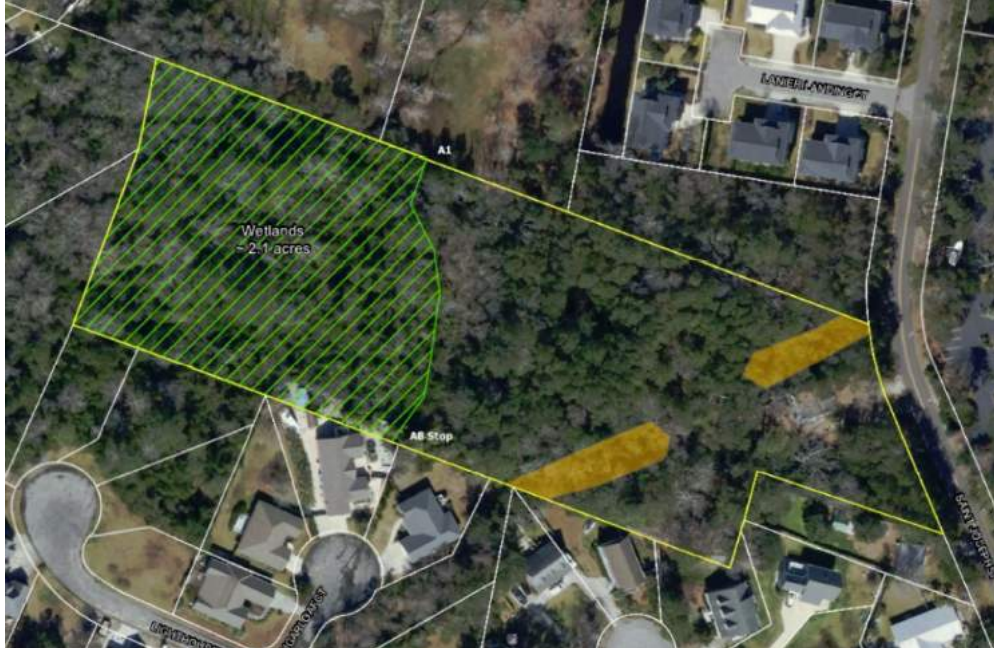


Report Title:

***Phase I Archaeological Testing on Property at 1215 St. Joseph Street,
Carolina Beach, New Hanover County, North Carolina***



Volume 1: Technical Assessment

Submitted to:

**W3 Built
707 A St. Joseph Street
Carolina Beach, North Carolina 28428**

Submitted by:

**Tidewater Atlantic Research, Inc,
P.O. Box 2494
Washington, North Carolina 27889**

Submittal Date:

29 January 2025

Abstract

Prior to developing property located at 1215 St. Joseph Street in Carolina Beach, North Carolina, W3-Built of Carolina Beach contracted with Tidewater Atlantic Research, Inc. (TAR) of Washington, North Carolina to investigate the archaeological sensitivity of the site. TAR proposed to carry out the historical, cartographical, and onsite archaeological research to support that determination. To determine the nature and extent of onsite archaeological investigation, TAR and W3-Built met with North Carolina Department of Natural and Cultural Resources (DNCR) archaeologists at the subject property on 18 October 2024. Reconnaissance survey walks over the non-wetland eastern portion of the property confirmed a high level of modern development impact associated with abandoned mid to late 20th-century structures on the site. Observable evidence indicated mid-twentieth century residential development has almost destroyed any topographic features associated with Confederate earthworks. The only surviving topographic evidence of earthworks was identified in the extreme northeast corner of the survey property, in the west St. Joseph Street right of way and east across the street. That conclusion was also supported by evidence generated by a topographic survey of the eastern non-wetland portion of the property carried out by Port City Land Surveying. Visual examinations of intact earthworks on adjacent property to the south, intact earthworks on property on the east side of St. Joseph Street and surviving earthwork features in the Joseph Ryder Lewis Jr. Civil War Park confirmed the nature of surviving characteristics of intact Confederate earthworks. Evidence at those sites confirmed that the survey area was extensively disturbed and represents a low probability for potentially significant archaeological features. Based on observations made during that initial site reconnaissance and consultation with DNCR personnel, TAR prepared a research proposal for Phase I archaeological investigation at the St. Joseph Street property. The Phase I onsite archaeology was designed to generate sufficient evidence to support a decision on feasibility to develop the property. TAR's subsequent Phase I investigation proposal was approved, and initial shovel testing field work was carried out from 29 to 31 October 2024 by Pre-Columbian Archaeological Research Group of Tallahassee, Florida. Onsite work continued 19 and 20 December that focused on test trench excavations and additional testing. Clearly, proposed development of the subject property will not impact any well preserved and Confederate earthworks or other potentially significant archaeological features. Both the reconnaissance investigation and Phase I onsite testing confirm that the only archaeological evidence that could be disturbed by development is a small section of earthworks at the extreme northeast border of the subject property. The physical integrity of that small section of the Confederate earthworks has been compromised. Clearance of the St. Joseph Street right of way and construction of power lines west of that street have both disturbed any archaeological integrity at that site. If development plans include terrestrial changes that would impact those remains, additional archaeological mitigation could document any surviving features and recover any associated cultural material. In addition to the Phase I archaeological survey (Volume 1: Technical Assessment), the TAR senior historian carried out a review of archival and literature sources in conjunction with a survey of relevant cartographical and photographic data (Volume 2: Historical Overview).

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Introduction

To determine the feasibility to develop property located at 1215 St. Joseph Street in Carolina Beach, North Carolina, W3-Built of Carolina Beach contracted with Tidewater Atlantic Research, Inc. (TAR) of Washington, North Carolina to investigate the archaeological sensitivity of the property. Because of the potential association with Confederate earthworks several previously interested firms abandoned their plans for development. To support assessment of development feasibility, TAR proposed to carry out the historical, cartographical, and onsite archaeological research to support that determination.

