

A stylized graphic of a bridge with a blue and orange arch and vertical supports, centered behind the title text.

INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY



CITY OF CHESAPEAKE, VA | STATE PROJECT #: 0064-131-783 | UPC: 104366

ARCHEOLOGICAL SURVEY REPORT



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

RICHMOND DISTRICT
2430 Pine Forest Drive
COLONIAL HEIGHTS, VA 23834
www.VDOT.Virginia.gov

Gregory A. Whirley
COMMISSIONER

October 7, 2014

Ms. Julie V. Langan, Director
ATTN: Mr. Marc Holma, Office of Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221

Route: Interstate 64
Project: 0064-131-783, P101
City: Chesapeake
Funding: Federal
UPC: 104366
DHR File: 2013-0971

Dear Mr. Holma:

The Virginia Department of Transportation (VDOT) is conducting a corridor study regarding the proposed project to widen Interstate 64 and replace the George A. Treacle Bridge (commonly referred to as the High Rise Bridge) in the City of Chesapeake. The corridor study begins at the Interstate 64/Interstate 464 Interchange and ends at the Interstate 64/Interstate 264 Interchange, roughly a distance of eight miles. The Area of Potential Effect (APE) for the study was defined as 100 feet from the edge of pavement along the existing Interstate 64 corridor from Interstate 464 to Interstate 264, a 600-foot buffer around the High Rise Bridge, and radial buffers of 1,500 feet around four interchanges (Interstate 64/Interstate 264, Interstate 64/U.S. Route 13, Interstate 64/George Washington Highway, and Interstate 64/Interstate 464).

This project has been previously coordinated with your office on March 7, 2014, April 4, 2014, and June 6, 2014. The results of this coordination has been that the Sunray Historic District (DHR Survey No. 131-5325), listed on the National Register of Historic Places (National Register), is the only historic property in the corridor study area for the proposed project.

Determination of Effect

In accordance with 36 CFR 800.5(a), VDOT has applied the criteria of adverse effect to historic properties within the corridor study area for the proposed project. The regulations implementing Section 106 of the National Historic Preservation Act define an effect as an “alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register” [36CFR800.16(i)]. The effect is adverse when the alteration of a qualifying characteristic occurs in a “manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling or association” [36CFR800.5(a)]. The VDOT recommends that the project to replace the High Rise Bridge will have no adverse effect on historic resources.

Architecture

The Sunray Historic District (VDHR No. 131-5325) is located within the vicinity of the proposed project (please see figure below). However, there is considerable amount of modern development between the Sunray Historic District and the High Rise Bridge. This includes Rt. 13, a major transportation corridor in the area. The project will not acquire any property from the Sunray Historic District, nor will it impact the resource in any capacity. Therefore, the VDOT recommends that the project as proposed will have no adverse effect on the Sunray Historic District.

The VDOT invites you to indicate your concurrence with our No Adverse Effect determination recommendation by signing below. Please return the original signature to this office

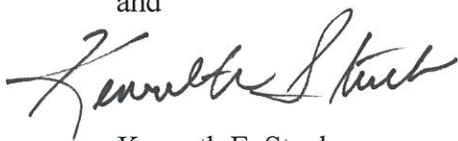
Thank you for your assistance. If you have any questions or need additional information about this report or this project, please do not hesitate to contact Ken Stuck at (757) 925-2372 or at kenneth.stuck@vdot.virginia.gov or Sarah Clarke at (804)-524-6269 or at Sarah.Clarke@vdot.virginia.gov.

Sincerely,



Sarah M. Clarke
VDOT Preservation Manager
Richmond District

and



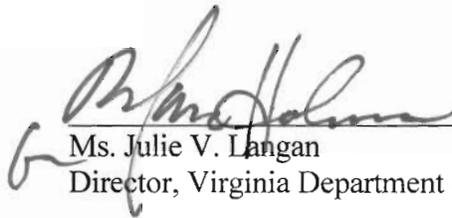
Kenneth E. Stuck
Cultural Resource Coordinator (Archaeologist)

Mr. Marc Holma
October 7, 2014
Page Three

KES:

bcc: Ms. M. E. Hodges
Mr. S. Smizik

The Virginia State Historic Preservation Officer (SHPO) concurs that the undertaking, VDOT Project No. 0709-001-208, P101, R201, M501; UPC 8312, will have no adverse effect on historic properties.


Ms. Julie V. Langan
Director, Virginia Department of Historic Resources

15 OCT 14
Date

DHR# 2013-0971

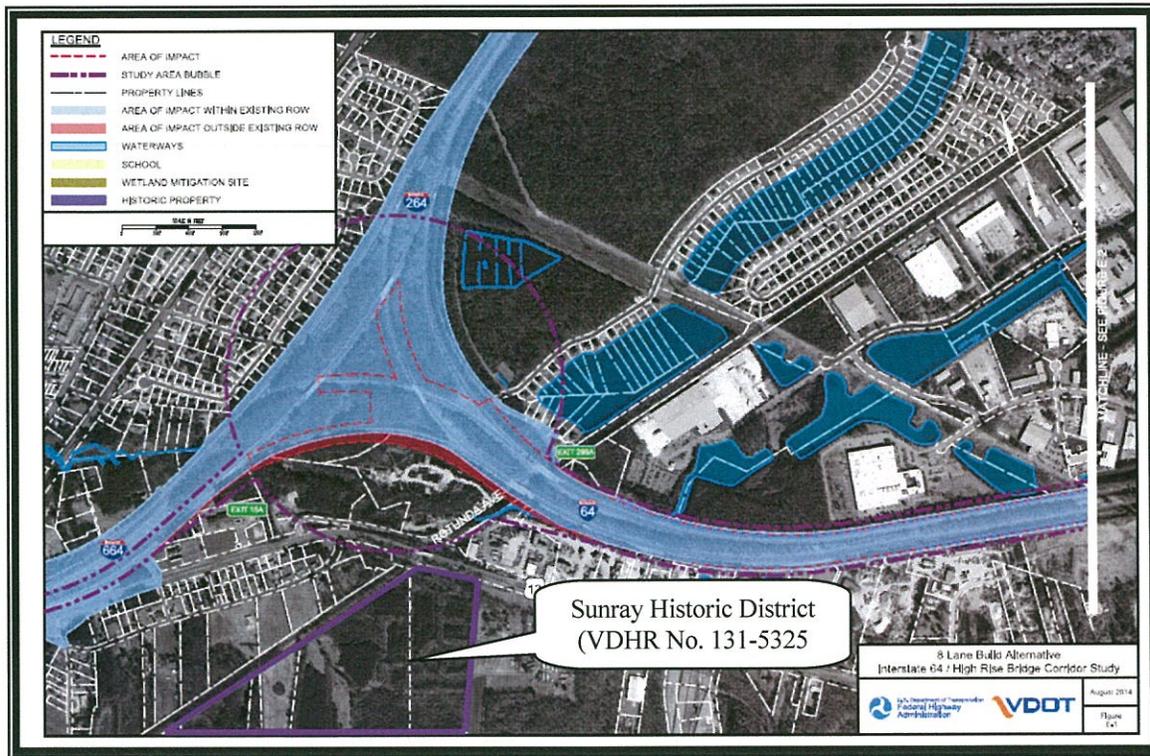


Figure Showing Build Alternative and Sunray Historic District

ARCHAEOLOGICAL SURVEY FOR
THE INTERSTATE 64 / HIGH RISE BRIDGE
CORRIDOR STUDY
CITY OF CHESAPEAKE, VIRGINIA
(DHR FILE NO. 2013-0971)



by
Daniel Baicy

With Contribution By
Daniel R. Hayes
(Hayes & Monahan Geoarchaeologists, LLC)

Prepared for



and



Prepared by



Kentucky | West Virginia | Ohio
Wyoming | Illinois | Indiana | Louisiana | Tennessee
Utah | Virginia | Colorado

ARCHAEOLOGICAL SURVEY FOR INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY, CITY OF CHESAPEAKE, VIRGINIA

VDOT Project No.: 0064-131-783, P101

UPC No.: 104366

Federal Project No.: NH-IM-064-3(481)

VDHR Review No.: 2013-0971

by

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With Contribution By

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Daniel Baicy, RPA
Principal Investigator

January 10, 2014

ABSTRACT

On behalf of Whitman, Requardt & Associates, LLP, and the Virginia Department of Transportation, Cultural Resource Analysts, Inc., conducted an archaeological survey in association with the proposed Interstate 64 widening and High Rise Bridge replacement project in Chesapeake, Virginia, in conjunction with VDOT Project No.: 0064-131-783, P101; UPC 104366; Federal Project No.: NH-IM-064-3(481). The study area is between the I-264 interchange at Bowers Hill and the I-464 interchange (just over 8 miles). The project also involves the replacement of the I-64 High Rise Bridge over the Southern Branch of the Elizabeth River. The area of potential effect was defined as a 100 foot buffer from the edge of the pavement along the existing I-64 corridor from the I-264 interchange at Bowers Hill to the I-464 interchange (just over 8 mi), a 1,200 ft buffer around the bridge, and radial buffers of 3,000 ft around four interchanges (I-264, U.S. 13, George Washington Highway, and I-464).

Cultural Resource Analysts, Inc., conducted the fieldwork from September 9 to October 4, 2013. The archaeological survey resulted in the identification of two archaeological sites (44CS0317 and 44CS0318), and two previously recorded sites (44CS0236 and 44CS0237) were revisited. Archaeological site 44CS0317 (DHR # 131-5554) is a small family cemetery with three marked burials on the Deep Creek Middle School campus. Site 44CS0318 is a moderately-sized, low density historic artifact scatter that dates from the early nineteenth century to the mid-twentieth century. Site 44CS0236 is a previously recorded historic artifact scatter that dates from the late nineteenth century to the mid-twentieth century. Site 44CS0236 also contains the Moore-Johnson Cemetery (DHR #131-5612), which was in use from 1873 to 1901. Site 44CS0237 is a previously recorded, small, low density historic artifact scatter that dates from the early nineteenth century to the mid-twentieth century. No early-nineteenth-century artifacts were located at Site 44CS0237 during the current survey. Both 44CS0237 and 44CS0236 have experienced significant impact from construction and maintenance related activities since their original recordation. Cultural Resource Analysts, Inc., recommends that all four resources, 44CS0236, 44CS0237, 44CS0317, and 44CS0318, are not individually eligible for listing in the National Register of Historic Places under Criterion A, B, C, or D, and the cemeteries (44CS0317 and the Moore-Johnson Cemetery [DHR # 131-5612] at 44CS0236) do not meet the qualification for eligibility under special Criteria Considerations C or D governing cemeteries.

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I. INTRODUCTION

From September 9 to October 4, 2013, Cultural Resource Analysts, Inc. (CRA), conducted an archaeological resources survey in association with the Interstate 64 High Rise Bridge Corridor Study in Chesapeake, Virginia, for Whitman, Requardt & Associates, LLP (WRA), on behalf of the Virginia Department of Transportation (VDOT) in conjunction with VDOT Project No.: 0064-131-783, P101; UPC 104366; Federal Project No.: NH-IM-064-3(481) (Figure 1).

The study area for the proposed project is located in the southwestern segment of the Hampton Roads Beltway, which is formed by a loop of I-64 and I-664 (Figure 2a-b). The study area encompasses approximately eight miles of I-64, consisting of two travel lanes in each direction, between the I-464 interchange and the I-664 and I-264 interchanges at Bowers Hill. The study area also includes interchanges along I-64 at Military Highway (US Route 13), George Washington Highway (US Route 17), and Great Bridge Boulevard (VA Route 190). The G. A. Treagle Memorial Bridge (High Rise Bridge), a mile-long double-leaf drawbridge that spans the Southern Branch of the Elizabeth River, also is included in the study area.

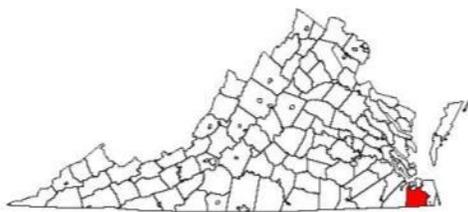


Figure 1. Location of Chesapeake, Virginia.

Within the study area, I-64 connects to numerous businesses, homes, schools, and recreational opportunities throughout Chesapeake. Due to the loop or beltway that I-64 follows through the study area, I-64 West travels in an easterly direction and I-64 East travels westerly. For the purpose of this study, I-64 will be described in terms of the road name and not the direction of the road. Additionally, any proposed transportation

improvements, along with analysis of environmental consequences is based on the limits described above and the following general corridor assumptions. These assumptions will allow for an inventory of resources and analysis of “worst-case” impacts.

- Four Interchanges (3,000 feet in diameter – estimated at 649 acres combined);
- Mainline along I-64 (100 feet on each side from existing edge of pavement – estimated at 230 acres); and
- High Rise Bridge Replacement (600 feet from the center line for a total of 1,200 foot buffer – estimated at 246 acres)

Furthermore, where there is a deviation from these assumptions additional clarifications will be provided as necessary.

For ease of discussion, the study area (Figure 2a-b) was divided into nine survey areas including (listed from west to east):

- Section 1: I-264 interchange;
- Section 2: I-64 between the I-264 interchange and the U.S. 13 interchange;
- Section 3: U.S. 13 interchange;
- Section 4: I-64 between the U.S. 13 interchange and the George Washington Highway interchange;
- Section 5: George Washington Highway interchange;
- Section 6: I-64 between the George Washington Highway interchange and the High Rise Bridge;
- Section 7: the High Rise Bridge;
- Section 8: I-64 between the High Rise Bridge and the I-464 interchange; and
- Section 9: the I-464 interchange.

The purpose of the survey was to identify archaeological sites located within the potential area of effect (APE) and to evaluate the potential need for further investigation of those resources. This survey was undertaken in compliance with the National Historic Preservation Act of 1966, as amended; the Archaeological and Historic Preservation Act of 1974; and Title 36 of the Code of Federal Regulations, Parts 660–66 and 800 (as revised, 1999). The field research and report meet the requirements specified in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (*Federal Register* 48: 190:44716–44742) (U.S. Department of the Interior 1983), as well as the Virginia Department of Historic Resources' (DHR's) *Guidelines for Conducting Historic Resources Survey in Virginia* (2011), VDOT's Expectations and Standard Products for Cultural Resource Surveys (Revised February 18, 2010), and the Programmatic Agreement between VDOT and DHR concerning interagency project coordination (1999). CRA's Project Manager and Principal Investigator who performed the cultural resource investigations meet or exceed the qualifications described in the Secretary of the Interior's Professional Qualifications Standards (48 Federal Register 44738-9).

Daniel Baicy, RPA, served as CRA's Principal Investigator, Archaeology, and he was assisted by Archaeological Field Technicians David Coleman, Andrew Loomis, Tommy McAlpine, and Karen Taylor. Kay Simpson, RPA, served as Principal Officer and CRA Project Manager. Leslie L. Holder supervised the laboratory processing and artifact inventory and analyzed the artifact assemblages. Historic background research was conducted by Hallie Hearnes and Sarah Reynolds under the supervision of S. Alan Higgins. Final illustrations were prepared for the report by Jason Anderson. Charles Hitch completed the final layout and formatting of the report. Daniel Hayes, geoarchaeologist with Hayes & Monghan Geoarchaeologists, LLC, completed the geoarchaeological analysis.

CRA prepared this report with funding from VDOT and the Federal Highway

Administration (FHWA). The contents of this report reflect the views of CRA, which is responsible for the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of VDOT or of the FHWA. This report does not constitute a standard, specification, or regulation.

Geologic Project Setting

The study area is located in Chesapeake, immediately south of Portsmouth, Virginia. The City of Chesapeake is located in southeast Virginia in the Tidewater region of the Atlantic Coastal Plain. The Atlantic coast is formed from the ancient marine sediments of the Atlantic Plain periodically exposed and submerged by changes in sea level. The work of ocean currents, waves, and weather has resulted in a relatively flat topography, generally less than 30 ft above sea level (Rader and Evans 1993). The Pamlico Terrace underlies the cities of Chesapeake and Virginia Beach. The flatness of the Pamlico Terrace is broken by a series of low ridges oriented with the Atlantic Coast. The land between these ridges forms backwater swamps, marshes, poorly drained areas, and drier flats suitable for agriculture or lawns (Hatch et al. 1985).

The Southern Branch of the Elizabeth River, a permanent water source, crosses the study area. Deep Creek, another permanent water source, parallels the study area to the south until emptying into the Elizabeth River where it crosses the proposed study area. Several unnamed tributaries, man-made drainages, and enhanced natural drainages cross the study area and drain into Deep Creek and the Southern Branch of the Elizabeth River. The study area is extremely flat, which is typical of the Tidewater. Most topographic relief in the area is artificial for the purposes of drainage. Elevations within the study area range from 0 to 3.7 m (0 to 12 ft) above mean sea level (AMSL). Vegetation in the study area includes mixed deciduous and pine forests, swampy reeds and bamboo, and manicured residential and commercial lawn (Hammer 2012).

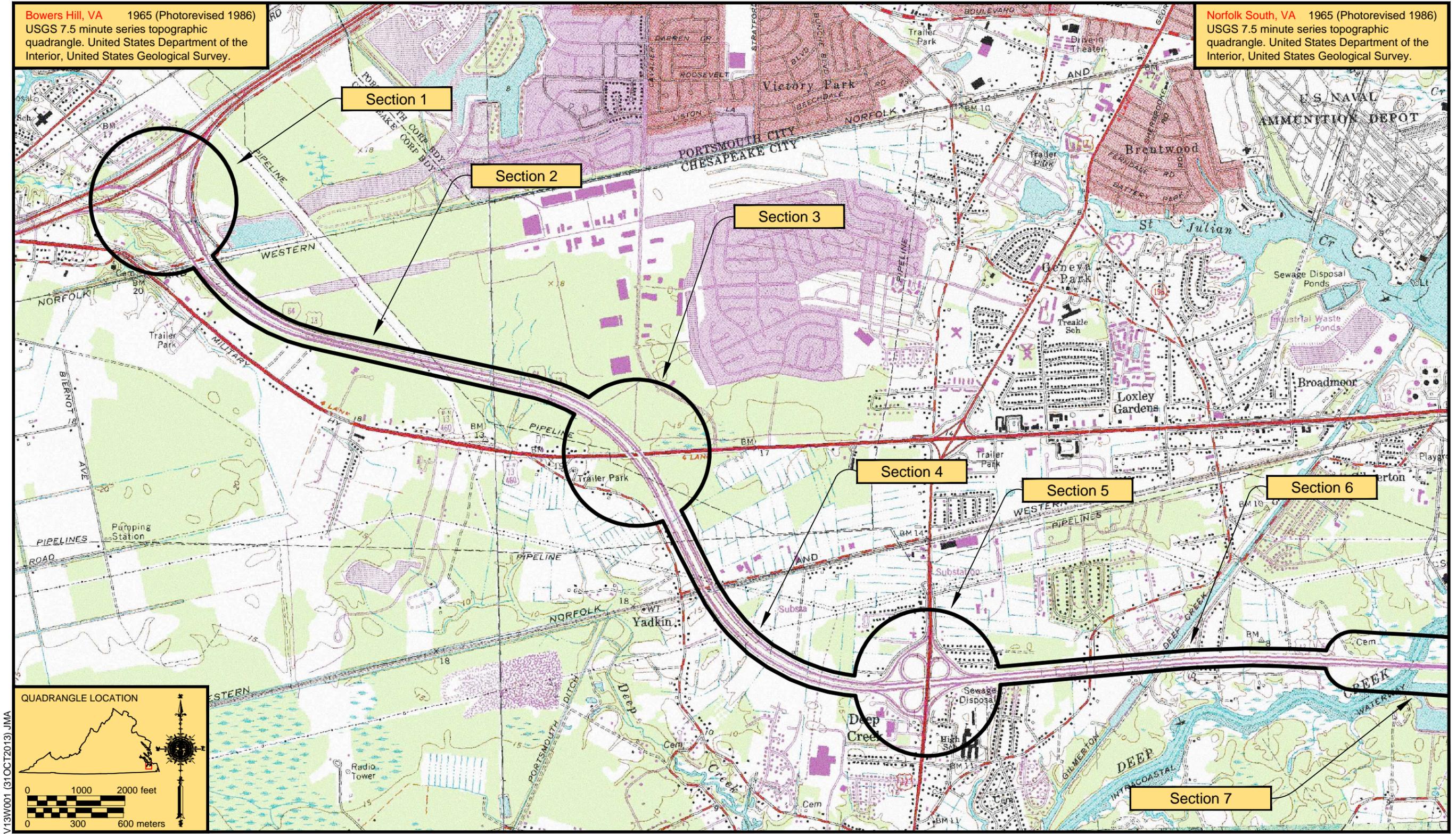


Figure 2a. Location of the Study Area boundary.

Bowers Hill, VA 1965 (Photorevised 1986)
USGS 7.5 minute series topographic
quadrangle. United States Department of the
Interior, United States Geological Survey.

Norfolk South, VA 1965 (Photorevised 1986)
USGS 7.5 minute series topographic
quadrangle. United States Department of the
Interior, United States Geological Survey.

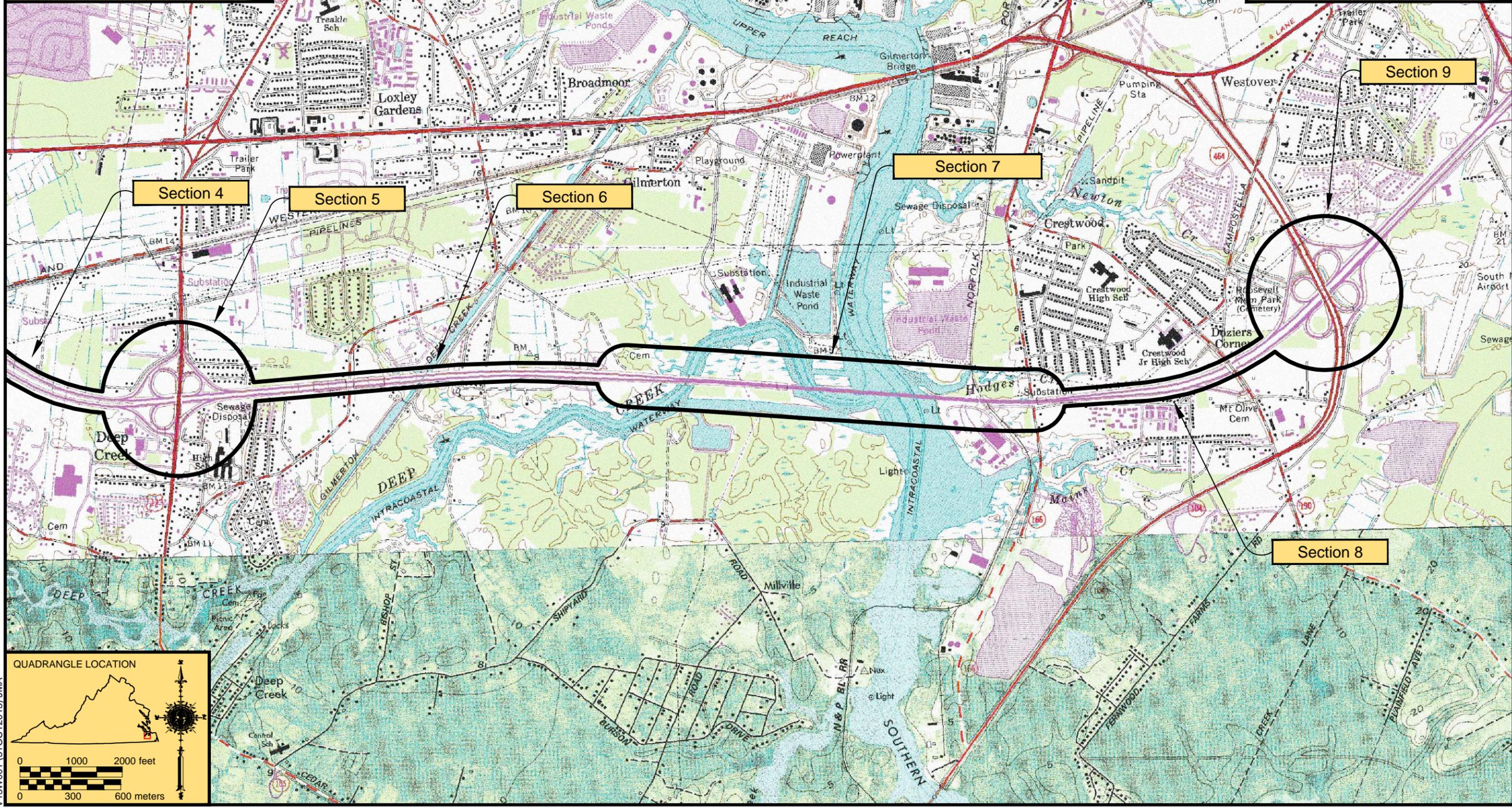


Figure 2b. Location of the Study Area boundary.

Daniel Hayes from Hayes & Monaghan, Geoarchaeologists, LLC, conducted an in-depth geoarchaeological analysis of the current study area. The analysis provides a discussion of previous construction studies of the I-64 bridge and an analysis of the potential for buried cultural resources. Hayes concluded that the potential for deeply buried sites within the study area is very low. The only possible locations are along the Elizabeth River and those resources, though unlikely to be present, would be buried under 3–8 m of construction and dredge fill. The rest of the study area, however, contains modern and urban soils that were used to fill previously estuarine or marshy areas before development. Shovel testing that reaches the sandy clay subsoil would be sufficient for recovering cultural materials. The full geoarchaeological analysis report is presented in Appendix C.

Soils

The online Web Soil survey, accessed on October 14, 2013, indicates that the archaeological APE encompasses 32 distinct map unit types as defined by the United States Department of Agriculture's (USDA's) Natural Resources Conservation Service (NRCS) (NRCS 2013) (Table 1). Soil characteristics were somewhat uniform across the entire study area. The entire study area is characterized by urban and poor to very poorly drained soils. Over 57 percent of the proposed study area contains a soil complex that is characterized by poorly drained soils, and over 20 percent of the study area is characterized as solely urban soils, which have no drainage information listed. There are small areas of well-drained sandy soils near the Elizabeth River and Deep Creek in areas of low commercial and residential development, particularly on the west side of the river.

II. BACKGROUND RESEARCH

CRA performed background research to compile existing cultural resource data and to assess the potential for finding additional

cultural resources in the survey area. Prior to fieldwork, CRA consulted the DHR's online Virginia Cultural Resource Information System (VCRIS) and visited DHR's archives to identify previously recorded cultural resources located within the APE. Additionally, relevant historic maps of the area were consulted during the background review.

DHR/VCRIS Research

Twelve cultural resource surveys have been completed near the survey area, primarily in association with repeated improvements to I-64, I-264, and I-464 (MacCord 1981; Hoffman 1983; Hundley 1989; Hinks and Harris 1996; Hinks et al. 1998; Sara et al. 1999; Moore et al. 2003; Baicy et al. 2005; Young 2007; Stewart et al. 2007; and Goode et al. 2010) (Figure 3a-b) (Table 2). Howard MacCord (1981) conducted a survey for a transmission line that crosses the study area briefly in Section 2. Michael Hoffman (1983) conducted a reconnaissance survey in the wooded area north of Grand Isle Drive, which is located in the southeast portion of Section 1. Michael Baker Jr., Inc., conducted a reconnaissance survey in 1996 that included portions of the current study area (Hinks and Harris 1996). A follow up investigation (Hinks et al. 1998), conducted shovel testing in high probability areas identified during the reconnaissance survey. That investigation resulted in two newly recorded sites (44CS0236 and 44CS0237). Another survey (Sara et al. 1999) was conducted around the travel lanes at the intersection of I-264 and I-64, which is in Section 1. The William and Mary Center for Archaeological Research (Young 2007) conducted a small survey on the south side of I-64, which is in Section 8, for a proposed sound wall. That survey resulted in three recorded sites (44CS0277, 44CS0278, 44CS0280). Finally, a survey conducted by Coastal Carolina Research (Baicy et al. 2005) impacts a small portion of the exit ramps at the intersection of I-64 and I-464, which is in the Section 9 survey area.

Table 1. Soils located within the APE (Web Soil Survey 20133)

Map Symbol	Soil Type	Description	Landscape Position	Acres	% Area
3	Arctdale-Urban land complex, 0 to 1 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in silt loam, 7 to 15 inches in silt loam, 15 to 43 inches in silty clay loam, and 43 to 66 inches in silt loam.	Marine terraces	0.8	0.10%
8	Bojac loamy fine sand, 0 to 2 percent slopes	Well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, 8 to 47 inches in fine sandy loam, and 47 to 85 inches in sand.	Marine terraces	5.2	0.50%
9	Bojac-Urban land complex, 0 to 2 percent slopes	Well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, 8 to 47 inches in fine sandy loam, and 47 to 85 inches in sand.	Marine terraces	7	0.60%
10	Bojac-Urban land-Wando complex, 0 to 3 percent slopes	Well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, and 8 to 79 inches in fine sand	Stream terraces, marine terraces, and dunes	9.2	0.80%
11	Chapanoke-Yeoplin complex, 0 to 3 percent slopes	Somewhat poorly drained soils. Never floods. Typical profile: 0 to 6 inches in silt loam, 6 to 50 inches in silty clay loam, and 50 to 62 inches in loam.	Marine terraces	0.3	0.00%
14E	Conetoe-Chesapeake-Tetoum complex, 2 to 40 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 8 inches in fine sandy loam, 8 to 32 inches in fine sandy loam, and 32 to 62 inches in fine sand.	Marine terraces, Stream terraces	0.5	0.00%
16	Deloss-Tomotley-Nimmo complex, 0 to 1 percent slopes	Very poorly drained soils. Never floods. Typical profile: 0 to 13 inches in fine sandy loam, 13 to 48 inches in sandy clay loam, and 48 to 79 inches in fine sand.	Marine terraces	35.7	3.20%
19	Dragston fine sandy loam, 0 to 2 percent slopes	Somewhat poorly drained soils. Never floods. Typical profile: 0 to 9 inches in fine sandy loam, 9 to 37 inches in fine sandy loam, and 37 to 79 inches in fine sand.	Marine terraces	7.7	0.70%
20	Dragston-Tomotley complex, 0 to 2 percent slopes	Somewhat poorly drained soils. Never floods. Typical profile: 0 to 9 inches in fine sandy loam, 9 to 37 inches in fine sandy loam, and 37 to 79 inches in fine sand.	Marine terraces	2.6	0.20%
21	Dragston-Urban land complex, 0 to 2 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in fine sandy loam, 7 to 42 inches in sandy clay loam, and 42 to 79 inches in fine sand.	Marine terraces	19.5	1.70%
22	Dragston-Urban land-Tomotley complex, 0 to 2 percent slopes	Somewhat poorly drained soils. Never floods. Typical profile: 0 to 9 inches in fine sandy loam, 9 to 37 inches in fine sandy loam, and 37 to 79 inches in fine sand.	Marine terraces	55.9	5.00%
25	Munden fine sandy loam, 0 to 2 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 8 inches in fine sandy loam, 8 to 32 inches in fine sandy loam, and 32 to 62 inches in fine sand.	Marine terraces	2.1	0.20%
27	Munden-Urban land complex, 0 to 2 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, 8 to 32 inches in fine sandy loam, and 32 to 62 inches in fine sand.	Marine terraces	79.1	7.00%
29	Munden-Urban land-Pactolus complex, 0 to 3 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, 8 to 32 inches in fine sandy loam, and 32 to 62 inches in fine sand.	Marine terraces, and dunes	6.4	0.60%
30	Nawney silt loam, 0 to 1 percent slopes, frequently flooded	Very poorly drained soils. Frequently floods. Typical profile: 0 to 4 inches in mucky peat, 4 to 9 inches in silt loam, 9 to 47 inches in loam, and 47 to 60 inches in loamy sand.	Marine terraces	7	0.60%
31	Pactolus loamy fine sand, 0 to 3 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 2 inches in loamy fine sand, and 2 to 79 inches in loamy fine sand.	Marine terraces	1.8	0.20%
33	Pocaty mucky peat, 0 to 1 percent slope.	Very poorly drained soils. Frequently floods. Typical profile: 0 to 12 inches in	Tidal Marshes	21.8	1.90%

Map Symbol	Soil Type	Description	Landscape Position	Acres	% Area
	very frequently flooded	peat, 12 to 20 inches in mucky peat, 20 to 60 inches in muck, and 60 to 80 inches in silt loam.			
37	Rappahannock muck, 0 to 1 percent slopes, very frequently flooded	Very poorly drained soils. Frequently floods. Typical profile: 0 to 41 inches in muck, and 41 to 79 inches in fine sand.	Tidal Marsh	4.9	0.40%
38	Tetotum fine sandy loam, 0 to 2 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 9 inches in fine sandy loam, 9 to 48 inches in loam, and 48 to 72 inches in fine sand.	Stream terraces, and marine terraces	1.1	0.10%
39	Tetotum-Urban land complex, 0 to 2 percent slopes	Moderately well drained soils. Never floods. Typical profile: 0 to 9 inches in fine sandy loam, 9 to 48 inches in loam, and 48 to 72 inches in fine sand.	Marine terraces	4	0.40%
42	Tomotley-Bertie complex, 0 to 2 percent slopes	Somewhat poorly drained soils. Never floods. Typical profile: 0 to 5 inches in fine sandy loam, 5 to 31 inches in sandy clay loam, and 31 to 60 inches in fine sand.	Marine terraces	2.2	0.20%
43	Tomotley-Deloss complex, 0 to 1 percent slopes	Very poorly drained soils. Never floods. Typical profile: 0 to 13 inches in fine sandy loam, 13 to 48 inches in sandy clay loam, and 48 to 79 inches in fine sand.	Marine terraces	245.6	21.90%
44	Tomotley-Deloss-Urban land complex, 0 to 1 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in fine sandy loam, 7 to 42 inches in sandy clay loam, and 42 to 79 inches in fine sand.	Marine terraces	36.7	3.30%
45	Tomotley-Nimmo complex, 0 to 1 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in fine sandy loam, 7 to 42 inches in sandy clay loam, and 42 to 79 inches in fine sand.	Marine terraces	22.2	2.00%
46	Tomotley-Urban land complex, 0 to 1 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in fine sandy loam, 7 to 42 inches in sandy clay loam, and 42 to 79 inches in fine sand.	Marine terraces	21.4	1.90%
47	Tomotley-Urban land-Bertie complex, 0 to 2 percent slopes	Somewhat poorly drained soils. Never floods. Typical profile: 0 to 5 inches in fine sandy loam, 5 to 31 inches in sandy clay loam, and 31 to 60 inches in fine sand.	Marine terraces	15.8	1.40%
48	Tomotley-Urban land-Nimmo complex, 0 to 1 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in fine sandy loam, 7 to 42 inches in sandy clay loam, and 42 to 79 inches in fine sand.	Marine terraces	96	8.50%
49	Udorthents-Urban land complex, 0 to 45 percent slopes	No soil information provided	Urban slopes	217.4	19.30%
50	Urban land, 0 to 5 percent slopes	No soil information provided	Urban land	15.2	1.40%
51E	Urban land-Conetoe-Chesapeake-Tetotum complex, 2 to 40 percent slopes	Well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, 8 to 25 inches in fine sand, 25 to 41 inches in sandy clay loam, and 41 to 79 inches in loamy fine sand.	Marine terraces	18.7	1.70%
52	Urban land-Deloss-Tomotley-Nimmo complex, 0 to 1 percent slopes	Poorly drained soils. Never floods. Typical profile: 0 to 7 inches in fine sandy loam, 7 to 42 inches in sandy clay loam, and 42 to 79 inches in fine sand.	Marine terraces	50.5	4.50%
53	Wando loamy fine sand, 0 to 3 percent slopes	Well drained soils. Never floods. Typical profile: 0 to 8 inches in loamy fine sand, and 8 to 79 inches in fine sand.	Dunes	5.8	0.50%
W	Water			103.7	9.20%
Totals for Area of Interest				1,123.80	100.00%

Table 2. Table of Previously Recorded Phase I Surveys within or Adjacent to the Proposed Project APE.

Author	Year	Title	Group
Hinks, Stephen and Katy Harris	1996	Management Summary: Preliminary Cultural Resources Investigations, I-64 Widening from I-464 to I-264, City of Chesapeake, Virginia.	Michael Baker, Jr., Inc.
Hinks et al.	1998	Archaeological Survey, I-64 Widening from I-464 to I-264, City of Chesapeake, Virginia	Michael Baker, Jr., Inc.
Howard A. MacCord Sr.	1981	An Archaeological Reconnaissance Survey of the 500KV, Septa to Yadkin Line in the County of Isle of Wight and the Cities of Suffolk and Chesapeake, Virginia.	N/A
Thomas Young	2007	An Archaeological Survey of the Proposed I-64 North Harbor Soundwall Project, City of Chesapeake, Virginia.	WMCAR
Sara et al.	1999	Cultural Resources Survey, Hampton Roads Crossing Study, Candidate Build Alternatives 1, 9, and 2, Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Suffolk, Virginia.	Michael Baker, Jr., Inc.
Michael Hoffman	1983	A Report on an Archaeological Reconnaissance of a Proposed VEPCO Fly Ash Disposal Site Near Bower's Hill, Virginia.	GAI Consultants
Moore, William and Dane Magoon	2003	Archaeological Survey of Proposed Water Transmission Lines, City of Chesapeake, Virginia.	Coastal Carolina Research (CCR)
Charles Goode et al.	2010	Phase I testing along the Dismal Swamp Canal, and Building Assessment of the Dismal Swamp Canal Company Toll House, Chesapeake City, Virginia and Camden County, North Carolina	John Milner and Associates (JMA)
Bailey et al.	2005	Archaeological Survey, Proposed Southeastern Parkway and Greenbelt, Cities of Chesapeake and Virginia Beach, Virginia.	Coastal Carolina Research (CCR)
R. L. Hundley	1989	Cultural Resources Survey of the Proposed Build Alternatives for the Southeastern Expressway, Cities of Chesapeake and Virginia Beach.	VDOT
Stewart et al.	2007	Cultural Resources Identification Survey Proposed Improvements to Dominion Boulevard Chesapeake, Virginia. Ms. on file Virginia Department of Historic Resources, Richmond.	Coastal Carolina Research (CCR)

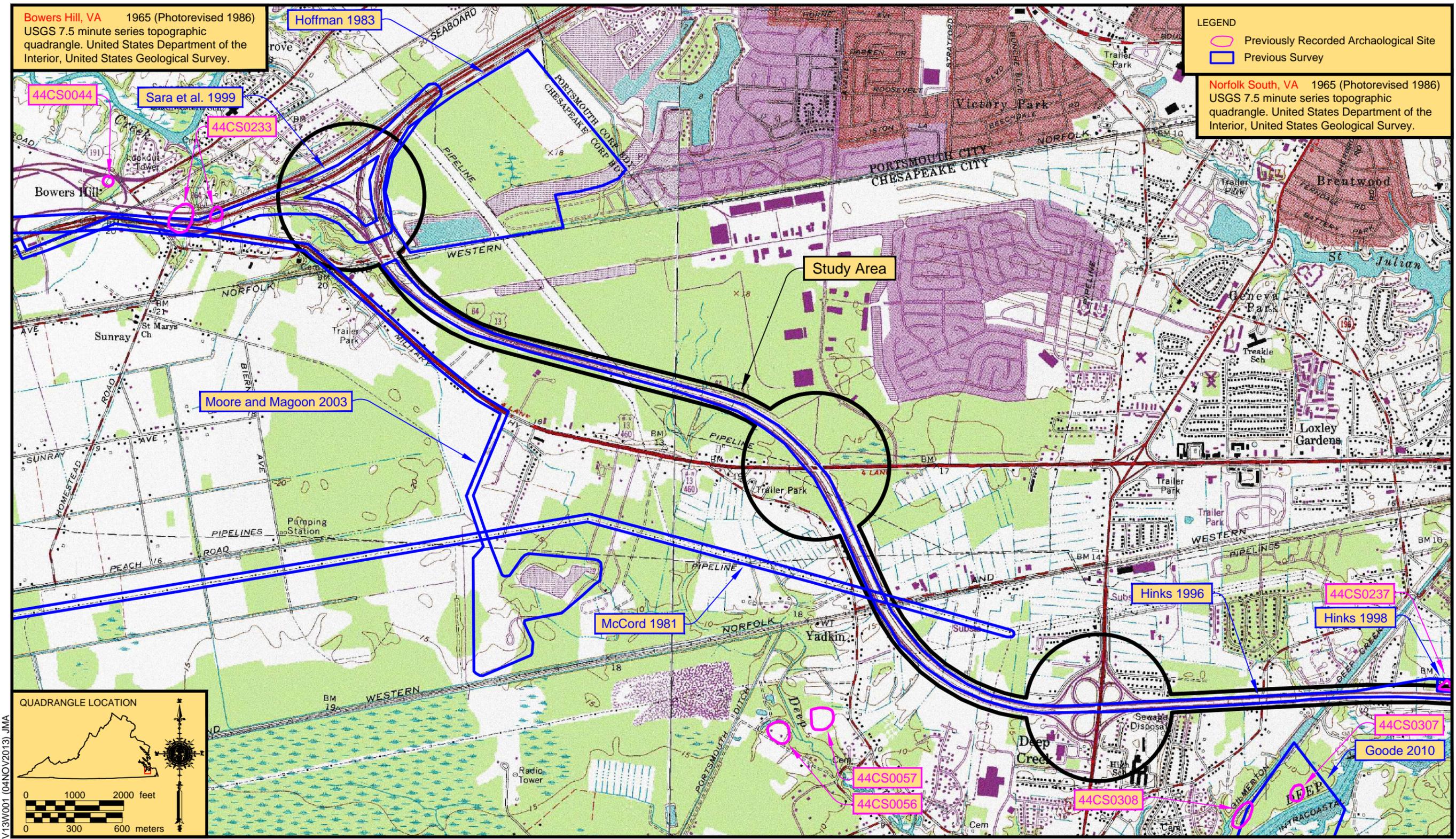


Figure 3a. Previously conducted surveys within or adjacent to the archaeological APE and previously recorded archaeological resources within a 1.6 km (1.0-mi) radius of the archaeological APE.

There are a total of 18 archaeological sites located within the record search area, a 1.6 km (1 mi) radius from the study area (Figure 3a-b) (Table 3). Of these previously recorded archaeological sites, 5 (44CS0236, 44CS0237, 44CS0277, 44CS0278, and 44CS0277) are located within or immediately adjacent to the project APE. Sites 44CS0236 and 44CS0237 are diffuse historic scatters associated with mid-nineteenth- to early-twentieth-century dwellings. Sites 44CS0277, 44CS0278, and 44CS0280 are small twentieth-century refuse scatters. The remaining sites consist of informant collection areas (44CS0044, 44CS0056, 44CS0057, and 44CS0233), nineteenth–twentieth-century refuse scatters (44CS0120, 44CS0276, and 44CS0307), small cemeteries (44CS0121 and 44CS0275), and transportation-related (44CS308 and 44CS0313) sites. Site 44CS0313, however, contains a prehistoric component of unknown affiliation that consists of a moderately-sized lithic scatter. This represents the only verified prehistoric site component within 1 mi of the current study area. There are no sites located within 1 mi of the current study area that have been recommended as eligible for listing in the National Register of Historic Places (NRHP).

Floodplains, terraces, and alluvial and colluvial fans with well-drained and moderately well-drained soils often contain prehistoric sites in surface and/or buried contexts. Gardner (1989) argues that prehistoric Native-American sites increase in frequency and intensity of occupation with their proximity to rivers and high-order streams (particularly locations with less than 10 percent slopes, well-drained soils, and a stable water supply), although Opperman et al. (1987) and colleagues note that prehistoric populations would have seasonally exploited a variety of topographic settings for food resources through the Middle Woodland, after which a shift to horticultural food production increased settlement along the James River and its tributaries. Due to convenient access to water and food resources, historic sites often mirror prehistoric ones, although historic sites are more likely to be found on broader terraces. Historic sites will also occur where mineral and other natural resources (such as timber) are

available. Fertile alluvial floodplains and terraces provide suitable land for agriculture and opportunities for livestock grazing.

Given the urban nature of the APE and the poorly-drained soils, there was deemed to be a low probability of prehistoric and historic archaeological sites. The portions of the APE that contain less development and moderately-drained soils near the confluence of Deep Creek and Elizabeth River, however, were deemed to have a moderate probability for prehistoric and historic resource identification. Additionally, based on the records search, a previous assessment of the area determined portions of the APE to have low to very low probability for prehistoric and historic archaeological site identification, with the exception of a few areas close to the Elizabeth River. Based on these record search results, the most likely resources to be encountered in the APE are low density mid-nineteenth- to twentieth-century domestic sites and small ephemeral prehistoric lithic scatters.

Historic Map Research

In addition to the record search and archival research conducted at DHR and through VCRIS, historic maps of the project and surrounding areas were examined. In 1755, the state of Virginia was scarcely settled, especially in Norfolk County, where the City of Chesapeake would eventually form. According to the 1755 Map of the Most Uninhabited Part of Virginia, most settlements were concentrated along the James River and Chesapeake Bay, with some activity in Norfolk. The 1863 map produced by Lieutenant Oscar Soederquist (1863) shows the area is still sparsely settled (Figure 4). By 1887, settlement had reached further south into Virginia. The 1887 Map of Norfolk County depicts two main roads in the APE, Galberry Road and George Washington Highway. Settlements have been made along these roads but are sparse. The roads lead to Deep Creek, where there is a higher concentration of buildings (Figure 5). Overall, the map depicts a significant number of land owners; some of the land owned at this time is situated around waterways as well. One railroad traverses the APE, the Norfolk and Western

Table 3. Table of Previously Recorded Archaeological Resources within a 1.6 km (1.0-mi) Radius of the Archaeological APE.

