

**NEW CASTLE COUNTY, DELAWARE
U.S. 301 WEIGH STATION AND INSPECTION FACILITY**

**PHASE I ARCHAEOLOGY
AND
HISTORIC STRUCTURES
INVENTORY**

Prepared for:

**THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION**

Submitted by:

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ABSTRACT

Complete Phase I archaeological and historic structures surveys, including background research, geomorphology, and field investigations, have been completed for the Delaware Department of Transportation's (DelDOT) proposed U.S. 301 Weigh Station and Inspection Facility located in New Castle County, Delaware. The project area is located on the Cecilton, Maryland-Delaware 7.5 minute United States Geological Survey (USGS) topographic quadrangle in the Upper Coastal Plain physiographic province.

The weigh station and inspection facility project area consists of approximately 4.9 ha (12.0 ac). DelDOT will construct a truck weigh station and inspection facility, including scales, an operations building, employee and truck parking, an offload storage and vehicle segregation area, a well, a septic system, and deceleration and acceleration ramps. Background and geomorphological research identified only one portion of the project area that retained intact soils of appropriate age to contain pre-contact archaeological resources. A total of 81 shovel test pits (STPs) was used to fully survey the U.S. 301 Weigh Station and Inspection Facility project Area of Potential Effects (APE).

One pre-contact period lithic specialized tool (Isolate 1) was identified during the archaeological survey. While Isolate 1 may be indicative of pre-contact period activity, it is not functionally diagnostic, nor can it yield specific information about the pre-contact period use of the archaeological APE. No other artifacts, cultural features, or materials suitable for radiometric assay were found in association with Isolate 1. Isolates are not considered archaeological sites; therefore, it is not potentially eligible for listing in the National Register of Historic Places (NRHP).

Research did not identify any previously recorded NRHP-listed or -eligible historic properties within the U.S. 301 Weigh Station and Inspection Facility project area. The current historic structures survey identified one above-ground structure, the McCrone Farm/Frederick Brady Farmhouse (N-5226), a residence, that is over 50 years of age within or adjacent to the proposed project area. This structure had been previously recorded and the Cultural Resource Survey (CRS) form was updated during the current project. The evaluation of the residence's potential eligibility for listing in the NRHP, using the NRHP Criteria for Evaluation and Delaware State guidelines, determined that the resource is not eligible for listing.

Based on the lack of previously and newly identified archaeological sites within the U.S. 301 Weigh Station and Inspection Facility project area, and the lack of NRHP-listed or -eligible historic structures, the proposed weigh station and inspection facility project, as currently designed, will not affect any significant pre-contact or historic period archaeological resources or historic structures. No additional cultural resources investigations are warranted.

**New Castle County, Delaware
U.S. 301 Weigh Station and Inspection Facility**

**Phase I Archaeology
and
Historic Structures Inventory**

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1.0 INTRODUCTION

A Phase I archaeological survey and a historic structures inventory have been completed in conjunction with the proposed U.S. 301 Weigh Station and Inspection Facility project located in New Castle County, Delaware (Figure 1).

1.1 Purpose and Need

The U.S. 301 Weigh Station and Inspection Facility project Phase I archaeological survey and historic structures inventory were performed by Skelly and Loy, Inc. personnel at the request of the Delaware Department of Transportation (DelDOT) in order to identify any and all archaeological resources and historic structures that might be present within the project's Area of Potential Effects (APE), and to preliminarily assess those resources for integrity and/or significance. The APE is defined in 36 CFR 800.16(d) as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking."

The archaeological APE was defined by DelDOT to include all portions of the project within which the proposed weigh station and inspection facility construction may cause changes in the character or use of archaeological resources [36 CFR 800.2(c)]. The weigh station and inspection facility construction project APE for archaeological resources follows the footprint of the proposed construction, is in proportion to the scale of the proposed undertaking, and has considered the appropriate variables for impacts to archaeological resources. The archaeological APE is an irregularly shaped area, following the limits of construction (Figure 2).

The historic structures APE is considered to be the maximum extent of potential visual and audible effects that this project may have on historic resources. No structures are present in the proposed U.S. 301 Weigh Station and Inspection Facility location; however, one is nearby. The historic structures APE considered the effects of the proposed construction on this residential structure located east of but outside of the limits of construction for the weigh station. The historic structures APE accounts for ground disturbance and visual and audible increases to the area.

DeIDOT anticipates federal funding for this project. By identifying and assessing the archaeological resources and historic structures which may be affected by the proposed U.S. 301 Weigh Station and Inspection Facility project, compliance with federal legislation, including Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992; the Federal-Aid Highway Act of 1966, as amended; and the National Environmental Policy Act of 1969; Code of Federal Regulations: Advisory Council on Historic Preservation CFR 800 is assured. The *Guidelines for Architectural and Archaeological Surveys in Delaware* (Delaware State Historic Preservation Office [SHPO] 1993) were followed in preparing the project research design, methodology, and this report.

1.2 Project Description

The proposed facility construction project is located on the Cecilton, Maryland-Delaware 7.5 minute United States Geological Survey (USGS) topographic quadrangle (USGS 1993), in the Upper Coastal Plain physiographic province (Custer 1984:24). DeIDOT will construct a truck weigh station and inspection facility adjacent to the east side of U.S. 301 approximately 457.2 m (1,500.0 ft) north of the intersection of U.S. 301 with Strawberry Road, and approximately 609.6 m (2,000.0 ft) south of the intersection of U.S. 301 with Warwick Road. The project will include the construction of scales, an operations building, employee and truck parking, an offload storage and vehicle segregation area, a well, a septic system, and deceleration and acceleration ramps, as detailed on electronic project mapping, which was provided to Skelly and Loy, Inc. on December 8, 2004 by Edwards and Kelcey, Inc. for DeIDOT. The project area contains existing U.S. 301 and its berms; drainage ditching; an identified wetland; a driveway; utilities; and some commercial and residential development. The area is currently wooded and brushy, although some clearing has taken place for core drilling.

The weigh station and inspection facility project area includes property on the east side of U.S. 301 for a distance of approximately 1.40 km (0.87 mi) on property owned by DeIDOT. The total area of the U.S. 301 Weigh Station and Inspection Facility project area is approximately 4.9 ha (12.0 ac).

2.0 ENVIRONMENTAL SETTING

2.1 Physiography and Topography

The U.S. 301 Weigh Station and Inspection Facility project is located in the Coastal Plain physiographic province (Matthews and Lavoie 1970:1). The Coastal Plain is located south of the Fall Line and is characterized by level terrain and streams with gentle slopes, meandering channels, and extensive contiguous wetland areas (USGS 1986:181). Elevations within the project area range from approximately 21.3 and 24.4 m (70.0 and 80.0 ft) above mean sea level (msl).

The proposed project location is nearly level uplands located southeast of the headwaters of two tributaries to Little Bohemia Creek. No topographic settings conducive to deep alluvial deposits are present in project area. At the time of the cultural resources study, the U.S. 301 Weigh Station and Inspection Facility project area was wooded, with some grassy/brushy areas adjacent to existing U.S. 301 (Photographs 1 and 2). Portions of the project area show evidence of disturbances from historic and modern period activities associated with utility, road, and driveway construction and maintenance; residential settlement; core drilling; and agriculture (Photographs 3 and 4).

2.2 Geology, Lithic Resources, and Soils

The U.S. 301 Weigh Station and Inspection Facility project area is located in the Coastal Plain. During the formation of the Appalachian mountain range, the rocks of the piedmont were buried and then metamorphosed. Once the mountain range had formed, it began eroding. Streams flowing down the sides of the mountain carrying the eroded material began to cut into the underlying rock. This material was deposited onto what is now known as the Coastal Plain. This eroded material from the mountains created the modern-day sediments of the Coastal Plain. The surface geology of the Atlantic Coastal Plain is Quaternary and late Pleistocene. The eastern edge (the barrier island) is primarily Holocene swamp and dune sands, while the mainland surface is made up of Pleistocene deposits and is underlain by deposits of the Quaternary and Tertiary periods (University Gallery and Mineralogical Museum 2004).



Photograph 1. View of the wooded testable portion of the archaeological APE, facing east.



Photograph 2. View of the wooded and brushy testable portion of the archaeological APE, facing east.



Photograph 3. View of paved parking area in archaeological APE, facing east.



Photograph 4. View of paved parking area with utilities in archaeological APE, facing east.

The Delmarva Peninsula generally consists of a thick mantle of Pleistocene sediments, resulting in a near absence of bedrock lithic sources. Though primary bedrock sources are rare, a wealth of secondarily deposited stone occurs throughout the region. Native American knappers selected from a variety of raw materials found in stream terraces, lag deposits, and gravel bars; sources exploited include chalcedony, chert, jasper, quartz, and quartzite (Petraglia *et al.* 2002:13.6-13.8). Quartz, a tenacious stone of variable flaking quality, is especially common in Delaware lithic assemblages. While quartz is suitable for the manufacture of flaked stone tools, its ubiquity in the region and its propensity to shatter when struck during plowing or other earthmoving activities makes the attribution of some quartz specimens as artifacts problematic.

Raw materials originating from primary bedrock sources are occasionally found on sites in the region (Petraglia *et al.* 2002:13.6-13.8). Sources of Iron Hill Jasper are located near Newark to the north of the U.S. 301 Weigh Station and Inspection Facility project area. This distinctive material varies in color from yellow to dark brown and ranges in quality from excellent to poor. When good to excellent quality jasper is located, a wide variety of lithic tool forms are easily made (Petraglia and Knepper 1996). In addition to primary outcrop sources, jasper cobbles can also be found in secondary deposits in the area. Ironstone, an iron cemented sandstone, is occasionally identified on sites in the area. Primary sources of this stone are located along the Elk River and Herring Island at the upper end of Chesapeake Bay, to the north of the project area (Ward 1988:7). Exotic raw materials occasionally encountered on sites in the region include argillite and rhyolite, both with primary outcrops located to the north and northwest of the project area, respectively.

The following soils information is taken from Matthews and Lavoie (1970). Soils in the project APE are classified as Matapeake-Sassafras Association, and are described as nearly level to steep, well drained medium-textured and moderately coarse-textured soils located on uplands. The specific soil type mapped within the project area is Fallsington loam (Fs). This soil type is a deeply weathered and poorly drained soil forming in coastal plain sediments varying in sand, silt, and clay content. The Fallsington loam is typically gleyed (gray in color, often with mottling) below 28.0 cm (11.0 in), indicating that the soil profile is saturated below this depth for the majority of the year. Fallsington loam soils occur on upland flats in the southern or Coastal Plain portion of New Castle County.

2.3 Climate and Hydrology

New Castle County has a humid, continental climate that is modified due to the proximity of the Atlantic Ocean (Matthews and Lavoie 1970:93). The nearby Atlantic Ocean modifies masses of air that pass over it before reaching the county. Winters bring westerly or northwesterly winds, cooler temperatures, and clearing skies. Summers bring southerly winds with warm moist air. The average annual temperature for the county is 54.0° F (12.2° C). The average annual precipitation for New Castle County is 121.9 cm (48.0 in) and it is fairly evenly distributed over the year. The frost-free growing season lasts approximately 175 to 185 days in the project area.

The U.S. 301 Weigh Station and Inspection Facility project area does not contain any streams; however, the project location is within the part of the county that drains westward into the Chesapeake Bay. The headwaters of the Great and Little Bohemian rivers and their tributaries are located to the west and northwest of the proposed project location. Wet areas are fairly common in low-lying portions of New Castle County and several wet areas located adjacent to the proposed project area have been identified.

2.4 Flora and Fauna

The floral and faunal distributions across Delmarva can be described as a mosaic with a high variety of species present in a small area (Custer 1984:46-47). The greatest variety of animals would have been found in the grass/woodlands settings and in perennial and seasonal water sources. Principal mammal species which served as potential resources for the aboriginal inhabitants of the area were mastodon, mammoth, musk ox, vole, lemming, mouse, white-tailed deer, caribou, elk, giant beaver, river otter, porcupine, cottontail rabbit, gray squirrel, and opossum. Important fur-bearing mammals included beaver, muskrat, raccoon, and red and gray foxes. Avian fauna of aboriginal importance would have included wild turkey and ruffed grouse, as well as various species of waterfowl. Numerous species of fish and shellfish were available in freshwater streams, the brackish waters of the Chesapeake Bay, and the salt waters of the Atlantic Ocean.

