3.0 CULTURAL RESOURCES PREDICTED FOR THE PROJECT APE

3.1 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 northern portion of the U.S. 13/U.S. 13A/Road 46 Intersection Improvements project archaeological APE is contained within a moderate probability area, while the southern portion is contained within a high probability area. This may be in part due to the proximity of Bucks Branch/Hearns Pond to the southern end of the archaeological APE. More specifically, Custer (1986:198) indicates that the archaeological APE is ranked as having medium/high significance probability with medium data quality and medium/low numbers of known sites. Despite the fact that Custer (1986:204-205) does not assign the intersection improvements project area location to a specific area of development (e.g., Seaford), the location of the archaeological APE at a multiple road intersection along a major north to south transportation route indicates that developmental pressures are high in the area and may preclude the potential for identifying intact pre-contact period archaeological remains.

Background research revealed that few cultural resources surveys have been completed in the project vicinity (Gwen Davis, personal communication 2004), and review of the Delaware archaeological site files did not yield any previously recorded pre-contact period archaeological sites within or near the proposed intersection improvements project.

Based on the absence of previously recorded pre-contact period archaeological sites within or nearby the archaeological APE; the information contained in the statewide contexts, including a categorization of the area as having moderate/high site potential in concert with a need for research; the scope and amount of commercial and roadway development within and adjacent to the archaeological APE; and the limited presence of soils of appropriate age to contain pre-contact period archaeological remains, the U.S. 13/U.S. 13A/Road 46 Intersection Improvements 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, 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 larger more permanent base camps along the Nanticoke River and its

larger tributaries (Custer 1986). For additional pre-contact period context of the project area, the reader is referred to *A Management Plan for Delaware's Prehistoric Cultural Resources* (Custer 1986), *Delaware Prehistoric Archaeology, An Ecological Approach* (Custer 1984), and *Chesapeake Prehistory* (Dent 1995).

3.2 Historic Period Archaeology

The following is a summary of previously identified historic period cultural resources located in the general vicinity of the U.S. 13/U.S. 13A/Road 46 Intersection Improvements 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 near the intersection improvements project and are summarized in Table 1.

Table 1.
Previously Recorded Historic Period Cultural Resources Located Near the U.S. 13/U.S. 13A/Road 46 Intersection Improvements Project

Site	Distance and Direction from Project APE	Description
S-6259	*ca.* 609.6 m (2,000.0 ft) south	dwelling; bungalow, late 1940s; Alt. 13
S-6260	*ca.* 609.6 m (2,000.0 ft) south	dwelling complex; house, 2 garages, 3 sheds; 1946; Alt. 13
S-6283	*ca.* 228.6 m (750.0 ft) north	dwelling complex; Highway 13
S-6284	*ca.* 457.2 m (1,500.0 ft) north	dwelling complex; Highway 13
S-6286	*ca.* 152.4 m (500.0 ft) north	dwelling complex; Highway 13
S-6288	*ca.* 609.6 m (2,000.0 ft) southeast	agricultural complex; house, garage, corncrib, dove cote/chicken coop, peacock cage; 1940s; Alt 13
S-6143	*ca.* 533.4 m (1,750.0 ft) southwest	dwelling complex; Thomason Parkway
S-6144	*ca.* 609.6 m (2,000.0 ft) southwest	dwelling complex; Brinsfield Drive
S-6083	*ca.* 381.0 m (1,250.0 ft) southeast	dwelling; house and shed; 1920-1950; Route 46
S-6084	*ca.* 152.4 m (500.0 ft) east	agricultural complex; house, garage, workshop/ office, 4 sheds, silo, stable, barn/office; 1900-1930; Route 46 and 13

Additional numerous historic period cultural resources are located in the Hearns Mill area, which is located approximately 1,219.2 m (4,000.0 ft) south of the intersection improvement project along U.S. 13 and U.S. 13A. Historic period mapping of the intersection improvements project area indicates that the area has remained mainly rural throughout the historic period, but has been subject to intense continued development since the mid-1950s when U.S. 13, a major four-lane north to south thoroughfare, was constructed.