Site	Temporal Designation	Thematic Context/Site Functions	Recorder & Date	NRHP Eligibility
44CS0044	Prehistoric; Unknown	Projectile points found during construction	Bott, 1980	Not Evaluated
44CS0056	Prehistoric; Unknown	Collection location by Informant	Egloff, 1986	Not Evaluated
44CS0057	Prehistoric; Unknown	Collection location by Informant	Egloff, 1986	Not Evaluated
44CS0120	twentieth century, twentieth century	Domestic: Trash scatter	Hoge, 1989	DHR Staff: Not Eligible
44CS0121	nineteenth century	Funerary: Cemetery	Hoge, 1989	DHR Staff: Not Eligible
44CS0233	Prehistoric; Unknown	No data	MacCord, 1963	Not Evaluated
44CS0236	nineteenth century, twentieth century	Domestic: Farmstead, Funerary: Cemetery	Hinks and Harris, 1996	Not Evaluated
44CS0237	nineteenth century, twentieth century	Domestic: Farmstead	Hinks and Harris, 1996	Not Evaluated
44CS0273	twentieth century	Shipwreck: Merchant Vessel	Watts, 2005	Not Evaluated
44CS0275	twentieth century	Funerary: Cemetery	Stewart, 2006	Recommended Not Eligible
44CS0276	twentieth century	Domestic: Trash scatter	Young, 2007	Not Evaluated
44CS0277	twentieth century	Domestic: Trash scatter	Young, 2007	Not Evaluated
44CS0278	twentieth century	Domestic: Trash scatter	Young, 2007	Not Evaluated
44CS0280	twentieth century	Domestic: Trash scatter	Young, 2007	Not Evaluated
44CS0307	nineteenth century; second half	Domestic: Trash scatter	Goode, 2010	Not Evaluated
44CS0308	nineteenth century; second half	Transportation: Canal Lock	Goode, 2010	Not Evaluated
44CS0313	nineteenth century; second half, Prehistoric; unknown	Historic Transportation: Canal Lock, Prehistoric Lithic scatter	Goode, 2010	Not Evaluated

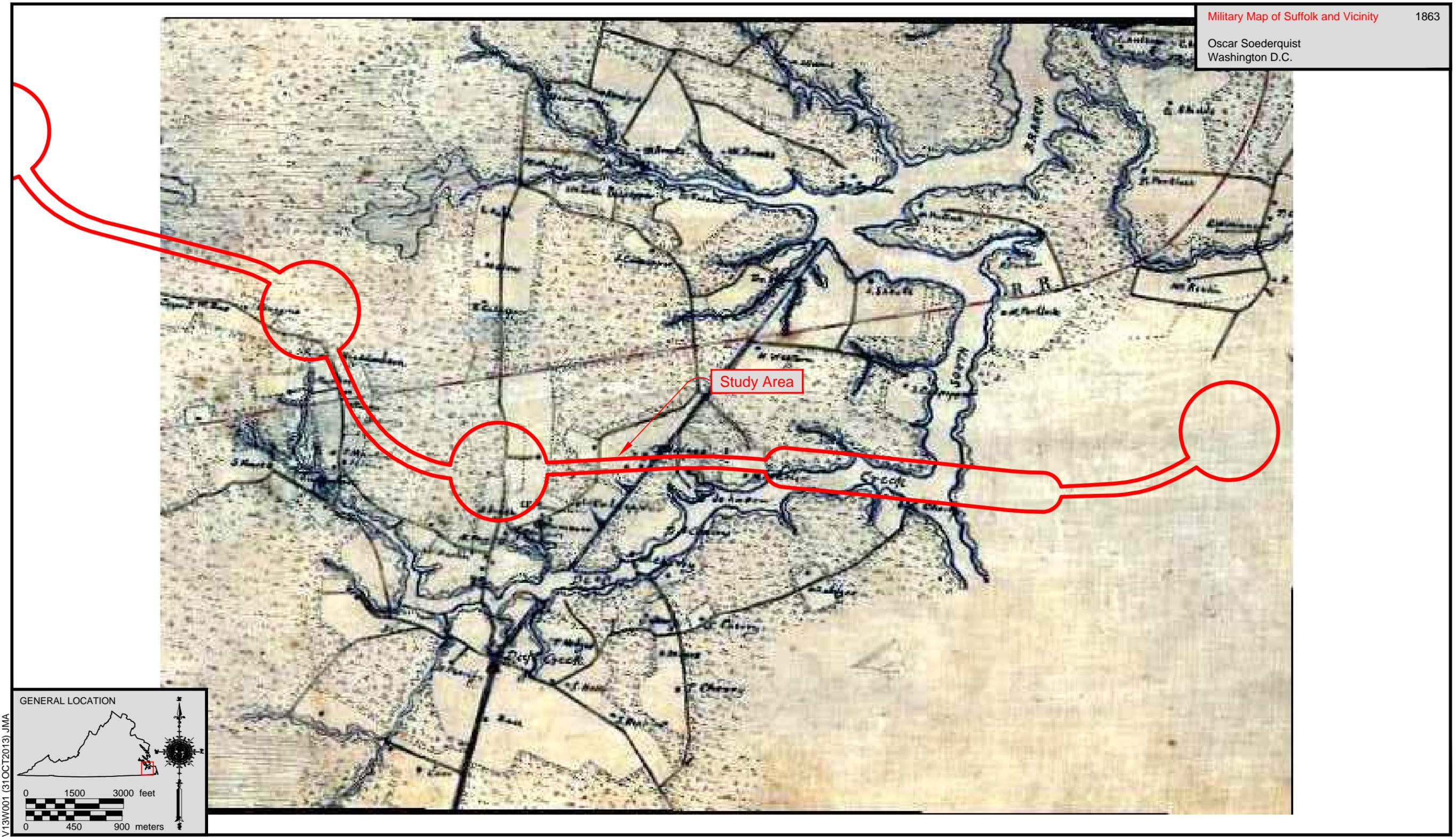


Figure 4. Portion of 1863 map of the area around Norfolk drawn by Lieut. Oscar Soederquist (Davis et al. 1983)..



Figure 5a. Portion of 1887 Sykes and Swathmey Map of Norfolk (Sykes and Swathmey 1887).

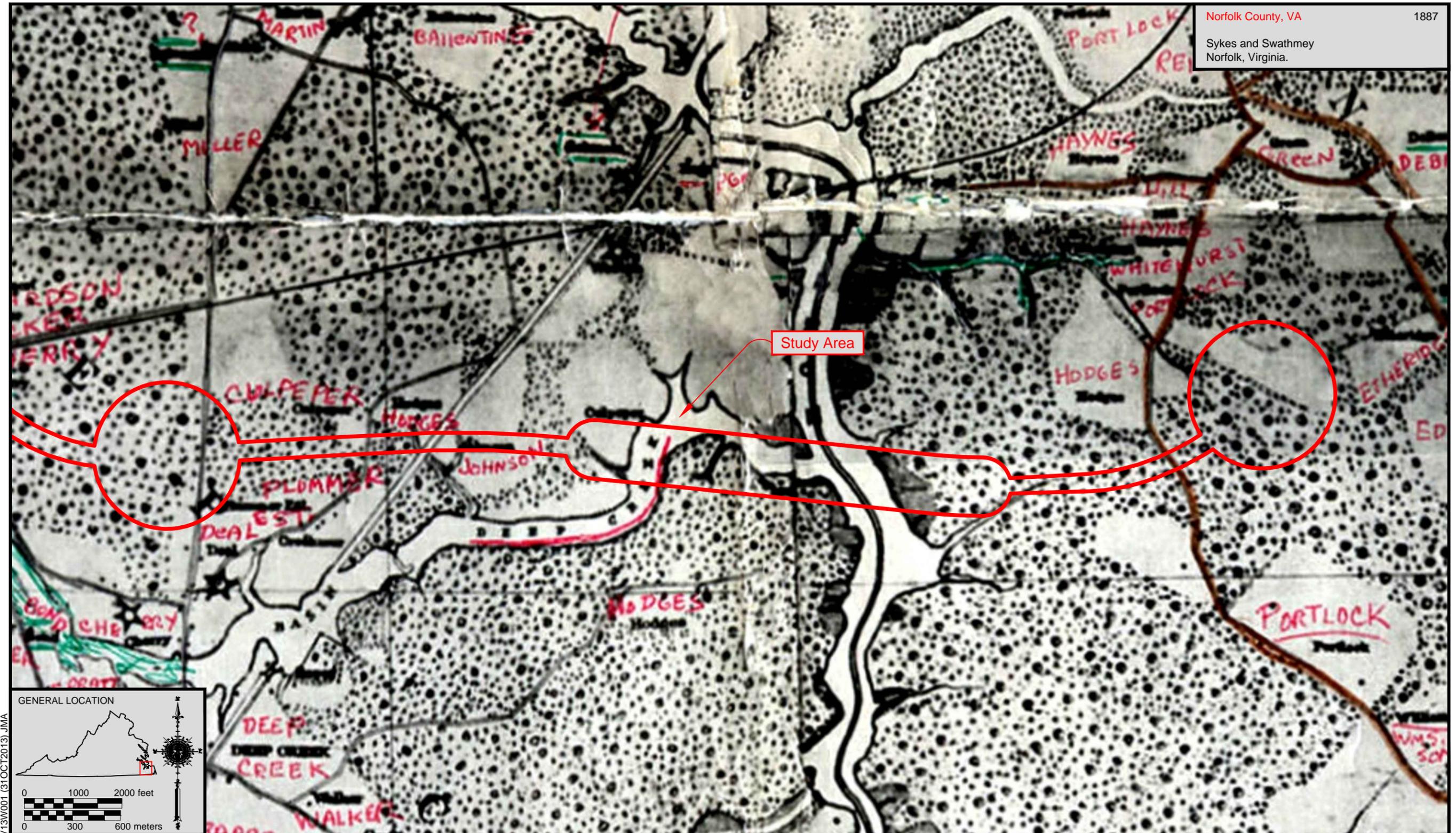


Figure 5b. Portion of 1887 Sykes and Swathmey Map of Norfolk (Sykes and Swathmey 1887).

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Railroad; the Portsmouth and Roanoke Railroad is located just outside of the APE in the Bowers Hill area. A map of the confluence of Deep Creek and Elizabeth River, drawn by J.B. Boutelle in 1912 (Figure 6), depicts a close-up of the area immediately west the High Rise Bridge section of the current survey.

By 1921, more houses are depicted along Galberry Road and George Washington Highway, although the area that comprises the APE is still rural in character. Gilmerton now appears as a prominent industrial area located on the Elizabeth River with access to the Norfolk and Western Railroad via several spur lines. The Norfolk and Portsmouth Railroad is depicted on the east side of the Elizabeth River and runs in a north-south direction. The Portsmouth and Roanoke Railroad has become the Seaboard Air Line by this time, and a spur off that line, called the Virginian, traverses the APE (Figure 7a-b).

In the 1950s, more residential development is depicted along Galberry Road and George Washington Highway. The only formal subdivision that is depicted in the APE is the Crestwood neighborhood. Additionally, industrial development has occurred around the Elizabeth River. The western part of the APE is still rural at this time, with few buildings. Military Highway, a four-lane highway, is only located in the APE in the Bowers Hill area (Figure 8 and 9a-b). The 1965 (revised 1986) Bowers Hill and Norfolk South 7.5-minute series topographic quadrangles depict expansive growth in the area since the 1950s. I-64 now appears on the map. Although the western portion of the APE still features some rural characteristics, the map depicts new subdivisions and residential growth. However, residential growth is most substantial in the Deep Creek area. Subdivisions as well as several schools now appear on the map. More residential developments are depicted east of the Elizabeth River as well.

III. ARCHAEOLOGICAL SURVEY METHODS

Phase I Survey

The objective of the archaeological survey was to identify archaeological sites, districts, objects, or cemeteries that might be located within the study APE. For the purpose of this study, an archaeological site is defined as the physical remains of any human activity greater than 50 years of age for which a boundary can be established, related either temporally or functionally, and located within a spatially restricted area. Methods used to complete the archaeological survey followed guidelines developed by DHR (2011a). All aspects of the survey were recorded through the completion of notes, standardized forms, and high-resolution digital photography. All field measurements were recorded in metric measure, including site sizes and transect intervals. Soil profile depths were measured to the nearest centimeter. Data generated by the survey were used to submit archaeological site forms through VCRIS (Appendix B).

Prior to initiating fieldwork, CRA notified Miss Utility of Virginia and had all buried utility corridors marked. All marked utilities were avoided during excavations. CRA followed VDOT's property notification guidelines, which included an attempt to notify all property owners prior to entering their property.

The archaeological survey consisted of pedestrian survey, controlled surface survey, and systematic subsurface testing across the APE (Figure 10a-d). The pedestrian survey was conducted throughout the entire APE to identify any aboveground resources, including but not limited to artifact scatters, cemeteries, and foundations, and to identify areas that would not require subsurface testing, including areas of excessive slope, areas of ground visibility greater than 50 percent, the median in between the interstate travel lanes, and areas of prior ground disturbance. In areas of disturbance, when possible or feasible, a few shovel tests were excavated to ascertain the condition of the soils.

Across the majority of the APE, subsurface testing involved excavation of shovel test probes (STPs) at approximately 23 m (75 ft) intervals to identify subsurface cultural remains. CRA chose a 23 m (75 ft) interval due to the low number of previously recorded archaeological resources within and adjacent to the APE; the major zones of industrial, commercial, and residential development; very poorly-drained soils; and extensive ground disturbances for water management activities. A shorter interval of 15 m (50 ft) was used in areas of higher potential, such as areas of minimal disturbance in proximity to Deep Creek and Elizabeth River or near previously recorded resources. Shovel tests were given sequential alpha-numeric designations that featured a letter transect designation and shovel test number (e.g., A1, A2, etc.). Tests measured approximately 38 cm (15 in) in diameter. Depths varied according to soil conditions but were typically shallow, reaching average depths of 30–50 cm (11.8–19.7 in) below the ground surface and terminating in culturally sterile subsoil. All excavated material was screened through .64 cm (.25 in) hardware mesh.

When cultural deposits were encountered or surface features were observed, radial testing at 7.5 m (25.0 ft) was employed to help define the horizontal extent of the deposits and to gather a larger sample of cultural material. Radials were not excavated in between two positive shovel tests. If necessary, limited radial testing was conducted beyond the limits of the APE. For those shovel tests in which archaeological materials were recovered, soil color, texture, and notes on the stratigraphic relationship of the artifacts were recorded. Soil horizons were identified according to NRCS soil taxonomy, and artifacts within these horizons were bagged separately and were properly labeled with site number, depth, and horizon. Soil profiles were mapped to scale with notes on Munsell color, texture, and inclusions. The same information was recorded for a sample of negative shovel tests in order to adequately characterize the nature of deposits in the direct APE. The principal investigator used a handheld GPS unit (Garmin Juno 3B) and incorporated mapping

provided by WRA to record shovel testing and site locations.

Laboratory Methods

CRA's West Virginia office processed, analyzed, and prepared recovered artifacts for curation in a manner consistent with DHR's State Collections Management Standards (2011b). The inventory of recovered materials is presented in Appendix A. Materials and data will be transferred to DHR upon acceptance of this archaeological survey report.

Historic Artifact Analysis

Prior to classification and analysis, the artifacts were cleaned and sorted into gross categories (e.g., bone, glass, metal, ceramics) by provenience. The analyst then assessed the materials, creating a record for each item and grouping the individual items into a modified version of a scheme originally developed by Stanley South (1977).

South believed that his classification scheme would present patterns in historic site artifact assemblages that would provide cultural insights. Questions of historic site function, the cultural background of a site's occupants, or regional behavior patterns were topics to be addressed using this system. At first, South's system was widely accepted and adopted by historical archaeologists. However, more recently the system has been criticized by some on theoretical and organizational grounds (Orser 1988; Wesler 1984). One criticism of South's pattern recognition system is that the organization of artifacts is too simplistic. Most archaeologists, however, recognize the usefulness of his classification system to organize data.

The classification scheme that was originally developed by South (1977) has subsequently been revised by numerous authors, including Stewart-Abernathy (1986), Orser (1988), and Wagner and McCorvie (1992). The scheme used for this report groups artifacts into the following categories: Architecture, Clothing, Domestic, Faunal, Furnishings, Maintenance and Subsistence, Miscellaneous, and Personal.

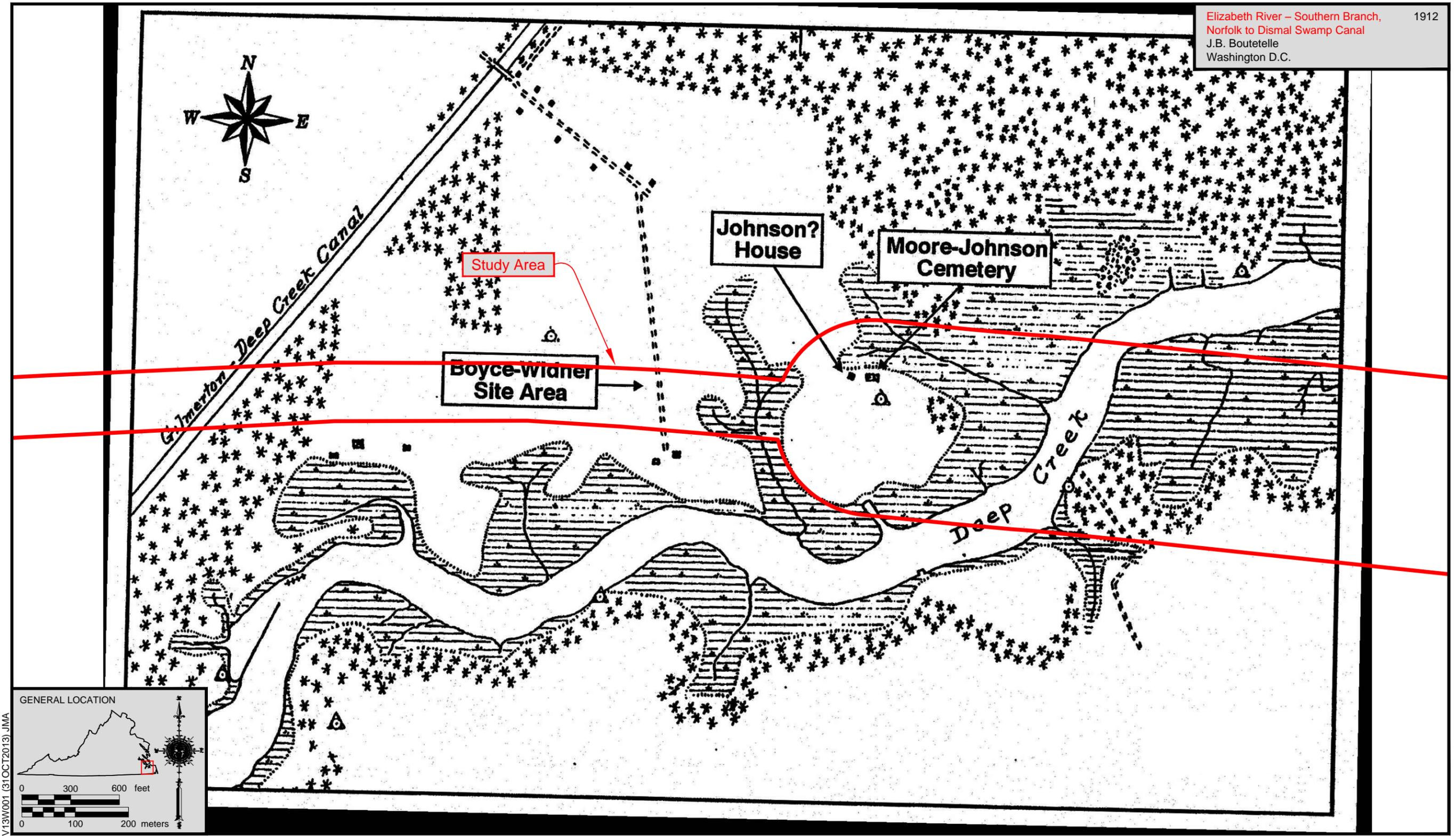


Figure 6. Portion of 1912 JB Boutelle Map of the Elizabeth River - Southern Branch, Norfolk to Dismal Swamp Canal (Boutelle 1912) (reproduced from Hinks et al 1998).

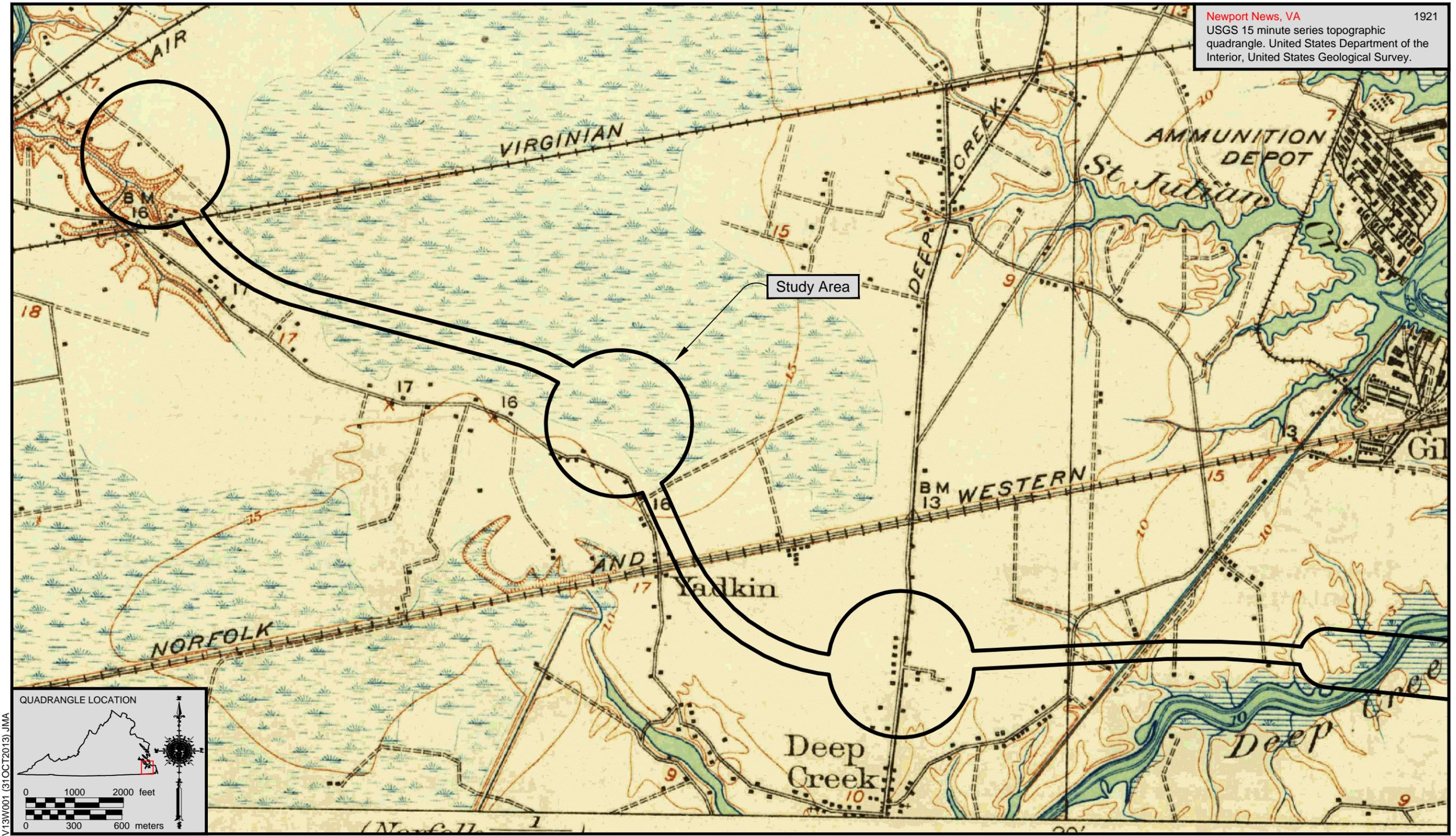


Figure 7a. Portion of the 1921 Newport News, Va 15-minute topographic quadrangle.

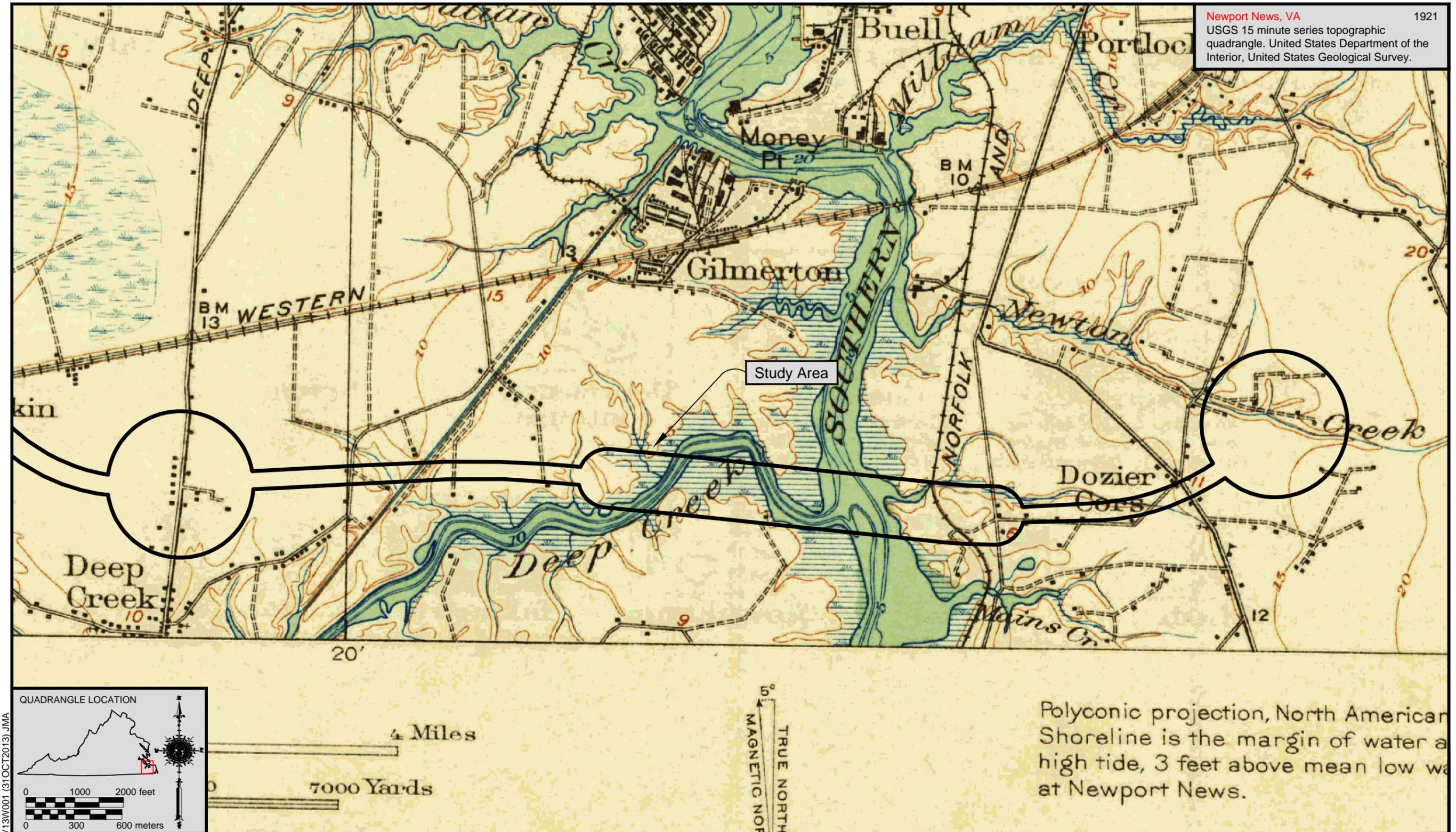


Figure 7b. Portion of the 1921 Newport News, Va 15-minute topographic quadrangle.

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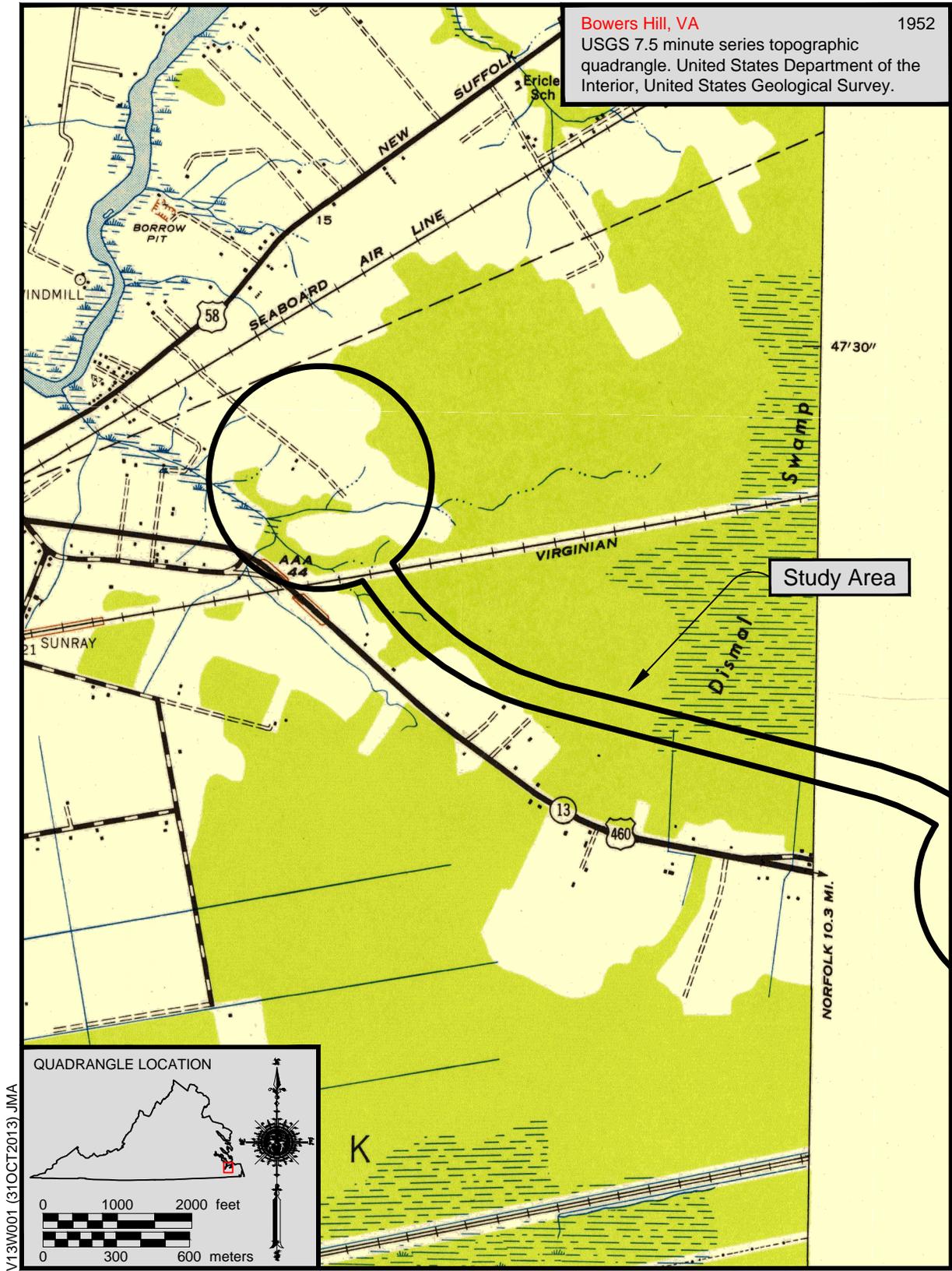


Figure 8. Portion of 1952 Bower's Hill, Va 7.5-minute topographic quadrangle.

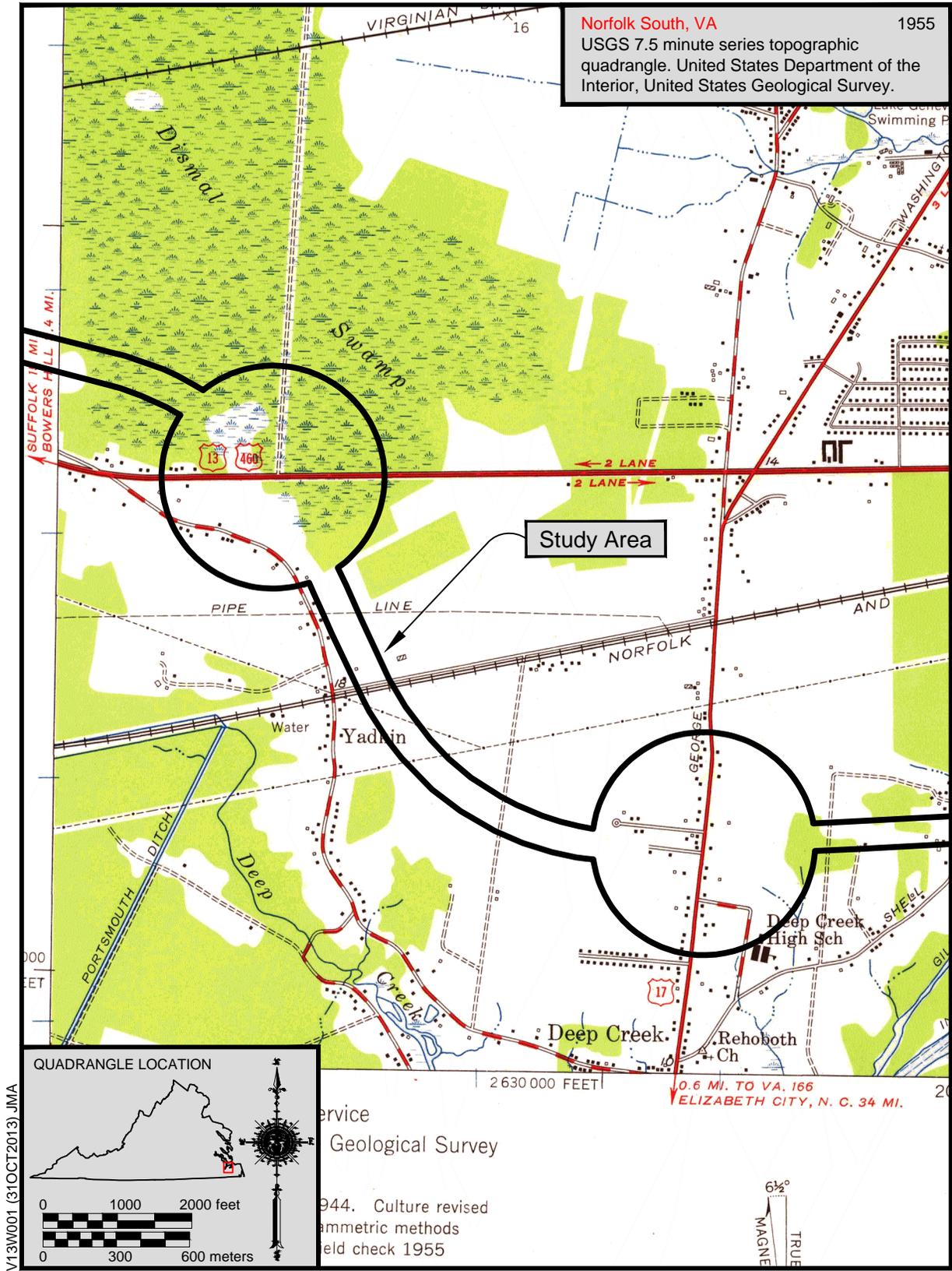


Figure 9a. Portion of 1955 Norfolk South, Va 7.5-minute topographic quadrangle.

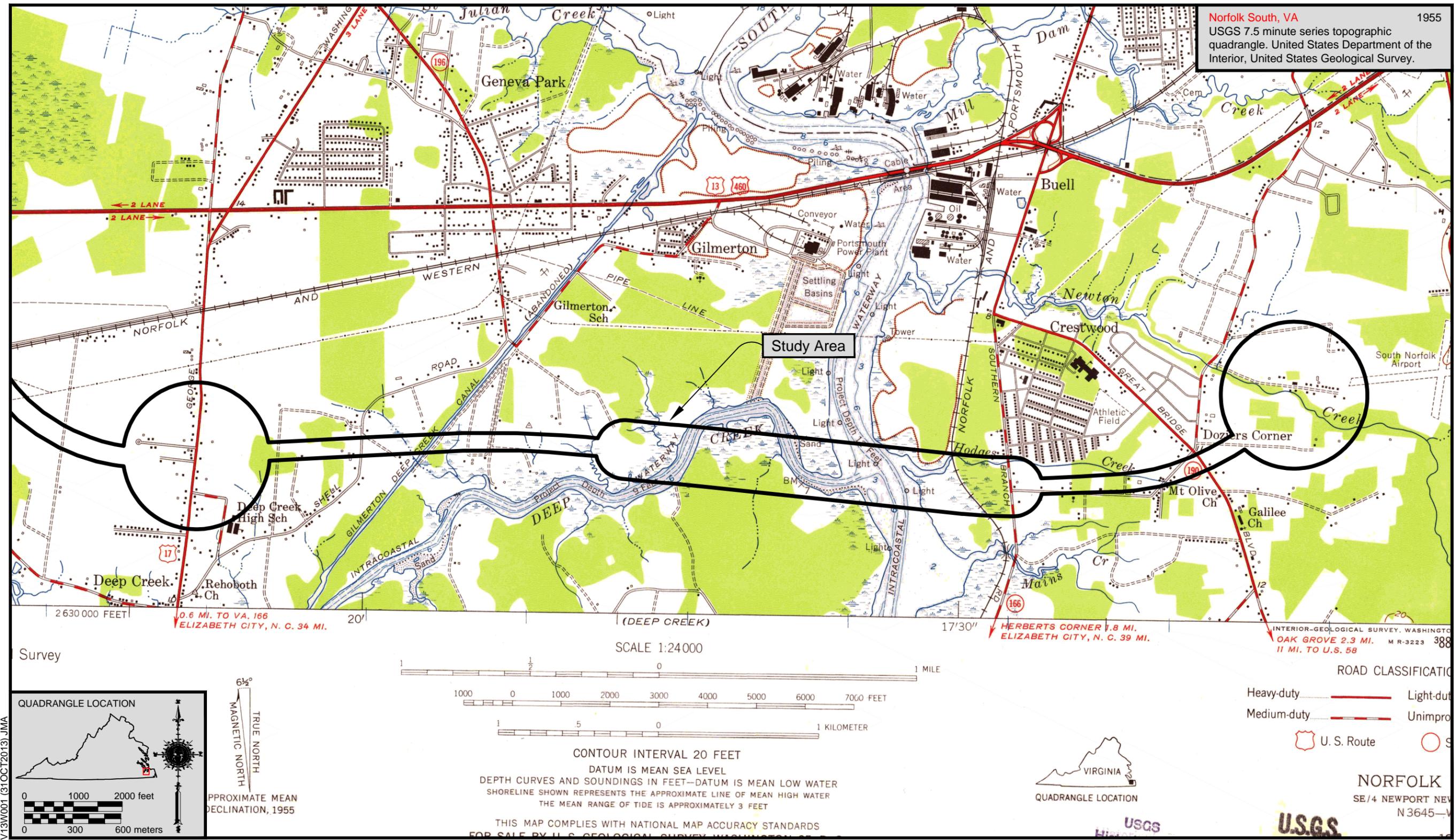
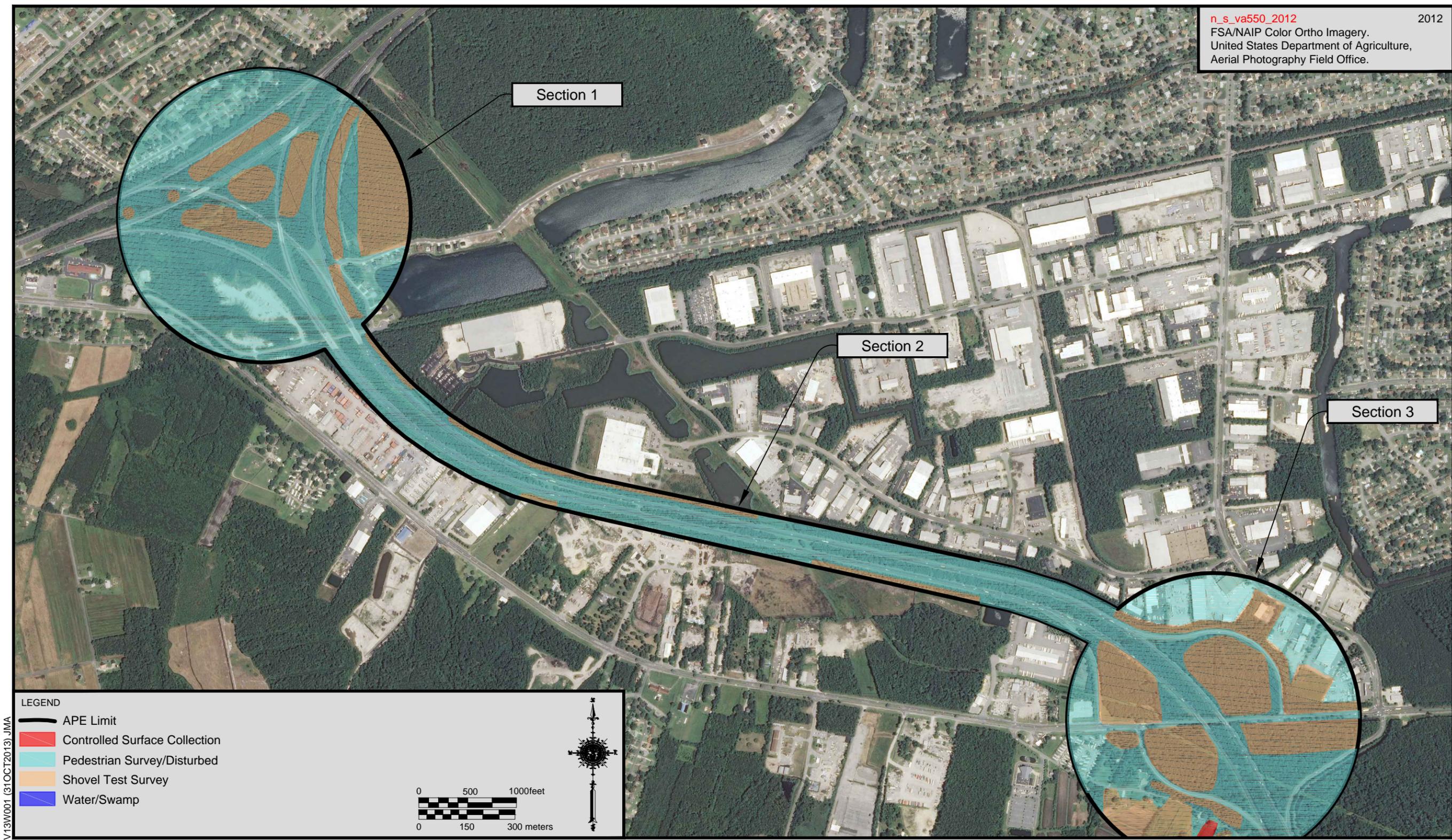
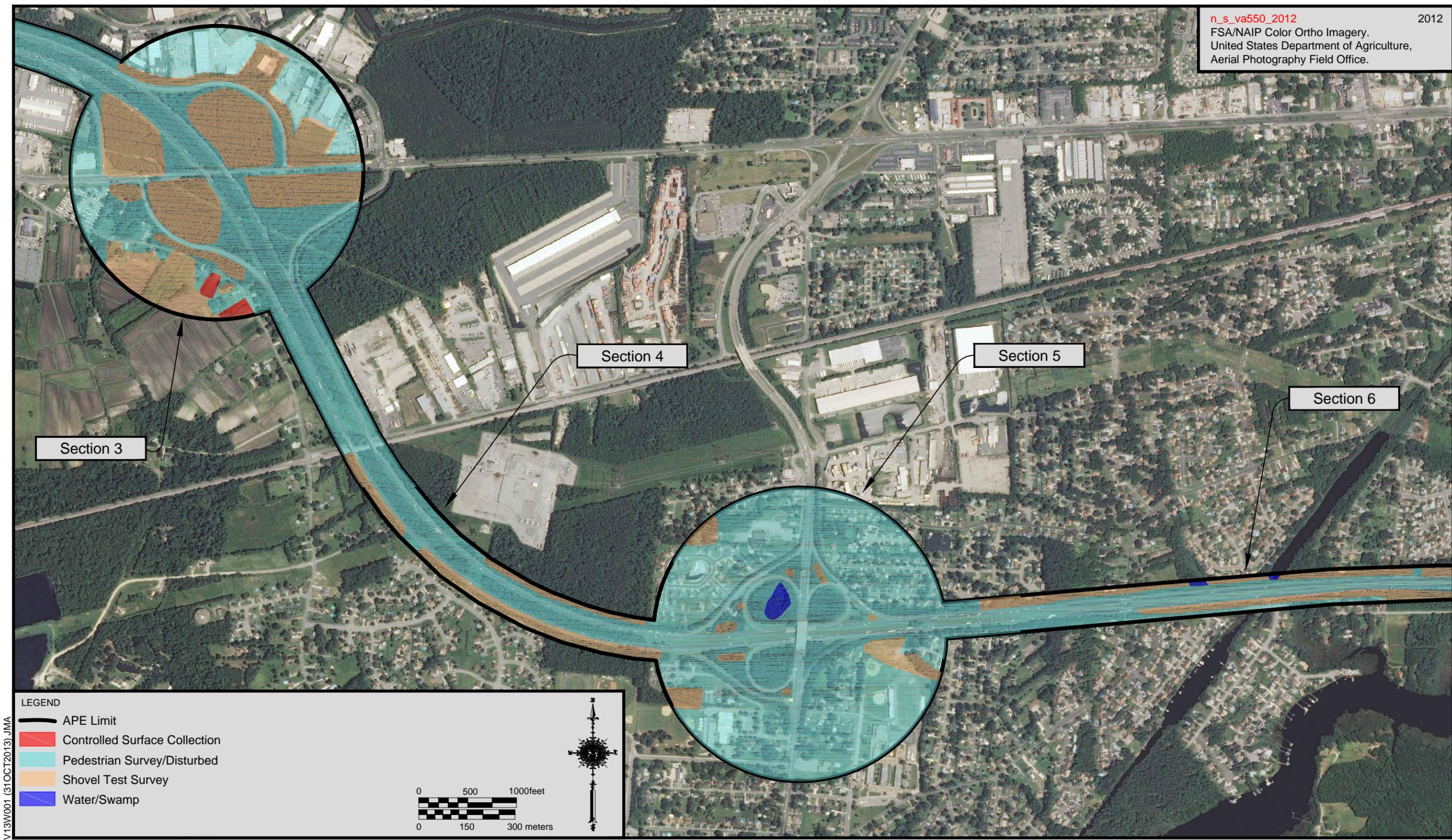


Figure 9b. Portion of 1955 Norfolk South, Va 7.5-minute topographic quadrangle.



