR600/US92 in Brevard County Project Development and Environment Study	2006	SEARCH
4449	Historic Properties Survey of Port Orange, Florida: A Study of the Historic Architectural Resources of Port Orange and Recommendations for Their Preservation	1996	Historic Property Associates

southeast of the project area, between I-95 and CR 4118 to the south of Pioneer Trail. This investigation did not include shovel tests within the current project area due to the presence of a wetland. No cultural resources were encountered during the survey. FMSF Survey No. 12927 conducted an archaeological and architectural survey of proposed ponds associated with improvements along I-95 in Volusia and Brevard Counties. It is unknown if any shovel tests were excavated within the current project APE; however, no cultural resources or archaeological occurrences were documented near Pioneer Trail within the I-95 right-of-way. FMSF Survey No. 16744 conducted an archaeological and historical architecture survey of the 15-mile long Gaco-Pirolo transmission line. The survey included a corridor that began on Pioneer Trail, approximately .18 miles (390 meters) west of the I-95 southbound overpass and continued south away from the current project APE. No shovel tests were excavated during this survey. FMSF Survey No. 20466 conducted a cultural resource assessment survey of the South Williamson Boulevard extension, from South Williamson Boulevard to Pioneer Trail. Nine shovel tests were excavated within the current project area west of I-95, and all were negative for cultural material.

The FMSF review also indicates that two cultural resources have been previously recorded within the project APE (**Table 2;** see **Figure 4**). Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660) are historic trails utilized by early settlers in the area and possibly Native Americans prior to that. Within the project APE these resources follow the same route, running east and west through the central portion of the APE. Subsurface testing during a previous survey of Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660) failed to produce cultural material or identify cultural features (SEARCH 2013). Survey No. 20466 concluded that because these historic trails have been converted to modern asphalt paved roads, they retain very little historical integrity. Even though the trails were important to the development of the area, their diminished historical integrity prompted the State Historic Preservation Officer (SHPO) to evaluate previously recorded segments of both of these linear resources, including the majority of the sections contained within the current project APE, as ineligible for inclusion in the NRHP (SEARCH 2013); however, the FMSF also

indicates insufficient information to evaluate these resources, presumably because the entirety of these roads have not been documented.

Table 2. Previously Recorded Cultural Resources within the I-95 at Pioneer Trail APE.

Resource Group				
FMSF No.	**Name**	**Time Period**	**Surveyor Evaluation**	**SHPO Evaluation**
8VO07656	Fort Kingsbury to New Smyrna Road	American Civil War, 1861-1865; Nineteenth century American, 1821-1899.	Ineligible for NRHP	Ineligible/Insufficient information
8VO07660	Pioneer Trail	American Civil War, 1861-1865; Nineteenth century American, 1821-1899.	Ineligible for NRHP	Ineligible/insufficient information

HISTORIC MAP AND AERIAL PHOTOGRAPH REVIEW

Historic maps and aerial photographs were examined in order to identify past land use in the vicinity of the I-95 at Pioneer Trail APE. The earliest detailed maps consulted were General Land Office (GLO) survey maps. The GLO maps were created by government land surveyors during the nineteenth century as part of the surveying, platting, and sale of public lands. These maps characteristically show landscape features such as vegetation, bodies of water, roads, and other features. 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 17 South, Range 33 East created in 1850 shows some potential signs of development in the area (**Figure 5**) (GLO 1850). Most notably, two roads are illustrated traveling in largely north-south directions to the east and west of the APE. These roads connect Spanish land grants in this vicinity, including a grant for Joseph Bonelly located to the east and outside of the project area. Though all of these features are illustrated near the project area, none of them cross into the APE. The land in Section 9 is divided into individual parcels, and two of these plots are within the project boundaries; however, no claims for these plots were located.

By the late nineteenth century, railroads had entered Volusia County, as evidenced on an 1890 map (Norton 1890). According to this map, the St. Johns and Halifax Railway traveled down the Atlantic Coast and ended at Daytona Beach, north of New Smyrna, while the JT&KW roughly followed the route of the St. Johns River; however, the latter built a line that extended eastward across the county, traveling through Lake Helen and Glencoe before arriving at New Smyrna. This map also labels Glencoe twice—once as a stop on the railroad just west of New Smyrna and one north of this point along Turnbull Bay.

State highway maps from the early twentieth century show a roadway traveling between Deland and New Smyrna; this is first evident on the 1917 highway map, which shows the road traveling in a west-northwest direction from New Smyrna and possibly through the project vicinity (Florida State Road Department [FSRD] 1917). Neither the 1926 nor the 1939 map provide additional details in terms of settlements, other roadways, etc. that would verify that

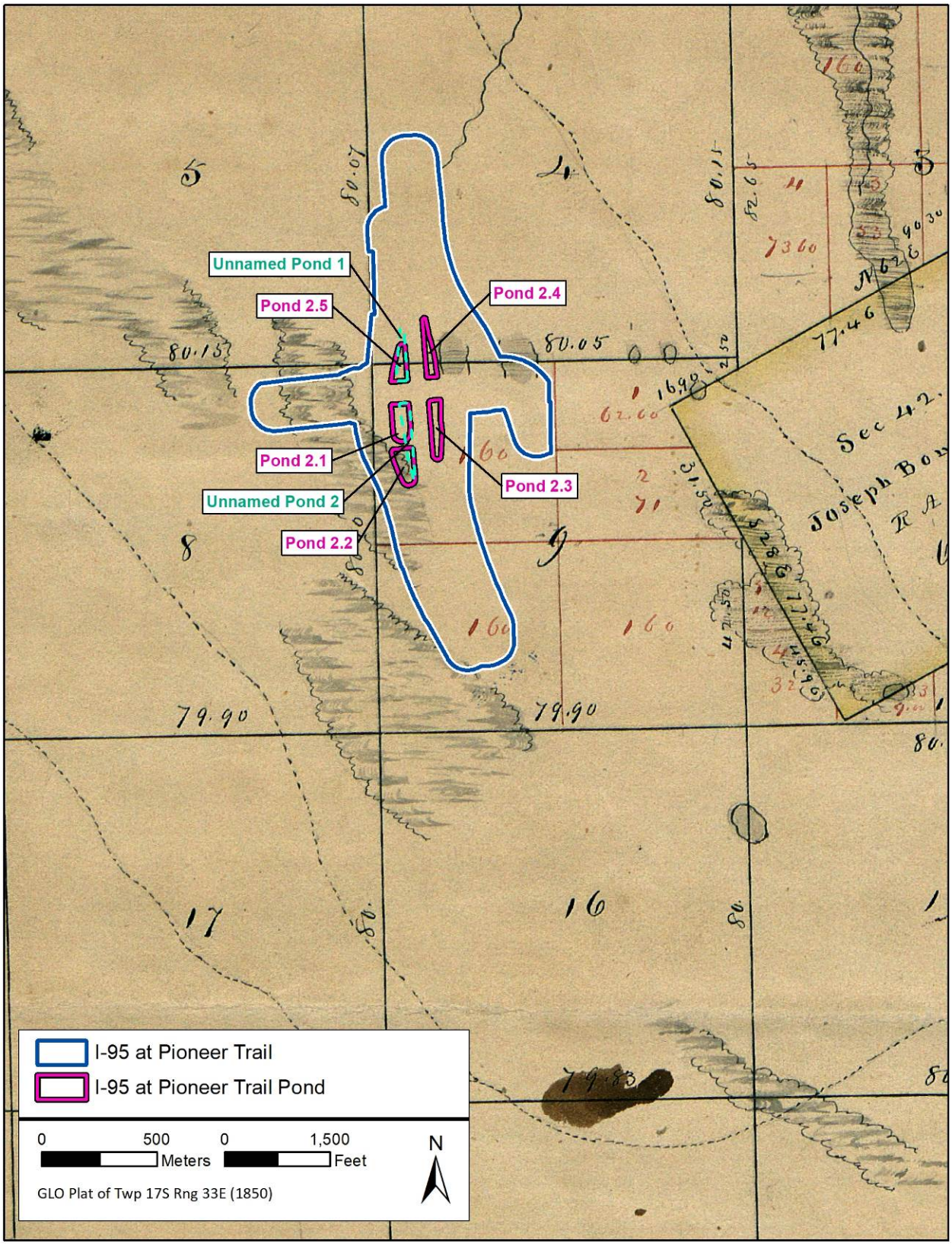

Figure 5. 1850 GLO Plat of Township 17 South, Range 33 East.

this road followed the same route as today's Pioneer Trail, though they appear to travel in a similar direction. By 1939, the road is labeled SR 75 (FSRD 1926, 1939).

An aerial photograph from 1943 does show a road traveling southeast to northwest before turning north and entering the APE; this road then turns westward, crosses through the center of the project area, and continues out of the project boundaries (**Figure 6**) (US Department of Agriculture [USDA] 1943). This road does follow the same route as today's Pioneer Trail. An additional road that travels from the northeast enters the project area and connects with Pioneer Trail inside the APE. What appears to be a canal also crosses though the northern portion of the project area. Most of the land within the APE is covered by swamps and various plant life, with no structures or other developments outside of the roads readily apparent.

The highway is labeled as SR 40A on topographic maps from the late 1950s and early 1960s, which also show the road crossing through the APE in a similar manner as mentioned above (**Figure 7**) (US Geological Survey [USGS] 1956, 1960). The northeast to southwest road that connects with SR 40A within the project area is also illustrated, as is the canal crossing through the northern portion of the APE. No structures are evident within the project boundaries, and much of the land is shown as covered by swampland. By 1973, I-95 had been constructed, evidenced by an aerial photograph from that year (**Figure 8**) (USDA 1973). The new highway passes north-south through the center of the APE. Additionally, a powerline corridor is evident passing into the project area on the west side of I-95.

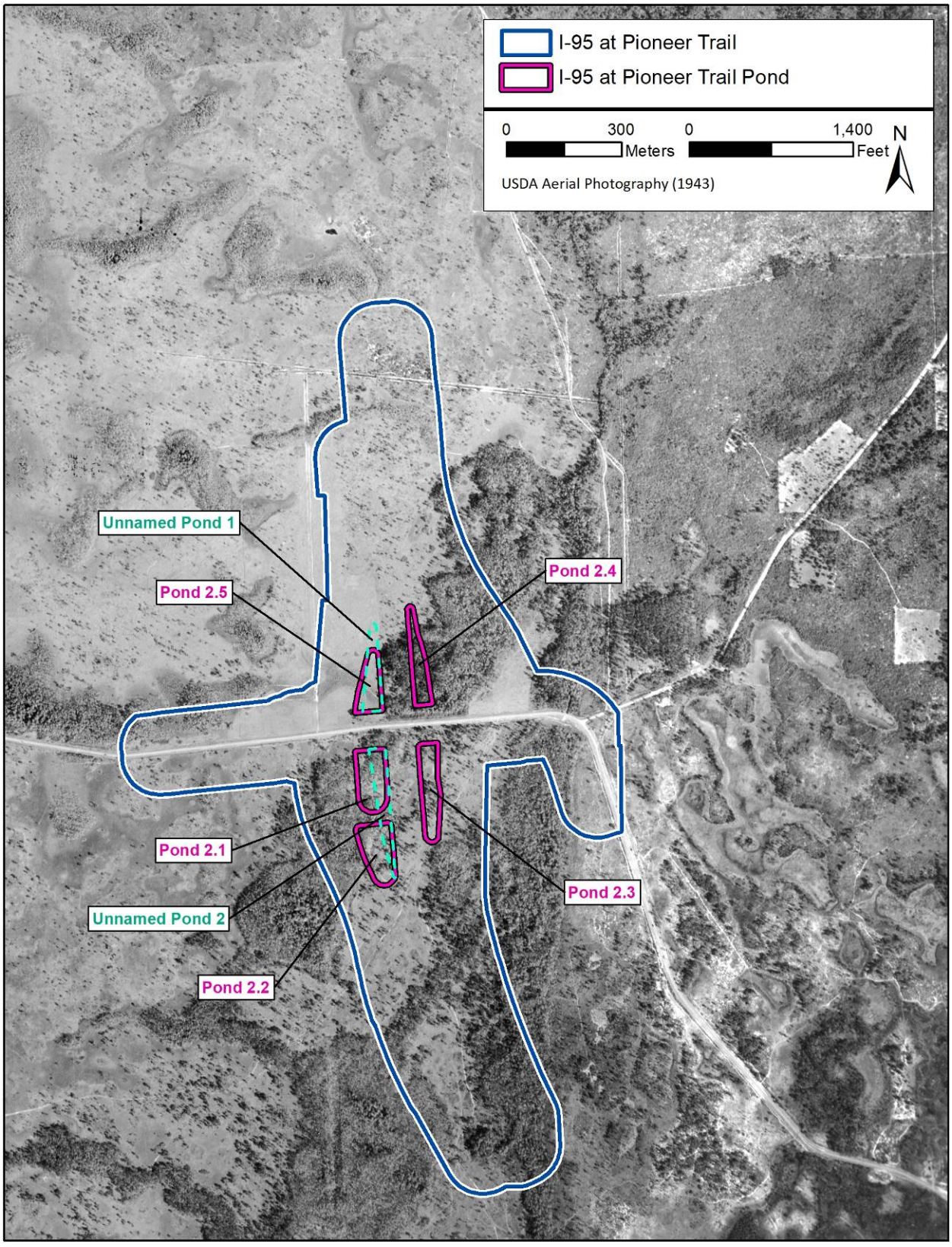

Figure 6. 1943 USDA aerial photograph of project area.

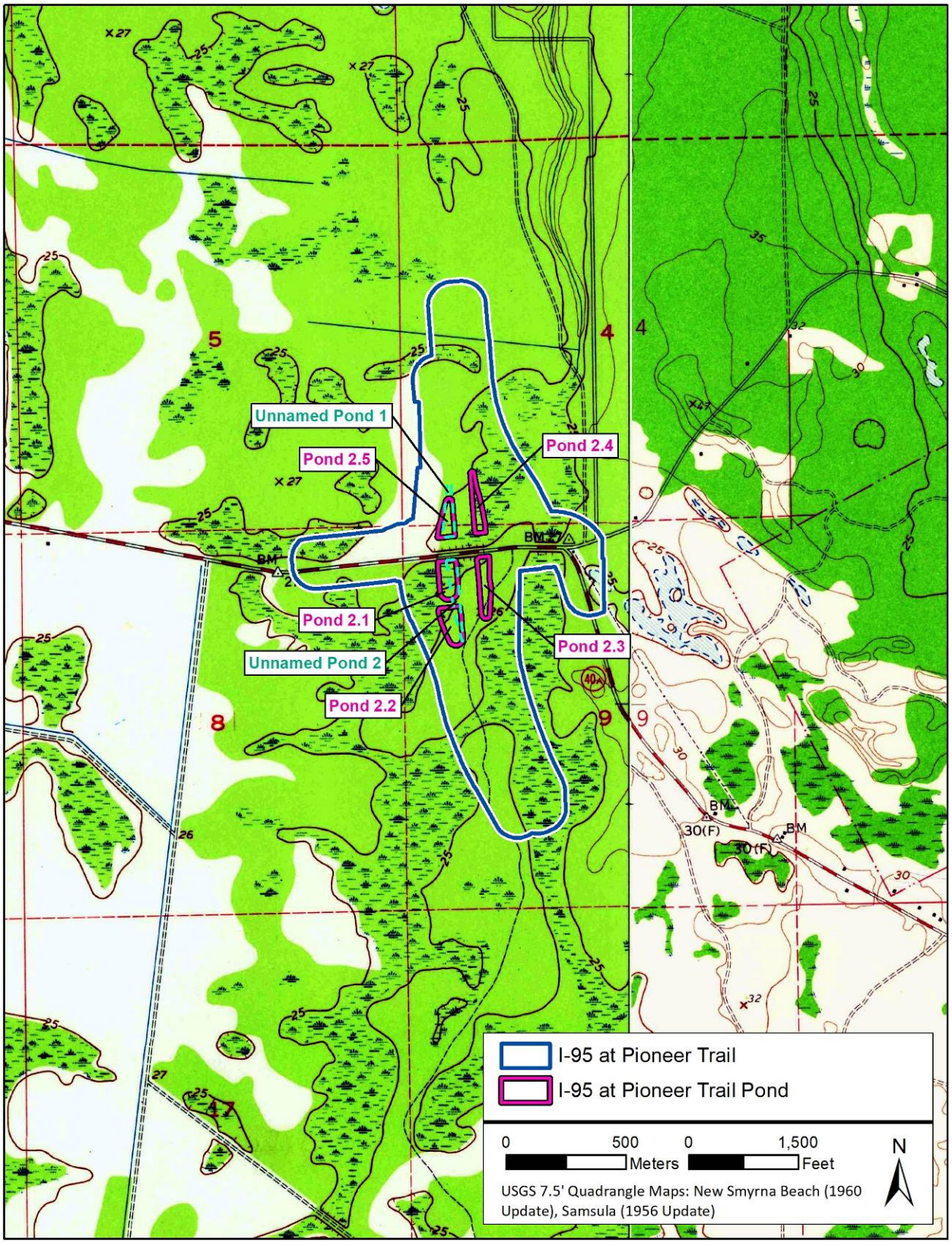

Figure 7. 1956 and 1960 quadrangle maps of project area.

