

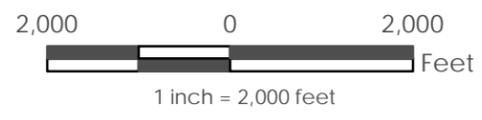
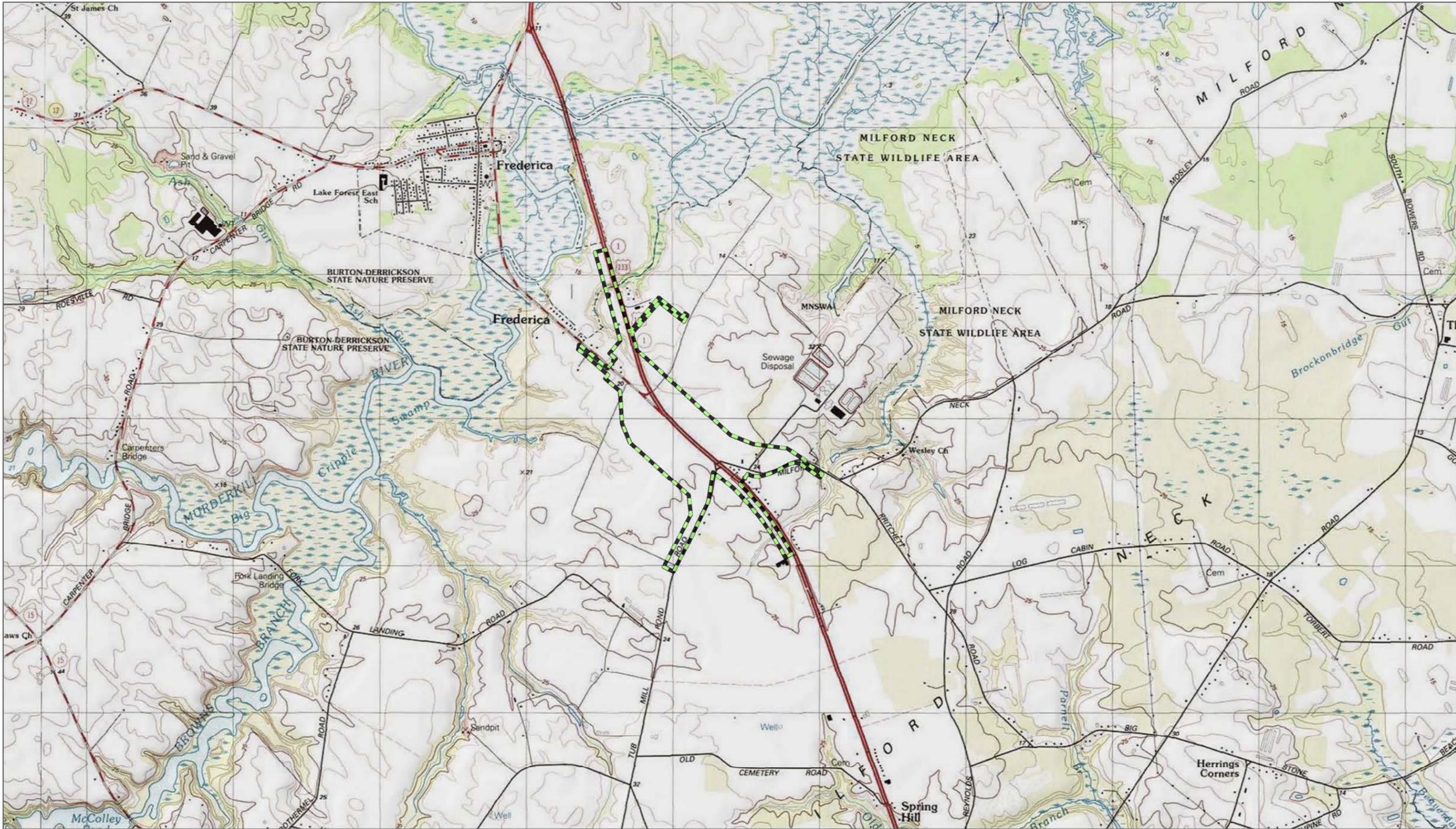
1.0 INTRODUCTION

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The following report details the results of a Phase I identification-level archaeological investigation conducted by A.D. Marble & Company of Conshohocken, Pennsylvania, for the proposed SR 1 Frederica Grade Separated Interchange project in Milford Hundred, Kent County, Delaware (Figure 1). The study is part of the SR 1 Corridor Capacity Preservation Program. A.D. Marble & Company performed the study for Century Engineering, Inc., and the Delaware Department of Transportation (DelDOT) on behalf of the Federal Highway Administration (FHWA).