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Figure 10a. Study area showing survey strategies.



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Figure 10b. Study area showing survey strategies.

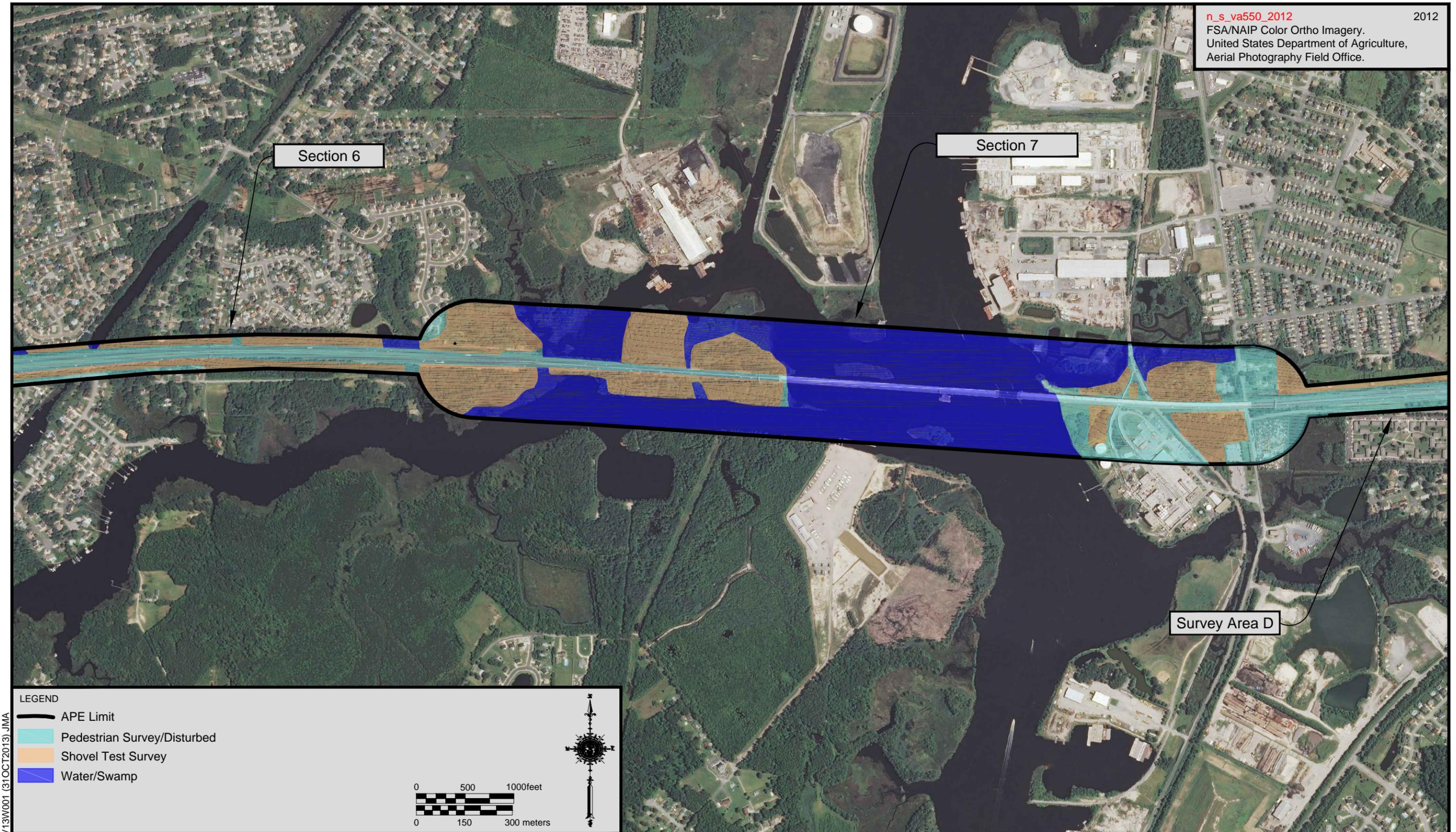


Figure 10c. Study area showing survey strategies.

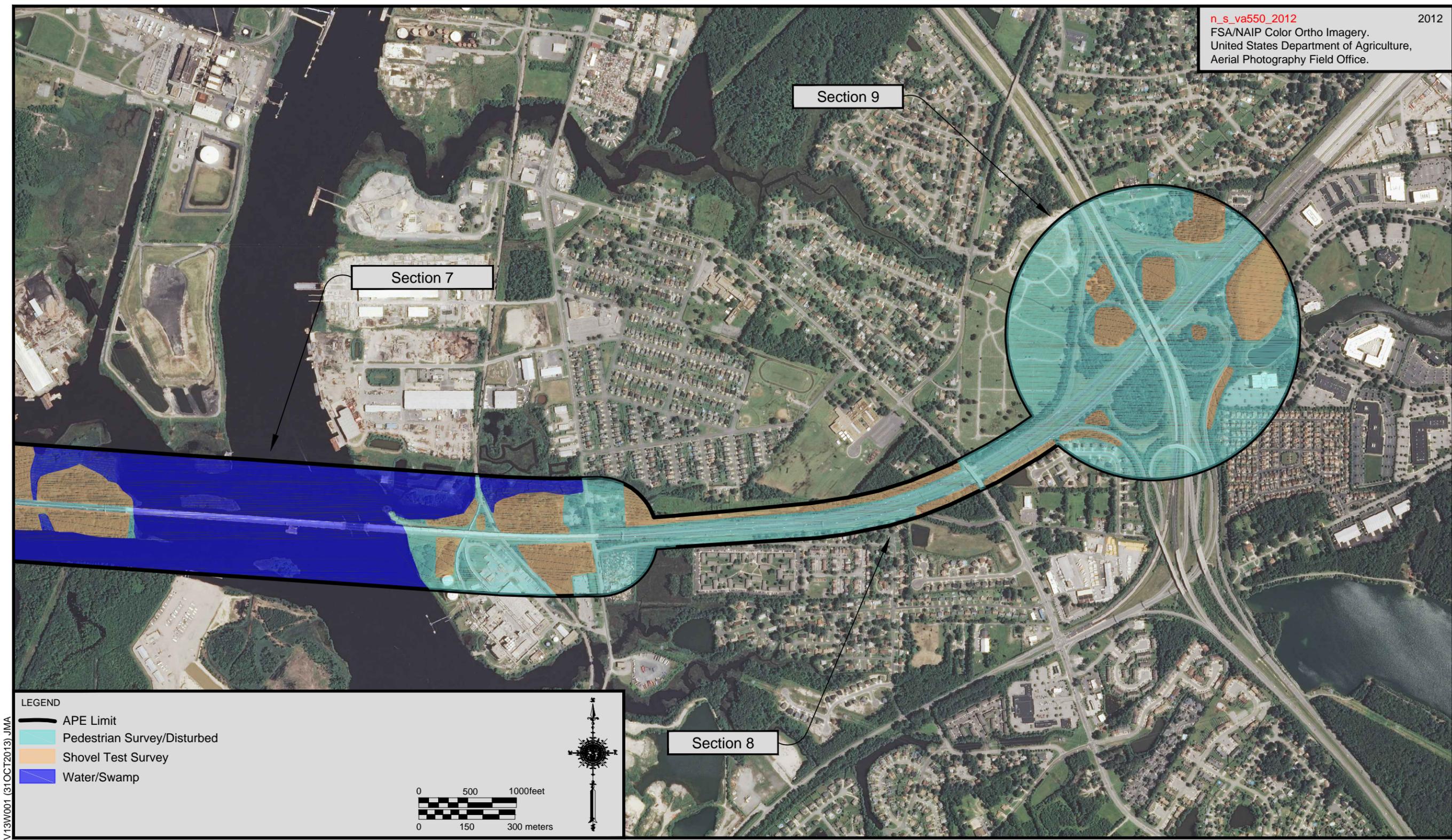


Figure 10d. Study area showing survey strategies.

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Grouping artifacts into these specific categories makes it more efficient to associate artifact assemblages with historic activities or site types. Each one of these groups, and the associated artifacts, are discussed in turn. The citations for beginning and ending dates need some clarification. Usually, an artifact has specific attributes that represent a technological change, an invention in the manufacturing process, or simple stylistic changes in decoration. These attribute changes usually have associated dates derived from historical and archaeological research. For example, bottles may have seams that indicate a specific manufacturing process patented in a certain year. The bottle can then be assigned a "beginning date" for the same year of the patent. New technology may eliminate the need for the same patent and the bottle would no longer be produced. The "ending date" will be the approximate time when the new technology takes hold and the old technology is abandoned.

With regard to ceramics, specific styles of decoration are known to have changed through time. Researchers have defined beginning and ending dates for their manufacture. South's (1977) mean ceramic dating technique uses this information. However, the dates presented in this report should not be considered absolute, although they are the best available estimates for age. The rationale for presenting dates is to allow for a more precise estimation for the duration of occupation, rather than the mean date for occupation.

Archaeological specimens recovered from the excavations were analyzed using an Access-based data entry program, Cultural Resource Analysts Material Management System. Created by CRA staff, the program has two main functions. The first is a data entry function whereby an individual record is created for each artifact. Each record includes fields for provenience, functional group, and artifact type and class. Other attributes, including window glass thickness, nail pennyweight, and ceramic decoration, are entered into the system. The database program also maintains a dating function, drawing from a reference list to provide a minimum and

maximum date for the artifact when applicable.

Once data for the artifacts are entered into the system, the analyst can then query the database to provide a wide range of information for specific types or classes of artifacts, or the assemblage as a whole. The query function allows for information on the quantities and percentages of artifact types by provenience or functional group to be quickly tabulated and presented to the analyst. These tabulations can then be exported to Excel, Word, or Surfer programs to generate data tables or distribution maps for the assemblage.

IV. ARCHAEOLOGICAL RESOURCE SURVEY RESULTS

The archaeological survey involved pedestrian investigation, some controlled surface collection, and subsurface testing of the entire archaeological APE. The archaeological APE is composed of nine survey areas (Figures 10 and 11a-d), which are described below. CRA excavated a total of 2,213 shovel tests (including radial testing), resulting in the identification of one newly identified archaeological site (44CS0318), revisits to two previously recorded sites (44CS0236 and 44CS0237), one cemetery (44CS0317), and two isolated find locations (IF 1 and IF 2) (Figure 11a-d and 12). This section begins with a description of the APE in terms of its current state as well as level of disturbance and then presents detailed information pertaining to the identified archaeological resources. The sites and isolated finds are discussed subsequent to the study area description and discussion. The complete archaeological site forms are presented in Appendix B.

The study area is characterized by a heavily developed environment with major disturbances from roadway construction and maintenance, man-made drainages, residential neighborhoods, and commercial/industrial

areas (work zones and office parks). Areas that are not artificially drained are typically swampy and covered in small reeds and very thick bamboo growth. The typical shovel test profile from an inland (Section 1, Segment DPB0909-01, STP D9) source contains approximately 20 cm (7.9 in) of dark grayish brown sandy loam (10YR 4/2), underlain by 20 cm (7.9 in) of brownish yellow sand (10YR 6/6), which is underlain by at least 25 cm (9.8 in) of gray sandy clay (10 YR 5/1) (Figure 13). Closer to Deep Creek and the Elizabeth River, a typical shovel test (Section 6, Segment DPB0918-05, STP A5) profile contains 20 cm (3.9 in) of dark grayish brown sandy loam (10YR 4/2) underlain by 20 cm (3.9 in) of brownish yellow (10YR 6/6) sand over gray clay (10YR 5/1) (Figure 13). In 1996, Michael Baker Jr., Inc., (Hinks and Harris 1996) prepared an assessment of the study area, though it was done for a smaller APE and was often confined to the existing right of way (ROW). The assessment, however, provided an in-depth analysis of historic maps for the length of the corridor. It was concluded that modern disturbances, the construction of I-64, and major shifts in the coastline at the mouth of Deep Creek due to dredging had significantly disturbed many of the potential areas.

Section 1: I-264 Interchange

The study area for Section 1 is 162.23 acres. A total of 247 shovel tests were excavated, none of which contained cultural materials. This portion of the APE is centered on the exit ramps for the intersection of I-64 and I-264. The area between the exit ramps is highly disturbed from the construction and maintenance of both intersecting highways. The northern portion of the APE contains a neighborhood. All of the yards within the APE appear to be graded and raised to maximize water drainage. There are also numerous drainage ditches and utility lines (Figure 14). The southwest portion of Section 1 contains two heavily graveled areas used for the storage of large tractor trailer containers (Figure 15). The wooded areas surrounding the aforementioned storage areas are much

lower than the manufactured storage area and are completely inundated (Figure 16). The eastern edge of the APE in Section 1 contains a small neighborhood of new houses and a very large drainage pond. Michael Hoffman (1983) conducted a reconnaissance survey in the wooded area north of Grand Isle Drive, which is located in the southeast portion of the survey area. He concluded that, "Given the low elevation, heavy clay soils and poor drainage of the survey area, the probability of significant archaeological sites occurring is quite low." Hoffman also noted the area contained a tremendous amount of disturbance from access roads and large man-made drainages. No shovel testing, however, was undertaken at that time. Shovel testing for the current project, however, was conducted in all areas that were not overtly affected by disturbances. The results of that testing confirmed the earlier observations by previous surveys (Hoffman 1983; Hinks and Harris 1996).

Section 2: I-64 between I-264 and U.S. 13 Interchanges

The study area for Section 2 is 83.36 acres. A total of 74 shovel tests were excavated, none of which contained cultural materials. The existing ROW is heavily disturbed by the construction and maintenance of the interstate. A large drainage ditch, typical of the entire study area, parallels both sides of the road approximately 50–60 ft off of pavement (Figure 17). The south side of the interstate is characterized by several tractor trailer storage yards, construction yards, and other businesses. These are highly graded, mostly paved surfaces. Surfaces that are not paved have been subjected to repeated landscape contouring activities. The north side of the survey area is predominantly wooded, with secondary growth between the interstate and several business and office buildings.

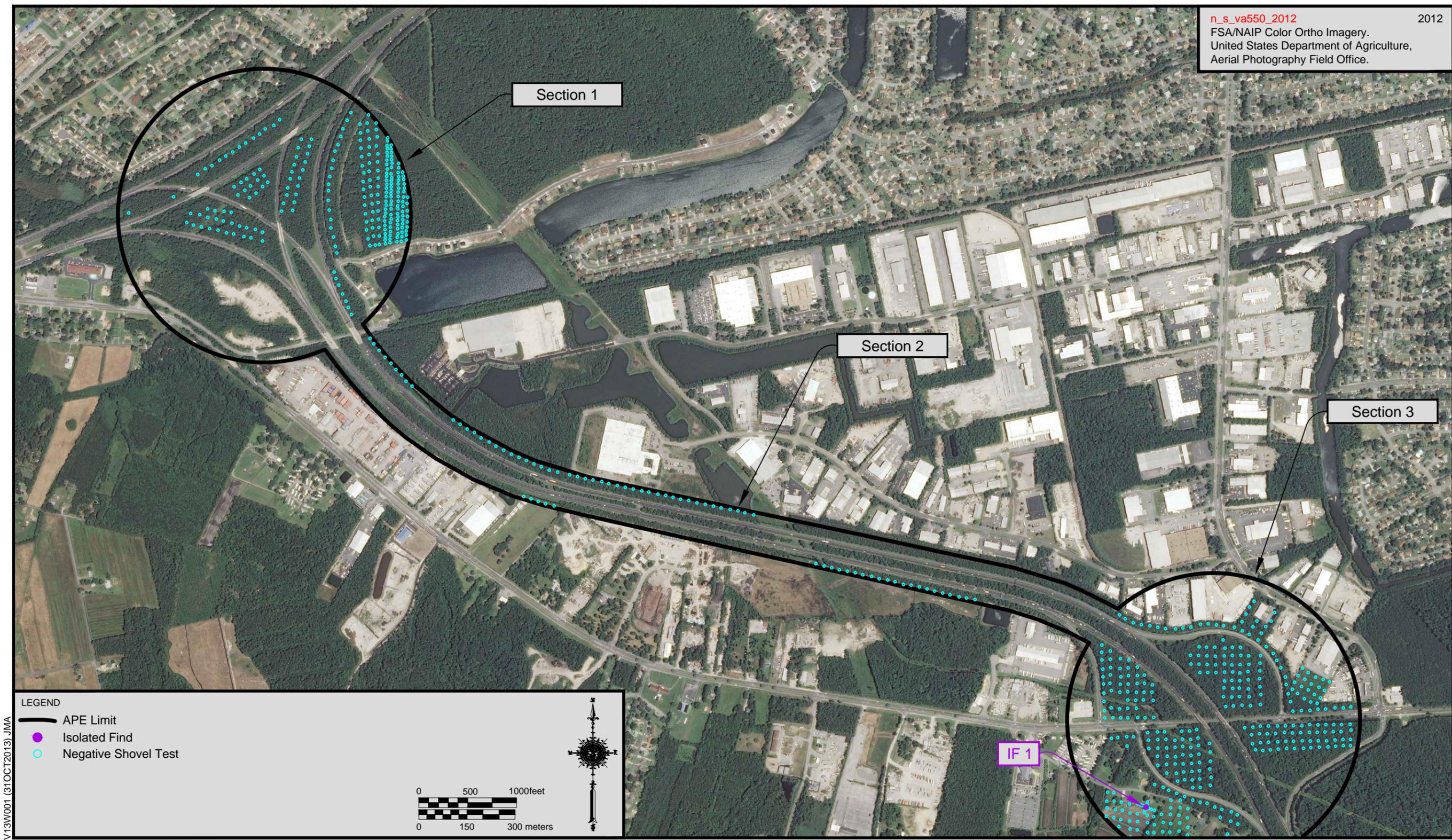
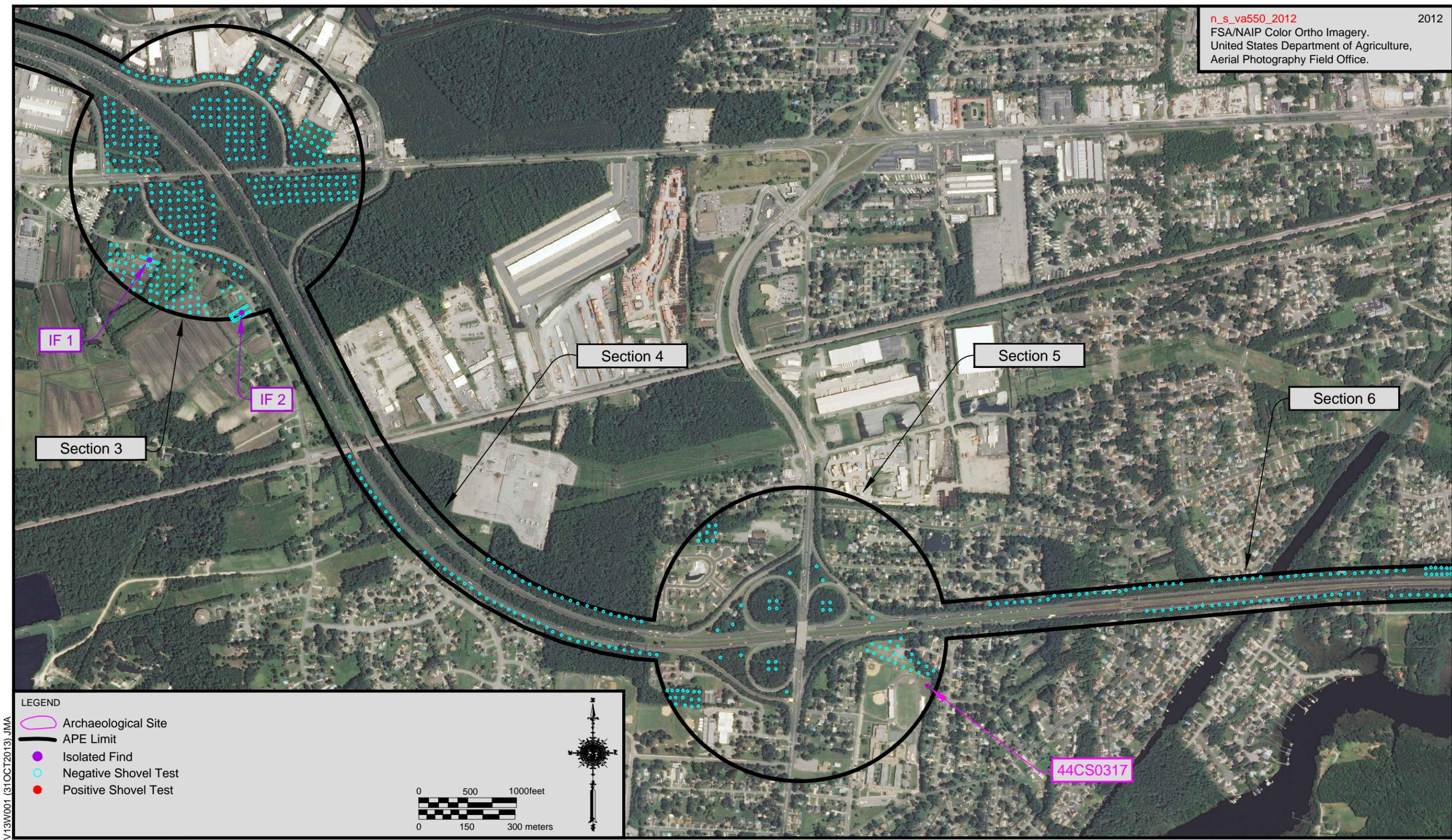


Figure 11a. Location of all excavated STPs within the archaeological APE.



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Figure 11b. Location of all excavated STPs within the archaeological APE.

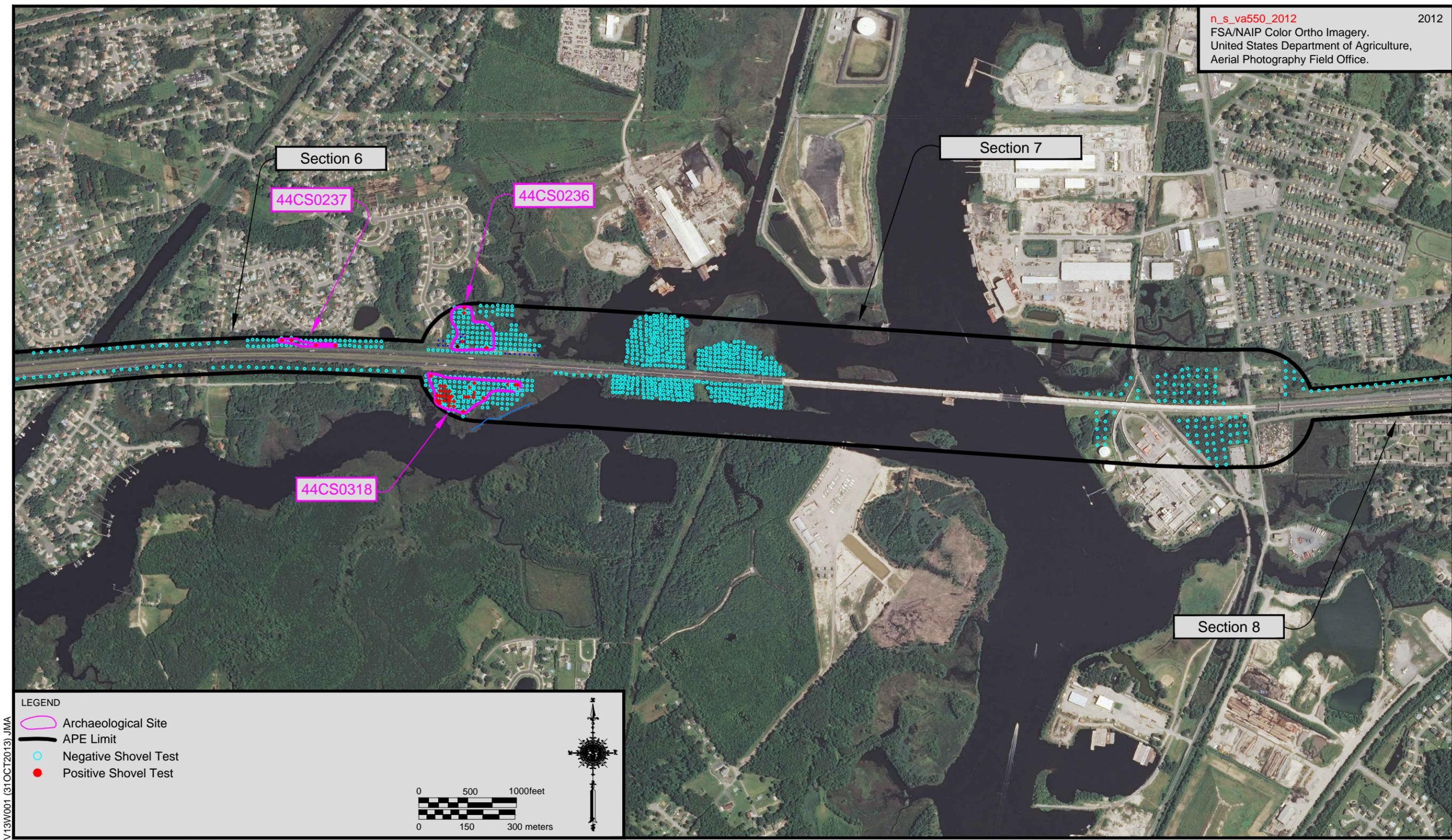
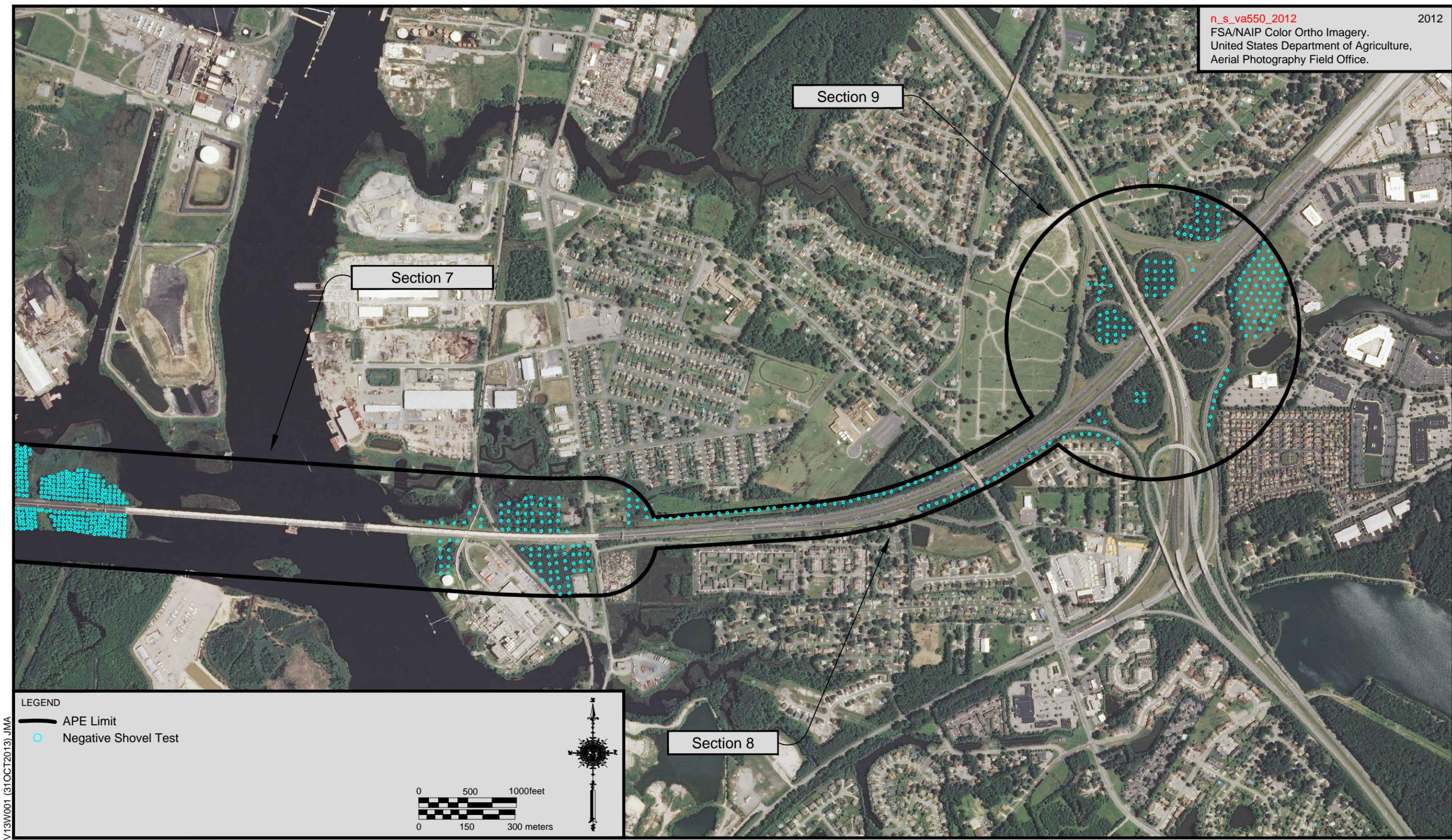


Figure 11c. Location of all excavated STPs within the archaeological APE.



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Figure 11d. Location of all excavated STPs within the archaeological APE.

Bowers Hill, VA 1965 (Photorevised 1986)
USGS 7.5 minute series topographic
quadrangle. United States Department of the
Interior, United States Geological Survey.

Norfolk South, VA 1965 (Photorevised 1986)
USGS 7.5 minute series topographic
quadrangle. United States Department of the
Interior, United States Geological Survey.

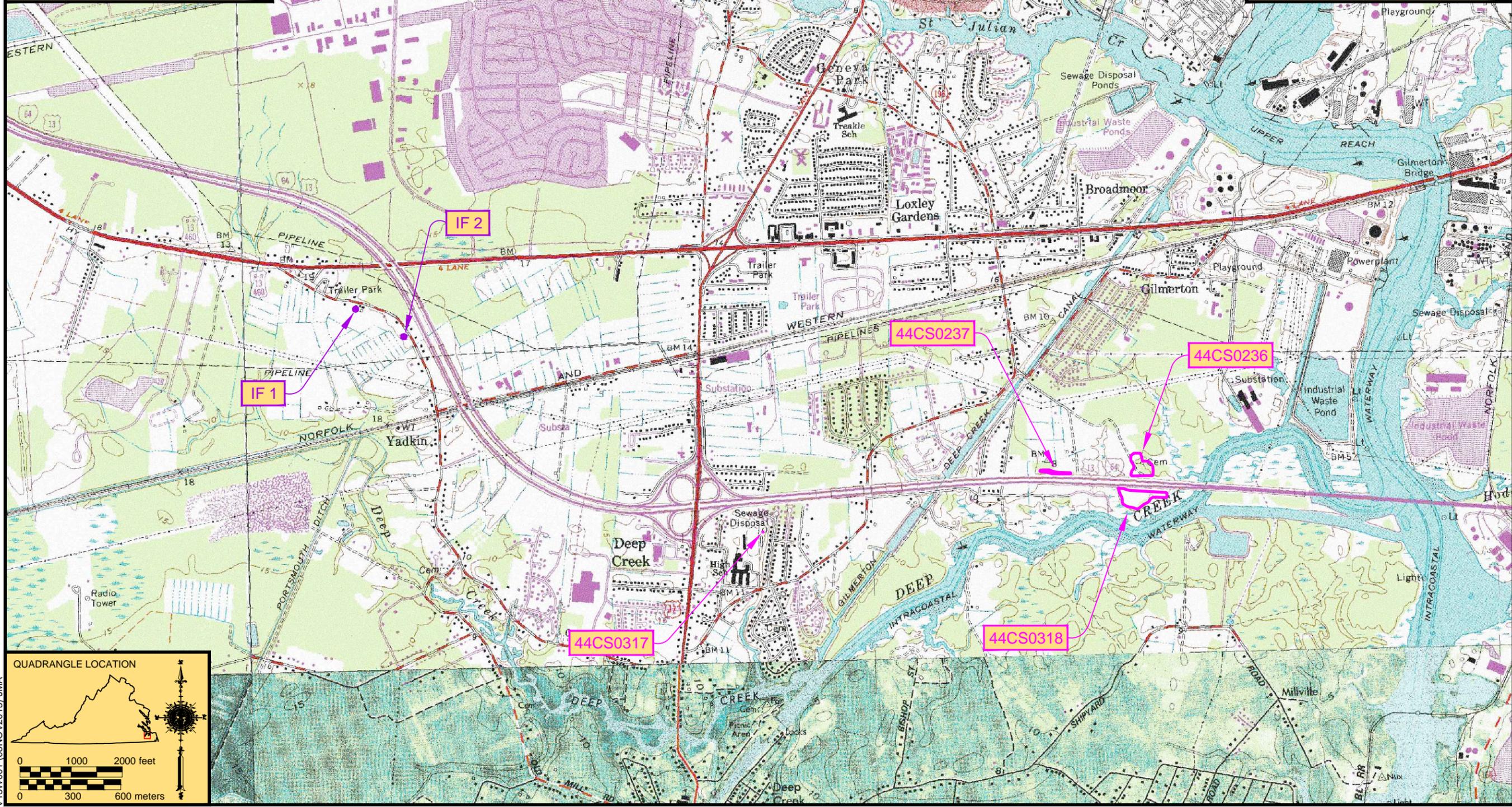


Figure 12. Location of all sites recorded or revisited during the survey on the 1965 Norfolk South 7.5 minute topographic map, revised 1986.

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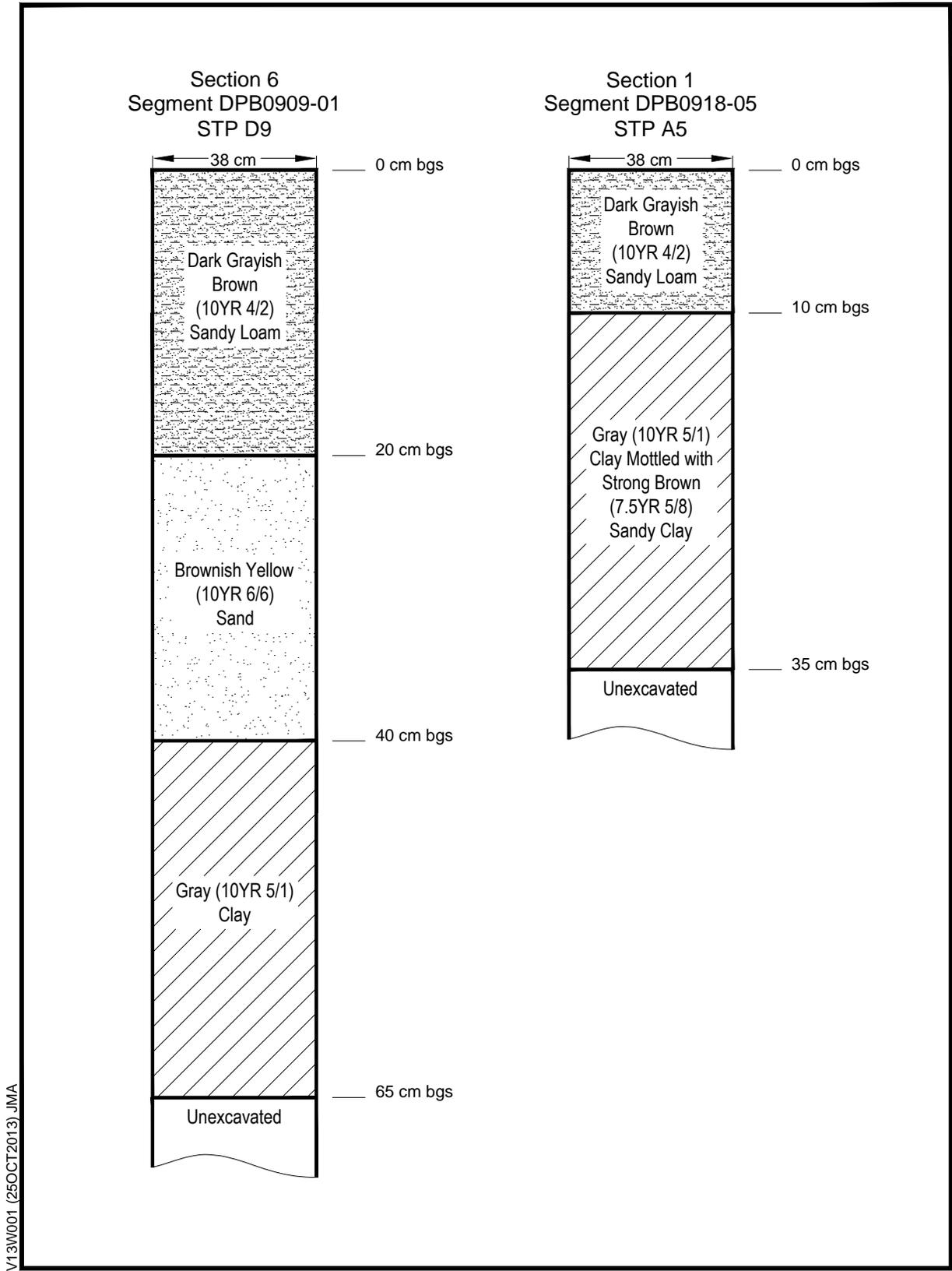


Figure 13. Typical shovel test profiles encountered during the systematic shovel testing in Sections 1 & 6.



Figure 14. Photograph of raised yards in a neighborhood in the northern portion of Section 1.



Figure 15. Photograph of tractor trailer storage yard in Section 1.



Figure 16. Photograph of inundated areas in Section 1.

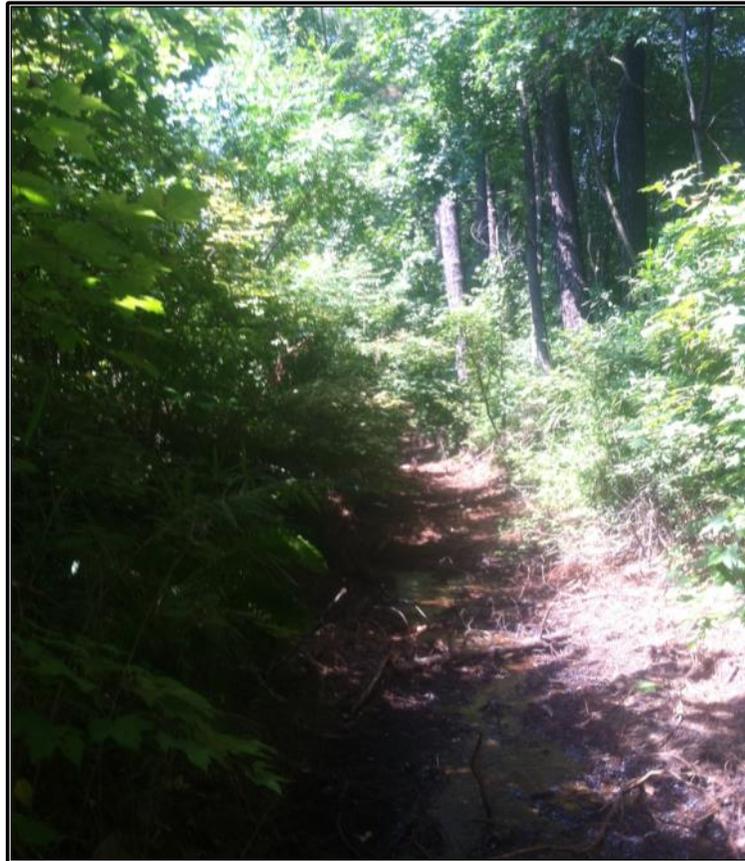


Figure 17. Photograph of drainage ditch at the edge of the existing ROW for I-64 in Section 2.

Section 3: U.S. 13 Interchange

The study area for Section 3 is 162.23 acres. A total of 387 shovel tests were excavated, one of which contained cultural materials. This portion of the APE includes the exit at the intersection of I-64 and South Military Highway (Route 13). This portion of the APE is largely wooded, very poorly drained, and disturbed by the exit ramps and water management activities (Figure 18). The northeast portion of the survey area is characterized by several businesses. The southwest portion of the survey area is characterized by a row of houses and some former agricultural land that is no longer being tended (Figure 19). The agricultural fields are punctuated with large drainage ditches, graded lots, and abandoned automobiles. Two small garden plots had been recently plowed, and a controlled surface survey was conducted. Two isolated finds, both of which are historic

ceramics, were recorded in the southwest portion of Section 3 (IF 1 and IF 2).

Isolated Finds

Two historic isolated finds were identified within the archaeological APE (Figure 12). Both finds were located within the Section 3 survey area in the agricultural fields southwest of Galberry Road. The first isolated find, IF-1, was identified during systematic shovel testing of an unmaintained soybean field. It consists of an isolated undecorated whiteware fragment. Eight radial shovel tests were excavated at 7.5 m intervals, two in each direction. No further cultural materials were recovered. The second isolated find, IF-2, was identified during a controlled surface collection of a recently plowed garden plot. It consists of a single fragment of American gray salt-glazed stoneware (1750–1920) (DAACS 2006). A total of 20 shovel tests were dug along the edges of the garden plot at 7.5 m intervals to confirm the isolated nature of the find.



Figure 18. Photograph of a poorly drained, wooded area in Section 3.



Figure 19. Photograph of a former agricultural field in Section 3.

Section 4: I-64 between the U.S. 13 Interchange and the George Washington Highway Interchange

The study area for Section 4 is 54.79 acres. A total of 64 shovel tests were excavated, none of which contained cultural materials. The existing ROW is heavily disturbed by the construction and maintenance of the interstate. A large drainage ditch lines both sides of the road approximately 50–60 ft off of pavement similar to the photograph referenced in Section 2 (Figure 17). In some cases, the study area is significantly sloped from the interstate down to the large drainage canal. Two utility corridors cross the study area to a nearby substation.

Section 5: George Washington Highway Interchange

The study area for Section 5 is 162.23 acres. A total of 69 shovel tests were excavated, none of which contained cultural materials. This survey area is developed and contains Deep Creek Elementary, Middle, and High schools, several neighborhoods, and businesses. A large majority of the area is graded and lined with utilities and drainage ditches. Shovel test probes were placed in the few available undeveloped lots in order to avoid disturbed areas and utilities. Site 44CS0317, also known as the Garnes Family Cemetery (DHR # 131-5554), was recorded on the Deep Creek Middle School campus. Shovel tests were excavated within the clover-leaf exit ramp to confirm levels of disturbance concurrent with soil mapping from the Web Soil Survey.

44CS0317

USGS 7.5-minute quadrangle: 1965
(Photorevised 1986) Norfolk South, VA

UTM Coordinates: NAD 83, Z18, 380352.26 E,
4068762.26N

Elevation: 2.7 m (9 ft) AMSL

Size: 12 m north-south x 10 m east-west (39
ft x 33 ft)

Components: 1920-1962

Closest named water: Deep Creek

Type of nearest water: Permanent

Topographic Setting: Flat, graded athletic field

Slope: 0-1 percent

NRCS Unit: Urban, 0-2 percent

Site 44CS0317 (DHR # 131-5554) represents a very small family cemetery located on the Deep Creek Middle School campus in the Section 5 study area. The cemetery is located northeast of the main administrative building for the school, immediately adjacent to the football field/running track. The cemetery is enclosed

by a chain-link fence and has a locking gate (Figure 20). The grounds are well kept and mowed regularly. There are two large trees within the borders of the marked cemetery and one immediately adjacent to the northern fence (Figure 21).

The cemetery contains three marked graves, all of which are oriented east to west. A pair of granite headstones (G2 and G3) rest on the same slab and are attributed to James W. Garnes (1888-1962) and Cora M. Garnes (1891-1942). The headstones flank a small granite urn (Figure 22). A single granite headstone is immediately to the east, and the first name is no longer legible, but the last name is "Garnes." The inscription reads "Born Dec. 13, 1918. Died Dec. 21, 1920" and likely is associated with the child of James and Cora (Figure 23). This headstone has a footer associated with it incised with the initials "ME." There are no obvious depressions in the immediate vicinity of the marked graves or outside the fence. But the grading episodes to contour the track and playing field have likely removed potential evidence of unmarked burials.



Figure 20. Photograph of Garnes Family Cemetery, facing East.

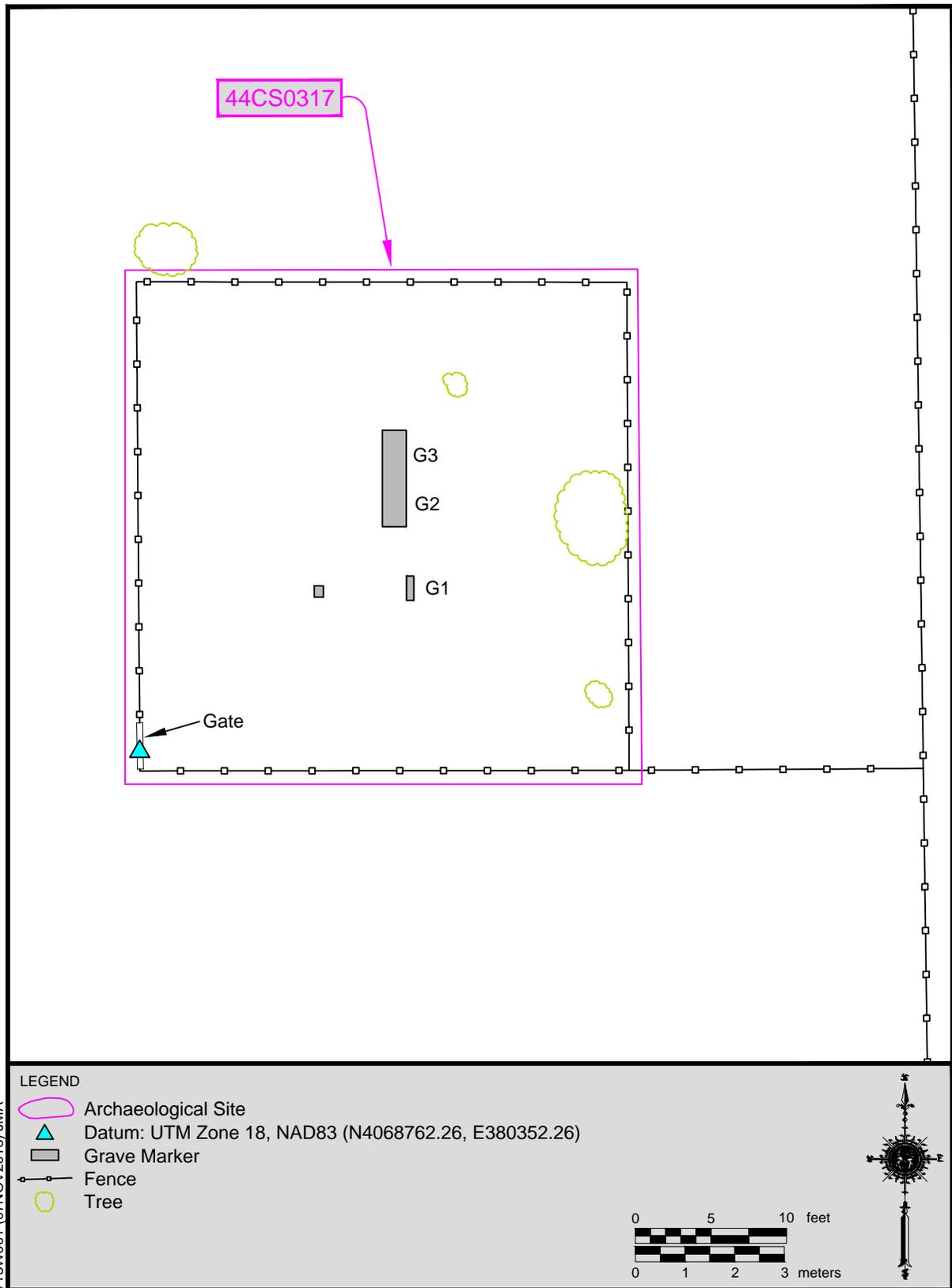


Figure 21. Schematic of Site 44CS0317, the Garnes Family Cemetery.



