APPENDIX C: HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES				

US Deparment of Transportation

Federal Aviation Administration Atlanta Airports District Office 1701 Columbia Ave. College Park, GA 30337-2747 Phone: (404) 305-7150

January 29, 2025

South Carolina Department of Archives and History State Historic Preservation Office 8501 Parklane Road Columbia, SC 29223

RE: Runway 18-36 Rehabilitation Supplemental Environmental Assessment
Myrtle Beach, Horry County, South Carolina
SHPO Project No. 24-JS0179

To Whom it May Concern:

The Federal Aviation Administration (FAA) herein informs the South Carolina State Historic Preservation Office (SHPO) of additional areas of disturbance for a project at the Myrtle Beach International Airport, in Horry County, South Carolina. The newly proposed changes would add borrow pits for the Runway 18-36 Rehabilitation project.

The FAA previously consulted with the South Carolina SHPO by letter dated April 5, 2024, and SHPO responded May 9, 2024, concurring with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places would be affected by the project. The FAA signed and environmental assessment and approved the project in May and June 2024, respectively. Subsequently, it has been determined that borrow sites would be necessary to complete the Runway 18-36 Reconstruction Project.

A Phase I Archaeological survey was conducted in the areas of the proposed borrow pits. The FAA submits the enclosed draft report of the Phase I Archaeological Survey. In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, and Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), the FAA requests review of the enclosed Phase I Archaeological Survey for the proposed project by the South Carolina SHPO.

The FAA is preparing a Supplemental Environmental Assessment to analyzed effects of the revised project, consistent with NEPA and FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions of Airport Actions*.

If you have any questions, please contact me by phone at (404) 305-6760 or by email at jennifer.p.adams@faa.gov.

Gennifu P. Adar

Jennifer P. Adams

**Environmental Protection Specialist** 



February 18, 2025

Jennifer P. Adams Environmental Protection Specialist Atlanta Airports District Office jennifer.p.adams@faa.gov

Re: Myrtle Beach International Airport, Runway 18-36 Rehabilitation, Supplemental EA, draft Phase I Archaeological Survey

Myrtle Beach, Horry County, South Carolina
SHPO Project No. 24-JS0179

Dear Ms. Adams:

Thank you for your January 29, 2025 letter, which we received on February 3, 2025, regarding the additional information submitted in support of the above referenced proposed undertaking. We also received draft report, *Phase I Archaeological Survey, Myrtle Beach International Airport, Myrtle Beach, South Carolina* (December 2024) as supporting documentation for this undertaking. Our office previously provided NHPA comments regarding the proposed undertaking on May 9, 2024. We understand that additional areas of disturbance (borrow pits) are necessary to complete the undertaking.

The State Historic Preservation Office is providing additional comments to the Federal Aviation Administration (FAA) pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes including those with state recognition, local governments, or the public.

The Phase I survey identified no archaeological sites or cultural resources. No additional work is recommended. Our office concurs with this recommendation. Based on the description of the undertaking's Area of Potential Effect (APE) and the identification of no historic properties within the APE, our office concurs with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this project.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

Our office accepts the report as final. To complete the reporting process, please provide at least two (2) hard copies of a final report: one (1) bound and one (1) unbound hard copies and a digital copy in ADOBE Acrobat PDF format for SCIAA. Investigators should send all copies directly to the SHPO. The SHPO will distribute the appropriate copies to SCIAA.

Please ensure that a copy of our comments letter is included in the Appendices and Attachments of the final report.

Please provide GIS shapefiles for the surveyed area. Shapefiles should be compatible with ArcGIS (.shp file format) and should be sent as a bundle in .zip format. For additional information, please see our GIS Data Submission Requirements.

Please refer to SHPO Project No. 24-JS0179 in any future correspondence regarding this project. If you have any questions, please contact me at (803) 896-6129 or <a href="mailto:JSylvest@scdah.sc.gov">JSylvest@scdah.sc.gov</a>.

Sincerely,

John D. Sylvest

John D. Sylvest Supervisor of Survey and Review & Compliance State Historic Preservation Office From: <u>Harrison, Alethea</u>
To: <u>Alberts, David</u>

Cc: jennifer.p.adams@faa.gov

Subject: [External] Myrtle Beach International Airport-Runway 18-36 Rehab, Phase I Archaeo. Survey, Final Copies/24-

JS0179

**Date:** Monday, March 31, 2025 1:07:24 PM

Attachments: image001.png

External Sender: Please use caution with links and attachments.

Hi David,

Please accept this e-mail as notification that we have received and accepted the requested final survey report copies and shapefiles for the subject referenced project in Horry County.

Thank you for your assistance with this project.

Regards,

Alethea Harrison



Alethea Harrison Historic Preservation Specialist State Historic Preservation Office SC Department of Archives & History 8301 Parklane Road Columbia, SC 29223

Ph: 803-896-4123



Atlanta Airports District Office 1701 Columbia Ave. College Park, GA 30337-2747

Phone: (404) 305-7150

February 5, 2025

Dr. Wenonah G. Haire Tribal Historic Preservation Officer Catawba Indian Nation (Catawba Indian Tribe of South Carolina) 1536 Tom Steven Road Rock Hill, SC 29730

RE: Runway 18-36 Reconstruction Project (Revised)
Myrtle Beach International Airport
Horry County, South Carolina

Dear Dr. Haire:

The Federal Aviation Administration (FAA) notified the Catawba Indian Nation Tribe of South Carolina by letter dated March 22, 2024 (attached), of an environmental assessment for the Runway 18-36 Reconstruction Project (project) at the Myrtle Beach International Airport located in Horry County, South Carolina. The FAA issued the Final Environmental Assessment on May 17, 2024, and approved the project on June 12, 2024.

Since issuance of the EA and approval of the project, the Horry County Department of Airports (sponsor) determined that additional areas of disturbance would be needed. Specifically, The newly proposed changes would add three locations of potential borrow pits for the Runway 18-36 Rehabilitation Project. The project location and areas of the potential borrow pits are shown in attached figures.

The FAA will evaluate potential effects of the proposed Project in a supplemental environmental assessment, consistent with the National Environmental Policy Act (NEPA) of 1969, as amended, and FAA Orders 1050.1F, Environmental Impacts: Policies and Procedures and 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions of Airport Actions.

The FAA respectfully requests comments from the Catawba Tribe of South Carolina in accordance Section 106 of the National Historic Preservation Act of 1966, as amended, to assist the FAA in identifying potential issues and areas of special concern in assessing the existing airport environment. For questions or additional information, please email jennifer.p.adams@faa.gov.

Sincerely,

Jennifer P. Adams

**Environmental Protection Specialist** 

Jennifee P. adams



Figure 1. Project location.

Introduction 2



Figure 1. Project location.

Introduction 2



Atlanta Airports District Office 1701 Columbia Ave. College Park, GA 30337-2747

Phone: (404) 305-7150

March 22, 2024

Ms. Wenonah G. Haire Tribal Historic Preservation Officer Catawba Indian Nation (Catawba Indian Tribe of South Carolina) 1536 Tom Steven Road Rock Hill, SC 29730

RE: Runway 18-36 Reconstruction Project
Government-to-Government Consultation
Scoping & Notification of Environmental Assessment

Dear Ms. Haire:

The Federal Aviation Administration (FAA) solicits comments from the Catawba Nation (Catawba Tribe of South Carolina) in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, and Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). Comments will assist the FAA in identifying potential issues and areas of special concern for a Runway 18-36 Reconstruction Project (Project) proposed by the Horry County Department of Airports (Airport Sponsor) at Myrtle Beach International (MYR or Airport) located in Myrtle Beach, South Carolina (see Figure 1).

The Airport Sponsor is requesting federal funding and the FAA's approval of the Airport Layout Plan to reconstruct Runway 18-36 to improve safety at the Airport. The project proposal consists of the permanent full depth and width reconstruction of the runway pavement (see Figure 2). Connected actions include the construction of a 6,800-foot-long temporary runway that would be situated between the existing Runway 18-36 and the existing full parallel Taxiway B. In addition, the Airport Sponsor proposes the construction of taxiway connectors (B3 and B4), 30-foot-wide temporary runway shoulders, runway edge lighting, and stormwater system improvements. As shown in Figure 2, the temporary runway would originate at taxiway connector B5 and terminate at taxiway connector B2. Upon completion of the Runway 18-36 reconstruction, the newly built temporary runway would be converted to a permanent taxiway. All construction would occur on Airport property. Proposed construction of the temporary runway would begin in 2026. In fall of 2028, Runway 18-36 would be closed for 92-120 days during the proposed reconstruction of Runway 18-36, then reopened in 2029. During reconstruction of Runway 18-36, aircraft operations would shift to the temporary runway. No other changes to aircraft operations, nor changes to the fleet mix of aircraft operating at MYR, would occur as a result of the proposed Project.

Comments from the Catawba Tribe of South Carolina will assist the FAA, in accordance with NHPA, in assessing the existing airport environment. The FAA will evaluate potential effects of the proposed Project in an environmental assessment (EA), consistent with NEPA and FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures* and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions of Airport Actions*. The EA will analyze the potential environmental effects of the Proposed Project and reasonable alternatives. Direct and indirect project study areas have been developed for the EA (see Figure 3). Preliminary environmental analysis indicates that the Proposed Project would not result in significant impacts.

The FAA requests scoping comments within 30 days of receiving this letter by mail. If you have any questions, please contact me by phone at (404) 305-6760 or by email at jennifer.p.adams@faa.gov.

Sincerely,

Jennifer P. Adams Environmental Protection Specialist

Figure 1: Airport Location

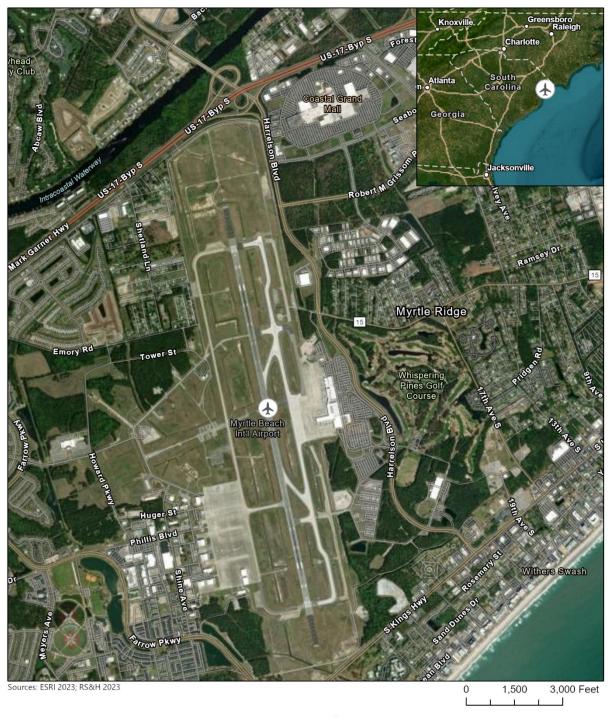


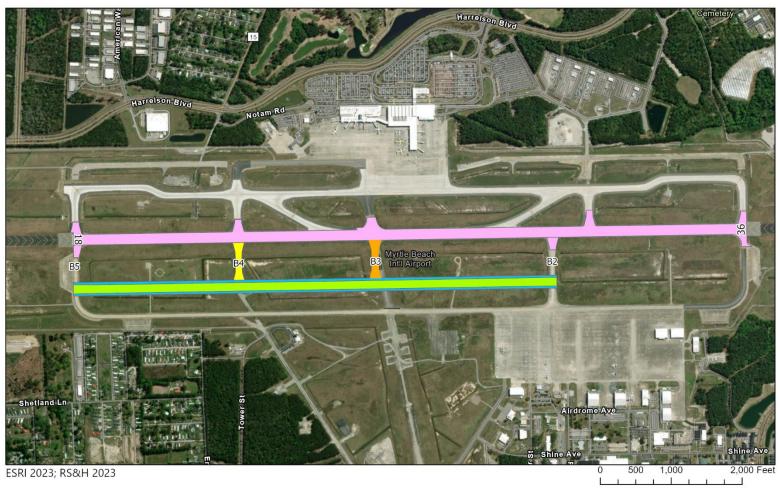








Figure 2: Proposed Project



#### Legend

Runway 18-36 Rehabilitation
Temporary Runway
Temporary Runway Shoulders (30 feet)
Taxiway Connector Rehabilitation
Taxiway Connector Construction

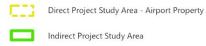




Figure 3: EA Direct and Indirect Project Study Areas



# Legend

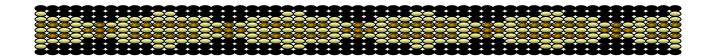






Catawba Indian Nation Tribal Historic Preservation Office 1536 Tom Steven Road Rock Hill, South Carolina 29730

Office 803-328-2427



March 11, 2025

Attention: Jennifer Adams Federal Aviation Administration 1701 Columbia Avenue College Park, GA 30337

Re. THPO# TCNS#

2025-40-4 Runway 18-36 Reconstruction Project (Revised) Myrtle Beach International Airport

**Project Description** 

Dear Ms. Adams,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.