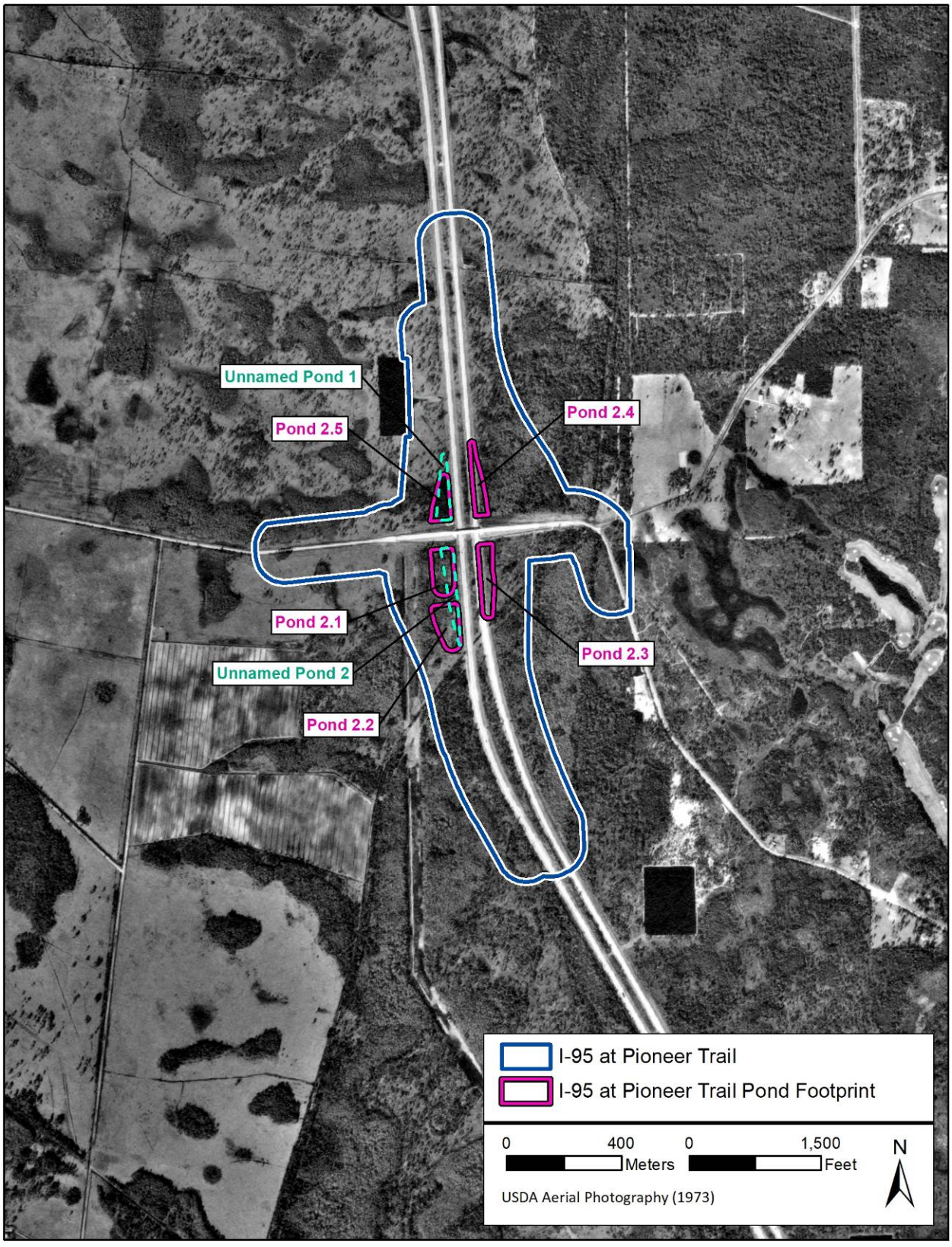

Figure 8. 1973 USDA aerial photograph of project area.

RESEARCH DESIGN

PROJECT GOALS

A research design is a plan to coordinate the cultural resource investigation from inception to the completion of the project. This plan should minimally account for three things: (1) it should make explicit the goals and intentions of the research, (2) it should define the sequence of events to be undertaken in pursuit of the research goals, and (3) it should provide a basis for evaluating the findings and conclusions drawn from the investigation.

The goal of this cultural resource survey was to locate and document evidence of historic or prehistoric occupation or use within the APE (archaeological or historic sites, historic structures, or archaeological occurrences [isolated artifact finds]), and to evaluate these for their potential eligibility for listing in the NRHP. The research strategy was composed of background investigation, a historical document search, and field survey. The background investigation involved a perusal of relevant archaeological literature, producing a summary of previous archaeological work undertaken near the project area. The FMSF was checked for previously recorded sites within the project corridor, which provided an indication of prehistoric settlement and land-use patterns for the region. Current soil surveys, vegetation maps, and relevant literature were consulted to provide a description of the physiographic and geological region of which the project area is a part. These data were used in combination to develop expectations regarding the types of archaeological sites that may be present and their likely locations (site probability areas).

The historical document search involved a review of primary and secondary historic sources as well as a review of the FMSF for any previously recorded historic structures. The original township plat maps, early aerial photographs, and other relevant sources were checked for information pertaining to the existence of historic structures, sites of historic events, and historically occupied or noted aboriginal settlements within the project limits.

NRHP CRITERIA

Cultural resources identified within the project 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. NRHP-eligible districts and buildings must also possess historic significance, historic integrity, and historical context.

CULTURAL RESOURCE POTENTIAL

Based on an examination of environmental variables (soil drainage, access to wetlands and marine resources, relative elevation), as well as the results of previously conducted surveys, the project APE was considered to have a low potential for encountering prehistoric archaeological sites. Although Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660) intersect the APE, shovel testing during a previous survey (Survey No. 20466) of 8VO07656 and 8VO07660 within the current APE yielded no cultural resources. Thus, the potential for encountering intact historic cultural resources was considered low.

SURVEY METHODS

Archaeological Field Methods

The Phase I CRAS consisted of pedestrian survey and systematic subsurface shovel testing within the proposed interchange right-of-way and pond footprints according to the potential for containing buried archaeological sites. The right-of-way and pond footprints were tested at 100-meter (328-foot) intervals or judgmentally depending on soil drainage characteristics and topography observed in the field.

Shovel tests measured approximately 50 centimeters (19.7 inches) in diameter and were excavated to a minimum depth of 100 centimeters below surface (cmbs) (39 inches), unless ground water was encountered. All excavated sediments were screened through 0.64-centimeter (1/4-inch) mesh hardware cloth. The location of each shovel test was marked on aerial photographs and recorded with Wide Area Augmentation System (WAAS)-enabled handheld Global Positioning System (GPS) units. Content, soil strata, and environmental setting for each shovel test was recorded in field notebooks.

Architectural Field Methods

The architectural survey for the project utilized standard procedures for the location, investigation, and recordation of historic properties. In addition to a search of the FMSF for previously recorded historic properties within the project area, SEARCH reviewed USGS quadrangle maps for structures that were constructed prior to 1975. The SEARCH field survey inventoried existing buildings, structures, and other aspects of the built environment within the I-95 at Pioneer Trail APE. SEARCH recorded the location of each historic resource with a WAAS-enabled GPS unit, and plotted it on USGS quadrangle maps and project aerials. SEARCH photographed all identified historic resources with a digital camera, and recorded architectural style, distinguishing characteristics, and present condition on FMSF resource forms. Upon completion of fieldwork, forms and photographs were returned to the SEARCH offices for analysis. SEARCH considered dates of construction, design, architectural features, condition, and integrity, as well as how the resources relate to surrounding landscapes. SEARCH evaluated the resources to assess their significance and recommended them eligible, potentially eligible, or not eligible for NRHP listing.

The CR 4118 Bridge over I-95 (FDOT Bridge No. 790066) is a concrete stringer bridge constructed in 1969. *The 2012 Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* (Federal Register 2012:68793–68795) "relieves federal agencies from the Section 106 requirement to consider the effects of undertakings on the bridge types identified in Section V of this Program Comment" if a bridge does not meet three considerations listed in Section IV (Federal Register 2012:68793). Using these three considerations, SEARCH examined the CR 4118 Bridge over I-95 (FDOT Bridge No. 790066) to determine if the bridge met the qualifications for application of the Program Comment.

First, based on a review of the FMSF, SEARCH determined that the CR 4118 Bridge over I-95 (FDOT Bridge No. 790066) was not listed in or had not been determined eligible for the NRHP. Furthermore, the bridge is not located adjacent to or within an NRHP-listed or -eligible historic district. Second, SEARCH architectural historians examined the bridge and determined that it is not one of the following bridge types: arch bridges, truss bridges, bridges with movable spans, suspension bridges, cable-stayed bridges, or covered bridges. Finally, the CR 4118 Bridge over I-95 (FDOT Bridge No. 790066) was not identified by the latest statewide bridge survey (Archaeological Consultants, Inc. [ACI] 2012) as having "exceptional significance for association with an event or individual, or being a very early or particularly important example of its type in a State or the nation, having distinctive engineering or architectural features that depart from standard designs, such as an aesthetic railing or balustrade, includes spans of exceptional length or complexity, or displaying other elements that were engineered to respond to a unique environmental context" which would except it from the Program Comment (Federal Register 2012:68794).

FDOT Bridge No. 790066 is a concrete stringer structure constructed in 1969 and based on the above considerations for the Program Comment, is excluded from Section 106 consideration

(Federal Register 2012:68793). As such, the bridge was not recorded or evaluated by the present study. The Section 106 responsibilities of FDOT and FHWA have been completed with regard to FDOT Bridge No. 790066.

Laboratory Methods

No artifacts were recovered as a result of this survey, and therefore no laboratory analysis was required.

Curation

The original maps and field notes are presently housed at the Newberry office of SEARCH. The original maps and field notes will be turned over to FDOT, District 5, upon project completion; copies will be retained by SEARCH.

Informant Interviews

No informant interviews were conducted as part of this survey effort.

Certified Local Government Consultation

Volusia County has a Certified Local Government (CLG) to address concerns or provide input on potential cultural resources within a project APE. SEARCH initiated consultation with the office of Mr. Robert Redd, the CLG representative for the County. On February 19, 2019, SEARCH project archaeologist Blue Nelson, MA, emailed Mr. Redd to discuss the project and inquire whether the County might have any concerns or insights related to possible or extant cultural resources within the project APE. In the email, Mr. Nelson provided the project maps to Mr. Redd for review. According to a response from Susan Jackson, a representative for Mr. Redd, the project area is not within an archaeologically sensitive area.

Procedures to Deal with Unexpected Discoveries

Every reasonable effort has been made during this investigation to identify and evaluate possible locations of prehistoric and historic archaeological sites; however, the possibility exists that evidence of cultural resources may yet be encountered within the project limits. Should evidence of unrecorded cultural resources be discovered during construction activities, all work in that portion of the project area must stop. Evidence of cultural resources includes aboriginal or historic pottery, prehistoric stone tools, bone or shell tools, historic trash pits, and historic building foundations. Should questionable materials be uncovered during the excavation of the project area, representatives of SEARCH will assist in the identification and preliminary assessment of the materials. If such evidence is found, the FDHR will be notified within two working days.

In the unlikely event that human skeletal remains or associated burial artifacts are uncovered within the project area, all work in that area must stop. The discovery must be reported to local law enforcement, who will in turn contact the medical examiner. The medical examiner will determine whether or not the State Archaeologist should be contacted per the requirements of Chapter 872.05, Florida Statutes.

RESULTS

ARCHAEOLOGICAL RESOURCES

A total of 40 shovel tests were excavated throughout the project right-of-way and pond footprints (**Figure 9**). Overall, shovel tests revealed wet soils with three strata: dark grayish brown sand to a depth of 25 cmbs (10 inches), below which was gray sand to a depth of 40 cmbs (16 inches), and finally a very dark brown spodic to a depth of 50 cmbs (20 inches). Due to water inundation of the shovel tests, archaeologists typically could not excavate beyond 50 cmbs. Photographs of shovel tests are presented in **Figure 10**. Marked field maps are provided in **Appendix A**.

An additional 27 shovel test locations were investigated along the project right-of-way. All of these locations were in areas that contained buried utilities or standing water. GPS points were taken and photographs were recorded at 100-meter intervals, but no shovel tests were excavated at these locations as testing was infeasible (see **Figure 10**).

No cultural material was recovered and no archaeological sites or archaeological occurrences were identified during the investigation of the I-95 at Pioneer Trail APE. No further archaeological survey is recommended.