3.0 METHODS

3.1 Background Research

Prior to the initiation of the geomorphological and archaeological fieldwork and the historic structures inventory, background research was conducted. Background research for the project included the examination of the Delaware archaeological site files, the National Register of Historic Places (NRHP) files, the historic resources inventory files, reports documenting previously conducted cultural resource studies, relevant state-wide historic contexts, and historic as-built roadway plans housed at the Delaware SHPO and DeIDOT offices.

3.2 Fieldwork

The U.S. 301 Weigh Station and Inspection Facility project archaeological survey was conducted in two stages. The first stage was a geomorphological reconnaissance of the archaeological APE in order to assess the nature of the landforms and soils within it, and to determine if appropriate areas existed for the implementation of archaeological survey procedures. Geomorphological investigations included the examination of the soils/sediments contained in the archaeological APE, *via* expedient hand excavated auger borings, in order to determine the presence or absence of *in situ* soils, slope, microrelief, the depth of potential cultural deposits, and any areas of modern disturbances which would preclude the preservation of buried archaeological resources. Areas with less than 15 percent slope, no obvious disturbances (e.g., cut and fill or grading operations, below-ground utility installation), and relatively intact, well drained soil horizons were chosen as appropriate locations for archaeological survey fieldwork.

Archaeological field procedures consisted of a visual examination of the entire project APE, followed by subsurface testing of the scale/parking area, as delineated during the geomorphological reconnaissance. Only limited subsurface testing was warranted in the proposed deceleration/acceleration ramp areas due to their proximity to existing U.S. 301 and its berms and drainage ditches. The Phase I archaeological survey was accomplished in December 2004. A total of 81 shovel test pits (STPs) was used during the survey. STPs were spaced at 15.0 m (49.2 ft) intervals on a grid, while retest STPs were spaced at 7.5 m (24.6 ft) intervals surrounding culturally positive STPs. The STPs were excavated by arbitrary 10.0 cm

(3.9 in) levels within natural strata to a minimum depth of 10.0 cm (3.9 in) into the culturally sterile Pleistocene subsoil, below which no pre-contact period artifacts would be expected. All of the sediments recovered from the STPs were screened through 0.64 cm (0.25 in) mesh hardware cloth in order to recover any artifacts present. Information regarding the soil texture and color, depth of any cultural materials recovered, and any soil disturbance was recorded on Skelly and Loy's standard excavation forms. Daily field notes and STP excavation information were kept by the field director. Field data were recorded on standardized field forms and were supplemented with notes made on the project maps, as warranted. The archaeological investigations were documented *via* 35mm and some digital photography.

3.3 Laboratory

The archaeological survey of the U.S. 301 Weigh Station and Inspection Facility archaeological APE yielded only one pre-contact period artifact. The recovered artifact was transported to Skelly and Loy's laboratory in Monroeville, Pennsylvania, where it was cleaned and processed. Provenience information and an artifact catalog are included as Appendix A.

3.4 Curation

The U.S. 301 Weigh Station and Inspection Facility project cultural resources materials, including field notes, maps, photographs, and one artifact, are being temporarily stored at Skelly and Loy's Monroeville, Pennsylvania facility. Permanent curation of the project materials is at DeIDOT's discretion.

3.5 Historic Structures Inventory

The historic structures APE includes one historic (i.e., greater than 50 years old) house and a portion of its associated land. The resource, McCrone Farm/Frederick Brady Farmhouse (N-5226), was previously surveyed in 1992. The existing survey form for the resource was acquired from the Delaware SHPO in November 2004. Due to the passage of time since the original survey, the resource was field surveyed and photographed using a 35mm camera and black and white film. Following the field survey, research on the property was undertaken at the New Castle County Recorder of Deeds office and the Delaware Historical Society, both located in Wilmington.

4.0 CULTURAL RESOURCES PREDICTED FOR THE PROJECT APE

A report compiling all of the data on existing and potential pre-contact and historic period archaeological resources has been previously completed for the entire U.S. 301 corridor (Kellogg 1992). The U.S. 301 Weigh Station and Inspection Facility project is located near the southern terminus of the corridor study area included in Kellogg (1992:3). The following discussions are specific to the U.S. 301 Weigh Station and Inspection Facility and draw upon information contained in Kellogg (1992), as well as additional updated background research.

4.1 Pre-contact Period Archaeology

The following is a discussion of the potential for the project APE to contain pre-contact period archaeological sites. According to the predictive modeling accomplished by Custer (n.d.) for pre-contact period archaeological resources in Delaware, the U.S. 301 Weigh Station and Inspection Facility project archaeological APE is contained within a moderate probability area; however, the area located immediately north of the archaeological APE, surrounding the intersection of U.S. 301 and Warwick Road, is contained in a high probability area. More specifically, Custer (1986:198) indicates that the archaeological APE is ranked as having low significance probability with medium/low data quality and medium/low numbers of known sites. Despite the fact that Custer (1986:204-205) does not assign the weigh station and inspection facility project area location to a specific area of development (e.g., Middletown/Odessa, Seaford), the location of the archaeological APE at a multiple road intersection along a major north to south transportation route and peripheral to the Middletown/Odessa areas indicates that developmental pressures are high for the U.S. 301 Weigh Station and Inspection Facility project archaeological APE.

Background research revealed that few cultural resources surveys have been completed in the project vicinity (Kellogg 1992:33, 39). Kellogg (1992:122-126) lists no previously recorded pre-contact period sites on the Cecilton, Maryland-Delaware topographic quadrangle and only one Woodland I period site on the adjacent Middletown, Delaware topographic quadrangle. Review of the Delaware archaeological site files for the current project did not identify any previously recorded pre-contact period archaeological sites within or near the proposed weigh station and inspection facility project.

Based on the absence of previously recorded pre-contact period archaeological sites within or near the archaeological APE; the information contained in the statewide contexts,

including a categorization of the area as having low/moderate site potential in concert with a need for research; the limited size of the proposed construction; the scope and amount of commercial and roadway development adjacent to the archaeological APE; and the presence of soils of appropriate age to contain pre-contact period archaeological remains, the U.S. 301 Weigh Station and Inspection Facility project archaeological APE is considered to have only a low to moderate potential to contain pre-contact period archaeological remains. Based on the archaeological APE's topographic setting as a level area with some wetlands and inundation, if pre-contact period archaeological remains are identified, they will most likely represent ephemeral transitory use of this area as part of a more general settlement pattern, which included use of resources associated with wetlands, and larger more permanent base camps along the Bohemia River, Little Bohemia Creek, Great Bohemia Creek, and their tributaries. For additional pre-contact period context of the project area, the reader is referred to *A Cultural Resources Reconnaissance Planning Study of the Proposed Delaware Route 310 Corridor, New Castle County, Delaware* (Kellogg 1992), *A Management Plan for Delaware's Prehistoric Cultural Resources* (Custer 1986), *Delaware Prehistoric Archaeology, An Ecological Approach* (Custer 1984), and *Chesapeake Prehistory* (Dent 1995).

4.2 Historic Period Archaeology

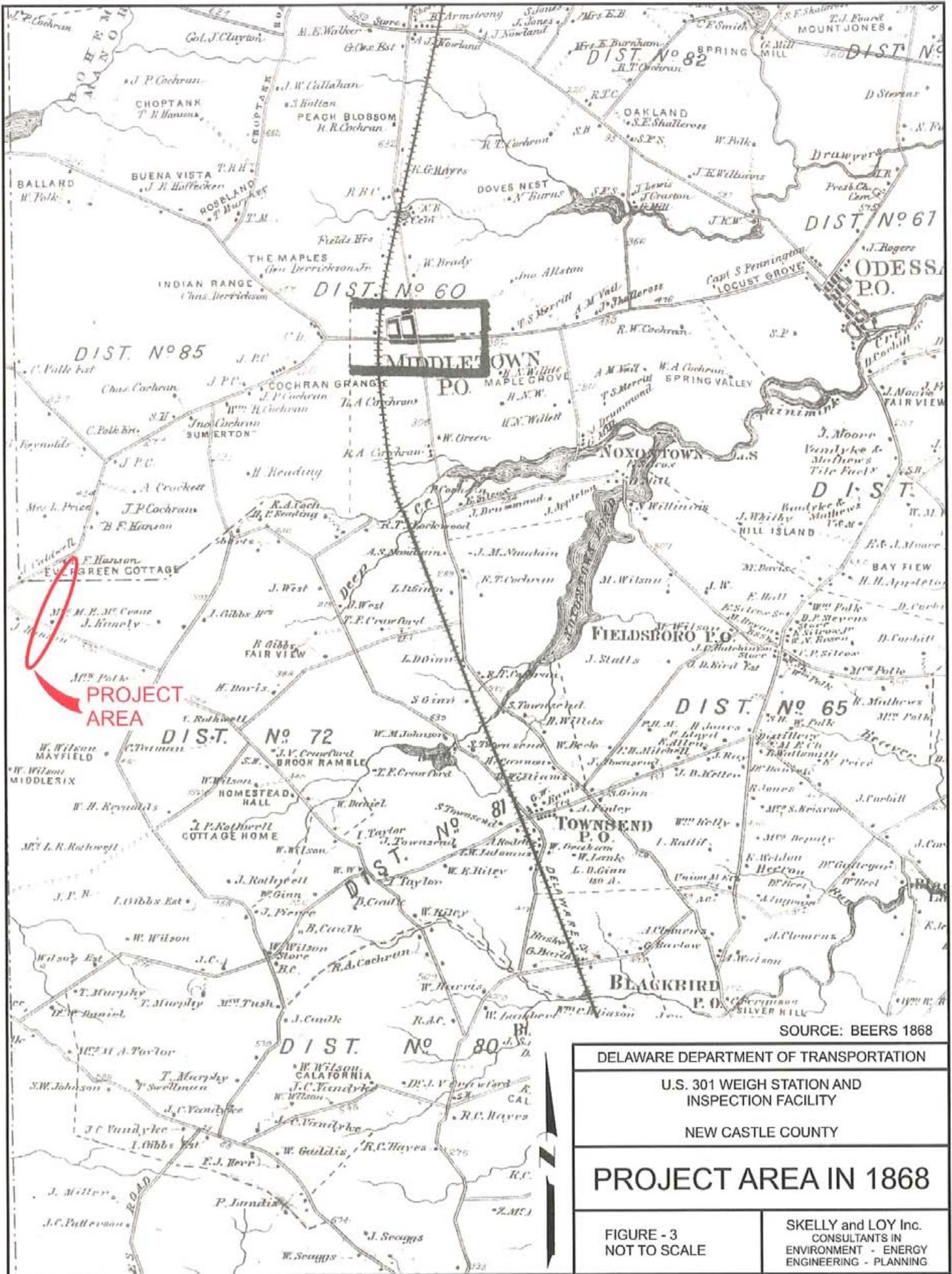
The following is a summary of previously identified historic period cultural resources located in the general vicinity of the U.S. 301 Weigh Station and Inspection Facility project and a discussion of the potential for the archaeological APE to contain historic period archaeological sites. For an extensive description of Delaware's Euro-American history, especially agriculture, the reader is referred to the *Management Plan for Delaware's Historical Archaeological Resources* (De Cunzo and Catts 1990) and "*Neither a Desert Nor a Paradise:*" *Historic Context for the Archaeology of Agriculture and Rural Life, Sussex County, Delaware 1770-1940* (De Cunzo and Garcia 1993). Several historic period cultural resources are recorded in or near the weigh station and inspection facility project and are summarized in Table 1. These resources are residences associated with farms/agricultural activity.