To determine the nature and extent of onsite archaeological investigation, TAR director Gordon P. Watts, Jr. met with W3-Built principal Wescott Butler and North Carolina Department of Natural and Cultural Resources (DNCR) archaeological personnel (Fort Fisher office) at the subject site on 18 October 2024. Reconnaissance survey walks over the non-wetland eastern portion of the property confirmed a high level of modern development impact associated with abandoned mid to late 20th-century structures on the site. Observable evidence indicated mid-twentieth century residential development has almost destroyed any topographic features associated with Confederate earthworks.

The only surviving topographic evidence of earthworks was identified in the extreme northeast corner of the survey property, in the west St. Joseph Street right of way and east across the street. That conclusion was also supported by evidence generated by a topographic survey of the eastern non-wetland portion of the property carried out by Port City Land Surveying. Visual examinations of intact earthworks on adjacent property to the south, intact earthworks on property on the east side of St. Joseph Street and surviving earthwork features in the Joseph Ryder Lewis Jr. Civil War Park confirmed the nature of surviving characteristics of intact Confederate earthworks (Figure 1). Evidence at those sites confirmed that the survey area was extensively disturbed and represents a low probability for potentially significant archaeological features.



Figure 1. Confederate earthworks in Joseph Ryder Lewis, Jr. Park.

Phase I Investigation

Based on observations made during that initial site reconnaissance and consultation with DNCR archaeological personnel, TAR prepared a research proposal for Phase I archaeological investigation at the St. Joseph Street property. The Phase I onsite archaeology was designed to generate sufficient evidence to support a decision on feasibility to develop the property. TAR's subsequent Phase I investigation proposal was approved by Wescott Butler, and initial shovel testing field work was carried out from 29 to 31 October 2024 under the direction of senior archaeologist Michael Lavender of Pre-Columbian Archaeological Research Group of Tallahassee, Florida. Onsite work continued 19 and 20 December that focused on test trench excavations and additional testing.

Shovel testing was designed and adapted around onsite vegetation and environmental alteration associated with 20th-century property development. That development was associated with construction of an abandoned house (Figure 2), an associated shed structure (Figure 3), well and water pump facility, animal pens (Figure 4) and an abandoned roadway leading west to the wetlands (Figure 5). Considerable modern 20th-century surface construction and habitation debris is associated with those features. Except for what appears to be partial remains of an earthwork in the northeast corner of the property (Figure 6) and the east St. Joseph Street right of way (Figure 7), no evidence of undisturbed Confederate earthworks was apparent. However, earthwork remains also exist on property on the south side of the survey area (Figure 8). Those remains east of Sugarloaf Court (Figure 9) and south of Lighthouse Drive (Figure 10) were identified and documented by Coastal Carolina Research (CCR) during 1995 (Lautzenheiser and Holm 1995).



Figure 2. Abandoned house on survey property at 1215 St. Joseph Street.



Figure 3. Abandoned shed on the survey property.



Figure 4. Abandoned animal pen and structure on the survey property.



Figure 5. Abandoned roadway leading west to the wetlands.



Figure 6. Utility poles and earthworks in the northeast property corner.



Figure 7. Earthworks and historical marker east of St. Joseph Street.



Figure 8. Location of Confederate earthworks south of survey area.



Figure 9. Confederate earthwork features east of Sugarloaf Court.



Figure 10. Confederate earthwork features south of Lighthouse Drive.

Based on archaeological evidence generated by the reconnaissance investigation only marginal pre-20th-century evidence was identified. That evidence was in the northeast corner of the property border and extends out of the property and into the St. Joseph Street right of way. That exception consists of several bricks and brick fragments that appear to potentially date to the 19th century (Figure 11). However, their association with modern cement blocks indicates that any original onsite context is questionable (Figure 12).



Figure 11. Nineteenth-century bricks and fragments near utility poles.



Figure 12. Twentieth-century cement block fragments near utility poles.

Based on those observations a plan for shovel testing was developed. Shovel testing was laid out focused on the project area east of protected wetlands. That area was inspected by Port City Land Surveying to produce a contour map of the site (Figure 13). That contour map was used as the background basis for conduct and documentation of archaeological field investigations.