If you have questions, please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail Caitlin.Rogers@catawba.com.

Sincerely,

Wenonah G. Haire

Tribal Historic Preservation Officer

Cattle Rogers for

## **DRAFT REPORT**

# PHASE I ARCHAEOLOGICAL SURVEY, MYRTLE BEACH INTERNATIONAL AIRPORT, MYRTLE BEACH, SOUTH CAROLINA

DECEMBER 2024





## **DRAFT REPORT**

# PHASE I ARCHAEOLOGICAL SURVEY, MYRTLE BEACH INTERNATIONAL AIRPORT, MYRTLE BEACH, SOUTH CAROLINA

PREPARED FOR

RS&H 10748 DEERWOOD PARK BLVD S. JACKSONVILLE FL 32256

**PREPARED BY** 

SEARCH SEARCH FLORIDA—JACKSONVILLE OFFICE

AUTHORED BY CHRIS CLEMENT, PhD, RPA

**DRAFT** 

\_\_\_\_\_

CHRIS CLEMENT, PHD, RPA
PRINCIPAL INVESTIGATOR

DECEMBER 2024

**SEARCH PROJECT NUMBER: 240277** 

WWW.SEARCHINC.COM

This page intentionally left blank.

### **ABSTRACT**

Southeastern Archaeological Research, LLC (SEARCH) conducted a Phase I archaeological survey at Myrtle Beach International Airport (MYR), Myrtle Beach, South Carolina in November 2024. RS&H, on behalf of MYR, subcontracted SEARCH to conduct the survey in support of proposed temporary runway construction and to examine three parcels where borrow material may be sourced. An environmental assessment (EA) for the proposed temporary runway construction was completed in May 2024 to satisfy Federal Avaiation Administration permitting requirements. The Federal Avaiation Administration and South Carolina State Historic Preservation Office agreed that the proposed temporary runway construction would have no effect on historic properties; however, the borrow pit locations were not defined when the EA was produced. This archaeological survey supports a supplemental EA addressing possible borrow pit locations and was conducted in compliance with Section 106 of the National Historic Preservation Act (54 US Code § 306108) and its implementing regulations (36 Code of Federal Regulations Part 800).

SEARCH conducted fieldwork from November 19, 2024, to November 21, 2024, excavating 54 shovel tests in a 23.5 ha (58.2 ac) study area in three parcels. Parcel 1 is at the northern extent of MYR and covers 5.4 ha (13.3 ac), Parcel 2 is west of the MYR runway and covers 11.4 ha (28.1 ac), and Parcel 3 is northwest of Parcel 2 and covers 6.8 ha (16.7 ac). The project parcels consisted of artificially leveled terrain with evidence of disturbance at the surface that was also identifiable through historic map and aerial photograph review. No positive shovel tests were recorded, and no cultural resources were identified.

SEARCH recommends that the project will have no effect on archaeological resources that are listed in the National Register of Historic Places (NRHP), that are eligible for NRHP listing, or that may be eligible for NRHP listing. SEARCH recommends no additional archaeological work for the project.

## **ACRONYMS AND ABBREVIATIONS**

cmbs cm below surface

COSCAPA Council of South Carolina Professional Archaeologists

FAA Federal Aviation Administration

MYR Myrtle Beach International Airport

NHPA National Historic Preservation Act.

NRHP National Register of Historic Places

SC SHPO South Carolina State Historic Preservation Office

SEARCH SEARCH, LLC

ST shovel test

USGS US Geological Survey

# **TABLE OF CONTENTS**

Li	st of Fi	gures		vi
Li	st of Ta	ables .		vii
1	Intro	duction	on	1
2	Envir		ental Context	
	2.1	Geol	ogy and Physiography	5
	2.2		cial Geology	
	2.3	•	ology	
	2.4			
3	Cultu		ontext	
	3.1		e American Context	
	3.1.		Paleoindian Period	
	3.1.		Archaic Period	
	3.1.	.3 \	Woodland and Mississippian Periods	10
	3.2		ric Period	
	3.3	Histo	ric Map and Aerial Photograph Review	13
4	Rese		Design	
	4.1		rmining Eligibility	
	4.2		Methods	
	4.3		Methods	
	4.4	Curat	tion	22
5	Resu			
	5.1		el 1	
	5.2		리 2	
	5.3		el 3	
6	Sumi	-	and Recommendation	
	6.1	Reco	mmendation	29
7	Refe	rence	s Cited	31
Α	opendi	хА	Project-Related Correspondence	
Α	opendi	х В	Principal Investigator Resume	
Α	opendi	хС	Shovel Test Log	

# **LIST OF FIGURES**

Figure 1. Project location	2
Figure 2. Project parcels, with results	3
Figure 3. Project surficial geology	6
Figure 4. Soil drainage classifications mapped in the Project	8
Figure 5. Project vicinity on the 1825 Mills map of Horry District	14
Figure 6. Project parcels on the 1918 soils map of Horry County.	15
Figure 7. Project parcels on the 1937 Myrtle Beach 1:48,000 USGS topographic quadrangle	16
Figure 8. Project parcels on the 1939 General Highway Map of Horry County	18
Figure 9. Project parcels on a 1951 aerial image	19
Figure 10. Project parcels on the 1952 master plan map of Myrtle Beach Air Base	20
Figure 11. Overview of Parcel 1. View west from ST N0600 E1440.	23
Figure 12. ST N0600 E1440, Parcel 1. North profile.	24
Figure 13. Overview of Parcel 2. View east from ST N8380 E1080.	25
Figure 14. Drainage feature at Parcel 2. View east from STN8320 E1320	25
Figure 15. ST N8320 E1260, Parcel 2. North profile	26
Figure 16. Overview of Parcel 3. View south from ST N8860 E0900	27
Figure 17. View east of drainage structure in Parcel 3 from near ST N8800 E0840	27
Figure 18. View east of broken pavement in Parcel 3 from ST N8620 E0900	28
Figure 19. ST N8620 E0900, Parcel 3. North profile.	28

List of Figures Vi

## **LIST OF TABLES**



This page intentionally left blank.

List of Figures Viii

## 1 INTRODUCTION

In November 2024, SEARCH, LLC (SEARCH) conducted a Phase I archaeological survey at Myrtle Beach International Airport (MYR), Myrtle Beach, South Carolina, under subcontract to RS&H on behalf of MYR (Figure 1). MYR proposes to construct a temporary runway, requiring borrowed material; the archaeological survey examined locations that may be used to source borrowed material (Project). An environmental assessment (EA) for the proposed temporary runway construction was completed in May 2024 to satisfy Federal Aviation Administration (FAA) permitting requirements. The FAA and South Carolina State Historic Preservation Office (SC SHPO) agreed that the proposed temporary runway construction would have no effect on historic properties; however, the borrow pit locations were not defined when the EA was produced (Appendix A). This archaeological survey is in support of a supplemental EA addressing possible borrow pit locations.

The study area examined here consists of 23.5 ha (58.2 ac) in three parcels (**Figure 2**). Parcel 1 is at the northern extent of MYR and covers an area of 5.4 ha (13.3 ac), Parcel 2 is west of the MYR runway and covers an area of 11.4 ha (28.1 ac), and Parcel 3 is northwest of Parcel 2 and covers an area of 6.8 ha (16.7 ac).

The Phase I survey detailed in this report included pedestrian survey and shovel test (ST) excavation and was conducted November 19–21, 2024. No cultural material was recovered during the survey and no cultural resources were recorded.

This investigation was conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. § 306108) and its implementing regulations (36 CFR Part 800). The work was performed by professional archaeologists meeting the qualifications established in the Secretary of the Interior's Standards and Guidelines (48 FR44716 [29 September 1983]). Report information and formatting are consistent with the standards set forth in the South Carolina Standards and Guidelines for Archaeological Investigations (Council of South Carolina Professional Archaeologists 2013). The work was performed by professional archaeologists meeting the qualifications established in the Secretary of the Interior's Standards and Guidelines (48 FR44716 [29 September 1983]). Chris Clement, PhD, RPA, was the Principal Investigator. A resume is provided in **Appendix B**. Joseph Normandy, MA, RPA, and Louise Steele, MA, RPA, conducted the fieldwork. Allen Kent, PhD, was the historian for this work. Andrew Heller, MA, provided GIS support and Greg Hendryx, MA, RPA, was the Project Manager.

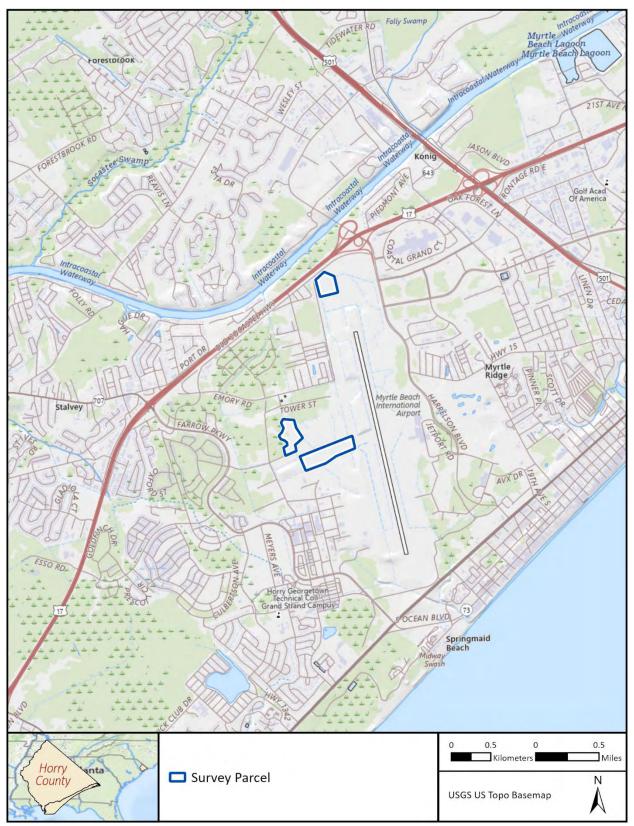


Figure 1. Project location.

Introduction 2

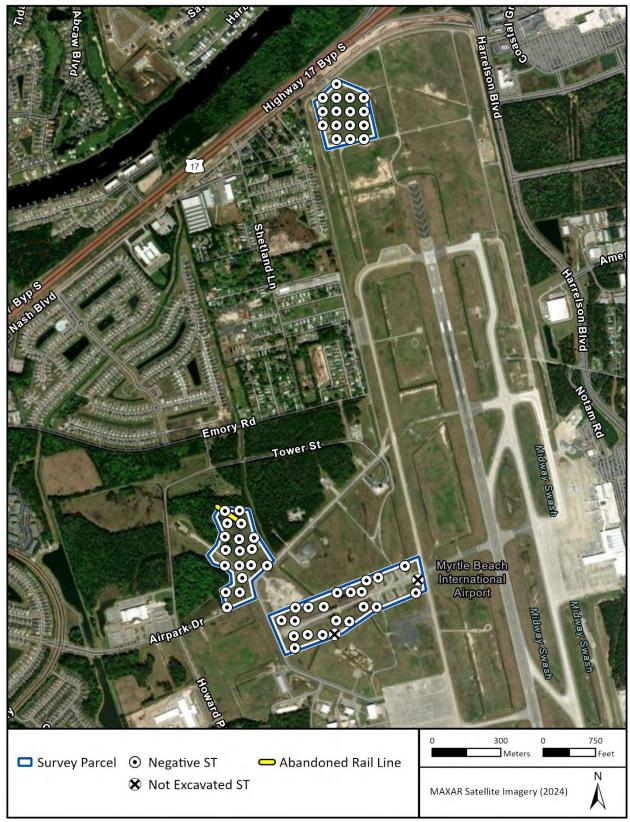


Figure 2. Project parcels, with results.



This page intentionally left blank.

Introduction 4

#### 2 ENVIRONMENTAL CONTEXT

This section provides an environmental context for the Project. It consists of a review of the geology and physiography of the Project, surficial geology, and hydrology. This section also addresses soils mapped within the Project.

#### 2.1 GEOLOGY AND PHYSIOGRAPHY

The Project is along South Carolina's Grand Strand, a 60 mile long stretch of coastline between about the Little River near the North Carolina/South Carolina border to Winyah Bay near Georgetown. The Grand Strand is underpinned by Pleistocene sediments, and contains recent fluvial sands, backbarrier muds and barrier beach sands less than 3 million year old. The Project is in the Carolina Flatwoods Level IV ecoregion (Griffith et al. 2002). The Carolina Flatwoods is a broad coastal plain with low relief and wide upland surfaces. Large areas of poorly drained soils are present. The ecoregion was covered with shallow coastal waters during the Pleistocene, with recession leaving behind terrace and shoreline related landforms. Native vegetation included pine flatwoods and savannas, freshwater marshes, pond pine woodlands, and pocosins. Some sandhill communities may also be present. Currently, loblolly pine plantation is widespread in undeveloped areas (Griffith et al. 2002; Comstock et al. 2002).