**Table 1.
Previously Recorded Historic Period Cultural Resources Located Near the
U.S. 301 Weigh Station and Inspection Facility Project**

CRS Number	Distance and Direction from U.S. 301 Weigh Station and Inspection Facility Project Location	Description
N-5221	2.1 km (1.3 mi) north-northeast	C. Polk Estate (Beers 1868); frame house; 1830-1880 Industrialization and Capitalization; agricultural functions
N-5222	2.9 km (1.8 mi) north-northwest	C. Polk Estate (Beers 1868); frame house; 1830-1880 Industrialization and Capitalization; agricultural functions
N-5223	1,219.2 m (4,000.0 ft) north-northwest	Mrs. C. Price (Beers 1868); frame house; 1830-1880 Industrialization and Capitalization; agricultural functions
N-5224	1,371.6 m (4,500.0 ft) north-northeast	A. Crockett (Beers 1868); unknown associated dates; unknown function
N-5225	838.2 m (2,750.0 ft) north	B.F. Hanson (Beers 1868); frame house; 1770-1830 Transformation from Colony to State; agricultural functions
N-5226	76.2 m (250.0 ft) east	Evergreen Cottage; 1992 survey identified this structure as Evergreen Cottage; however, this is in error; CRS form updated during current survey

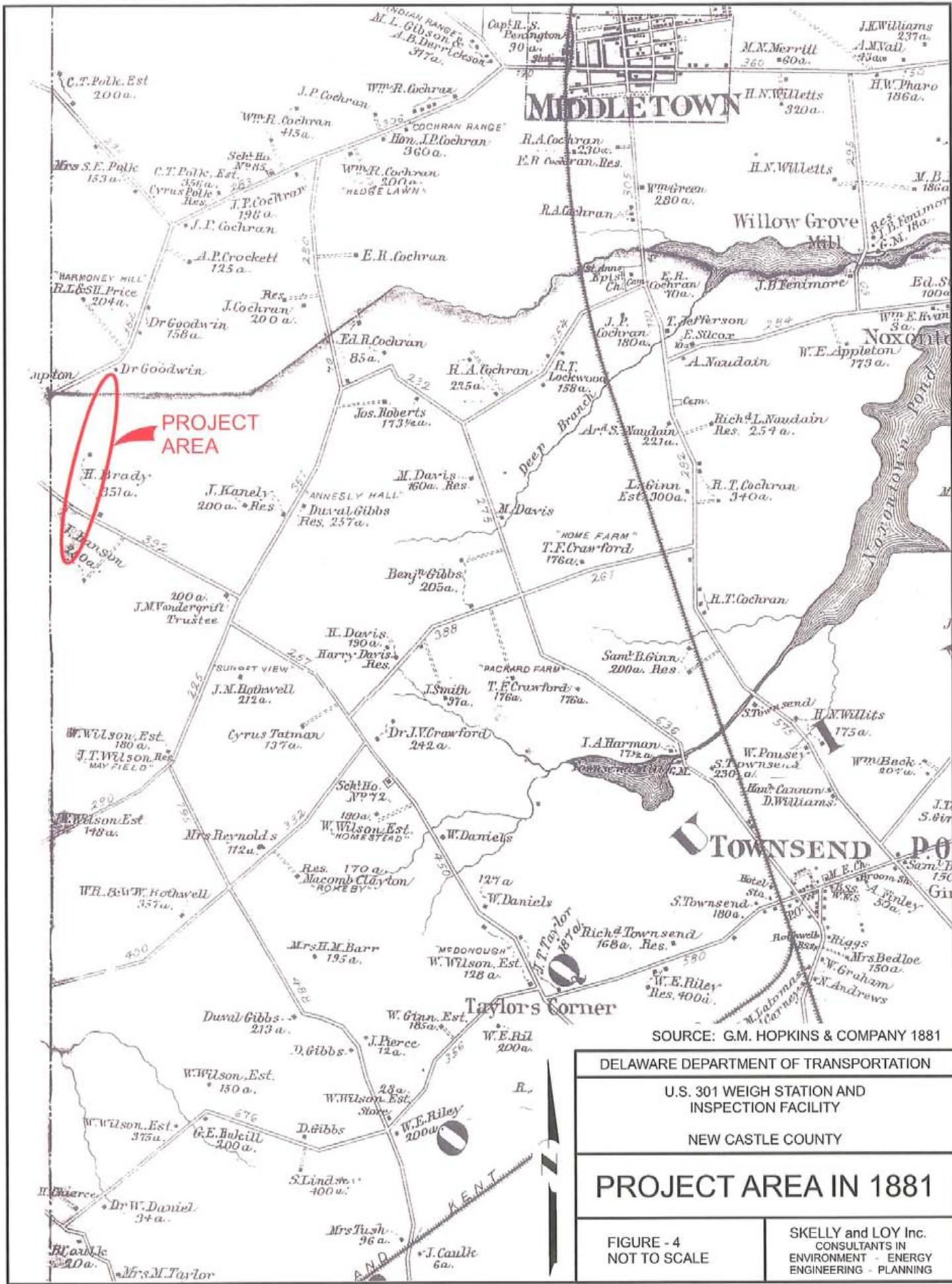
Historic period mapping of the project area indicates that the area has remained mainly rural throughout the historic period, but has been subject to continued development since the 1950s when U.S. 301 was built in this area. The Beers (1868) map of Sussex County shows two structures near the archaeological APE, but definitely outside of it (Figure 3). The B.F. Hanson residence is shown northwest of the archaeological APE on the west side of what is now S.R. 299, and a second residence associated with Mrs. M.E. McCrone is shown south of the archaeological APE along the north side of Strawberry Lane. The G.M. Hopkins & Company (1881) and Baist (1893) maps show the same structures but with different owners (Figures 4 and 5). Dr. Goodwin is associated with the former Hanson residence and H. Brady is associated with the former McCrone residence. Sometime between 1893 and 1900, it appears from the historic mapping that a house was constructed directly to the east of the archaeological APE, but like the two other earlier structures, this residence is not within the archaeological APE (Figure 6). None of the houses shown on historic mapping are close enough to the U.S. Weigh Station and Inspection Facility archaeological APE for their associated historic features, such as outbuildings, sheet trash middens, wells, or privies, to be located within the archaeological APE.

De Cunzo and Catts (1990) present an in-depth discussion of the history of the project area, as well as the statewide historic contexts within which identified historic period resources may be evaluated. Additional historic period information and a predictive model for historic sites



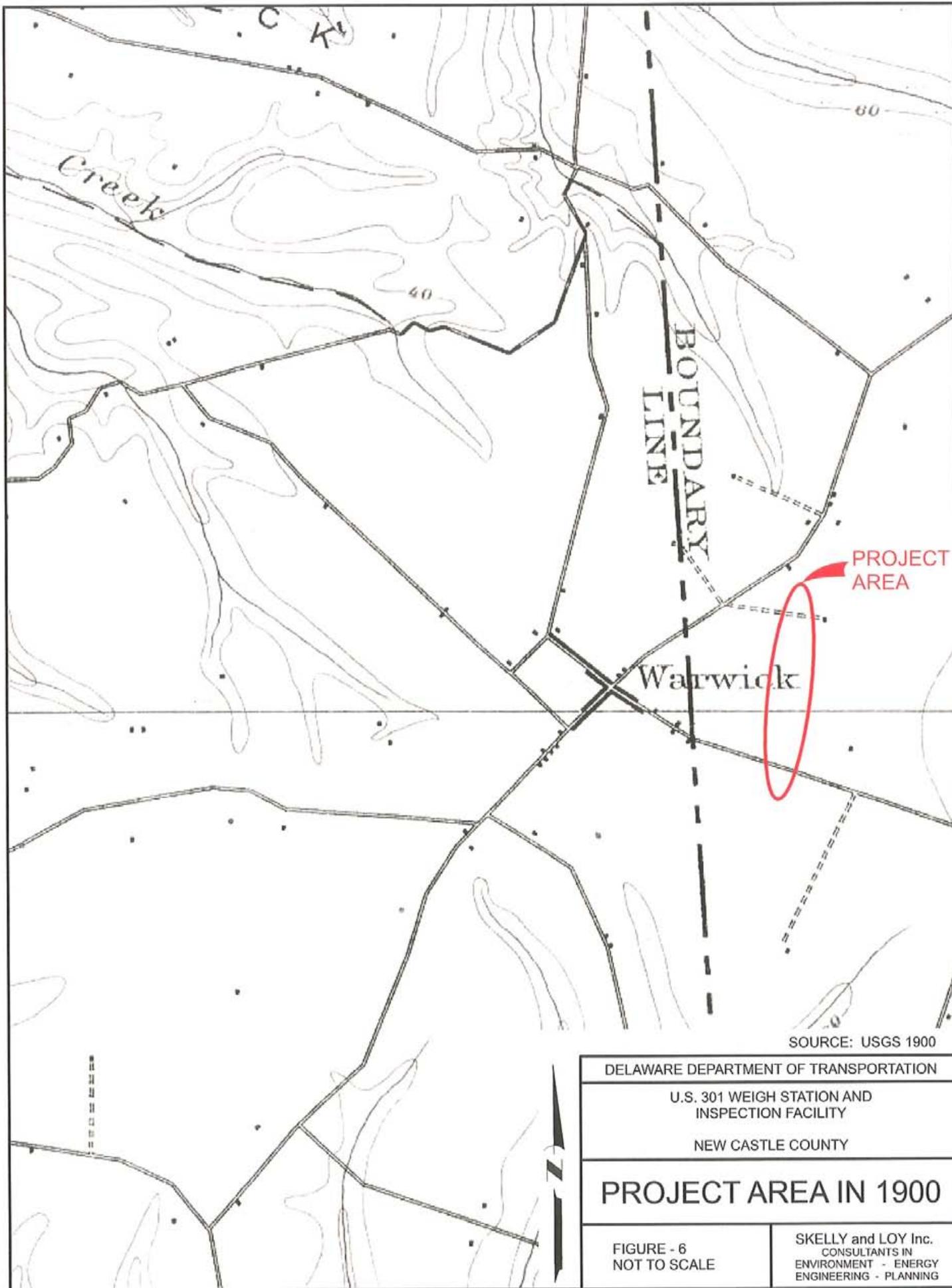
SOURCE: BEERS 1868

DELAWARE DEPARTMENT OF TRANSPORTATION	
U.S. 301 WEIGH STATION AND INSPECTION FACILITY	
NEW CASTLE COUNTY	
PROJECT AREA IN 1868	
FIGURE - 3 NOT TO SCALE	SKELLY and LOY Inc. CONSULTANTS IN ENVIRONMENT - ENERGY ENGINEERING - PLANNING



SOURCE: G.M. HOPKINS & COMPANY 1881

DELAWARE DEPARTMENT OF TRANSPORTATION	
U.S. 301 WEIGH STATION AND INSPECTION FACILITY	
NEW CASTLE COUNTY	
PROJECT AREA IN 1881	
FIGURE - 4 NOT TO SCALE	SKELLY and LOY Inc. CONSULTANTS IN ENVIRONMENT - ENERGY ENGINEERING - PLANNING