ARCHITECTURAL RESOURCES

The architectural survey resulted in the identification and evaluation of two previously recorded historic linear resources within the I-95 at Pioneer Trail APE (**Figure 11**): Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660). These resources follow the same route in the project area, crossing east/west through the central portion of the APE before turning south along the eastern end of the APE. In 2013, the SHPO stated that there was insufficient information to provide an eligibility determination for listing the entirety of these historic linear resources in the NRHP and that segments of 8VO07656 and 8VO07660 would need to be evaluated separately. Fort Kingsbury to New Smyrna Road (8VO07656) is locally significant under NRHP Criterion A as a pioneer trail used during the settlement and development of Volusia County and during the Seminole Wars. The Pioneer Trail (8VO07660) is locally significant under Criterion A as a pioneer trail used during the settlement and

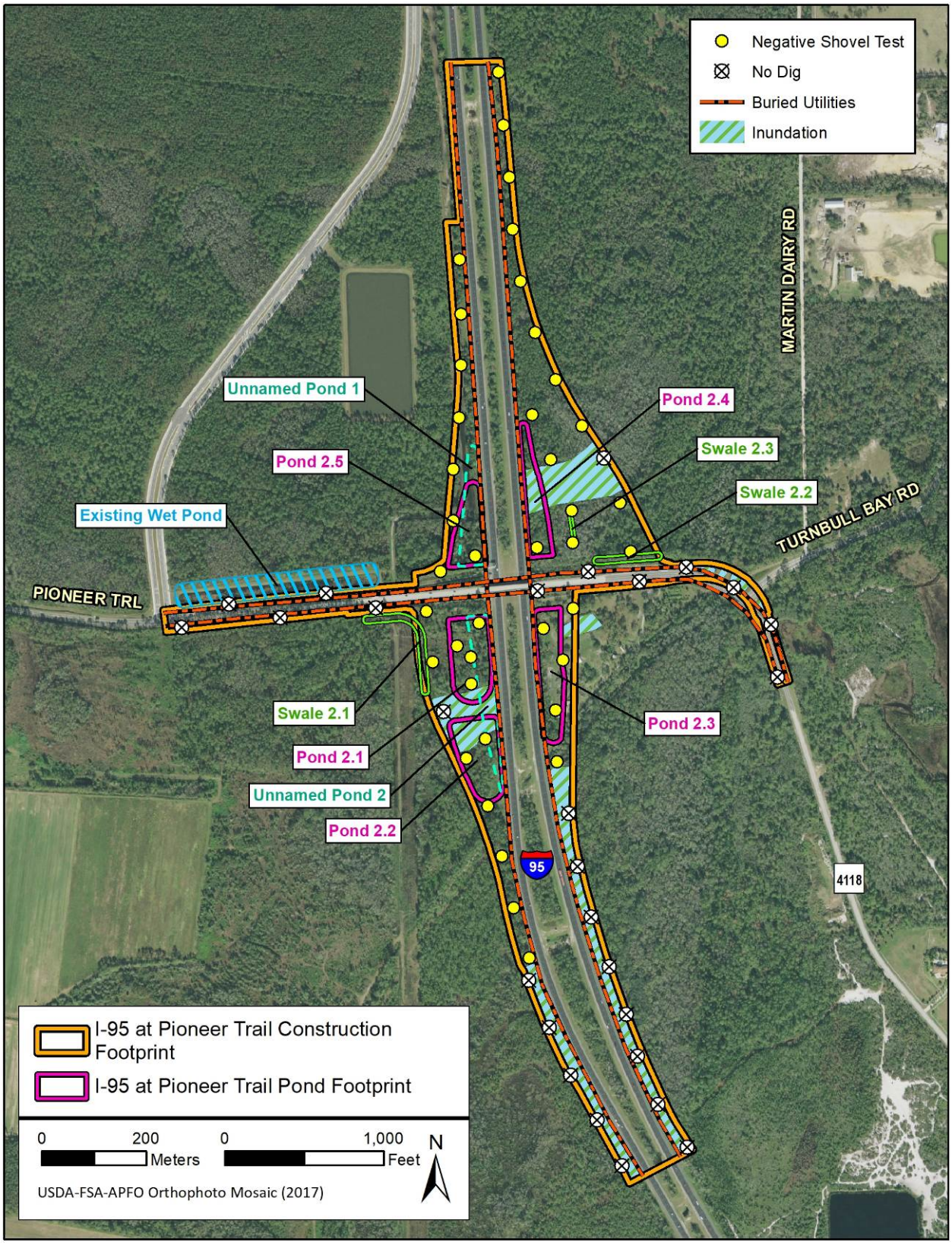

Figure 9. Results of archaeological survey within the I-95 at Pioneer Trail APE.

Figure 10. Top: typical shovel test profiles east (left) and west (right) of I-95. Middle: Inundated areas east (left) and west (right) of I-95. Bottom: Marked buried utilities along the south side (left) and north side (right) of Pioneer Trail.

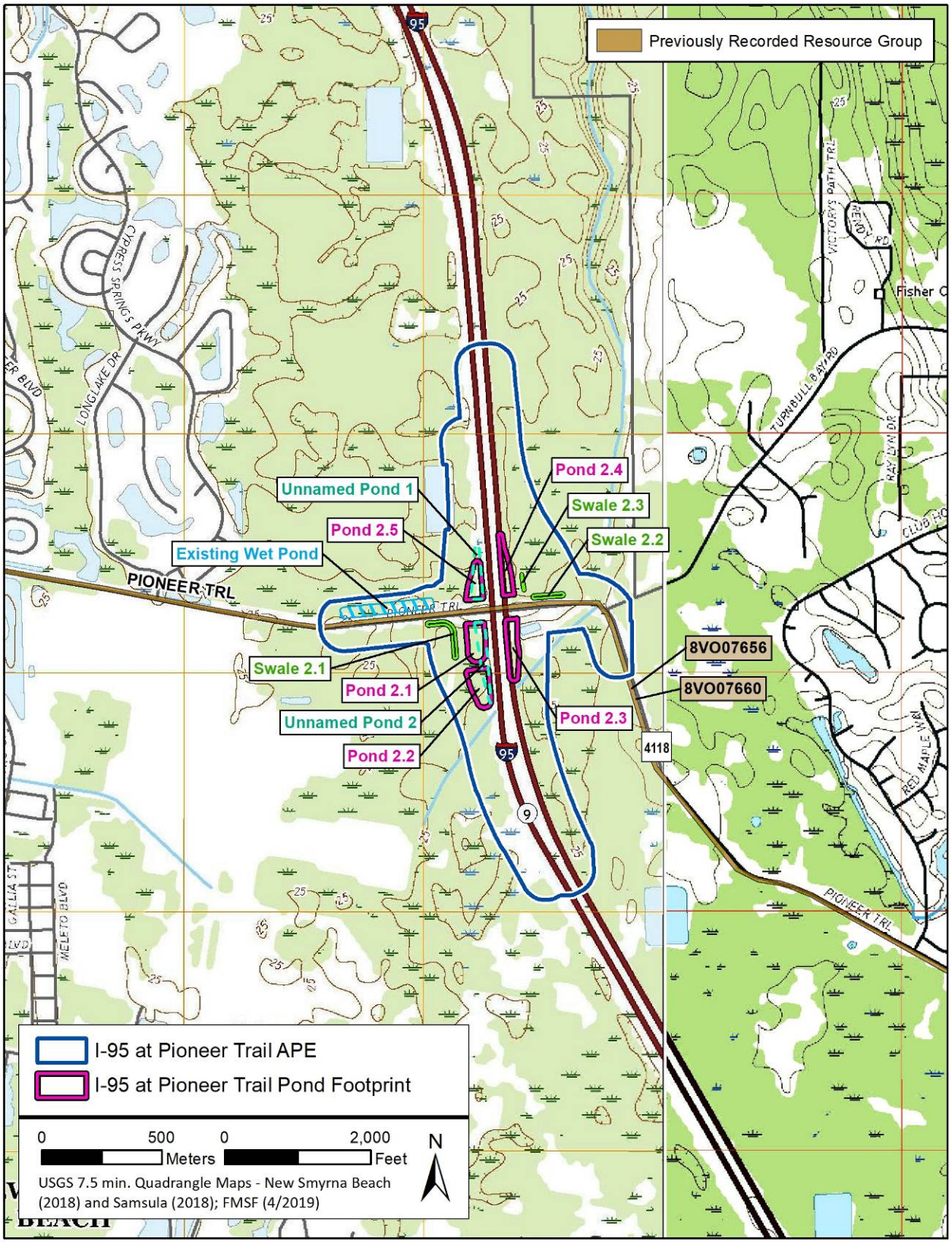

Figure 11. Results of the architectural history survey within the I-95 at Pioneer Trail APE.

development of Volusia County and during the Seminole Wars (SEARCH 2013). Based on the results of the current survey, it is the opinion of SEARCH that the segments of resources 8VO07656 and 8VO07660 within the I-95 at Pioneer Trail APE are locally significant under Criterion A, but lack the necessary historic integrity to convey their significance. Therefore, they are recommended ineligible for listing in the NRHP. Descriptions of Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660) are discussed below, as the presentation of their attributes in a table was deemed insufficient. FMSF forms and their associated maps and photographs are provided in **Appendix B**. The survey log sheet is provided in **Appendix C.**

NRHP EVALUATIONS

Historic Linear Resources

8VO07656, Fort Kingsbury to New Smyrna Road

8VO07656, Fort Kingsbury to New Smyrna Road (**Figure 12**), is a previously recorded linear resource located in Sections 8 and 9 of Township 17 South, Range 33 East, as depicted on the 2018 *Samsula, Fl* USGS quadrangle map (see **Figure 11**). Within the I-95 at Pioneer Trail APE, 8VO07656 starts at the intersection of South Williamson Boulevard and Pioneer Trail (CR 4118) and runs roughly 3,360 feet (1,024 meters) east and turns south for roughly 1,118 feet (341 meters). Outside of the I-95 at Pioneer Trail APE, 8VO07656 extends northeast from FDOT Bridge No. 790124 over the St. Johns River along CR 415, turns east at the junction of CR 415 and CR 4118, and runs along CR 4118 until CR 4118 becomes Enterprise Avenue in New Smyrna Beach. 8VO07656 has been a transportation route in use since 1839, with local significance during the Seminole Wars and during the settlement and development period of Volusia County (SEARCH 2013). According to *Saving Historic Roads: Design and Policy Guidelines*, a route of this kind would be considered a cultural route and most likely developed and evolved from Native American trails, colonial post roads, or simply from convenient connections between villages (Marriott 1998). Eventually, most of these cultural routes were changed and modified into paved roadway corridors, providing little evidence of the original cultural route, as is the case for 8VO07656 (Marriott 1998). 8VO07656 has been modernized to include a two-lane asphalt road with signage, above-ground utilities, and nonhistoric buildings located adjacent to the

Figure 12. Resource 8VO07656, facing west.

resource. Major changes occurred in the area when I-95 was constructed in the 1960s (**Figure 13**), as a large number of trees were removed, a man-made pond was created, FDOT Bridge 790066 was built, and the land below the Fort Kingsbury to New Smyrna Road was carved away to allow the interstate to pass below it.

Figure 13. Historic aerials of the I-95 at Pioneer Trail APE. Above: 1943. Below: 1969. Sources: University of Florida Digital Collections and FDOT.

Assessment

8VO07656, Fort Kingsbury to New Smyrna Road, is a previously recorded linear resource within the I-95 at Pioneer Trail APE. 8VO07656 is locally significant under Criterion A for its use during the Seminole Wars and as a pioneer trail during the settlement and development of Volusia County. 8VO07656 is not significant under Criterion B because it lacks association with any person(s) significant in history. 8VO07656 is not significant under Criterion C as it lacks any engineering distinction nor does it embody any distinctive methods of construction. Finally, 8VO07656 is not significant under Criterion D because it lacks the potential to yield further information of historical importance due to the high level of disturbance.

While 8VO07656 is locally significant under Criterion A, it lacks the necessary historic integrity required to convey its significance. The original trail has been covered by a two-lane asphalt road while above-ground utilities and nonhistoric structures follow its alignment within the APE. As seen in **Figure 13**, the construction of I-95 in the 1960s resulted in a loss of integrity as a bridge and new highway crossed 8VO07656. Although 8VO07656 still maintains its

integrity of location, it no longer exhibits its original design, setting, materials, feeling, or historical association as a pioneer trail due to these modern changes (**Figure 14**). As such, it is the opinion of SEARCH that this portion of 8VO07656 within the I-95 at Pioneer Trail APE is ineligible for the NRHP as a non-contributing segment to the overall 8VO07656 linear resource.

Figure 14. Resource 8VO07656, facing north.

8VO07660, Pioneer Trail

8VO07660, Pioneer Trail (**Figure 15**), is a previously recorded linear resource located in Sections 8 and 9 of Township 17 South, Range 33 East, as depicted on the 2018 *Samsula, Fl.* USGS quadrangle map (see **Figure 11**). Following the same route as 8VO07656 within the I-95 at Pioneer Trail APE, 8VO07660 starts at the intersection of South Williamson Boulevard and Pioneer Trail (CR 4118) and runs roughly 3,360 feet (1,024 meters) east and turns south for roughly 1,118 feet (341 meters). Outside of the I-95 at Pioneer Trail APE, 8VO07660 extends roughly east along CR 4118 starting at the junction of CR 4118 and SR 44 until CR 4118 becomes Enterprise Ave in New Smyrna Beach. 8VO07660 has been a transportation route in use since 1839, with local significance during the Seminole Wars and during the settlement and development period of Volusia County (SEARCH 2013). According to *Saving Historic Roads: Design and Policy Guidelines*, a route of this kind would be considered a cultural route and most likely developed and evolved from Native American trails, colonial post roads, or simply from convenient connections between villages (Marriott 1998). Eventually, most of these cultural routes were changed and modified into paved roadway corridors providing little evidence of the original cultural route, as is the case for 8VO07660 (Marriott 1998). 8VO07660 has been modernized to include a two-lane asphalt road with signage, above-ground utilities, and nonhistoric buildings adjacent to the resource. Major changes occurred in the area when I-95 was constructed in the 1960s (see **Figure 13**), as a large number of trees were removed, a man-made pond was created, FDOT Bridge 790066 was built, and the land below Pioneer Trail was carved away to allow the interstate to pass below it.

Figure 15. Resource 8VO07660, facing west.

Assessment

8VO07660, Pioneer Trail, is a previously recorded linear resource within the I-95 at Pioneer Trail APE. 8VO07660 is significant under Criterion A for its use as a pioneer trail during the settlement and development of Volusia County. 8VO07660 is not significant under Criterion B because it lacks association with any person(s) significant in history. 8VO07656 is not significant under Criterion C as it lacks any engineering distinction nor does it embody any distinctive methods of construction. Finally, 8VO07660 is not significant under Criterion D because it lacks the potential to yield further information of historical importance due to the high level of disturbance.

While 8VO07660 is locally significant under Criterion A, it lacks the necessary historic integrity required to convey its significance. The original trail has been covered by a two-lane asphalt road while above-ground utilities and nonhistoric structures follow its alignment within the APE. As seen in **Figure 13**, the construction of I-95 in the 1960s resulted in a loss of integrity as a bridge and new highway crosses 8VO07660. Although 8VO07660 still maintains its integrity of location, it no longer exhibits its original design, setting, materials, feeling, or historical association as a pioneer trail due to these modern changes (**Figure 16**). As such, it is the opinion of SEARCH that this portion of 8VO07660 within the I-95 at Pioneer Trail APE is ineligible for the NRHP as a non-contributing segment to the overall 8VO07660 linear resource.

Figure 16. Resource 8VO07660, facing east and showing above-ground disturbances.

CONCLUSION AND RECOMMENDATIONS

This report presents the findings of a Phase I CRAS conducted in support of a proposed interchange at Pioneer Trail on I-95 in Volusia County, Florida. The FDOT, District 5 is proposing the construction of an interchange with retention ponds at Milepost 19.032 on I-95. This interchange will be constructed between two existing interchanges: SR 421/Dunlawton Avenue, approximately 4.25 miles (6.8 kilometers) to the north, and SR 44/Lytle Avenue, approximately 2.75 miles (4.43 kilometers) to the south.

The archaeological survey included the excavation of 40 shovel tests within the project APE. No artifacts were recovered and no archaeological sites or occurrences were identified within the APE. No further archaeological survey is recommended in support of the proposed project.

The architectural survey resulted in the identification and evaluation of two previously recorded historic linear resources within the I-95 at Pioneer Trail APE: Fort Kingsbury to New Smyrna Road (8VO07656) and Pioneer Trail (8VO07660); these resources follow the same route within the project APE. In 2013, the SHPO stated that there was insufficient information to provide an eligibility determination for listing the overall historic linear resources, 8VO07656 and 8VO07660, in the NRHP, and that segments of 8VO07656 and 8VO07660 would need to be evaluated separately. Fort Kingsbury to New Smyrna Road (8VO07656) is locally significant under NRHP Criterion A as a pioneer trail used during the settlement and development of Volusia County and during the Seminole Indian Wars. The Pioneer Trail (8VO07660) is locally significant under Criterion A as a pioneer trail used during the settlement and development of Volusia County and during the Seminole Indian Wars (SEARCH 2013). Based on the results of the current survey, it is the opinion of SEARCH that the segments of resources 8VO07656 and 8VO07660 within the I-95 at Pioneer Trail APE are locally significant under Criterion A, but lack the necessary historic integrity to convey their significance and are recommended ineligible for listing in the NRHP.