The Beers (1868) map of Sussex County shows two structures near the archaeological APE, but definitely outside of it. A schoolhouse is shown along Road 46 in the northeast quadrant of the U.S. 13A and Road 46 intersection. A second structure, which appears to be the residence of W.E. Cannon, is shown located between U.S. 13A and Road 46 in the southeast quadrant of this intersection. None of the recorded historic period cultural resources, as recorded in the Delaware site files and listed above in Table 1, appear to be the structures illustrated on the Beers 1868 map.

The 1941 General Highway Map of Sussex County, Delaware (Delaware State Highway Department 1941) shows multiple structures along the west side of then U.S. 13 (today U.S. 13A), south of Road 46, and a few structures along Road 46, east of U.S. 13 (today U.S. 13A). All of the structures on the west side of U.S. 13 (today U.S. 13A) between Dolby Road and Road 46 were demolished when the trucking company that is currently occupying the property developed its facility there. The structures on the east side of U.S. 13 (today U.S. 13A) would have been demolished in the mid-1950s when the four-lane U.S. 13 was constructed just to the east of then U.S. 13. The 1955 Seaford, Delaware topographic quadrangle (USGS 1955) shows fewer structures in the overall project area, most likely the result of the construction associated with U.S. 13 between 1952 and 1955. In addition, based on the location of the two structures illustrated on the Beers 1868 map, it is likely that if any remains of these were present when U.S. 13 was built, the construction of this highway destroyed them. Historic roadway as-built maps (Delaware State Highway Department 1931, 1936, 1946; Miller Lewis, Inc. 1999) for various roadway and housing development projects in or adjacent to the U.S. 13/U.S. 13A/Road 46 archaeological APE attest to the scale of disturbance which has taken place within and adjacent to the project area.

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. De Cunzo and Catts (1990:172-176) do not consider the U.S. 13/U.S. 13A/Road 46 Intersection Improvements project area to be within their areas of emphasis for

any of the outlined earlier historic periods (e.g., Exploration and Frontier Settlement 1630-1730; Intensified and Durable Occupation 1730-1770; Transformation from Colony to State 1770-1830) until the period of Industrialization and Capitalization 1830-1880, and especially the period of Urbanization and Suburbanization from 1880-1940. It is during these latter two historic periods that the U.S. 13/U.S. 13A corridor becomes a major north to south transportation route linking many of the small towns in southwestern Delaware, like Laurel, Seaford, Bridgeville, and Greenwood, with Dover and areas to the north. With the improvement of the U.S.13/U.S. 13A transportation corridor came additional development. Based on the information contained in historic mapping and De Cunzo and Catts (1990), it appears that the area surrounding the U.S. 13/U.S. 13A/Road 46 Intersection Improvements 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. 13/U.S. 13A/Road 46 Intersection Improvements project area. No previously identified and two newly identified above-ground resources built prior to 1950 are located within the historic structures APE; however, only one of them is located within the archaeological APE. It is an old service station (S-10139) and now functions as a tobacco shop. Due to paving surrounding the structure, its location between U.S. 13 and U.S. 13A, its historic function, and the potential for associated hazardous waste, the site has little potential to contain archaeological remains which would be significant or aid in a determination of the structure as significant. Due to the age and commercial nature of the structure (1952-1955), deep historic cultural features such as wells or privies would not be expected.

Due to the long-term rural nature of the project APE, if historic period archaeological resources are identified, they will most likely be related to agricultural activities and/or transportation related resources dating from the construction of current U.S. 13 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 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.

3.3 History of the Project Area

Seaford Hundred was created in March 1869, when Northwest Fork Hundred was divided in two; the lower portion became Seaford Hundred. At the time the new hundred was erected, it was known predominantly for agriculture, including fruit cultivation, and milling.

Historically, by the late eighteenth century, much of the land north of the Nanticoke River was owned by Hudson Cannon. Over time, other large farms developed in the area, including those of the Ross, Cannon, and Brown families (Scharf 1888:1301-1315). In 1868, the year before Seaford Hundred was established, the agricultural nature of the hundred was very evident. The Cannon family still owned a good deal of property in the project vicinity, and a schoolhouse was located at the northwest quadrant of the intersection of the precursor roads to U.S. 13A and Road 46 (Figure 3; Beers 1868). The house and the schoolhouse are now gone. A short distance to the south of the intersection, outside of the project area, was a sawmill then owned at the time by W.H. Cannon. It would be rebuilt in 1879, and taken over by Marcellus Hearn in 1887 (Scharf 1888). The Hearn name lives on in the community and former mill pond, but the mill is gone.