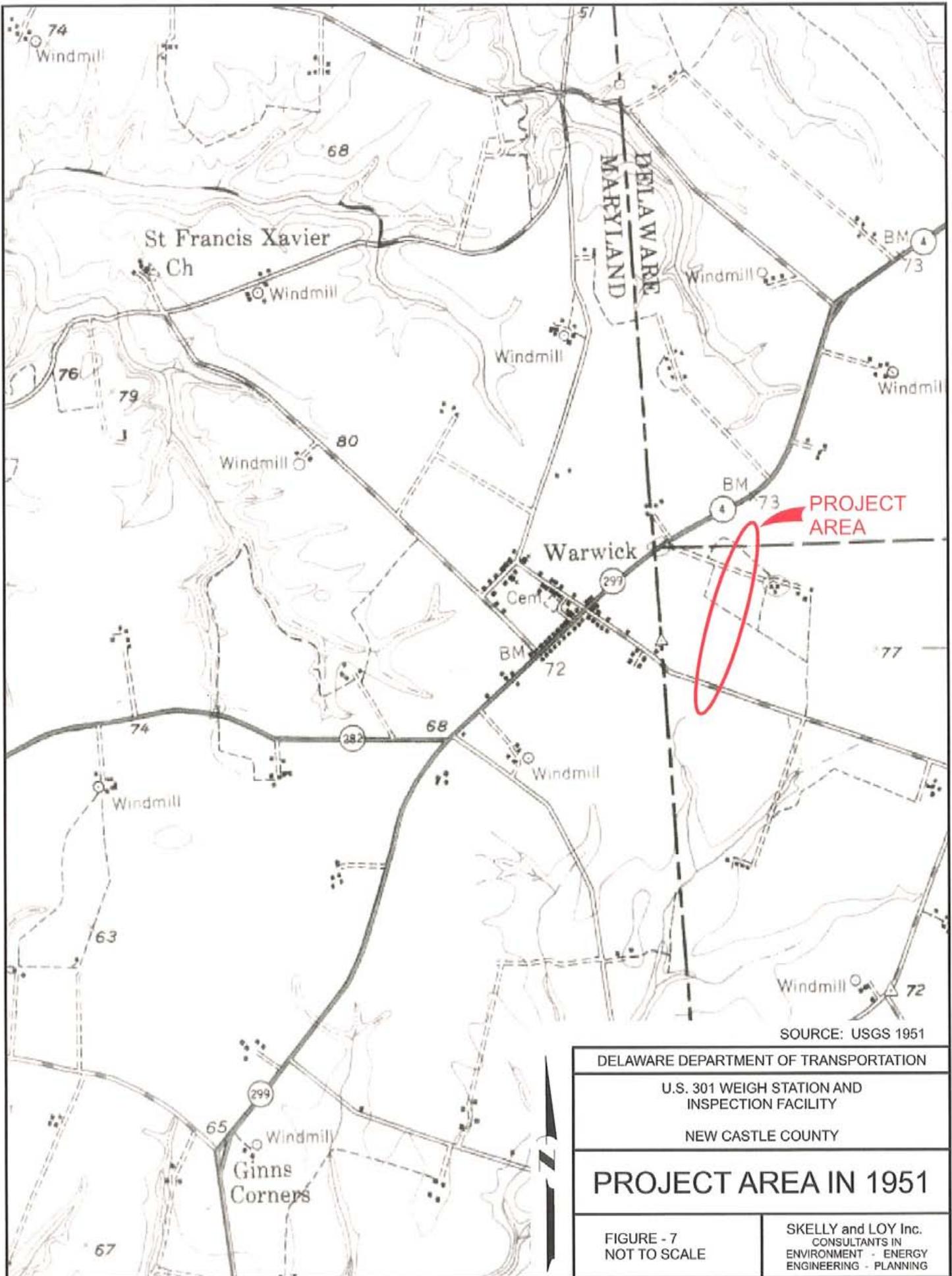


are provided in the Route 301 Planning Study (Kellogg 1992). Kellogg's (1992:71-82) historic sites predictive model accounted for the two earliest periods of Euro-American settlement in Delaware, 1630 to 1730 and 1730 to 1770, using two major variables -- distance to transportation and soil drainage. These variables are germane due to the agrarian economy that was in place at the time. Based on this modeling, the weigh station and inspection facility project area is included in the low and lowest potential areas for the presence of historic period sites of these ages (Kellogg 1992:77, 80).

In addition, De Cunzo and Catts (1990:172-173) do not consider the U.S. 301 Weigh Station and Inspection Facility project area to be within their areas of emphasis for either their Exploration and Frontier Settlement 1630-1730 or their Intensified and Durable Occupation 1730-1770 periods. After 1770, the towns of Middletown and Odessa begin to develop; however, the areas surrounding them remain mainly rural until the rise of the suburbs in the 1940s-1950s. The weigh station and inspection facility project area did not become a major transportation route until the improvements to U.S. 301 in the 1950s (after 1951) (Figure 7). With the improvement to U.S. 301 came additional development. Based on the information contained in historic mapping, Kellogg (1992), and De Cunzo and Catts (1990), it appears that the area surrounding the U.S. 301 Weigh Station and Inspection Facility project has a low potential to contain historic period archaeological resources.

Skelly and Loy personnel recently conducted a historic architectural survey of the U.S. 301 Weigh Station and Inspection Facility area. No previously identified or newly identified above-ground resources built prior to 1950 are located within the archaeological APE; however, one structure is located east of the proposed limits of construction for the weigh station and inspection facility. The McCrone Farm/Frederick Brady Farmhouse (N-5226) is a farmhouse identified on historic mapping. The farmhouse is not close enough to the project area to cause concern that archaeological deposits associated with it might be located in the archaeological APE.

Due to the long-term rural nature of the archaeological APE, if historic period archaeological resources are identified, they will most likely be secondary and/or inadvertent deposits of litter related to agricultural activities and/or transportation related resources dating from the construction of current U.S. 301 to the recent past. However, given the constricted size and positioning of the archaeological APE, it is likely that generalized historic artifact scatters or isolates will be the norm recovered during the archaeological survey. Generalized/fragmentary temporally and functionally non-diagnostic historic period artifacts do not permit



SOURCE: USGS 1951

DELAWARE DEPARTMENT OF TRANSPORTATION	
U.S. 301 WEIGH STATION AND INSPECTION FACILITY	
NEW CASTLE COUNTY	
PROJECT AREA IN 1951	
FIGURE - 7 NOT TO SCALE	SKELLY and LOY Inc. CONSULTANTS IN ENVIRONMENT - ENERGY ENGINEERING - PLANNING

specific contextual associations such as those mentioned above, nor do the interpretations of them contribute significant information to the specific land-use history of the project area.

5.0 RESULTS

5.1 Geomorphology and Lithic Resources

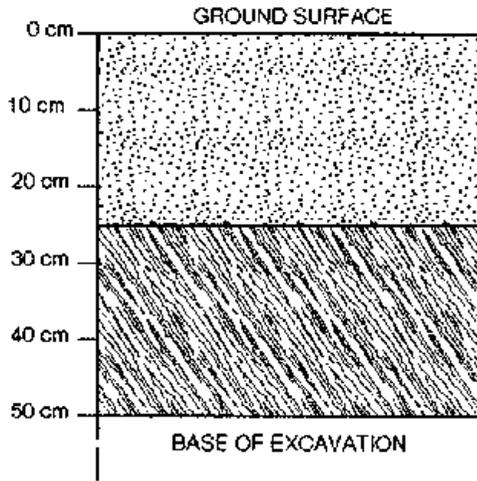
The U.S. 301 Weigh Station and Inspection Facility project archaeological APE was investigated for the presence of landforms and soils which might have the potential to contain intact archaeological resources. Many soil auger borings were taken within the archaeological APE, with some exhibiting disturbed or truncated, and perpetually inundated stratigraphic profiles. Being located within the Coastal Plain physiographic province, soils within the archaeological APE are forming in coastal plain sediments left from receding marine waters. The area is nearly level, with subtle higher areas and basin-shaped depressions.

Three of the auger boring soil profiles were chosen as typical and representative of the encountered soil types and conditions within the archaeological APE (see Figure 2). The three soil profiles were examined and described in detail according to the methods and nomenclature prescribed by the United States Department of Agriculture, Natural Resources Conservation Service (Schoenenberger 2002). Tabular descriptions of the soil profiles are included in Appendix B and graphic depictions of the same profiles are included as Figures 8 and 9.

All three described soil profiles are comprised of well developed, deeply weathered profiles forming in sandy coastal plain sediments. Auger Boring 1 is located on a convex topographic surface that is slightly higher than the surrounding depressed areas. The Auger Boring 1 soil profile appears to be well drained due to a high sand content. Auger Boring 2 is located within a subtle concave topographic depression. This auger boring contains a poorly drained soil that is high in silt content and gleyed below 25.0 cm (9.8 in), indicating that the internal drainage of this soil profile is severely restricted below this depth for a majority of the year. Auger Boring 3, is located on a generally level topographic setting with no notable depressions, and is comprised of loamy sediments containing approximately equal amounts of sand, silt, and clay. The subsoil present in Auger Boring 3 is not gleyed, but was mottled, indicating frequent but not prolonged drainage restrictions (Photograph 5).

The well-drained portions of the project area may have been attractive as an occupational surface by indigenous people. However, due to the presence of numerous poorly drained soils and wet areas, the U.S. Weigh Station and Inspection Facility project archaeological APE is more likely to have been used for short-term, ephemeral activities associated with the procurement of subsistence resources associated with these wetlands. Due to the localized nature of the wet/poorly drained soils within the archaeological APE,

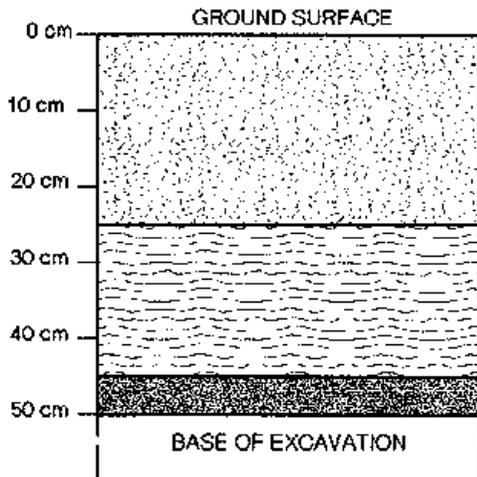
SOIL PROFILE AUGER BORING 1



Ap 10YR 3/3 Dark brown sandy loam.

Bt 7.5YR 4/4 Brown sandy clay loam.

SOIL PROFILE AUGER BORING 2



Ap 10YR 4/2 Dark grayish brown silt loam.

Btg1 10YR 5/2 Grayish brown silty clay loam, with common
10YR 6/1 Gray mottles.

Btg2 10YR 6/1 Gray silty clay loam.

DELAWARE DEPARTMENT OF TRANSPORTATION

U.S. 301 WEIGH STATION AND
INSPECTION FACILITY

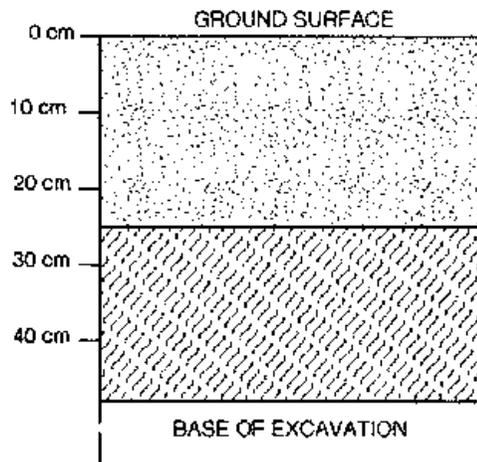
NEW CASTLE COUNTY

SOIL PROFILES
AUGER BORINGS 1 AND 2

FIGURE - 8

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ENGINEERING - PLANNING

SOIL PROFILE AUGER BORING 3



Ap 10YR 4/2 Dark grayish brown loam.

Bt 10YR 5/3 Brown clay loam, with common 10YR 6/2 Light brownish gray mottles.

DELAWARE DEPARTMENT OF TRANSPORTATION	
U.S. 301 WEIGH STATION AND INSPECTION FACILITY	
NEW CASTLE COUNTY	
SOIL PROFILE AUGER BORING 3	
FIGURE - 9	SKELLY AND LOY, INC. CONSULTANTS IN ENVIRONMENT - ENERGY ENGINEERING - PLANNING



Photograph 5. View of standing water in archaeological APE, facing east.

testing for archaeological resources was recommended throughout the portion of the archaeological APE that contains the scales, operations building, parking areas, and septic system.

Most portions of the archaeological APE that adjoin existing U.S. 301 have been previously disturbed from roadway construction, utility emplacement, and commercial and residential development. Within these disturbed areas, either the entire soil profile has been excavated and/or re-graded, and mixed. Drainage ditches, excavated for the collection of roadway runoff, lie adjacent to portions of existing U.S. 301 in the archaeological APE. No archaeological testing was recommended in the disturbed portions of the archaeological APE due to the lack of soils of appropriate age to contain archaeological resources or the mixed/redeposited nature of the soils present. Two small areas adjacent to the existing roadway did exhibit intact soil profiles and were tested.

