

## 1.0 INTRODUCTION

Phase I archaeological investigations have been completed in conjunction with the proposed State Route (S.R.) 24 Improvements, S.R. 1 to Love Creek and Holly Lake Road to Oak Orchard Road project located in Rehoboth and Indian River hundreds, Sussex County, Delaware (Figure 1).

### 1.1 Purpose and Need

Because federal funding is expected as part of the S.R. 24 Improvements project, an archaeological survey was performed by Skelly and Loy, Inc., personnel at the request of the Delaware Department of Transportation (DelDOT). This survey was completed in order to identify any and all archaeological resources that might be present within the archaeological Area of Potential Effect (APE), and to preliminarily assess those resources for integrity and/or significance. By accomplishing these goals, compliance with state and 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; the National Environmental Policy Act of 1969; and the Code of Federal Regulations: Advisory Council on Historic Preservation CFR800 is assured. *The Guidelines for Architectural and Archaeological Surveys in the State of Delaware* (Delaware State Historic Preservation Office 1993) were followed in preparing the project research design, methodology, and this report.

### 1.2 Project Description

The archaeological APE is located on the Fairmount and Frankfort, Delaware 7.5 minute United States Geological Survey (USGS 1984a, 1984b) topographic quadrangles, in the Eastern Shore Coastal Plain physiographic province (Fenneman 1938). DelDOT will modify the existing two-lane roadway into a three-lane roadway, with a center turning lane. In conjunction with the roadway improvements, new stormwater management facilities (including drainage easements) will be constructed. The roadway improvements will be required to safely service a large number of new residential developments completed in and proposed for the area.

The S.R. 24 Improvements archaeological APE includes two discontinuous, 25.9 m (85.0 ft) wide corridors centered on the existing roadway centerline and six stormwater management facility/drainage easement locations. The first roadway improvement segment begins just

southwest of the S.R. 24/S.R. 1 intersection and continues southwest to where S.R. 24 crosses Love Creek (Photographs 1, 2, and 3). The second roadway improvement segment begins at the intersection of S.R. 24 with Holly Lake Road and continues to just south of the S.R. 24/Oak Orchard Road intersection (Photographs 4, 5, 6, 7, 8, and 9). The S.R. 1 to Love Creek segment of the archaeological APE is approximately 2.7 km (1.7 mi) long, while the Holly Lake Road to Oak Orchard Road segment is approximately 5.0 km (3.1 mi) long. The total area of the S.R. 24 Improvements archaeological APE, including proposed roadway construction and stormwater management facilities, is 33.21 ha (82.05 ac). Elevations within the archaeological APE range from approximately 1.5 to 9.1 m (5.0 to 30.0 ft) above mean sea level (msl).

The following soils information is taken from Ireland and Matthews (1974). Soil types mapped within the archaeological APE include Evesboro, Fallsington, Johnston, Kenansville, Klej, Rumford, Sassafas, Tidal Marsh, and Woodstown series, which all form in coastal plain sediments. With the exception of the Johnston and Tidal Marsh series soils, the remaining soil series found in the archaeological APE are similar in the high amount of sand throughout their profiles; however, they exhibit great variation in their internal drainage. These variations are largely due to the position of a soil within the landscape, and the depth to a water table. Soils in the Evesboro, Kenansville, Klej, Rumford, Sassafas, and Woodstown series have no or only moderate drainage restrictions within their internal soil profiles, and therefore would have been attractive for aboriginal human occupation. However, soils within the Fallsington, Johnston, and Tidal Marsh series have severe drainage restrictions, displaying gleyed conditions at shallow depths, and would have been less suitable for direct aboriginal occupation; however, resources associated with these soils may have been used during the pre-contact period. Based on their topographic positions, drainage, and age, portions of the archaeological APE exhibiting the better drained soils have a higher potential to contain pre-contact and historic period cultural remains.

The archaeological APE consists of 13 test areas on the west side and 10 test areas on the east side of existing S.R. 24, with non-testable areas in between, and six stormwater management and related outfall facilities (Figure 2). The test areas are those portions of the archaeological APE that have intact soils of appropriate age to contain pre-contact period archaeological deposits and those areas that have potential for historic period resources, as demonstrated by historic documentary and map resources, as well as oral interviews. Non-testable areas include areas where the soil profile is no longer intact due to modern disturbances, such as residential and commercial development, emplacement of both above-ground and subsurface utilities, paving, grading, and landscaping, among others.



*Photograph 1. General view of Test Area B located in northern segment of archaeological APE, facing north.*



*Photograph 2. General view of Test Area C located in northern segment of archaeological APE, facing south.*



*Photograph 3. General view of Test Area D located in northern segment of archaeological APE, facing south.*



*Photograph 4. General view of northern portion of Test Area P located in southern segment of archaeological APE, facing south.*



*Photograph 5. General view of southern portion of Test Area P located in southern segment of archaeological APE, facing south.*



*Photograph 6. General view of Test Area J located in southern segment of archaeological APE, facing south.*



*Photograph 7. General view of Test Area S located in southern segment of archaeological APE, facing north.*



*Photograph 8. General view of work in progress in Test Area V located in southern segment of archaeological APE, facing south.*



*Photograph 9. General view of Test Area U located in southern segment of archaeological APE, facing south.*