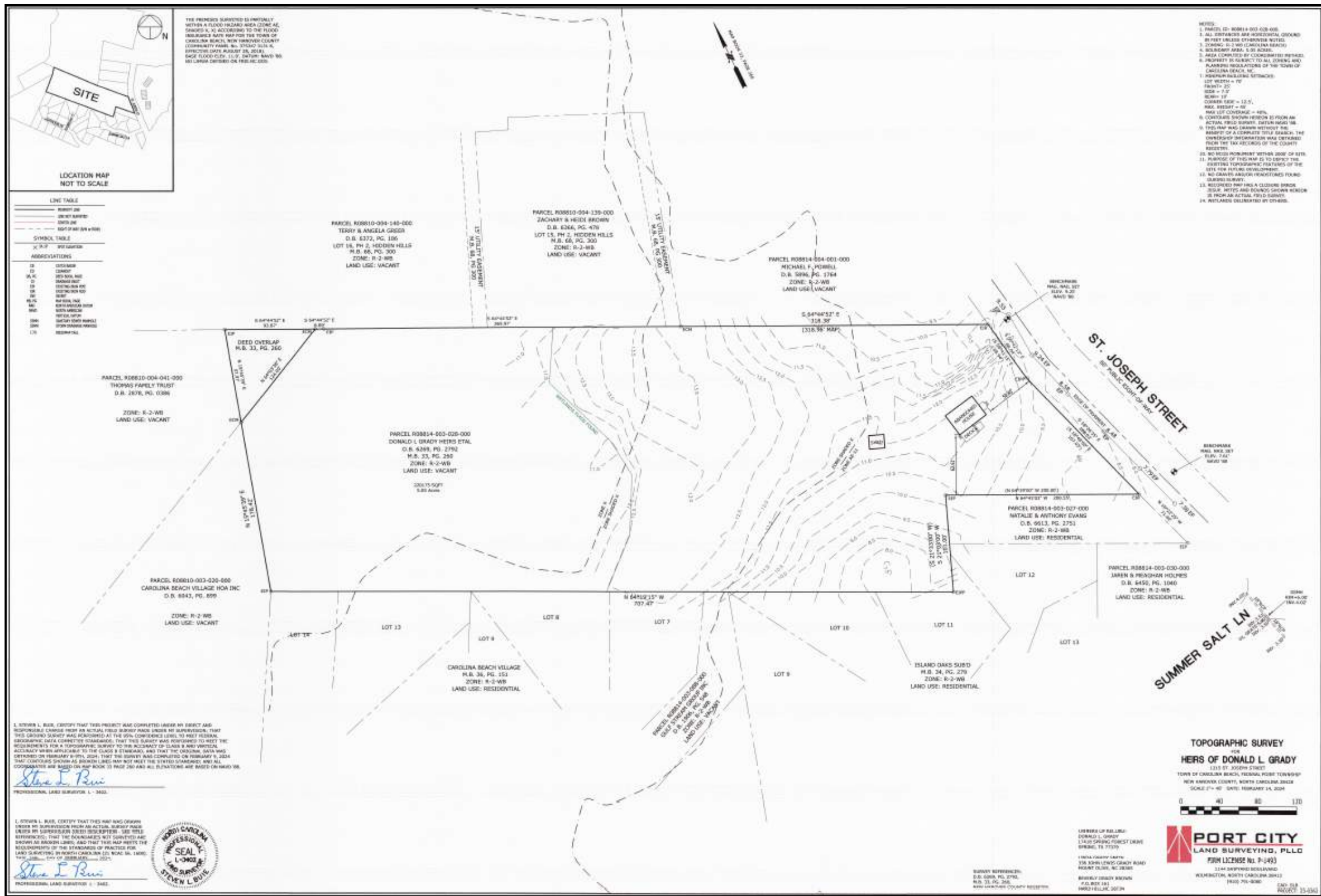


Figure 13. Port City Land Surveying (PCLS) topographic map.

Archaeological Test Excavations

The survey test pits were laid out in relation to a global positioned electronic grid. The test pit grid was laid out north to south and east to west on 15-meter intervals. Due to heavy vegetation, disturbance associated with modern structures and extensive modern debris, test pit locations had to frequently be abandoned or relocated. All test pits were excavated in the area east of the designated wetlands in the western section of the property (Figure 14; Figure 15; Table 1). With exceptions for environmental conditions associated with dense vegetation, those test pits were approximately 25 to 50 centimeters in diameter. Where vegetation density made shovel testing impractical, posthole testing was employed. Test pit depths ranged from 20 to 95 centimeters as determined by vegetation, stratigraphy or the lack thereof, modern 20th century debris and the water table (Figure 16). Shovel and posthole digger test excavated material was sifted through 1/4-inch mesh to identify potentially significant artifacts.

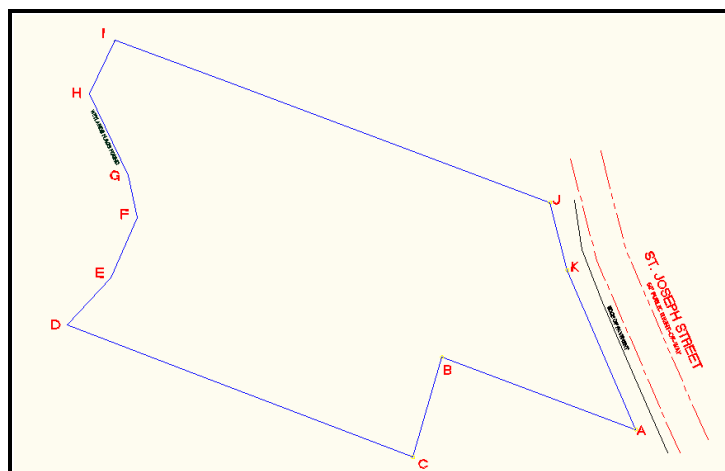


Figure 14. Survey area and border points.

Table 1. Border point coordinates.

POINT	X Coordinate	Y Coordinate
A	2335273.2	109890.6
B	2335085.4	109960.9
C	2335057.1	109863.9
D	2334721.3	109992.2
E	2334764.4	110037.9
F	2334789.5	110096.4
G	2334780.9	110137.1
H	2334743.4	110215.9
I	2334767.7	110268.4
J	2335189.4	110110.9
K	2335206.9	110045.1