5.2 Archaeology

As illustrated on Figure 2, most of the archaeological APE adjacent to existing U.S. 301 has been extensively disturbed by roadway and utility construction and maintenance. The disturbed portion of the archaeological APE comprises approximately 3.1 ha (7.7 ac). Two small areas adjacent to existing U.S. 301 and the portion of the U.S. 301 Weigh Station and Inspection Facility project archaeological APE that will contain the scales, operations building, parking areas, and septic system are the only portions of the archaeological APE that exhibited undisturbed stratigraphic profiles of appropriate age to contain *in situ* archaeological remains. These testable areas total approximately 1.7 ha (4.2 ac). Currently, the test areas are grassy and/or wooded, with light undergrowth, including opportunistic species. Ground surface visibility was poor (<50%) due to vegetation and leaf litter. Two isolated STPs were excavated adjacent to U.S. 301 in two undisturbed areas, while 75 STPs laid out on a 15.0 m (49.2 ft) grid were excavated across the large test area. Four retest STPs were excavated at 7.5 m (24.6 ft) intervals surrounding the single culturally positive STP (N285 E105) in the large test area.

The undisturbed stratigraphic profiles of the STPs are similar to one another and are comprised of two natural strata. Stratum 1, the uppermost stratum, is either a dark brown (10YR 3/3) or dark grayish brown (10YR 4/2) sandy loam or loam plowzone (Ap). Stratum 1 is present at the modern ground surface, and ranges in thickness from a minimum of 5.0 cm (2.0 in) to a maximum of 36.0 cm (14.2 in), with an average thickness of 27.5 cm (10.8 in). One pre-contact period specialized implement (Isolate 1) was identified in Stratum 1 at UTM grid

coordinate Zone 18 Northing 4363680 Easting 434265 in STP N285 E105. A map of Isolate 1's location is included as Appendix C. Isolate 1 is a uniface made of jasper (Plate 1). Stratum 1 overlies Stratum 2 by a clear boundary. Stratum 2 is a yellowish brown (10YR 5/6) sandy clay loam Pleistocene subsoil (Bt). Stratum 2 is culturally sterile.

While Isolate 1 may be indicative of pre-contact period activity, it is not functionally diagnostic, nor can it yield specific information about the pre-contact period use of the archaeological APE. No other artifacts, cultural features, or materials suitable for radiometric assay were found in association with Isolate 1. Due to the presence of localized disturbances in the U.S. 301 Weigh Station and Inspection Facility project archaeological APE, and its isolated context, Isolate 1 is most likely a re-deposited artifact not indicative of an *in situ* pre-contact period event. Isolated artifacts are not considered archaeological sites. No other archaeological remains were identified in the archaeological APE during the Phase I survey. Since no previously recorded archaeological sites or NRHP-listed properties are present within the U.S. 301 Weigh Station and Inspection Facility project archaeological APE, and only a single pre-contact period lithic isolate was recovered during the archaeological survey, no additional archaeological investigations are warranted.

5.3 Historic Structures

A Delaware Cultural Resource Survey (CRS) form has been updated for the single identified structure over 50 years of age located adjacent to but outside of the proposed U.S. 301 Weigh Station and Inspection Facility project. The updated CRS form for the McCrone Farm/ Frederick Brady Farmhouse (N-5226) is included in Appendix D.

5.3.1 McCrone Farm/Frederick Brady Farmhouse (N-5226)

Located to the east of the proposed U.S. 301 Weigh Station and Inspection Facility project area is historic resource N-5226 (Photographs 6 and 7), a farmhouse that was previously surveyed in 1992. In addition to the farmhouse, there are also some small and undistinguished outbuildings located on the property. The 1992 survey of the farmhouse misidentified the house as "Evergreen Cottage," a property located in St. Georges Hundred and associated with B.F. Hanson on the 1868 *Atlas of the State of Delaware* (Beers 1868) (see Figure 3). A date stone on the farmhouse, however, indicates that it was not constructed until 1908, by someone with the initials F.B.



SL 1



Plate 1. Isolate 1, Uniface.



Photograph 6. View of the facade and south sides of the Frederick Brady Farmhouse (N-5226), facing northeast.



Photograph 7. View of the rear and north sides of the Frederick Brady Farmhouse (N-5226), facing southwest.

(Photograph 8). Furthermore, the farmhouse (N-5226) is located in Appoquinimink Hundred, rather than St. Georges Hundred, and on U.S. 301, a road that did not exist in 1868. The road on which Evergreen Cottage was located is State Route 299 today. No recommendation for eligibility of the property was made in the 1992 survey.

Deed research indicates that N-5226 once sat on a farm of approximately 142.1 ha (351.0 ac). The 1868 Beers Atlas (Beers 1868) shows the farm as being owned by Mrs. M.E. McCrone. There is a house on the property, but it is not at the location of N-5226. In 1879, Henry W. Brady purchased the farm from Mary E. McCrone (New Castle County Deeds 1879). New Castle County maps from 1881 (G.M. Hopkins & Company 1881) and 1893 (Baist 1893) show H. Brady as the owner of a 351 ac farm (see Figures 4 and 5). In 1886, Henry Brady sold the McCrone Farm to his brother, George F. Brady (New Castle County Deeds 1886). At some point, in a transaction not recorded at the New Castle County Recorder of Deeds, the McCrone Farm became the property of George Brady's son, Frederick Brady. It is assumed he is the F.B. who erected the farmhouse (N-5226) in 1908. In 1924, Frederick and his wife Mary D. Brady sold the farm to his mother, Rebecca W. Brady, for \$18,000 (New Castle County Deeds 1924). An undated history of the Brady family, on file at the Delaware Historical Society (DHS), notes that Rebecca Brady died in 1928 (Button n.d.). More than two decades later, her six surviving children and their spouses, Rebecca's heirs-at-law, sold the McCrone Farm (New Castle County Deeds 1949). A development company purchased the land in 1957, when the property began to be subdivided. Today, the farmhouse sits on a 77.7 ha (192.1 ac) tract of land (New Castle County Deeds 1957, 2004).

The Bradys were a prominent family in the Middletown area who, among other things, speculated in land and owned multiple farms in the area. George F. Brady, an emigrant from Ireland, arrived in Delaware during the 1850s. He and his brother, Henry, operated a successful towing business on the Chesapeake and Delaware Canal and also entered the agricultural trade, purchasing farms throughout New Castle County. George Brady's home farm, initially, was called Marldale and was located in Red Lion Hundred. All his children, including Frederick, were born there. At some point, George moved the family to the Middletown area, to better manage his farm properties. In the 1880s, he lived at Greenlawn (N-188), a NRHP-listed farmhouse that was demolished in 1983 (Button n.d.; Herman 1987:154-157). At the time of his death in 1910, George Brady owned 14 farms (Bevans 1929:106).



Photograph 8. View of the Frederick Brady Farmhouse (N-5226) date stone, facing southwest.

George's son, Frederick, who apparently built the farmhouse on the McCrone Farm, was not as prominent as his father. Delaware histories and biographical dictionaries published in 1882 (McCarter and Jackson 1882), 1908 (Conrad 1908), 1929 (Bevans 1929), and 1947 (Reed 1947) contain no information about Frederick. The Brady family history at the DHS also contains little concrete information about him. It does, however, indicate that he probably did not live on the McCrone Farm. Rather, beginning in 1893, Frederick lived on a farm named Acadia (Button n.d.). The deed record for the 142.1 ha (351.0 ac) McCrone Farm never uses the name Acadia; the McCrone name is used consistently throughout. The implication is that Frederick rented or leased the McCrone Farm, a conclusion consistent with the family's history of owning multiple farms.

5.3.2 NRHP Assessment of the Frederick Brady Farmhouse (N-5226)

Frederick Brady built the farmhouse on the McCrone Farm in 1908 during the "Urban and Early Suburbanization 1880-1940" period of Delaware's history. In the Upper Peninsula Zone (including Appoquinimink Hundred), agriculture continued to play an important function in rural areas during this period, although farm values were dropping. Truck farming and a greater commercialization of agriculture were trends during this era (Herman *et al.* 1989:34-35).

The Frederick Brady Farmhouse (N-5226) is not eligible for listing in the NRHP under Criteria A, B, C, or D. In order to be eligible under Criterion A for agriculture, the farmhouse would have to convey its association with the truck farming and greater commercialization of agriculture that characterized the Upper Peninsula Zone in the 1880-1940 period. This is best done through an intact farm or farmstead, which would include a farmhouse and intact agricultural outbuildings. Two outbuildings present when the property was surveyed in 1992 have been removed. A large amount of farmland still remains with the property, but the farmhouse is currently a residential rental property and is not associated with agricultural activities on the property. The Frederick Brady Farmhouse (N-5226) does not convey its former association as an agricultural property.

To be eligible under Criterion B, the Frederick Brady Farmhouse (N-5226) must be associated with a significant person. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (National Park Service 1991:14) clearly states that "Criterion B applies to properties associated with individuals whose specific

contributions to history can be identified and documented.” The farmhouse was built by Frederick Brady. Although his family was prominent in the Middletown area, there is no record that Frederick made a significant and demonstrable contribution to the history of the region. Consequently, the Frederick Brady Farmhouse (N-5226) is not eligible under NRHP Criterion B.

The farmhouse is also not eligible under NRHP Criterion C as embodying “distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction” (National Park Service 1991:17). In order to be significant under this criterion, the farmhouse would have to display the character-defining elements of Colonial Revival architecture, which one architectural style guide describes as a rectangular plan; accentuated front door, normally with a decorative fanlight or sidelights; symmetrical fenestration with multi-pane glazing; and exaggerated details (McAlester and McAlester 1990:321-326). The architectural style was used with great frequency between 1880 and 1955, and residential examples are remarkably common. Consequently, in order to be NRHP-eligible, examples should also have high-style details, including large massing, cornices supported by exposed rafter tails, Palladian or stained glass windows, and vertical boards or end pilasters. The architecture of the Frederick Brady Farmhouse (N-5226) does not rise to this level. Rather, the house is a modest example of a Colonial Revival dwelling that lacks basic elements, such as an accentuated front door with fanlight or sidelights and all of the high-style elements outlined above. Its only stylistic detail are the hood moldings that grace the doors and windows. The resource has also been altered, most notably by the removal of the front porch and the replacement of some windows. The Frederick Brady Farmhouse (N-5226) is not eligible under Criterion C.

Finally, the Frederick Brady Farmhouse (N-5226) is not eligible under NRHP Criterion D. Under this criterion, a building is significant if it is the principal source of important information that cannot be gathered by other means. The house is an undistinguished example of a common late nineteenth and twentieth centuries type. It does not convey information on architecture or building techniques that cannot be gathered by other methods. For this reason, it is not eligible under Criterion D.

6.0 SUMMARY AND RECOMMENDATIONS

An archaeological survey and historic structures inventory, including a field view, background research, geomorphology, and field investigations, have been completed for the DelDOT's proposed U.S. 301 Weigh Station and Inspection Facility project. The goal of the archaeological survey was to identify any archaeological remains located within the limits of the construction disturbance proposed for the weigh station and inspection facility and, if possible, to assess any identified resources for significance (eligibility for listing in the NRHP). To this end, background and geomorphological research indicated that the project area had the potential, albeit low, to contain pre-contact or historic period archaeological remains. The project area was then surveyed using appropriate, standard, and proven methodologies.

Despite the opportunity to survey relatively undisturbed portions of the project area that had the potential to contain pre-contact period cultural remains, the U.S. 301 Weigh Station and Inspection Facility project archaeological survey resulted in the identification of only one isolated pre-contact period artifact. No cultural features or other artifacts were identified during the survey. Isolate 1 is not considered an archaeological site; therefore, it can not be considered eligible for listing in the NRHP.

Research did not identify any previously recorded NRHP-listed or -eligible historic structures, or historic districts within the proposed U.S. 301 Weigh Station and Inspection Facility project area. One structure, the McCrone Farm/Frederick Brady Farmhouse (N-5226) located to the east of the project area, had been surveyed in 1992, but the structure was wrongly identified and no recommendation of eligibility had been made. The current historic structures survey re-identified this structure and updated the CRS form, correcting the mistaken identity and evaluating the property for NRHP eligibility. The McCrone Farm/Frederick Brady Farmhouse (N-5226), a ca. 1908 farmhouse built by Frederick Brady and currently used as a residential rental property, is the only property that is over 50 years of age within or adjacent to the proposed project area. The structure is not considered potentially eligible for listing in the NRHP due to its lack of association with prominent events or persons in history, its lack of distinctive architectural characteristics or master craftsmanship, and its inability to yield information important to the historic land-use of the region. The McCrone Farm/Frederick Brady Farmhouse (N-5226) is not potentially eligible for listing in the NRHP because it does not meet any of the four NRHP Criteria for Evaluation, nor does it possess aspects of integrity as measured by the NRHP Criteria for Evaluation and Delaware State Guidelines.