#### 2.2 SURFICIAL GEOLOGY

Within the Project, mapped surficial geology includes barrier island deposits forming linear, subparallel ridges, Pliestocene muds, and estuarine deposits (Doar 2014; **Figure 3**). Barrier island deposits and Pleistocene muds are mapped at Parcel 3, while estuarine deposits are mapped at Parcel 1. Portions of the Project are also mapped as moved earth, which is material moved by human action and occurs specifically within the Project where airfield construction has occurred, including parts of Parcels 1 and 3, and all of Parcel 2. Also present in the area, though not mapped within the Project, are sediments of the Silver Bluff alloformation. These are Pleistocene in age, and are above 6 ft elevation at their seaward margin.

#### 2.3 HYDROLOGY

There are no mapped waterbodies in the Project, which lacks naturally occurring topographic relief though airfield development has created some relatively higher ground associated with areas of moved earth. A 1937 US Geological Survey topographic quadrangle indicates that portions of Parcels 2 and 3 were wetland historically, and that a small watercourse once crossed the northern edge of Parcel 1, draining northward into what is now the Intracoastal Waterway. Historically, the Intracoastal Waterway was associated with a wetland known as Folly Swamp.

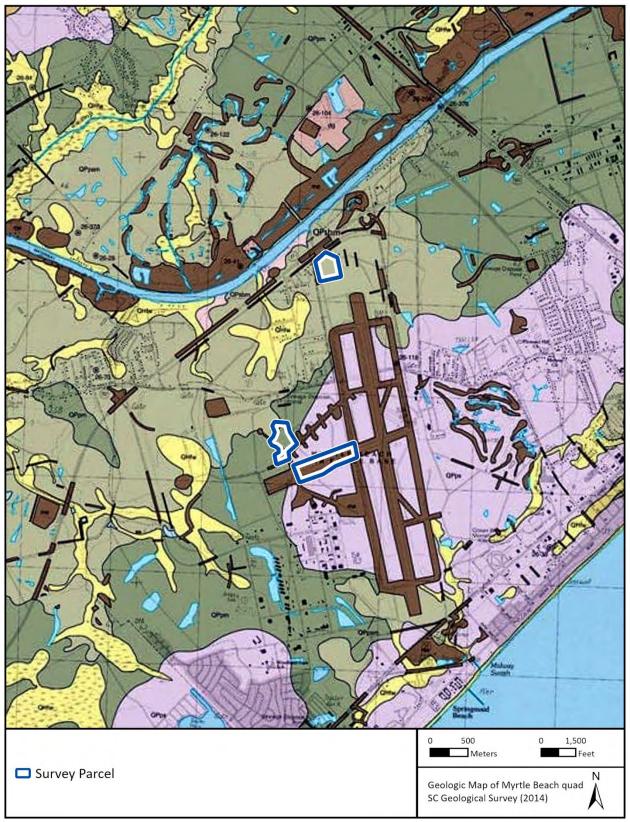


Figure 3. Project surficial geology.

#### 2.4 Soils

Soils mapped at the Project parcels are presented in **Table 1** and **Figure 4**. The soils in the Project parcels are either poorly drained or somewhat poorly drained, and occur generally on coastal plains (US Department of Agriculture 2024). Wahee fine sandy loam covers the largest area within the Project, and is characterize by a dark gray (10YR 4/1) fine sandy loam A horizon, a pale brown (10YR 6/3) sandy loam E horizon, and a light olive brown (2.5Y 5/3) clay loam Bt horizon, a grayish brown (2.5Y 5/2) clay loam Btg1 horizon, and a gray (10YR 6/1) clay loam Btg2 horizon in the upper meter. Yemassee loamy fine sand is also common in the Project parcels, and is characterized by a black (10YR 2/1) loamy fine sand A horizon, a pale brown (10YR 5/3) loamy fine sand E horizon, a pale brown (2.5Y 6/3) sandy clay loam Bt horizon, a gray (10YR 6/1) sandy clay loam Btg1 horizon, and a gray (10YR 6/1) sandy clay loam Btg2 horizon in the upper meter. Intact soils representing any of the mapped soils within the Project parcels were not encountered; instead, STs revealed disturbed soil profiles across the Project parcels, as summarized in the Results section.

Table 1. Soils Mapped in the Project Parcels.

Table 1: 30h3 Wapped in the 110 jeet 1 areels.							
Bladen fine sandy loam	Poorly drained	coastal plains, depressions, flats	4.36	7.50%			
Meggett loam	Poorly drained	coastal plains, drainageways, flood plains	8.95	15.38%			
Wahee fine sandy loam	Somewhat poorly drained	coastal plains, flats	27.24	46.83%			
Yemassee loamy fine sand	Somewhat poorly drained	coastal plains, flats	17.63	30.30%			

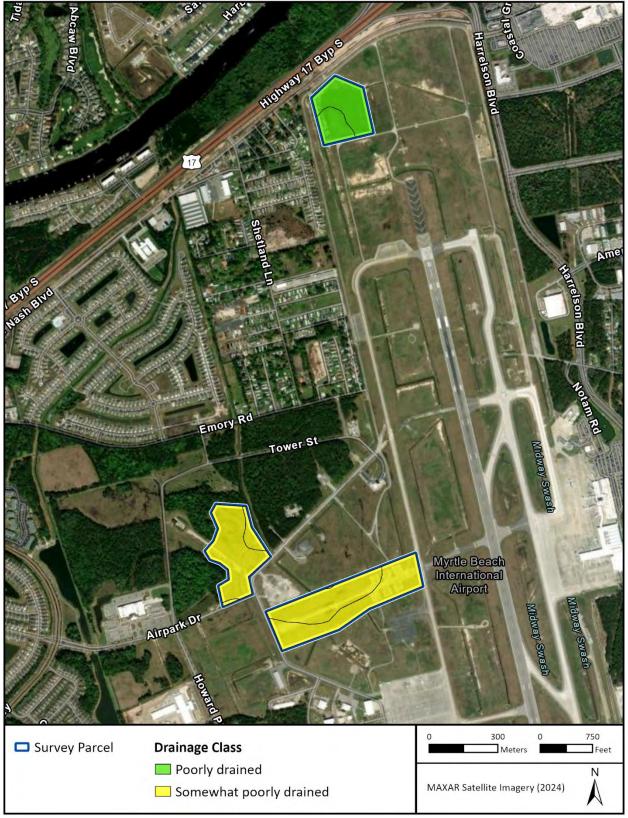


Figure 4. Soil drainage classifications mapped in the Project.

8

#### 3 CULTURAL CONTEXT

This section presents a cultural context for the Project. It is abbreviated because the survey recorded negative results.

#### 3.1 Native American Context

The prehistoric period is divided into the Paleoindian period when humans first occupied the Americas, the Archaic period marked by growing familiarity with and control of a stabilized natural environment, the Woodland period when ceramics came into widespread use, and the Mississippian period when southeastern groups achieved their cultural climax. This section provides brief summaries of each period, focusing primarily on diagnostic artifacts that would indicate that a site occupied during a given period was encountered by the survey.

#### 3.1.1 Paleoindian Period

The Paleoindian period began ca. 11,500 B.P. and lasted until ca. 9900 B.P. It is broken down into three subperiods-Early, Middle and Late (or transitional). Subperiods are based on the introduction of new artifact forms to the tool kit, which in turn are associated with rapid environmental changes occurring at the time. The Early Paleoindian subperiod (ca. 11,500 to 10,800 B.P.) is characterized by the presence of Clovis points with their distinctive fluting. At ca. 10,800 B.P., a number of new point types made their appearance, marking the Middle Paleoindian subperiod. These include Cumberland, Suwannee and Simpson types, with lanceolate forms and narrowing bases. The Late Paleoindian subperiod beginning about 10,500 B.P. is characterized by Dalton and Hardaway points. Daltons are lanceolate points with concave bases that have grinding on the lateral and basal margins. Hardaways are small lanceolate points with a slight waist, poorly developed ears and a slightly concave base (Cambron and Hulse 1964:A-7; Dejarnette et al. 1962:47, 84; Justice 1987:35-36). Quad and Beaver Lake points may also be related (Coe 1964; Goodyear 1974, 1982:390; Justice 1987:35-44; Morse 1971, 1973).

When humans first entered the Americas at the end of the Pleistocene, generally colder temperatures created a coarse-grained, patchy environment characterized by boreal forests and parklands in the study region. Additionally, the Atlantic coastline was significantly further east at the end of the last ice age, and many paleo sites are likely inundated today. Gradual warming and increased precipitation caused rapid shifts in this environment, leading to sea level rise and a more homogeneous northern hardwood forest with altitudinal variation. Eastern Paleoindians appear to have placed less reliance on Pleistocene megafauna than their western counterparts, and more emphasis on a generalized foraging economy (Dunbar 1991; Lepper and Meltzer 1991), requiring less mobility by individual groups but greater distances per move (Kelly 1983; Shott 1986). Reliance on a collector strategy required an increased effort to conserve scarce resources (Binford 1980), and tools were often used to exhaustion. As a result, high quality lithic raw materials that better lent themselves to retouching and tool maintenance were likely preferred (Goodyear 1979).

#### 3.1.2 Archaic Period

The Archaic is also generally divided into three subperiods-Early, Middle and Late. The Early Archaic is characterized in South Carolina by the presence of diagnostic side and corner-notched biface types, including Taylor, Big Sandy and Bolen points. These types also occur during the Late Paleoindian, suggesting cultural continuity. By about 9500 B.P. these early types began to be replaced by Palmer and Kirk Corner Notched points, which continued to be made until approximately 8800 B. P. when they were in turn replaced by MacCorkle, St. Albans, LeCroy, and Kanawah bifurcate base types, dating from about 8900 to 7800 B.P. Towards the end of the Early Archaic and into the Middle Archaic, various square-stemmed and contracting-stemmed types appear, including Morrow Mountain, Kirk Stemmed and Stanly points (Anderson et al. 1992: 10). Guilford Lanceolate points are also attributed to the Middle Archaic. Late Archaic points may be a continuation of the Middle Archaic, though some smaller types such as small Savannah River Stemmed and Gypsy may also be attributed to this time period. More characteristic of the Late Archaic is the addition of pottery to the toolkit, including Stallings Island and Thoms Creek.

The Archaic period begins roughly with the start of the Holocene. A more stable climate allowed human populations to refine local environment familiarity, and a progressive shift from Early Paleoindian collector strategies to more specialized foraging strategies was likely completed by 9900 B.P.-the beginning of the Archaic period. This shift may have resulted in slight population density increases and mobility decreases by human groups seeking locally abundant resources; movement to new locations would occur only when those resources were depleted. As resource distribution became increasingly patchy and fine-grained due in part to environmental changes, moves were shorter and likely planned, eventually developing into a seasonal round. By the end of the Archaic period, approximately 3000 B.P., seasonal rounds were probably quite refined.

### 3.1.3 Woodland and Mississippian Periods

The Woodland period in South Carolina, beginning at ca. 1000 B.C., is characterized by the widespread use of pottery, while the Mississippian period is marked by the appearance of intensive horticulture within a context of ranked, hierarchical social structures and complex ceremonialism associated with South Appalachian Mississippian cultures at ca. A.D. 1100. Material remains associated with the Woodland and Mississippian periods display increasing diversity across both time and space, resulting in a complex array of diagnostic materials.

The Woodland period marks the widespread adoption of ceramic technology across the southeast. In north coastal SC, pottery was already present in the archaeological record, but Late Archaic types were supplanted by Refuge and then Deptford pottery with the onset of the Woodland period. Along the southern North Carolina coast Late Archaic pottery was supplemented by Hamps Landing and New River types marking the onset of the Woodland period, while Cape Fear and Mount Pleasant marked the Middle Woodland. The Middle Woodland in South Carolina continued to be characterized by Deptford, though other series were also present including Wilmington. Hanover and series pottery was also introduced during the Middle Woodland in North Carolina, but is more commonly associated with the Late Woodland.

Cultural Context 10

Complicated stamping marks the beginning of the Mississippian period, but complicated stamped pottery occurs rarely or not at all on the North Carolina coast and there are few other indications that Mississippian developments elsewhere in the southeastern US had strong influences in the area. For South Carolina, complicated stamping occurs on the Savannah and St. Catherine's ceramic series and signals the onset of the Mississippian period, but these pottery series are largely limited to the southern coastal areas of the state. Complicated stamping on the northern South Carolina coast did not appear until the Middle Mississippian with the Peedee series (Anderson 1982; Clement et al. 2001). Wachesaw and Kimbel are two late-dating Native American ceramics, both possibly associated with groups occupying the northern coast of South Carolina during the early historic period (Trinkley and Hogue 1979; Trinkley et al. 1983).