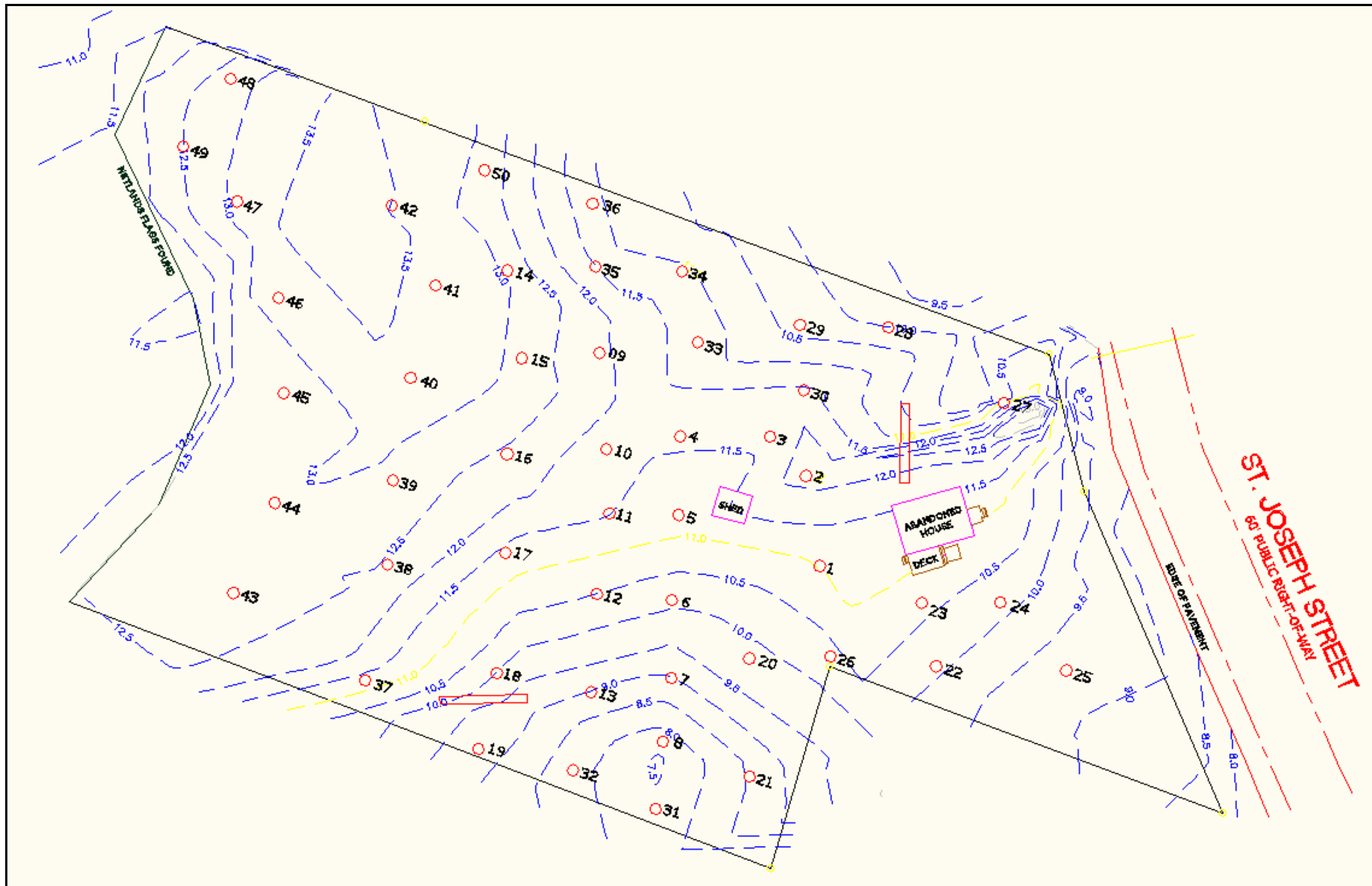


Figure 15. Detail of PCLS map with test pits and trenches.



Figure 16. Shovel test pit excavation example and artifact screen.

In addition to test and posthole pits, two trenches were excavated using a track hoe. Those trenches were located to provide additional insight into two sites where topography suggested there might be subsurface features associated with Confederate earthworks that did not show up in test pits. One trench was associated with topographic features adjacent to the abandoned house (Figure 17). Excavation confirmed all features, and debris are associated with twentieth century clearing and leveling for construction of the house (Figure 18).



Figure 17. Excavating trench adjacent to the abandoned house structure.



Figure 18. Debris from trench adjacent to abandoned house structure.

A second trench was excavated in association with topographic features near the southern survey area border (Figure 19). Those features were thought to be potentially associated with significantly damaged earthworks. Excavation confirmed that no stratigraphic features reinforced that supposition. Stratigraphy in the trench was all associated with mottled Newhan fine light grey sand with one small section that included a much lighter natural stratigraphic feature (Figure 20). At backhoe test depth in the trench sandy sediment was virtually black and moisture indicated the proximity of the water table (Figure 21). No artifacts were identified in the trench profiles or the excavated material.



Figure 19. Excavating the trench adjacent to the southern site border.



Figure 20. Stratigraphy in the trench adjacent to the south site border.