Based on the lack of previously and newly identified archaeological sites within the proposed U.S. 301 Weigh Station and Inspection Facility project area, and the lack of NRHP-listed or -eligible historic structures, the proposed construction, as currently designed, will not affect any significant pre-contact or historic period archaeological resources, or historic structures. No additional cultural resources investigations are warranted.

7.0 REFERENCES CITED

- Baist, G.W.
1893 *Atlas of New Castle County, Delaware*. G.W. Baist, Philadelphia.
- Beers, D.G.
1868 *Atlas of the State of Delaware: From Actual Surveys By and Under the Direction of D.G. Beers*. Pomeroy & Beers, Philadelphia.
- Bevans, W.L. (editor)
1929 *History of Delaware: Past and Present*. Lewis Historical Publishing Company, New York.
- Button, R.P.
n.d. Brady Family Genealogical File. On file, Delaware Historical Society, Wilmington.
- Conrad, H.C.
1908 *History of the State of Delaware: From the Earliest Settlement to the Year 1907*. Wickersham Company, Wilmington.
- Custer, J.F.
n.d. Predictive Model Maps for Prehistoric Sites. On file, Delaware Department of Transportation, Dover.
- 1984 *Delaware Prehistoric Archaeology, An Ecological Approach*. University of Delaware Press, Newark.
- 1986 *A Management Plan for Delaware's Prehistoric Cultural Resources*. University of Delaware Center for Archaeological Research Monograph No. 2. Newark.
- De Cunzo, L.A., and W.P. Catts
1990 *Management Plan for Delaware's Historical Archaeological Resources*. University of Delaware, Department of Anthropology Center for Archaeological Research, Newark.
- De Cunzo, L.A., and A.M. Garcia
1993 "Neither a Desert Nor a Paradise." *Historic Context for the Archaeology of Agriculture and Rural Life, Sussex County, Delaware 1770-1940*. University of Delaware Department of Anthropology Center for Archaeological Research, Newark.
- Delaware State Historic Preservation Office (SHPO)
1993 *Guidelines for Architectural and Archaeological Surveys in Delaware*. Delaware State Historic Preservation Office, Dover.
- Dent, R.J., Jr.
1995 *Chesapeake Prehistory*. Plenum Press, New York.

- G.M. Hopkins & Company
 1881 Map of New Castle County, Delaware From Actual Surveys and Records. G.M. Hopkins & Company, Philadelphia.
- Herman, B.L.
 1987 *Architecture and Rural Life in Central Delaware, 1700-1900*. The University of Tennessee Press, Knoxville.
- Herman, B.L., R.J. Siders, D.L. Ames, and M.H. Callahan
 1989 *Historic Context Master Reference and Summary*. Center for Historic Architecture and Engineering, College of Urban Affairs and Public Policy, University of Delaware, Newark.
- Kellogg, D.C.
 1992 *A Cultural Resources Reconnaissance Planning Study of the Proposed Delaware Route 301 Corridor, New Castle County, Delaware*. DelDOT Archaeology Series No. 98, Dover.
- Matthews, E.D., and O.L. Lavoie
 1970 *Soil Survey of New Castle County, Delaware*. United States Department of Agriculture, Soil Conservation Service. U.S. Government Printing Office, Washington, D.C.
- McAlester, V., and L. McAlester
 1990 *A Field Guide to American Houses*. Alfred A. Knopf, New York.
- McCarter, J.M., and B.F. Jackson
 1882 *Historical and Biographical Encyclopedia of Delaware*. Aldine Publishing and Engraving Company, Wilmington.
- National Park Service
 1991 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. United States Department of the Interior, Washington, D.C.
- New Castle County Deeds
 1879 Mary E. McCrone *et al.* to Henry W. Brady. Deed Book 11, Page 153. On file, New Castle County Recorder of Deeds Office, Wilmington.
- 1886 Henry W. and Rebecca D. Brady to George F. Brady. Deed Book 13N, Page 159. On file, New Castle County Recorder of Deeds Office, Wilmington.
- 1924 Frederick and Mary D. Brady to Rebecca W. Brady. Deed Book 32S, Page 48. On file, New Castle County Recorder of Deeds Office, Wilmington.
- 1949 Frederick Brady *et al.* to Walter Harman and Helen B. Money. Deed Book 49U, Page 3. On file, New Castle County Recorder of Deeds Office, Wilmington.
- 1957 Charles D. and Emma V. Wert to Appoquinimy Developing Company. Deed Book 59X, Page 592. On file, New Castle County Recorder of Deeds Office, Wilmington.

New Castle County Deeds (Continued)

2004 Wachovia Bank to Clay Farms G.P. Deed Book 116, Page 7557. On file, New Castle County Recorder of Deeds Office, Wilmington.

Petraglia, M.D., S.L. Bupp, S.P. Fitzell, and K.W. Cunningham (compilers)

2002 *Hickory Bluff: Changing Perceptions of Delmarva Archaeology*. Delaware Department of Transportation Archaeology Series No. XXX.

Petraglia, M.D., and D.A. Knepper

1996 *Phase II Archaeological Investigations at Iron Hill East (7NC-D-108), and Phase I Archaeological Investigations at Two Stormwater Management Areas, State Route 896, New Castle County, Delaware*. Parsons Engineering Science, Inc., Washington, D.C. Submitted to the Delaware Department of Transportation, Dover.

Reed, H.C. (editor)

1947 *Delaware: A History of the First State*. Lewis Historical Publishing Company, New York.

Schoenenberger, P.J., D.A. Wysocki, E.C. Benham, and W.D. Broderson

2002 *Field Book for Describing and Sampling Soils*. Version 2.0. Department of Agriculture, Natural Resources Conservation Service. National Soil Survey Center, Lincoln, Nebraska. U.S. Government Printing Office, Washington, D.C.

United States Geological Survey (USGS)

1900 Cecilton, Maryland-Delaware topographic map, 15 minute series. Website at <http://historical.maptech.com>. Accessed January 4, 2005.

1951 Cecilton, Maryland-Delaware topographic map, 15 minute series. Website at <http://historical.maptech.com>. Accessed January 4, 2005.

1986 National Water Summary 1985-Hydrologic Events and Surface-water Resources: *United States Geological Survey Water-Supply Paper 2300, Maryland and the District of Columbia*. Baltimore.

1993 Cecilton, Maryland-Delaware topographic map, 7.5 minute quadrangle. U.S. Geological Survey, Denver.

1993 Middletown, Delaware topographic map, 7.5 minute quadrangle. U.S. Geological Survey, Denver.

University Gallery and Mineralogical Museum

2004 General Geology of the Delmarva Region. Website at http://www.museums.udel.edu/mineral/mineral_site/education/gengeodel.html. Accessed December 15, 2004.

Ward, H.H.

1988 Prehistoric Utilization of Ironstone in the Central Middle Atlantic. *Pennsylvania Archaeologist* 58(1):7-25.

APPENDIX A

FS AND ARTIFACT CATALOG

FS Catalog, U.S. 301 Weigh Station and Inspection Facility

SL#	IF#	Test Area	North	East	Unit/STP	Stratum	Depth BGS (cm)	Depth IS (cm)	Excv Date
1	1	Warwick Rd	285	105 s		1	0-28	0-28	12/15/04 PWW

Lithic Catalog, U.S. 301 Weigh Station and Inspection Facility

SL#	IF#	Raw Material	Technotype	Cortex	Flake Size	Platform	Thermal Alteration	Utilization	Comment
1	1	jasper	Specialized Implement	Absent	25-50	NA	Present	Present	Uniface

APPENDIX B
SOIL PROFILES

SOIL PROFILE

Auger Boring 1

Date: July 15, 2004

County: New Castle

Soil Description By: M.G. Sams, CPSS

Project Location: U.S. 301 Weigh Station and Inspection Facility

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Mottling					
Ap / 0-25.0 cm (0-9.8 in)	10YR 3/3 Dark brown		sandy loam	weak medium granular	friable	clear	
Bt / 25.0-50.0 cm+ (9.8-19.7 in+)	7.5YR 4/4 Brown		sandy clay loam	weak medium subangular blocky	friable		

Additional Notes: Upland position; well developed profile forming in deeply weathered coastal plain sediments.

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SOIL PROFILE

Auger Boring 2

Date: July 15, 2004

County: New Castle

Soil Description By: M.G. Sams, CPSS

Project Location: U.S. 301 Weigh Station and Inspection Facility

Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Mottling					
Ap / 0-25.0 cm (0-9.8 in)	10YR 4/1 Dark grayish brown		silt loam	weak medium granular	friable	clear	
Btg1 / 25.0-45.0 cm (9.8-17.7 in)	10YR 5/2 Grayish brown	common: 10YR 6/1 Gray	silty clay loam	moderate medium subangular blocky	friable	clear	
Btg2 / 45.0-50.0 cm+ (17.7-19.7 in+)	10YR 6.1 Gray		silty clay loam	weak medium subangular blocky	friable		

Additional Notes: Upland depression position; well developed but poorly drained profile forming in deeply weathered coastal plain sediments.

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SOIL PROFILE

Auger Boring 3

Date: July 15, 2004

County: New Castle

Soil Description By: M.G. Sams, CPSS

Project Location: U.S. 301 Weigh Station and Inspection Facility

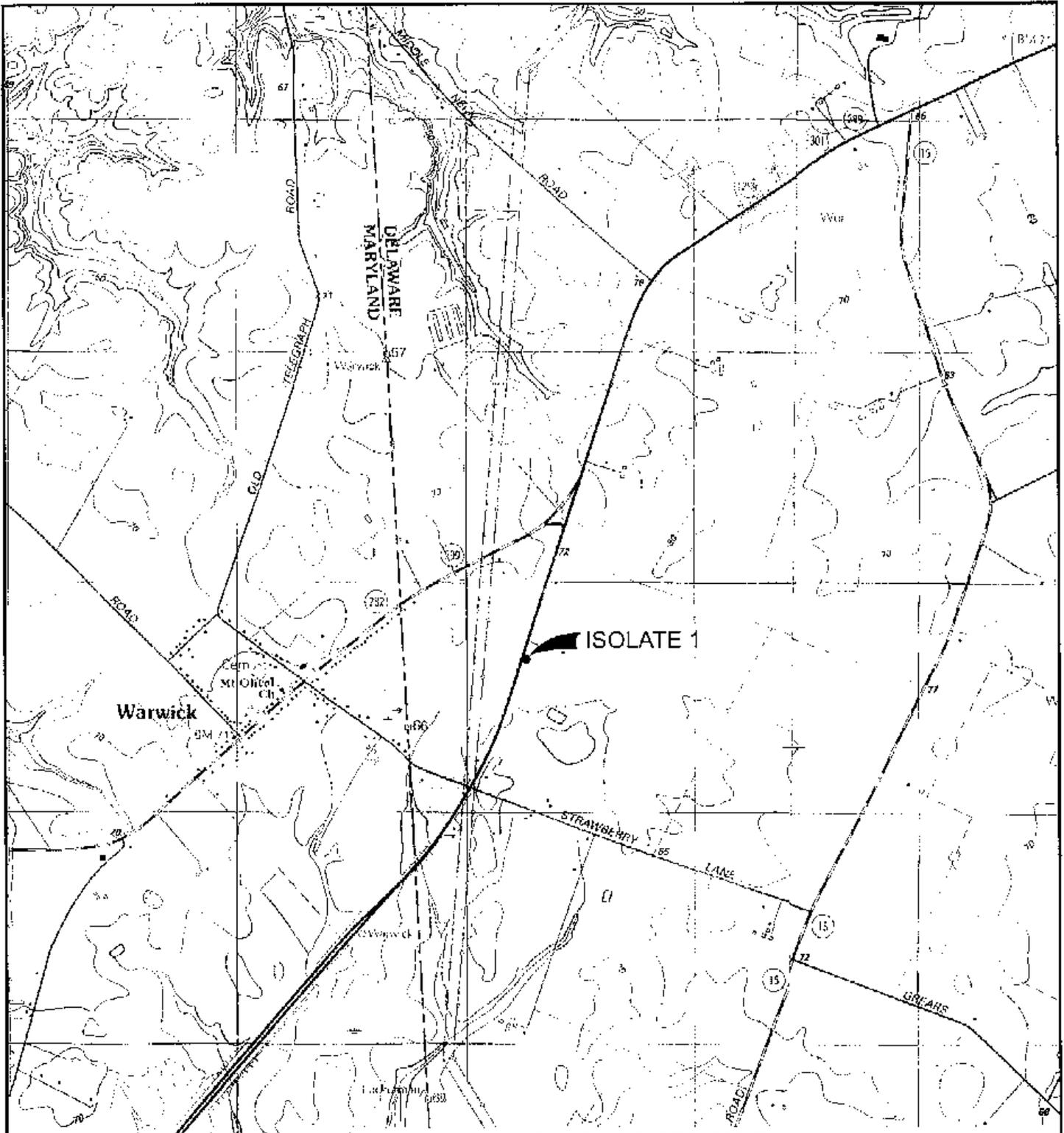
Horizon/Depth	SOIL COLOR		Texture	Structure	Consistence	Boundary	Comments
	Matrix	Mottling					
Ap / 0-25.0 cm (0-9.8 in)	10YR 4/2 Dark grayish brown		loam	weak medium granular	friable	clear	
Bt / 25.0-48.0 cm+ (9.8-18.9 in+)	10YR 5/3 Brown	common: 10YR 6/2 Light brownish gray	clay loam	weak medium subangular blocky	friable		

