

#### **IV. Summary and Recommendations**

The results of the background research and the geomorphological evaluation were utilized to assess the probability of locating archaeological sites within the project areas and to provide an archaeological fieldwork methodology for the two projects. Areas of low, moderate, and high archaeological potential were delineated within the APEs (*Figure 2*). This information, along with the proposed archaeological testing methodologies for the two projects, is provided in this section.

##### **A. State Bridge 503 over the Norfolk Southern Railroad/St. Anne's Church Road**

In terms of prehistoric archaeological potential, the undisturbed portions of the State Bridge 503 APE are considered to exhibit either a high or moderate probability for containing prehistoric sites. The landforms within the APE conform to the profile of a number of the Native American archaeological sites in the Appoquinimink headwaters based on distance to permanent water and landscape setting. Historic archaeological potential was considered to be low due to the lack of known historic properties within the APE, although the sensitivity for locating historic sites was heightened on the upland landform in the northeast quadrant due to the presence of the cemetery to the east of the APE and the long standing presence of St. Anne's Church.

The undisturbed upland landforms in the northeast, northwest, and southwest quadrants all exhibit well drained soils, and due to the proximity of Deep Creek, are considered to represent high probability landforms for prehistoric archaeological resources. These areas include the lawn west of the Old St. Anne's Church cemetery (*Photograph 1*) in the northeast quadrant of the APE, the residential lawns and agricultural field in the southwest quadrant (*Photographs 9 and 10*), and the agricultural field in the northwest quadrant (*Photograph 8*). With the exception of a localized area of alluvium just west of the tree line in the northwest quadrant, it is recommended that archaeological testing be conducted through the excavation of STPs placed at 15 meter (49.2 foot) intervals on these well drained upland landforms (*Figure 2*). Due to the depth of the soil profile, the upland area west of the tree line in the agricultural field should be tested with 1x1 meter TUs spaced at 30 meter (98.4 foot) intervals (*Figure 2*).

In the northeast quadrant of the APE, Dr. Vento noted that the T1 terrace zone is flood scoured, therefore archaeological potential on this landform was considered to be moderate. The highest probability for locating archaeological sites would be on the preserved higher portions of the terrace. Because archaeological potential is contained within the upper 0.5 meter (1.6 feet) of the soil profile, it is recommended that testing on this landform be accomplished through the excavation of STPs placed on a 30 meter (98.4 foot) interval grid. If any of the STPs on the arbitrary grid fall within a scoured swale, the location of the STP will be adjusted to ensure that the preserved portions of the T1 terrace are tested during the survey.

No archaeological testing is recommended in the disturbed portions of the APE. These include the entire southeast quadrant of the APE (*Photographs 3-5*), the St. Anne's Church Road fill slope in the southwest quadrant, and the railroad and landfill zones in the northwest quadrant (*Photographs 6 and 7*).

## **B. Levels Road Culvert**

Because many of the previously identified prehistoric sites in the Appoquinimink drainage lie on landforms similar to that found within the APE, the Levels Road Culvert project area is considered a high probability landform for containing prehistoric archaeological resources. Historic archaeological potential was considered to be low due to the lack of historical properties in the vicinity of the APE.

Due to the high prehistoric potential, it is recommended that archaeological testing within the APE consist of the excavation of STPs at a 15 meter ( 50 foot) interval. If alluvial deposits greater than one meter (3.28 feet) in depth are encountered during the shovel testing, the area will be tested with 1x1 meter units (placed at 30 meter intervals) in order to reach sterile lateral accretion deposits.

The Phase I tests for both projects will be dug by natural strata and excavated soils will be dry screened through ¼ inch hardware cloth. The STPs will be circular and approximately 0.57 meter in diameter. All excavations will extend at least 0.1 meter into sterile subsoil or to lateral accretion deposits. Notes regarding the excavations will be recorded on standardized forms using Munsell color designations and U.S. Department of Agriculture soil texture terminology. Proper safety protocols will be followed during the Phase I Identification Survey. It is anticipated that at least one meeting with representatives of DelDOT, the Delaware SHPO, and McCormick Taylor, Inc. will be held while the Phase I fieldwork is in progress.