It is the opinion of SEARCH that the proposed construction of the I-95 interchange at Pioneer Trail will have no effect on cultural resources listed or eligible for listing in the NRHP. No further work is recommended.

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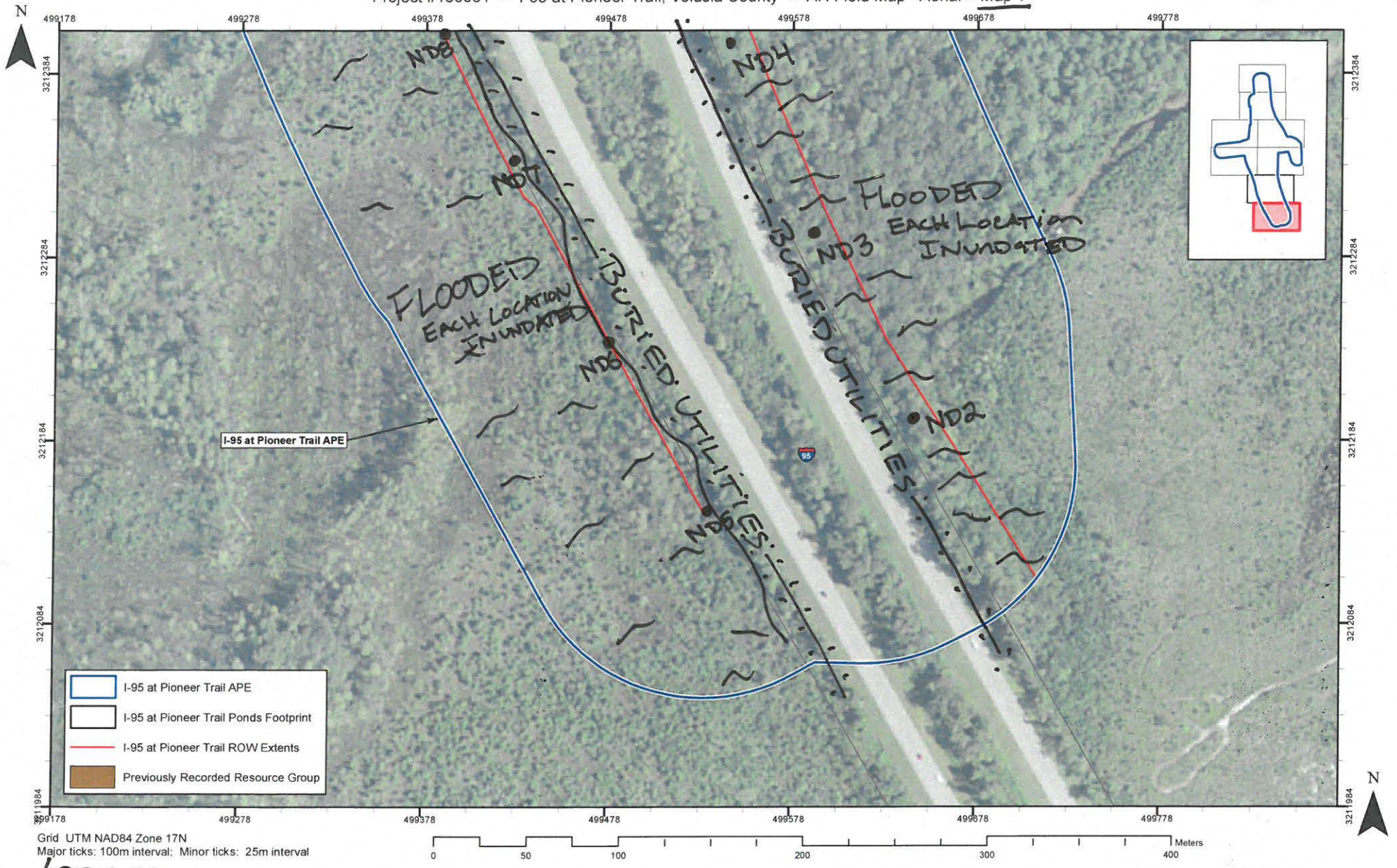
APPENDIX A.

MARKED FIELD MAPS

Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 1

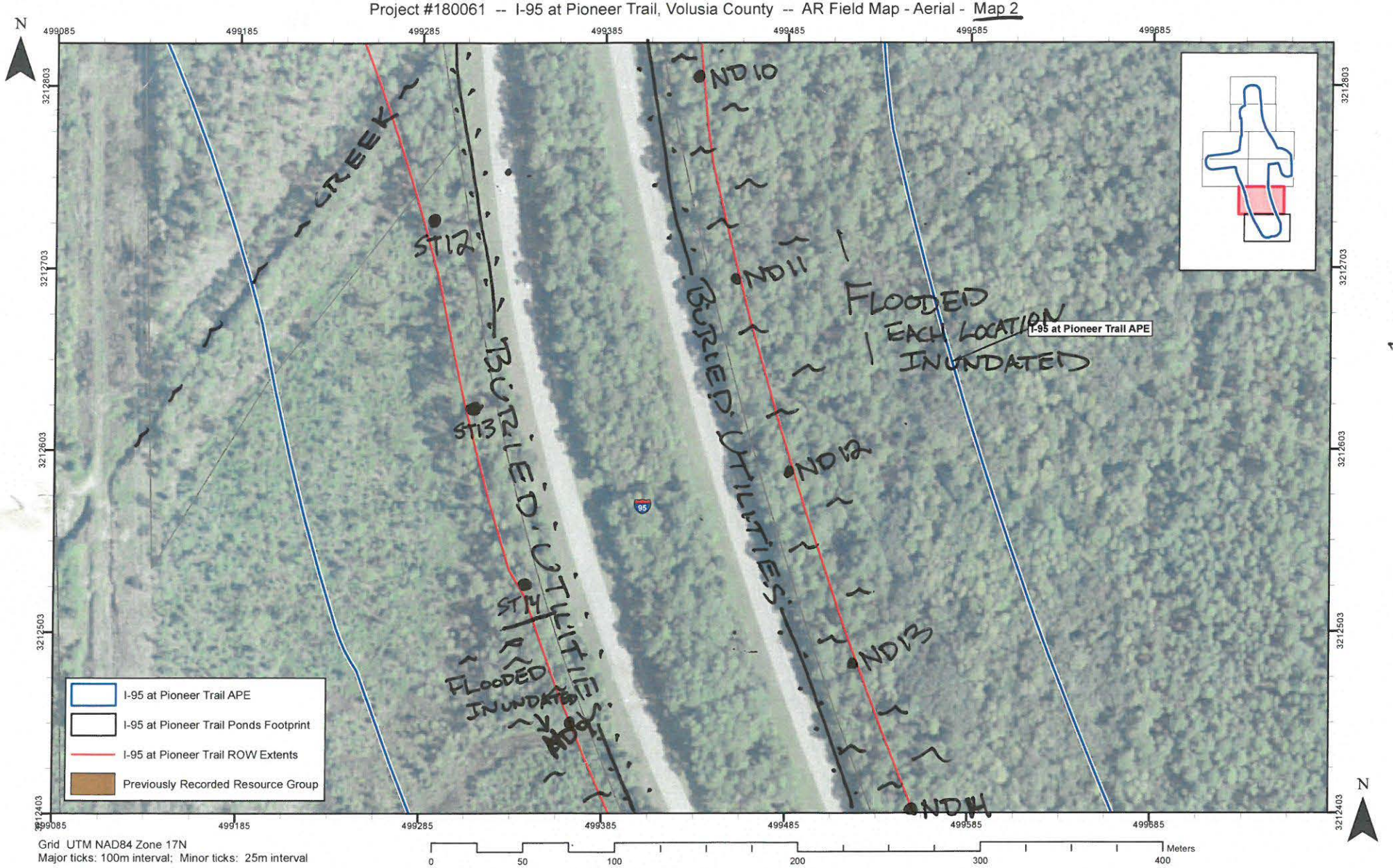


MAPS/GPS KEY:

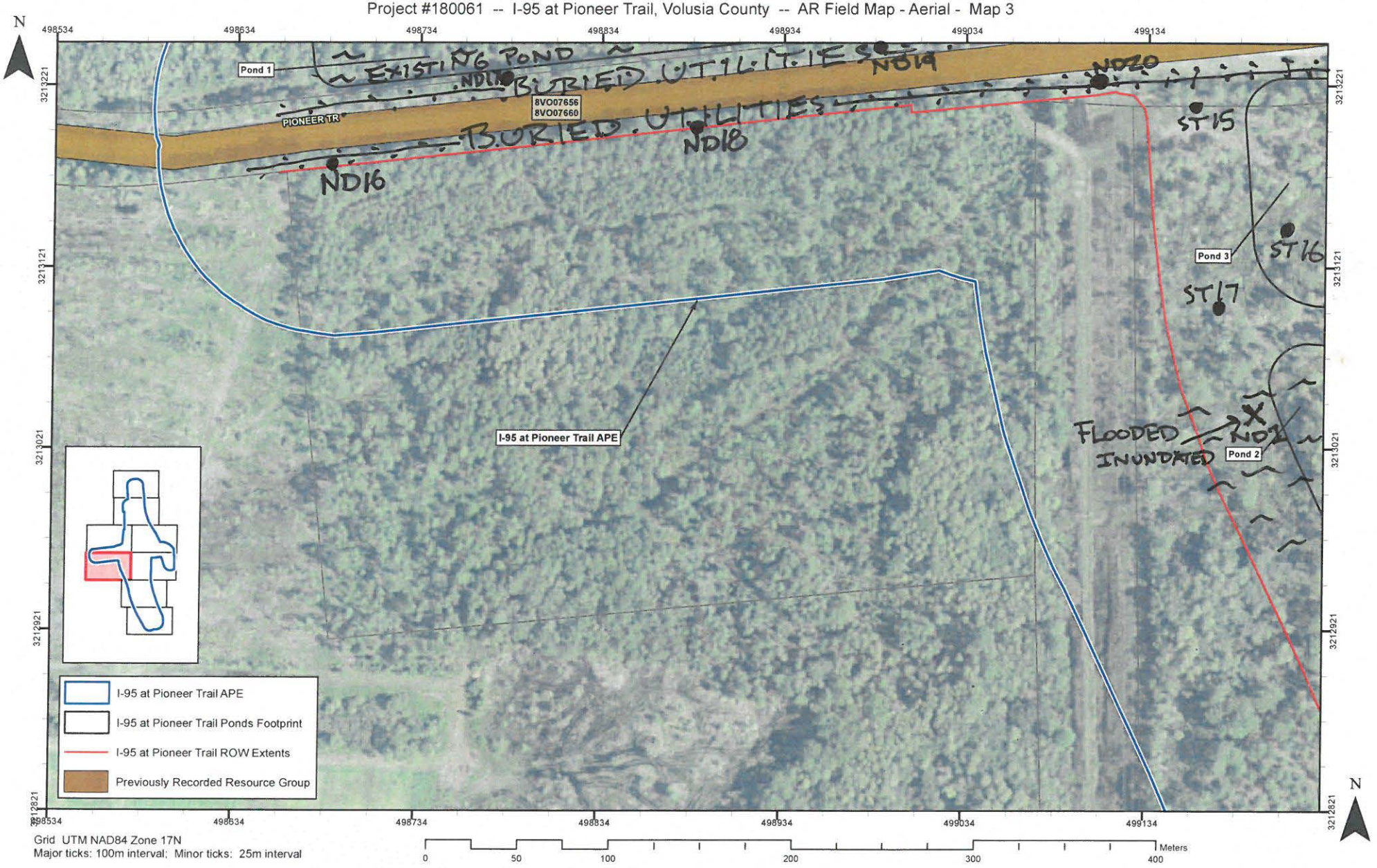
●= WAYPOINT; ND= NO DIG

ST= SHOVEL TEST (ALL NEGATIVE)

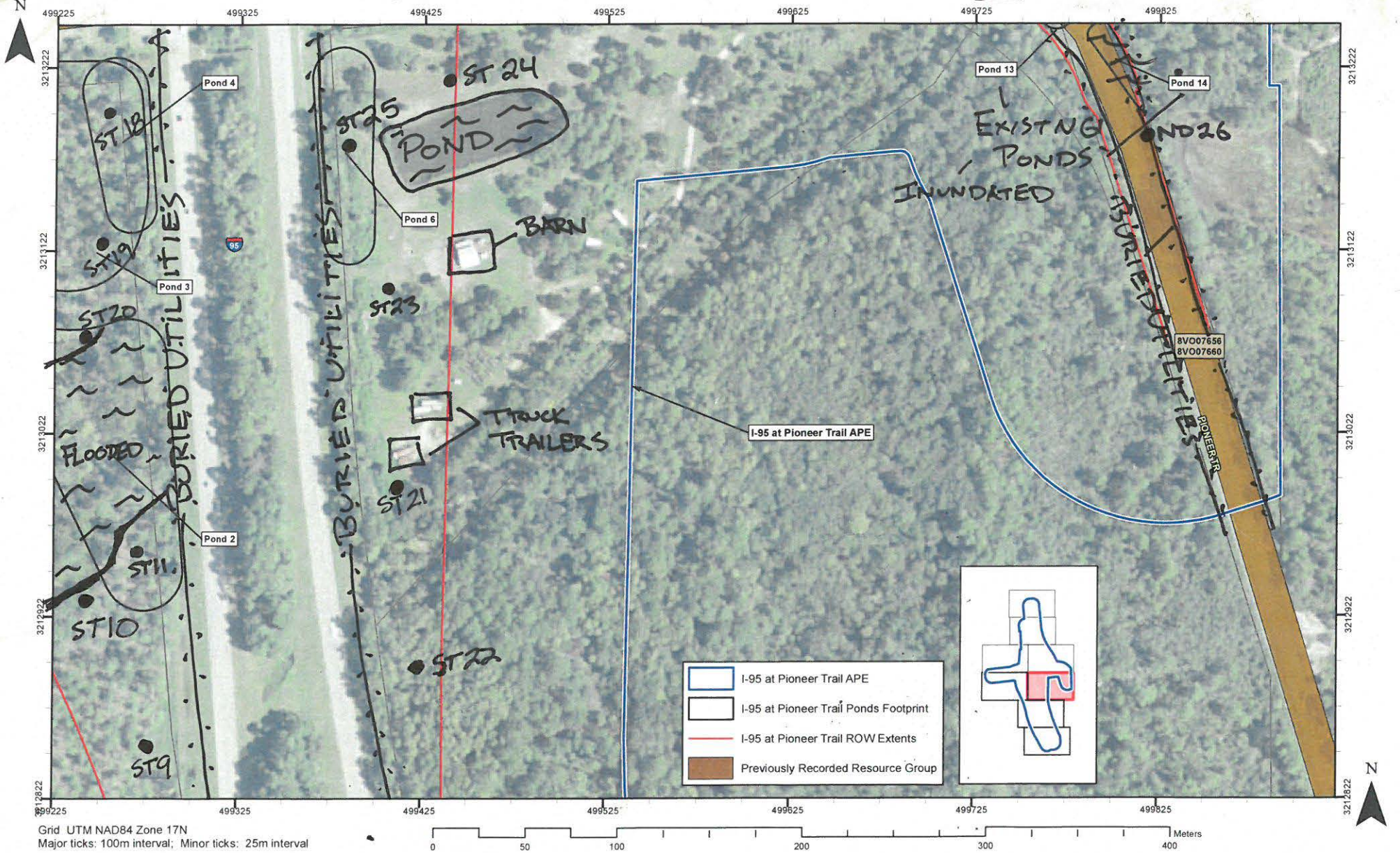
Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 2



Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 3



Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 4



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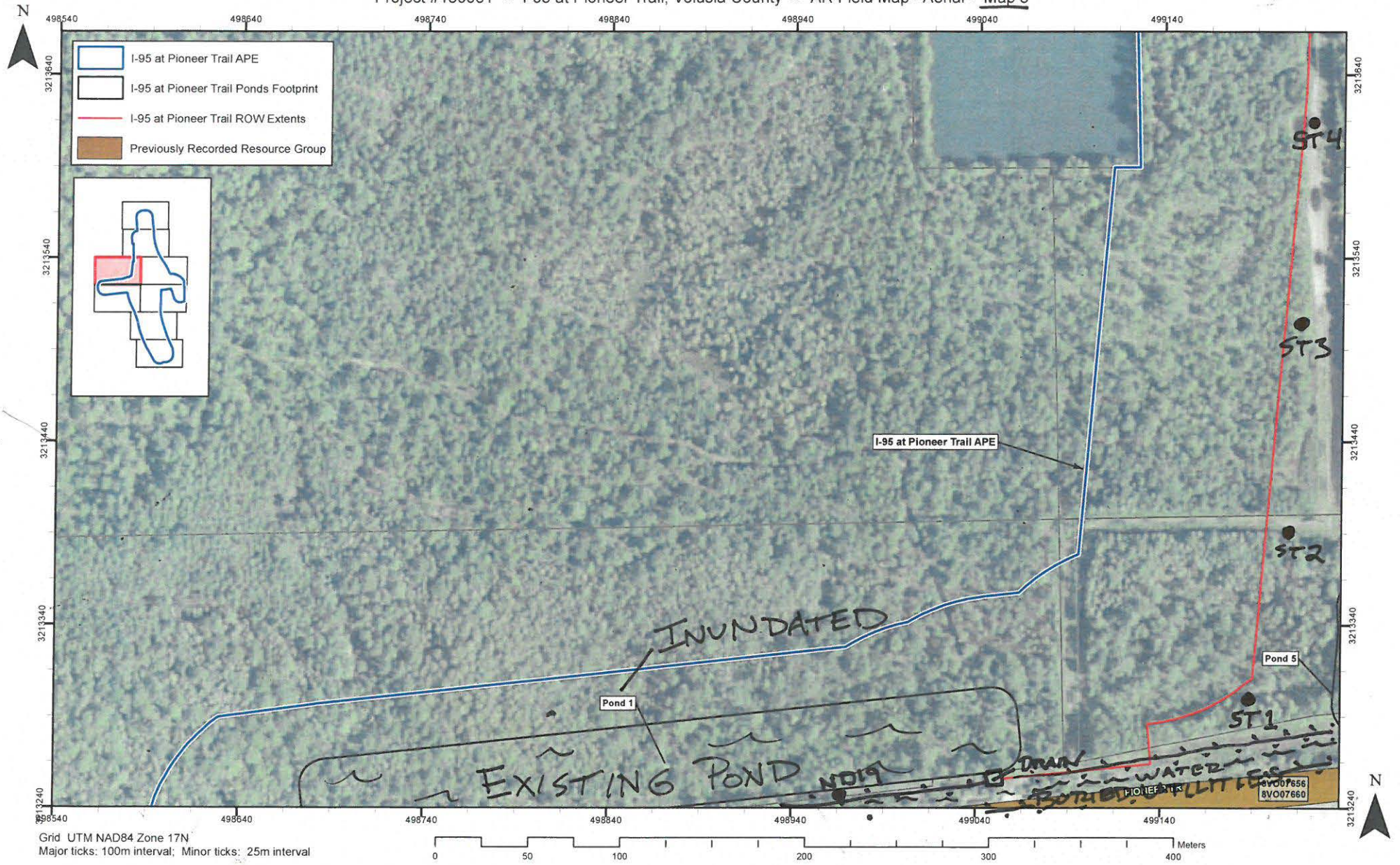
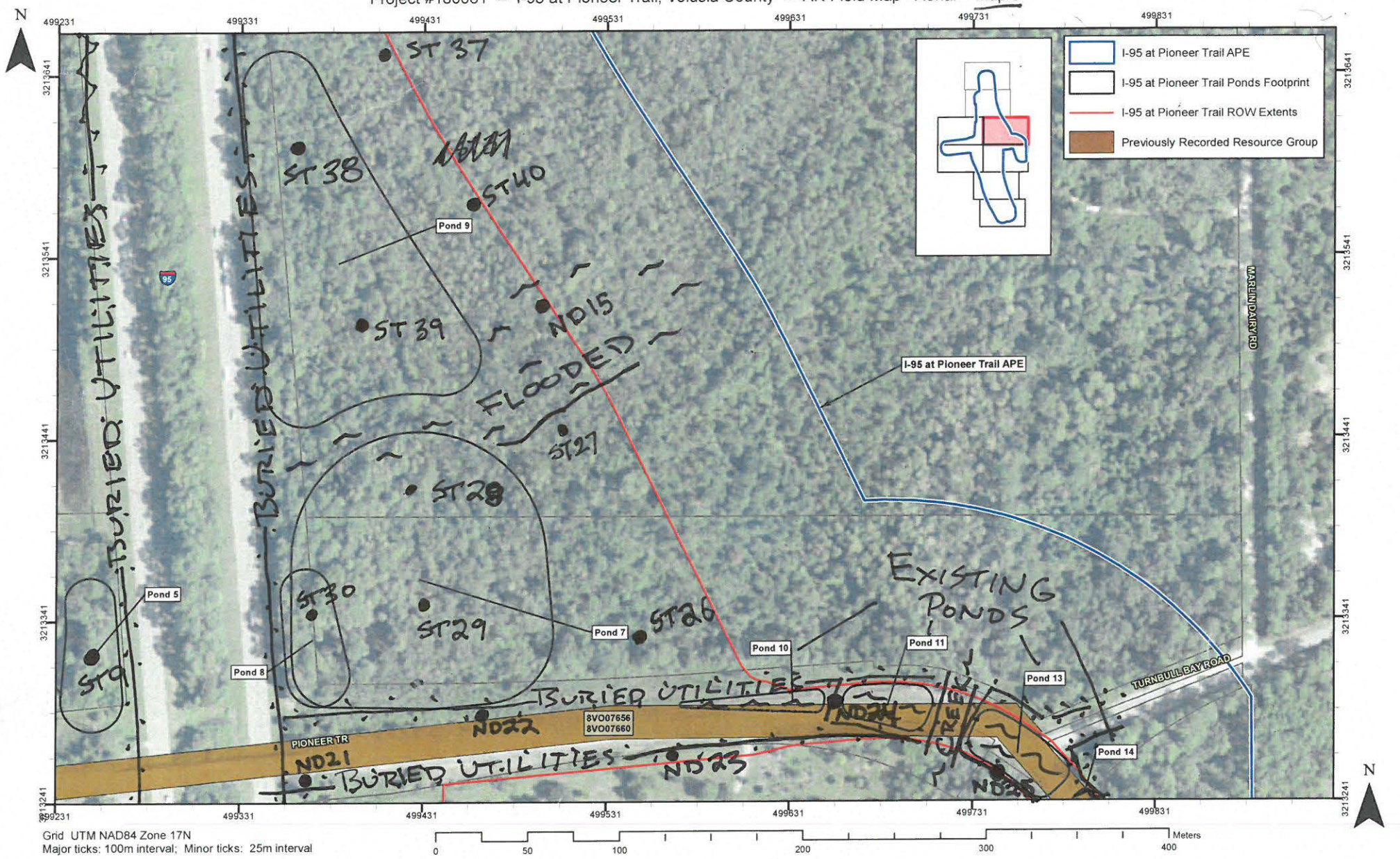
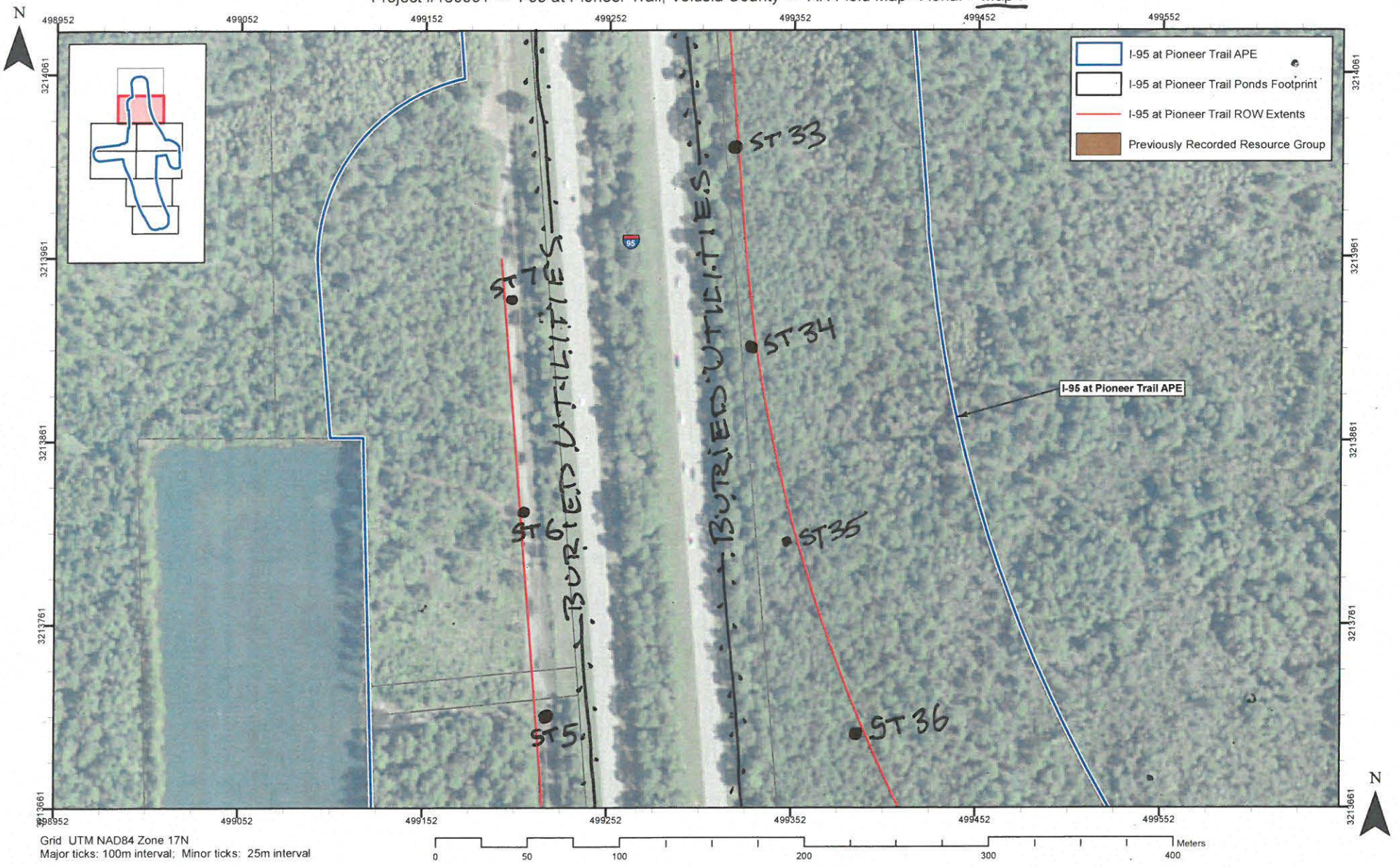
Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 5



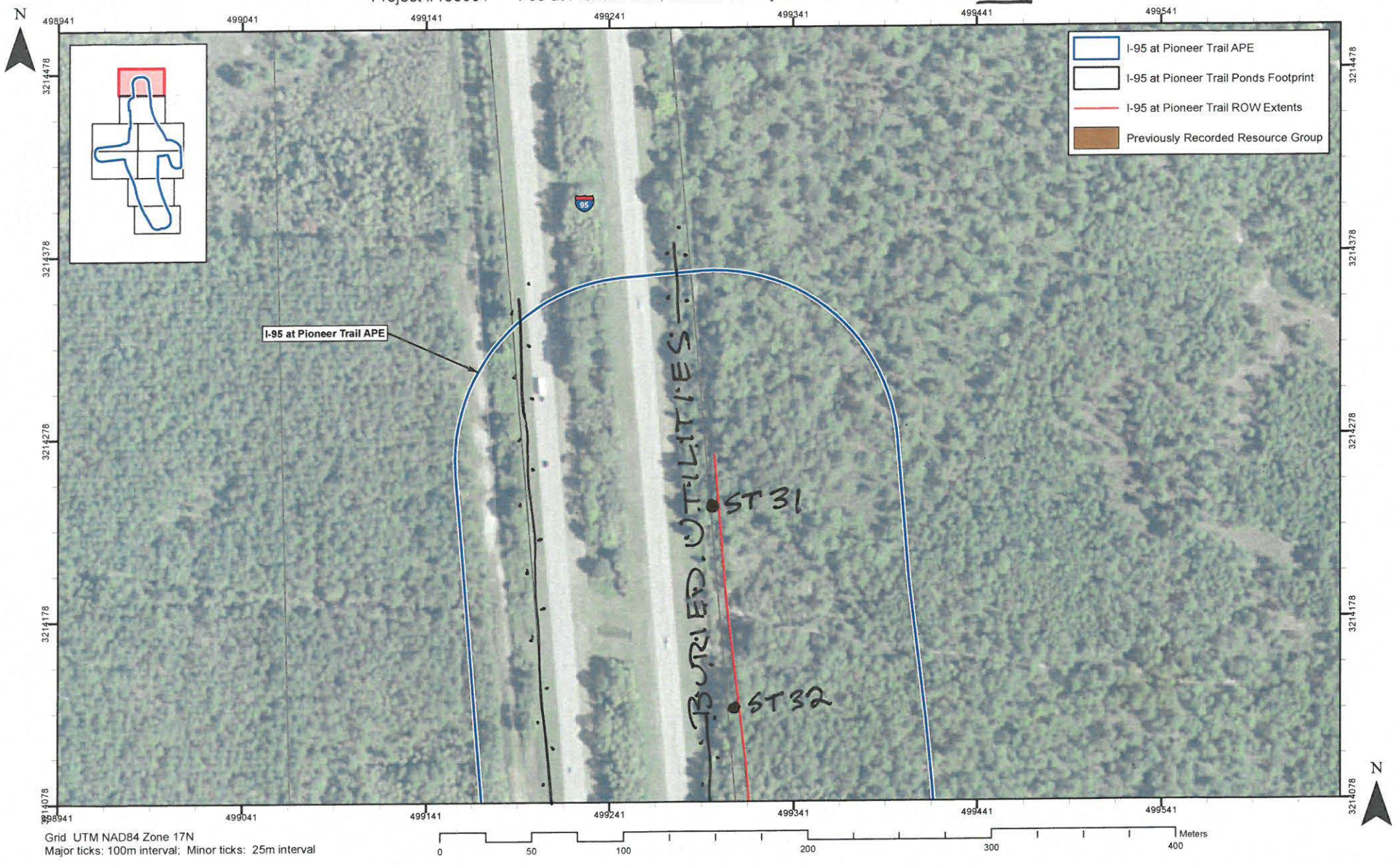
Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 6



Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 7



Project #180061 -- I-95 at Pioneer Trail, Volusia County -- AR Field Map - Aerial - Map 8



APPENDIX B.