Additional Notes: Upland position; well developed profile forming in deeply weathered coastal plain sediments.

SKELLY AND LOY, INC.
ENGINEERS-CONSULTANTS
MONROEVILLE and HARRISBURG, PA

APPENDIX C

ISOLATE 1 LOCATION MAP



U.S.G.S. QUAD. SHEETS: CECILTON, MD.-DEL. AND MIDDLETOWN, DEL.

DELAWARE DEPARTMENT OF TRANSPORTATION

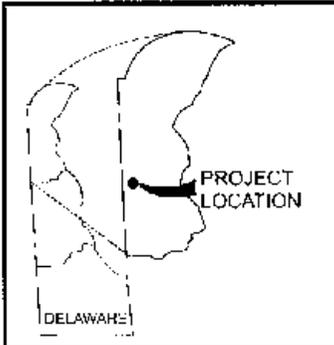
U.S. 301 WEIGH STATION AND INSPECTION FACILITY

NEW CASTLE COUNTY

ISOLATE 1 LOCATION

FIGURE C-1

SKELLY and LOY Inc.
CONSULTANTS IN
ENVIRONMENT ENERGY
ENGINEERING PLANNING



DELAWARE

APPENDIX D

CRS FORM



CULTURAL RESOURCE SURVEY
MAIN BUILDING FORM

CRS # N-5226

1. ADDRESS/LOCATION: 1266 Middletown Warwick Road

2. FUNCTION(S): historic Farmhouse current Single family dwelling (rental)

3. YEAR BUILT: 1908 CIRCA?: ARCHITECT/BUILDER: Frederick Brady

4. STYLE OR FLOOR PLAN: Center hall plan

5. INTEGRITY: original site moved
if moved, from where other location's CRS # year

list major alterations and additions with years (if known) year

a. Removal of front porch

b. Skim coating and replacement and infill of some windows

6. CURRENT CONDITION: excellent good fair poor

7. DESCRIPTION: (Describe the resource as completely as possible. Use N/A for not applicable; leave no blanks.)

a. Overall shape: Rectangular Stories: 2 1/2
Additions: One-story, shed roof addition at rear; one-story, shed roof lean-to on the south side

b. Structural system (if known): Terra cotta masonry tile

c. Foundation: materials: Terra cotta masonry tiles (assumed) with stucco finish
basement: full partial not visible no basement

d. Exterior walls (original if visible& any subsequent coverings): Stucco

e. Roof: shape: Side gable
materials: Asphalt
cornice: None
dormers: None
chimney: location(s): Two chimneys - both interior at the ridgeline and finished with stucco

8. DESCRIPTION OF ELEVATIONS:

a. Facade: Direction: W
1) Bays 5
2) Windows 4 on first story, 5 on second story
fenestration Regular
type 2/2 double-hung wood
trim Colonial Revival hood mouldings
shutters None

Facade (cont'd)

- 3) **Door(s)** 1
 location Center bay
 type Wood panel and glass
 trim Colonial Revival hood moulding
- 4) **Porch(es)** Original removed - shadow is present, as is full-width poured concrete slab
 (not original)

b. Side: Direction: N

- 1) **Bays** 3
- 2) **Windows** 3 on each story
 fenestration Regular
 type 1/1 and 6 light vertical sash
 trim Colonial Revival hood mouldings
 shutters None
- 3) **Door(s)** None
 location N/A
 type N/A
 trim N/A
- 4) **Porch(es)** None

c. Side: Direction: S

- 1) **Bays** 3
- 2) **Windows** 4 on each floor
 fenestration Regular
 type 2/2 double-hung wood
 trim Colonial Revival hood mouldings
 shutters None
- 3) **Door(s)** None
 location N/A
 type N/A
 trim N/A
- 4) **Porch(es)** 1-bay shed roof lean-to

d. Rear: Direction: E

- 1) **Bays** 5
- 2) **Windows** 5 on second story; 1 on first story
 fenestration Regular
 type 2/2 double-hung wood sash with exterior storm windows
 trim Colonial Revival hood mouldings
 shutters None
- 3) **Door(s)** 1
 location Northernmost bay
 type Sliding glass door
 trim None
- 4) **Porch(es)** 1-story, 3-bay frame addition with board and plywood finish

9. **INTERIOR:** Not Accessible

10. **LANDSCAPING:** Mature elm at the northwest corner of the house; farm fields located to the north; outbuildings are located to the rear of the property.

11. **OTHER COMMENTS:** Structural system is based on the shadow of the porch roof, which exposes the terra cotta tile under the stucco.



DELAWARE STATE HISTORIC PRESERVATION OFFICE
15 THE GREEN, DOVER, DE 19901

CULTURAL RESOURCE SURVEY
SECONDARY BUILDING FORM

CRS # N-5226

1. ADDRESS/LOCATION: 1266 Middletown Warwick Road/East Side U.S. Route 301

2. FUNCTION(S): historic Shed current Shed

3. YEAR BUILT: 1950 CIRCA?: ARCHITECT/BUILDER: N/A

4. STYLE/FLOOR PLAN: Rectangular

5. INTEGRITY: original site moved
if moved, from where original location's CRS # year

list major alterations and additions with years (if known) year
a.
b.

6. CURRENT CONDITION: excellent good fair poor

7. DESCRIPTION:

a. Structural system Frame

b. Number of stories 1

c. Wall coverings Plywood

d. Foundation Concrete

e. Roof
structural system Frame shed
coverings Metal
openings None

8. DESCRIPTION OF ELEVATIONS:

- a. Facade: direction: N
1) bays: 1
2) windows: N/A
3) door(s): 1 two-panel door
4) other: N/A

- b. Side: direction: S
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

- c. Side: direction: W
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

- d. Rear: direction: E
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

9. INTERIOR (if accessible):

a) Floor plan Not accessible

b) Partition/walls Not accessible

c) Finishes Not accessible

d) Furnishings/machinery Not accessible



DELAWARE STATE HISTORIC PRESERVATION OFFICE
15 THE GREEN, DOVER, DE 19901

CULTURAL RESOURCE SURVEY
SECONDARY BUILDING FORM

CRS # N-5226

1. ADDRESS/LOCATION: 1266 Middletown Warwick Road/East Side U.S. Route 301

2. FUNCTION(S): historic Shed current Shed

3. YEAR BUILT: 1950 CIRCA?: ARCHITECT/BUILDER: N/A

4. STYLE/FLOOR PLAN: Rectangular

5. INTEGRITY: original site moved
if moved, from where original location's CRS # year

list major alterations and additions with years (if known) year
a.
b.

6. CURRENT CONDITION: excellent good fair poor

7. DESCRIPTION:

a. Structural system Frame

b. Number of stories 1

c. Wall coverings Plywood

d. Foundation Concrete

e. Roof
structural system Frame shed
coverings Metal
openings None

8. DESCRIPTION OF ELEVATIONS:

- a. Facade: direction: W
1) bays: 1
2) windows: 1 single pane light
3) door(s): 1 plywood
4) other: N/A

- b. Side: direction: N
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

- c. Side: direction: S
 - 1) bays: 1
 - 2) windows: 1 single pane light
 - 3) door(s): N/A
 - 4) other: N/A

- d. Rear: direction: E
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

9. INTERIOR (if accessible):

- a) Floor plan Not accessible

- b) Partition/walls Not accessible

- c) Finishes Not accessible

- d) Furnishings/machinery Not accessible



DELAWARE STATE HISTORIC PRESERVATION OFFICE
15 THE GREEN, DOVER, DE 19901

CULTURAL RESOURCE SURVEY
SECONDARY BUILDING FORM

CRS # N-5226

1. ADDRESS/LOCATION: 1266 Middletown Warwick Road/East Side U.S. Route 301

2. FUNCTION(S): historic Shed current Shed

3. YEAR BUILT: 1995 CIRCA?: ARCHITECT/BUILDER: N/A

4. STYLE/FLOOR PLAN: Rectangular

5. INTEGRITY: original site moved
if moved, from where original location's CRS # year

list major alterations and additions with years (if known) year
a.
b.

6. CURRENT CONDITION: excellent good fair poor

7. DESCRIPTION:
a. Structural system Metal
b. Number of stories 1
c. Wall coverings Metal
d. Foundation Concrete
e. Roof
structural system Gable end
coverings Metal
openings None

8. DESCRIPTION OF ELEVATIONS:
a. Facade: direction: N
1) bays: 1
2) windows: N/A
3) door(s): Dual sliding metal
4) other: N/A

- b. Side: direction: W
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

- c. Side: direction: E
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

- d. Rear: direction: S
 - 1) bays: 1
 - 2) windows: N/A
 - 3) door(s): N/A
 - 4) other: N/A