The next available map of the project region dates to 1915 (Figure 4; USGS 1915). Once again, the rural nature of this section of the hundred is illustrated. The intersection has only a church at the northeast quadrant and, a short distance to its east, a schoolhouse identified as "Brown's School." A building was also shown to the south and east of the intersection. It is no longer present.

By 1941, the project area had become more developed (Figure 5; Delaware State Highway Department 1941). The growth was undoubtedly spurred by the construction, in the early 1920s, of U.S.13 (now U.S.13A). Four houses are located on the west side of U.S. Route 13 between Hearns Mill and Road 46. Across the highway from the houses is a farm, and at the northeast quadrant of the intersection is a store. To the west of the intersection, on the south side of Road 46, are two houses.

Post-World War II highway improvements, however, brought radical changes to the project area and the intersection. First, in 1946, U.S.13 (today U.S. 13A) between Seaford and Bridgeville, which includes the project area, was widened (Delaware State Highway Department 1946). The houses on the west side of the road were apparently demolished at that time. Six years later, in 1952, current U.S. 13 was constructed (Delaware State Highway Department 1952). A map from 1955 (Figure 6; USGS 1955) shows the dramatic changes to the project

area. The only building located along what had been redesignated U.S. 13A within the historic structures APE is a gas station located in the triangular area between U.S. 13 and U.S. 13A (S-10139, now a discount cigarette outlet). A house (S-10140) is also shown on the south side of Road 46.

Today, the alignments of the highways remain much like they were in 1955. Development has increased in the project area. A trucking company and storage yard has been established on the west side of U.S. 13A. Late twentieth century housing has also been constructed in the project area, as has the DelDOT Seaford Maintenance Building and Yard.

3.4 Twentieth Century Highway Development in the Project Area

Following the passage of the Federal Aid Highway Act of 1916, Delaware moved to establish a state highway department and state highway system. The Highway Act of 1917 created the Delaware State Highway Department (DE SHD) and assigned it the task of mapping out a highway system. The DE SHD established as its first priority the construction of a north-south trunk line linking county seats and larger towns and providing access to rail terminals. The trunk route between Delmar and Dover, today designated U.S. 13A, was completed by the early 1920s. Taking a cue from the privately constructed Dupont Highway, the highway was built with a generous right-of-way; it also bypassed most towns, with spur roads leading into them (Lichtenstein Consulting Engineers 2000:11-12).

A 1919 state law substantially increased the state road aid provided by counties. Consequently, by the mid-1920s, every major town in the state was connected to the main highway system by a paved road. Increases in the motor vehicle fuel tax led to improvements to the primary road system and the development of secondary road systems between 1926 and 1935. The state then took over responsibility for all county roads, with the goal of eliminating all dirt roads, which were a particular problem in rural Sussex County (Lichtenstein Consulting Engineers 2000:12-16).

In the post-World War II era, Delaware, like the rest of the country, experienced an explosive growth in automobile registrations. Extensive residential and commercial development also began. To ease growing traffic problems, Delaware began a program of upgrading its major roads. U.S. 13 was improved in the late 1940s and early 1950s. In places, such as the U.S. 13/U.S. 13A/Road 46 Intersection Improvements project area, the road was constructed on a new alignment, with the older road redesignated U.S. 13A.

The expansion of automobile registrations and the highway system in Delaware fueled the growth of roadside services outside of the traditional downtown business district. One category of resources was automobile service stations. In the early twentieth century, gasoline and automobile parts were sold in existing businesses, such as general and hardware stores. Entrepreneurs quickly saw the value in constructing businesses that specifically catered to automobile travelers. By the mid-1920s, freestanding buildings dedicated to automobile services and repairs were ubiquitous (LeeDecker *et al.* 1992:291-292). One example remains in the U.S. 13/U.S. 13A/Road 46 Intersection Improvements project historic structures APE, although it no longer functions as an automobile service facility (S-10139). It was constructed in the 1950s, at a time when like buildings had already been in use for 30 years, and it is an incredibly common type throughout the state.