FMSF RESOURCE FORMS

☐Original
☒Update

RESOURCE GROUP FORM
FLORIDA MASTER SITE FILE
Version 5.0 3/19

Consult the *Guide to the Resource Group Form* for additional instructions

Site #8 VO07656
Field Date 3-18-2019
Form Date 3-29-2019
Recorder# _____

NOTE: Use this form to document districts, landscapes, building complexes and linear resources as described in the box below. Cultural resources contributing to the Resource Group should also be documented individually at the Site File. Do not use this form for National Register multiple property submissions (MPSs). National Register MPSs are treated as Site File manuscripts and are associated with the individual resources included under the MPS cover using the Site File manuscript number.

Check ONE box that best describes the Resource Group:

- ☐ Historic district (NR category "district"): buildings and NR structures only: NO archaeological sites
- ☐ Archaeological district (NR category "district"): archaeological sites only: NO buildings or NR structures
- ☐ Mixed district (NR category "district"): includes more than one type of cultural resource (example: archaeological sites and buildings)
- ☐ Building complex (NR category usually "building(s)"): multiple buildings in close spatial and functional association
- ☐ Designed historic landscape (NR category usually "district" or "site"): can include multiple resources (see *National Register Bulletin #18*, page 2 for more detailed definition and examples: e.g. parks, golf courses, campuses, resorts, etc.)
- ☐ Rural historic landscape (NR category usually "district" or "site"): can include multiple resources and resources not formally designed (see *National Register Bulletin #30, Guidelines for Evaluating and Documenting Rural Historic Landscapes* for more detailed definition and examples: e.g. farmsteads, fish camps, lumber camps, traditional ceremonial sites, etc.)
- ☒ Linear resource (NR category usually "structure"): Linear resources are a special type of structure or historic landscape and can include canals, railways, roads, etc.

Resource Group Name Ft. Kingsbury to New Smyrna Road Multiple Listing [DHR only] _____
Project Name I-95 at Pioneer Trail FMSF Survey #_____
National Register Category (please check one): ☐building(s) ☒structure ☐district ☐site ☐object
Linear Resource Type (if applicable): ☐canal ☐railway ☒road ☐other (describe): _____
Ownership: ☐private-profit ☐private-nonprofit ☐private-individual ☐private-nonspecific ☐city ☒county ☐state ☐federal ☐Native American ☐foreign ☐unknown

LOCATION & MAPPING

Address: Street Number | Direction | Street Name | Street Type | Suffix Direction

City/Town (within 3 miles) Port Orange In Current City Limits? ☐yes ☒no ☐unknown
County or Counties (do not abbreviate) Volusia
Name of Public Tract (e.g., park) _____
1) Township 17S Range 33E Section 8 ¼ section: ☐NW ☐SW ☐SE ☐NE Irregular-name: _____
2) Township 17S Range 33E Section 9 ¼ section: ☐NW ☐SW ☐SE ☐NE
3) Township _____ Range _____ Section _____ ¼ section: ☐NW ☐SW ☐SE ☐NE
4) Township _____ Range _____ Section _____ ¼ section: ☐NW ☐SW ☐SE ☐NE
USGS 7.5' Map(s) 1) Name SAMSULA USGS Date 2018
2) Name _____ USGS Date _____
Plat, Aerial, or Other Map (map's name, originating office with location) _____
Landgrant _____
Verbal Description of Boundaries (description does not replace required map)

Within the APE, 8VO07656 starts at the intersection of South Williamson Blvd and Pioneer Trail (CR 4118) and runs roughly 3360 feet (1024 meters) east and turns south for roughly 1118 feet (341 meters).

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

Florida Master Site File / Div. of Historical Resources / R. A. Gray Bldg / 500 S Bronough St., Tallahassee, FL 32399-0250
Phone 850.245.6440 / Fax 850.245.6439 / E-mail SiteFile@dos.myflorida.com

RESOURCE GROUP FORM

Site #8 VO07656

HISTORY & DESCRIPTION

Construction Year: 1839 ☒approximately ☐year listed or earlier ☐year listed or later
Architect/Designer: _____ Builder: _____
Total number of individual resources included in this Resource Group: # of contributing 0 # of non-contributing 1
Time period(s) of significance (choose a period from the list or type in date range(s), e.g. *1895-1925*)
1. Seminole, 2nd War to 3rd 1835-1855 3. _____
2. _____ 4. _____
Narrative Description (*National Register Bulletin 16A* pp. 33-34; attach supplementary sheets if needed)

A transportation route in use since 1839, giving the route local significance during the Seminole Indian Wars and during the settlement and development period of Volusia County. The route has since been modernized to a two-lane asphalt road.

RESEARCH METHODS (check all that apply)

☒FMSF record search (sites/surveys)	☐library research	☐building permits	☐Sanborn maps
☒FL State Archives/photo collection	☐city directory	☐occupant/owner interview	☐plat maps
☐property appraiser / tax records	☐newspaper files	☐neighbor interview	☐Public Lands Survey (DEP)
☒cultural resource survey	☐historic photos	☐interior inspection	☐HABS/HAER record search

☒other methods (specify) Pedestrian/windshield survey
Bibliographic References (give FMSF Manuscript # if relevant)

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, see *National Register Bulletin 16A* p. 48-49. Attach longer statement, if needed, on separate sheet.)

Due to lack of sufficient historic integrity, this segment of 8VO07656 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. _____ 3. _____ 5. _____
2. _____ 4. _____ 6. _____

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 Southeastern Archaeological Research
Document description Photos, Maps, Field Notes, Aerial File or accession #'s 180061

2) Document type _____ Maintaining organization _____
Document description _____ File or accession #'s _____

RECORDER INFORMATION

Recorder Name Briane Shane Affiliation Southeastern Archaeological Research
Recorder Contact Information 315 NW 138th Terrace, Newberry, Fl 32669/3523330049/briane.shane@searchinc.
(address / phone / fax / e-mail)

Required Attachments

❶ PHOTOCOPY OF USGS 7.5' MAP WITH DISTRICT BOUNDARY CLEARLY MARKED
❷ LARGE SCALE STREET, PLAT OR PARCEL MAP WITH RESOURCES MAPPED & LABELED
❸ TABULATION OF ALL INCLUDED RESOURCES - Include name, FMSF #, contributing? Y/N, resource category, street address or other location information if no address.
❹ PHOTOS OF GENERAL STREETSCAPE OR VIEWS (Optional: aerial photos, views of typical resources) When submitting images, they must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital images must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