The purpose of the project is to create a grade separated interchange at the southern end of the town of Frederica, Delaware. The project will improve safety at several intersections and allow access to future residential developments. The project area is primarily located between the SR 1/US 113 intersections with SR 12 (Frederica Road), SR 119 (Tub Mill Pond Road), and SR 120 (Milford Neck Road). The archaeological Area of Potential Effects (APE) encompasses an approximately 176-ac (71.2-ha) area comprised of agricultural fields, roadway and residential property margins, and wooded areas.

The objective of the archaeological investigation was to identify archaeological resources in the project area. The 176-ac APE is primarily composed of agricultural fields and residential properties (Figure 2). DelDOT and the Delaware State Historic Preservation Office (DESHPO) previously determined that the APE contained low to moderate potential for containing archaeological resources. Given the low to moderate potential, DelDOT and DESHPO agreed that only a fraction of the APE would undergo Phase I archaeological resources-identification survey (field work). A.D. Marble & Company prepared a predictive model to generate a sampling design that would focus on identifying archaeological resources within the high probability areas of the APE. As a result, approximately 132 ac of the 176-ac APE (75 percent of the APE) underwent Phase I field work. The field work was accomplished via a combination of shovel test pits (STPs) and pedestrian survey. A.D. Marble & Company excavated a total of 186 STPs and performed pedestrian survey of 82 ac.