Figure 22. Photograph of Graves G2 and G3, facing east.



Figure 23. Photograph of Grave G1, facing east.

Section 6: I-64 between the George Washington Highway Interchange and the High Rise Bridge

The study area for Section 6 is 56.25 acres. A total of 169 shovel tests were excavated, four of which contained cultural materials. The existing ROW is heavily disturbed by the construction and maintenance of the interstate. A large drainage ditch lines both sides of the road approximately 50–60 ft off of pavement (Figure 24). In some cases, the study area is sloped from the interstate down to the large drainage canal. There are neighborhoods with graded yards, drainage ditches, and utility lines. A small portion of the survey area was surveyed as an area of high potential by Michael Baker Jr., Inc., based on historic map research (Hinks and Harris 1996, Hinks et al. 1998). Site 44CS0237, which was first recorded in 1998, was encountered on the eastern terminus of Section 6, north of the interstate. Despite the signs of major disturbances, the shovel test interval was shortened to 15 m (50 ft) in the vicinity of the previously recorded site.

44CS0237

USGS 7.5-minute quadrangle: 1965
(Photorevised 1986) Norfolk South, VA

UTM Coordinates: NAD 83, Z18, 382033.61 E,
4069069.21N

Elevation: 2.74 m (9 ft) AMSL

Size: 15 m north–south x 175 m east–west (33
ft x 574.1 ft)

Components: mid-nineteenth century to
twentieth century.

Closest named water: Deep Creek

Type of nearest water: Permanent

Topographic Setting: Flat, Marine Terrace

Slope: 0–2 percent

NRCS Unit: Tomotley-Nimmo soil complex,
0–1 percent slopes

Site 44CS0237 represents a low-density historic domestic scatter situated in a wooded buffer between the neighborhood along London Plane Crest Road and I-64 (Figures 11 and 12). Two man-made water retention ponds are located immediately to the east.



Figure 24. Photograph of large drainage ditch at the edge of the existing ROW of I-64.

This site was originally recorded in 1998 by Michael Baker Jr., Inc., during a survey for the potential widening of I-64. The area is covered with secondary growth pines and deciduous trees (Figure 25). A large drainage ditch and fence separates the site from the existing ROW for the interstate.

The original survey yielded 56 historic artifacts, with only 15 of those possessing any diagnostic characteristics. The diagnostic assemblage contained glass and ceramic artifacts ranging from the early nineteenth century to the mid-twentieth century, including two pearlware fragments (1780–1840). None of the historic maps of the area depicted structures within the site area. The 1863 map produced by Soederquist depicts a building attributed to M. Martin 200–250 m (656–820 ft) south of the site area (Figure 26). The Sykes and Swathmey map (1887) shows the Johnson family approximately .5 mi to the east of Site 44CS0237 (Figure 27). The shorelines of Deep Creek and the Elizabeth River have changed considerably, making it difficult to accurately place the sites and study area on already less than accurate nineteenth-century maps. The 1912 Boutelle map gives a general sense of the area at that time (Figure 28). The 1921 Newport News 15 minute topographic quadrangle depicts structures at

the end of an unimproved lane a little over 100 m (328 ft) from the site area, as does the 1965 Norfolk South 7.5 minute topographic quadrangle (Figures 29 and 12). Michael Baker Jr., Inc. (Hinks et al. 1998), concluded that the site likely represents a refuse disposal scatter attributed to those buildings and separated from their original contexts by the construction of I-64. This conclusion is supported by the evidence gathered during the reexamination of the site.

The site boundaries within the APE were defined by the presence of positive STP C7 (N1000 E1000), C9 (N1030, E1000), B14 (N1105, E1015), and B18 (N1165, E1015) (Figure 30). A total of 14 shovel tests were excavated at 7.5 m intervals off the positive shovel tests where topographic features allowed, resulting in no further cultural materials. Subsurface testing revealed that the soils across the site are moderately shallow. A representative profile from a positive shovel test at N1000 E1000 consists of two strata, a very dark grayish brown (10YR 3/2) loam A-horizon from 0 to 15 cm (0 to 6 in) below ground surface (bgs) (Stratum I) over a compact gray (10YR 5/1) silty clay loam from 15 to 40 cm (5.9 to 15.7 in) bgs (Stratum II) (Figure 31). Adjacent shovel tests revealed similar stratigraphy, all exhibiting two strata



Figure 25. Photograph of Site 44CS0237 facing west to N1000, E1000.

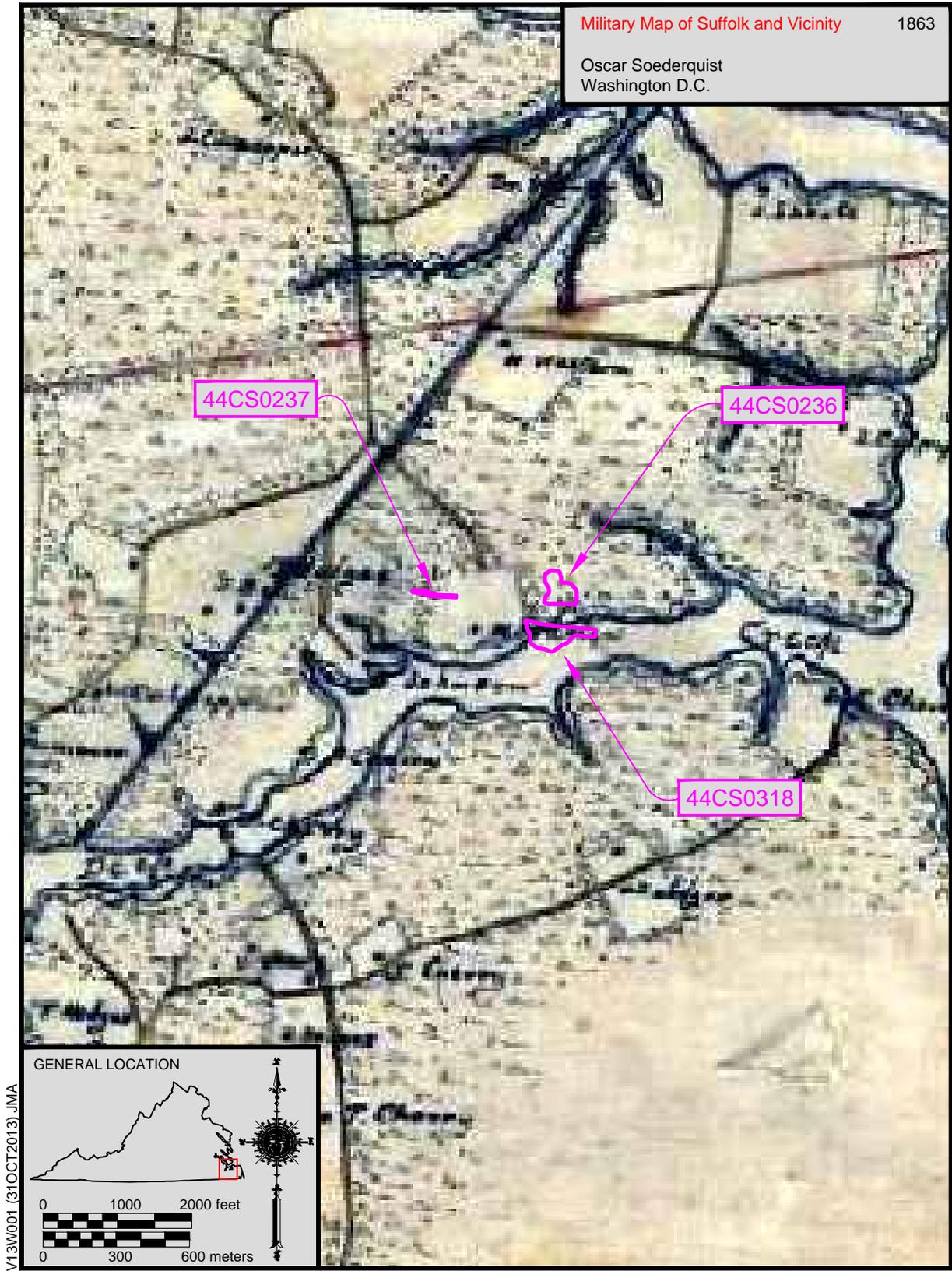


Figure 26. Portion of the 1863 map, drawn by Lieut. Oscar Soederquist, with Sites 44CS0236, 44CS0237, and 44CS0318 locations.

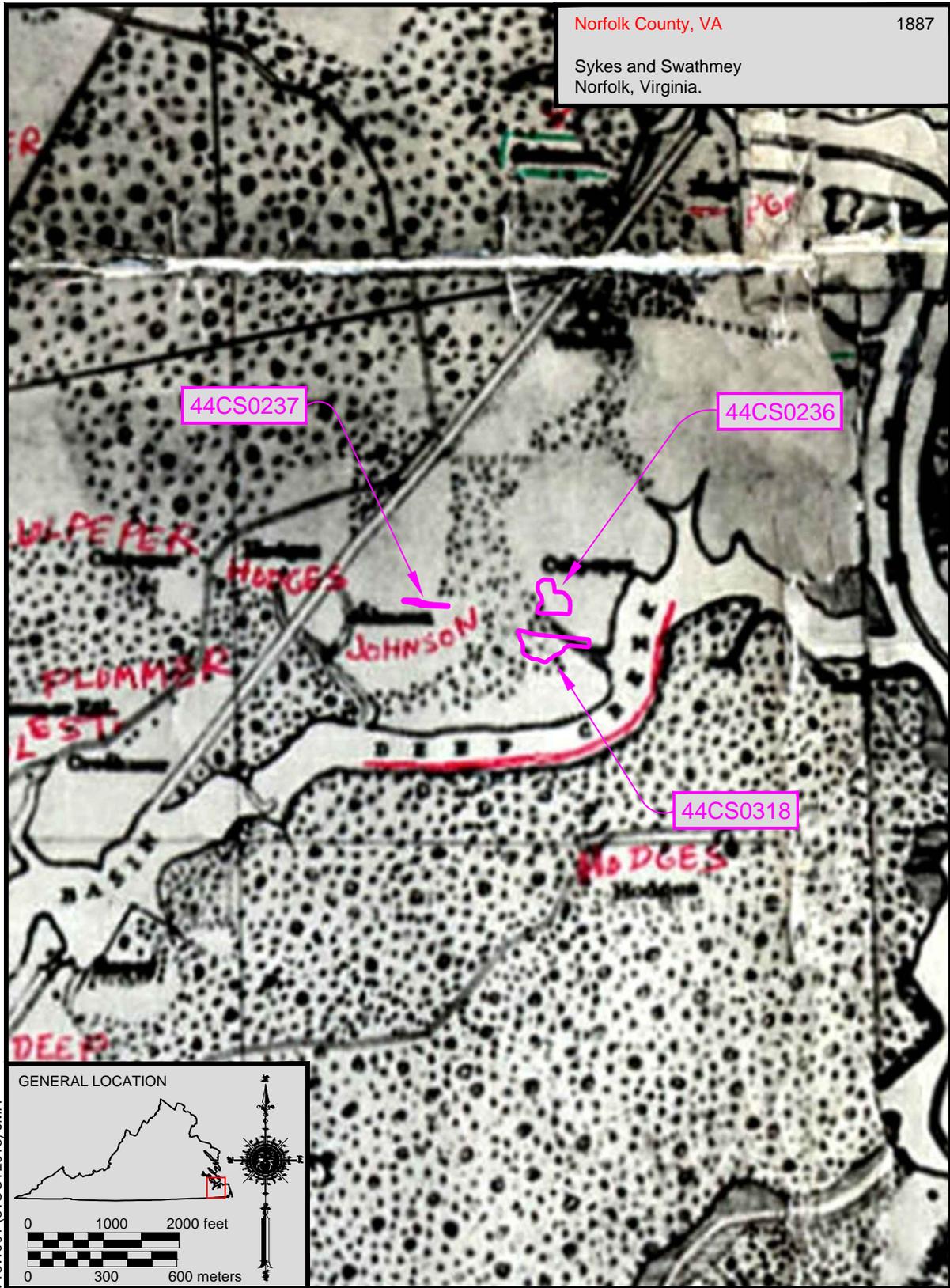


Figure 27. Portion of the 1887 Map of Norfolk, drawn by Sykes and Swathmey, with Sites 44CS0236, 44CS0237, and 44CS0318 locations.

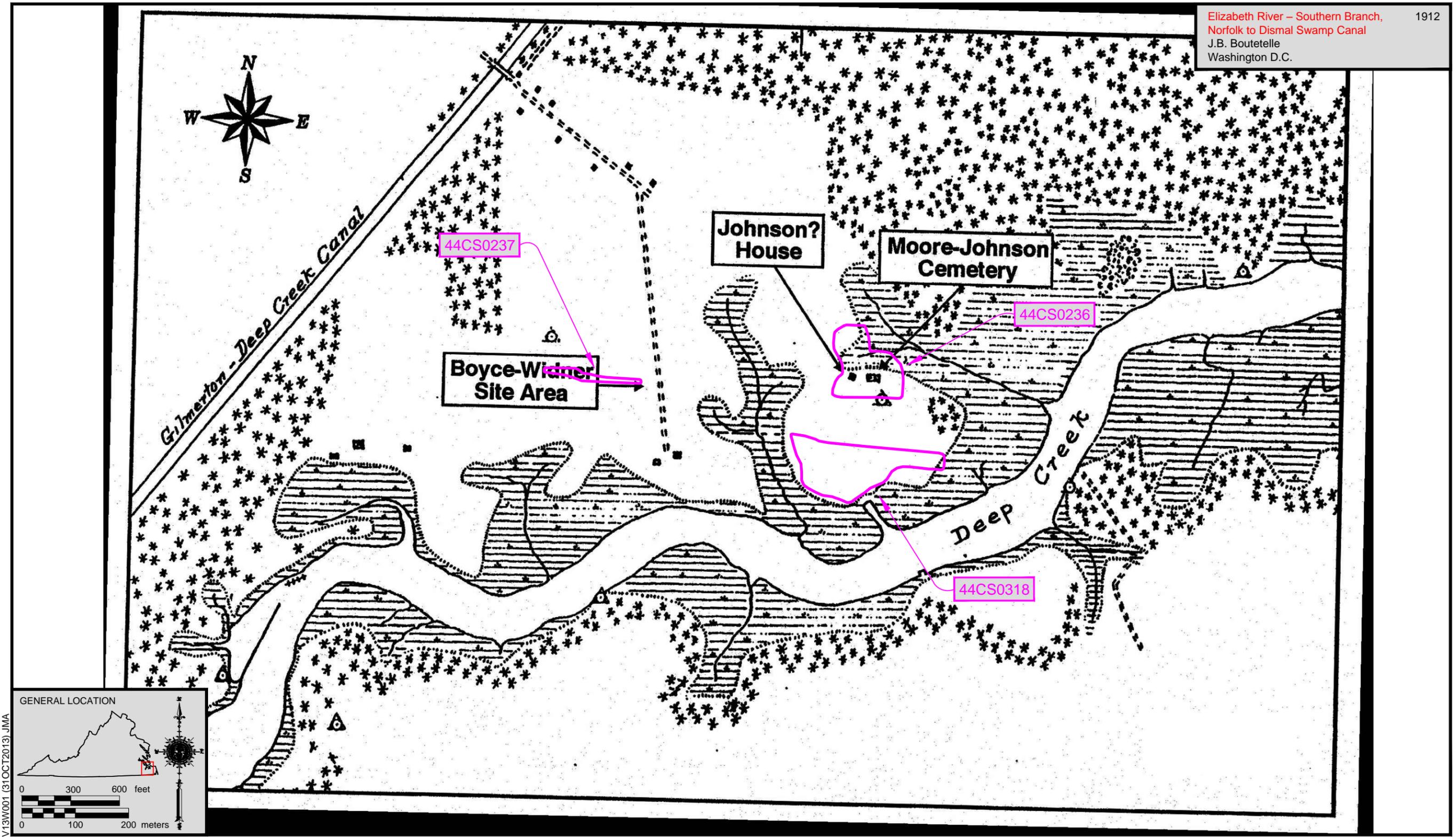


Figure 28. Portion of 1912 Map of the Elizabeth River, drawn by J.B. Boutelle (reproduced from Hinks et al 1998), with Sites 44CS0236, 44CS0237, and 44CS0318 locations.

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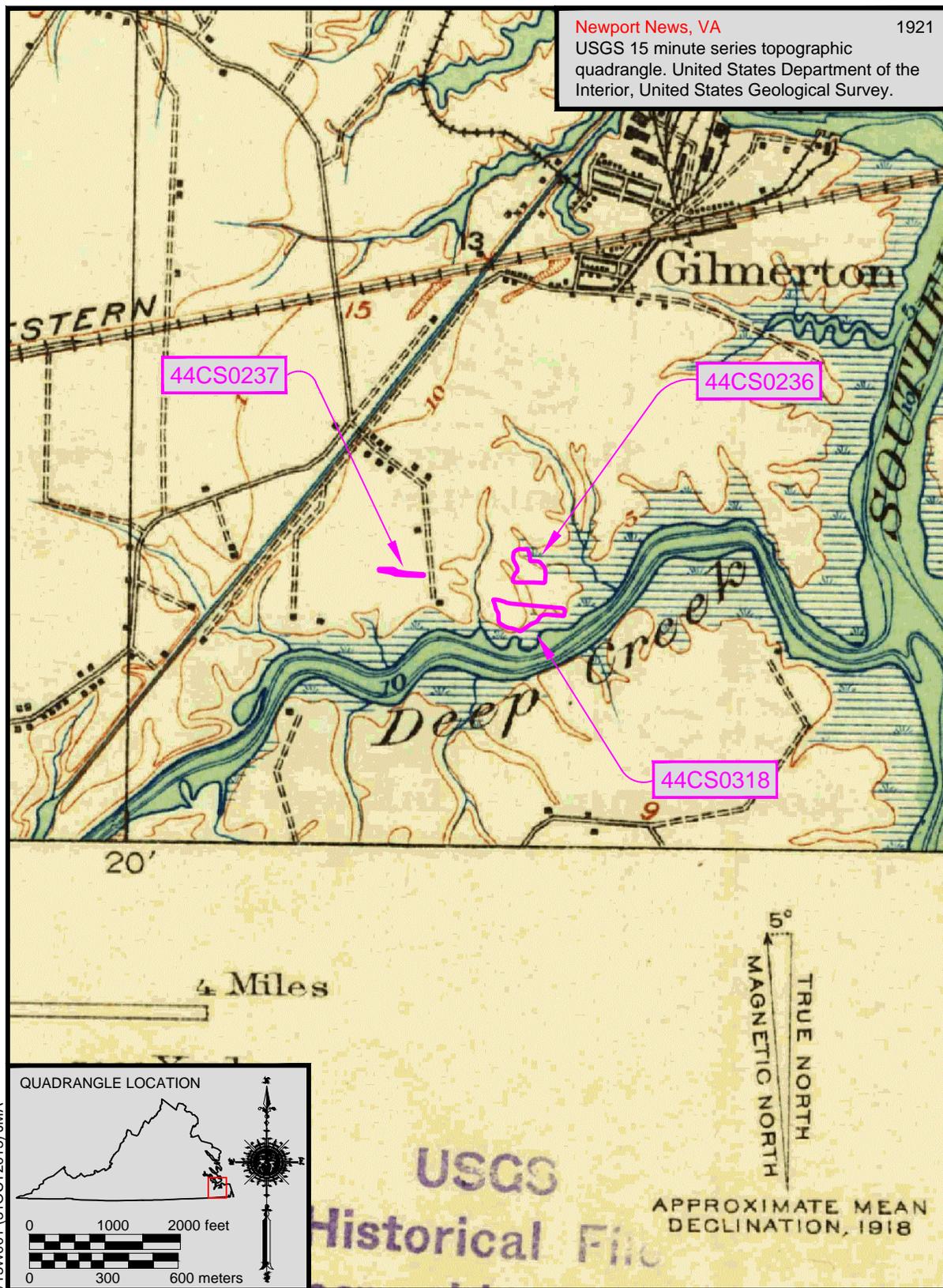


Figure 29. Portion of the 1921 Newport News 15-minute topographic quadrangle, with Sites 44CS0317, 44CS0236, 44CS0237, and 44CS0318 locations.

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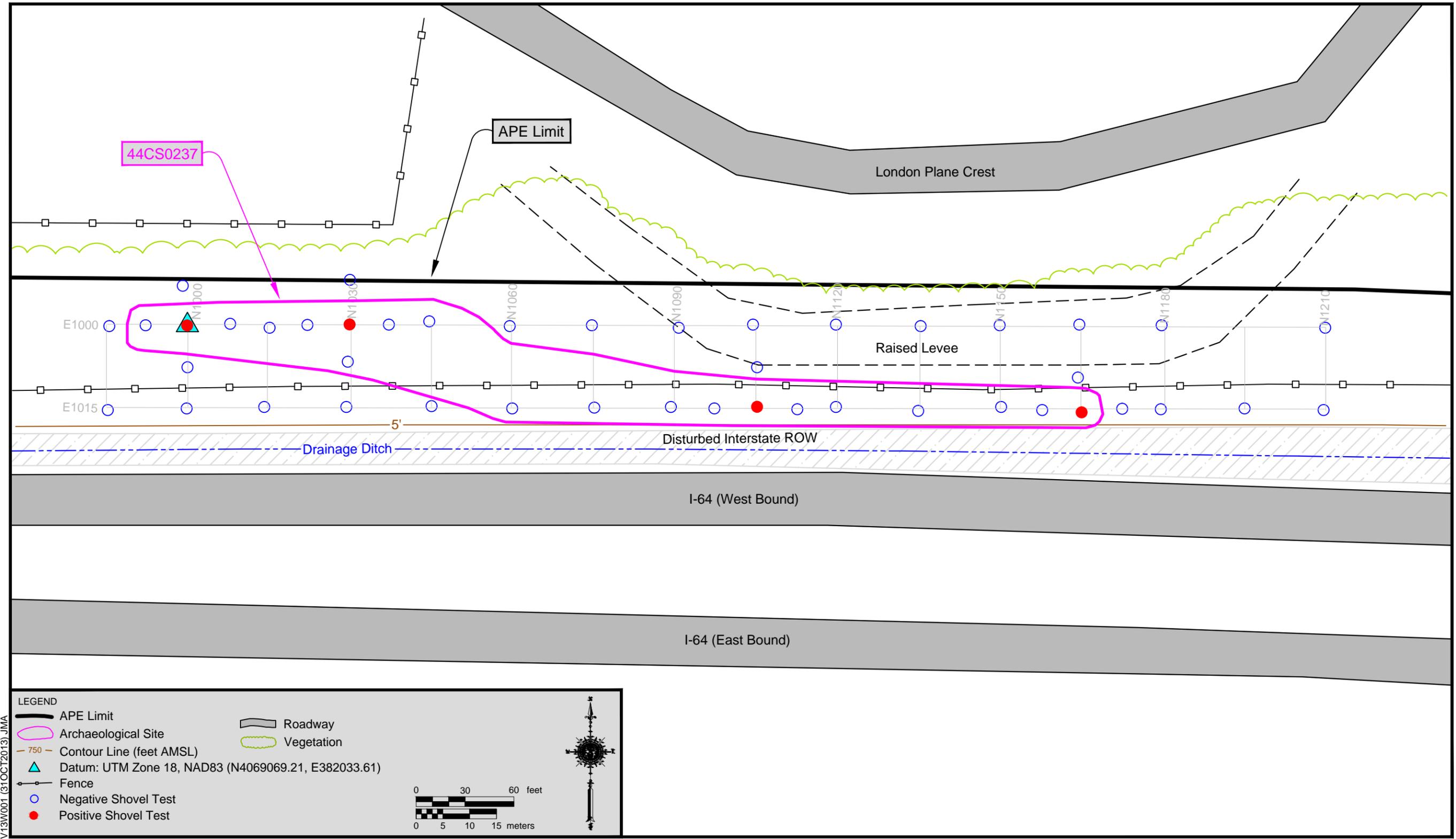


Figure 30. Schematic of Site 44CS0237.

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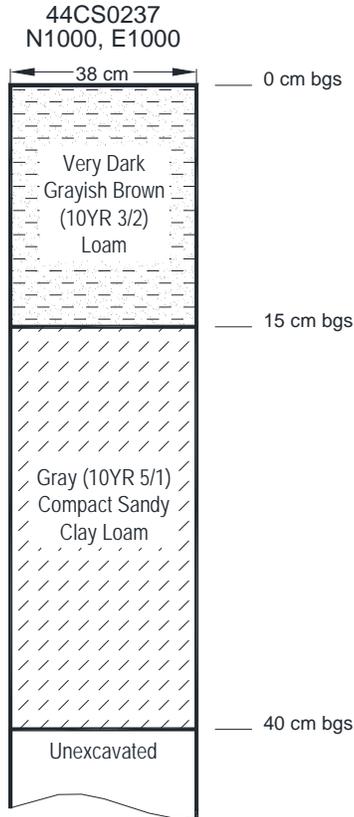


Figure 31. Shovel test profile from Site 44CS0237 (N1000, E1000).

and reaching subsoil between 30 and 35 cm (11.8 and 13.8 in) bgs. Cultural material was recovered only from A-horizon deposits. Shovel tests excavated near N1105, E1015 and N1165, E1015 contain more compacted soils due to the presence of a nearby levy that was constructed to alleviate flooding into the adjacent neighborhood. Modern debris was found throughout the area, including broken glass from beer bottles, car windows, and

numerous other sources. Modern debris was not kept or recorded.

Shovel tests yielded a total of seven artifacts (5.1 g) from the site, all recovered from Stratum I (Table 4; Appendix A). The historic archaeological site boundary encompasses .01 ha (.03 acres) and was defined by negative shovel tests and surrounding disturbances. All recovered artifacts were representative of the domestic artifact group. The domestic group includes items related to food storage, preparation, and consumption or other domestic activities (e.g., sewing or housekeeping). The domestic assemblage consists of one fragment of ironstone (1850–present) (Miller 2000), one fragment of hand-painted polychrome whiteware (1830–1920), one fragment of blue shell-edged whiteware (1800–1830) (Hunter and Miller 1994), one fragment of unidentified refined earthenware, one fragment of curved amethyst glass (1880–1917), one fragment of colorless window pane glass, and a single fragment of faunal bone.

This site appears to be a domestic artifact scatter dating to the early nineteenth to mid-twentieth century, likely representing dumping activities associated with the nearby historic dwellings and land use depicted on various historic maps throughout the nineteenth and twentieth centuries. The site has seen extensive impact since the original recording episode in 1998 and has largely been destroyed.

Table 4. Site 44CS0237 Historic Assemblage.

Group	Class	Description	Quantity	Weight (g)
Architecture	Window Glass	Pane Glass	1	0.4
Domestic	Ceramic Tableware	Hollowware	1	0.4
		Indet. Tableware	1	1.2
	Misc. Domestic Ceramic	Indet. Object	1	0.2
Faunal	Unsorted Bone	(Blank)	1	0.8
Miscellaneous	Misc. Ceramic	Refined White Earthenware	1	0.5
	Misc. Glass	Colorless, Amethyst Tint Glass	1	1.5
Grand Total			7	5

Section 7: The High Rise Bridge

The Section 7 Study Area is 245.98 acres. A total of 995 shovel tests were excavated, 37 of which contained cultural materials. Previously recorded site 44CS0236 and newly recorded site 44CS0318 are located in this portion of the study area. The study area encompasses 600 ft off of pavement in the High Rise Bridge area. Portions of the study area were previously surveyed in 1998 based on historic map research and proximity to major water sources (Hinks and Harris 1998).

These areas were not exempt from shovel testing during the current project due to an expanded APE that differed from the original survey. Most of the study area is covered by Deep Creek and the Elizabeth River. The shovel test interval was shortened to 15 m (50 ft) in most Section 7 due to the presence of previously recorded sites, historic mapping, proximity to permanent water source, and lower disturbance from development (on the west side of the Elizabeth River). The 23 m (75 ft) interval was reinstated on the eastern side of the river due to the large amount of industrial disturbance on both sides of the interstate.

44CS0236

USGS 7.5-minute quadrangle: 1965
(Photorevised 1986) Norfolk South, VA

UTM Coordinates: NAD 83, Z18, 382581.07 E,
4069029.89 N

Elevation: 1.82 m (6 ft) AMSL

Size: 130 m north–south x 110 m east–west
(426.5 ft x 361 ft)

Components: late-nineteenth-century to mid-
twentieth-century domestic, late-nineteenth-
century funerary

Closest named water: Deep Creek

Type of nearest water: Permanent

Topographic Setting: Marine Terrace, Flat

Slope: 0–1 percent

NRCS Unit: Bojac-Urban land-Wando
complex, 0 to 3 percent slopes

Site 44CS0236 represents a low-density historic domestic scatter situated on a small rise surrounded by wetlands (Figures 11 and 12). The site includes a marked cemetery (1873–1901) of the Moore-Johnson family. The site is located on the north side of I-64, immediately west of the High Rise Bridge. It is situated approximately 100 m (328.08 ft) southeast of the cul-de-sac of Anabranche Terrace. There are two large billboards that flank the site on the east and west, with gravel maintenance roads connecting them. The site was originally recorded by Michael Baker Jr., Inc., in 1998. The excavators noted major disturbances of undulating ground, modern debris, tires, and sheet plastic. Since 1998, the area has seen substantially more disturbances from improved gravel roads, including several gravel spoil piles (Figure 32), large mounds of pushed up soil, and increased modern debris, and portions of the site boundary are now encroached on by a brand new neighborhood of upscale homes. Modern fencing was noted throughout the undergrowth near the cemetery in 1998 and was confirmed during the current survey. Several features, including a cinder block foundation, concrete debris, and lead pipes, were recorded during the current survey. The fencing, foundation, debris, and plumbing appear to be associated with mid- to late-twentieth-century farm use of the area.

The current site boundaries of 44CS0236 within the APE were defined by the presence of six positive subsurface tests (Figure 33). An additional 15 radial shovel tests were excavated, none of which were positive for cultural materials. The boundaries are also defined by the presence of the surface features recorded at the northern edge of the site (Features 1–5) and the Moore-Johnson cemetery (discussed below). The historic archaeological site boundary encompasses 1.31 ha (3.24 acres) and was defined by negative shovel tests and surrounding disturbances. A representative soil profile from Site 44CS0236 (N1000 E1000) included a dark grayish brown (10YR 4/2) loam A-horizon from 0 to 30 cm (0 to 11.8 in) bgs



Figure 32. Photograph of a typical gravel spoil pile at Site 44CS0236, with neighborhood in the background, facing north.

(Stratum I) over a gray (10YR 5/1) compact sandy loam from 30 to 45 cm (11.8 to 17.7 in) bgs (Stratum II) underlain by at least 15 cm (5.9 in) of yellowish brown (10YR 5/6) sand (Stratum III) (Figure 34). The positive shovel tests in the northern portion of the site, however, were much more shallow ending at approximately 30 cm (11.8 in) bgs with a very compact gray (10YR 5/1) sandy clay mottled with strong brown (7.5 YR 5/6). All of the shovel tests in the site area contained imported gravel throughout the A-horizon.

The previous excavations at Site 44CS0236 resulted in 107 artifacts being recovered. The artifacts were all representative of the domestic artifact group. Thirty-eight of these artifacts were considered diagnostic. The diagnostic artifacts all ranged from mid-nineteenth century to the early twentieth century. The shovel test excavations

during the current survey yielded a total of 43 artifacts (176.9 g), all recovered from Stratum I (Table 5; Appendix A). Most of the recovered artifacts were representative of the domestic artifact group. The domestic group includes items related to food storage, preparation, and consumption or other domestic activities (e.g., sewing or housekeeping).

The artifact assemblage consists of 33 glass fragments, 3 ceramic fragments, and 7 architecture and construction related artifacts. The diagnostic glass artifacts consist of 2 fragments of colorless press molded glass with Jeanette Glass Company's Holiday Button and Bows pattern (1947–1959) (Florence 1996), one fragment of contact molded colorless glass (1790–1900) (Jones 2000), 1 fragment machine made colorless glass with non-slip stippling (1939–Present) (Miller 2000), and 1

fragment of press molded colorless glass (1825–Present) (Miller 2000). The diagnostic ceramic artifacts consist of a single fragment of ironstone (1850–present) (DAACS 2006). The remaining architecture and construction related artifacts consist of an iron machine-made hexagonal nut, a fragment of coal, and five brick fragments, 1 of which exhibits characteristics of machine-made brick (1900–2013)(Gurke 1987).

Features

Five features were recorded in the northern portion of the site area (Figure 33). These features are likely the remnants of an outbuilding associated with farming activities, probably for feeding and watering livestock, during the early twentieth century. The features were not recorded during the original site recordation in 1998 due to the smaller APE for that project. Feature 1 is a 5 m x 10 m scatter of concrete debris. Feature 2 is a metal plumbing pipe protruding from the ground (Figure 35). Feature 3 is the edge of a buried concrete and cinder block foundation or pad that runs along the edge of a line of wooden fence posts. Probes and shovel testing measure the concrete pad at approximately 15 m x 15 m square. Feature 4 is another metal plumbing pipe similar to Feature 2. Finally, Feature 5 is a pair of very large chunks of the concrete (Figure 36).

History

Michael Baker Jr., Inc. (Hinks et al. 1998), provided an extensive historical background (reiterated here) for Site 44CS0236 and the Johnson family that is associated with the nineteenth-century and early-twentieth-century component. A house and cemetery are depicted in the vicinity of Site 44CS0236 on the Boutelle 1912 map (Figure 28) of the Southern Branch of the Elizabeth River, both of which are attributed to the Johnson family. According to the Norfolk County Deed Book (103:48), prior to the Civil War the parcels of land that would eventually contain the house and cemetery were comprised of two land tracts that were described as “near the mouth of Deep Creek.” In 1873, these two land tracts

were acquired by Sylvester Moore and his sister, Ann Virginia Johnson, via inheritance from their father, John Moore, and grandfather, John Cherry. John Moore (1794–1873) represents the earliest marked burial in the cemetery. The subsequent partition of the land left Ann Virginia Johnson (1826–1895) with the tracts that contain the marked cemetery at Site 44CS0236. She was married to John Tart Johnson (1809–1891), and both are interred in the cemetery. The 1863 Soederquist map depicts a house belonging to J. Johnson southwest of the site area, adjacent to Deep Creek (Figure 26). Subsequently, the Sykes and Swathmey map (1887) shows the Johnson family approximately .5 mi to the northwest of Site 44CS0236 (Figure 27). Neither map indicates the presence of a structure in the site vicinity. The shorelines of Deep Creek and the Elizabeth River have changed considerably, making it difficult to accurately place the sites and study area on already less than accurate historic maps. After Ann Virginia’s death in 1895, the parcels are passed on to her surviving five children. The interests in the land but not the cemetery were transferred to William S. Johnson, one of the aforementioned five children, in 1904 (NCDB 281: 506).

It appears likely that William S. Johnson constructed a dwelling, depicted on the 1912 Boutelle Map next to the family cemetery, sometime after acquiring the land in 1904. The 1921 edition of the Newport News topographic quadrangle, produced from a 1918 survey, shows neither the cemetery nor the building (Figure 29). Tax records also suggest that by 1924 the structure is no longer standing. The property passed from William to his daughter, Esther Gallup (NCDB 548:366 and Norfolk County Will Book 15: 172). The property was sold by Esther Gallup to the Norland Housing Corporation in 1950, excluding the family cemetery.

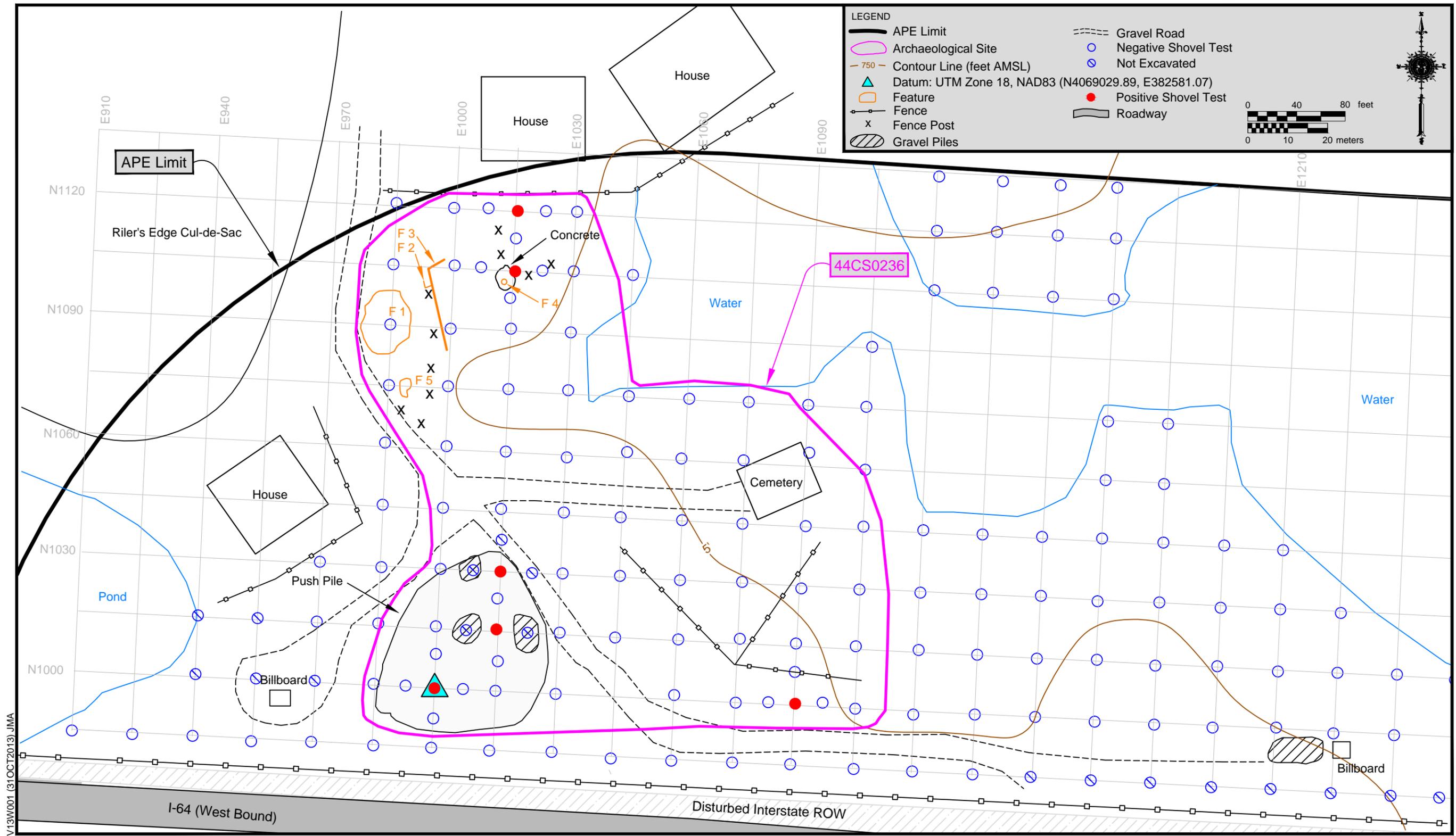


Figure 33. Schematic of Site 44CS0236 recorded during the current survey.

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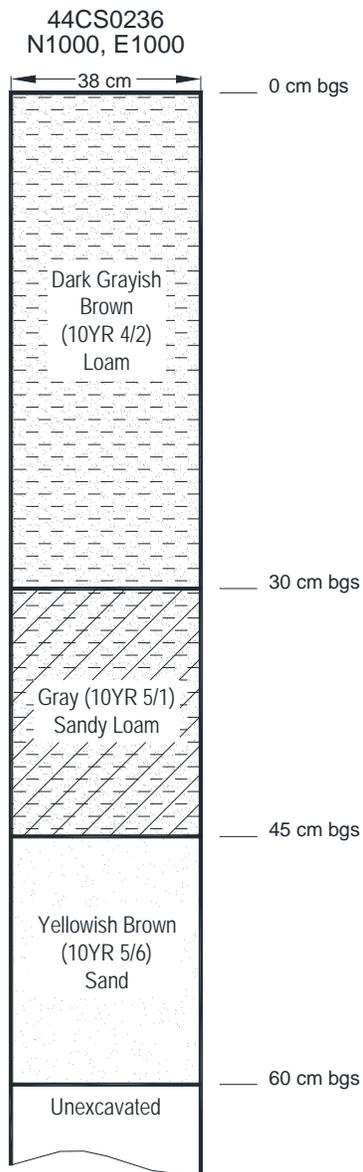


Figure 34. Shovel test profile of a typical shovel test at Site 44CS0236 (N1000, E1000)

Table 5. Site 44CS0236 Historic Assemblage.

Group	Class	Description	Quantity	Weight (g)
Architecture	Construction Material	Brick	5	45.8
	Window Glass	Plate Glass	1	1.3
Domestic	Ceramic Tableware	Platter	1	49.8
	Glass Tableware	Hollowware	1	1.6
		Indet. Tableware	2	12.5
	Misc. Domestic Ceramic	Indet. Object	1	1.5
	Misc. Domestic Glass	Indet. Object	9	27.1
Maintenance/Subsistence	Fuel	Coal	1	0.8
	Hardware	Nut, Hex	1	20.4
Miscellaneous	Misc. Ceramic	Refined White Earthenware	1	0.3
	Misc. Glass	Aquamarine Glass	1	1.2
		Colorless, Clear Glass	17	12.9
		Green, Non-Olive Glass	2	1.7
Grand Total			43	176.9



Figure 35. Photograph of Feature 2 at Site 44CS0236.



Figure 36. Photograph of Feature 5 at Site 44CS0236.

Cemetery

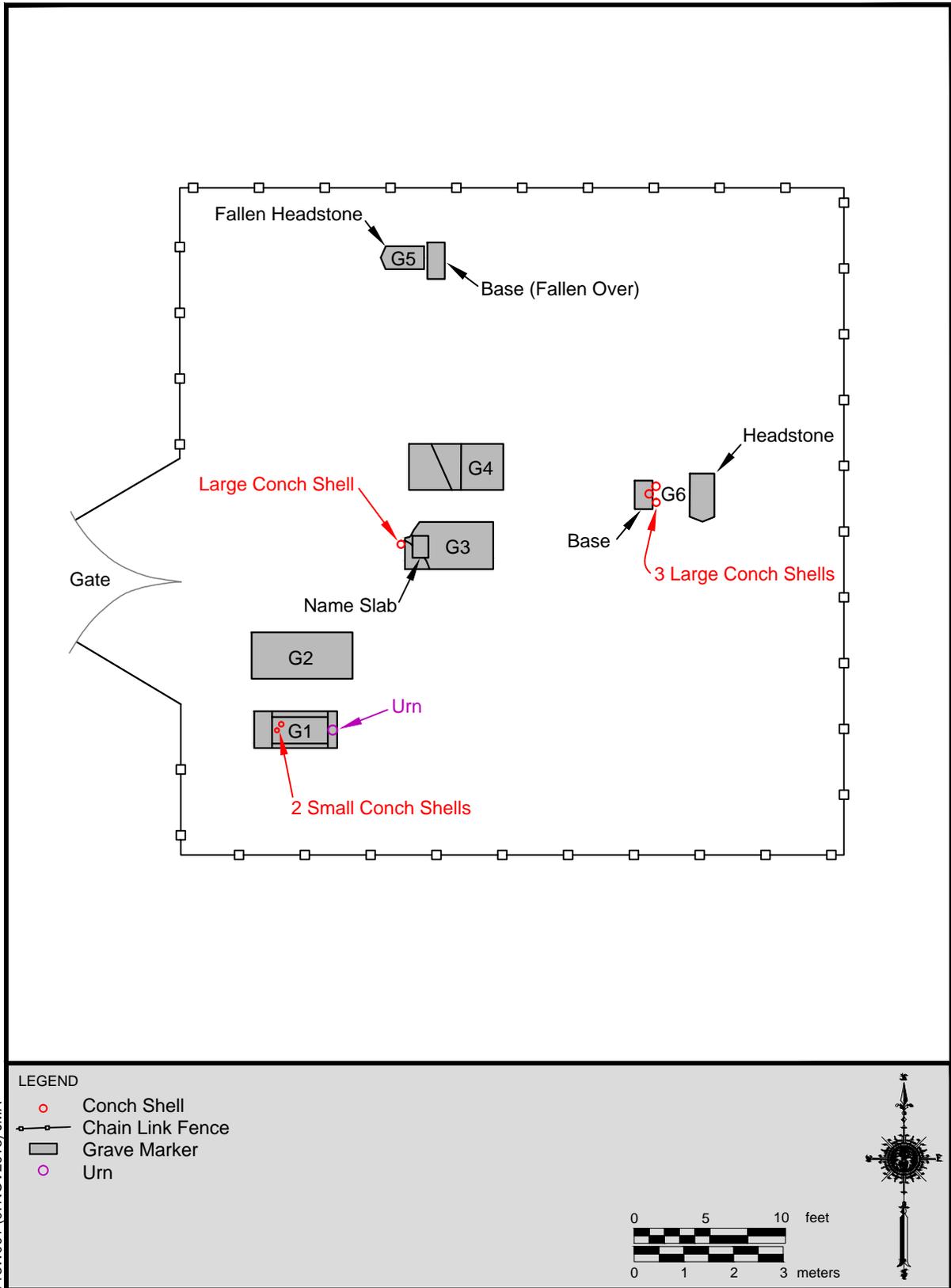
The Moore-Johnson Cemetery (DHR # 131-5612) is located on the northeastern edge of the site boundaries for 44CS0236. The land immediately to the north and east of the cemetery slopes slightly into a very swampy area covered with thick bamboo. A tall chain-link fence surrounds the marked cemetery (Figure 37). Currently, six marked graves are visible within the cemetery (Figure 38). The six markers have death dates ranging from 1873 to 1901. All of the graves are oriented east to west. Three of the markers contain quotations from Psalms or Proverbs, and two others have engraved depictions of hands pointing to heaven (Table 6). A 1956 map, produced by the Virginia Department of Highways, indicates that eight graves are present, though it does not depict the location of the stones. Hinks et al. (1998) postulate that the missing stones belong to spouses of current interments. No visible depressions were noted during the original survey or during the current survey. The area within the marked cemetery is heavily overgrown, however (Figure 39). Conch shells were observed in association with three of the graves during the original survey. This

observation was confirmed during the current survey, though many of the shells are cracked and crumbling.