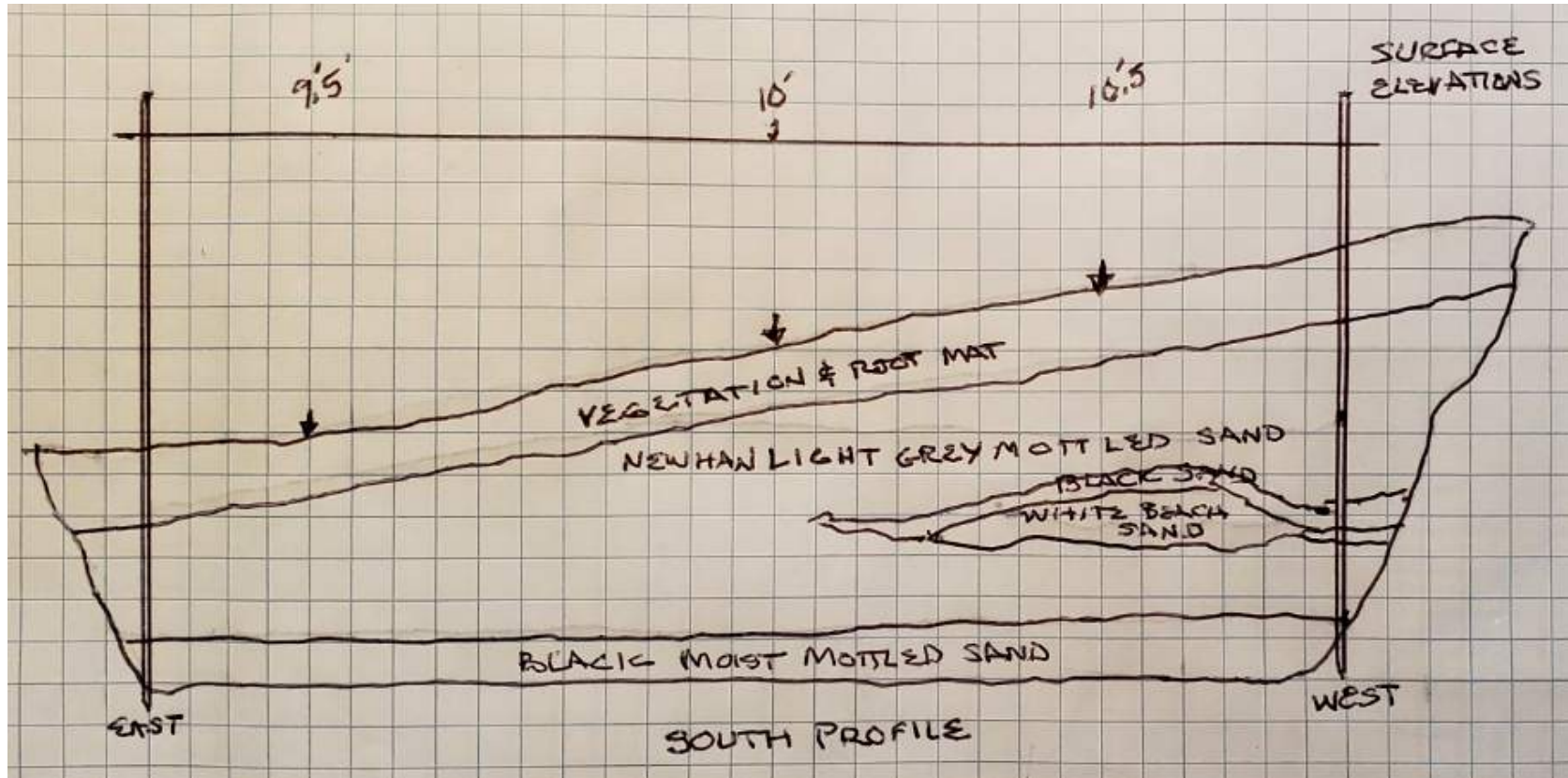


Figure 21. South profile of the trench adjacent to south site border.

Investigation Results

Shovel and post hole testing in the project survey area produced consistent negative results. Those results were for the most part characterized by a mottled featureless Newhan fine light grey sand stratigraphy. Site No. 3 shovel test provides an example of the featureless Newhan fine light grey sand (Figure 22). Several test excavations reached levels of white beach sand, black mud and the water table.



Figure 22. Shovel Test 3 illustrating mottled featureless stratigraphy.

Nine shovel tests produced cultural material from the mid to late twentieth century (Appendix A). That material represents modern debris consisting of household garbage such as soft drink bottles and fragments a milk glass jar (Figure 23), ceramic and glass plate fragments and metal drink cans with pull tab lids. Examples of similar material including Natural Light and Schlitz beer cans (Figure 24) and pull tabs were discovered in association with several test excavations in the general proximity of the abandoned house, shed, well and near the two utility poles in the northeast corner of the property border.



Figure 23. A Carolina Dairy milk bottle, soft drink bottles and fragments.



Figure 24. Remains of "Natural Light" and "Schlitz" beer can fragments.

Reconnaissance and Phase I Investigation

Based on the initial reconnaissance survey only marginal pre-20th century evidence was identified. That archaeological evidence was in a small area located in the northeast corner of the property border. From there it extends out of the property and into the St. Joseph Street right of way. The exception to modern material consists of several bricks and brick fragments that appear to potentially date to the mid or late 19th century (Figure 25). However, their association with modern cement blocks indicates that any original onsite context is questionable at best (Figure 26).



Figure 25. Nineteenth century bricks and fragments near utility poles.



Figure 26. Twentieth century cement blocks and fragments near utility poles.

That is also apparently the context case with the onsite remains of any of the Confederate earthworks. Marginal features associated with those Confederate earthworks that survive on property extend east into the St. Joseph Street right of way. On the east side of St. Joseph Street an extension of those earthworks survives. Below the south border of the project property better preserved and protected Confederate earthworks were identified by CCR in 1995. That survey identified historically and archaeologically significant earthworks east of Sugarloaf Court. Those remains extend southwest through the development to the north Lighthouse Drive right of way. South of Lighthouse Drive those Confederate earthworks extended southwest to the perimeter of the Gulfstream Development property surveyed by CCR. Although not in as good a condition as the northern earthworks, that section was also considered to be historically and archaeologically significant.

Both of those sections of earthwork were determined by CCR archaeologists to survive in good enough condition to merit preservation. CCR also determined that due to their condition and association with the Sugarloaf Line, both sections were eligible for nomination to the National Register of Historic Places. An 1865 map produced under the direction of U.S. Army Chief Engineer Bvt. Brig. Gen. C.B. Comstock indicated that the earthworks were associated with the both the Sugarloaf Line and Fort Lookout (Figure 27).



Figure 27. Detail [northern section] of Comstock's 1865 map.

Previous Archaeological Investigations

Site files and cultural resource management (CRM) reports for the subject New Hanover County community were evaluated by professional archaeologist Nathan Henry on 14 January 2025 with the kind assistance of Madeline Spencer [DNCR field office]. DNCR personnel provided access to several significant reports through the agency's ShareFile account on 21 January 2025. Abstracts for relevant CRM reports follow.