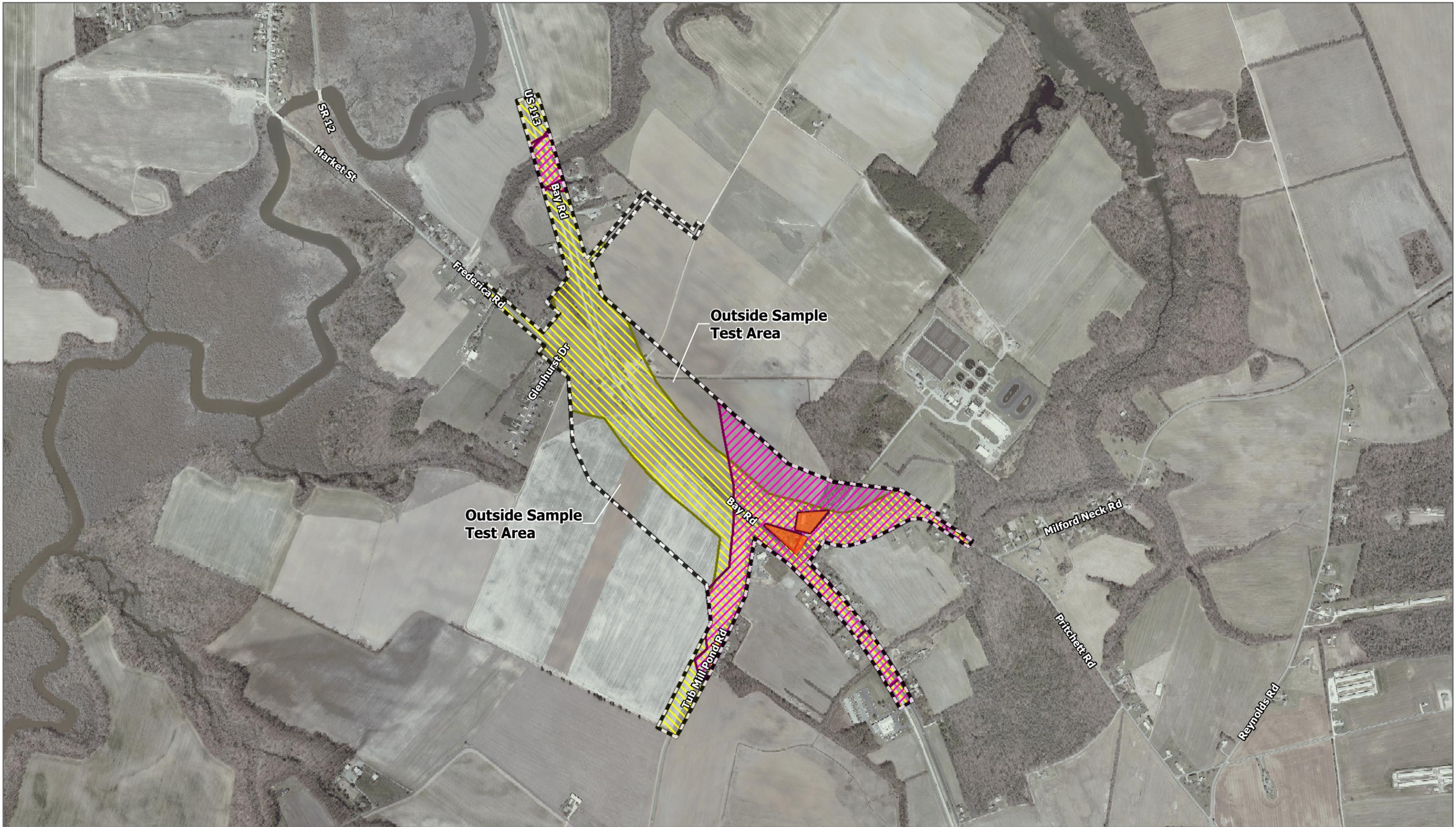


Source: © 2009 National Geographic Society, i-cubed

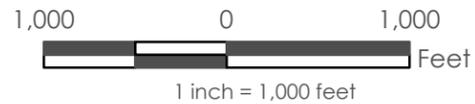
Approximate Location of APE

Figure 1
Project Location Map

SR 1 South Frederica Grade Separated Intersection
Kent County, Delaware



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Aug 27 2010



Source: 2007 Orthophotography De DataMIL



APE
Comprehensively Disturbed-
Not Tested



Precontact Probability



Historic Probability

Figure 2
Area of Potential Effects
and Sample Area

SR 1 South Frederica Grade Separated Intersection
Kent County, Delaware

The Phase I investigation revealed evidence of precontact and historic occupation of the APE. The field team recovered 87 precontact artifacts, 1,914 historic artifacts, and 44 faunal remains (likely historic or modern) during the investigation, which was accomplished via a combination of pedestrian survey in tilled fields and STPs and a single test unit (TU) in the untillable portions of the APE. The precontact assemblage contains ground and flaked stone tools, ceramics, and debitage; together, these artifacts indicate groups performed a wide variety of activities that included stone tool manufacture and maintenance as well as processing, preparation, and/or consumption of animal and plant resources. Historic artifacts include domestic and architectural debris such as fragments of bottle and window glass, nails, brick, and sherds of nineteenth- to twentieth-century ceramic forms.

The investigation identified five potentially significant archaeological sites. The first site is a small Woodland I-era precontact site that is located near the northern end of the APE and overlooks an unnamed tributary of the Murderkill River. The second site is a historic farmstead site located in the north-central portion of the APE (Cultural Resource Survey [CRS] #K-04952). Numerous brick fragments and coal slag are present in the site assemblage. Historic mapping and photography document the presence of a structure and outbuildings at this location in the early twentieth century. The third site is a late-eighteenth- to early-twentieth-century historic site that is located in the southeastern portion of the APE and contains a concentration of domestic and architectural debris. The fourth site is a historic-era site also located in the southeastern portion of the APE and mostly contains nineteenth-century domestic debris. The fifth site is located on the edge of a former farmstead property (Cultural Resource Survey [CRS] #K-04954) and contains mid- to late-nineteenth-century materials. Historic and precontact artifacts are present elsewhere in the APE, but these occur in a spatially diffuse pattern and appear to constitute isolated finds and historic-era field scatter.

This Phase I survey was performed in compliance with the provisions of the DESHPO Guidelines for Architectural and Archaeological Surveys; the Secretary of the Interior's Standards and Guidelines; Section 106 of The National Historic Preservation Act of 1966, as amended; the Procedures for the Protection of Historic and Cultural Properties set forth in 36 CFR 800, as amended; 23 CFR 771, as amended; guidance published by the Advisory Council

on Historic Preservation (ACHP); Sections 1(3) and 2(b) of Executive Order 11593; and the National Environmental Policy Act of 1969.

A.D. Marble & Company conducted the Phase I archaeological field work from March to April 2010. Bryan Butina and Frank Dunsmore served alternately as field directors. Justin Bracken, John Gorczyk, and Abigail Finkenbinder served as field technicians. Stephanie Walker directed the laboratory processing and cataloging of the artifact collection, and Michael Lenert served as report coordinator and author.