#### 3.2 HISTORIC PERIOD

European settlement efforts along the South Carolina coast date to Spanish exploration in the 1520s, but was limited until the arrival of the English in the mid-seventeenth century. Much of their settlement in today's South Carolina centered around Charleston, often to the neglect of other coastal and interior territories. Charleston continued to serve as a focal point of the Carolina Colony into the early decades of the eighteenth century. In 1730, Royal Governor Robert Johnson created a township system to encourage additional settlement. Present-day Myrtle Beach and portions of Horry County became part of Kingston Township in 1732 (Lewis 1998; US Air Force 1993).

Though the land grants of the township system did bring additional settlement to today's Horry County, it remained sparse through the Revolutionary and Early National periods. In 1810, Horry County held the smallest population in the state, standing at 4,349. The timber forests of the area aided the development of logging and naval stores industry, which increased in importance by the 1830s and grew significantly in the post-Civil War period. In 1883, Conwayborough became Conway, and in 1887, a railroad line connected the town with larger markets. By 1890, the population grew to over 19,000, expanding further to 23,364 in 1900 (Forestall 1996; Lewis 1998; US Air Force 1993).

The earliest significant interest in Myrtle Beach began in 1900, when Franklin G. Burroughs ordered a survey for a railroad line connecting the economic and political center at Conway with the coast to aid shipping possibilities. Following his death, Burroughs' sons helped lay out the streets for an area that became known as New Town to differentiate from the "old town" of Conway. The name was quickly changed to Myrtle Beach. By 1901, the Burroughs' opened the Seaside Inn and provided the first hotel accommodation in the area. The first three decades of the twentieth century brought additional settlers, mostly small farmers buying individual plots of land, as well as developers along the area's beaches building hotels and attractions. By the 1930s, significant investment in the tourism industry ramped up, aided by the completion of a paved road to Myrtle Beach in 1928. This period also included the construction of Myrtle Beach State Park. Between 1900 and 1940, the population more than doubled, reaching nearly 52,000 (Forestall 1996; Lewis 1998; US Air Force 1993).

The first airport facility for the Myrtle Beach area began with the town council in 1939. In October, the council opted to procure land for a local airport, with 135 acres purchased for that express purpose. The buildup to World War II brought additional investment in the development of airfields. Piedmont Airlines served as the first outfit to provide commercial flights to and from Myrtle Beach. In anticipation of US entry into the conflict growing in the early 1940s, cooperation between the city and the US War Department resulted in the expansion of the facility. Between 1940 and 1941, federal funds aided significant airport expansion, and the lengthening and paving of the two grass runways. In November 1941, the US War Department obtained around 100,000 acres, with nearly 7,000 acres comprising the air facilities. By 1942, the US Army Air Forces (AAF) constructed three gunnery ranges and two bombing ranges were constructed or under construction, and the facility was renamed the Myrtle Beach General Bombing and Gunnery Range (Air Force Civil Engineer Center n.d.; Historical Marker Database 2017; McMillan 2004; Mueller 1989; South Carolina History Trail n.d.; US Air Force 1993).

The facility housed numerous squadrons, beginning as early as 1940, including the 3<sup>rd</sup>, 105<sup>th</sup>, and 112<sup>th</sup> Observation Squadrons. Following its elevation to an active facility in 1942, the Myrtle Beach General Bombing and Gunnery Range housed numerous commands destined for the battlefields of Europe and the Pacific, with the first—the 3<sup>rd</sup> AAF Bombing and Gunnery Range Squadron— assigned in 1942. In May 1942, the 79<sup>th</sup> Squadron arrived for training on the gunnery ranges. Units stationed at the facility also patrolled the US coastline to protect against potential attacks from German U-boats, and captured German prisoners were kept on base during the war. Throughout the course of the war, over 550 combat teams and over 1,000 crew members participated in nearly 4,500 bombing and gunnery training missions (Mueller 1989; South Carolina History Trail n.d.; US Air Force 1993).

The facility was further developed during the war to expand its capabilities.. In 1943 a perimeter taxiway network, a hardstand for aircraft parking, and reinforcements to the runway were constructed, as were additional facilities for on-site personnel. In total, 114 new structures were constructed during this period. The additions upgraded the facility's position within the training infrastructure of the AAF, and in November 1943, the installation was renamed Myrtle Beach Army Airfield. However, training at the facility soon slowed with the successes of Allied forces in Europe and the Pacific, bringing an end to World War II. Myrtle Beach Army Airfield had its status changed to inactive on November 1, 1947. The City of Myrtle Beach took back control of the facilities and again used the runways for commercial flights (Mueller 1989; US Air Force 1993).

Though the facility remained a municipal airport into the early 1950s, the development of the Cold War following the end of World War II returned increased attention to military preparedness, and the development of nuclear weaponry elevated the importance of the US Air Force. In 1954, an agreement between the City of Myrtle Beach and the Air Force resulted in the establishment of Myrtle Beach Air Force Base (AFB). Given the increased speed of technological development during the Cold War, the US Army Corps of Engineers (USACE) created extensive plans to upgrade the facility to accommodate new bombers and fighter jets of the Tactical Air Command (TAC). Numerous changes and additions occurred between 1954 and 1961, including an aircraft control and warning site with a radar facility, expansion and rehabilitation of runways

Cultural Context 12

to accommodate modern jets, Capehart housing facilities, and a hospital unit (Mueller 1989; US Air Force 1993; South Carolina History Trail n.d.).

In 1975, the federal government agreed to operate a joint military-civilian air facility, resulting in the construction of the Myrtle Beach Jetport on the northeast side of Myrtle Beach AFB. The first commercial flight landed at the site in July 1975, and the Economic Development Administration provided \$500,000 of federal funding to aid in the building of a terminal facility. The Myrtle Beach City Council annexed the base and surrounding areas into the city in 1977. Following the end of the Cold War in the early 1990s, the Department of Defense closed many bases around the United States, including Myrtle Beach AFB, which officially deactivated in 1993. The commercial airport continued to operate and expand its flight services, offering international flights and renaming Myrtle Beach International Airport in 1996. An \$18 million renovation of the facilities expanded the airport terminal to 120,000 square feet (Air Force Civil Engineer Center n.d.; Columbia Record 19 Nov 1975; Merx 1996; Monk 1975, 1977; Mueller 1989; Winston-Salem Journal 28 August 1996).

## 3.3 HISTORIC MAP AND AERIAL PHOTOGRAPH REVIEW

SEARCH reviewed historic maps and aerial photographs to identify previous development within the Project and to understand previous land use. Historic maps examined include the Mills (1825) map of the Horry District, the 1918 soils map of Horry County (US Department of Agriculture 1918), the 1939 General Highway and Transportation Map of Horry County (SC State Highway Department 1939), a master plan map of Myrtle Beach Air Base dated 1952 (Anonymous 1952), and US Geological Survey (USGS) topographic maps from 1937, 1940, and 1984. Additional USGS topographic maps are available on the NetrOnline (2024) *Historical Aerials* website where historic aerial images can be viewed and overlaid, however, references to specific maps and aerial images are not provided and can be discussed only by the year they were created. Individual historic aerial images are also available from the USGS' EarthExplorer web site; historic aerials from 1951, 1958, 1964, and 1977 were examined for the present survey.

Maps showing the Myrtle Beach area prior to construction of the inland waterway and extensive development of Myrtle Beach itself, including MYR, are difficult to interpret because both road networks and hydrological features have been altered. On the 1825 Mills map an additional complication is that Myrtle Beach is not indicated; however, based on historic road networks, it is likely at or near "Eight Mile Sw" (swash) which drains Withers Swamp inland from the coast (Figure 5). Withers Swamp is not indicated on modern maps, but appears on the 1918 soil map as Withers Big Swamp and on the 1937 USGS topographic map as Withers Swamp; on both maps the swamp drains into the Atlantic Ocean at Withers Swash south of the main area of Myrtle Beach development. The Project is somewhat southwest of Withers Swash, and no structures are depicted in the area on the 1825 map. By 1918 (Figure 6) the Project is bisected by a road between Myrtle Beach and Socastee, with the northern Project parcel to the north and the southern parcels to the south. On the 1937 USGS topographic map (Figure 7) this road is US

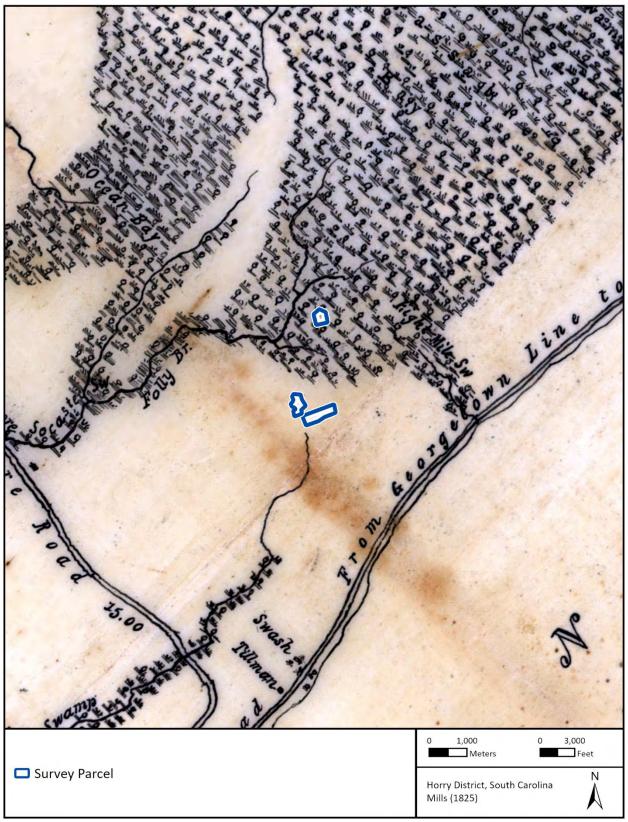


Figure 5. Project vicinity on the 1825 Mills map of Horry District.

Cultural Context 14

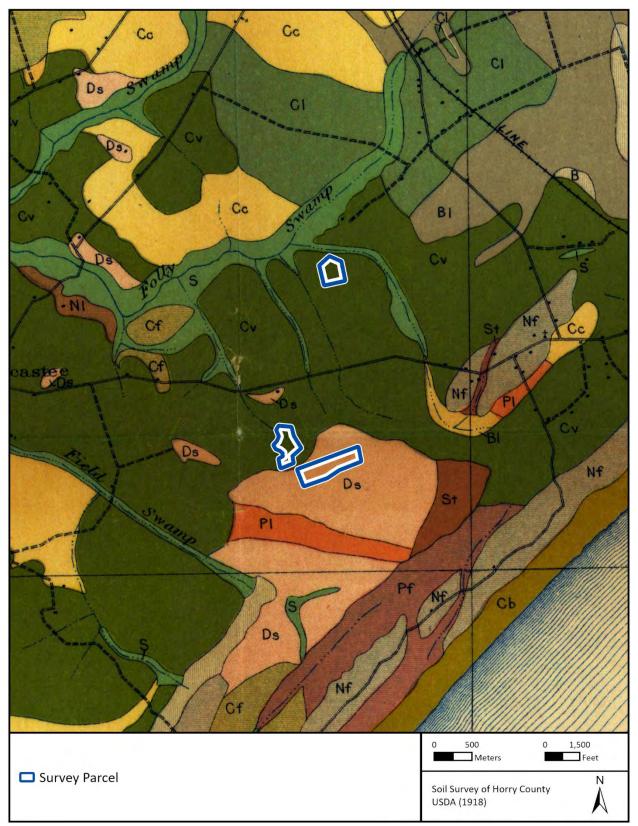


Figure 6. Project parcels on the 1918 soils map of Horry County.

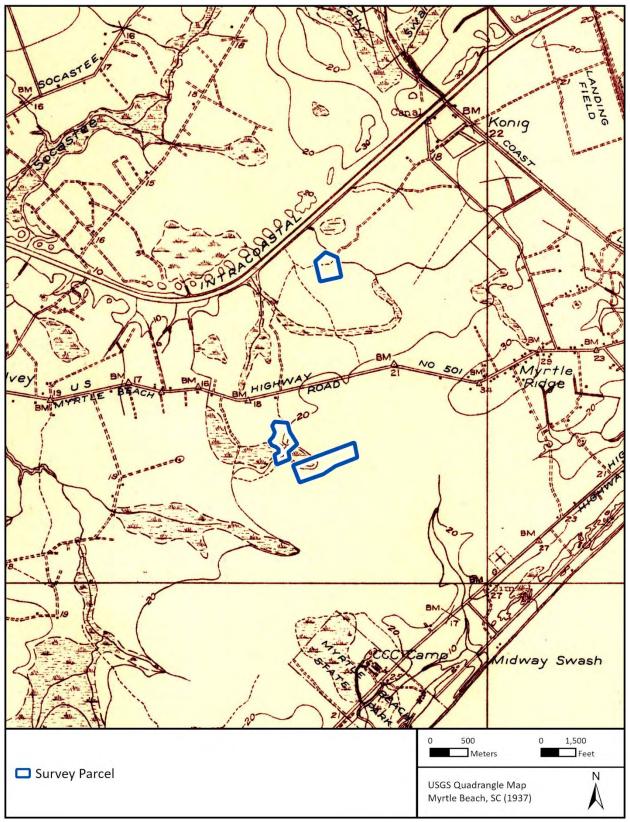


Figure 7. Project parcels on the 1937 Myrtle Beach 1:48,000 USGS topographic quadrangle.