Site 44CS0236, as recorded during this project, appears to be a domestic artifact scatter dating to the first half of the twentieth century and likely representing dumping activities associated with agricultural use of the area. The component of the site attributed to the Johnson family occupation, which was recorded in 1998, has largely been destroyed by a new neighborhood to the north and maintenance activities associated with the two billboards that flank the site. Prior to the current disturbances, Hinks et al. (1998) recommended the site as not eligible due to the complete lack of integrity because of various sources of disturbance. The marked portion of the Moore-Johnson Cemetery, however, has not been impacted by the disturbances, though it has not been well maintained. The original surveyors also recommend the cemetery as not eligible for inclusion in the NRHP because it is not associated with any historically significant individuals, nor does it possess high artistic values.



Figure 37. Photograph of the sign, fence, and gate around the marked Moore-Johnson Family Cemetery at Site 44CS0236.



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Figure 38. Schematic of the Moore-Johnson Family Cemetery (DHR # 131-5612) at Site 44CS0236 (reproduced from Hinks et al. 1998, field checked during current survey).

Table 6. Table of marked graves in the Moore-Johnson Family Cemetery.

Marker	Description	Inscription
1	Marble headstone with cross and urn. Two small conch shells lie centered on the grave	Sacred to the memory of Johnie C. Ford. The Darling Boy of P.L. & Alice M. Ford. Born April 14, 1875. Died Sept 6, 1890. I love them that I love me and those that seek me early shall find me. Prov. 8. 17v.
2	Flat marble slab marker on a stiff mud brick base	Pleasant L. Ford. Born May 12, 1837. Died June 28, 1901. The Lord is my Shepard (sic)
3	Flat rectangular marble slab marker. The marker is cracked and a portion is missing. A large conch shell rests on the ground.	Ann Virginia Johnson. Born Feb. 9, 1826. Died Jan. 27, 1895. Her children arise and call her blessed. Proverbs 31 chapter 28 verse.
4	Flat rectangular marble slab marker.	John Tart Johnson. Born April 1809. Died January 3, 1891
5	Fallen marble marker and base. Engraved depiction of a hand pointing up.	Benjamin F. Johnson. Died Dec. 29, 1883. Age 25 years. Thou wert beloved none ever knew None here could know how well. And hearts sincere and warm and true Will love thee still
6	Fallen marble marker. Three large conch shells lie on adjacent base. Some brick fragments are scattered in the area.	In Heaven. In memory of John Moore. Died Jan'y 11, 1873. Aged 73 years. God's finder touched him and he slept



Figure 39. Photograph of the interior of the Moore-Johnson Family Cemetery.

44CS0318

USGS 7.5-minute quadrangle: 1965 (Photorevised 1986) Norfolk South, VA

UTM Coordinates: NAD 83, Z18, 382494.91 E, 4068941N

Elevation: 1.5 m (5 ft) AMSL

Size: 110 m north–south x 225 m east–west (360.9 ft x 738.2 ft)

Components: mid-eighteenth to twentieth century

Closest named water: Deep Creek

Type of nearest water: Permanent

Topographic Setting: Low Marine Terrace

Slope: 0–2 percent

NRCS Unit: Bojac-Urban land-Wando complex, 0 to 3 percent slopes

Site 44CS0318 represents a low-density historic domestic scatter situated in a wooded area bounded by Deep Creek on the south and I-64 on the north. The east and west boundaries are swampy areas associated with Deep Creek

(Figure 12). The artifacts were recovered across a large expanse in several different areas of the landform. The largest concentration is located in the southwest portion. A barbed-wire fence separates the site area from the existing ROW of I-64. The interstate is built up above the natural surface for drainage purposes and for the run-up to the High Rise Bridge. The fence is in disrepair and is easily crossed for access to the site area. The landform is a slight sandy rise that slopes gently down into Deep Creek. There is considerable modern debris throughout the area, though concentrations are higher close to the interstate. The vegetation consists of secondary growth of mainly deciduous trees with some coniferous inclusions (Figure 40). The area is largely open, though there are pockets of thick undergrowth. There is a small drainage that runs to Deep Creek and contains solid ground, though it's likely inundated in times of heavy rain. Several push piles line the small drainage suggesting that it is routinely dredged.

The site boundaries within the APE were defined by the presence of 25 positive shovel tests (Figure 41). A total of 72 additional radial shovel tests were excavated at 7.5 m intervals



Figure 40. Photograph of Site 44CS0318 facing N to N1000 E1000.

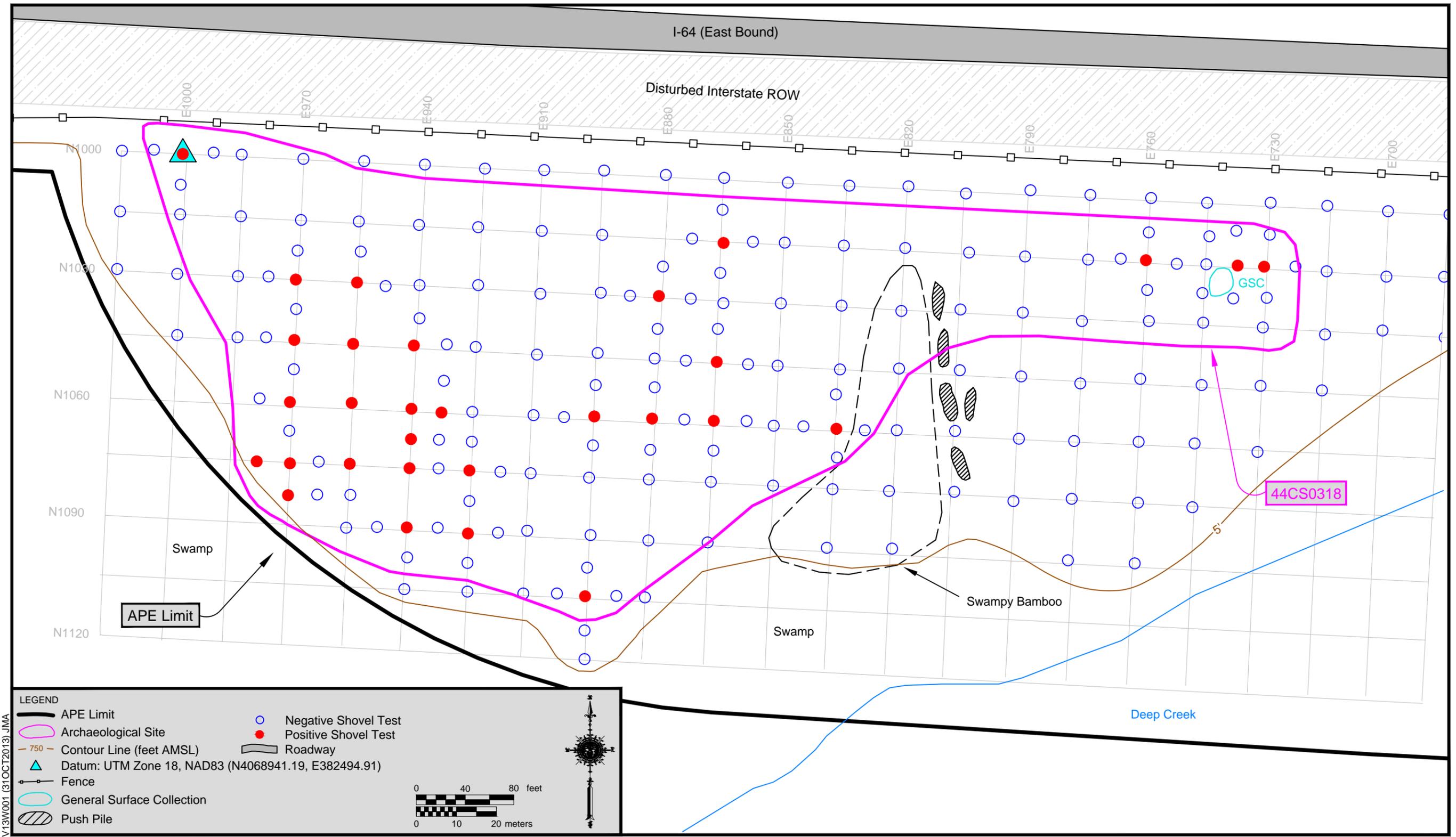


Figure 41. Schematic map of shovel testing at 44CS0318.

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off the positive shovel tests, resulting in 5 additional positive tests. No additional radial shovel tests were excavated in between 2 positive shovel tests, since enough material had been collected to evaluate the assemblage. A large tree fall resulted in a small surface collection of artifacts, which is located at approximately N1015, E940. Subsurface testing revealed that the soils across the site are somewhat deep. A representative profile from a positive shovel test at N1015 E865 consists of three strata, a dark grayish brown (10YR 4/2) loam A-horizon from 0 to 30 cm (0 to 11.8 in) below ground surface (bgs) (Stratum I) over a light yellowish brown (10YR 6/4) sand from 30 to 60 cm (11.8 to 23.6 in) bgs (Stratum II) underlain by at least 10 cm (5.9 in) of a strong brown (7.5 YR 5/6) sandy clay (Stratum III) (Figure 42). Cultural material was recovered only from the A-horizon deposits.

Shovel tests yielded a total of 143 artifacts (1588.3 g) from the site, all recovered from Stratum I (Table 7; Appendix A). The historic archaeological site boundary encompasses 1.9 ha (4.71 acres) and was defined by negative shovel tests and surrounding disturbances. A total of 101 artifacts recovered were from the domestic and miscellaneous glass and ceramic groups, 2 from the personal group, 1 from the clothing group, and 39 from the architecture, construction, or fuel group.

The domestic/miscellaneous assemblage consists of 53 glass artifacts and 48 ceramic artifacts. The diagnostic glass artifacts consist of five fragments of curved amethyst glass (1880–1917) (Sutton and Arkush 2006), one fragment of machine-made colorless glass (1920–Present), one base fragment of colorless blown in mold glass (1944–1979) (Toulouse 1972), one fragment of colorless glass with a cap seat finish (1880–Present) (Lindsay 2013), and 12 fragments of Non-Owens glass of green, amber, and colorless tint (1917–Present) (Sutton and Arkush 2006). The diagnostic ceramics consist of one fragment of clear lead glazed redware (1700–1900) (DAACS 2006), two undecorated fragments of creamware (1762–1820), six fragments of undecorated whiteware (1820–2000) (DAACS 2006), one fragment of hand-

painted whiteware (1820–2000) (DAACS 2006), one fragment of flow blue decorated whiteware (1840–1900) (DAACS 2006), five fragments of blue transfer print whiteware (1820–2000) (DAACS 2006), one fragment of black transfer print whiteware (1820–2000) (DAACS 2006), four fragments of undecorated ironstone (1840–2000) (DAACS 2006), one fragment of two color transfer print ironstone (1840-2000)(DAACS 2006), two

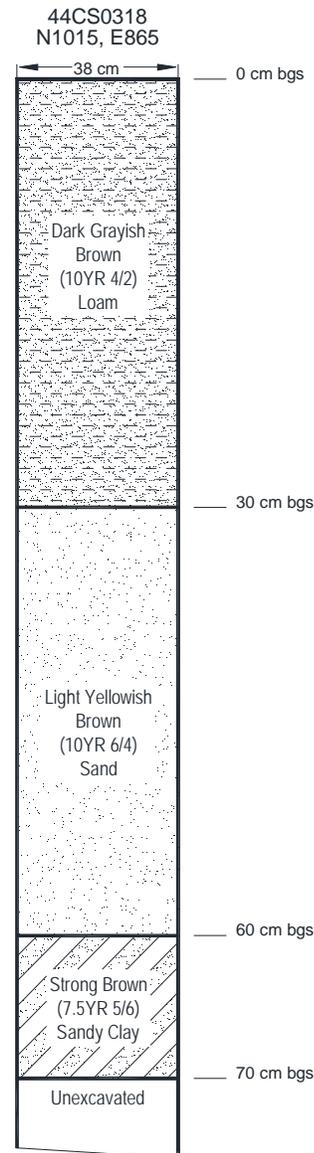


Figure 42. Representative shovel test profile at 44CS0318.

Table 7. Site 44CS0318 Historic Assemblage.

Group	Class	Description	Quantity	Weight (g)
Architecture	Construction Material	Brick	13	604.1
		Other Construct. Mat.	1	0.7
	Nails	Wrought	1	12.4
	Window Glass	Pane Glass	14	10.7
Clothing	Buttons	Sew-through: Flat, 1 Pc	1	1.1
Domestic	Ceramic Tableware	Bowl	1	95.3
		Flatware	6	66.7
		Hollowware	4	211.4
		Indet. Tableware	1	1.6
	Glass Storage Container	Commercial Food	1	21.7
		Indet. Container	1	3.5
	Glass Tableware	Flatware	1	29.7
		Stemware	1	36.2
	Misc. Domestic Ceramic	Indet. Object	26	65.7
	Misc. Domestic Glass	Indet. Object	31	392.0
Furnishings	Lighting	Lamp Chimney	1	0.4
Maintenance/Subsistence	Fuel	Coal	9	18.4
Miscellaneous	Misc. Ceramic	Coarse Earthenware	1	0.6
		Refined White Earthenware	9	3.1
	Misc. Glass	Amber Glass	1	0.4
		Aquamarine Glass	5	2.4
		Colorless, Amethyst Tint Glass	3	1.0
		Colorless, Clear Glass	8	5.5
		Green, Non-Olive Glass	1	0.2
Personal	Currency	Small Cent (Penny)	1	2.9
	Smoking Pipes	Bowl Fragment	1	0.6
Grand Total			143	1588.3

fragments of semi-porcelain with a Warwick maker's mark (1944), and two fragments of semi-porcelain with "SHENANGO CHINA" / NEW CAST"-LE PA." printed on the base (1920–1959) (RWCN 2013). Some of the ceramic fragments were too small and lacked classical hallmarks to definitively classify as pearlware or creamware and were classified generically as whiteware fragments. A single brass sew-through button with "ROBINSONS / * ATTLEBORO *" incised on the body was recovered (Figure 43). The button (1826–1848) was manufactured by the Robinson family factory in Attleboro, Massachusetts, that specialized in gilt buttons, brass buttons with so little zinc mixed with the copper that they looked like gold (Daggett 1894). A "wheat" penny was also recovered with the mint date of 1937 (Reed 1969). A total of 41 artifacts from the architecture, construction, fuel, and furnishings group were recovered. The diagnostic artifacts consist of 11 fragments of window pane glass (1815–1906), one lamp chimney of amethyst glass (1880–1917) (Sutton and Arkush 2006), and a

wrought iron nail (1790–1890)(Sutton & Arkush (2006). A total of 13 brick fragments (604.1) were also recovered during the shovel testing.



Figure 43. Photograph of a brass sew-through button recovered at 44CS0318.

This site appears to be a domestic artifact scatter dating to the early portion of the eighteenth century through the mid-twentieth century, likely representing refuse disposal activities associated with the nearby historic dwellings. A house attributed to a M. Martin is depicted immediately to west of the site area on the 1863 Soederquist map (Figure 4 and Figure 26). The shorelines of Deep Creek and the Elizabeth River have changed considerably, making it difficult to accurately place the sites and study area. Due to large-format scanning restraints, it is difficult to see the M. Martin house in the digital copy of the map in Figure 26. A portion of the study area, particularly the concentration of artifacts in the southwestern portion of the site, may be attributed to outbuildings and activities associated with the M. Martin occupation of the area. The creamware fragments (1762–1820), wrought iron nail (1790–1890), the brass button (1826–1848), and the majority of the decorated whiteware fragments (1820–2000) were recovered from between E1000 and E910. Most (n = 12) of the brick fragments recovered during the shovel testing were located in this area as well. Some of the more modern ceramics and glass are located in this area, but most of the diagnostic items with twentieth-century date ranges were recovered from surface collection and shovel testing at the eastern end of the site. The entire site area, however, has clearly been subject to earthmoving activities associated with the I-64 corridor, nearby bridge construction, dredging of the mouth of Deep Creek, drainages, and logging. The major soil unit listed for the area is Bojac-Urban-Wando soil complex, which consists of a component of urban disturbed soil. There is very little potential for intact subsurface features.

Section 8: I-64 between the High Rise Bridge and the I-464 Interchange

The study area for Section 8 is 34.57 acres. A total of 55 shovel tests were excavated, none of which contained cultural materials. A large drainage ditch lines both

sides of the road approximately 50–60 ft off of pavement, similar to the photograph from Section 6 (Figure 24). The William and Mary Center for Archaeological Research (Young 2007) conducted a small survey on the south side of I-64 for a proposed sound wall. That survey resulted in three recorded sites (44CS0277, 44CS0278, 44CS0280). The entire area the sites encompassed has been bulldozed and graded during construction of the aforementioned sound wall and its associated drainage pond (Figure 44). No shovel tests were excavated within the borders of the aforementioned sites due to utilities, houses, and major disturbances. The northeastern portion of the APE in this survey area contains portions of Roosevelt Memorial Park (DHR # 131-5608), a large marked cemetery (Figure 45).

Section 9: I-464 Interchange

The study area for Section 9 is 162.23 acres. A total of 153 shovel tests were excavated, none of which contained cultural materials. This portion of the APE includes the exit at the intersection of I-64 and I-464. The APE in this survey contains a large portion of the Roosevelt Memorial Park, two small neighborhoods, and a technology office park (Figure 46). Most of the area is highly disturbed by the roadways, clover-leaf exit ramps, large drainage ditches, water retention ponds, and utility lines. Shovel tests were excavated within the wooded zones of the exit ramps and any undeveloped lots. No shovel tests were excavated near the Memorial Park.

V. SUMMARY AND RECOMMENDATIONS

The archaeological resource survey resulted in the identification of one archaeological site (44CS0318) and one cemetery (44CS0317) in the survey area. Two previously identified archaeological resources were revisited (44CS0236 and 44CS0237), one of which (44CS0236) contains a cemetery as a component. The purpose of this survey was to identify all archaeological resources within the



Figure 44. Photograph of constructed sound wall, water management pond, and associated disturbed area in Section 8.



Figure 45. Photograph of Roosevelt Memorial Park (DHR # 131-5608) from the archaeological APE in Sections 8 & 9.



Figure 46. Photograph of open field near an office park in Section 9.

APE associated with the widening and bridge replacement project (VDOT Project No.: 0064-131-783, P101; UPC No.: 104366; Federal Project No.: NH-IM-064-3(481)).

Archaeological Resources

CRA identified two archaeological sites, and relocated two previously recorded archaeological sites (Table 8). The significance of these sites was evaluated in relation to the NRHP eligibility criteria. The sites were evaluated with regard to Criterion A for their association with events that have made a significant contribution to the broad patterns of our history, with regard to Criterion B for their association with people significant in our nation's history, with regard to Criterion C for their embodiment of the distinctive characteristics of a style, and with regard to Criterion D for their potential to yield information important in history. Additionally, the Garnes and Johnson cemeteries were evaluated in relation to special requirements of

National Register Criteria Consideration C and D governing cemeteries.

Site 44CS0236 is a historic domestic scatter dating from the last half of the nineteenth century to the mid-twentieth century. The site also contains the Johnson Moore Family Cemetery (DHR # 131-5612), which contains six marked graves. The site and cemetery were recorded during a Phase I survey in 1998 (Hinks et al. 1998) and were revisited during the current survey. The site has been significantly damaged by a recently constructed neighborhood and improvements to a gravel path used to maintain the two billboards that flank the site. CRA recommends that the archaeological site associated with this resource, 44CS0236, is not eligible for listing in the NRHP. The site lacks a diverse and robust artifact assemblage and has very low subsurface integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). There are no associations

Table 8. Summary of NRHP Eligibility Recommendations for the Identified Archaeological Sites.

Site	Temporal Designation	Thematic Context/Site Functions	NRHP Eligibility
44CS0236	19th Century - 20th Century	Domestic Scatter: Trash Scatter; Funerary: Cemetery	Not Eligible
44CS0237	19th Century - 20th Century	Domestic Scatter: Trash Scatter,	Not Eligible
CRAI-05	Mid-20th Century	Funerary: Cemetery	Not Eligible
CRAI-07	19th Century - 20th Century	Domestic Scatter: Trash Scatter	Not Eligible

with significant persons (Criterion B), and the deposits do not illustrate the distinctive characteristics of a type, period, or method of construction (Criterion C). Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D). The cemetery component (DHR # 131-5612) of this site is not associated with an important historical event, nor does it contain graves of individuals of transcendent importance. The grave markers do not demonstrate any particularly distinctive characteristics with regard to design or style and therefore do not meet the qualification for eligibility under Criteria Considerations C and D governing cemeteries.

Site 44CS0237 is a very small historic domestic scatter dating from the last half of the nineteenth century to the mid-twentieth century. The site was originally recorded during a Phase I survey in 1998 (Hinks et al. 1998) and was revisited during the current survey. The site has been significantly damaged by maintenance of I-64, a small neighborhood, and significant water management activities. CRA recommends that the archaeological site, 44CS0237, is not eligible for listing in the NRHP. The site lacks a diverse and robust artifact assemblage and has very low subsurface integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). There are no associations with significant persons (Criterion B), and the deposits do not illustrate the distinctive characteristics of a type, period, or method of construction (Criterion C). Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D).

Site 44CS0317 (DHR # 131-5554) is a small cemetery with three marked graves

belonging to the Garnes family. The site is located on a heavily contoured athletic field on the Deep Creek Middle School campus. The site was evaluated with regard to Criterion A for its association with events that have made a significant contribution to the broad patterns of our history, with regard to Criterion B for its association with people significant in our nation's history, with regard to Criterion C for its embodiment of the distinctive characteristics of a style, and with regard to

Criterion D for the potential to yield information important in history. Additionally, the Garnes Family Cemetery (Site 44CS0317) was evaluated in relation to special requirements of National Register Criteria Consideration C and D governing cemeteries. CRA recommends the site as not eligible for inclusion in the NRHP, as the cemetery is not associated with an important historical event, nor does it contain graves of individuals of transcendent importance. The grave markers do not demonstrate any particularly distinctive characteristics with regard to design or style.

Site 44CS0318 is a low density historic domestic scatter dating from the first quarter of the nineteenth century to the mid-twentieth century. The site may have been the location of outbuildings associated with dwellings depicted on historic maps belonging to M. Martin and/or with the Johnson family occupation at the nearby Site 44CS0236. All of the artifacts were found in the A-horizon soils, in varying positions within the soil column. The site has been significantly disturbed by earthmoving activities associated with the dredging of nearby waterways, construction of I-64 and the High Rise Bridge, and logging. It is very likely that some of the artifacts represent a secondary deposit location due to any or all of the aforementioned

activities. Due to the disturbed nature of the soil and low density of architecture-related artifacts, there is little to no potential for subsurface features. CRA recommends that the archaeological site 44CS0318 is not eligible for listing in the NRHP. The site lacks a diverse and robust artifact assemblage and has very low subsurface integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). There are no associations with significant persons (Criterion B), and the deposits do not illustrate the distinctive characteristics of a type, period, or method of construction (Criterion C). Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D).

Therefore, CRA recommends that the archaeological components at all three resources, 44CS0236, 44CS0237 and 44CS0318, are not individually eligible for listing in the NRHP under Criterion A, B, C, or D. Thus, no further work is recommended. The Garnes Family Cemetery, Site 44CS0317 (DHR # 131-3334), and the Moore-Johnson Cemetery (DHR # 131-5612) are not individually eligible for listing in the NRHP under Criterion A, B, C, or D. They also do not meet the qualification for eligibility under Criteria Consideration C or D governing cemeteries.

REFERENCES CITED

Baicy, Daniel, Loretta Lautzenheiser, and Michael Scholl

2005 *Archaeological Survey, Proposed Southeastern Parkway and Greenbelt, Cities of Chesapeake and Virginia Beach, Virginia*. Prepared for the Virginia Department of Transportation and H.W. Lochner, by Coastal Carolina Research.

Boutelle, J.B.

1912 *Elizabeth River – Southern Branch, Norfolk to Dismal Swamp Canal*. U.S. Department of Commerce and Labor, Coast and Geodetic Survey, T Chart

3249. U.S. Coast and Geodetic Survey, Record Group 37, National Archives, Washington, D.C.

DAACS

2006 DAACS CATALOGING MANUAL: CERAMICS. JENNIFER AULTAMAN, KATE GRILLO, NICK BON-HARPER, AND JILLIAN GALLE

Daggett, John

1894 *A Sketch of the History of Attleborough: From Its Settlement to the Division. Edited and Completed by His Daughter*. Press of Samuel Usher. Boston.

Florence, Gene

1996 *Collectible Glassware from the 40s, 50s, 60s*. Third Edition. Collector Books. Paducah, Kentucky.

Gardner, W.M.

1989 An Examination of Cultural Change in the Late Pleistocene and Early Holocene. In *Paleoindian Research in Virginia* edited by J.M. Wittofski and T.R. Reinhart, pp. 5-52. Special Publication No. 19 of the Archaeological Society of Virginia. Dietz Press, Richmond.

Goode, Charles, Lynn Jones, and Joseph Balicki.

2010 *Phase I testing along the Dismal Swamp Canal, and Building Assessment of the Dismal Swamp Canal Company Toll House, Chesapeake City, Virginia and Camden County, North Carolina*. Prepared for US Army Core of Engineers, by John Milner Associates.

Gurcke, Karl

1987 *Bricks and Brickmaking: A Handbook for Historical Archaeology*. The University of Idaho Press. Moscow, Idaho.

Hammer, Greg

2012 *Soil Survey of the City of Chesapeake, Virginia*. United States Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.

- Hatch, D.R., J.E. Belshan, and S.M. Lantz
1985 *Soil Survey of Virginia Beach, Virginia*. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.
- Hinks, Stephen and Katry Harris
1996 *Management Summary: Preliminary Cultural Resources Investigations, I-64 Widening from I-464 to I 264, City of Chesapeake, Virginia*. Prepared for Virginia Department of Transportation by Michael Baker Jr., Inc.
- Hinks, Stephen, Martin T. Fuess, Denise L. Grantz, KellyLynn L. Rudolph, and Regina J. Hart
1998 *Archaeological Survey, I-64 Widening from I-464 to I-264, City of Chesapeake, Virginia*. Prepared for the Virginia Department of Transportation by Michael Baker Jr., Inc.
- Hoffman, Michael Allen
1983 *A Report on an Archaeological Reconnaissance of a Proposed VEPCO Fly Ash Disposal Site Near Bower's Hill, Virginia*. Prepared for VEPCO, by GAI Consultants.
- Hundley, R.L.
1989 *Cultural Resources Survey of the Proposed Build Alternatives for the Southeastern Expressway, Cities of Chesapeake and Virginia Beach*. Prepared by the Virginia Department of Transportation
- Hunter, Robert R., Jr. and George L. Miller
1994 English Shell-Edge Earthenwares. *Antiques*, March 1994: 432-443.
- Jones, Olive R.
2000 A Guide to Dating Glass Tableware: 1800-1940. *Study in Material Culture Research*. Edited by Karlis Karklins. The Society for Historical Archaeology.
- Lindsey, Bill
2013 BLM / SHA Historic Glass Bottle Identificaiton & Information Website. Last updated 10/25/13
<http://www.sha.org/bottle/>
- MacCord Sr., Howard A.
1981 *An Archaeological Reconnaissance Survey of the 500KV, Septa to Yadkin Line in the County of Isle of Wight and the Cities of Suffolk and Chesapeake, Virginia*. On file at the Virginia Department of Historic Resources.
- Miller, George
2000 *Telling Time for Archaeologists. Northeast Historical Archaeology* (Boston, Massachusetts) Vol. 29.
- Moore, Will, Dane Magoon, and Loretta Lautzenheiser
2003 *Archaeological Survey of Proposed Water Transmission Lines, City of Chesapeake, Virginia*. Prepared for HDR Engineering, Inc., by Coastal Carolina Research.
- Natural Resources Conservation Service (NRCS)
2013 Web Soil Survey. United States Department of Agriculture. Electronic document, <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed Oct 14, 2013.
- Opperman, Antony, Jacqueline Hernigle, Steven Alexandrowicz, Deborah Davenport, and Lauren Archibald
1987 *A Phase I Cultural Resources Survey for the Southern Portion of Proposed Route 288, Richmond Virginia*. Prepared for Harland Batholomew and Associates, Inc., Richmond, Virginia by MAAR Associates, Inc., Williamsburg, Virginia.
- Orser, Charles E.
1988 *The Material Basis of the Postbellum Tenant Plantation*. The University of Georgia Press, Athens.
- Rader, E.K., and N.H. Evans
1993 Geologic Map of Virginia-Expanded Explanation: Division of Mineral Resources, Charlottesville, Virginia.

- Reed, Mort
1969 *Cowles Complete Encyclopedia of U.S. Coins*. Cowles Book Company, Inc. New York.
- RWCN
2013 The Restaurant Ware Collectors Network Website. Last updated 2013 (exact date UKN)
<http://www.restaurantwarecollectors.com/forums/misc.php?do=page&template=datecodes>
- Sara, Timothy R., Stuart Paul Dixon, Eric F. Griffiths, Philip E. Pendleton, with J. Lee Cox.
1999 *Cultural Resources Survey, Hampton Roads Crossing Study, Candidate Build Alternatives 1, 9, and 2, Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Suffolk, Virginia*. Prepared for Michael Baker Jr., Inc. and the Virginia Department of Transportation, by Louis Berger & Associates, Inc.
- Soederquist, Lieut. Oscar
1863 Military Map of Suffolk and Vicinity for Brig. Gen. E.L. Viele. In *The Official Military Atlas of the Civil War*, by Major George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, Plate XXVI, 4. Compiled by Captain Calvin D. Cowles, Gramercy Books, New York: Originally published: Atlas to Accompany the Official Records of the Union and Confederate Armies. Government Printing Office, Washington D.C., 1891-1895.
- South, Stanley
1977 *Methods and Theory in Historical Archaeology*. Academic Press, New York.
- Stewart, Jennifer, Dawn M. Bradley, Bill Hall, and Loretta Lautzenheiser
2007 *Cultural Resources Survey of Proposed Improvements to Dominion Boulevard, City of Chesapeake, Virginia*. Prepared for PB Americas, Inc., by Coastal Carolina Research.
- Stewart-Abernathy, Leslie C.
1986 *The Moser Farmstead, Independent But Not Isolated: The Archaeology of a Late Nineteenth Century Ozark Farmstead*. Arkansas Archeological Survey Research Series No. 26, Fayetteville.
- Sutton, Mark Q. & Brooke S. Arkush
2006 *Archaeological Laboratory Methods: An Introduction*. 4th Edition. Kendal/Hunt Publishing Co., Dubuque, Iowa.
- Sykes and Swathmey
1887 Map of Norfolk County, Virginia. Sykes and Swathmey, Norfolk, Virginia. Library of Congress, Washington, D.C.
- Toulouse, Julian H.
1972 *Bottle Makers and their Marks*. Thomas Nelson, New York.
- United States Department of Agriculture, Aerial Photography Field Office.
2012 FSA/NAIP Color Ortho Imagery.
- United States Department of the Interior
1983 Archaeology and Historic Preservation: Secretary of the Interiors' Standards and Guidelines. *Federal Register*, Part IV, 48(2):44716-44742. Annotated version showing later technical and officially adopted revisions available from the 41 National Park Service's preservation laws, regulations, and standards webpage
http://www.wcr.nps.gov/locallaw/arch_stnds_0.htm.
- U.S. Geological Survey
1921 Newport News, Va. 15 minute Quadrangle. Field checked 1918.
1953 Bower's Hill, Va 15 minute topographic quadrangle.
1965 Norfolk South, Va 7.5 minute topographic quadrangle, revised 1986
- Virginia Department of Highways
1956 Plan and Profile of Proposed State Highway, City of Chesapeake, From 0632 mi. West of Rte. 464 to 0.398 mi.

East of Rte. 17, 9 sheets. S.R. Conley,
Project Coordinator. Designed by
Hayes, Seay, Mattern & Mattern.
Adopted by resolution of Highway
Commission, October 4, 1956.
Engineering Data Revised through
October 3, 1967. Federal Aid Project
Nos. 1-64-3(85)264; I-64-3(102)264.
Virginia Project Nos. 0064-131-102, G-
301, P-401; 0064-131-102, PE-101.

Mary Center for Archaeological
Research (WMCAR).

Virginia Department of Historic Resources
1999 Programmatic Agreement Between the
Virginia Departments of Transportation
and Historic Resources Concerning
Interagency Project Coordination.

2011a Guidelines for Conducting Historic
Resources Survey in Virginia. Virginia
Department of Historic Resources,
Richmond, Virginia.

2011b State Collections Management
Standards. Virginia Department of
Historic Resources, Richmond, Virginia.

Virginia Department of Transportation
2010 Expectations and Standard Products
for Cultural Resource Surveys.

Wagner, Mark, and Mary McCorvie
1992 *The Archeology of the Old Landmark.
Nineteenth Century Taverns Along the
St. Louis Vincennes Trace in Southern
Illinois*. Illinois Department of
Transportation and the Center for
American Archeology, Kampsville.

Wesler, Kit W.
1984 A Spatial Perspective on Artifact
Group Patterning Within the Houselot.
In *Proceedings of the Symposium on
Ohio Valley Urban and Historic
Archeology*, Vol. II, edited by Donald B.
Ball and Phillip J. Diblasi, pp. 37-44.
Louisville, Kentucky.

Young, Thomas Davis
2007 *An Archaeological Survey of the
Proposed I-64 North Harbor Soundwall
Project, City of Chesapeake, Virginia*.
Prepared for the Virginia Department of
Transportation, by the William and

APPENDIX A. ARTIFACT INVENTORY

16-Dec-13

I-64 Widening Phase I Historic Inventory

Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
44CS0236							
STP G02 Zn I 0-20 cmbgs N1000 E1000	Ceramic Tableware	Platter: Rim, Body	Semi-Porcelain	Annular	Restaurant ware; Indeterminate double green band motif	1	49.8
STP G02 Zn I 0-20 cmbgs N1000 E1000	Glass Tableware	Hollowware: Body	Colorless, Clear Glass	Press Mold	Jeannette Glass Company's Holiday "Buttons and Bows" pattern 1947-1959	1	1.6
STP G02 Zn I 0-20 cmbgs N1000 E1000	Glass Tableware	Indet. Tableware: Body	Colorless, Clear Glass	Press Mold	Jeannette Glass Company's Holiday "Buttons and Bows" pattern 1947-1959	1	0.7
STP G02 Zn I 0-20 cmbgs N1000 E1000	Glass Tableware	Indet. Tableware: Stem	Colorless, Clear Glass	Machine-made		1	11.8
STP G02 Zn I 0-20 cmbgs N1000 E1000	Misc. Ceramic	Refined White Earthenware	Indet. Form			1	0.3
STP G02 Zn I 0-20 cmbgs N1000 E1000	Misc. Domestic Glass	Indet. Object: Base	Colorless, Clear Glass	Machine-made		1	4.3
STP G02 Zn I 0-20 cmbgs N1000 E1000	Misc. Domestic Glass	Indet. Object: Body	Amber Glass	Machine-made		1	2.1
STP G02 Zn I 0-20 cmbgs N1000 E1000	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Machine-made		2	14.0
STP G02 Zn I 0-20 cmbgs N1000 E1000	Misc. Glass	Aquamarine Glass	Curved			1	1.2
STP G02 Zn I 0-20 cmbgs N1000 E1000	Misc. Glass	Colorless, Clear Glass	Curved			6	4.6
					STP G02 Total:	16	90.4
STP H03 Zn I 0-20 cmbgs N1015 E1015	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	1	20.9
STP H03 Zn I 0-20 cmbgs N1015 E1015	Construction Material	Brick	Machine-made	Well-fired	Fragment(s); Brick face present 1900-2013	1	21.6
STP H03 Zn I 0-20 cmbgs N1015 E1015	Misc. Domestic Glass	Indet. Object: Base	Colorless, Clear Glass	Contact Mold	Thick, fanned ribbing pattern 1790-1900	1	3.0
STP H03 Zn I 0-20 cmbgs N1015 E1015	Misc. Domestic Glass	Indet. Object: Base	Colorless, Clear Glass	Machine-made		1	2.2
STP H03 Zn I 0-20 cmbgs N1015 E1015	Misc. Glass	Colorless, Clear Glass	Curved			1	0.5
					STP H03 Total:	5	48.2
STP H04 Zn I 0-20 cmbgs N1030 E1015	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	2	2.0
STP H04 Zn I 0-20 cmbgs N1030 E1015	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Machine-made		1	0.5
STP H04 Zn I 0-20 cmbgs N1030 E1015	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Machine-made	Non-slip stippling 1939-2013	1	0.2
STP H04 Zn I 0-20 cmbgs N1030 E1015	Misc. Glass	Colorless, Clear Glass	Curved			6	5.3
STP H04 Zn I 0-20 cmbgs N1030 E1015	Misc. Glass	Colorless, Clear Glass	Indet. Form			1	0.1
					STP H04 Total:	11	8.1
STP H09 Zn I 0-20 cmbgs N1105 E1015	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	1	1.3
STP H09 Zn I 0-20 cmbgs N1105 E1015	Fuel	Coal				1	0.8

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)	
STP H09	Zn I 0-20 cmbgs N1105 E1015	Misc. Glass	Colorless, Clear Glass	Curved		1	1.0	
STP H09	Zn I 0-20 cmbgs N1105 E1015	Misc. Glass	Green, Non-Olive Glass	Curved		2	1.7	
STP H09 Total:						5	4.8	
STP H10	Zn I 0-20 cmbgs N1120 E1015	Hardware	Nut, Hex	Ferrous Metal	Machine-made; Threaded bolt included on nut	1	20.4	
STP H10	Zn I 0-20 cmbgs N1120 E1015	Window Glass	Plate Glass			1	1.3	
STP H10 Total:						2	21.7	
STP M02	Zn I 0-20 cmbgs N1000 E1090	Misc. Domestic Ceramic	Indet. Object: Rim	R.E., Ironstone, Thick	Plain	1840-2000	1	1.5
STP M02	Zn I 0-20 cmbgs N1000 E1090	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Press Mold	1825-2013	1	0.8
STP M02	Zn I 0-20 cmbgs N1000 E1090	Misc. Glass	Colorless, Clear Glass	Curved			1	0.5
STP M02	Zn I 0-20 cmbgs N1000 E1090	Misc. Glass	Colorless, Clear Glass	Indet. Form			1	0.9
STP M02 Total:						4	3.7	
44CS0236 Site Total:						43	176.9	
44CS0237								
STP B14	Zn I 0-20 cmbgs N1105 E1015	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Ironstone	Plain	Redish-brown exterior glaze 1840-2000	1	0.2
STP B14	Zn I 0-20 cmbgs N1105 E1015	Misc. Glass	Colorless, Amethyst Tint Glass	Curved		1880-1917	1	1.5
STP B14	Zn I 0-20 cmbgs N1105 E1015	Window Glass	Pane Glass	1.59 mm		1847-1847	1	0.4
STP B14 Total:						3	2.1	
STP B18	Zn I 0-20 cmbgs N1165 E1015	Ceramic Tableware	Hollowware: Body	R.E., Whiteware	Hand Painted Polychrome	Indet. Motif; Indeterminate flower motif 1830-1920	1	0.4
STP B18 Total:						1	0.4	
STP C07	Zn I 0-20 cmbgs N1000 E1000	Ceramic Tableware	Indet. Tableware: Rim	R.E., Whiteware	Molded & Painted	Sh.E. Bl, Even Scallop, Impr. Str. Lines 1800-1830	1	1.2
STP C07 Total:						1	1.2	
STP C09	Zn I 0-20 cmbgs N1030 E1000	Misc. Ceramic	Refined White Earthenware	Indet. Form			1	0.5
STP C09	Zn I 0-20 cmbgs N1030 E1000	Unsorted Bone					1	0.8
STP C09 Total:						2	1.3	
44CS0237 Site Total:						7	5.0	

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
44CS0318							
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Ceramic Tableware	Flatware: Base	Semi-Porcelain	Plain	SHENANGO "CHINA" / NEW CAST"-LE PA." Transfer Print on Base 1920-1959	1	34.7
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Ceramic Tableware	Hollowware: Base, Body, Rim	R.E., Ironstone	Annular	"B-" , "B" Transfer Print on Base 1840-2000	1	186.3
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Ceramic Tableware	Hollowware: Body	R.E., Ironstone	Annular	1840-2000	1	18.7
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Glass Tableware	Flatware: Base	Opaque White Glass	Machine-made		1	29.7
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Glass Tableware	Stemware: Foot	Colorless, Clear Glass	Blown in Mold	Federal Glass Company "F" Inside a shield Embossed on Foot 1944-1979	1	36.2
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Misc. Domestic Ceramic	Indet. Object: Footring, Base	R.E., Ironstone	Plain	1840-2000	1	5.9
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Misc. Domestic Ceramic	Indet. Object: Rim	R.E., Ironstone	Plain	1840-2000	1	7.5
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Misc. Domestic Glass	Indet. Object: Base	Colorless, Clear Glass	Machine-made		1	28.7
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Misc. Domestic Glass	Indet. Object: Base, Body	Colorless, Clear Glass	ABM (Non-Owens)	Non-slip stippling, Owens Illinois Glass Company "<(I)>", "0270 / 56-46", "19" Embossed on Base, 4/5"-QUART", "4/5 QUART" , "4/5 QUAR-"T Embossed on Body 1939-1952	1	127.1
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Machine-made		1	2.8
GSC 0-0 cmbgs N1015 E740, Coordinates are approximate	Misc. Domestic Glass	Indet. Object: Rim	Colorless, Clear Glass	Machine-made		1	1.2
GSC Total:						11	478.8
STP B01 Zn I 0-30 cmbgs N1000 E1000	Ceramic Tableware	Hollowware: Rim, Body	R.E., Ironstone	Plain	1840-2000	1	3.7
STP B01 Total:						1	3.7
STP D03 Lvl 3 Zn I 30-40 cmbgs N1030 E970	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	1	1.6
STP D03 Lvl 3 Zn I 30-40 cmbgs N1030 E970	Window Glass	Pane Glass	1.87 mm		1870-1870	1	0.9
STP D03 Total:						2	2.5
STP D04 Zn I 0-20 cmbgs N1045 E970	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	4	13.8

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
STP D04 Zn I 0-20 cmbgs N1045 E970	Fuel	Coal				3	12.5
STP D04 Zn I 0-20 cmbgs N1045 E970	Misc. Ceramic	Refined White Earthenware	Indet. Form			1	0.1
STP D04 Zn I 0-20 cmbgs N1045 E970	Misc. Glass	Colorless, Amethyst Tint Glass	Curved			1	0.4
STP D04 Zn I 0-20 cmbgs N1045 E970	Misc. Glass	Colorless, Clear Glass	Indet. Form			2	1.4
STP D04 Zn I 0-20 cmbgs N1045 E970	Misc. Glass	Green, Non-Olive Glass	Curved			1	0.2
STP D04 Zn I 0-20 cmbgs N1045 E970	Window Glass	Pane Glass	2.27 mm		1904-1904	1	0.8
STP D04 Zn I 0-20 cmbgs N1045 E970	Window Glass	Pane Glass	2.52 mm		1915-2013	1	0.4
STP D04 Total:						14	29.6
STP D05 Zn I 0-30 cmbgs N1060 E970	Misc. Ceramic	Refined White Earthenware	Indet. Form			2	0.2
STP D05 Zn I 0-30 cmbgs N1060 E970	Misc. Domestic Ceramic	Indet. Object: Body	C.E., Redware, Unglazed Int.	Unglazed	1700-1900	1	3.1
STP D05 Total:						3	3.3
STP D06 Zn I 0-20 cmbgs N1075 E970	Misc. Ceramic	Refined White Earthenware	Indet. Form			1	0.2
STP D06 Zn I 0-20 cmbgs N1075 E970	Misc. Glass	Aquamarine Glass	Flat			1	0.2
STP D06 Total:						2	0.4
STP D06 S Rad Zn I 0-20 cmbgs N1082.5 E970	Ceramic Tableware	Flatware: Base, Body	R.E., Whiteware	Transfer Print, Blue	Other Motif; Flowers and lines present in motif 1820-2000	1	6.1
STP D06 S Rad Zn I 0-20 cmbgs N1082.5 E970	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Transfer Print, Blue	Indet. Motif 1820-2000	1	0.8
STP D06 S Rad Total:						2	6.9
STP D06 W Rad Zn I 0-10 cmbgs N1075 E977.5	Buttons	Sew-through: Flat, 1 Pc	Brass	Four Holes	Machine-made; 24 Lingnes "ROBINSONS / * ATTLEBORO *" Incised on Body 1826-1848	1	1.1
STP D06 W Rad Zn I 0-10 cmbgs N1075 E977.5	Construction Material	Brick	Indet. Brick	Over-fired/Vitrified	Fragment(s)	1	28.9
STP D06 W Rad Zn I 0-10 cmbgs N1075 E977.5	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	1	2.9
STP D06 W Rad Zn I 0-10 cmbgs N1075 E977.5	Misc. Domestic Ceramic	Indet. Object: Base	R.E., Whiteware	Plain	1820-2000	1	6.2
STP D06 W Rad Zn I 0-10 cmbgs N1075 E977.5	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Ironstone	Plain	1840-2000	1	4.7
STP D06 W Rad Zn I 0-10 cmbgs N1075 E977.5	Misc. Domestic Glass	Indet. Object: Neck	Colorless, Amethyst Tint Glass	Indet. Manufacture	1880-1917	1	1.8
STP D06 W Rad Total:						6	45.6
STP E03 Zn I 0-10 cmbgs N1030 E955	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	1	176.5