Title: Archaeological Reconnaissance of Carolina Beach and Vicinity, New Hanover County, North Carolina

Principal Author: Alan N. Snavely and Diana C. Gorin

Submittal Date: July 1974

Abstract: In July 1974, Alan Snavely and Diana Gorin carried out archaeological surveys of four terrestrial borrow sites in the Carolina Beach vicinity for the U. S. Army Corps of Engineers-Wilmington District (USACE-W). Terrestrial investigations carried out by Snavely and Gorin determined that only one of the four areas identified as potential sources of borrow material was viable. That 50-acre option, identified as Area A, was located on the east bank of the Cape Fear River approximately 3/4 mile south of Snows Cut. Cultural material recovered during the investigation included both prehistoric and historic period artifacts. Investigation of the remaining three sites, identified as B, C and D produced no significant results. Site B on the north side of the western end of Snows Cut contained a small amount of prehistoric material that could be associated with deposited dredge spoil. Investigation of Site C located due east of Site B on the east side of the Atlantic Intercoastal Water Way identified no cultural material and was used as a dredge spoil deposit site. Likewise, the investigation of Site D, located north of Site C on Carolina Beach Inlet, produced no evidence of cultural material. Based on the locations of sites B, C and D and the results of the Snavely and Gorin investigation, cultural resources in Area A will have no impact on future development at the 1215 St. Joseph Street site.

Title: An Intensive Archaeological Reconnaissance of the Carolina Beach Borrow Area, New Hanover County, North Carolina

Principal Author: Michael Baker

Submittal Date: 1981

Abstract: Archaeological Research Consultants carried out an intensive archaeological reconnaissance survey on an 80-acre tract bordering the Cape Fear River west of Carolina Beach. That archaeological reconnaissance survey was carried out for the USACE-W. The survey objective was to determine the existence, character, extent and significance of cultural resources in the proposed borrow site and determine the condition and significance of two previously identified sites. The survey was designed around investigation of three transects across the site. On the transects, the Cape Fear River shoreline and jeep trails, archaeologists looked for cultural resource surface features. On the transects archaeologists also carried out shovel tests at 50-meter intervals. Shovel tests identified isolated historic mid-19th century artifacts at four sites. No site was considered potentially significant. Prehistoric artifacts and features were discovered at two sites: CBBA-1 and CBBA-2. Cultural material and features were found that identified the sites as the locations of potentially significant archaeological deposits. Mitigation was recommended at both CBBA-1 and CBBA-2 unless avoidance was possible. At the two previously identified sites 31NH107 and 31NH398 additional information was also collected. At Site 31NH107 both

prehistoric and historic cultural material was identified. At Site 31NH398 only prehistoric material was identified. Additional investigation was recommended at Site 31NH107. World War II structure foundations and features were identified on two sites in the survey area. Neither site was archaeologically significant enough to recommend additional investigation.

Title: Investigations, the Federal Fortifications (Archaeological Reconnaissance of Federal Fortifications (Bullet Trench) at the Carolina Beach Borrow Area

Principal Author: Richard H. Lewis

Submittal Date: 5 November 1981

Abstract: In late October 1981, news outlets reported that clearing operations in a Carolina Beach borrow site included the location of a Union earthwork known as the "Bullet Trench" and that the operations would impact that historic feature. Richard Lewis and Charles Wilson (Environmental Resources Branch, USACE-W) immediately investigated the site. Lewis and Wilson discovered that a contractor clearing the borrow area for material recovery had destroyed much of the "Bullet Trench" earthwork feature that lay within the borrow site. During a brief period when the contractor agreed to shift his clearing operations, Lewis and Wilson assessed the extent of damage to the earthworks and mapped the surviving elements of the structure that were located within the borrow site. Based on observations (James Legg with the Blockade Runners of the Confederacy Museum), Lewis and Keith Harris returned to the site on 30 October and resumed efforts to document the surviving structural evidence associated with the "Bullet Trench". Contact with Torrey McLean III (North Carolina Division of Archives and History) resulted in new information about the construction and occupation of the earthwork feature by the Second and Third Brigade, Third Division, 25th U. S. Army Colored Troops. While no further investigation at the site was recommended, a North Carolina site form was prepared to determine National Register of Historic Places (NRHP) eligibility.

Title: Investigations of Civil War Era Fortifications Located at the Carolina Beach Borrow Area New Hanover County, North Carolina

Principal Author: Richard H. Lewis

Submittal Date: February 1982

Abstract: Based on the Carolina Beach and Vicinity Hurricane Protection Project authorized in 1962 material was deposited on Carolina Beach to construct a berm and dune in 1964, 1965, 1967, 1970 and 1971. Completion of the beach stabilization project required an additional 3.3 million cubic yards of suitable material. The USACE-W planned to use material from an upland borrow site adjacent to the Cape Fear River. That 77-acre site was in the Military Ocean Terminal, Sunny Point blast zone south of the Carolina Beach Sewage Treatment Plant. For dredge access a channel would be dredged from the Cape Fear River to the borrow site. Beach nourishment material dredged from the borrow site would be pumped across the peninsula and placed on the beach. The Lewis report only addressed plans for utilization of the proposed borrow area.

Title: Archaeological/Historical Survey of Ocean Dunes Development Carolina Beach North Carolina

Principal Author: Thomas C. Loftfield and James Legg

Submittal Date: 10 September 1982

Abstract: The archaeological survey carried out by Loftfield and Legg focused on a 33.5-acre site at the southern end of Federal Point just north of the Fort Fisher Historical Site. The site was surveyed for L&O Investments in anticipation of developing the property. The investigation included a pedestrian survey of the entire site with test pits in areas of low surface visibility and areas determined to have a potentially high archaeological probability. Due to the proximity to Fort Fisher the area was also investigated with a metal detector to identify objects associated with fortification construction and subsequent military activities. The historical background developed by Loftfield and Legg documented significant civilian and military activity associated with Federal Point. However, the survey activities produced ... "totally negative" results. No archaeological evidence of any of the historically documented activities in the project area was discovered. World War II development at the Ocean Dunes site left the entire area ... "effectively leveled, flattened and otherwise destroyed".