8VO07656_a Facing North

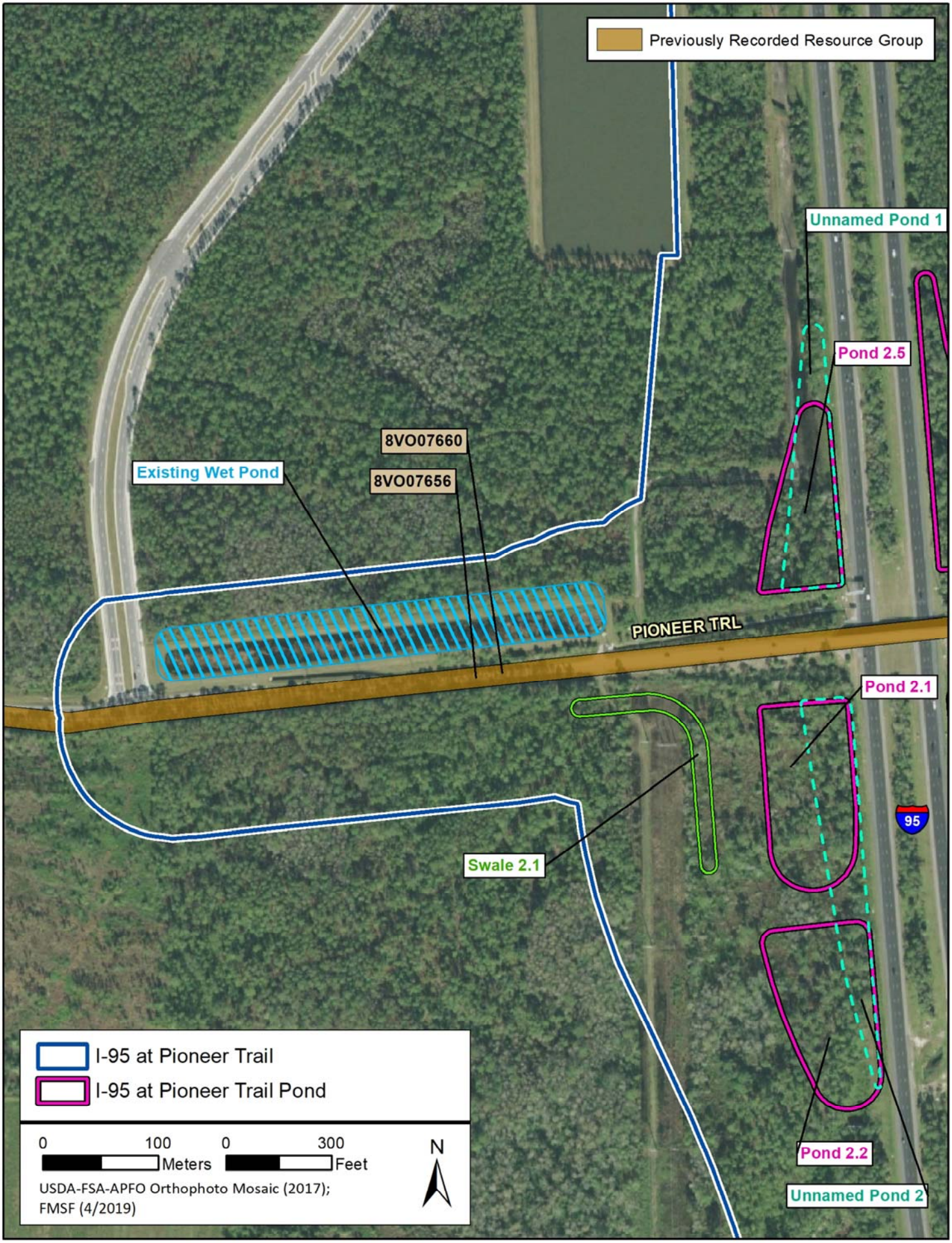
8VO07656_b Facing North

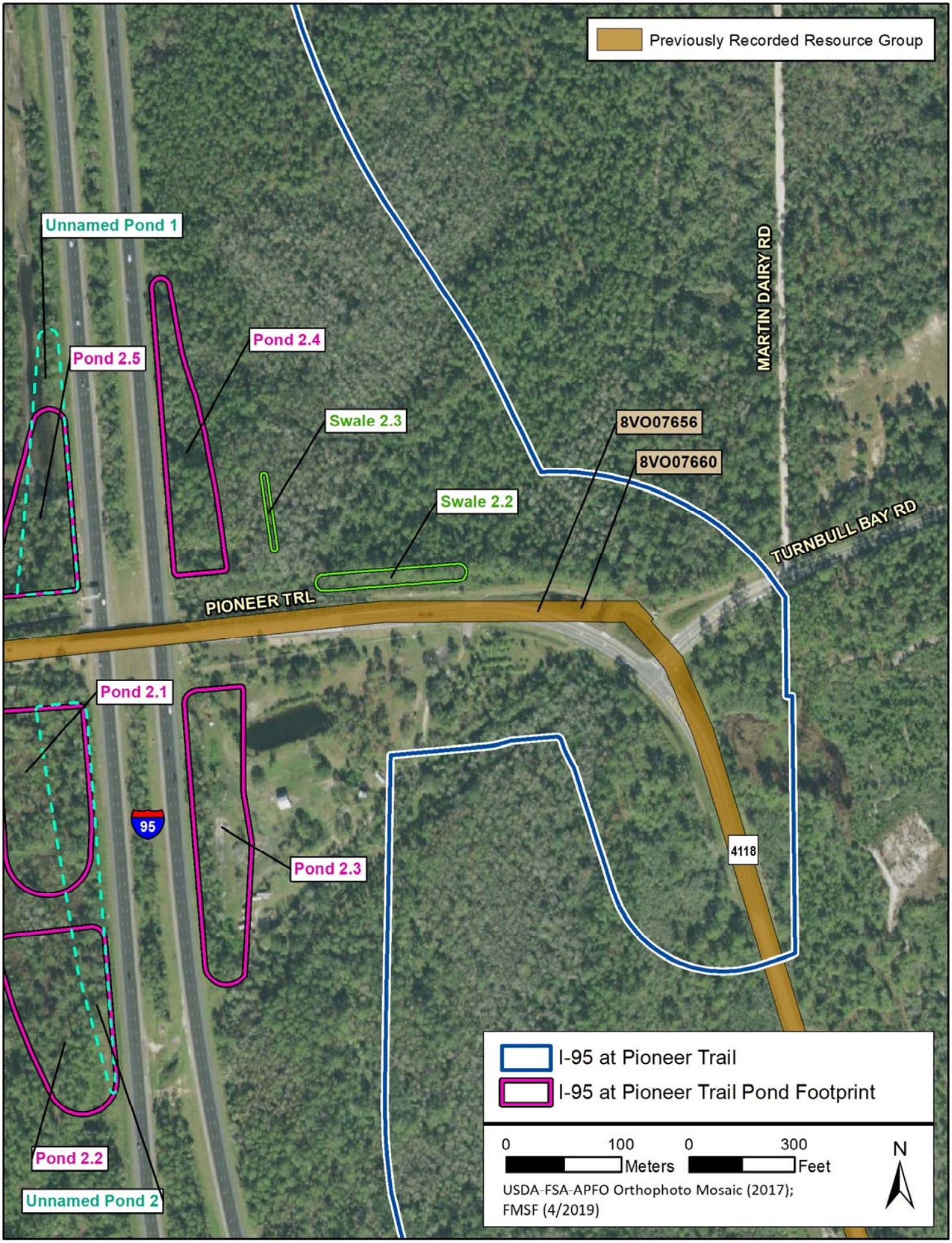
8VO07656_c Facing West

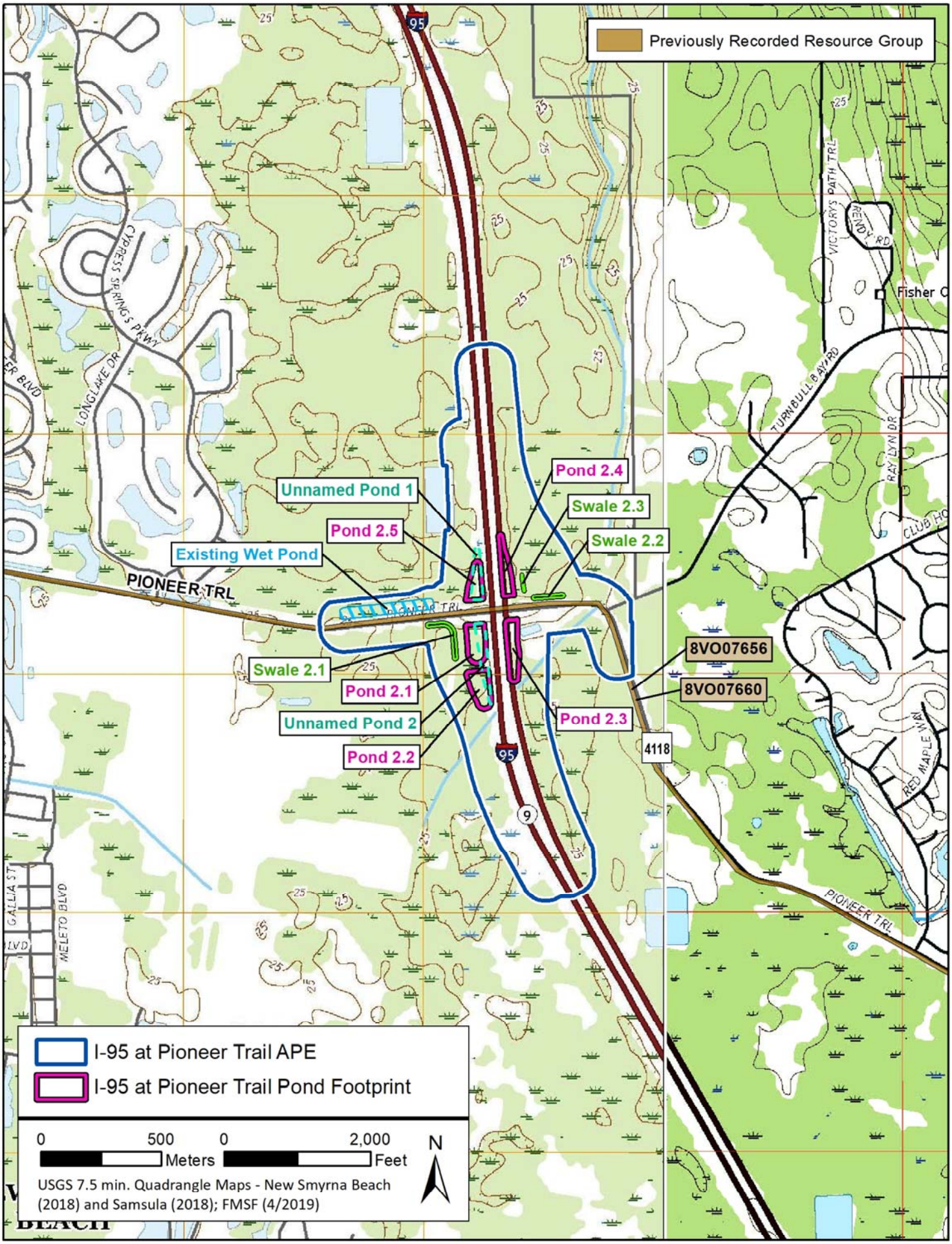
8VO07656_d Facing East

8VO07656_e Facing West

8VO07656_f Facing East


Previously Recorded Resource Group
Unnamed Pond 1
Pond 2.5
8VO07660
8VO07656
Existing Wet Pond
PIONEER TRL
Pond 2.1
95
Swale 2.1
Pond 2.2
Unnamed Pond 2
I-95 at Pioneer Trail
I-95 at Pioneer Trail Pond
0 100 Meters
0 300 Feet
N
USDA-FSA-APFO Orthophoto Mosaic (2017);
FMSF (4/2019)


Previously Recorded Resource Group
Unnamed Pond 1
Pond 2.5
Pond 2.4
Swale 2.3
Swale 2.2
8VO07656
8VO07660
MARTIN DAIRY RD
TURNBULL BAY RD
PIONEER TRL
Pond 2.1
95
Pond 2.3
4118
Pond 2.2
Unnamed Pond 2
I-95 at Pioneer Trail
I-95 at Pioneer Trail Pond Footprint
0 100 Meters
0 300 Feet
N
USDA-FSA-APFO Orthophoto Mosaic (2017);
FMSF (4/2019)


Previously Recorded Resource Group
Unnamed Pond 1
Pond 2.5
Existing Wet Pond
Pond 2.4
Swale 2.3
Swale 2.2
Swale 2.1
Pond 2.1
Unnamed Pond 2
Pond 2.2
Pond 2.3
8VO07656
8VO07660
4118
PIONEER TRL
I-95 at Pioneer Trail APE
I-95 at Pioneer Trail Pond Footprint
0 500 Meters
0 2,000 Feet
N
USGS 7.5 min. Quadrangle Maps - New Smyrna Beach (2018) and Samsula (2018); FMSF (4/2019)

☐Original
☒Update

RESOURCE GROUP FORM
FLORIDA MASTER SITE FILE
Version 5.0 3/19

Consult the *Guide to the Resource Group Form* for additional instructions

Site #8 VO07660
Field Date 3-18-2019
Form Date 3-29-2019
Recorder# _____

NOTE: Use this form to document districts, landscapes, building complexes and linear resources as described in the box below. Cultural resources contributing to the Resource Group should also be documented individually at the Site File. Do not use this form for National Register multiple property submissions (MPSs). National Register MPSs are treated as Site File manuscripts and are associated with the individual resources included under the MPS cover using the Site File manuscript number.

Check ONE box that best describes the Resource Group:

- ☐ Historic district (NR category "district"): buildings and NR structures only: NO archaeological sites
- ☐ Archaeological district (NR category "district"): archaeological sites only: NO buildings or NR structures
- ☐ Mixed district (NR category "district"): includes more than one type of cultural resource (example: archaeological sites and buildings)
- ☐ Building complex (NR category usually "building(s)"): multiple buildings in close spatial and functional association
- ☐ Designed historic landscape (NR category usually "district" or "site"): can include multiple resources (see *National Register Bulletin #18*, page 2 for more detailed definition and examples: e.g. parks, golf courses, campuses, resorts, etc.)
- ☐ Rural historic landscape (NR category usually "district" or "site"): can include multiple resources and resources not formally designed (see *National Register Bulletin #30, Guidelines for Evaluating and Documenting Rural Historic Landscapes* for more detailed definition and examples: e.g. farmsteads, fish camps, lumber camps, traditional ceremonial sites, etc.)
- ☒ Linear resource (NR category usually "structure"): Linear resources are a special type of structure or historic landscape and can include canals, railways, roads, etc.

Resource Group Name Pioneer Trail Multiple Listing [DHR only] _____
Project Name I-95 at Pioneer Trail FMSF Survey #_____
National Register Category (please check one): ☐building(s) ☒structure ☐district ☐site ☐object
Linear Resource Type (if applicable): ☐canal ☐railway ☒road ☐other (describe): _____
Ownership: ☐private-profit ☐private-nonprofit ☐private-individual ☐private-nonspecific ☐city ☒county ☐state ☐federal ☐Native American ☐foreign ☐unknown

LOCATION & MAPPING

Address: Street Number | Direction | Street Name | Street Type | Suffix Direction

City/Town (within 3 miles) Port Orange In Current City Limits? ☐yes ☒no ☐unknown
County or Counties (do not abbreviate) Volusia
Name of Public Tract (e.g., park) _____
1) Township 17S Range 33E Section 8 ¼ section: ☐NW ☐SW ☐SE ☐NE Irregular-name: _____
2) Township 17S Range 33E Section 9 ¼ section: ☐NW ☐SW ☐SE ☐NE
3) Township _____ Range _____ Section _____ ¼ section: ☐NW ☐SW ☐SE ☐NE
4) Township _____ Range _____ Section _____ ¼ section: ☐NW ☐SW ☐SE ☐NE
USGS 7.5' Map(s) 1) Name SAMSULA USGS Date 2018
2) Name _____ USGS Date _____
Plat, Aerial, or Other Map (map's name, originating office with location) _____
Landgrant _____
Verbal Description of Boundaries (description does not replace required map)

Within the APE, 8VO07660 starts at the intersection of South Williamson Blvd and Pioneer Trail (CR 4118) and runs roughly 3360 feet (1024 meters) east and turns south for roughly 1118 feet (341 meters).

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

Florida Master Site File / Div. of Historical Resources / R. A. Gray Bldg / 500 S Bronough St., Tallahassee, FL 32399-0250
Phone 850.245.6440 / Fax 850.245.6439 / E-mail SiteFile@dos.myflorida.com

RESOURCE GROUP FORM

Site #8 VO07660

HISTORY & DESCRIPTION

Construction Year: 1839 ☒approximately ☐year listed or earlier ☐year listed or later
Architect/Designer: _____ Builder: _____
Total number of individual resources included in this Resource Group: # of contributing 0 # of non-contributing 1
Time period(s) of significance (choose a period from the list or type in date range(s), e.g. *1895-1925*)
1. Seminole, 2nd War to 3rd 1835-1855 3. _____
2. _____ 4. _____
Narrative Description (*National Register Bulletin 16A* pp. 33-34; attach supplementary sheets if needed)

A transportation route in use since 1839, giving the route local significance during the Seminole Indian Wars and during the settlement and development period of Volusia County. The route has since been modernized to a two-lane asphalt road.

RESEARCH METHODS (check all that apply)

☒FMSF record search (sites/surveys)	☐library research	☐building permits	☐Sanborn maps
☒FL State Archives/photo collection	☐city directory	☐occupant/owner interview	☐plat maps
☐property appraiser / tax records	☐newspaper files	☐neighbor interview	☐Public Lands Survey (DEP)
☒cultural resource survey	☐historic photos	☐interior inspection	☐HABS/HAER record search

☒other methods (specify) Pedestrian/windshield survey
Bibliographic References (give FMSF Manuscript # if relevant)

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, see *National Register Bulletin 16A* p. 48-49. Attach longer statement, if needed, on separate sheet.)

Due to lack of sufficient historic integrity, this segment of 8VO07660 is ineligible for listing in the NRHP, either individually or as a contributing resource within a potential or existing historic district.

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. _____ 3. _____ 5. _____
2. _____ 4. _____ 6. _____

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 Southeastern Archaeological Research
Document description Photos, Maps, Field Notes, Aerial File or accession #'s 180061

2) Document type _____ Maintaining organization _____
Document description _____ File or accession #'s _____

RECORDER INFORMATION

Recorder Name Briane Shane Affiliation Southeastern Archaeological Research
Recorder Contact Information 315 NW 138th Terrace, Newberry, Fl 32669/3523330049/briane.shane@searchinc.
(address / phone / fax / e-mail)

Required Attachments

❶ PHOTOCOPY OF USGS 7.5' MAP WITH DISTRICT BOUNDARY CLEARLY MARKED
❷ LARGE SCALE STREET, PLAT OR PARCEL MAP WITH RESOURCES MAPPED & LABELED
❸ TABULATION OF ALL INCLUDED RESOURCES - Include name, FMSF #, contributing? Y/N, resource category, street address or other location information if no address.
❹ PHOTOS OF GENERAL STREETSCAPE OR VIEWS (Optional: aerial photos, views of typical resources) When submitting images, they must be included in digital AND hard copy format (plain paper grayscale acceptable). Digital images must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