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
STP E03	Zn I 0-10 cmbgs N1030 E955	Misc. Ceramic	Coarse Earthenware	Other Form	Flat	1	0.6
STP E03	Zn I 0-10 cmbgs N1030 E955	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Indet. Decoration	1	0.1
					Indet. Motif; Transfer print or flow blue pattern, too small to discern 1820-2000		
STP E03	Zn I 0-10 cmbgs N1030 E955	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Transfer Print, Blue	1	0.1
STP E03	Zn I 0-10 cmbgs N1030 E955	Misc. Domestic Glass	Indet. Object	Colorless, Green Tint Glass	Machine-made	1	1.1
STP E03	Zn I 0-10 cmbgs N1030 E955	Misc. Domestic Glass	Indet. Object: Base	Colorless, Clear Glass	ABM (Non-Owens)	1	0.3
STP E03	Zn I 0-10 cmbgs N1030 E955	Window Glass	Pane Glass	2.01 mm	1882-1882	1	0.2
					STP E03 Total:	7	178.9
STP E04	Zn I 0-27 cmbgs N1045 E955	Misc. Domestic Ceramic	Indet. Object: Body	C.E., Redware, Clear Lead Gl. Int	Plain	1	1.0
					Exterior is unglazed 1700-1900		
STP E04	Zn I 0-27 cmbgs N1045 E955	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Indet. Decoration	1	0.2
STP E04	Zn I 0-27 cmbgs N1045 E955	Misc. Glass	Amber Glass	Curved		1	0.4
STP E04	Zn I 0-27 cmbgs N1045 E955	Misc. Glass	Aquamarine Glass	Curved		1	0.4
STP E04	Zn I 0-27 cmbgs N1045 E955	Misc. Glass	Colorless, Amethyst Tint Glass	Curved	1880-1917	1	0.3
STP E04	Zn I 0-27 cmbgs N1045 E955	Window Glass	Pane Glass	1.54 mm	1842-1842	1	0.3
					STP E04 Total:	6	2.6
STP E05	Zn I 0-35 cmbgs N1060 E955	Fuel	Coal			1	0.2
STP E05	Zn I 0-35 cmbgs N1060 E955	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Ironstone	Plain	1	0.7
STP E05	Zn I 0-35 cmbgs N1060 E955	Window Glass	Pane Glass	1.48 mm	1837-1837	1	0.1
					STP E05 Total:	3	1.0
STP E06	Zn II 6-27 cmbgs N1075 E955	Ceramic Tableware	Flatware: Body	R.E., Whiteware	Transfer Print, Blue	1	2.1
STP E06	Zn II 6-27 cmbgs N1075 E955	Ceramic Tableware	Indet. Tableware: Footring, Base	R.E., Creamware	Plain	1	1.6
STP E06	Zn II 6-27 cmbgs N1075 E955	Construction Material	Brick	Handmade	Well-fired	1	368.8
STP E06	Zn II 6-27 cmbgs N1075 E955	Misc. Ceramic	Refined White Earthenware	Indet. Form		1	1.0
					STP E06 Total:	4	373.5
STP F04	Lvl 3 Zn I 20-30 cmbgs N1045 E940	Nails	Wrought	Fragment(s)	T-Head	1	12.4
					1790-1890		
					STP F04 Total:	1	12.4
STP F05	Zn I 0-20 cmbgs N1060 E940	Construction Material	Brick	Indet. Brick	Over-fired/Vitrified	1	3.4
STP F05	Zn I 0-20 cmbgs N1060 E940	Construction Material	Brick	Indet. Brick	Well-fired	1	0.9
STP F05	Zn I 0-20 cmbgs N1060 E940	Fuel	Coal			4	3.8
STP F05	Zn I 0-20 cmbgs N1060 E940	Window Glass	Pane Glass	1.69 mm	1855-1855	1	2.0

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
STP F05 Total:						7	10.1
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Ceramic Tableware	Hollowware: Footring, Base	R.E., Creamware	Plain	1762-1820	1 2.7
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Misc. Domestic Ceramic	Indet. Object: Base	R.E., Ironstone	Plain	1840-2000	1 3.3
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Misc. Domestic Glass	Indet. Object: Body	Green, Non-Olive Glass	Machine-made	Ultramarine / teal glass 1920-2013	1 2.4
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Misc. Glass	Aquamarine Glass	Curved			2 0.9
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Misc. Glass	Colorless, Amethyst Tint Glass	Curved		1880-1917	1 0.3
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Smoking Pipes	Bowl Fragment	Indet. Material(s)	Molded	Plain; Kaolin	1 0.6
STP F05 E Rad	Zn I 0-30 cmbgs N1060 E932.5	Window Glass	Pane Glass	2.1 mm		1890-1890	1 0.3
STP F05 E Rad Total:						8	10.5
STP F05 S Rad	Lvl 4 Zn I 30-40 cmbgs N1067.5 E940	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Whiteware	Hand Painted Monochrome	Floral, Broad 1820-2000	1 5.6
STP F05 S Rad Total:						1	5.6
STP F06	Lvl 4 Zn I 30-40 cmbgs N1075 E940	Misc. Domestic Glass	Indet. Object: Body	Olive Green Glass	Indet. Manufacture	Distressed surfaces	1 5.7
STP F06 Total:						1	5.7
STP F07	Zn I 0-20 cmbgs N1090 E940	Construction Material	Brick	Indet. Brick	Over-fired/Vitrified	Fragment(s)	1 2.2
STP F07	Zn I 0-20 cmbgs N1090 E940	Fuel	Coal				1 1.9
STP F07	Zn I 0-20 cmbgs N1090 E940	Misc. Ceramic	Refined White Earthenware	Indet. Form			2 0.2
STP F07	Zn I 0-20 cmbgs N1090 E940	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Flow Blue	Indet. Motif 1840-1900	1 0.1
STP F07 Total:						5	4.4
STP G06	Zn II 6-34 cmbgs N1075 E925	Lighting	Lamp Chimney	Colorless, Amethyst Tint Glass	Indet. Manufacture	1880-1917	1 0.4
STP G06	Zn II 6-34 cmbgs N1075 E925	Misc. Domestic Ceramic	Indet. Object	R.E., Whiteware	Plain	1820-2000	1 1.9
STP G06	Zn II 6-34 cmbgs N1075 E925	Misc. Domestic Glass	Indet. Object: Base	Colorless, Amethyst Tint Glass	Indet. Manufacture	1880-1917	1 0.5
STP G06	Zn II 6-34 cmbgs N1075 E925	Window Glass	Pane Glass	1.21 mm		1815-1815	1 0.9
STP G06	Zn II 6-34 cmbgs N1075 E925	Window Glass	Pane Glass	2.29 mm		1906-1906	1 1.9
STP G06 Total:						5	5.6
STP G07	Zn I 0-10 cmbgs N1090 E925	Misc. Domestic Ceramic	Indet. Object: Body	Semi-Porcelain	Plain		1 1.6
STP G07 Total:						1	1.6
STP I05	Zn I 0-30 cmbgs N1060 E895	Misc. Ceramic	Refined White Earthenware	Indet. Form			1 1.2
STP I05	Zn I 0-30 cmbgs N1060 E895	Misc. Domestic Ceramic	Indet. Object: Rim	Semi-Porcelain	Plain		1 1.0
STP I05	Zn I 0-30 cmbgs N1060 E895	Window Glass	Pane Glass	2.09 mm		1889-1889	1 1.3

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)	
						STP I05 Total:	3	3.5
STP I08	Zn I 0-20 cmbgs N1105 E895	Misc. Domestic Ceramic	Indet. Object: Footring, Base	Semi-Porcelain	Plain	1	2.2	
STP I08	Zn I 0-20 cmbgs N1105 E895	Window Glass	Pane Glass	1.72 mm	1858-1858	1	0.3	
						STP I08 Total:	2	2.5
STP J03	Zn II 20-35 cmbgs N1030 E880	Misc. Domestic Ceramic	Indet. Object: Base, Body	R.E., Whiteware	Plain	1	1.3	
STP J03	Zn II 20-35 cmbgs N1030 E880	Misc. Domestic Glass	Indet. Object: Neck	Colorless, Clear Glass	Machine-made	1	1.0	
STP J03	Zn II 20-35 cmbgs N1030 E880	Window Glass	Pane Glass	1.52 mm	1841-1841	1	0.5	
						STP J03 Total:	3	2.8
STP J05	Zn I 20-29 cmbgs N1060 E880	Misc. Domestic Ceramic	Indet. Object: Base, Body	R.E., Ironstone	Plain	1	8.7	
						STP J05 Total:	1	8.7
STP K02	Zn I 0-10 cmbgs N1015 E865	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Indet. Decoration	Indet. Motif 1820-2000	1	0.6
						STP K02 Total:	1	0.6
STP K04	Zn I 0-40 cmbgs N1045 E865	Construction Material	Brick	Indet. Brick	Well-fired	Fragment(s)	1	5.1
STP K04	Zn I 0-40 cmbgs N1045 E865	Misc. Ceramic	Refined White Earthenware	Indet. Form			1	0.2
STP K04	Zn I 0-40 cmbgs N1045 E865	Misc. Domestic Glass	Indet. Object: Neck	Olive Green Glass	Blown in Mold		1	9.2
						STP K04 Total:	3	14.5
STP K05	Zn I 0-20 cmbgs N1060 E865	Glass Storage Container	Indet. Container: Finish	Colorless, Clear Glass	ABM (Non-Owens)	External Thread 1919-2013	1	3.5
STP K05	Zn I 0-20 cmbgs N1060 E865	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Ironstone	Plain	1840-2000	1	1.5
STP K05	Zn I 0-20 cmbgs N1060 E865	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	ABM (Non-Owens)	1917-2013	2	17.4
STP K05	Zn I 0-20 cmbgs N1060 E865	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	ABM (Non-Owens)	Refit 1917-2013	3	17.5
STP K05	Zn I 0-20 cmbgs N1060 E865	Window Glass	Pane Glass	2.25 mm		1902-1902	1	0.8
						STP K05 Total:	8	40.7
STP M05	Zn I 0-20 cmbgs N1060 E835	Misc. Domestic Ceramic	Indet. Object: Indet. Portion	R.E., Whiteware	Transfer Print, Black	Indet. Motif 1820-2000	1	1.1
STP M05	Zn I 0-20 cmbgs N1060 E835	Misc. Domestic Glass	Indet. Object: Finish	Colorless, Clear Glass	Indet. Manufacture	Cap seat finish 1880-2013	1	1.1
STP M05	Zn I 0-20 cmbgs N1060 E835	Misc. Glass	Aquamarine Glass	Curved			1	0.9
STP M05	Zn I 0-20 cmbgs N1060 E835	Misc. Glass	Colorless, Clear Glass	Curved			4	2.4
						STP M05 Total:	7	5.5
STP R02	Zn I 0-50 cmbgs N1015 E760	Construction Material	Other Construct. Mat.	Ceramic	Redware	Fragment(s); Tile	1	0.7
STP R02	Zn I 0-50 cmbgs N1015 E760	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Ironstone	Transfer Print, Two-color	Other Motif; Indeterminate flower motif 1840-2000	1	1.2
STP R02	Zn I 0-50 cmbgs N1015 E760	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Whiteware	Plain	1820-2000	1	2.7

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Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
STP R02 Zn I 0-50 cmbgs N1015 E760	Misc. Domestic Glass	Indet. Object: Base	Colorless, Clear Glass	ABM (Non-Owens)	Non-slip stippling "E-1641" Embossed on Body 1939-2013	1	107.0
STP R02 Zn I 0-50 cmbgs N1015 E760	Misc. Domestic Glass	Indet. Object: Body	Amber Glass	ABM (Non-Owens)	Trapezoid imprinted on exterior 1917-2013	1	10.2
STP R02 Zn I 0-50 cmbgs N1015 E760	Misc. Glass	Colorless, Clear Glass	Curved			1	1.1
STP R02 Total:						6	122.9
STP T02 Zn II 3-18 cmbgs N1015 E730	Ceramic Tableware	Flatware: Base	Semi-Porcelain	Plain	Restaurant ware, Warwick motif WAR224, matches 12.3 gm rim, WA"-RICK / MADE IN U.S.A. / 1944" Transfer Print on Base 1944-1944	1	4.3
STP T02 Zn II 3-18 cmbgs N1015 E730	Ceramic Tableware	Flatware: Rim	Semi-Porcelain	Annular	Restaurant ware, 10" diameter, Warwick motif WAR224, matches 4.3gm base 1944-1944	1	12.3
STP T02 Zn II 3-18 cmbgs N1015 E730	Currency	Small Cent (Penny)	Lincoln, Wheat Ear	Copper	Minted in Denver "IN GOD WE TRUST / LIBERTY" , "1939" Embossed on Body, "E . PLURIS . UNUM / ONE / CENT / UNITED STATES / OF AMERICA" Embossed on Body 1937-1937	1	2.9
STP T02 Zn II 3-18 cmbgs N1015 E730	Misc. Domestic Ceramic	Indet. Object: Body	R.E., Ironstone	Plain	1840-2000	1	2.6
STP T02 Zn II 3-18 cmbgs N1015 E730	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Machine-made		1	2.4
STP T02 Zn II 3-18 cmbgs N1015 E730	Misc. Domestic Glass	Indet. Object: Indet. Portion	Colorless, Clear Glass	Machine-made		1	2.9
STP T02 Zn II 3-18 cmbgs N1015 E730	Misc. Glass	Colorless, Clear Glass	Curved			1	0.6
STP T02 Total:						7	28.0
STP T02 W Rad Zn I 0-10 cmbgs N1015 E737.5	Ceramic Tableware	Bowl: Base, Body, Rim	Semi-Porcelain	Decalcomania	Floral, Linear "-A" / "-A." Transfer Print on Base	1	95.3
STP T02 W Rad Zn I 0-10 cmbgs N1015 E737.5	Ceramic Tableware	Flatware: Rim	R.E., Whiteware	Other Decoration	Indet. Motif; Molded, scalloped rim 1820-2000	1	7.2
STP T02 W Rad Zn I 0-10 cmbgs N1015 E737.5	Glass Storage Container	Commercial Food: Base, Body	Colorless, Green Tint Glass	ABM (Non-Owens)	1917-2013	1	21.7
STP T02 W Rad Zn I 0-10 cmbgs N1015 E737.5	Misc. Domestic Glass	Indet. Object: Base	Colorless, Green Tint Glass	Machine-made		1	7.3
STP T02 W Rad Zn I 0-10 cmbgs N1015 E737.5	Misc. Domestic Glass	Indet. Object: Body	Amber Glass	ABM (Non-Owens)	1917-2013	1	1.4

16-Dec-13

I-64 Widening Phase I Historic Inventory

Context	Class	Attribute 1	Attribute 2	Attribute 3	Comments	Qty	Wt (g)
STP T02 W Rad E737.5	Zn I 0-10 cmbgs N1015	Misc. Domestic Glass	Indet. Object: Body	Colorless, Amethyst Tint Glass	Machine-made	1880-1917	1 3.3
STP T02 W Rad E737.5	Zn I 0-10 cmbgs N1015	Misc. Domestic Glass	Indet. Object: Body	Colorless, Clear Glass	Machine-made		4 15.2
STP T02 W Rad E737.5	Zn I 0-10 cmbgs N1015	Misc. Domestic Glass	Indet. Object: Indet. Portion	Colorless, Clear Glass	Machine-made		1 2.4
STP T02 W Rad E737.5	Zn I 0-10 cmbgs N1015	Misc. Domestic Glass	Indet. Object: Rim, Body	Colorless, Clear Glass	Machine-made		1 22.1
STP T02 W Rad Total:						12	175.9
44CS0318 Site Total:						143	1588.3
IF 01							
STP E02	Strat I 0-10 cmbgs N1000 E1000	Misc. Ceramic	Refined White Earthenware	Indet. Form			1 0.9
STP E02 Total:						1	0.9
IF 01 Site Total:						1	0.9
IF 02							
GSC	0-0 cmbgs, Located on Lane 5 at 25m	Ceramic Cookware/Storage	Hollowware: Body	Stonew., Ame. Salt-glazed	Plain	1750-1920	1 7.1
GSC Total:						1	7.1
IF 02 Site Total:						1	7.1
Survey Total:						195	1778.2

APPENDIX B. VCRIS FORMS

Snapshot

Date Generated: November 12, 2013

Site Name: No Data
Site Classification: Terrestrial, open air
Year(s): 1873 - 1901
Site Type(s): Cemetery, Dwelling, single, Farmstead
Other DHR ID: 131-5612
Temporary Designation: No Data

Site Evaluation Status

Not Evaluated

Locational Information

USGS Quad: NORFOLK SOUTH
County/Independent City: Chesapeake (Ind. City)
Physiographic Province: Coastal Plain
Elevation: 4
Aspect: Facing North
Drainage: James
Slope: 2 - 6
Acreage: 3.380
Landform: Terrace, Low Marine
Ownership Status: Private
Government Entity Name: No Data

Site Components

Component 1

Category: Domestic
Site Type: Dwelling, single
Cultural Affiliation: Euro-American
DHR Time Period: Reconstruction and Growth, World War I to World War II
Start Year: No Data
End Year: No Data

Comments: Oct. 2013 - This is the component associated with the Johnson-Moore family occupation and use of the land in the last quarter of the nineteenth century and the first quarter of the 20th century. The site has been impacted severely by the construction of a nearby neighborhood since 1997, as well as continued use for road maintenance and maintenance of the two billboards that flank the site. The Boutelle 1912 map of the southern branch of the Elizabeth depicts a structure attributed to the Johnson family, as well as the cemetery in this location.

Component 2

Category: Domestic
Site Type: Farmstead
Cultural Affiliation: Euro-American
DHR Time Period: The New Dominion
Start Year: No Data
End Year: No Data

Comments: Oct. 2013 - There are some above ground features located in the northern section of the site area that were not recorded in 1997 during the original survey due to the constraints of their project area. There is a large concrete scatter, a small cinder block and poured concrete foundation, two exposed water pipes, wooden fencing, and some very large concrete boulders. These features are associated with the mid-twentieth century agricultural use of the property and not associated with the earlier Johnson-Moore family occupation.

Component 3

Category: Funerary
Site Type: Cemetery

Cultural Affiliation:	Euro-American
DHR Time Period:	Reconstruction and Growth
Start Year:	1873
End Year:	1901
Comments:	Oct. 2014 - The Moore-Johnson cemetery is located on the northeastern edge of the site boundaries for 44CS0236. The land immediately to the north and east of the cemetery slopes slightly into a very swampy area covered with thick bamboo. A tall chain link fence surrounds the marked cemetery. Currently, 6 marked graves are visible within the cemetery. The six markers have death dates ranging from 1873 to 1901. All of the graves are oriented east to west. No visible depressions were noted during the original survey in 1997, or during the current survey. The area within the marked cemetery is heavily overgrown, however, and not well-maintained. Conch shells were observed in association with three of the graves during the original survey (1997). This observation was confirmed during the current survey (2013), though many of the shells are cracked and crumbling.

Bibliographic Information

Bibliography:

Hinks, Stephen, Martin T. Fuess, Denise L. Grantz, KellyLynn L. Rudolph, and Regina J. Hart
1998 Archaeological Survey, I-64 Widening from I-464 to I-264, City of Chesapeake, Virginia. Prepared for the Virginia Department of Transportation by Michael Baker Jr., Inc.

Informant Data:

Name: Unknown
Company 1: Norfolk Stell Corporation
Address 1: 1500 Steel Street
City: Chesapeake
State: Virginia
ZIP: 23323
Phone 1: 757-485-0600
Owner Relationship: Owner of property

CRM Events

Event Type: Survey:Phase I

Project Staff/Notes:

Archaeology: Daniel Baicy
Architecture: Hallie Hearnes
Supervisors: Kay Simpson (Arch), Alan Higgins (Architecture)

Project Review File Number: 2013-0971

Sponsoring Organization: No Data

Organization/Company: Cultural Resource Analysts, Inc.

Investigator: Daniel Baicy

Survey Date: 9/9/2013

Survey Description:

From September 9 to October 4, 2013, Cultural Resource Analysts, Inc. (CRA), conducted a cultural resources survey in association with the proposed I-64 widening project and high rise bridge replacement project in Chesapeake County, Virginia, for WRA, Inc. on behalf of the Virginia Department of Transportation (VDOT) in conjunction with VDOT Project No.: 0064-131-783, P101.

The area of potential effect (APE) for the archaeological survey encompasses 30.5 m (100 ft) off of pavement on either side of I-64 from its intersection with I-264 to the intersection with I-464. The study corridor changes to 183.5 m (600 ft) off of pavement on either side of the current High Rise Bridge. There were also four Interchanges, which had a study corridor consisting of a 457.2 meter (1500 ft) radius from a center point at each exit off of I-64 between the two aforementioned intersections.

The project area is extremely urban and very poorly drained with small pockets of well-drained soils and undeveloped land. Two previously recorded sites were revisited and two new sites were recorded.

Current Land Use	Date of Use	Comments
Cemetery	11/11/2013	Moore-Johnson Family Cemetery located on site.
Dwelling, multiple	10/4/2013	A new neighborhood has impacted the borders of the site.
Other	10/4/2013	Two modern billboards flank the site and the gravel roads that have been improved to grant access to these have impacted the site.

Threats to Resource: Development, Neglect, Transportation Expansion

Site Conditions: 75-99% of Site Destroyed

Survey Strategies: Historic Map Projection, Observation, Subsurface Testing

Specimens Collected: Yes

Specimens Observed, Not Collected: No

Artifacts Summary and Diagnostics:

Oct 2013: Shovel tests yielded a total of 43 artifacts (176.9 g) from the site, all recovered from Stratum I.

The artifact assemblage consists of 33 glass fragments, 3 ceramic fragments, and 7 architecture and construction related artifacts. The diagnostic glass artifacts consist of 2 fragments of colorless press molded glass with Jeanette Glass Company's Holiday Button and Bows pattern (1947-1959), one fragment of contact molded colorless glass (1790-1900), 1 fragment machine made colorless glass with non-slip stippling (1939-Present), and 1 fragment of press molded colorless glass (1825-Present). The diagnostic ceramic artifacts consist of a single fragment of ironstone (1850-present). The remaining architecture and construction related artifacts consist of an iron machine-made hexagonal nut, a fragment of coal, and five brick fragments, 1 of which exhibits characteristics of machine-made brick (1900-2013).

Summary of Speciment Observed, Not Collected:

No Data

Current Curation Repository: CRAI KY Lab

Permanent Curation Repository: VDHR

Field Notes: Yes

Field Notes Repository: VDHR

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

AN ARCHAEOLOGICAL SURVEY OF THE I-64 WIDENING AND HIGH RISE BRIDGE REPLACEMENT PROJECT, CITY OF CHESAPEAKE, VIRGINIA

Baicy, Daniel

VDOT Project No.: 0064-131-783, P101

UPC No.: 104366

Federal Project No.: NH-IM-064-3(481)

VDHR Review No.: 2013-0971

Survey Report Repository: VDHR

DHR Library Reference Number:

No Data

Significance Statement:

Oct. 2013: Aside from the artifacts, five features were recorded in the northern portion of the site area. These features are likely the remnants of an outbuilding associated with farming activities, probably for feeding and watering livestock, during the early 20th century. The features were not recorded during the original site recordation in 1998 due the smaller APE for that project. Feature 1 is a 5m x 10m (ft) scatter of concrete debris. Feature 2 is a metal plumbing pipe protruding from the ground. Feature 3 is the edge of a buried concrete and cinder block foundation or pad that runs along the edge of a line of wooden fence posts. Probes and shovel testing measure the concrete pad at approximately 15 m x 15m square. Feature 4 is another metal plumbing pipe, similar to Feature 2. Finally, Feature five is a pair of very large chunks of the concrete.

This site appears to be a domestic artifact scatter dating to the first half of the twentieth century, likely representing dumping activities associated with agricultural use of the area. The component of the site attributed to the Johnson family occupation of the site that was recorded in 1998 has largely been destroyed by a new neighborhood to the north and maintenance activities associated with the two billboards that flank the site. The marked portion Moore-Johnson cemetery, however, has not been impacted by the disturbances, though it has not been well-maintained.

Site 44CS0236 is a historic domestic scatter dating from the last half of the 19th century to the mid-twentieth century. The site also contains the Johnson Moore Family cemetery, which contains 6 marked graves. The site and cemetery were recorded during a Phase I survey in 1998 (Hinks 1998) and revisited during the current survey. The site has been significantly damaged by a recently constructed neighborhood and improvements to a gravel path used to maintain the two billboards that flank the site. CRA recommends that the archaeological site associated with this resource, 44CS0236, is also not eligible for listing in the NRHP. The site lacks a diverse and robust artifact assemblage and has very low subsurface integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). There are no associations with significant persons (Criterion B), and the deposits do not illustrate the distinctive characteristics of a type, period, or method of construction (Criterion C). Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D). The cemetery associated with this site is not associated with an important historical event, nor does it contain graves of individuals of transcendent importance. The grave markers do not demonstrate any particularly distinctive characteristics with regard to design or style and therefore does not meet the qualification for eligibility under Criteria Considerations C and D governing cemeteries.

Surveyor's Eligibility Recommendations:

Recommended Not Eligible

Surveyor's NR Criteria Recommendations, :

No Data

Surveyor's NR Criteria Considerations:

No Data

Event Type: Survey:Phase I/Reconnaissance

Project Staff/Notes:

No Data

Project Review File Number:

No Data

Sponsoring Organization:

No Data

Organization/Company:

Unknown (DSS)

Investigator:

Michael Baker Jr. Inc.-Stephen Hink

Survey Date:

5/1/1997

Survey Description:

Survey was conducted in association with proposed widening of the adjacent I-64. The entire proposed right-of-way expansion area was tested by excavating probes at 23m (75 ft.) intervals along transects spaced 23m (75 ft.) apart; radial probes were excavated around several positive probes. All excavated probes were screened for artifacts. Field notes and a site map were prepared. An ca. 1873-1901 family cemetery also was documented. The site area was photographed.

Much of the site area has been plowed, portions have been bulldozed, with some areas of munded dirt evident. Two modern billboards have been erected within the site area. In addition, portion of the site are covered with tires, plastic and other modern debris.

Current Land Use	Date of Use	Comments
Forest	No Data	Woods and meadow
Threats to Resource:		No Data
Site Conditions:		25-49% of Site Destroyed
Survey Strategies:		Historic Map Projection
Specimens Collected:		Yes
Specimens Observed, Not Collected:		Yes
Artifacts Summary and Diagnostics:		

A total of 107 historic artifacts were recovered, including 57 pieces of glass, 8 ceramic sherds, 32 pieces of metal, and 10 miscellaneous artifacts. These artifacts typically date from the early to mid-twentieth century. An inventory is attached.

Summary of Specimen Observed, Not Collected:

No Data

Current Curation Repository:	VDHR
Permanent Curation Repository:	No Data
Field Notes:	Yes
Field Notes Repository:	VDHR
Photographic Media:	No Data
Survey Reports:	No Data

Survey Report Information:

Hinks, Stephen, Fuess, Martin T., Grantz, Denise L., Rudolph, Kelly Lynn and Hart, Regina, 1997
Phase I Archaeological Survey, I-64 Widening from I-464 to I-264, City of Chesapeake, Virginia. Submitted
by Michael Baker Jr. Inc. to the Va. Dept. of Transportation, Richmond, Virginia.

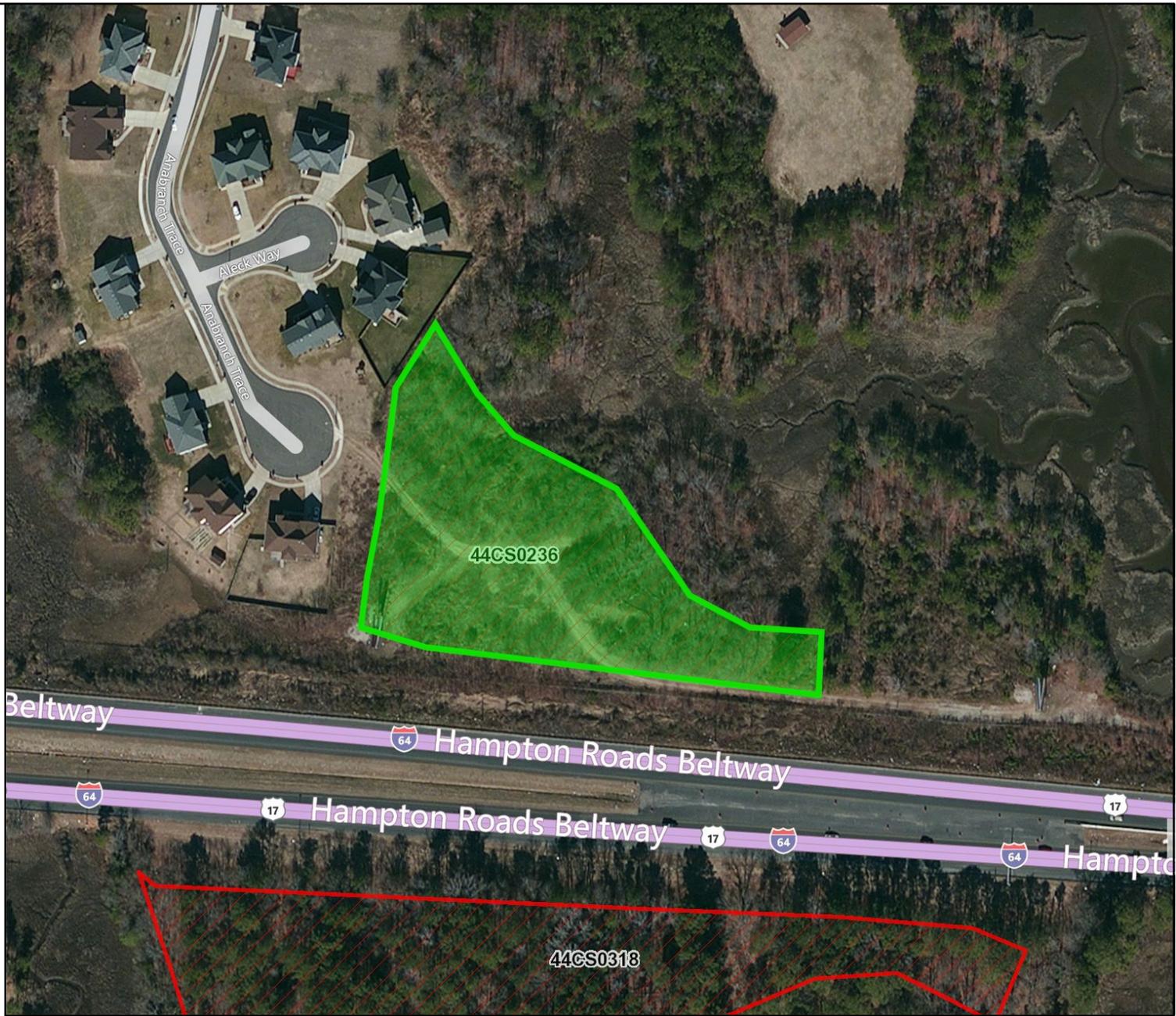
Boutelle, J. B. 1912
Elizabeth River-Southern Branch, Norfolk to Dismal Swamp Canal. U.S. Department of Commerce and Labor, Coast and Geodetic Survey, T chart
3249. U.S. Coast and Geodetic Survey, Record Group 37, National Archives, Washington, D.C.

Survey Report Repository:	VDOT
DHR Library Reference Number:	No Data
Significance Statement:	No Data
Surveyor's Eligibility Recommendations:	No Data
Surveyor's NR Criteria Recommendations, :	No Data
Surveyor's NR Criteria Considerations:	No Data



Legend

-  Architecture Resources
-  Architecture Labels
-  Individual Historic District Properties
-  Archaeological Resources
-  Archaeology Labels
-  USGS GIS Place names
-  County Boundaries



Title: Archaeological Resources

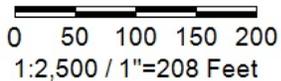
Date: 11/12/2013

DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.

Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.



Feet



Snapshot

Date Generated: November 12, 2013

Site Name: No Data
Site Classification: Terrestrial, open air
Year(s): 1875 - 1899
Site Type(s): Artifact scatter
Other DHR ID: No Data
Temporary Designation: No Data

Site Evaluation Status

Not Evaluated

Locational Information

USGS Quad: NORFOLK SOUTH
County/Independent City: Chesapeake (Ind. City)
Physiographic Province: Coastal Plain
Elevation: 7
Aspect: Facing North
Drainage: James
Slope: 2 - 6
Acreage: 1.370
Landform: Terrace, Low Marine
Ownership Status: Private
Government Entity Name: No Data

Site Components

Component 1

Category: Domestic
Site Type: Artifact scatter
Cultural Affiliation: Euro-American
DHR Time Period: 19th Century: 4th quarter
Start Year: 1875
End Year: 1899
Comments: April 1997: Trash scatter.

Bibliographic Information

Bibliography:

AN ARCHAEOLOGICAL SURVEY OF THE I-64 WIDENING AND HIGH RISE BRIDGE REPLACEMENT PROJECT, CITY OF CHESAPEAKE, VIRGINIA

Baicy, Daniel

Informant Data:

Name: Unknown
Company 1: Boyce-Widner Ltd.
Company 2: c/o Robert G. McDonald
Address 1: 620 Cedar Road
City: Chesapeake
State: Pennsylvania
ZIP: 15108
Phone 1: 757-547-8952
Owner Relationship: Owner of property

CRM Events

Event Type: Survey:Phase I

Project Staff/Notes:

Archaeology: Daniel Baicy
Architecture: Hallie Hearn
Supervisors: Kay Simpson (Arch), Alan Higgins (Architecture)

Project Review File Number: 2013-0971

Sponsoring Organization: No Data

Organization/Company: Cultural Resource Analysts, Inc.

Investigator: Daniel Baicy

Survey Date: 9/9/2013

Survey Description:

From September 9 to October 4, 2013, Cultural Resource Analysts, Inc. (CRA), conducted a cultural resources survey in association with the proposed I-64 widening project and high rise bridge replacement project in Chesapeake County, Virginia, for WRA, Inc. on behalf of the Virginia Department of Transportation (VDOT) in conjunction with VDOT Project No.: 0064-131-783, P101.

The area of potential effect (APE) for the archaeological survey encompasses 30.5 m (100 ft) off of pavement on either side of I-64 from its intersection with I-264 to the intersection with I-464. The study corridor changes to 183.5 m (600 ft) off of pavement on either side of the current High Rise Bridge. There were also four Interchanges, which had a study corridor consisting of a 457.2 meter (1500 ft) radius from a center point at each exit off of I-64 between the two aforementioned intersections.

The project area is extremely urban and very poorly drained with small pockets of well-drained soils and undeveloped land. Two previously recorded sites were revisited and two new sites were recorded.

Current Land Use	Date of Use	Comments
Other	10/4/2013	Wooded buffer between Neighborhood and I-64
Threats to Resource:		Development, Transportation Expansion
Site Conditions:		50-74% of Site Destroyed, 75-99% of Site Destroyed
Survey Strategies:		Historic Map Projection, Subsurface Testing
Specimens Collected:		Yes
Specimens Observed, Not Collected:		No

Artifacts Summary and Diagnostics:

Oct. 2013: Shovel tests yielded a total of 7 artifacts (5.1 g) from the site, all recovered from Stratum I.

The domestic assemblage consists of one fragment of ironstone (1850–present), 1 fragment of hand-painted polychrome whiteware (1830-1920), 1 fragment of blue shell-edged whiteware (1800-1830), 1 fragment of unidentified refined earthenware, 1 fragment of curved amethyst glass (1880-1917), 1 fragment of colorless window pane glass, and a single fragment of faunal bone.

Summary of Speciment Observed, Not Collected:

No Data

Current Curation Repository: CRA, Inc.

Permanent Curation Repository: DHR

Field Notes: Yes

Field Notes Repository: DHR

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

AN ARCHAEOLOGICAL SURVEY OF THE I-64 WIDENING AND HIGH RISE BRIDGE REPLACEMENT PROJECT, CITY OF CHESAPEAKE, VIRGINIA

Baicy, Daniel

VDOT Project No.: 0064-131-783, P101

UPC No.: 104366

Federal Project No.: NH-IM-064-3(481)

VDHR Review No.: 2013-0971

Survey Report Repository: VDHR

DHR Library Reference Number: No Data

Significance Statement: Oct. 2013: This site appears to be a domestic artifact scatter dating to the early nineteenth to mid-twentieth-century, likely representing dumping activities associated with the nearby historic dwellings and land use depicted on various historic maps throughout the nineteenth and twentieth centuries. The site has seen extensive impact since the original recording

episode in 1998 and has largely been destroyed.

Site 44CS0237 is a very small historic domestic scatter dating the last half of the 19th century to the mid-twentieth century. The site was originally recorded during a Phase I survey in 1998 (Hinks 1998) and revisited during the current survey. The site has been significantly damaged by maintenance of I-64, a small neighborhood, and significant water management activities. CRA recommends that the archaeological site, 44CS0237, is also not eligible for listing in the NRHP. The site lacks a diverse and robust artifact assemblage and has very low subsurface integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). There are no associations with significant persons (Criterion B), and the deposits do not illustrate the distinctive characteristics of a type, period, or method of construction (Criterion C). Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D).

Surveyor's Eligibility Recommendations: Recommended Not Eligible
Surveyor's NR Criteria Recommendations, : No Data
Surveyor's NR Criteria Considerations: No Data

Event Type: Survey:Phase I/Reconnaissance

Project Staff/Notes:

No Data

Project Review File Number: No Data
Sponsoring Organization: No Data
Organization/Company: Unknown (DSS)
Investigator: Michael Baker Jr.Inc.-Stephen Hinks
Survey Date: 4/1/1997

Survey Description:

Survey was conducted in association with proposed widening of I-64, which lies adjacent to the site. The entire proposed right-of-way expansion area was tested by excavating probes at 23m (75 ft.) intervals along transects spaced 23m (75 ft.) apart; radial probes were excavated around several positive probes. All excavated soils were screened for artifacts. Field notes and a site map were prepared, and the site area was photographed.

The identified site area has been plowed. The artifacts that form the site apparently are associated with one or two houses that formerly stood on the opposite side of the existing I-64; all that survives within the identified site area is a narrow swath of peripheral sheet refuse.

Current Land Use	Date of Use	Comments
Forest	No Data	Woodland

Threats to Resource: No Data
Site Conditions: 50-74% of Site Destroyed
Survey Strategies: Historic Map Projection
Specimens Collected: Yes
Specimens Observed, Not Collected: Yes

Artifacts Summary and Diagnostics:

A total of 56 historic artifacts were recovered from the site, comprised of 40 glass artifacts, 11 ceramic sherds, 3 brick fragments, and 2 pieces of metal. These artifacts generally date from the late nineteenth and early twentieth century, with a few dating earlier. An inventory is attached.

Summary of Speciment Observed, Not Collected:

No Data

Current Curation Repository: VDHR
Permanent Curation Repository: No Data
Field Notes: Yes
Field Notes Repository: VDHR
Photographic Media: No Data
Survey Reports: No Data

Survey Report Information:

Hinks, Stephen, Fuess, Martin T., Grantz, Denise L., Rudolph, Kelly Lynn and Hart, Regina J. 1997
 Phase I Archaeological Survey, I-64 Widening from I-464 to I-264, City of Chesapeake, Virginia. Submitted by Michael Baker Jr.,Inc. Coraopolis, Pennsylvania, to the Virginia Department of Transportation, Richmond, Virginia.

Boutelle, J.B. 1912
 Elizabeth River-Southern Branch, Norfolk to Dismal Swamp Canal. U.S. Department of Commerce and Labor, Coast and Geodetic Survey, T chart 3249. U.S. Coast and Geodetic Survey, Record Group 37, National Archives, Washington, D.C.

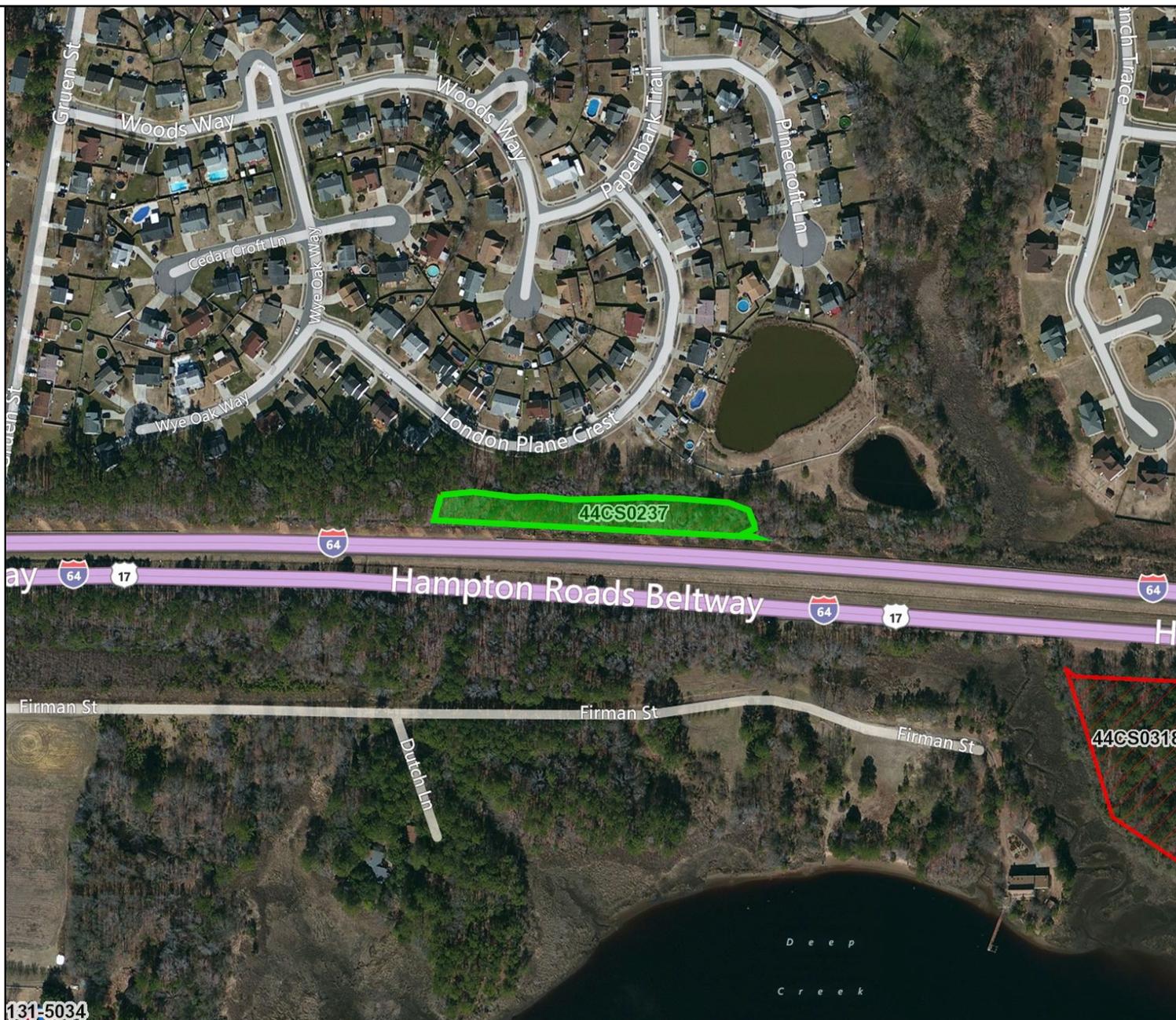
Survey Report Repository: VDOT

DHR Library Reference Number:	No Data
Significance Statement:	No Data
Surveyor's Eligibility Recommendations:	No Data
Surveyor's NR Criteria Recommendations, :	No Data
Surveyor's NR Criteria Considerations:	No Data

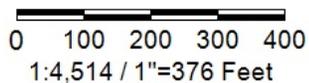


Legend

- Architecture Resources
- Architecture Labels
- Individual Historic District Properties
- Archaeological Resources
- Archaeology Labels
- USGS GIS Place names
- County Boundaries



Feet



Title: Archaeological Resources

Date: 11/12/2013

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Snapshot

Date Generated: November 12, 2013

Site Name: Garnes Family Cemetery
Site Classification: Terrestrial, open air
Year(s): 1920 - 1962
Site Type(s): Cemetery
Other DHR ID: 131-5554
Temporary Designation: CRAI-05

Site Evaluation Status

Not Evaluated

Locational Information

USGS Quad: NORFOLK SOUTH
County/Independent City: Chesapeake (Ind. City)
Physiographic Province: Coastal Plain
Elevation: 9
Aspect: Flat
Drainage: James
Slope: 0 - 2
Acreage: 0.010
Landform: Urban
Ownership Status: Private
Government Entity Name: No Data

Site Components

Component 1

Category: Funerary
Site Type: Cemetery
Cultural Affiliation: Euro-American
DHR Time Period: The New Dominion, World War I to World War II
Start Year: 1920
End Year: 1962
Comments: Cemetery. Marked death dates are 1920, 1942, and 1962

Bibliographic Information

Bibliography:

AN ARCHAEOLOGICAL SURVEY OF THE I-64 WIDENING AND HIGH RISE BRIDGE REPLACEMENT PROJECT, CITY OF CHESAPEAKE, VIRGINIA

Baicy, Daniel

Informant Data:

No Data

CRM Events

Event Type: Survey:Phase I

Project Staff/Notes:

Archaeology: Daniel Baicy
 Architecture: Hallie Hearnes
 Supervisors: Kay Simpson (Arch), Alan Higgins (Architecture)

Project Review File Number: 2013-0971

Sponsoring Organization: No Data

Organization/Company: Cultural Resource Analysts, Inc.