Title: Archaeological/Historical Reconnaissance at Otter Creek Subdivision New Hanover County, North Carolina

Principal Author: Thomas C. Loftfield and Tucker Littleton

Submittal Date: 1982

Abstract: The archaeological survey focused on an 8-acre site associated with the Otter Creek development on the west side of Myrtle Grove Sound and south of Snows Cut at the north end of St. Joseph Street. Loftfield surveyed the site for L&O Investments in anticipation of expanding development of the Otter Creek. The archaeological reconnaissance investigation was based on excavating shovel tests located every 75 feet on corridors spaced every 50 feet. Shovel tests were excavated to subsoil or ground water and material was screened through 1/4-inch hardware cloth. The single archaeological site identified consisted of a shell midden with associated aboriginal potsherds. Evidence generated by the investigation indicated a potential for significant archaeological data and additional work on the feature was recommended. Background historical and archaeological data associated with the Otter Creek site and Carolina Beach vicinity was collected and analyzed by Tucker Littleton.

Title: Phase I Archaeological Survey of Water and Sewer Line Extensions in Carolina Beach, New Hanover County, North Carolina

Principal Author: Daniel F. Cassidy

Submittal Date: 25 January 1994

Abstract: In November and December 1993, Garrow and Associates carried out an archaeological survey associated with the construction of water and sewer line extensions in Carolina Beach. Their surface reconnaissance and shovel testing identified one archaeological site in the construction corridor alignments. This site (31NH688) was identified where Tarboro Avenue cut through a Confederate earthwork. That earthwork was a segment of a Confederate fortification that extended from the Cape Fear River across the peninsula to Battery Gatlin on Myrtle Grove Sound. Although several other alignments were identified and investigated, none were associated with archaeological sites. Consequently, construction activity was recommended for restriction to the Tarboro Avenue right of way.

Title: Archaeological Testing and Documentation Carolina Beach Village, Carolina Beach, New Hanover County, North Carolina

Principal Author: Loretta Lautzenheiser and Mary Ann Holm

Submittal Date: 1 December 1995

Abstract: Due to the immediate proximity of the 1995 survey carried out by Coastal Carolina Research (CCR) that investigation was previously discussed in this report. The CCR investigation identified historically and archaeologically significant Confederate earthworks east of Sugarloaf Court. Those earthwork remains extended north to the southern border of the 1215 St. Joseph Street property. South of Lighthouse Drive those earthworks extended southwest to the perimeter of the Gulfstream Development property surveyed by CCR. Both of those sections of earthwork were determined by CCR archaeologists to survive in good enough condition to merit preservation. Both sections of those Confederate earthworks were nominated for inclusion on the NRHP.

Conclusions and Recommendations

Clearly, proposed development of the 1215 St. Joseph Street property will not impact any well-preserved Confederate earthworks or other potentially significant archaeological features. Both the reconnaissance investigation and Phase I onsite testing confirm that the only archaeological evidence that could be disturbed by development is a small section of earthworks at the extreme northeast border of the subject property. The physical integrity of that small section of the Confederate earthworks has been compromised. Clearance of the St. Joseph Street right of way and construction of power lines west of that street have both disturbed any archaeological integrity at that site. If development plans include terrestrial changes that would impact those remains, additional archaeological mitigation could document any surviving features and recover any associated cultural material.

Twentieth-century residential development and habitation at the project site has clearly had a significantly adverse impact on any prehistoric or historic archaeological integrity. Construction of the abandoned house, an associated shed and animal containment structures on the survey property likely occurred during the post World War II period. Aerial imagery dating to 1938 confirms that onsite residential development occurred after that date (Figure 28).



Figure 28. March 1938 aerial image of survey project location.

That image evidence is supported by the modern nature of all artifacts and other cultural material identified at the project site (Appendix A). In the final analysis, historical, cartographic, photographic and archaeological research confirms that development of the survey site will have no impact on potentially significant archaeological resources. Previous modern 20th century on site residential and possibly agricultural development has significantly and adversely impacted the remains of Confederate earthwork features that survive beyond both south and east borders of the property. Based on investigation data proposed development will not have an adverse impact on prehistoric or historical archaeological evidence and no additional research at the site is recommended.

Unexpected Discovery Protocol

If any construction activities expose potential prehistoric or historic cultural material not identified during the recent investigations, the firm (or firms) under contract to W-3 Built should *immediately* shift operations away from the site (or sites) and *immediately* notify the respective Point of Contact for the North Carolina State Historic Preservation Office [Raleigh NC], DNCR [Fort Fisher NC and Raleigh NC] and W-3 Built. Notification should address the exact location (where possible), the nature of material exposed by project activities, and options for timely archaeological inspection and assessment of the site.

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Cassedy, Daniel F.

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Lewis, Richard H.

1981 Investigations, The Federal Fortifications (Bullet Trench) at the Carolina Beach Borrow Area. Submitted to U.S. Army Corps of Engineers-Wilmington District, Wilmington NC. 5 November 1981. Submitted by Environmental Analysis Section, Wilmington NC.

1982 Investigations of Civil War Era Fortifications Located at the Carolina Beach Borrow Area, New Hanover County, North Carolina. February 1982. Submitted to U.S. Army Corps of Engineers-Wilmington District, Wilmington NC. Submitted by Environmental Analysis Section, Wilmington NC.