9. INTERIOR (if accessible):

a) Floor plan Not accessible

b) Partition/walls Not accessible

c) Finishes Not accessible

d) Furnishings/machinery Not accessible



CULTURAL RESOURCE SURVEY
MAP FORM

CRS # N-5226

1. ADDRESS/LOCATION: 1266 Middletown Warwick Road/East side U.S. Route 301

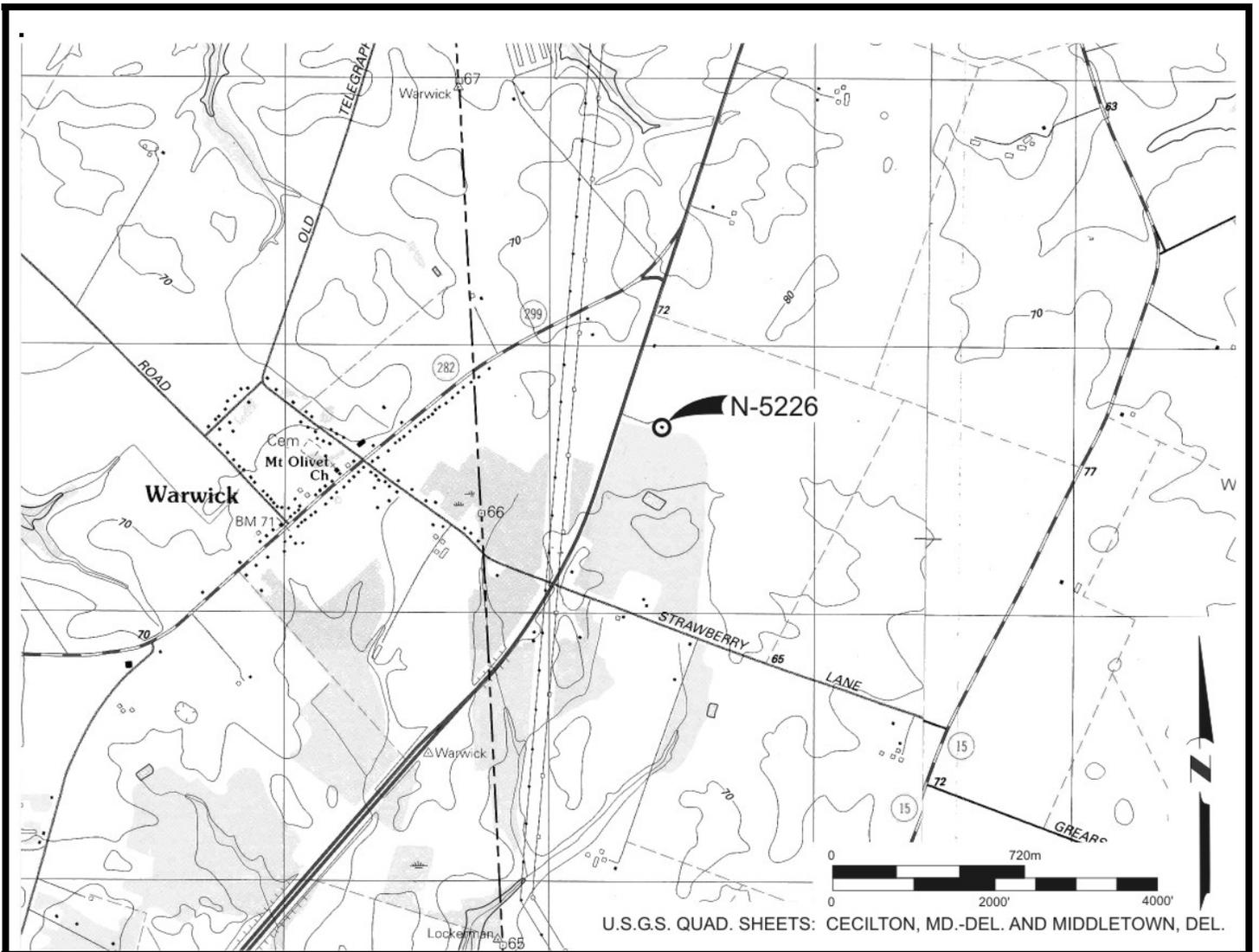
2. NOT FOR PUBLICATION reason: _____

3. LOCATION MAP:

Indicate position of resource in relation to geographical landmarks such as streams and crossroads.

(attach section of USGS quad map with location marked or draw location map)

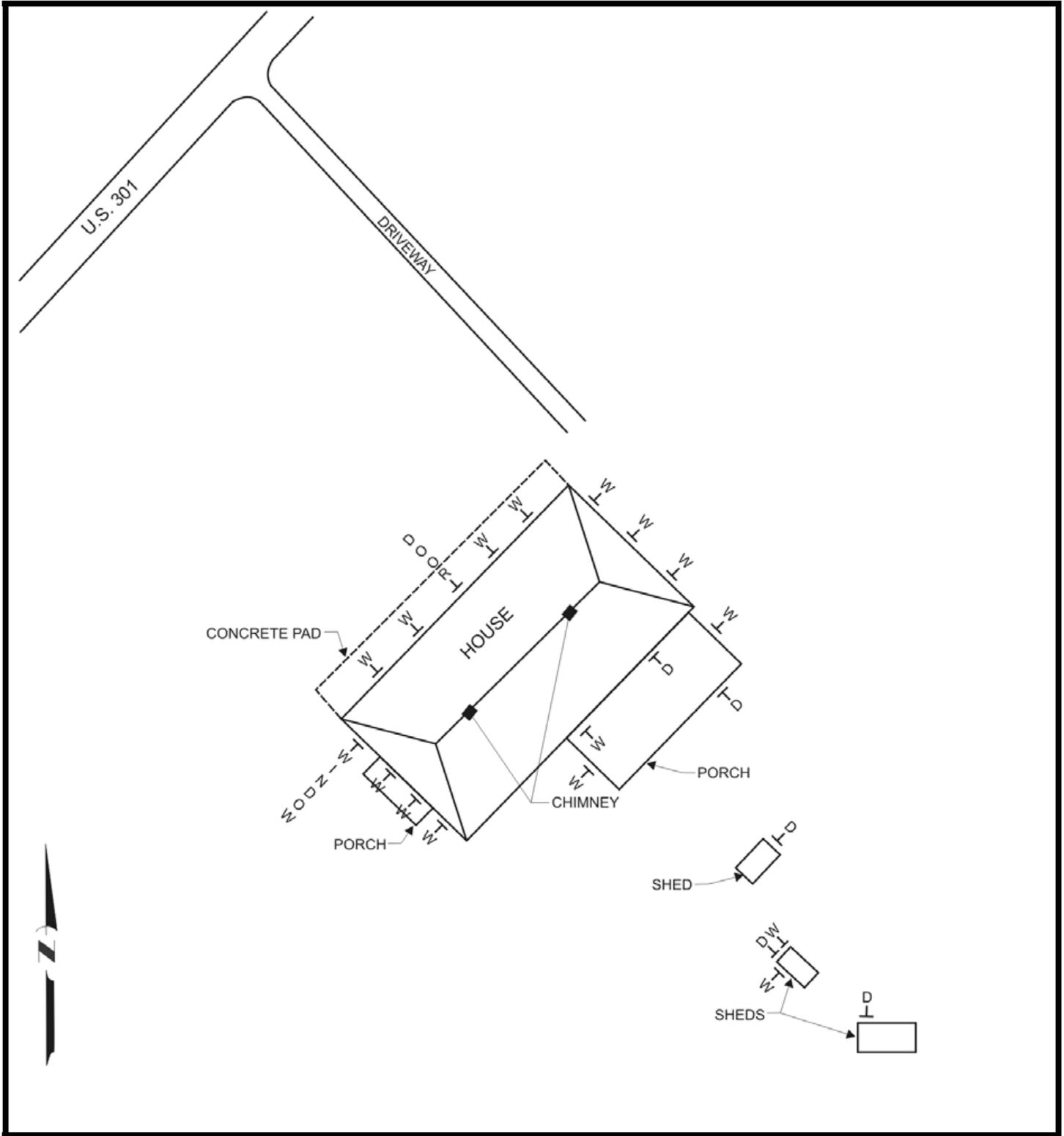
INDICATE NORTH ON SKETCH



4. SITE PLAN:

CRS # N-5226

INDICATE NORTH ON PLAN



USE BLACK INK ONLY

CRS-9



DELAWARE STATE HISTORIC PRESERVATION OFFICE
15 THE GREEN, DOVER, DE 19901

CULTURAL RESOURCE SURVEY
SURVEY UPDATE FORM

CRS # N-5226

1. HISTORIC NAME/FUNCTION: B.F. Hanson "Evergreen Cottage"/Frederick Brady Farmhouse (Correct Name)

2. ADDRESS/LOCATION: 1266 Middletown Warwick Road/East Side U.S. Route 301

3. CURRENT CONDITION: excellent good fair poor demolished

4. INTEGRITY: Front porch removed and concrete slab poured; skim coating of the exterior and replacement of some windows.

5. SETTING INTEGRITY: 2 1/2 story crib barn with vertical siding and a second larger outbuilding present when the property was surveyed in 1992 have been removed.

6. FORMS ADDED (give number of forms completed for each):

#:	Form:	List property types:
1	CRS 2 Main Building Form	Farmhouse
3	CRS 3 Secondary Building Form	Outbuildings (2) and shed
	CRS 4 Archaeological Site Form	
	CRS 5 Structure (Building-Like) Form	
	CRS 6 Structure (Land Feature) Form	
	CRS 7 Object Form	
	CRS 8 Landscape Elements Form	
2	CRS 9 Map Form	N/A
	CRS 14 Potential District Form	

7. SURVEYOR INFORMATION:

Surveyor name: Gerald M. Kuncio

Principal Investigator name: Gerald M. Kuncio

Principal Investigator signature: _____

Organization: Skelly And Loy, Inc. Date: 11/1/2004

8. OTHER NOTES OR OBSERVATIONS:

CRS# N-5226

CRS form prepared in 1992 misidentified the site as "Evergreen Cottage," a property in St. Georges Hundred associated on the 1868 Atlas of the State of Delaware (Beers 1868) with B.F. Hanson. N-5226, however, was not built until 1908 (a date stone is on the house), is in Appoquinimink Hundred, and is on U.S. 301, a road that did not exist in 1868 (it was not constructed until the second half of the twentieth century). The date stone and historical research indicate that N-5226 was constructed by Frederick Brady. The Bradys were a prominent family in the Middletown area who, among other things, speculated in land and owned multiple farms in the area. The farm on which Frederick Brady built the house was purchased by his uncle in 1879 from Mary E. McCrone et al., and is referred to in deeds as the McCrone Farm.

9. STATE HISTORIC CONTEXT FRAMEWORK (check all appropriate boxes; refer to state management plan(s)):

- a) Time period(s)
- Pre-European Contact
 - Paleo-Indian
 - Archaic
 - Woodland I
 - Woodland II
 - 1600-1750" Contact Period (Native American)
 - 1630-1730" Exploration and Frontier Settlement
 - 1730-1770" Intensified and Durable Occupation
 - 1770-1830" Early Industrialization
 - 1830-1880" Industrialization and Early Urbanization
 - 1880-1940" Urbanization and Early Suburbanization
 - 1940-1960" Suburbanization and Early Ex-urbanization

- b) Geographical zone
- Piedmont
 - Upper Peninsula
 - Lower Peninsula/Cypress Swamp
 - Coastal
 - Urban (City of Wilmington)

c) Historic period theme(s)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Agriculture | <input type="checkbox"/> Transportation and Communication |
| <input type="checkbox"/> Forestry | <input type="checkbox"/> Settlement Patterns and Demographic Changes |
| <input type="checkbox"/> Trapping/Hunting | <input type="checkbox"/> Architecture, Engineering and Decorative Arts |
| <input type="checkbox"/> Mining/Quarrying | <input type="checkbox"/> Government |
| <input type="checkbox"/> Fishing/Oystering | <input type="checkbox"/> Religion |
| <input type="checkbox"/> Manufacturing | <input type="checkbox"/> Education |
| <input type="checkbox"/> Retailing/Wholesaling | <input type="checkbox"/> Community Organizations |
| <input type="checkbox"/> Finance | <input type="checkbox"/> Occupational Organizations |
| <input type="checkbox"/> Professional Services | <input type="checkbox"/> Major Families, Individuals and Events |

DELAWARE STATE HISTORIC PRESERVATION OFFICE
PHOTOGRAPHIC INVENTORY

CRS # N-5226 Date 11/8/2004 Photo Roll # N-5226 Surveyor G.M. Kuncio

Description 13 - Rear and north sides of the house, facing southwest; 14 - Shed and two outbuildings, facing southeast; 15 - Outbuilding, facing southeast; 16 - Second outbuilding, facing northeast; 17 - Shed, facing southeast; 18 - Shed, facing southwest; 19 - Date stone on the north side gable of the house, facing southwest; 20 - Rear and south sides of the house, facing northwest.

Negative location (if other than SHPO) _____

Attach contact print(s):



13

14

15

16



17



18



19



20

DELAWARE STATE HISTORIC PRESERVATION OFFICE
PHOTOGRAPHIC INVENTORY

CRS # N-5226 Date 11/8/2004 Photo Roll # N-5226 Surveyor G.M. Kuncio

Description 21 - First floor facade of the house with poured concrete porch pad, facing northeast; 22- Facade of the house showing the missing porch and the terra cotta under the tile, facing northeast; 23 - Facade and south side of the house, facing northeast; 24 - Rear and north side of the house, facing southwest.

Negative location (if other than SHPO) _____

Attach contact print(s):



21

22

23

24