Investigator: Daniel Baicy

Survey Date: 9/9/2013

Survey Description:

From September 9 to October 4, 2013, Cultural Resource Analysts, Inc. (CRA), conducted a cultural resources survey in association with the proposed I-64 widening project and high rise bridge replacement project in Chesapeake County, Virginia, for WRA, Inc. on behalf of the Virginia Department of Transportation (VDOT) in conjunction with VDOT Project No.: 0064-131-783, P101.

The area of potential effect (APE) for the archaeological survey encompasses 30.5 m (100 ft) off of pavement on either side of I-64 from its intersection with I-264 to the intersection with I-464. The study corridor changes to 183.5 m (600 ft) off of pavement on either side of the current High Rise Bridge. There were also four Interchanges, which had a study corridor consisting of a 457.2 meter (1500 ft) radius from a center point at each exit off of I-64 between the two aforementioned intersections.

The project area is extremely urban and very poorly drained with small pockets of well-drained soils and undeveloped land. Two previously recorded sites were revisited and two new sites were recorded.

Current Land Use	Date of Use	Comments
Other	10/4/2013	Deep Creek Middle School

Threats to Resource: None Known

Site Conditions: Site Condition Unknown

Survey Strategies: Observation

Specimens Collected: No

Specimens Observed, Not Collected: No

Artifacts Summary and Diagnostics:

No Data

Summary of Speciment Observed, Not Collected:

No Data

Current Curation Repository: No Data

Permanent Curation Repository: No Data

Field Notes: Yes

Field Notes Repository: DHR

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

AN ARCHAEOLOGICAL SURVEY OF THE I-64 WIDENING AND HIGH RISE BRIDGE REPLACEMENT PROJECT, CITY OF CHESAPEAKE, VIRGINIA

Baicy, Daniel

VDOT Project No.: 0064-131-783, P101

UPC No.: 104366

Federal Project No.: NH-IM-064-3(481)

VDHR Review No.: 2013-0971

Survey Report Repository: VDHR

DHR Library Reference Number: No Data

Significance Statement: Site CRAI-05 represents a very small family cemetery located on the Deep Creek Middle School campus in the Interchange 3 study area. The cemetery is located northeast of the main administrative building for the school, immediately adjacent to the football field/running track. The cemetery is enclosed by a chain link fence and has a locking gate. The grounds are well kept and mowed regularly. There are two large trees within the borders of the marked cemetery and one immediately adjacent to the northern fence.

The cemetery contains three marked graves, all of which are oriented east to west. A pair of

granite headstones (G2 and G3) rest on the same slab and are attributed to James W. Garnes (1888-1962) and Cora M. Garnes (1891-1942). The headstones flank a small granite urn. A single granite headstone is immediately to the east and the first name is no longer legible, but the last name is "Garnes". The inscription reads, "Born Dec. 13, 1918. Died Dec. 21, 1920" and likely is the child of James and Cora. This headstone has a footer associated with it incised with the initials "ME". There are no obvious depressions in the immediate vicinity of the marked graves, nor outside the fence. But, the grading episodes to contour the track and playing field have removed potential evidence of unmarked burials.

The significance of this site was evaluated in relation to the NRHP eligibility criteria. The site was evaluated with regard to Criterion A for its association with events that have made a significant contribution to the broad patterns of our history, with regard to Criterion B for its association with people significant in our nation's history, with regard to Criterion C for its embodiment of the distinctive characteristics of a style, and with regard to Criterion D for the potential to yield information important in history. Additionally, the Garnes Family Cemetery (Site CRAI-05) was evaluated in relation to special requirements of National Register Criteria Consideration C and D governing cemeteries.

CRA recommends the site as not eligible for inclusion in the NRHP, as the cemetery is not associated with an important historical event, nor does it contain graves of individuals of transcendent importance. The grave markers do not demonstrate any particularly distinctive characteristics with regard to design or style. Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory, and the cemetery does not meet the qualification for eligibility under Criteria Consideration D.

Surveyor's Eligibility Recommendations:

Surveyor's NR Criteria Recommendations, :

Surveyor's NR Criteria Considerations:

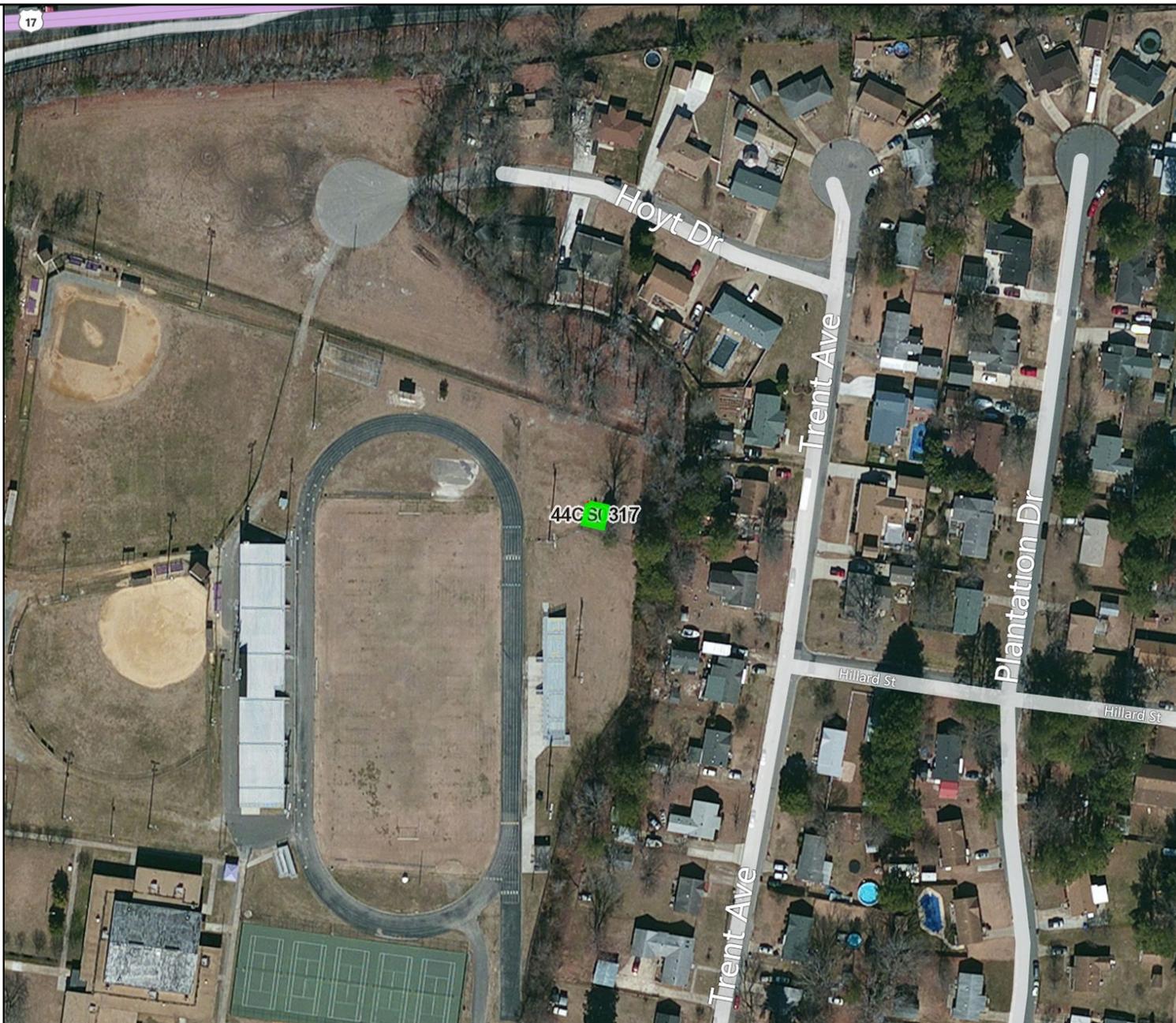
Recommended Not Eligible

No Data

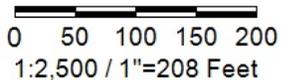
No Data

Legend

- Architecture Resources
- Architecture Labels
- Individual Historic District Properties
- Archaeological Resources
- Archaeology Labels
- USGS GIS Place names
- County Boundaries



Feet



Title: Archaeological Resources

Date: 11/12/2013

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Snapshot

Date Generated: November 12, 2013

Site Name: No Data
Site Classification: Terrestrial, open air
Year(s): No Data
Site Type(s): Artifact scatter
Other DHR ID: No Data
Temporary Designation: CRAI-07

Site Evaluation Status

Not Evaluated

Locational Information

USGS Quad: NORFOLK SOUTH
County/Independent City: Chesapeake (Ind. City)
Physiographic Province: Coastal Plain
Elevation: 7
Aspect: Flat
Drainage: James
Slope: 0 - 2
Acreage: 7.790
Landform: Terrace, Low Marine
Ownership Status: Private
Government Entity Name: No Data

Site Components

Component 1

Category: Domestic
Site Type: Artifact scatter
Cultural Affiliation: Euro-American
DHR Time Period: Antebellum Period, Civil War, Reconstruction and Growth, The New Dominion, World War I to World War II
Start Year: No Data
End Year: No Data
Comments: Large historic artifact scatter with a large date ranges for a variety of domestic items. Possibly secondary deposit, or more likely deposits from nearby historic locations 44CS0236, 44CS0237, and historic structures depicted on several historic maps and topographic quads in the area and separated from their original contexts by I-64

Bibliographic Information

Bibliography:

Soederquist, Lieut. Oscar
1983 Military Map of Suffolk and Vicinity for Brig. Gen. E.L. Viele. In The Official Military Atlas of the Civil War, by Major George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, Plate XXVI, 4. Compiled by Captain Calvin D. Cowles, Gramercy Books, New York: Originally published: Atlas to Accompany the Official Records of the Union and Confederate Armies. Government Printing Office, Washington D.C., 1891-1895.

Informant Data:

No Data

CRM Events

Event Type: Survey:Phase I

Project Staff/Notes:

Archaeology: Daniel Baicy
 Architecture: Hallie Hearnes
 Supervisors: Kay Simpson (Arch), Alan Higgins (Architecture)

Project Review File Number: 2013-0971

Sponsoring Organization: No Data

Organization/Company: Cultural Resource Analysts, Inc.

Investigator: Daniel Baicy

Survey Date: 9/9/2013

Survey Description:

From September 9 to October 4, 2013, Cultural Resource Analysts, Inc. (CRA), conducted a cultural resources survey in association with the proposed I-64 widening project and high rise bridge replacement project in Chesapeake County, Virginia, for WRA, Inc. on behalf of the Virginia Department of Transportation (VDOT) in conjunction with VDOT Project No.: 0064-131-783, P101.

The area of potential effect (APE) for the archaeological survey encompasses 30.5 m (100 ft) off of pavement on either side of I-64 from its intersection with I-264 to the intersection with I-464. The study corridor changes to 183.5 m (600 ft) off of pavement on either side of the current High Rise Bridge. There were also four Interchanges, which had a study corridor consisting of a 457.2 meter (1500 ft) radius from a center point at each exit off of I-64 between the two aforementioned intersections.

The project area is extremely urban and very poorly drained with small pockets of well-drained soils and undeveloped land. Two previously recorded sites were revisited and two new sites were recorded.

Current Land Use	Date of Use	Comments
Other	11/11/2013	Currently a wooded area buffer between I-64 and Deep Creek
Threats to Resource:		Transportation Expansion
Site Conditions:		0-24% of Site Destroyed
Survey Strategies:		Historic Map Projection, Observation, Subsurface Testing
Specimens Collected:		Yes
Specimens Observed, Not Collected:		No

Artifacts Summary and Diagnostics:

Shovel tests yielded a total of 143 artifacts (1588.3 g) from the site, all recovered from Stratum I.

The domestic/miscellaneous assemblage consists of 53 glass artifacts and 48 ceramic artifacts. The diagnostic glass artifacts consist of 5 fragments of curved amethyst glass (1880-1917), 1 fragment of machine-made colorless glass (1920-Present), 1 base fragment of colorless blown in mold glass (1944-1979), 1 fragment of colorless glass with a cap seat finish (1880-Present), and 12 fragments of Non-Owens glass of green, amber, and colorless tint(1917-Present).

The diagnostic ceramics consist of, 1 fragment of clear lead glazed redware (1700-1900), 2 undecorated fragments of creamware (1762-1820), 6 fragments of undecorated whiteware (1820-2000), 1 fragment of hand-painted whiteware (1820-2000), 1 fragment of flow blue decorated whiteware (1840-1900), 5 fragments of blue transfer print whiteware (1820-2000), 1 fragment of black transfer print whiteware (1820-2000), 4 fragments of undecorated ironstone (1840-2000), 1 fragment of two color transfer print ironstone (1840-2000), and 2 fragments of semi-porcelain with a Warwick maker's mark (1944). A single brass sew-through button with "ROBINSONS / * ATTLEBORO *" incised on the body was recovered. The button (1826-1848) was manufactured by a family factory in Attleboro, Massachusetts that specialized in gilt buttons, brass buttons with so little zinc mixed with the copper that they looked like gold. A "wheat" penny was also recovered with the mint date of 1939. A total of 41 artifacts from the architecture, construction, fuel, and furnishings group were recovered. The diagnostic artifacts consist of 11 fragments of window pane glass (1815-1906), 1 lamp chimney of amethyst glass(1880-1917), and 1 wrought iron nail (1790-1890).

Summary of Speciment Observed, Not Collected:

No Data

Current Curation Repository: CRAI-KY LAB

Permanent Curation Repository: VDHR

Field Notes: Yes

Field Notes Repository: VDHR

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

AN ARCHAEOLOGICAL SURVEY OF THE I-64 WIDENING AND HIGH RISE BRIDGE REPLACEMENT PROJECT, CITY OF CHESAPEAKE, VIRGINIA

Baicy, Daniel

VDOT Project No.: 0064-131-783, P101

UPC No.: 104366

Federal Project No.: NH-IM-064-3(481)
VDHR Review No.: 2013-0971

Survey Report Repository:

VDHR

DHR Library Reference Number:

No Data

Significance Statement:

This site appears to be a domestic artifact scatter dating to the first half of the eighteenth century through the mid-twentieth century likely representing refuse disposal activities associated with the nearby historic dwellings. A house attributed to a M. Martin is depicted nearby to the west of the site area on the Civil War era Soederquist map. A portion of the project area, particularly the concentration of artifacts in the southwestern portion of the site may be attributed to outbuildings and activities associated with the M. Martin occupation of the area. The creamware fragments (1762-1820), wrought iron nail (1790-1890), the brass button (1826-1848) and the majority of the decorated whiteware fragments (1820-2000) were recovered from between E1000 and E910. These artifacts, however, were located in the same mixed A-horizon as much more modern glass and ceramics. The site area has clearly been subject to earth-moving activities associated with the I-64 corridor, nearby bridge construction, dredging of the mouth of Deep Creek, and logging. There is very little to zero potential for intact subsurface features.

It is also possible that some material from the Johnson-Moore late nineteenth century occupation of Site 44CS0236, which is located across I-64 to the north, may be present and deposited from its original location during the construction of the bridge and Interstate.

Site CRAI-07 is a historic domestic scatter dating from the mid-eighteenth century through the mid-twentieth century. The site has been impacted by logging, dredging of Deep Creek, and construction of I-64 and the High Rise Bridge. CRA recommends that the archaeological site, CRAI-07, is also not eligible for listing in the NRHP. The site lacks a diverse and robust artifact assemblage and has very low subsurface integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). There are no associations with significant persons (Criterion B), and the deposits do not illustrate the distinctive characteristics of a type, period, or method of construction (Criterion C). Additionally, the site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D).

Surveyor's Eligibility Recommendations:

Recommended Not Eligible

Surveyor's NR Criteria Recommendations, :

No Data

Surveyor's NR Criteria Considerations:

No Data

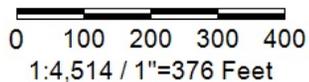


Legend

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APPENDIX C. GEOARCHAEOLOGICAL LANDSCAPE ANALYSES

**Phase I Geoarchaeological Landscape Analyses for the
Proposed I-64 Road Widening and
High Rise Bridge Replacement Project,
City of Chesapeake, VA**

For

Cultural Resource Analysts, Inc.
PO Box 71120
Richmond, VA 23255

Submitted By

Daniel R. Hayes
Hayes & Monaghan, Geoarchaeologists LLC
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November 14, 2013

Introduction

This geoarchaeological landscape analysis of the Proposed I-64 Road Widening and High Rise Bridge Replacement Project, located in the City of Chesapeake, Virginia, reviews published sources (map and technical reports) regarding the study area, as well as the results and observations of Phase I reconnaissance efforts conducted by field archaeologists. Altogether these investigations found little potential or evidence for processes that may deeply bury archaeological sites with two exceptions: 1) historic-age fill deposits such as those associated with original road and bridge construction and dredge spoil, and 2) Holocene-age organic-rich sediment accumulated within present-day drainages (estuaries and marshes) that aggraded with steadily rising sea levels. Effective methods of evaluating fill deposits could include mechanical deep testing (below the effective range of shovel tests); regarding estuarine/marsh deposits (all below water table) mechanical extraction of deep cores may provide a depositional record of accumulated sediments, including archaeological inputs.

Study area Geomorphology, Sediments and Soils

This section of I-64 corridor is located within the Coastal Plain physiographic province, in a relatively level section bounded to the north, east and west by estuarine tributary extensions of the James River (including the Elizabeth River and its tributary Western and Southern branches), and south by the Great Dismal Swamp. The Coastal Plain consists of sediments deposited during pre-existing high stands of the sea in marine, estuarine, fluvial and eolian depositional environments. These high stands resulted primarily from fluctuating, world-wide volumes of continental glacial ice that occurred during the Late Tertiary and subsequent Quaternary Periods (Toscano 1992)¹.

During the last major interglacial high stand of the sea (late-Pleistocene Stage 5 “Sangamon Interglacial” a “warm” period ~125 kyBP) transgressive sea levels stood approximately 16-20 ft (5-6m) higher than present (Toscano 1992), and coastal margins and river estuaries extended far inland of their present boundaries, evidenced by eroded bluffs such as the Surry Scarp. With the onset of early Wisconsin glaciation, sea levels began to regress to an eventual low of ~120 m below present during the height/apex of late Wisconsin glaciation (~20 kyBP), and coastal margins extended far seaward of present. As continental glaciers melted between 15 and 5 kyBP sea levels experienced a dramatic rise. Sea level rise accelerated during the early and middle Holocene, eventually rising ~54m within the past 10.7 kyBP, most of which (~48m) occurred prior to 6 kyBP (Riggs 1988, Fairbridge 1992). Rapid sea level rise between ~7.4 and 6.2 kyBP may have been responsible for initial flooding of the Chesapeake Bay (Bratton et al 2003).

Geologic mapping (Mixon et al 1989) depicts the study corridor to consist of the late Pleistocene Lynnhaven Member of the Tabb Formation [also known as the Sand Bridge Formation, (Barker and Bjorken 1978)] comprised of surficial deposits of a broad lowland that typically includes fining-upwards and nearshore marine sediments comprised primarily of sand, silt and clay. This terrace landform was last modified by marine conditions during the early-middle Wisconsin glacial stage as sea levels receded from pre-glacial, Sangamon highs. During much of the late Pleistocene and early-middle Holocene the study area was relatively high and dry, with local drainages occupying relatively deep valleys, likely fed by spring seeps and surface runoff. Subsequent sea level rise during the middle-late Holocene raised water tables and backflooded incised drainage valleys, resulting progressively in tidal estuarine conditions, as fine- and organic-rich sediments accumulated within the confines of the drainage valleys: most of this sediment accumulation, however, occurred at and below prograding sea levels that progressively inundated previously extant sections of landform.

¹ Geological subdivisions referred to in text follow generally accepted age ranges (after Flint 1971, Mickelson 1983). The Quaternary is the second Period of the Cenozoic Era, following the Tertiary: it began 2-3 millions years ago and includes the Pleistocene Epoch (which extended to ~10 kyBP), and subsequent Holocene Epoch. “Wisconsinan” glacial stage is a formal stratigraphic term that refers to the fourth and last glacial epoch (ca. ~115-10 kyBP) of the Pleistocene in North America that followed the “Sangamon” interglacial stage (ca. ~125-115 kyBP). The Holocene represents a post-glacial warm period that began ~10-11 kyBP.

Sea level is presently at a modern high. The mean sea level trend in this region has been estimated at +3.76 mm/year (1.23ft/century) for last century (NOAA 2013). Catastrophic storm events such as hurricanes have resulted in regional backflooding of tidal areas by associated storm tides that ranged ~2.4m above normal (Boone 2003).

In summary, sediment deposition and new landform formation concurrent with very late Pleistocene- through Holocene-age occupation of the study area are primarily restricted to alluvial and swamp deposition within modern floodplains and expanding estuaries, and wind-derived erosion and deposition atop upland Pleistocene terraces (Markewich et al 2009). This study found undisturbed near-surface sediments (<1 mbs) to primarily consist of sand-rich, marine fines configured into a relatively level marine terrace incised by marshy drainages. No distinct eolian landform features (dunes or blowouts) were in evidence within the project corridor, although historic modifications would expectedly have homogenized surface topography.

The project corridor crosses a variably-drained, sandy-textured, lowland that ranges from 5-20' elevation and crosses one major estuarine tributary (Southern Branch Elizabeth River) and several minor tributaries (Goose Creek, Deep Creek, and Hodges Creek). Each of these drainage ways represents a relatively low-order tributary of the pre-tidal James River. Early 20th c maps indicate that these drainages were flanked by estuarine marshes; contemporary maps indicate that selective fill deposition has buried some of these natural lows. Fill sediments were likely sourced from borrow pits that flank elevated rail-and roadbeds, as well as dredge spoil from canal and ditch construction activities, including those associated with the Intercoastal Waterway (constructed post 1947). However, these previously shallow valley and feeder tributaries likely afforded prehistoric occupants diverse riparian environments available for settlement prior to inundation by rising sea levels.

Mapped soils vary by type across the study area. Soils are weathered sediment, and soil development is contingent upon the lithology, relative age, micro-topography, biotic community, climate conditions and drainage characteristics of any host landform. Soil classification nominally reflects these variables. Soil types may vary across a contiguous landform and include remnant soils preserved in modified (e.g. truncated) or buried contexts. Most soils mapped on the relic marine terrace landform that hosts the project corridor formed primarily within weathered "upland" marine terrace sediments of advanced age (dominated by Ultisols such as the Bojac, Dragston, Munden, Tetotum and Tomotley Series): exceptions include both historically-modified fill deposits (aka "urban land" and/or Udorthents) often associated with the highway corridor and interchanges, a small percentage of sand-rich and potentially eolian soils (Psamments) such as the Wando and Pactolus Series, and organic-rich muck or peaty soils (Histisols) such as the Pungo and Rappahannock Series formed in aggrading Holocene alluvial/marsh environments (USDA-NRCS 2013). Soils of these types typically hold little potential for inclusion of deeply buried "surfaces" with the exception of those associated with historic fills, eolian constructs, and aggraded alluvial/marsh sediments.

Review of original I-64 bridge construction studies

A primary goal of this investigation was to examine the depositional history of the study area to formulate a refined model of landform genesis, assess the buried-site potential of the inclusive landforms and evaluate the contextual characteristics of any archaeological components. In particular, site sediments were reviewed for any evidence of cultural depositional processes that may have potentially buried or disturbed archaeological components.

Regarding the buried site potential of the project corridor, arguably the most sensitive section of the study area is the elevated bridge crossing of the South Branch Elizabeth River. As the largest riverine resource in the corridor, the bridge corridor section would expectedly exhibit high probability regarding archaeological site formation, as well as the most extensive effects of sea-level affected landscape change throughout the late Pleistocene and subsequent Holocene. It has also been

subjected to some of the most extensive landform modifications during the past century as evidenced through comparison of early topographic maps (Figure 7a-b in report) with modern (Figure 2a-b in report) that included highway/bridge construction, channel excavation and dredging associated with the Intercoastal Waterway and urban development along the river; all developments that likely included fill deposition within the corridor right-of-way (ROW).

Results of extensive subsurface testing of the proposed elevated bridge corridor was compiled by the Virginia Department of Highways (VDOH) in advance of initial I-64 construction, and included the bridge and pier-elevated approaches on both sides of the river: this included 24 core borings distributed along 4823 ft (1470 m) between opposing bridge abutments (VDOH 1966). The resulting logs record sediment characteristics as deep as 78.5' (24 m) below mean sea level (bmsl), with the shallowest core boring reaching 34.5' (10.5 m) bmsl. These logs record characteristics of basic lithology (sediment makeup) pertinent for engineering purposes which are also useful in regards to attributing gross temporal assignments (by identification of fossil markers or organics). Of particular significance is the identification of buried macro organic materials included within aggraded alluvium that can reliably be considered Holocene "markers" in age determination. Deposition and eventual burial of these sediments within previously incised drainage channels progressed as the drainage network evolved from free-flowing to tidal with rising sea levels.

Barker & Bjorken (1978) utilized I-64 South Branch Elizabeth River bridge core boring data in configuring local stratigraphic cross-sections for their *Geology of the Norfolk South Quadrangle, Virginia* (attribution to the aforementioned 1966 VDOH reference is indicated but not clearly referenced). This study interprets Holocene-age sediments (organic and non-organic) to extend as deep as ~46.5 feet (14 m) below sea level, indicating the pre-Holocene drainage channel to have incised to approximately that depth (although the authors allude to the some difficulty in differentiating the Holocene/Pleistocene boundary within non-organic sediments). VDOH bore logs indicate organic-rich sediment (alone) to extend as deep as 29.5' (9 m) below modern sea level.

According to the 1966 VDOH boring logs, surface elevations before bridge constructions were quite low. Highest elevations were noted at both ends of the corridor at the proposed bridge abutments, ~6.3' (2 m), where Pleistocene terrace sediments (and possible fills) comprised the surface. Between abutments all core locations west of the river channel reported surface elevations to be no higher than 0.5' below high tide; east of the channel surface elevations ranged from ~2-6' (0.6-1.8 m) amsl. Compared with modern elevations, these data, if correct, may allow for some indication of the depths of fill that presently cap these same extant landforms. Included with the boring logs are plan drawings that depict a "Finished grade access road" to be built under the eastern approach, raised ~1-4' above the existing ground profile, with nothing similar depicted for the marshy area west of the channel. Prior to bridge construction the maximum depth of the river channel was ~22.5' (7 m), with plans to dredge the channel to ~33' (10 m), with no indication of where dredge spoil would be disposed. Barker & Bjorken (1978) note some fill deposits along the bridge corridor, particularly east of and adjacent to the river.

As previously noted, relatively deep deposits of organic-infused Holocene sediment are evidence on both sides of the river channel. West of the river channel and east of Deep Creek, below landforms extant prior to bridge construction, organic sediments ranged as deep as 10.9'-19.9' (3.3-6.0 m) bmsl; east of the channel they range from 0-26.4' (8m) bmsl (and again, it is possible that some of the underlying, non-organic sediments are also Holocene in age). East of the channel there appears to be more variability in both depth of organic sediments, and lithologies (particularly with the inclusion at some depths of relatively rare pebbles and gravels), that may have resulted from incision and meandering of a small tributary stream (Hodges Creek) that trends parallel to the road and conjoins the main channel north of the ROW; pebbles and gravels noted between ~3-42' (1-13 m) bmsl could represent channel lag deposits related to the creek, historic fill, or possibly some

archaeological contributions such as fire-cracked rock (speculative, but geotechnical coring crews would not make that distinction).

Discussion

For most of the study area, located above sea level, archaeological sites of all ages would expectedly be situated at/near the surface of the relatively ancient host landform, which with the exception of incised and marshy drainages consists of very old sediment components. Little potential exists for site burial processes in these settings. Shovel testing to depths that encounter relic marine sediments (such as dense clay-rich subsoil) should prove adequate for site discovery.

Two scenarios exist for the possible preservation of buried sites (buried beyond reach of shovel testing) within the project corridor: 1) sites buried by historic-era fill deposits and, 2) sites buried by estuarine/alluvial sediments within the footprints of old drainage channels such as the Elizabeth River and associated backflooded tributaries. The latter are sometimes going to be buried by the former (particularly in developed areas), and the latter will expectedly exist at and well beneath modern sea level (which makes for challenging excavation techniques).

Presently, no evidence exists of site burial within the project corridor. Site burial beneath fill is not uncommon, particularly in urban settings. Site burial within aggraded estuarine sediments is a viable concept, but largely unproven. If either of these scenarios were to be field tested within the bridge corridor recommended buried-site discovery techniques would include mechanical trenching of fill deposits (above sea level), and continuous coring of Holocene fill deposits that extend below sea level. Deep sampling of wet alluvial sediments has been successfully accomplished by the author utilizing a hydraulic Geoprobe with a dual-tube sampler to depths of 32' (10 m).

References

- Barker, William J. and Eric D. Bjorken
1978 Geology of the Norfolk South Quadrangle, Virginia: Virginia Division of Mineral Resources Publication 9, text and 1:24,000 scale map.
- Boone, J.
2003 The Three Faces of Isabel: Storm Surge, Storm Tide, and Sea Level Rise. Informal Paper.<http://www.vims.edu/physical/research/isabel>.
- Bratton, J.F., Colman, S.M., Thieler, E.R. and Seal, R.R.I.
2003. Birth of the modern Chesapeake Bay estuary 7.4 to 8.2 ka and implications for global sea-level rise. *Geo-Marine Letters*, v. 22, 188-197
- Flint, R.F.
1971 *Glacial and Quaternary Geology*. John Wiley and Sons, New York.
- Markewich, Helaine W., Ronald J. Litwin, Milan J. Pavich and George A. Brook
2009 Late Pleistocene eolian features in southeastern Maryland and Chesapeake Bay region indicate strong WNW-NW winds accompanied growth of the Laurentide Ice Sheet. *Quaternary Research*, 71: 400-425.
- Mickelson, D.M.
1983 The late Wisconsin glacial record of the Laurentide ice sheet in the United States. In: *Late Quaternary environments of the United States*, Edited by Lee Clayton, D.S. Fullerton, H.W. Borns and H.E. Wright. Univ. Minn. Press, Minneapolis. pp 3-37.

- Mixon, R.B., C.R. Berquist Jr., W.L. Newell, and G. H Johnson
1989 Geologic map and generalized cross sections of the coastal plain and adjacent parts of the Piedmont, Virginia. U.S. Geological Survey, Miscellaneous investigations series ; map I-2033, Reston.
- NOAA (National Oceanic and Atmospheric Administration)
2013 Mean Sea Level Trend, 8638660 Portsmouth, Virginia.
http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8638660 Accessed 11/05/13.
- Toscano, Marguerite A.
1992 Record of Oxygen Isotope Stage 5 on the Maryland Inner Shelf and Atlantic Coastal Plain--A Post-Transgressive-Highstand and Regime. In, C.H. Fletcher and J.F. Wehmiller Eds. Quaternary Coasts of the United States: Marine and Lacustrine Systems. Special Publication 48, pp 101-111, SEPM (Society for Sedimentary Geology).
- USDA-NRCS (United States Department of Agriculture, Natural Resources Conservation Service)
2013 Web Soil Survey. Available online at
<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> accessed 11/04/13.
- Virginia Department of Highways (VDOT)
1966 Rte 64 over South Branch Elizabeth River, City of Chesapeake-Span and Elevation drawings, and Engineering Geology. Project #: 0064-131-102, B-608, pp 4-8 & 129-131 of 132. Office of the Bridge Engineer, Richmond, March 1966, Revised 04/18/1966.

A stylized graphic of a bridge with a blue and orange arch and vertical supports, centered behind the title text.

INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY



CITY OF CHESAPEAKE, VA | STATE PROJECT #: 0064-131-783 | UPC: 104366

SUPPLEMENTAL ARCHEOLOGICAL SURVEY REPORT

SUPPLEMENTAL ARCHAEOLOGICAL SURVEY
FOR THE INTERSTATE 64 / HIGH RISE BRIDGE
CORRIDOR STUDY, CITY OF CHESAPEAKE, VIRGINIA
(DHR FILE NO. 2013-0971)



by
Daniel Baicy

Prepared for

WR&A
WHITMAN, REQUARDT
& ASSOCIATES, LLP

and



Prepared by

 **cra**
cultural resource analysts, inc

Kentucky | West Virginia | Ohio
Wyoming | Illinois | Indiana | Louisiana | Tennessee
Utah | Virginia | Colorado

**SUPPLEMENTAL ARCHAEOLOGICAL SURVEY
FOR THE INTERSTATE 64 / HIGH RISE BRIDGE
CORRIDOR STUDY, CITY OF CHESAPEAKE, VIRGINIA
(DHR FILE NO. 2013-0971)**

VDOT Project No.: 0064-131-783, P101
UPC No.: 104366
Federal Project No.: NH-IM-064-3(481)

by

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CRA Project No.: V13W001



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Principal Investigator

May 16, 2014

ABSTRACT

On behalf of Whitman, Requardt & Associates, LLP, and the Virginia Department of Transportation (VDOT), Cultural Resource Analysts, Inc., conducted a supplemental archaeological survey in association with the proposed Interstate 64/High Rise Bridge Corridor Study in Chesapeake, Virginia, in conjunction with VDOT Project No.: 0064-131-783, P101; UPC 104366; Federal Project No.: NH-IM-064-3(481). The current investigation is a supplement to this original survey and includes 15 small additions and expansions of variable size added to five sections of the original project area due to planning level design changes. The supplemental area of potential effect encompasses appropriately 80 ha (197.84 acres).

Cultural Resource Analysts, Inc., conducted the archaeological fieldwork from April 22 to April 25, 2014. The archaeological survey resulted in the identification of an isolated find (IF-1), and two previously recorded resources (44CS0233 and 44CS0275) were revisited. Archaeological site 44CS0233 is a small prehistoric artifact scatter that was recorded in 1963 by Howard A. McCord. A revisit in 1997 by the William and Mary Center for Archaeological Research recorded a small scatter of artifacts. In 1999, Michael Baker Jr, Inc. (Sara et al. 1999) could not relocate the site. Currently, I-664 is constructed over the mapped locations for Site 44CS0233. CRA was unable to locate the site and shovel testing confirmed massive disturbance from road construction. Therefore, CRA recommends that Site 44CS0233 is not individually eligible for listing in the National Register of Historic Places under Criterion A, B, C, or D. Archaeological site 44CS0275 (DHR # 131-5339) is a small family cemetery, known as the Mount Olive Cemetery, previously recorded by Coastal Carolina Research in 2006. The cemetery has no discernable boundaries and contains at least 20 markers. There are numerous depressions and evidence for several unmarked graves. Site 44CS0275 (DHR # 131-5339) was determined ineligible for listing in the National Register of Historic Places in 2006. Cultural Resource Analysts, Inc., concurs with the previous evaluation that 44CS0275 is not individually eligible for listing in the National Register of Historic Places under Criterion A, B, C, or D, and it does not meet the qualification for eligibility under special Criteria Considerations C or D governing cemeteries.

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I. INTRODUCTION

From April 22 to April 25, 2014, Cultural Resource Analysts, Inc. (CRA), conducted a supplemental archaeological resources survey in association with the Interstate 64 High Rise Bridge Corridor Study in Chesapeake, Virginia, for Whitman, Requardt & Associates, LLP (WRA), on behalf of the Virginia Department of Transportation (VDOT) in conjunction with VDOT Project No.: 0064-131-783, P101; UPC 104366; Federal Project No.: NH-IM-064-3(481) (Figure 1).

The study areas for the proposed project are located in the southwestern segment of the Hampton Roads Beltway, which is formed by a loop of I-64 and I-664 (Figure 2). The study area encompasses approximately eight miles of I-64, consisting of two travel lanes in each direction, between the I-464 interchange and the I-664 and I-264 interchanges at Bowers Hill. The study area also includes interchanges along I-64 at Military Highway (U.S. Route 13), George Washington Highway (U.S. Route 17), and Great Bridge Boulevard (VA Route 190). The G. A. Treacle Memorial Bridge (High Rise Bridge), a mile-long double-leaf drawbridge that spans the Southern Branch of the Elizabeth River, is included in the study area also.

For ease of discussion, the study area (Figure 2a-b) was divided into nine survey areas (listed from west to east):

- Section 1: I-264 interchange;
- Section 2: I-64 between the I-264 interchange and the U.S. 13 interchange;
- Section 3: U.S. 13 interchange;
- Section 4: I-64 between the U.S. 13 interchange and the George Washington Highway interchange;
- Section 5: George Washington Highway interchange;
- Section 6: I-64 between the George Washington Highway interchange and the High Rise Bridge;
- Section 7: the High Rise Bridge;

- Section 8: I-64 between the High Rise Bridge and the I-464 interchange; and
- Section 9: the I-464 interchange.

A previous cultural resource survey by CRA (Baicy 2014; Hearn et al. 2014) was conducted for the study area. These prior investigations resulted in the identification of four archaeological sites and 168 newly identified architectural resources; however, none were recommended eligible for listing in the NRHP, nor were any found to be contributing resources to a historic district based on current survey.

The current investigation is a supplement to this original survey and includes 15 small additions and expansions of variable size added to five sections of the original project area due to planning level design changes. The supplemental area of potential effect encompasses appropriately 80 ha (197.84 acres).

This report is an addendum to the previous archaeological report (Baicy 2014). As such, many of the sections included in the original report will not be duplicated within the current document. Specifically, the environmental settings section descriptions are greatly abridged and the laboratory methods section is not repeated as only one isolated artifact was identified. Also, additional background research was not conducted within the scope of the current investigation and therefore no background section is presented within this report. However, the results of the previous background research and the previous survey materials were examined prior to the initiation of fieldwork.

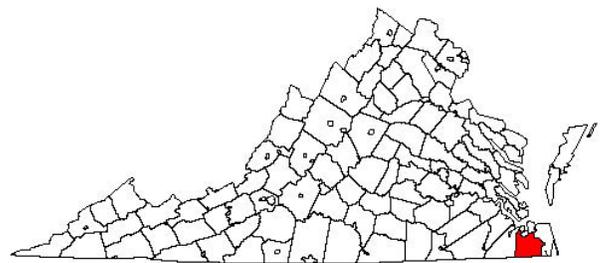


Figure 1. Location of Chesapeake, Virginia.

The purpose of the supplemental survey was to identify archaeological sites located within the potential area of effect (APE) and to evaluate the potential need for further investigation of those resources. This survey was undertaken in compliance with the National Historic Preservation Act of 1966, as amended; the Archaeological and Historic Preservation Act of 1974; and Title 36 of the Code of Federal Regulations, Parts 660–66 and 800 (as revised, 1999). The field research and report meet the requirements specified in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (U.S. Department of the Interior 1983), as well as the Virginia Department of Historic Resources' (DHR's) *Guidelines for Conducting Historic Resources Survey in Virginia* (2011), VDOT's Expectations and Standard Products for Cultural Resource Surveys (Revised February 18, 2010), and the Programmatic Agreement between VDOT and DHR concerning interagency project coordination (1999). CRA's Project Manager and Principal Investigator who performed the cultural resource investigations meet or exceed the qualifications described in the Secretary of the Interior's Professional Qualifications Standards (U.S. Department of the Interior 1983).

Daniel Baicy, RPA, served as CRA's principal investigator, archaeology, and he was assisted by archaeological field technicians David Coleman and Katherine Holcomb. Kay Simpson, RPA, served as principal officer and CRA project manager. Leslie L. Holder supervised the laboratory processing and artifact inventory and analyzed the artifact assemblages. Final illustrations were prepared for the report by Jason Anderson. Savannah Westerfield completed the final layout and formatting of the report.

CRA prepared this report with funding from VDOT and the Federal Highway Administration (FHWA). The contents of this report reflect the views of CRA, which is responsible for the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of VDOT or of the FHWA. This

report does not constitute a standard, specification, or regulation.

II. ARCHAEOLOGICAL SURVEY METHODS

Phase I Survey

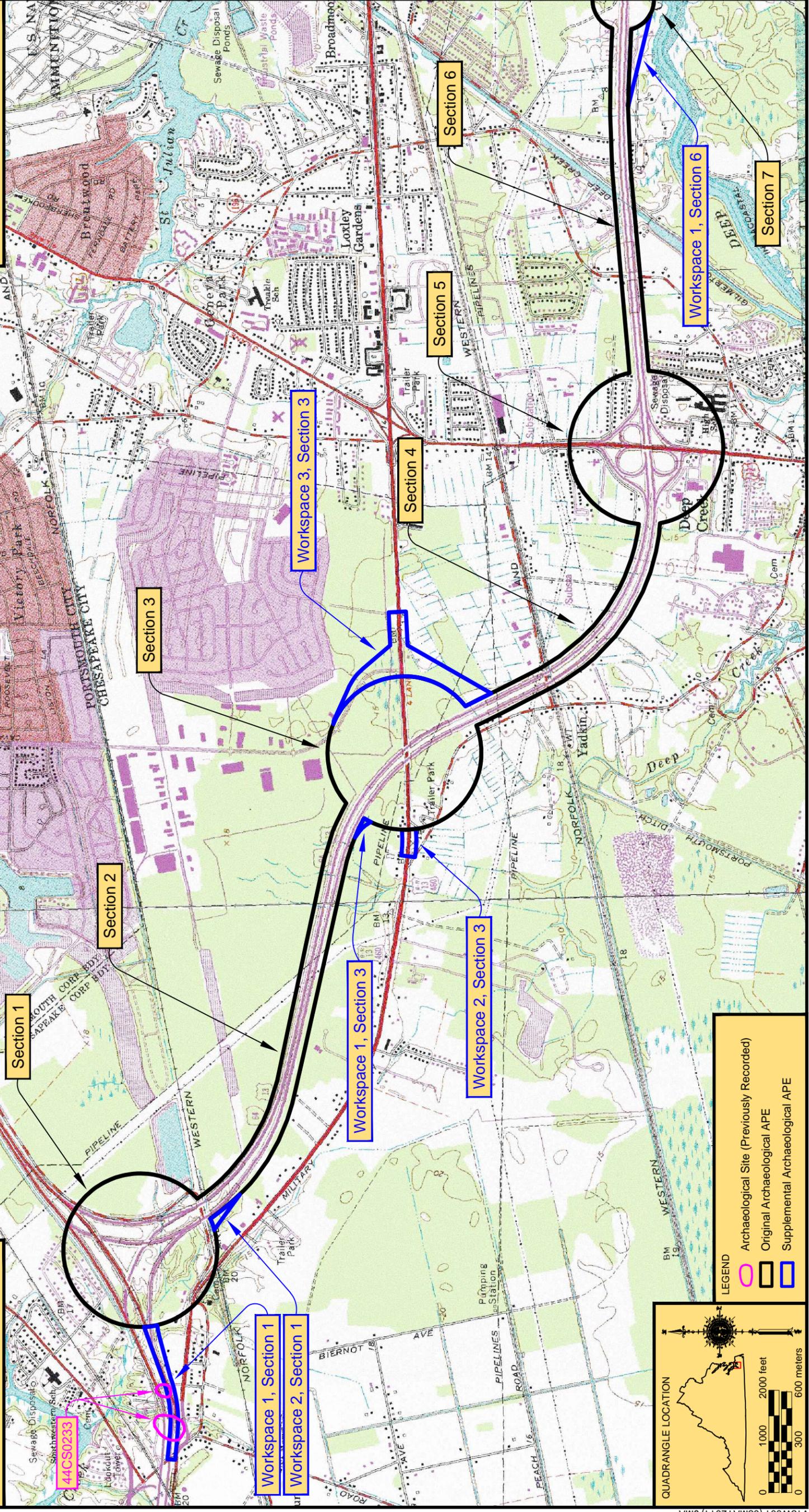
The objective of the archaeological survey was to identify archaeological sites, districts, objects, or cemeteries that might be located within the study APE. For the purpose of this study, an archaeological site is defined as the physical remains of any human activity greater than 50 years of age for which a boundary can be established, related either temporally or functionally, and located within a spatially restricted area. Methods used to complete the archaeological survey followed guidelines developed by DHR (2011). All aspects of the survey were recorded through the completion of notes, standardized forms, and high-resolution digital photography. All field measurements were recorded in metric measure, including site sizes and transect intervals. Soil profile depths were measured to the nearest centimeter.

Prior to initiating fieldwork, CRA notified Miss Utility of Virginia and had all buried utility corridors marked. All marked utilities were avoided during excavations. CRA followed VDOT's property notification guidelines, which included an attempt to notify all property owners prior to entering their property.

The archaeological survey consisted of pedestrian survey, controlled surface survey, and systematic subsurface testing across the APE (Figure 3).

Bowers Hill, VA 1965 (Photorevised 1986)
 USGS 7.5 minute series topographic
 quadrangle. United States Department of the
 Interior, United States Geological Survey.

Norfolk South, VA 1965 (Photorevised 1986)
 USGS 7.5 minute series topographic
 quadrangle. United States Department of the
 Interior, United States Geological Survey.



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Figure 2a. Location of the study area boundary on topographic quadrangle.

Bowers Hill, VA 1965 (Photorevised 1986)
 USGS 7.5 minute series topographic
 quadrangle. United States Department of the
 Interior, United States Geological Survey.

Norfolk South, VA 1965 (Photorevised 1986)
 USGS 7.5 minute series topographic
 quadrangle. United States Department of the
 Interior, United States Geological Survey.