Lofffield, Thomas C., and James Legg

1982 Archaeological/Historical Survey of Ocean Dunes Development, Carolina Beach, North Carolina. Submitted to L&O Investments, Fayetteville NC. Submitted by University of North Carolina at Wilmington, Department of Sociology & Anthropology, Wilmington NC.

Lofffield, Thomas C., and Tucker Littleton

1982 Archaeological/Historical Reconnaissance at Otter Creek Subdivision, New Hanover County, North Carolina. A-95 Clearinghouse Number CH 82-0696. Submitted to L&O Investments, Fayetteville NC. Submitted by University of North Carolina at Wilmington, Department of Sociology & Anthropology, Wilmington NC.

Snavely, Alan N., and Diana C. Gorin

1974 Archaeological Reconnaissance of Carolina Beach and Vicinity, New Hanover County, North Carolina. July 1974. Submitted to North Carolina Department of Cultural Resources, Division of Archives and History, Archaeology Section, Raleigh NC.

APPENDIX A

Test Pit	X Coordinate	Y Coordinate	Stratigraphy	Artifacts	Test Depth
1	2335055.03	110017.44	Newhan Light Grey Mottled Sand	None	90cm
2	2335073.81	110052.29	Newhan Light Grey Mottled Sand	plastic bottle and modern window glass	85cm
3	2335056.61	110071.06	Newhan Light Grey Mottled Sand	plastic wheel from 20th century toy	80cm
4	2335013.77	110071.32	Newhan Light Grey Mottled Sand	None	95cm
5	2335012.94	110033.5	Newhan Light Grey Mottled Sand	None	95cm
6	2335009.81	109992.72	Newhan Light Grey Mottled Sand	None	85cm
7	2335009.58	109955.31	Newhan Light Grey Mottled Sand	None	85cm
8	2335093.59	109880.43	Newhan Grey Over White Beach Sand	None	80cm
9	2334975.18	110111.32	Newhan Grey Over White Beach Sand	modern window pane glass,	80cm
10	2334978.42	110065.18	Newhan Grey Over White Beach Sand	coke bottle	95cm
11	2334979.92	110034.37	Newhan Light Grey Mottled Sand	aluminum pop top and beer cans	95cm
12	2334973.88	109995.59	Newhan Light Grey Mottled Sand	modern bottle glass	95cm
13	2339471.14	109948.55	Newhan Light Grey Mottled Sand	None	water @80cm
14	2334931.18	110150.93	Newhan Light Grey Mottled Sand	None	water @80cm
15	2334937.86	110108.82	Newhan Light Grey Mottled Sand	None	water @80cm
16	2334936.05	110062.77	Newhan Light Grey Mottled Sand	None	90 cm
17	2334930.19	110015.41	Newhan Light Grey Mottled Sand	None	75cm
18	2334826.11	109957.74	Newhan Light Grey Mottled Sand	None	75cm
19	2334917.26	109921.21	Newhan Grey Over White Beach Sand	broken glass, modern ceramic sherd	70cm
20	2335036.78	109964.73	Newhan Light Grey Mottled Sand	None	80cm
21	2335046.85	109908.01	Newhan Grey Over White Beach Sand	None	95cm
22	2335136.09	109960.89	Light Grey and White Beach Sand	None	85cm
23	2335131.79	109983.18	Light Grey and White Beach Sand	None	85cm
24	2335172.31	109987.04	Light Grey and White Beach Sand	plastic debris	90cm
25	2335198.34	109958.95	Light Grey and White Beach Sand	None	90cm
26	2335085.6	109965.81	Mottled White Beach Sand	None	65cm
27	2335168.62	110087.31	Mottled Dark Grey Sand And Mud	pop top beer cans soda bottle broken glass	50cm
28	2335113.26	110123.59	Newhan Light Grey Mottled Sand	None	70cm
29	2335070.97	110124.84	Newhan Light Grey Mottled Sand	None	75cm
30	2335072.77	110093.35	Newhan Light Grey Mottled Sand	None	80cm
31	2336002.05	109892.38	Newhan Grey Over White Beach Sand	None	85cm
32	2334962.47	109911.09	Newhan Grey Over White Beach Sand	None	90cm
33	2335022.09	110116.38	Newhan Light Grey Mottled Sand	None	65cm
34	2335014.63	110150.47	Newhan Light Grey Mottled Sand	None	50cm
35	2334973.23	110152.71	Newhan Light Grey Mottled Sand	None	55cm
36	2334971.81	110182.91	Newhan Light Grey Mottled Sand	None	55cm
37	2334863.21	109954.28	Newhan Light Grey Mottled Sand	None	70cm
38	2334873.79	110009.72	Newhan Light Grey Mottled Sand	None	70cm
39	2334876.35	110050.11	Newhan Light Grey Mottled Sand	None	55cm
40	2334884.76	110099.32	Newhan Light Grey Mottled Sand	None	70cm
41	2334896.77	110143.74	Newhan Light Grey Mottled Sand	None	45cm
42	2334875.75	110182.16	Newhan Light Grey Mottled Sand	None	30cm
43	2334800.08	109996.07	Newhan Light Grey Mottled Sand	None	65cm
44	2334819.91	110039.29	Newhan Light Grey Mottled Sand	None	45cm
45	2334824.11	110092.12	Newhan Light Grey Mottled Sand	None	30cm
46	2334821.7	110137.74	Newhan Light Grey Mottled Sand	None	25cm
47	2334801.88	110183.96	Newhan Light Grey Mottled Sand	None	35cm
48	2334798.88	110242.78	Newhan Light Grey Mottled Sand	None	20cm
49	2334776.06	110210.37	Newhan Dark Grey Mottled Sand	None	40cm
50	2334920.21	110198.96	Newhan Dark Grey Mottled Sand	None	40cm