Cultural Context 16

Highway 501/Myrtle Beach Road (US 501), and unimproved roads are present in the northern and western Project parcels. No other development is indicated in the Project parcels. The future route of the Intracoastal Waterway is labeled as Folly Swamp on the 1918 soils map where it nearly abuts the northern Project parcel, by 1937 the Intracoastal Waterway had been constructed.

The 1939 General Highway Map (Figure 8) adds a little to the 1937 USGS topographic map. Several additional structures are present along US Highway 501, and the location of MYR is indicated. A spur of the Atlantic Coast Line Railroad is present looping west and then north from the eastern extent of MYR, but its precise relationship to the Project is unclear. This spur is not depicted on the 1940 USGS topographic map, nor is MYR. By 1984 MYR has been constructed largely in its present configuration. USGS maps from intervening years are at a scale of 1:250,000, and do not provide sufficient detail for interpretation. USGS topographic maps from 1965 and 1975 are available on *Historic Aerials* (NETROnline 2024), but show no change from the 1940 map; however, aerial photographs pick up where mapping leaves off. A 1951 aerial photograph shows MYR as operational, but with a smaller, more southerly footprint than today (Figure 9). US 501 is still extant skirting the airport's northern edge. On a 1958 aerial photograph the MYR footprint largely mirrors its current limits, and US 501 has been rerouted both north and south of MYR. By 1977 US 17 was under construction and would be collocated with US 501 along the northern edge of MYR.

Aerial imagery and the 1952 Myrtle Beach Air Base master plan map also shows the development of MYR itself. In 1951 the airfield was confined to south of then US 501. Two main runways were present, but the north-south runway (now Runway 36 north/18 south) was shorter than it is today while an east-west runway that is no longer operational was also present (see Figure 9), and can be seen on modern imagery (e.g., see Figure 2). This airfield configuration is also seen on the 1952 master plan map of Myrtle Beach Air Base, though the north-south runway is slated for lengthening (Figure 10). The northernmost Project parcel occupies the cleared glide path of Runway 18. The southernmost Project parcel occupies the western portion of the east-west runway and its apron. The western end of the east-west runway was flanked in 1951 north and south by taxiways leading to keyhole-shaped alert aprons for individual aircraft; north of the runway there were seven alert aprons on the north side of the taxiway and seven on the south side. Each alert apron consisted of an access lane with space to turn the aircraft around at the end of the access lane. On the north side of the runway, the westernmost Project parcel occupies one of these alert aprons. The 1952 master plan map of Myrtle Beach Air Base shows that these alert aprons will no longer be used, and also shows a road from the ordnance depot crossing roughly north-south beyond the alert apron occupied by the westernmost Project parcel. An abandoned rail line is also present within Parcel 3, exiting to the northeast from the northernmost part of the parcel. By 1958 the Parcel 3 alert apron had been lengthened to accommodate multiple multi-engine aircraft nose-to-tail, eliminating the keyhole shape, and the road and rail line are no longer apparent; this configuration is apparent on modern imagery, through the rail line trace can be discerned (see Figure 2).

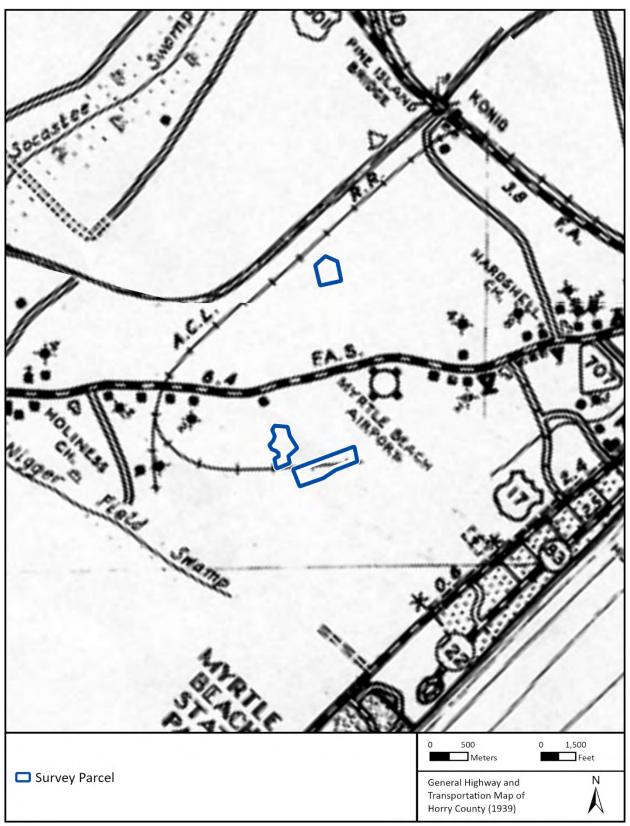


Figure 8. Project parcels on the 1939 General Highway Map of Horry County.

Cultural Context 18

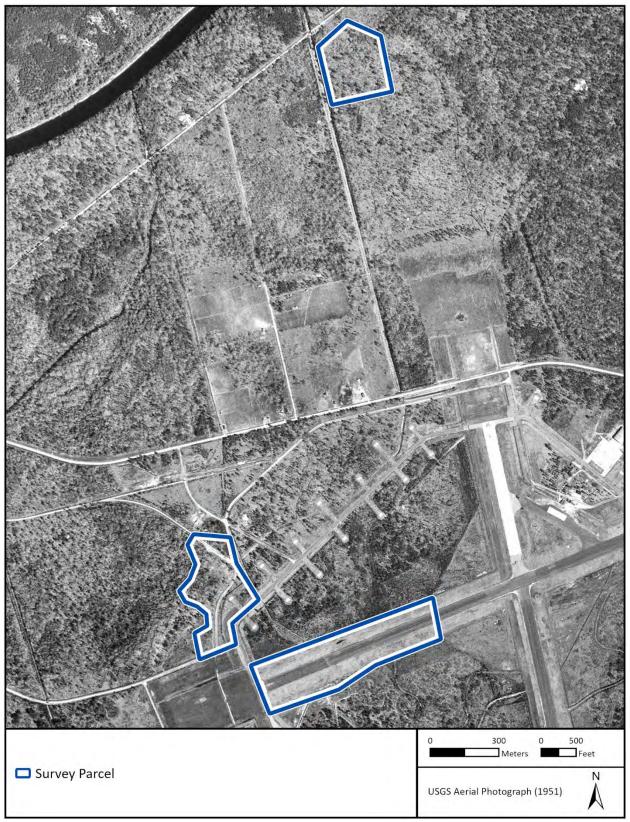


Figure 9. Project parcels on a 1951 aerial image.

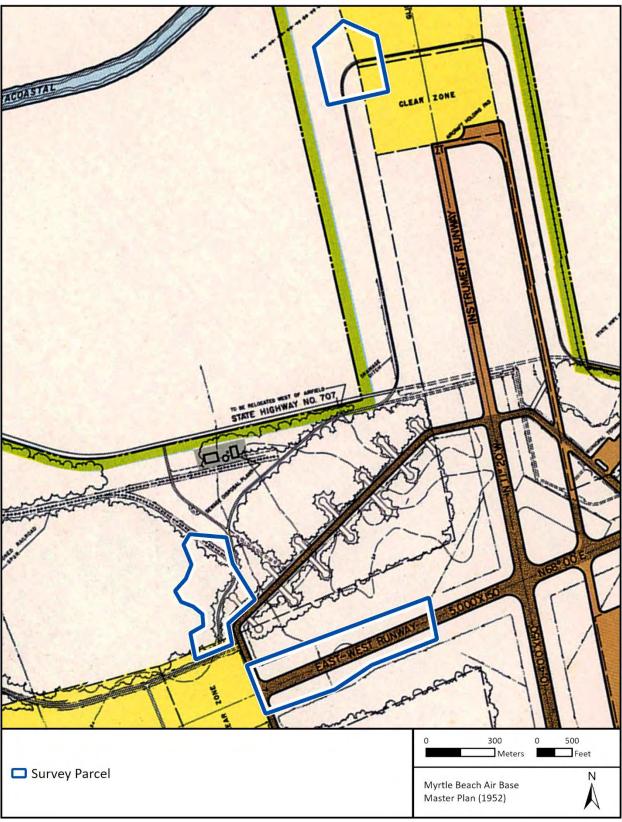


Figure 10. Project parcels on the 1952 master plan map of Myrtle Beach Air Base.

Cultural Context 20

## 4 RESEARCH DESIGN

This survey was designed to identify archaeological sites within the Project parcels that are listed on the National Register of Historic Places (NRHP) or that are eligible for NRHP listing. This section presents the research design adopted for archaeological survey of the Project parcels. It includes a discussion of methods employed during fieldwork as well as a discussion of laboratory procedures and methods, and begins with a section operationalizing NRHP eligibility recommendations.

## 4.1 DETERMINING ELIGIBILITY

One purpose of an archaeological survey is to make preliminary eligibility recommendations for any prehistoric or historic archaeological sites encountered in the survey. These recommendations, and the data on which they are based, serve as an initial basis for establishing whether additional work is required to assess site eligibility for listing in the NRHP. Evaluation for inclusion in the NRHP follows 36 CFR Part 60.4, which states that: The quality of significance in American history, architecture, archeology, 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 that have made a significant contribution to the broad patterns of our history;
- B. that are associated with the lives of persons significant in our past;
- 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.

Of the above criteria, it is Criterion D that is typically singled out when the eligibility of archaeological properties is determined.

#### 4.2 FIELD METHODS

Field methods relied on the hand excavation of STs along parallel transects within the Project parcels, and are consistent with standards and guidelines promulgated by COSCAPA (2013). The Project parcels consisted of artificially leveled terrain with evidence of disturbance at the surface as well as identifiable through historic map and aerial photograph review. They are also composed of poorly drained or somewhat poorly drained soils. Surface visibility was good across most of the Project parcels, but due to the nature of the terrain and the soil drainage characteristics the possibility of buried archaeological deposits was explored using a transect and ST interval of 60 m. Had positive STs been encountered, site boundaries would have been

investigated by excavating STs in no less than four directions at a 15-m interval within the Project parcel. Site boundaries in South Carolina are identified by at least two consecutive negative STs with no other related cultural materials within a 30-m radius.

STs were 30 cm in diameter and were excavated to at least 80 cm below surface (cmbs), or until impenetrable substrate (i.e., bedrock or clay), a known sterile subsoil, or the water table was reached. STs were excavated in 10-cm levels, had straight, vertical (not sloping) sides, and were excavated into sterile soil below any artifact-bearing strata. Soil was screened through 6.4-mm (¼-inch) mesh hardware cloth. Following ST excavation, soil profiles were examined for their archaeological context, taking into account the general setting of the individual shovel test.

ST locations were recorded using a GPS-based geographic data collection system, and the field crew also recorded their findings, including soil profiles, using a standardized ST form. Additionally, publication-quality photographs were taken of the general survey area condition/environment, fieldwork overviews, and ST excavations. A photographic log, including all relevant information necessary to accurately record the location and condition of the item being photographed, was kept throughout the project. Minimally, information recorded in the photographic log included the project number, date, photograph orientation, recorder, accurate location from which the shot was taken, description of the item being photographed, frame/exposure number, and any other relevant information.

## 4.3 LAB METHODS

No artifacts or other cultural material was recovered by the survey, and no laboratory analysis was conducted.

#### 4.4 CURATION

No artifacts or other cultural material was recovered by the survey. No curation is required. Paperwork and other data generated by the survey will be retained at the SEARCH Jacksonville, FL office.

Research Design 22

## 5 RESULTS

SEARCH conducted fieldwork from November 19–21, 2024, excavating 54 STs. An ST log is provided in **Appendix C**. Two planned STs were not excavated due to the nearby presence of modern utilities or artificial landforms. No positive STs were recorded, and no cultural resources were identified during the survey. This section summarizes the results of fieldwork by survey parcel (see **Figure 2**).

## **5.1** Parcel **1**

SEARCH archaeologists excavated 16 STs in Parcel 1. Parcel 1 consisted of manicured grass and generally level terrain at the time of survey (**Figure 11**). Drainage ditches and other evidence of earthmoving were apparent. STs ranged in depth from 14 to 30 cmbs, with a mean depth of 23 cmbs. Evidence of disturbance was noted in all STs, and all were terminated due to sterile clay subsoil. Two strata were encountered in STs. Stratum 1 was typically a dark gray to brown (10YR 4/1–4/3) clay or sandy clay, and was encountered to depths between 10 and 20 cmbs. Mottling was present in three instances, indicating disturbance. Stratum 2 was identified in five STs, and was usually a grayish brown (10YR 5/2) sandy clay, though yellowish brown (10YR 5/6) and dark yellowish brown (10YR 4/6) soils were also present. **Figure 12** provides one example of a Parcel 1 ST.