8VO07660_a Facing North

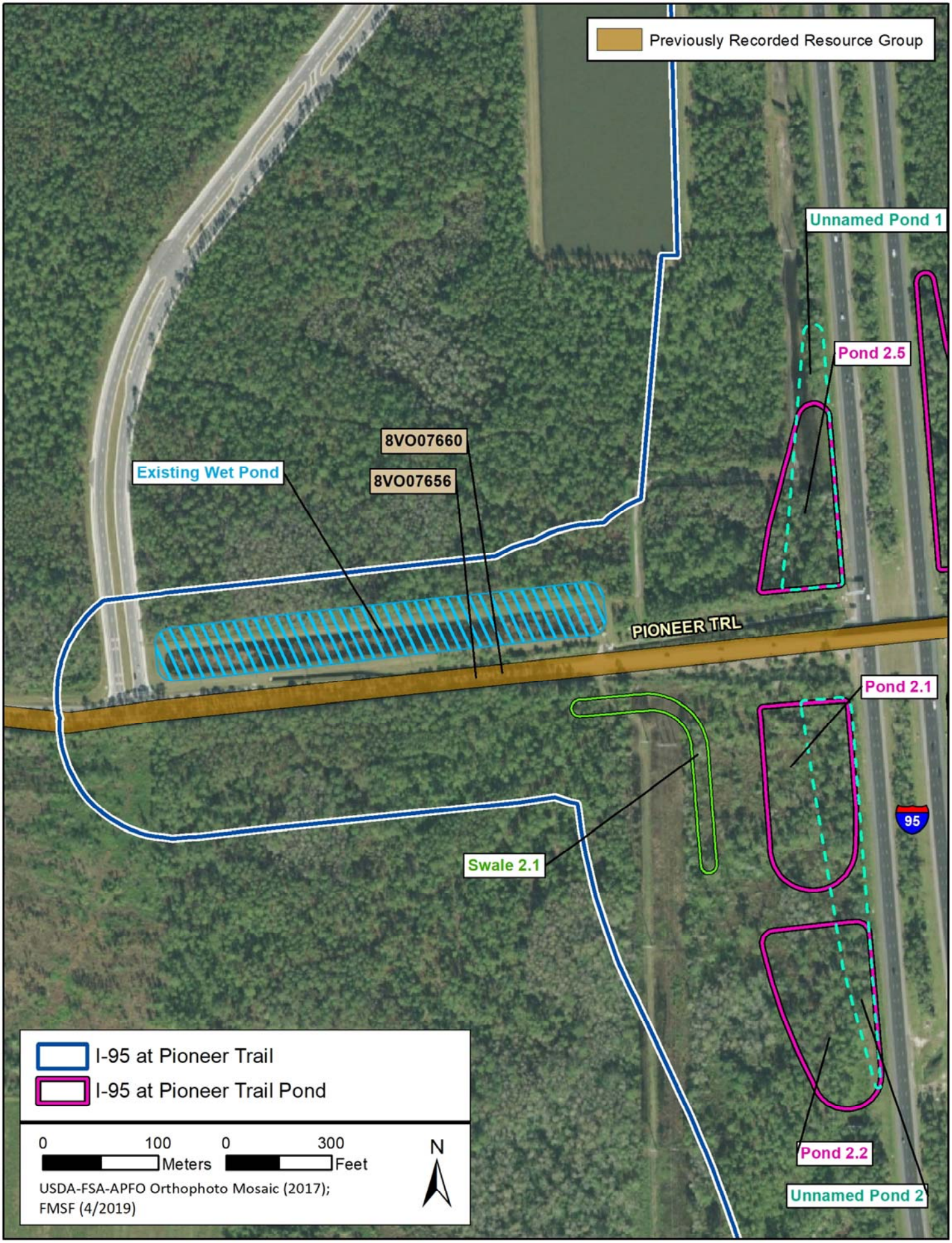
8VO07660_b Facing North

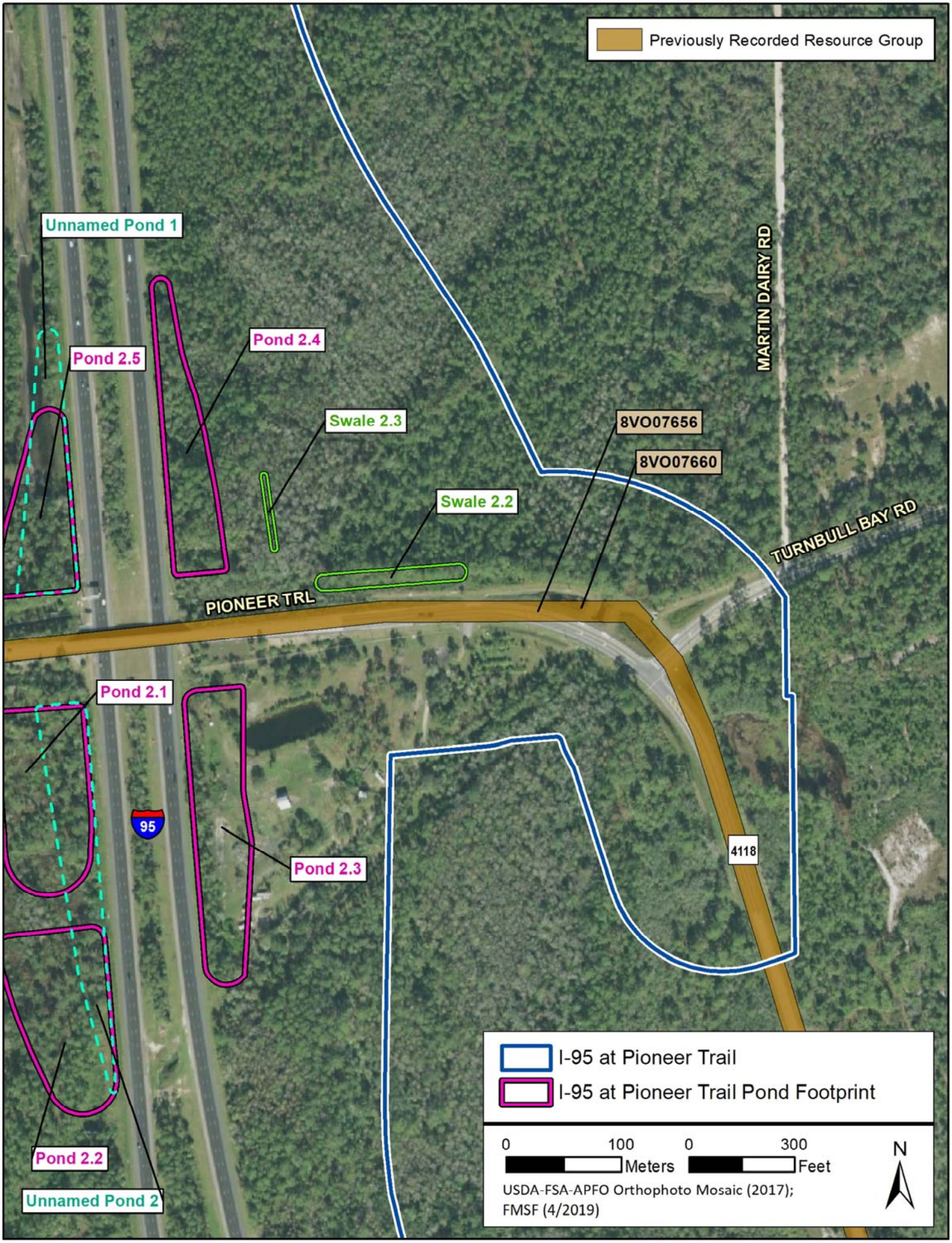
8VO07660_c Facing West

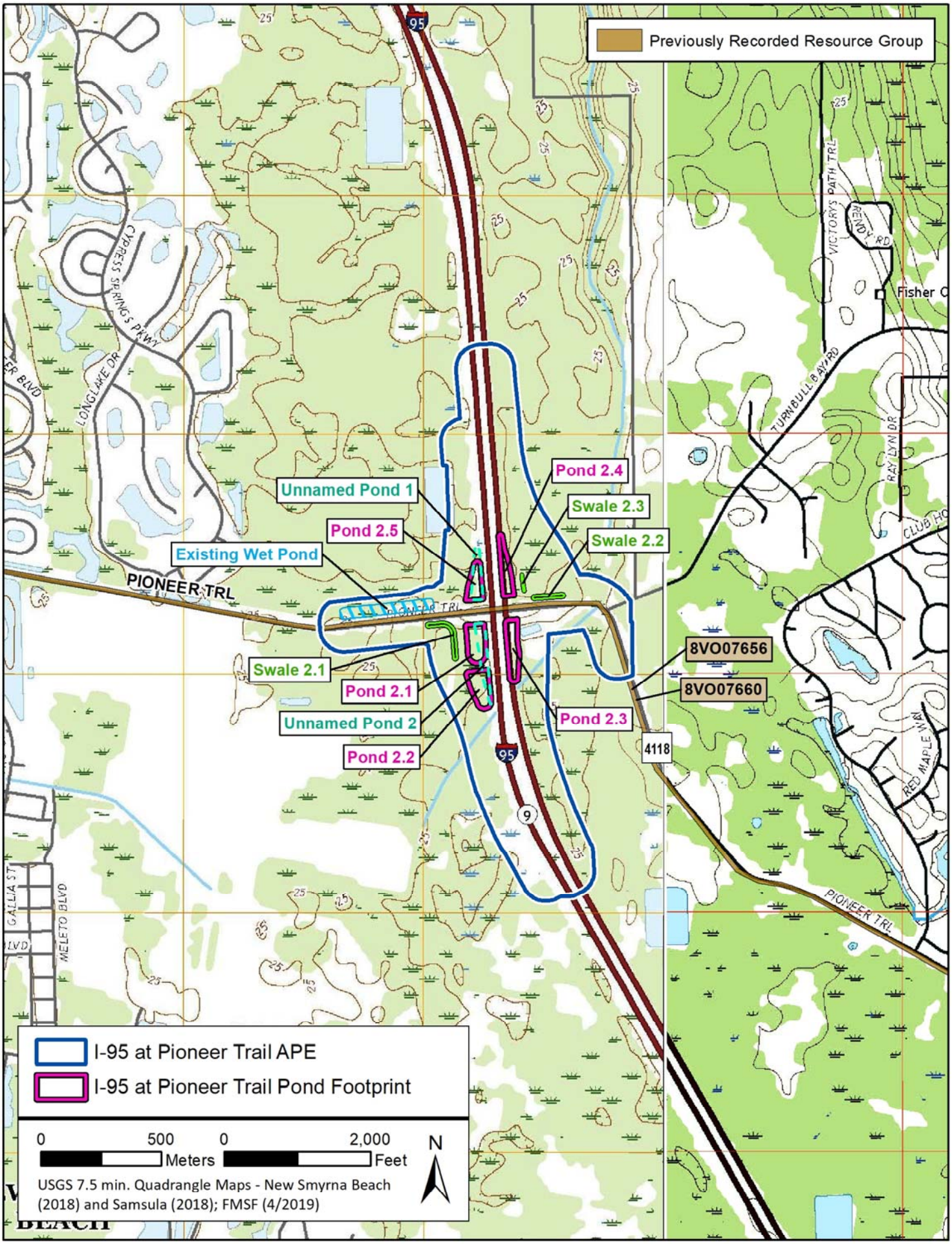
8VO07660_d Facing East

8VO07660_e Facing West

8VO07660_f Facing East


Previously Recorded Resource Group
Unnamed Pond 1
Pond 2.5
8VO07660
8VO07656
Existing Wet Pond
PIONEER TRL
Pond 2.1
95
Swale 2.1
Pond 2.2
Unnamed Pond 2
I-95 at Pioneer Trail
I-95 at Pioneer Trail Pond
0 100 Meters
0 300 Feet
N
USDA-FSA-APFO Orthophoto Mosaic (2017);
FMSF (4/2019)


Previously Recorded Resource Group
Unnamed Pond 1
Pond 2.5
Pond 2.4
Swale 2.3
Swale 2.2
8VO07656
8VO07660
MARTIN DAIRY RD
TURNBULL BAY RD
PIONEER TRL
Pond 2.1
95
Pond 2.3
4118
Pond 2.2
Unnamed Pond 2
I-95 at Pioneer Trail
I-95 at Pioneer Trail Pond Footprint
0 100 Meters
0 300 Feet
N
USDA-FSA-APFO Orthophoto Mosaic (2017);
FMSF (4/2019)


Previously Recorded Resource Group
Unnamed Pond 1
Pond 2.5
Existing Wet Pond
Pond 2.4
Swale 2.3
Swale 2.2
Swale 2.1
Pond 2.1
Unnamed Pond 2
Pond 2.2
Pond 2.3
8VO07656
8VO07660
4118
PIONEER TRL
I-95 at Pioneer Trail APE
I-95 at Pioneer Trail Pond Footprint
0 500 Meters
0 2,000 Feet
N
USGS 7.5 min. Quadrangle Maps - New Smyrna Beach (2018) and Samsula (2018); FMSF (4/2019)

APPENDIX C.

FDHR SURVEY LOG SHEET

Ent D (FMSF only)_____

Survey Log Sheet

Florida Master Site File
Version 4.1 1/07

Survey # (FMSF only) _____

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

Identification and Bibliographic Information

Survey Project (name and project phase) Cultural Resource Assessment Survey for the I-95 Interchange at Pioneer Trail, Phase 1

Report Title (exactly as on title page) Cultural Resource Assessment Survey for the I-95 Interchange at Pioneer Trail, Volusia County, Florida

Report Authors (as on title page, last names first) 1. RabbySmith, Steven 2. Travisano, Mikel 3. Foster, Michael 4. Shane, Briane

Publication Date (year) 2019 **Total Number of Pages in Report** (count text, figures, tables, not site forms) 45

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
FINANCIAL MANAGEMENT NO. 436292-1-21-01. SEARCH Project No. 180061.

Supervisors of Fieldwork (even if same as author) Names Michael Foster

Affiliation of Fieldworkers: Organization Southeastern Archaeological Research City Jacksonville

Key Words/Phrases (Don't use county name, or common words like *archaeology*, *structure*, *survey, architecture, etc.*)
1. Pioneer Trail 2. I-95 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)
Name Florida Department of Transportation Organization Florida Dept of Transportation - District 5
Address/Phone/E-mail _____

Recorder of Log Sheet Foster, Michael **Date Log Sheet Completed** 5-15-2019

Is this survey or project a continuation of a previous project? ☒ No ☐ Yes: **Previous survey #s (FMSF only)** _____

Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)
1. Volusia 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)
1. Name SAMSULA Year 2018
2. Name NEW SMYRNA BEACH Year 2018
3. Name _____ Year _____
4. Name _____ Year _____
5. Name _____ Year _____
6. Name _____ Year _____

Description of Survey Area

Dates for Fieldwork: Start 3-18-2019 End 3-21-2019 **Total Area Surveyed** (fill in one) _____ hectares 916.76 acres
Number of Distinct Tracts or Areas Surveyed 1
If Corridor (fill in one for each) **Width:** _____ meters _____ feet **Length:** _____ kilometers _____ miles

Survey Log Sheet

Survey #_____

Research and Field Methods

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

Scope/Intensity/Procedures Archaeological survey and architectural history survey.

Preliminary Methods (check 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
☐Florida Photo Archives (Gray Building)	☐library-special collection - *nonlocal*	☐newspaper files	☒soils maps or data
☒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): _____

Archaeological Methods (check 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)
☐surface collection, **un**controlled	☐water screen	☐soil resistivity
☒shovel test-1/4"screen	☐posthole tests	☐magnetometer
☐shovel test-1/8" screen	☐auger tests	☐side scan sonar
☐shovel test 1/16"screen	☐coring	☒pedestrian survey
☐shovel test-unscreened	☐test excavation (at least 1x2 m)	☐unknown

☐other (describe): _____

Historical/Architectural Methods (check 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	☐exposed ground inspected	☐occupant interview	☒tax records
☐interior documentation	☒local property records	☐occupation permits	☐unknown

☐other (describe): _____

Survey Results (cultural resources recorded)

Site Significance Evaluated? ☒Yes ☐No

Count of Previously Recorded Sites 2 **Count of Newly Recorded Sites** 0

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) VO07656, VO07660

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) _____

Site Forms Used: ☐Site File Paper Form ☒Site File Electronic Recording Form

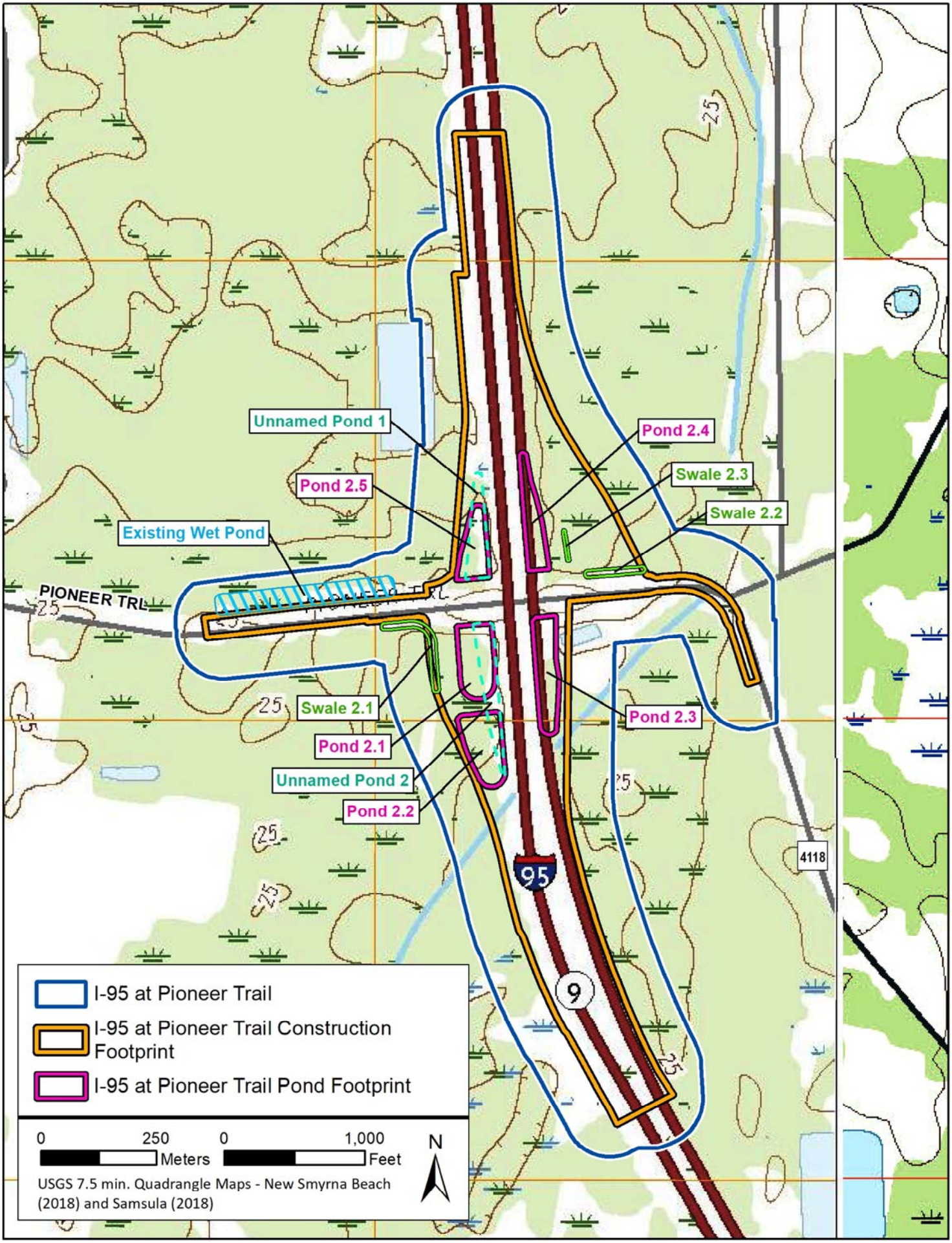
*****REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)*****

SHPO USE ONLY **SHPO USE ONLY** **SHPO USE ONLY**

Origin of Report: ☐872 ☐CARL ☐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
☐MPS ☐MRA ☐TG ☐Other: _____

Document Destination: _____ **Plotability:** _____


Unnamed Pond 1
Pond 2.4
Pond 2.5
Swale 2.3
Swale 2.2
Existing Wet Pond
PIONEER TRL
Swale 2.1
Pond 2.3
Pond 2.1
Unnamed Pond 2
Pond 2.2
95
9
4118
I-95 at Pioneer Trail
I-95 at Pioneer Trail Construction Footprint
I-95 at Pioneer Trail Pond Footprint
0 250 Meters
0 1,000 Feet
N
USGS 7.5 min. Quadrangle Maps - New Smyrna Beach (2018) and Samsula (2018)