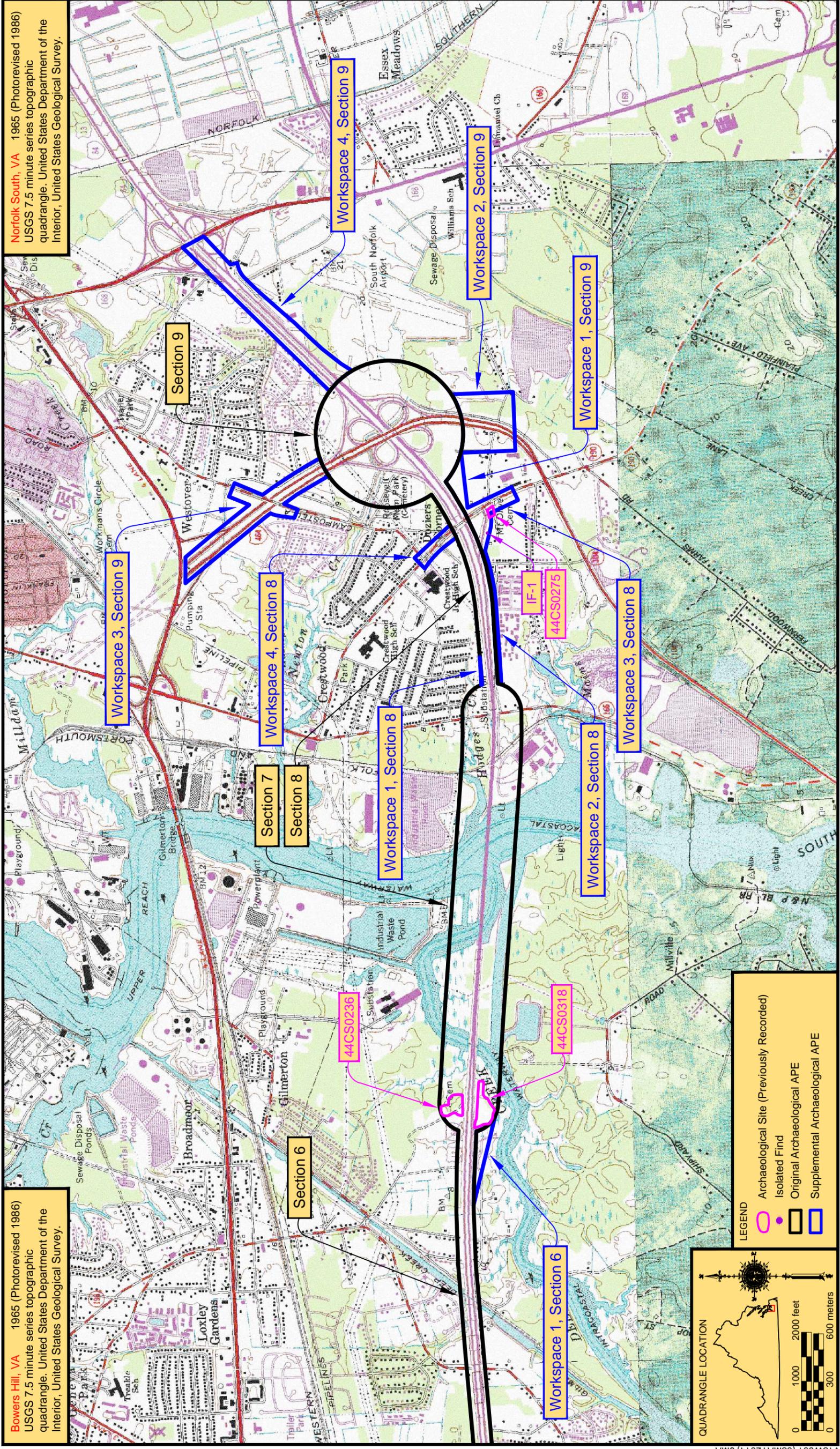


Figure 2b. Location of the study area boundary on topographic quadrangle.

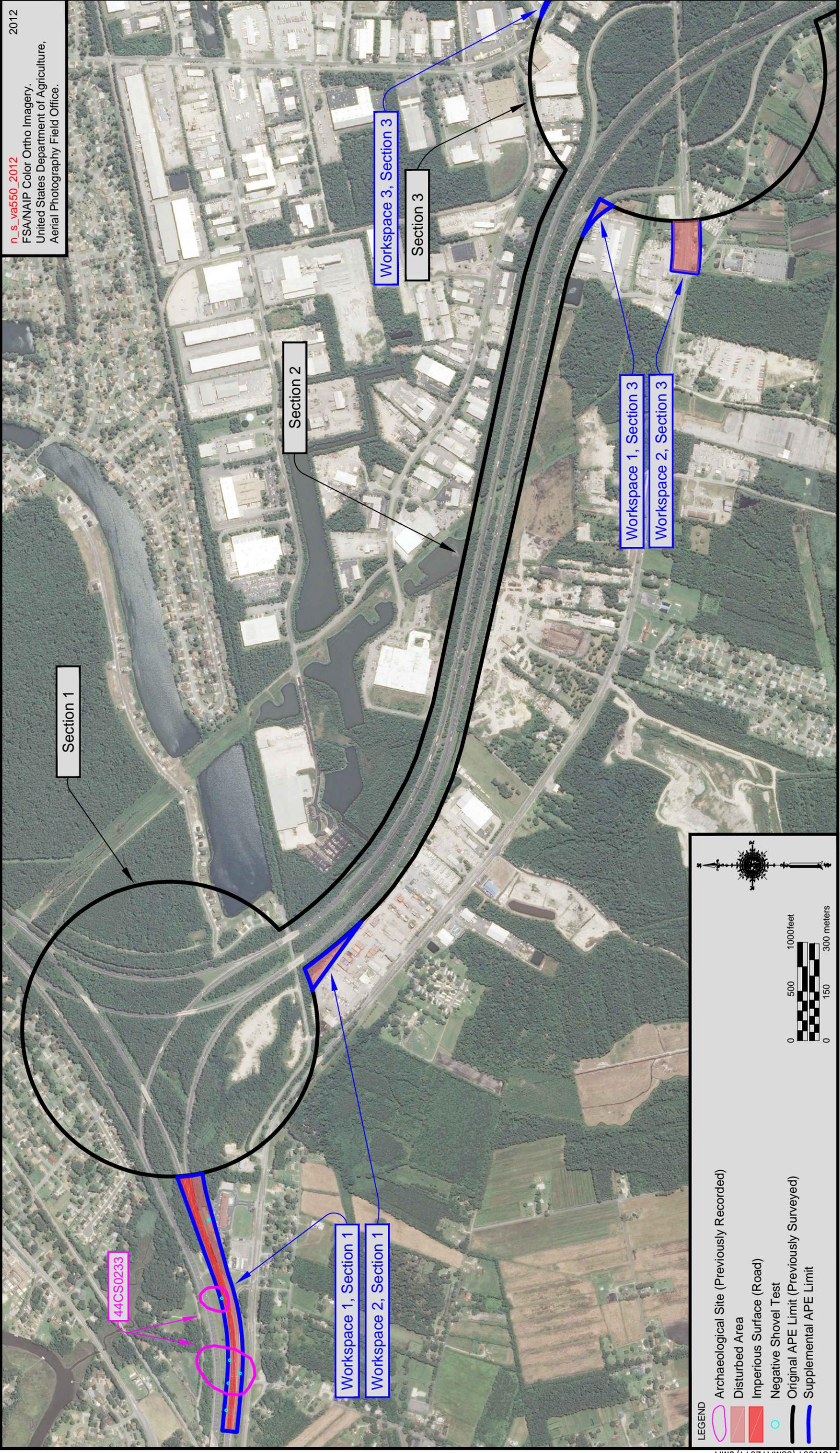


Figure 3a. Aerial view of all excavated STPs within the archaeological APE.

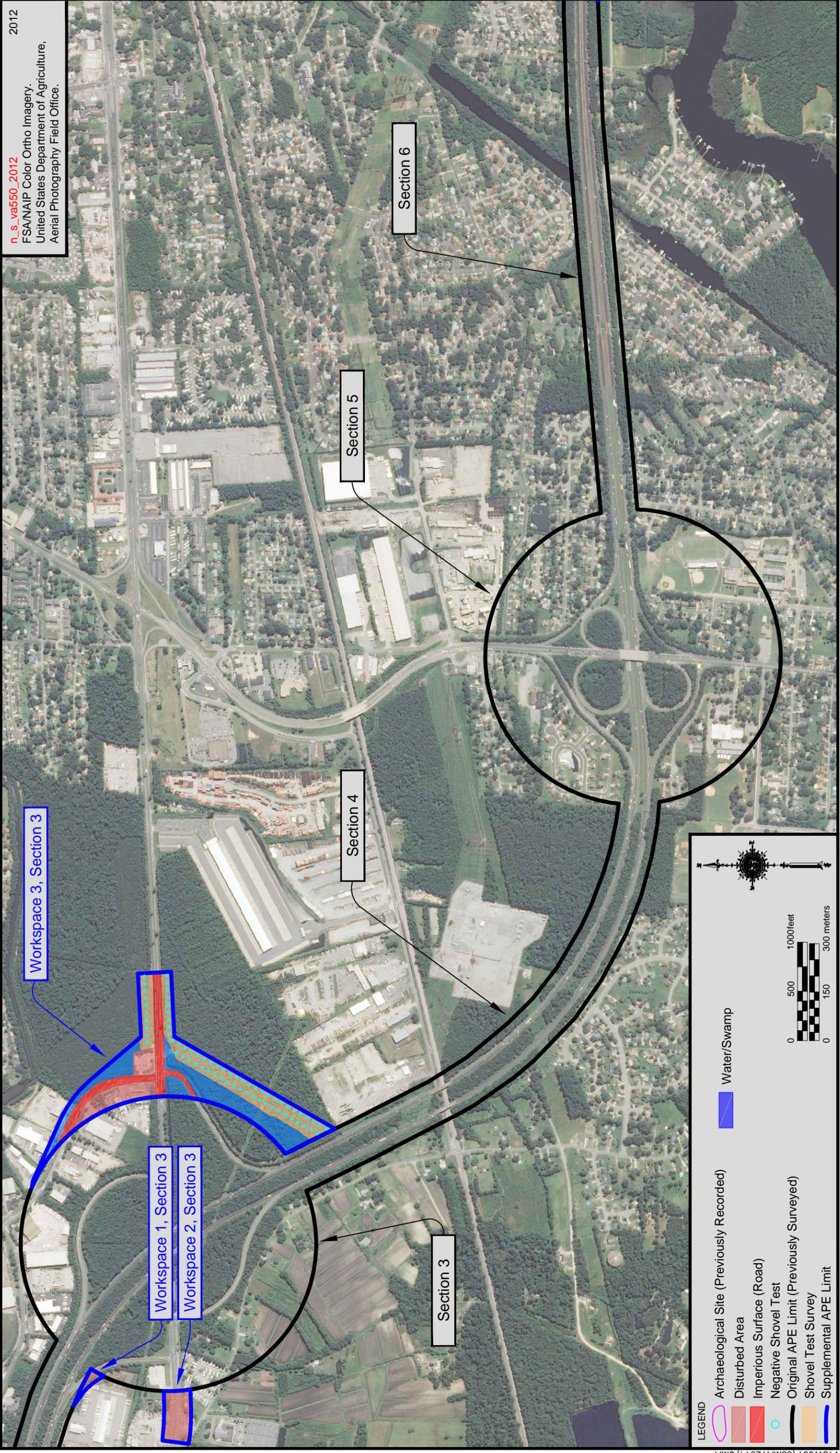


Figure 3b. Aerial view of all excavated STPs within the archaeological APE.

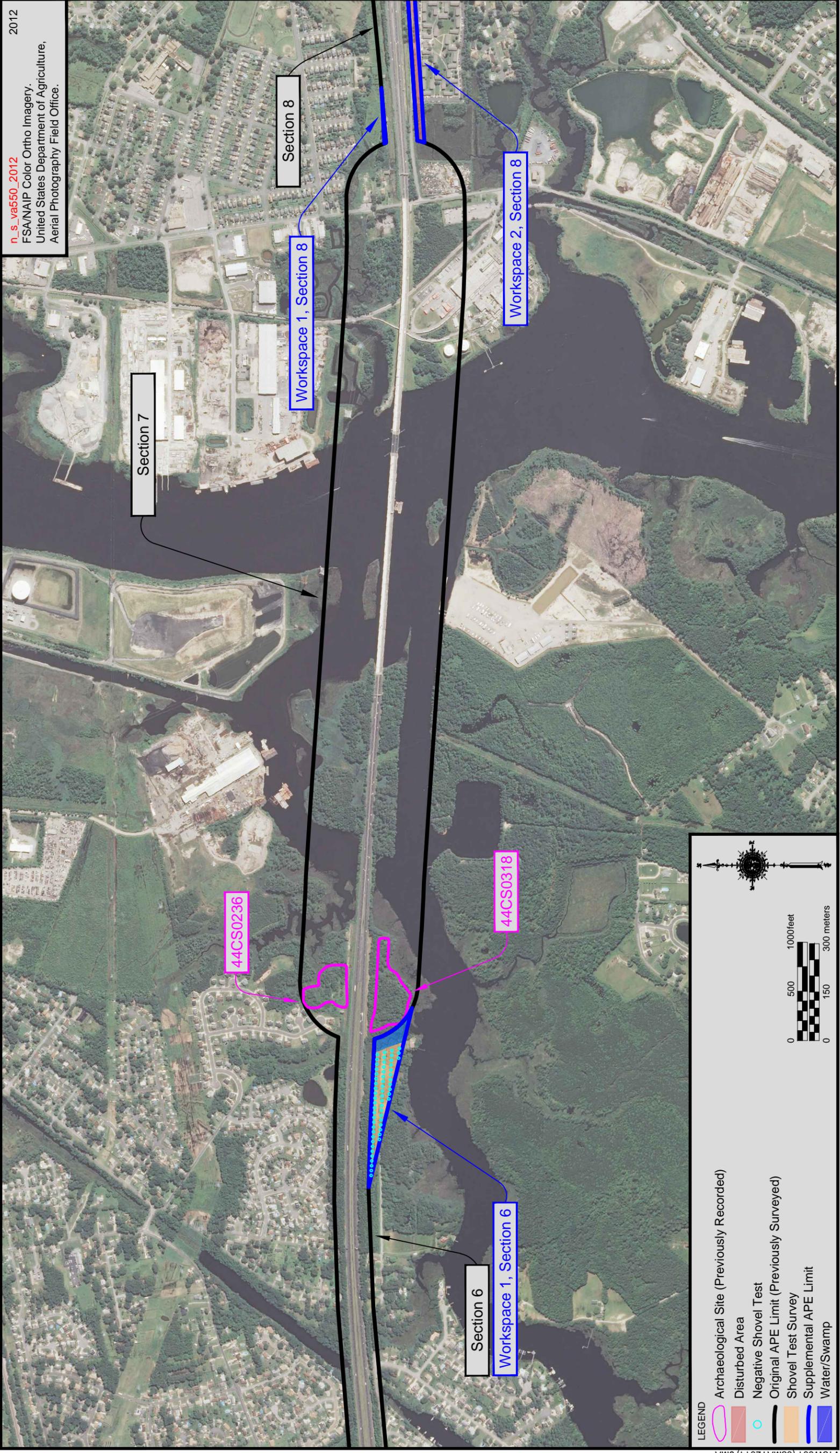


Figure 3c. Aerial view of all excavated STPs within the archaeological APE.

n_s_va650_2012
 2012
 FSA/NAIP Color Ortho Imagery
 United States Department of Agriculture,
 Aerial Photography Field Office.

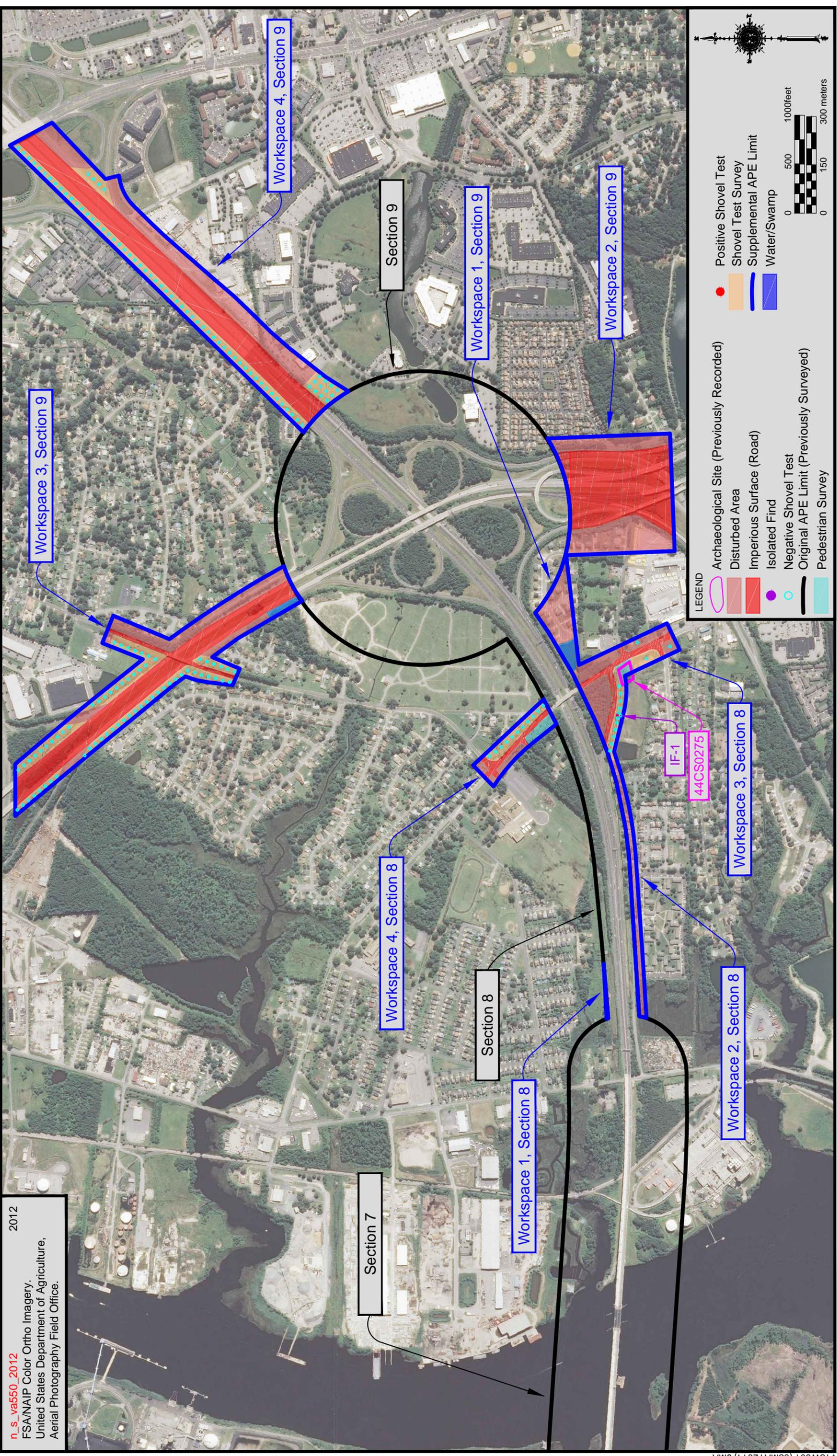


Figure 3d. Aerial view of all excavated STPs within the archaeological APE.

The pedestrian survey was conducted throughout the entire APE to identify any aboveground resources, including but not limited to artifact scatters, cemeteries, and foundations, and to identify areas that would not require subsurface testing, including areas of excessive slope, areas of ground visibility greater than 50 percent, the median in between the interstate travel lanes, and areas of prior ground disturbance. In areas of disturbance, when possible or feasible, a few shovel tests were excavated to ascertain the condition of the soils. Across the majority of the APE, subsurface testing involved excavation of shovel test probes (STPs) at approximately 23 m (75 ft) intervals to identify subsurface cultural remains. CRA chose a 23 m (75 ft) interval due to the low number of previously recorded archaeological resources within and adjacent to the APE; the major zones of industrial, commercial, and residential development; very poorly-drained soils; and extensive ground disturbances for water management activities. A shorter interval of 15 m (50 ft) was used in the area near previously recorded archaeological site 44CS0318. Shovel tests were given sequential alpha-numeric designations that featured a letter transect designation and shovel test number (e.g., A1, A2, etc.). Tests measured approximately 38 cm (15 in) in diameter. Depths varied according to soil conditions but were typically shallow, reaching average depths of 30–50 cm (11.8–19.7 in) below the ground surface and terminating in culturally sterile subsoil. All excavated material was screened through .64 cm (.25 in) hardware mesh.

When cultural deposits were encountered or surface features were observed, radial testing at 7.5 m (25 ft) was employed to help define the horizontal extent of the deposits and to gather a larger sample of cultural material. Radials were not excavated in between two positive shovel tests. If necessary, limited radial testing was conducted beyond the limits of the APE. For those shovel tests in which archaeological materials were recovered, soil color, texture, and notes on the stratigraphic relationship of the artifacts were recorded. Soil

horizons were identified according to NRCS soil taxonomy, and artifacts within these horizons were bagged separately and were properly labeled with site number, depth, and horizon. Soil profiles were mapped to scale with notes on Munsell color, texture, and inclusions. The same information was recorded for a sample of negative shovel tests in order to adequately characterize the nature of deposits in the direct APE. The principal investigator used a handheld GPS unit (Garmin Juno 3B) and incorporated mapping provided by WRA to record shovel testing and site locations.

III. ARCHAEOLOGICAL RESOURCE SURVEY RESULTS

The archaeological survey involved pedestrian investigation and subsurface testing of the supplemental archaeological APE. The archaeological APE is composed of 15 survey areas in five of the corridor sections (Figures 2 and 3), which are described below. CRA excavated a total of 296 shovel tests (including radial testing), resulting in the identification of one isolated find (IF-1) and revisit to two previously recorded sites (44CS0233 and 44CS0275 [DHR 131 – 5339]). The updated site forms are located in Appendix A.

The shovel tests excavated in a majority of the extra workspaces and expansion areas exhibited extensive top-soil disturbance from residential, commercial, and industrial sources. The most prevalent disturbances included grading for neighborhood lots, buried utilities, sound dampening walls, and flood management activities. Canals, drainage ditches, and large man-made water management ponds are major parts of the landscape within the archaeological study corridor. The under-developed portions of the study corridor exhibited large spoil piles and associated drainage ditches. The largest workspace containing under-developed area was along the east side of Section 3. This area

was heavily inundated (Figure 4), confirming observations made during the original survey in late summer (though the areas were dry during the original survey, many areas had soil profiles that suggested inundation). The vegetation in extra work spaces that contain lower amounts of commercial and residential disturbance is a mixture of secondary growth deciduous and coniferous trees with extensive undergrowth. Low-lying areas consist of reedy plants, green briar, and bamboo. The typical shovel test contains very light gray or white sandy clays below the immediate topsoil, which is typical of previously inundated landscapes.

Section 1: I-264 Interchange

Section 1 contained two additional workspaces. Workspace 1 was an expansion to the right-of-way south of the I-664 and I-64 interchange. Site 44CS0233 is mapped in two different locations along this route. This site

is a prehistoric site that was recorded in 1963 by Howard A. MacCord. It was revisited in 1997 by William and Mary Center for Archaeological Research (WMCAR) resulting in a small Archaic artifact scatter. The site was not relocated during a Phase I survey conducted by Michael Baker Jr., Inc. (Sara et al. 1999) Both locations mapped for this site are heavily disturbed by the highways, associated drainages, and utility trenches (Figure 5). Six shovel tests were excavated along the median and on the roadside. All six shovel tests exhibited massive amounts of disturbance. Site 44CS0233 appears to have been completely destroyed by highway construction.

Workspace 2 is a small extension along south side of the travel lanes of I-64. This workspace was completely inundated and highly disturbed by the nearby construction yard. No shovel tests were excavated.



Figure 4. Photograph of Workspace 3 in Section 3 depicting flooding common throughout the project area, facing south.



Figure 5. Photograph of mapped location for Site 44CS0233, facing north. Site location in background between rows of traffic.

Section 3: U.S. 13 Interchange

Section 3 contains three additional workspaces. Workspace 1 is a small expansion along the south side of I-64 and the exit ramp to U.S. 13. The area is heavily disturbed by the exit ramp and nearby commercial facility. No shovel tests were excavated. Workspace 2 is an expansion to the right-of-way for U.S. 13 on the west side of the Interchange. The entire area is disturbed by a mechanic garage, a commercial contract yard, an electric substation, and underground utilities. No shovel tests were excavated. Workspace 3 is a large expansion on the east side of the U.S. 13 Interchange on both sides of U.S. 13. Most of the area is inundated and underwater. A total of 67 shovel tests were excavated in Workspace 3. All of the shovel tests exhibited a soil profile consistent with a landscape that is submerged

for long periods. No cultural materials were recovered.

Section 6: I-64 between the George Washington Highway Interchange and the High Rise Bridge

Section 6 contains one additional workspace. Workspace 1 is a small expansion to south of the travel lanes of I-64 adjacent to the High Rise Bridge. A total of 59 shovel tests were excavated in Workspace 1. A shorter interval of 15 m (50 ft) was used in the area near previously recorded archaeological site 44CS0318. All of the shovel tests exhibited soil profiles consistent with a heavily graded and graveled landscape. The whole workspace has been altered for the placement of a modern house and to assist with drainage. No cultural materials were recovered.

Section 8: I-64 between the High Rise Bridge and the I-464 Interchange

Section 8 contains five additional workspaces. Workspace 1 is a small expansion along the north of I-64 immediately adjacent to the High Rise Bridge. This entire workspace is submerged. Previous survey in the adjacent corridor also provided adequate coverage through shovel testing. No additional shovel tests were excavated. Workspace 2 is a small expansion along the travel lanes south of I-64 from the High Rise Bridge to the Great Bridge Boulevard exit. This workspace is entirely within a graded neighborhood. No shovel tests were excavated.

Workspace 3 is a small area centered on the exit ramp for the Great Bridge Blvd. exit along the eastbound lanes for I-64. A total of 15 shovel tests were excavated immediately south of the exit ramp. A single fragment of undecorated whiteware (1820–2000) (DAACS 2006) (IF-1) was recovered in a shovel test (STP A4). Two radial shovel tests at 7.5 m (25 ft) intervals were excavated to the east, west, and south of the positive STP. No additional shovel tests were excavated to the north due a large drainage ditch and the exit ramp road. All of the shovel tests exhibited a very disturbed profile. Previous visits to the area by CRA noted the same area was being graded and re-seeded. The isolated historic artifact was likely not a primary deposit. A small family cemetery, known as the Mount Olive Cemetery (DHR # 131-5339, Site 44CS0275), was recorded by Coastal Carolina Research in 2006 in the eastern portion of Workspace 3 in Section 8. The cemetery consists of approximately 20 markers, all of which are from the early to late twentieth century (Figure 6). There is no border or fence for the cemetery. The current borders are the maintained portion of the cemetery around the standing headstones. There are numerous depressions indicative of unmarked burials across the entire maintained portion of the cemetery, as well as a few wooden markers and numerous broken stone markers. The grasses

around the unmaintained border of the graveyard made it difficult to visually assess the area for unmarked burials immediately beyond the maintained cemetery. Several broken markers and two depressions, however, were noted outside the maintained portion of the cemetery (Figure 7). CRA concurs with the previous evaluation that 44CS0275 is not individually eligible for listing in the National Register of Historic Places under Criterion A, B, C, or D, and does not meet the qualification for eligibility under special Criteria Considerations C or D governing cemeteries.

Finally, workspace 4 is a small expansion on both sides of Great Bridge Boulevard adjacent to the Crestwood Intermediate School and the Roosevelt Memorial Park. Most of the workspace is highly disturbed and contains slopes greater than 15 percent. A short transect of shovel tests were excavated along the east side of Great Bridge Boulevard. A total of 11 shovel tests were excavated in workspace 4. No cultural materials were recovered.

Section 9: I-464 Interchange

Section 9 contains four additional workspaces. Workspaces 1 and 2 are located on the south side of the I-464 Interchange. These interchanges are highly disturbed by a neighborhood, paved highway, and utilities. No shovel tests were excavated in these workspaces. Workspace 3 originates on the north side of I-464 and extends approximately 1,066 m (3,500 ft) north along I-464 on either side of the highway. It also contains a small portion along Campostella Road. Workspace 3 is heavily disturbed by highway construction, drainage, and graded neighborhoods. A total of 66 shovel tests were excavated in workspace 3 in areas of moderate disturbance. No cultural materials were recovered. Workspace 4 extends 915 m (3,000 ft) northeast of the I-464 Interchange alongside both travel lanes of I-64. The southern portion of Workspace 4 is a paved technological and office park. Three transects of shovel tests were excavated in a large field west of the office park and a couple



Figure 6. Photograph of Mount Olive Cemetery (44CS0275), facing north.



Figure 7. Photograph of Mount Olive Cemetery (44CS0275), facing west. Note the overgrown interment on the right.

judgmental tests were excavated near the exit ramp for Battlefield Road. A single transect of shovel tests was excavated west of the travel lanes of I-64 for the length of Workspace 4. A total of 71 shovel tests were excavated in Workspace 4. All of the shovel tests exhibited soil profiles consistent with heavy sand fill underneath a sod layer. No cultural materials were recovered.

IV. SUMMARY AND RECOMMENDATIONS

One isolated find was identified and two previously identified archaeological resources (44CS0233 and 44CS0275) were revisited during this supplemental survey. The purpose of this survey was to identify all archaeological resources within the APE associated with the widening and bridge replacement project (VDOT Project No.: 0064-131-783, P101; UPC No.: 104366; Federal Project No.: NH-IM-064-3(481)).

CRA revisited two previously recorded archaeological sites (Table 1). The significance of these sites was evaluated in relation to the NRHP eligibility criteria. The sites were evaluated with regard to Criterion A for their association with events that have made a significant contribution to the broad patterns of our history, with regard to Criterion B for their association with people significant in our nation’s history, with regard to Criterion C for their embodiment of the distinctive characteristics of a style, and with regard to Criterion D for their potential to yield information important in history.

Site 44CS0233 is a small prehistoric artifact scatter. The site area is mapped in two locations along the median of I-664. Six shovel tests were excavated in areas that were not marked for utilities. All six shovel tests exhibited massive amounts of disturbance. No cultural materials were located in the areas mapped for site 44CS0233. A previous survey by Michael Baker Jr., Inc. (Sara et al. 1999) did not relocate the site. Site 44CS0233 appears to have been destroyed by highway construction. CRA recommends that site 44CS0233 is not eligible for listing in the NRHP. The site as originally recorded lacked a diverse and robust artifact assemblage and now lacks integrity. There are also no significant associations between these deposits and a significant historical event or pattern of events (Criterion A). The site has not yielded, nor will it be likely to yield, information important in history or prehistory (Criterion D); Criteria A, B, and C are not applicable to this resource.

Site 44CS0275 (DHR # 131-5339) is a small cemetery known as the Mount Olive Church Cemetery. The cemetery contains approximately 20 headstones with no discernable border or fence surrounding it. There is a moderate to high probability that unmarked burials exist outside of the maintained borders. Site 44CS0275 was determined ineligible for listing in the National Register of Historic Places in 2006. CRA concurs with the previous evaluation that 44CS0275 is not individually eligible for listing in the National Register of Historic Places under Criterion A, B, C, or D, and it does not meet the qualification for eligibility under special Criteria Considerations C or D governing cemeteries.

Table 1. Summary of NRHP Eligibility Recommendations for the Identified Archaeological Sites.

Site	Temporal Designation	Thematic Context/Site Functions	National Register Recommendation
44CS0233	Prehistoric; Archaic	Camp	Not Eligible
44CS0275	Funerary	Cemetery	Not Eligible

REFERENCES CITED

Baicy, Daniel, with Daniel Hayes

2014 *Interstate 64 / High Rise Bridge Corridor Study, City Of Chesapeake, Virginia*. Prepared for Whitman, Requardt & Associates, LLP and the Virginia Department of Transportation, by Cultural Resource Analysts, Inc..

Hearnes, Hallie A., Sarah Reynolds, and Holly Higgins

2014 *Architectural Survey for Interstate 64 / High Rise Bridge Corridor Study, City Of Chesapeake, Virginia*. Prepared for Whitman, Requardt & Associates, LLP and the Virginia Department of Transportation, by Cultural Resource Analysts, Inc.

DAACS

2006 *DAACS Cataloging Manual: Ceramics*. Administered by Jennifer Aultaman, Kate Grillo, Nick Bon-Harper, and Jillian Galle

Sara, Timothy R., Stuart Paul Dixon, Eric F. Griffiths, Philip E. Pendleton, with J. Lee Cox.

1999 *Cultural Resources Survey, Hampton Roads Crossing Study, Candidate Build Alternatives 1, 9, and 2, Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Suffolk, Virginia*. Prepared for Michael Baker Jr., Inc. and the Virginia Department of Transportation, by Louis Berger & Associates, Inc.

United States Department of the Interior

1983 Archaeology and Historic Preservation: Secretary of the Interiors' Standards and Guidelines. *Federal Register*, Part IV, 48(2):44716–44742. Annotated version showing later technical and officially adopted revisions available from the 41 National Park Service's preservation laws, regulations, and standards webpage
http://wwwcr.nps.gov/locallaw/arch_stnds_0.htm.

United States Geological Survey (USGS)

1965 Bowers Hill, VA 15-Minute Topographic Quadrangle Map (Photorevised 1985). United States Geological Survey.

Virginia Department of Historic Resources

1999 *Programmatic Agreement Between the Virginia Departments of Transportation and Historic Resources Concerning Interagency Project Coordination*.

2011a *Guidelines for Conducting Historic Resources Survey in Virginia*. Virginia Department of Historic Resources, Richmond, Virginia.

Virginia Department of Transportation

2010 Expectations and Standard Products for Cultural Resource Surveys.

APPENDIX A. SITE FORMS

Snapshot

Date Generated: May 14, 2014

Site Name: No Data
Site Classification: Terrestrial, open air
Year(s): 8500 - 1201 B.C., 1200 B.C. - 1606 A.D.
Site Type(s): No Data
Other DHR ID: 44NA0002
Temporary Designation: No Data

Site Evaluation Status

Not Evaluated

Locational Information

USGS Quad: BOWERS HILL
County/Independent City: Chesapeake (Ind. City)
Physiographic Province: Coastal Plain
Elevation: 11
Aspect: Flat
Drainage: James
Slope: 0 - 2
Acreage: 3.990
Landform: Other
Ownership Status: Private
Government Entity Name: No Data

Site Components

Component 1

Category: No Data
Site Type: No Data
Cultural Affiliation: Native American
DHR Time Period: Archaic
Start Year: -8500
End Year: -1201
Comments: February 1997

Component 2

Category: No Data
Site Type: No Data
Cultural Affiliation: Native American
DHR Time Period: Woodland
Start Year: -1200
End Year: 1606
Comments: February 1997

Bibliographic Information

Bibliography:

No Data

Informant Data:

No Data

CRM Events

Event Type: Survey:Phase I

Project Staff/Notes:

Daniel Baicy - Principal Investigator

Project Review File Number: 2013-0971

Sponsoring Organization: No Data

Organization/Company: Cultural Resource Analysts, Inc.

Investigator: Daniel Baicy

Survey Date: 4/21/2014

Survey Description:

Small survey of supplemental areas for a larger project for the I-64 widening and High Rise Bridge replacement near City of Chesapeake

Current Land Use	Date of Use	Comments
Road	5/14/2014 12:00:00 AM	I-664 goes through the bulk of the site.

Threats to Resource: Transportation Expansion

Site Conditions: 75-99% of Site Destroyed

Survey Strategies: Observation, Subsurface Testing

Specimens Collected: No

Specimens Observed, Not Collected: No

Artifacts Summary and Diagnostics:

No Data

Summary of Specimens Observed, Not Collected:

No Data

Current Curation Repository: No Data

Permanent Curation Repository: No Data

Field Notes: No

Field Notes Repository: No Data

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

INTERSTATE 64 HIGH RISE BRIDGE CORRIDOR STUDY, SUPPLEMENTAL PHASE I SURVEY, CITY OF CHESAPEAKE, VIRGINIA.
By Daniel Baicy

Survey Report Repository: DHR

DHR Library Reference Number: No Data

Significance Statement: April 2014: Site 44CS0233 is heavily impacted by I-664 and its associated utilities, drainages, and the median. Six shovel tests were excavated along the south side of the site as it is mapped. All six shovel tests showed extensive disturbance. The current project did not assess the northern portion of the site, but visual inspection suggests the entire site has been destroyed by road construction.

No artifacts or features were located during this supplemental survey. Due to the heavy impact from road construction, the site is recommended as not eligible for inclusion on the National Register of Historic Places.

Surveyor's Eligibility Recommendations: Recommended Not Eligible

Surveyor's NR Criteria Recommendations, : No Data

Surveyor's NR Criteria Considerations: No Data

Event Type: Other

Project Staff/Notes:

Woodland added as temporal due to sherd as diagnostic

Project Review File Number: No Data

Sponsoring Organization: No Data

Organization/Company: Unknown (DSS)
Investigator: WMCAR
Survey Date: 2/27/1997
Survey Description:
 No Data

Current Land Use	Date of Use	Comments
Agricultural field	No Data	No Data

Threats to Resource: No Data
Site Conditions: Site Condition Unknown
Survey Strategies: Surface Testing
Specimens Collected: Yes
Specimens Observed, Not Collected: Yes
Artifacts Summary and Diagnostics:
 Archaic points, half of atlatl weight, one sherd
Summary of Specimens Observed, Not Collected:
 No Data

Current Curation Repository: VDHR
Permanent Curation Repository: No Data
Field Notes: No
Field Notes Repository: No Data
Photographic Media: No Data
Survey Reports: No Data
Survey Report Information:
 No Data

Survey Report Repository: No Data
DHR Library Reference Number: No Data
Significance Statement: No Data
Surveyor's Eligibility Recommendations: No Data
Surveyor's NR Criteria Recommendations, : No Data
Surveyor's NR Criteria Considerations: No Data

Event Type: Survey:Phase I/Reconnaissance

Project Staff/Notes:
 No Data

Project Review File Number: VSL Acc.#10
Sponsoring Organization: No Data
Organization/Company: Unknown (DSS)
Investigator: MacCord, Howard A.
Survey Date: 3/1/1963
Survey Description:
 No Data

Threats to Resource: No Data
Site Conditions: No Data
Survey Strategies: No Data
Specimens Collected: No Data
Specimens Observed, Not Collected: No Data
Artifacts Summary and Diagnostics:
 No Data
Summary of Specimens Observed, Not Collected:
 No Data

Current Curation Repository: No Data
Permanent Curation Repository: No Data

Field Notes:	No Data
Field Notes Repository:	No Data
Photographic Media:	No Data
Survey Reports:	No Data
Survey Report Information:	
No Data	
Survey Report Repository:	No Data
DHR Library Reference Number:	No Data
Significance Statement:	No Data
Surveyor's Eligibility Recommendations:	No Data
Surveyor's NR Criteria Recommendations, :	No Data
Surveyor's NR Criteria Considerations:	No Data

Snapshot

Date Generated: May 14, 2014

Site Name: Mt. Olive Cemetery
Site Classification: Terrestrial, open air
Year(s): 1900 - 1949
Site Type(s): Cemetery
Other DHR ID: 131-5339
Temporary Designation: 44CS0413-001

Site Evaluation Status

Not Evaluated

Locational Information

USGS Quad: NORFOLK SOUTH
County/Independent City: Chesapeake (Ind. City)
Physiographic Province: Coastal Plain
Elevation: 6
Aspect: Flat
Drainage: James
Slope: 0 - 2
Acreage: 0.430
Landform: Other
Ownership Status: Private
Government Entity Name: No Data

Site Components

Component 1

Category: Funerary
Site Type: Cemetery
Cultural Affiliation: Indeterminate
DHR Time Period: Reconstruction and Growth, World War I to World War II
Start Year: 1900
End Year: 1949
Comments: Probably associated with a church that is no longer standing.

February 2006

Bibliographic Information

Bibliography:

SUPPLEMENTAL ARCHITECTURAL SURVEY
FOR THE INTERSTATE 64 / HIGH RISE BRIDGE CORRIDOR STUDY, CITY OF CHESAPEAKE, VIRGINIA
(DHR NO. 2013-0971) By Hallie Hearn.

SUPPLEMENTAL ARCHAEOLOGICAL SURVEY INTERSTATE 64 / HIGH RISE BRIDGECORRIDOR STUDY, CITY OF CHESAPEAKE,
VIRGINIA, By Daniel Baicy.

Informant Data:

Name: Unknown
Surveyor Notes: Owner Unknown

CRM Events

Event Type: Survey:Phase I

Project Staff/Notes:

Daniel Baicy - Principal Investigator

Project Review File Number: 2013-0971

Sponsoring Organization: No Data

Organization/Company: Cultural Resource Analysts, Inc.

Investigator: Daniel Baicy

Survey Date: 4/21/2014

Survey Description:

Small survey of supplemental areas for a larger project for the I-64 widening and High Rise Bridge replacement near City of Chesapeake

Current Land Use	Date of Use	Comments
Cemetery	4/14/2014 12:00:00 AM	Mount Olive Cemetery

Threats to Resource: Transportation Expansion

Site Conditions: Surface Features

Survey Strategies: Observation

Specimens Collected: No

Specimens Observed, Not Collected: No

Artifacts Summary and Diagnostics:

No Data

Summary of Specimens Observed, Not Collected:

No Data

Current Curation Repository: No Data

Permanent Curation Repository: No Data

Field Notes: No

Field Notes Repository: No Data

Photographic Media: Digital

Survey Reports: Yes

Survey Report Information:

INTERSTATE 64 HIGH RISE BRIDGE CORRIDOR STUDY, SUPPLEMENTAL PHASE I SURVEY, CITY OF CHESAPEAKE, VIRGINIA.
By Daniel Baicy

Survey Report Repository: DHR

DHR Library Reference Number: No Data

Significance Statement: Apr. 2014: A small family cemetery, known as the Mount Olive Cemetery (DHR # 131-5339, Site 44CS0275), was recorded by Coastal Carolina Research in 2006. The cemetery consists of approximately 20 markers, all of which are from the early to late 20th century. The cemetery contains the military marker of Spanish-American War veteran Charles Wood, of Company H of the 8th Virginia Infantry. More recent markers feature simple stone headstones with basic inscriptions.

There is no border or fence for the cemetery. The current borders are the maintained portion of the cemetery around the standing headstones. There are numerous depressions indicative of unmarked burials across the entire maintained portion of the cemetery, as well as a few wooden markers and numerous broken stone markers. The grasses around the outside of the maintained border of the graveyard made it difficult to visually assess the area for unmarked burials immediately beyond the maintained cemetery. Several broken markers and two depressions, however, were noted outside the maintained portion of the cemetery.

Historical research revealed little information about the history of Mt. Olive Cemetery. While the exact age of this cemetery is unknown, it appears to date to the twentieth century. The cemetery retains a moderate level of integrity of materials, workmanship, and design; however, the setting of the cemetery has been diminished by the construction of the I-64 ramp to Great Bridge Boulevard, located just to the north of the parcel. Furthermore, the church formerly associated with the cemetery is no longer extant.

While in the field, CRA staff noted the location of New Mt. Olive AME Church at 1953 Campostella Road in Chesapeake. Mt. Olive Cemetery was likely associated with Mt. Olive AME Church prior to its move to Campostella Road.

The extensive use of concrete markers and the identification of Fitchett Funeral & Cremation Services (Fitchett Services on markers), an African American-owned funeral home in Chesapeake, indicate that Mt. Olive Cemetery is an African-American cemetery (Fitchett Funeral & Cremation Services 2014).

While Mt. Olive Cemetery is associated with the African American community, research did not reveal any specific historical associations between Site 44CS0275 (DHR# 131-5339) and events or persons of historical significance that would warrant listing under Criterion A or B. Mt. Olive Cemetery is also not eligible for listing in the NRHP under Criterion C, as it represents an example of a typical twentieth century resource with markers commonly associated with African American cemeteries. The stones do not exhibit denotative characteristics that would otherwise separate it from countless examples throughout the region, which are similar in form and character.

Furthermore, Site 44CS0275, (DHR# 131-5339) is not eligible under Criteria Consideration D, as it does not derive its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from associations with historic events. Consequently, CRA concurs that Mt. Olive Cemetery is not individually eligible for inclusion in the NRHP under Criterion A, B, or C.

Surveyor's Eligibility Recommendations: Recommended Not Eligible
Surveyor's NR Criteria Recommendations, : No Data
Surveyor's NR Criteria Considerations: No Data

Event Type: Survey:Phase I/Reconnaissance

Project Staff/Notes: No Data
Project Review File Number: No Data
Sponsoring Organization: No Data
Organization/Company: Unknown (DSS)
Investigator: Coastal Carolina Research, Jennifer Stewart
Survey Date: 2/27/2006

Survey Description:
 This historic cemetery was defined on the basis of approximately 20 headstones but there appear to be several unmarked graves due to grave-sized depressions in the ground. Most of the head and/or footstones appear to be fashioned out of concrete, and the graves have an east-to-west orientation. Some of the last names identified on the headstones include Brooks, Mullen, James, and Skinner. The cemetery seems to receive some maintenance due to the lack of overgrown weeds and brush.
 The surveyor has recommended this cemetery as not eligible for the NRHP, however, relevant local and state statutes regarding the protection and/or relocation of cemeteries must be followed if any disturbances are anticipated.
 UTM's were calculated using NAD 1927.

Current Land Use	Date of Use	Comments
Cemetery	2/27/2006 12:00:00 AM	The cemetery is located to the west of an overpass of Great Bridge Boulevard. It is surrounded by immature trees and shrubs.

Threats to Resource: No Data
Site Conditions: Surface Features
Survey Strategies: Observation
Specimens Collected: No
Specimens Observed, Not Collected: No
Artifacts Summary and Diagnostics: N/A
Summary of Specimens Observed, Not Collected: N/A
Current Curation Repository: N/A
Permanent Curation Repository: No Data
Field Notes: Yes
Field Notes Repository: Coastal Carolina Research
Photographic Media: No Data
Survey Reports: Yes
Survey Report Information: Stewart, J.B. et al.

2006 Cultural Resources Identification Survey Dominion
Boulevard City of Chesapeake, Virginia. Ms. on file
Virginia Department of Historic Resources, Richmond.

Survey Report Repository:	VDHR
DHR Library Reference Number:	No Data
Significance Statement:	No Data
Surveyor's Eligibility Recommendations:	No Data
Surveyor's NR Criteria Recommendations, :	No Data
Surveyor's NR Criteria Considerations:	No Data