Figure 11. Overview of Parcel 1. View west from ST N0600 E1440.



Figure 12. ST N0600 E1440, Parcel 1. North profile.

## **5.2** Parcel 2

SEARCH archaeologists excavated 20 STs in Parcel 2. Parcel 2 consisted of manicured grass and generally level terrain abutting the former east-west runway at MYR at the time of survey (**Figure 13**). Drainage ditches and other evidence of earthmoving were apparent (**Figure 14**). STs ranged in depth from 7 to 80 cmbs, with a mean depth of 31 cmbs. Only two strata were encountered in most STs (n=12), where Stratum 1 was typically a dark brown (10YR 3/3) sandy clay, and was encountered most commonly to depths of up to 17 cmbs and to a maximum depth of 25 cmbs. A dark brown (10YR 3/3) matrix was also most common among STs displaying a single stratum (n=6). Stratum 2 was usually a yellowish brown (10YR 5/6) sandy clay. In STs with only two strata, Stratum 2 terminated between 24 and 50 cmbs. STs with one or two strata were terminated due to compaction (n=4), visible disturbance (n=7), sterile soils (n=5), or rock impasses (n=2). Five STs had more than two strata, including two with four strata and one with three strata. These were also among the deepest STs, averaging 61 cmbs. Stratum 3 was either a strong brown (7.5YR 5/6) sand or a yellowish brown (10YR 5/4) sandy clay. Stratum 4 was a gray to light brownish gray (10YR 6/1–2) clay or sandy clay. **Figure 15** provides one example of a Parcel 2 ST.



Figure 13. Overview of Parcel 2. View east from ST N8380 E1080.



Figure 14. Drainage feature at Parcel 2. View east from STN8320 E1320.



Figure 15. ST N8320 E1260, Parcel 2. North profile.

## **5.3** Parcel **3**

SEARCH archaeologists excavated 18 STs in Parcel 3. Parcel 3 consisted of manicured grass and generally level terrain at the time of survey (Figure 11). Drainage ditches and other drainage infrastructure (Figure 17), areas of broken pavement (Figure 18), an abandoned rail line trace (see Figure 2), and other evidence of earthmoving were apparent. STs ranged in depth from 20 to 45 cmbs, with a mean depth of 30 cmbs. Evidence of disturbance was noted in all STs. Most STs (n=14) contained two strata. Stratum 1 was typically a dark brown (10YR 3/3) sandy clay or sandy loam, and was encountered to depths between 7 and 40 cmbs, most commonly terminating above 25 cmbs. Mottling was present in three instances, indicating disturbance. Stratum 2 was usually a very pale brown (10YR 7/3) sandy clay, but varied considerably, again, consistent with disturbed soils. One ST contained three strata, including a dark brown (10YR 3/3) upper stratum, a very pale brown (10YR 7/3) Stratum 2, and a light brownish gray (10YR 6/2) Stratum 3; all strata were mottled with soils from the other strata. STs in Parcel 3 were terminated due to disturbance (n=8), sterile soils (n=8), compaction (n=1), or rock impasse (n=1). Figure 19 provides one example of a Parcel 3 ST.



Figure 16. Overview of Parcel 3. View south from ST N8860 E0900.



Figure 17. View east of drainage structure in Parcel 3 from near ST N8800 E0840.



Figure 18. View east of broken pavement in Parcel 3 from ST N8620 E0900.



Figure 19. ST N8620 E0900, Parcel 3. North profile.

## 6 SUMMARY AND RECOMMENDATION

SEARCH conducted a Phase I archaeological survey at MYR, Myrtle Beach, South Carolina in November 2024. The survey was conducted under subcontract to RS&H on behalf of MYR in support of proposed temporary runway construction, and examined three parcels where borrow material may be sourced. An EA for the proposed temporary runway construction was completed in May 2024 to satisfy FAA permitting requirements. The FAA and SC SHPO agreed that the proposed temporary runway construction would have no effect on historic properties; however, the borrow pit locations were not defined when the EA was produced. This archaeological survey is in support of a supplemental EA addressing possible borrow pit locations, and was conducted in compliance with Section 106 of the NHPA (54 U.S.C. § 306108) and its implementing regulations (36 CFR Part 800).

SEARCH conducted fieldwork from November 19–21, 2024, excavating 54 STs across the three Project parcels. The Project parcels consisted of artificially leveled terrain with evidence of disturbance at the surface as well as identifiable through historic map and aerial photograph review. No positive STs were recorded, and no cultural resources were identified by the survey.

## **6.1** RECOMMENDATION

SEARCH recommends a finding that the Project will have no effect on archaeological resources that are listed in the NRHP, that are eligible for NRHP listing, or that may be eligible for NRHP listing. SEARCH recommends no additional archaeological work in relation to the Project.

This page intentionally left blank.

## 7 REFERENCES CITED

#### Air Force Civil Engineer Center

n.d. Air Force Transfers Final Property Remaining at Former Myrtle Beach AFB. History. Electronic document, https://www.afcec.af.mil/Home/BRAC/Myrtle-Beach/, accessed December 2024.

#### Anderson, David G.

1982 The Mattassee Lake Ceramic Artifact Assemblage. In *Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina*, edited by David G. Anderson, Charles E. Cantley and A. Lee Novick, pp. 207- 321. Atlanta Interagency Archaeological Services Division, National Park Service Special Publication No. 1982

Anderson, David G., Kenneth E. Sassaman, and Christopher Judge (editors)

1992 Paleo indian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective. Council of South Carolina Professional Archaeologists.

#### Anonymous

1952 Myrtle Beach Air Base Preliminary Master Plan. Electronic document, https://tedsvintageart.com/products/vintage-map-of-myrtle-beach-air-base-1952/, accessed December 2024.

#### Binford, Lewis R.

1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45:4-20.

#### Cambron, James W., and David C. Hulse

1964 Handbook of Alabama Archaeology, Part 1: Point Types. Archaeological Research Association of Alabama, Tuscaloosa.

Clement, Christopher Ohm, Ramona M. Grunden, and Amy C. Joyce

2001 A Preliminary Report on Archaeological Investigations at 38GE469, Sandy Island, South Carolina. South Carolina Institute of Archaeology and Anthropology, Columbia.

#### Coe, Joffre L.

1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society* 54(5). Philadelphia.

#### The Columbia Record [Columbia, SC]

1975 Myrtle Beach Jetport Terminal Grant Okayed. 19 November: 4-D.

## Comstock, Jeffery.A., GlennE. Griffith, James M. Omernik

2002 Ecoregions of North Carolina: Regional Descriptions. Electronic document, https://bplant.org/region/845, accessed December 2024.

#### Council of South Carolina Professional Archaeologists (COSCAPA)

2013 South Carolina Standards and Guidelines for Archaeological Investigations. Electronic document, https://scdah.sc.gov/sites/scdah/files/Documents/Historic%20 Preservation%20(SHPO)/Publications/Standards\_Guidelines2005-13.pdf, accessed December 2024.

## Dejarnette, David L., E. Kerjack, and J. Cambron

1962 Stanfield-Worley Bluff Shelter Excavations. Journal of Alabama Archaeology 8.

#### Doar, W.R.

2014 Geologic Map of the Myrtle Beach Quadrangle, Horry County, South Carolina. Electronic document, https://ngmdb.usgs.gov/Prodesc/proddesc\_103893.htm, accessed December 2024.

#### Dunbar, James S.

1991 Resource Orientation of Clovis and Suwannee Age Paleoindian Sites in Florida. In *Clovis: Origins and Adaptations*, edited by Robson Bonnichsen and Karen L. Turnmire, pp. 185-213. Peopling of the Americas Publications, Center for the Study of the First Americans, Oregon State University, Corvallis.

#### Forestall, Richard L.

1996 Population of the States and Counties of the United States: 1790 – 1990. US Bureau of the Census, Department of Commerce. US Government Printing Office, Washington, DC.

## Goodyear, Albert C.

- 1974 The Brand Site: A Technofunctional Study of a Dalton Site in Northeast Arkansas. Arkansas Archaeological Survey, Research Series 7.
- 1979 A Hypothesis for the Use of Cryptocrystalline Raw Materials Among PaleoIndian Groups of North America. Research Manuscript Series No. 156. South Carolina Institute of Archaeology and Anthropology, The University of South Carolina, Columbia.
- 1982 The Chronological Position of the Dalton Horizon in the Southeastern United States. *American Antiquity* 47:382-395.

Griffith, Glenn E., James M. Omernik, Jeffrey A. Comstock, Michael P. Schafale, W. Henry McNab, and David R. Lenat

2002 Ecoregions of North Carolina and South Carolina. Electronic document, https://www.epa.gov/eco-research/ecoregion-download-files-state-region-4#pane-38, accessed December 2024.

#### Historical Marker Database

2017 Myrtle Beach Air Force Base Historical Origin. Electronic document, https://www.hmdb.org/m.asp?m=102109, accessed December 2024.

References Cited 32

#### Justice, Noel D.

1987 Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States. Indiana University Press, Bloomington.

#### Kelly, Robert L.

1983 Hunter-Gatherer Mobility Strategies. *Journal of Anthropological Research* 39:277-306.

#### Lepper, Bradley T., and David J. Meltzer

1991 Late Pleistocene Human Occupation of the Eastern United States. In *Clovis: Origins and Adaptations*, edited by Robson Bonnichsen and Karen L. Turnmire, pp. 175-184. Peopling of the Americas Publications, Center for the Study of the First Americans, Oregon State University, Corvallis.

#### Lewis, Catherine Heniford

1998 Horry County, South Carolina, 1730-1993. University of South Carolina Press, Columbia.

#### McMillan, Susan Hoffer

2004 Myrtle Beach and the Grand Strand. Arcadia Publishing, Charleston, SC.

#### Merx, Katie

1996 Airport deal will connect Strand, Germany. The Sun News [Myrtle Beach, SC] 18 July:1-D.

#### Mills, Robert

1825 Horry District, South Carolina. Electronic document, https://www.loc.gov/item/2007627619/, accessed December 2024.

#### Monk, John

- 1975 MB Dream Sets Down At Jetport. The Sun News [Myrtle Beach, SC] 10 July:1-A.
- 1977 Annexation Given First Reading. The Sun News [Myrtle Beach, SC] 30 March:1-A.

#### Morse, Dan F.

- 1971 The Hawkins Cache: A Significant Dalton Find in Northeast Arkansas. *Arkansas Archeologist* 12:9-20.
- 1973 Dalton Culture in Northeast Arkansas. Florida Anthropologist 26:23-38.

#### Mueller, Robert

1989 Air Force Bases, Volume I: Active Air Force Bases Within the United States of America on 17 September 1982. Office of Air Force History, United States Air Force. Washington, DC.

#### **NETROnline**

2024 *Historic Aerials*. Electronic resource, https://www.historicaerials.com/, accessed December 2024.

#### Shott, Michael J.

1986 Technological Organization and Settlement Mobility: An Ethnographic Examination. Journal of Anthropological Research 42: 15-51.

#### South Carolina History Trail

n.d. Myrtle Beach Bombing Range and Air Force Base. Electronic document, http://www.schistorytrail.com/property.html?i=49, accessed December 2024.

#### South Carolina State Highway Department

00.pdf, accessed December 2024.

1939 General Highway and Transportation Map of Horry County, South Carolina. Electronic document, https://www.rootsandrecall.com/horry/files/2014/08/1407586415Horry\_County19384

#### **US Air Force**

1993 Disposal and Reuse of Myrtle Beach Air Force Base, South Carolina Final Environmental Impact Statement. February 1993. US Air Force, Washington, DC.

#### US Department of Agriculture

- 1918 Soil Map, Horry County, Eastern Sheet. Electronic document, https://digital.tcl.sc.edu/digital/collection/HSSM/id/23/, accessed December 2024.
- 2024 Official Soil Series Descriptions. Electronic document, https://soilseries.sc.egov.usda.gov/osdname.aspx, accessed December 2024.

#### US Geological Survey (USGS)

- 1937 Myrtle Beach, 1:48,000 topographic quadrangle. Electronic document, https://livingatlas.arcgis.com/topomapexplorer, accessed December 204.
- 1940 Myrtle Beach, 1:62,500 topographic quadrangle. Electronic document, https://livingatlas.arcgis.com/topomapexplorer, accessed December 204.
- 1951 Aerial image 1MW0000080036. Electronic document, https://earthexplorer.usgs.gov/, accessed December 2024.
- 1958 Aerial image CVAP620090007. Electronic document, https://earthexplorer.usgs.gov/, accessed December 2024.
- 1964 Aerial image B650101000824. Electronic document, https://earthexplorer.usgs.gov/, accessed December 2024.
- 1977 Aerial image 1SWJJ00020094. Electronic document, https://earthexplorer.usgs.gov/, accessed December 2024.
- 1984 Myrtle Beach, 1:24,000 topographic quadrangle. Electronic document, https://livingatlas.arcgis.com/topomapexplorer, accessed December 204.

#### The Winston-Salem Journal [Winston-Salem, NC]

1996 Getting around: By car, by plane, by boat – just get here. This is Myrtle Beach: A special advertising section. 28 August:12.

References Cited 34

# APPENDIX A PROJECT-RELATED CORRESPONDENCE

This page intentionally left blank.

From: Chris Clement
To: Chris Clement

**Subject:** FW: MYR Runway Rehab Supplemental EA - Phase I CRAS assistance?

**Date:** Monday, December 9, 2024 9:16:13 AM

Attachments: <u>image008.png</u>

From: Alberts, David < <u>David.Alberts@rsandh.com</u>>
Sent: Wednesday, November 6, 2024 8:18 AM

**To:** Greg Hendryx <<u>greg@searchinc.com</u>>; Bryan Harrell <<u>bryan@searchinc.com</u>>

Cc: Hamblin, Monica < Monica. Hamblin@rsandh.com >

Subject: MYR Runway Rehab Supplemental EA - Phase I CRAS assistance?

Greg and Bryan,

RS&H is working on a scope and fee to help our client Myrtle Beach International Airport (MYR) with a Supplemental EA. Part of the project involves burrow pits for the construction of a temporary runway (areas shown in red polygons below).

A little background, RS&H completed an EA for the temporary runway in May 2024. At that time the FAA and SHPO agreed that the area of disturbance for the Proposed Action would have no effect on historic, archeological or cultural resources because the construction would be limited to the highly disturbed airfield area (I can provide you with the correspondence). However, at that time we did not know the areas of the burrow pits. Now we do, sort of.

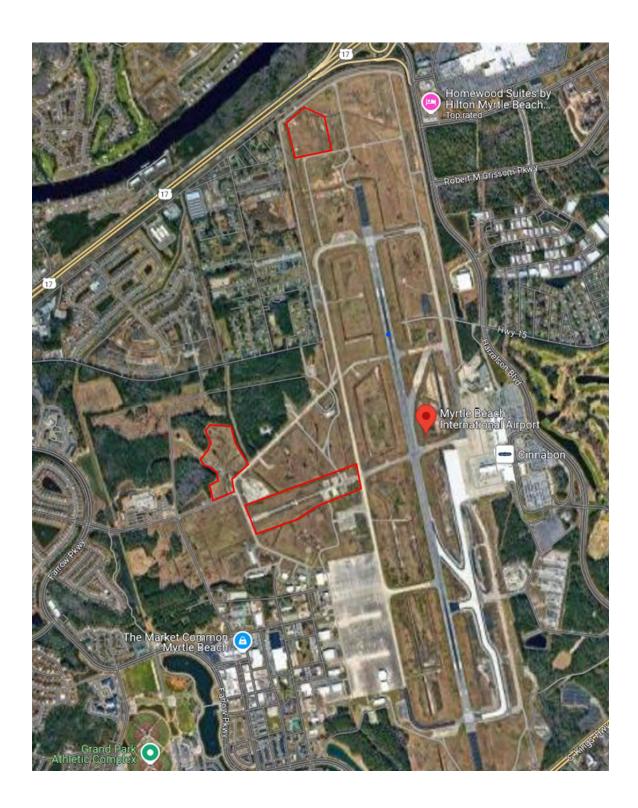
The burrow pits are only being proposed for now. Our Engineers are working on different alternatives to figure out the most cost effective method (use on Airport material or go to a designated burrow pit and truck in the material). So these proposed burrow pit areas may not be used for the project. But schedule is a driving factor, and MYR does not want to wait to see if the FAA/SHPO coordination results in the need for a Phase I CRAS or whatever the SC SHPO needs for initial study (does SC SHPO have a DHR checklist like NC?).

With that, can you please let me know what the SC SHPO would want as an Phase I CRAS or its equivalent? Whatever need to be done, I would appreciate SEARCH's assistance with a scope and fee to conduct the Phase I CRAS effort (similarly to what Bryan is doing for us at CLT). As described previously, schedule is important. Would it be possible to have a draft Phase I CRAS or its equivalent to RS&H before Christmas?

Let me know if you would like to chat further. I am traveling later today, but will have some time before 11 am tomorrow.

Thanks,

Dave A



## David E. Alberts

Senior Project Manager, Aviation Environmental 10748 Deerwood Park Blvd S., Jacksonville FL 32256 904-307-7049

David.Alberts@rsandh.com

<u>rsandh.com</u> | <u>Facebook</u> | <u>Twitter</u> | <u>LinkedIn</u> | <u>Blog</u>

Stay up-to-date with our latest news and insights.

# APPENDIX B PRINCIPAL INVESTIGATOR RESUME

This page intentionally left blank.



## Christopher O. Clement, PhD, RPA Lead Principal Investigator Hanover, New Hampshire

Christopher O. Clement, PhD, RPA, has been a professional archaeologist for more than 25 years, and he has directed projects ranging from Phase I surveys to Phase III data recoveries. His professional background includes academic settings as faculty at several universities, and cultural resource management as an archaeologist and Principal Investigator across the southeastern US as well as in New England and the Caribbean. Prior to joining SEARCH, Dr. Clement was a Principal Investigator with the South Carolina Institute of Archaeology and Anthropology's Cultural Resources Consulting Division for 15 years. Dr. Clement has directed projects for the US Forest Service, the US Navy, the US Army, the US Air Force, the South Carolina National Guard, the National Park Service, and many private clients, as well as for various international clients in the Caribbean. Dr. Clement has 30+ refereed publications or professional presentations to his credit, and since joining SEARCH he has authored or co-authored more than 100 technical reports. Dr. Clement's qualifications exceed those set forth by the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-42).

#### **EDUCATION**

PhD	1995	Anthropology.	University of Florida.
MA	1988	Anthropology.	University of Florida.
BA	1982	Anthropology.	Colorado College.

#### **PROFESSIONAL EXPERIENCE**

2022-Present	Lead Principal Investigator, SEARCH
2009-2022	Principal Investigator, SEARCH
1994–2009	Principal Investigator, South Carolina Institute of Archaeology and Anthropology,
	University of South Carolina
2000-2009	Associate Faculty, University of South Carolina School of the Environment

#### PROFESSIONAL REGISTRATIONS AND ASSOCIATIONS

Register of Professional Archaeologists # 63500

#### **SELECT PROJECT EXPERIENCE**

**Lead Principal Investigator,** Phase I Cultural Resources Assessment Survey and Remote Sensing of Cemetery for the CR 31/Oglethorpe Road at Little Goose Neck Creek Bridge Replacement, Wayne County, Georgia. As a subconsultant, SEARCH completed a Phase I archaeological study and historic resources survey as part of a task work order under a continuing services contract. Conducted for Arcadis for Georgia Department of Transportation.

**Principal Investigator,** Phase I Terrestrial Archaeological Survey of an Additional 1.6-mile Segment of the I-20 Widening Project at the I-20 Crossing of the Augusta Canal Richmond County, Georgia and Aiken County, South Carolina. This survey is an addendum to the 2012 survey due to an additional 1.6-mile Segment proposed. Conducted for Arcadis for Georgia Department of Transportation.

**Principal Investigator,** Cultural Resource Assessment Survey Update in Support of I-295 from John Turner Butler (JTB) (SR 202) to Southside Connector, Duval County, Florida. The archaeological survey of the 1.6-mile corridor included a visual examination and pedestrian survey of the proposed construction and



improvements within the APE. No cultural material, artifacts, sites, or features were found. The architectural survey resulted in the identification and evaluation of newly recorded historic resources 8DU22931-8DU22933 which are recommended as ineligible for NRHP listing. Conducted for Parsons Corporation for Florida Department of Transportation District Two.

**Principal Investigator,** Phase I Cultural Resource Assessment Survey for the Dennis Howell Road Over Warrior Creek Bridge No. 384029, Taylor County, Florida. The archaeological survey consisted of pedestrian survey and the excavation of four shovel tests, all of which were negative for cultural material. The architectural survey of the 0.03-mile corridor resulted in the identification and evaluation of newly recorded historic FDOT Bridge No. 384029 (8TA00619), which is recommended ineligible for inclusion in the National Register of Historic Places (NRHP). Conducted for the Florida Department of Transportation Districts Two.

**Principal Investigator,** Phase I Cultural Resource Assessment Survey of Four Proposed Drainage Ponds for the I-95/SR 9 Improvements from I-295 to SR 202, Duval County, Florida. The archaeological survey of the combined 17.4-acre APE consisted of pedestrian survey and the excavation of eight shovel tests. No artifacts were recovered, and no archaeological sites or occurrences were identified. No architectural resources were identified. Conducted for the Florida Department of Transportation District Two.

**Principal Investigator,** Phase I Cultural Resource Assessment Survey in Support of the SR 289 Bridge No. 480092 Replacement Over Carpenters Creek, Escambia County, Florida. The archaeological survey of the 800-foot corridor consisted of pedestrian survey, as field conditions precluded the excavation of subsurface tests. No artifacts were recovered, and no archaeological sites or occurrences were identified within the APE. The architectural survey resulted in the identification and evaluation of newly recorded buildings 8ES04609 and 8ES04610, both of which are recommended ineligible for NRHP listing. Conducted for the Florida Department of Transportation District Three.

**Principal Investigator,** Miscellaneous Cultural Resources Support for Transportation Projects within Florida Department of Transportation District Five. SEARCH was serving as a subconsultant under a districtwide contract. SEARCH provided cultural resources services for hundreds of minor projects covered under the Programmatic Agreement (PA) between FDOT, FHWA ACHP, and SHPO, and assigned through this contract. Projects involved drainage improvement, sidewalk improvements, multi-use paths, hurricane repairs, roadway widening, safety improvements, resurfacing, and bridge repairs. Conducted for Atkins for Florida Department of Transportation District Five.

**Principal Investigator,** Cultural Resource Survey in Support for the Utility Structure Replacement Located at 243 Daniel Webster Highway in Nashua, Hillsborough County, New Hampshire. Background research and cultural resource evaluation of this site were performed. Field survey for archaeology did not identify any new cultural resources, which indicates that there is no likelihood for intact archaeological deposits to be present. The architectural survey identified five resources within the indirect APE. Of these resources, one is recommended eligible for listing in the NRHP. Conducted for ERM for Version communications.

**Lead Principal Investigator,** Phase I Archaeological Survey, Eversource 3151 Transmission Line Structures 67, 68, and 69, and Eversource 322 Transmission Line Structures 69 and 70 Replacement in Bedford, Hillsborough County, New Hampshire. SEARCH excavated 17 shovel tests within the archaeologically sensitive areas identified by pedestrian reconnaissance which resulted in identifying archaeological site 27-HB-535. Conducted for VHB, Inc. for Eversource Energy.

## APPENDIX C SHOVEL TEST LOG

This page intentionally left blank.

ST ID	Status	Stratum	Depth (cmbs)	Vegetation	Termination	Munsell	Texture	Inclusions	Notes	Northing	Easting	Survey Parcel
N0480,E1440	negative	1	0-14	grass	sterile	10YR 4/2	SaCl	None		3730479	691436	1
N0480,E1440	negative	2	14-26	grass	sterile	10YR 5/2	SaCl	None		3730479	691436	1
N0480,E1380	negative	1	0-21	grass	sterile	10YR 5/2	SaCl	None	Mottled with 10yr 7/6 and 10yr 3/3. Disturbed by airport grading and construction.	3730473	691389	1
N0480,E1320	negative	1	0-12	grass	sterile	10YR 4/2	SaCl	None		3730476	691323	1
N0480,E1320	negative	2	12-30	grass	sterile	10YR 4/6	Cl	None		3730476	691323	1
N0540,E1260	negative	1	0-26	grass	sterile	10YR 7/3	CI	None	Mottled with 10yr 5/3 and 7.5yr 5/6. Disturbed as a result of hrading and airport construction.	3730534	691260	1
N0540,E1320	negative	1	0-10	grass	sterile	10YR 4/2	SaCl	None		3730538	691321	1
N0540,E1320	negative	1	0-30	grass	sterile	10YR 5/6	SaCl	None	Mottled with 10 YR 4/2 sacl	3730538	691321	1
N0540,E1380	negative	1	0-18	grass	disturbed	10YR 3/3	CI	50% subangular gravel	Mottled with 10yr 5/6 and road gravel.  Mechanically graded and modified for runway.	3730536	691377	1
N0540,E1440	negative	1	0-10	grass	sterile	10YR 4/2	SaCl	None		3730529	691433	1
N0540,E1440	negative	2	10-30	grass	sterile	10YR 5/2	SaCl	None	Mottled with 10 YR 5/6 cl	3730529	691433	1
N0600,E1440	negative	1	0-10	grass	sterile	10YR 4/2	SaCl	None		3730591	691440	1
N0600,E1440	negative	2	10-30	grass	sterile	10YR 4/3	SaCl	None	Mottled with 10 YR 5/6 and 10 YR 6/1	3730591	691440	1
N0600,E1380	negative	1	0-26	grass	disturbed	10YR 3/3	SaCl	None	Mottled with 10yr 7/3 and 10yr 5/6.  Distubed and modified for airport  construction	3730596	691381	1
N0600,E1320	negative	1	0-30	grass	sterile	10YR 3/2	SaCl	None	Mottled with 5/6 cla	3730601	691319	1
N0600,E1260	negative	1	0-15	disturbed	sterile	10YR 4/1	Cl	None		3730602	691259	1
N0660,E1260	negative	1	0-14	grass	sterile	10YR 4/1	Cl	None		3730654	691262	1

ST ID	Status	Stratum	Depth (cmbs)	Vegetation	Termination	Munsell	Texture	Inclusions	Notes	Northing	Easting	Survey Parcel
N0720,E1320	negative	1	0-20	grass	sterile	10YR 6/2	SaCl	None	Mottled with 5/6 clay	3730715	691320	1
N0660,E1320	negative	1	0-18	grass	sterile	10YR 4/3	SaCl	None	Mottled 10yr 5/6	3730660	691322	1
N0660,E1440	negative	1	0-20	grass	sterile	10YR 4/3	SaCl	None	Mottled with 10 YR 5/6 cl	3730469	691437	1
N0660,E1380	negative	1	0-20	grass	sterile	10YR 4/3	SaCl	None	Mott with 10YR 5/6 cl	3730467	691440	1
N8380,E1080	negative	1	0-15	grass	sterile	10YR 3/3	SaLo	None		3728383	691075	2
N8380,E1080	negative	2	15-27	grass	sterile	10YR 7/2	SaClLo	None		3728383	691075	2
N8380,E1080	negative	3	27-70	grass	sterile	7.5YR 5/6	Sa	None		3728383	691075	2
N8380,E1080	negative	4	70-80	grass	sterile	10YR 6/1	Cl	None		3728383	691075	2
N8380,E1140	negative	1	0-21	grass	sterile	10YR 3/3	SaLo	15% subrounded gravel		3728376	691133	2
N8380,E1140	negative	2	21-35	grass	sterile	10YR 7/2	LoSa	None	Mottled with 10yr 3/3 and 7.5yr 5/6	3728376	691133	2
N8380,E1140	negative	3	35-47	grass	sterile	7.5YR 5/6	Sa	None	Mottled with 10yr 7/2	3728376	691133	2
N8380,E1140	negative	4	47-68	grass	sterile	10YR 6/2	SaCl	None		3728376	691133	2
N8320,E1140	negative	1	0-14	grass	disturbed	10YR 3/3	SaLo	None		3728311	691134	2
N8260,E1140	negative	1	0-15	grass	compaction_ impasse	10YR 4/3	SaClLo	None		3728259	691137	2
N8260,E1140	negative	2	15-47	grass	compaction_ impasse	7.5YR 5/6	SaCl	None	Mottled with 10yr 3/3	3728259	691137	2
N8860,E0840	negative	1	0-31	grass	sterile	10YR 3/2	SaClLo	None		3728857	690833	3
N8860,E0840	negative	2	31-45	grass	sterile	10YR 5/2	SaCl	None	With 10 YR 5/6 mottling	3728857	690833	3
N8860,E0900	negative	1	0-18	grass	compaction_ impasse	10YR 3/3	SaLo	None	Mottled with 10yr 5/6 and 10yr 7/3	3728859	690896	3
N8860,E0900	negative	2	18-25	grass	compaction_ impasse	10YR 7/3	SaLo	None	Mottled with 10yr 6/2 and 10yr 3/3	3728859	690896	3

ST ID	Status	Stratum	Depth (cmbs)	Vegetation	Termination	Munsell	Texture	Inclusions	Notes	Northing	Easting	Survey Parcel
N8860,E0900	negative	3	25-37	grass	compaction_ impasse	10YR 6/2	SaCl	None	Mottled with 10yr 7/3 and 10yr 5/6	3728859	690896	3
N8800,E0900	negative	1	0-35	grass	sterile	10YR 3/2	SaCl	None	Mottled with 10 YR 5/6 SaCl and 10 YR 6/1 SaCl	3728802	690904	3
N8800,E0840	negative	1	0-18	grass	sterile	10YR 3/3	SaLo	None		3728803	690843	3
N8800,E0840	negative	2	18-37	grass	sterile	10YR 7/3	SaCl	None	Mottled with 10yr 3/3 and 10yr 5/6	3728803	690843	3
N8740,E0840	negative	1	0-22	grass	sterile	10YR 3/3	SaCILo	None		3728745	690832	3
N8740,E0840	negative	2	22-35	grass	sterile	10YR 7/3	SaCl	None	Mottled with 10yr 5/6 and 10yr 3/3	3728745	690832	3
N8740,E0900	negative	1	0-24	grass	sterile	10YR 3/3	SaCILo	None		3728734	690895	3
N8740,E0900	negative	2	24-40	grass	sterile	10YR 5/6	SaCl	None	Mottled with 10yr 7/3 and 10yr 3/3	3728734	690895	3
N8740,E0960	negative	1	0-13	grass	sterile	10YR 3/3	SaClLo	None		3728717	690967	3
N8740,E0960	negative	2	13-24	grass	sterile	10YR 7/3	SaCl	None	Mottled with 10yr 5/6 and 10yr 3/3	3728717	690967	3
N8680,E0960	negative	1	0-16	grass	disturbed	10YR 3/3	SaCILo	None		3728691	690950	3
N8680,E0960	negative	2	16-26	grass	disturbed	10YR 6/2	SaCl	None		3728691	690950	3
N8680,E0840	negative	1	0-40	grass	rock_impass e	10YR 3/3	SaCILo	40% subangular gravel		3728687	690836	3
N8620,E0840	negative	1	0-21	grass	disturbed	5YR 6/4	SaCl	None	Mottled with 10yr 3/3 and 10yr 7/4	3728619	690833	3
N8620,E0900	negative	1	0-13	grass	disturbed	10YR 3/3	SaCl	None		3728619	690895	3
N8620,E0900	negative	2	13-30	grass	disturbed	5YR 6/4	SaCl	None		3728619	690895	3
N8620,E0960	negative	1	0-20	grass	disturbed	7.5YR 5/3	SaClLo	None		3728621	690947	3
N8620,E0960	negative	2	20-30	grass	disturbed	7.5YR 6/2	SaCl	None	Mottled with 7.5yr 7/3	3728621	690947	3
N8560,E0900	negative	1	0-15	grass	disturbed	10YR 3/3	SaClLo	None		3728565	690908	3

ST ID	Status	Stratum	Depth (cmbs)	Vegetation	Termination	Munsell	Texture	Inclusions	Notes	Northing	Easting	Survey Parcel
N8560,E0900	negative	2	15-30	grass	disturbed	7.5YR 5/3	SaCl	None	Mottled with 10yr 6/4	3728565	690908	3
N8500,E0900	negative	1	0-13	grass	disturbed	10YR 3/3	SaClLo	None		3728502	690897	3
N8500,E0900	negative	2	13-30	grass	disturbed	7.5YR 3/3	SaCl	None	Mottled with 10yr7/3	3728502	690897	3
N8500,E0840	negative	1	0-9	grass	disturbed	10YR 3/3	SaClLo	None		3728503	690836	3
N8500,E0840	negative	2	9-20	grass	disturbed	10YR 7/3	SaCl	None	Mottled with 10yr 5/6	3728503	690836	3
N8440,E0840	negative	1	0-7	grass	disturbed	10YR 3/3	SaClLo	None		3728437	690842	3
N8440,E0840	negative	2	7-20	grass	disturbed	10YR 7/3	SaCl	None	Mottled with 10yr 5/6	3728437	690842	3
N8680,E0900	negative	1	0-15	grass	sterile	10YR 3/3	SaCILo	None		3728730	690676	3
N8680,E0900	negative	2	15-28	grass	sterile	10YR 3/3	SaCl	None	Mott w/ 10 YR 5/6 and 7/3	3728730	690676	3
N8320,E1320	not_exca vated			disturbed	not_excavate d			NaN%	No dig: ST located on top of artificial drainage access berm	3728319	691311	2
N8380,E1320	negative	1	0-10	disturbed	disturbed	10YR 3/3	SaClLo	None		3728379	691319	2
N8620,E1020	negative	1	0-9	grass	sterile	10YR 3/3	SaClLo	None		3728618	691016	3
N8620,E1020	negative	2	9-20	grass	sterile	10YR 5/6	SaCl	None	Mottled with 10YR 3/3 sacl	3728618	691016	3
N8320,E1200	negative	1	0-25	grass	compaction_ impasse	10YR 4/3	SaCILo	15% subangular gravel		3728317	691194	2
N8320,E1200	negative	2	25-40	grass	compaction_ impasse	10YR 5/3	SaClLo	None	Mottled with a 10yr 6/3 and 10yr 5/2.  Compaction increases with depth.	3728317	691194	2
N8320,E1260	negative	1	0-12	grass	sterile	10YR 4/3	SaCILo	60% subangular gravel		3728316	691259	2
N8320,E1260	negative	2	12-30	grass	sterile	10YR 5/6	SaCl	None	Mottled with 10yr 7/4	3728316	691259	2
N8380,E1380	negative	1	0-12	grass	sterile	10YR 5/6	SaCl	None		3728375	691376	2

ST ID	Status	Stratum	Depth (cmbs)	Vegetation	Termination	Munsell	Texture	Inclusions	Notes	Northing	Easting	Survey Parcel
N8440,E1440	negative	1	0-19	grass	compaction_ impasse	10YR 3/3	SaClLo	None		3728439	691438	2
N8440,E1440	negative	2	19-33	grass	compaction_ impasse	10YR 3/2	SaClLo	None	Mottled with 10yr 7/2	3728439	691438	2
N8440,E1500	negative	1	0-12	grass	rock_impass e	10YR 3/3	SaClLo	None		3728438	691495	2
N8440,E1500	negative	2	12-24	grass	rock_impass e	10YR 7/3	SaCILo	80% subrounded gravel	Fill gravel.	3728438	691495	2
N8500,E1680	negative	1	0-11	grass	sterile	10YR 3/3	SaClLo	None		3728500	691666	2
N8500,E1680	negative	2	11-23	grass	sterile	10YR 3/3	SaClLo	None	Mottled with 10yr 5/6	3728500	691666	2
N8560,E1680	not_exca vated			grass	not_excavate d			NaN%	Adjacent to runway, between two manhole covers. No dig for buried utilities.	3728556	691675	2
N8620,E1620	negative	1	0-15	grass	sterile	10YR 3/3	SaClLo	None		3728617	691618	2
N8620,E1620	negative	2	15-29	grass	sterile	10YR 4/1	SaCl	None		3728617	691618	2
N8560,E1500	negative	1	0-16	grass	compaction_ impasse	10YR 3/3	SaCILo	30% subrounded gravel		3728566	691501	2
N8560,E1500	negative	2	16-50	grass	compaction_ impasse	10YR 6/1	Sa	None	Compaction increases with depth.	3728566	691501	2
N8560,E1440	negative	1	0-25	grass	disturbed	10YR 3/3	SaClLo	None		3728554	691451	2
N8560,E1440	negative	2	25-36	grass	disturbed	10YR 5/6	SaCl	None	Mottled with 10yr 3/3	3728554	691451	2
N8500,E1440	negative	1	0-14	grass	disturbed	10YR 3/3	SaClLo	None		3728504	691430	2
N8500,E1440	negative	2	14-25	grass	disturbed	10YR 5/6	SaCl	None	Mottled with 10yr 3/3	3728504	691430	2
N8500,E1380	negative	1	0-10	grass	disturbed	10YR 3/3	SaClLo	None		3728502	691382	2
N8500,E1380	negative	2	10-24	grass	disturbed	10YR 5/6	SaCl	None	Mottled with 10yr 3/3 and 10yr 6/1	3728502	691382	2
N8500,E1320	negative	1	0-9	grass	disturbed	10YR 5/3	SaClLo	None		3728500	691323	2

ST ID	Status	Stratum	Depth (cmbs)	Vegetation	Termination	Munsell	Texture	Inclusions	Notes	Northing	Easting	Survey Parcel
N8500,E1320	negative	2	9-25	grass	disturbed	10YR 5/6	SaCl	None		3728500	691323	2
N8440,E1260	negative	1	0-7	grass	disturbed	10YR 3/3	SaClLo	None		3728439	691264	2
N8440,E1200	negative	1	0-11	grass	disturbed	10YR 5/3	SaLo	None		3728436	691197	2
N8440,E1200	negative	2	11-21	grass	disturbed	10YR 5/6	SaCILo	None		3728436	691197	2
N8440,E1200	negative	3	21-36	grass	disturbed	10YR 5/4	SaCl	None	Mottled with 10yr 6/1 Compaction increases with depth	3728436	691197	2
N8440,E1140	negative	1	0-13	grass	disturbed	10YR 3/3	SaCl	None	Mottled with 10yr 5/6 and 10yr 6/1	3728435	691141	2