

5.0 PHASE II INVESTIGATION STUDY AREAS

Fourteen sites were defined within the Choptank Road alignment based upon the results of KSK's Phase I investigation of the Choptank Road project area (see KSK 2004, Morrell et al. 2004, Moore 2004, Morrell and Glumac 2005), and the analysis of the cultural material collected during McCormick Taylor & Associates' survey of segments of the current project area in 2001. The location of a fifteenth site (7NC-F-76/N-14187), previously identified by a representative of the DE HCA, was reestablished during KSK's subsurface investigation within the KSK # 6 test area. All but one of the fourteen new sites defined during the Phase I surveys was assigned a Delaware site number (Table 25) and their locations recorded at the DE HCA in Dover (Figure 39); the fourteenth site registration was pending at the time of draft report submission.

Table 25. Archaeological sites identified during Choptank Road Phase I investigations.

| Area Name | Site # | CRS # |
|----------------------|----------------------|-----------|
| KSK 1 | 7NC - F - 97 | N - 14208 |
| KSK 3/1 | 7NC - F - 98 | N - 14209 |
| KSK 3/2-4 | 7NC - F - 99 | N - 14210 |
| MTA Schoolhouse | 7NC - F - 101 | N - 14212 |
| KSK 4 | 7NC - F - 100 | N - 14211 |
| KSK 8 | 7NC - F - 92 | N - 14203 |
| MTA J Clayton/KSK 11 | 7NC - F - 93 | N - 14204 |
| KSK 14West | 7NC - F - 94 | N - 14205 |
| MTA N 107 | 7NC - F - 95 | N - 14206 |
| KSK 15 | 7NC - F - 96 | N - 14207 |
| KSK 16 | 7NC - F - 91 | N - 14202 |
| MTA 16A/White Fence | 7NC - F - 102 | N - 14213 |
| KSK 18 | 7NC - F - 103 | N - 14214 |
| School Drive | Registration pending | |

5.1 PHASE II TESTING METHODOLOGY AND LEVEL OF EFFORT

The Phase II investigation of the Choptank Road project area, based upon the results of the preliminary Phase I survey, consisted of the placement of 5-x 5-foot square excavation units (EU's) on ten loci within eight of the fifteen sites identified during the Phase I investigation of the Choptank Road project area. These site locations, each assessed as meriting additional investigation due to the presence of intact prehistoric and/or relatively high quantities of historical cultural material, were subjected to a total of 31 EU's, with the number of units delegated to each locus in accordance with the constraints of the individual site area (Figure 40; Table 26). Initial proposed level of effort on these ten loci consisted of 28 EU's; concurrent with fieldwork, three additional EU's were added to the testing regimen in an effort to more thoroughly investigate the areas. Those site areas that did not receive additional subsurface investigation were deemed to have been sufficiently investigated during the preceding Phase I survey (7NC-F-93, 7NC-F-95, 7NC-F-96, and 7NC-F-103), or will not be impacted by the proposed construction due to the re-engineering of the project alignment (7NC-F-101 and 7NC-F-102).

Table 26. Choptank Road Phase II Proposed Level of Effort

| Area Name | Choptank Road Mileage Station | Quantity of EU's |
|----------------|--|------------------|
| KSK # 1 | Choptank Road Sta 240 + 20 to 241 + 40 | 2 |
| KSK #3/Locus 1 | Choptank Road Sta 239 + 30 to 240 + 30 | 1 |
| KSK #3/Locus 2 | Choptank Road Sta 233 + 90 to 235 + 45 | 5 |
| KSK #3/Locus 3 | Choptank Road Sta 227 + 10 to 230 + 00 | 2 |
| KSK #3/Locus 4 | Choptank Road Sta 222 + 10 to 224 + 00 | 2 |
| KSK #4 | Choptank Road Sta 222 + 35 to 224 + 00 | 2 |
| KSK #6 | Choptank Road Sta 211 + 75 to 212 + 30 | 1 |
| KSK #8 | Choptank Road Sta 175 + 25 to 178 + 05 | 5 |
| KSK #14 West | Choptank Road Sta 75 + 15 to 77 + 85 | 5 |
| KSK #16 | Choptank Road Sta 35 + 55 to 38 + 35 | 3 |

The Phase II testing of these site locations employed a testing strategy utilizing the excavation of a series of five by five-foot square EU's placed within the site based upon the results of the Phase I testing results. EU's were specifically located within identified high artifact density portions of the sites. Prior to the start of Phase II testing KSK's field staff established an independent, uniform grid over each site in order to facilitate eventual mapping of all excavations and relevant findings. Each grid was created using the appropriate edge of Choptank Road as the primary baseline and was extended across the site in ten-foot increments. To allow for the accurate translation of field points to the site plan the site grid was keyed into existing roadside telephone poles. It should be noted that throughout the remainder of this report all referential compass directions provided in the text will be made with respect to the established archaeological grid orientation, rather than to magnetic bearings.

Consultation with representatives of DelDOT and DE HCA throughout the Phase II excavations permitted the addition and reallocation of EU's concurrent with the excavation, in an effort to best utilize the time and resources provided for in the testing regimen.

All EU's were excavated by natural strata, and in 3.5-inch (approximately 10 centimeter) increments within layers, to a point at least seven inches, or two levels, into sterile subsoil deposits. In an effort to maintain tight horizontal control over artifact distribution, and to better identify and document evidence for detailed artifact patterning, each arbitrary level within the EU's were excavated in 2.5-foot square quadrants. All excavated soil was screened through ¼-inch hardware cloth. Recovered artifacts were placed in plastic bags labeled with precise horizontal and vertical provenience information. Standardized forms were used to record data relating to the depths, Munsell color and soil texture, and artifact content for each soil stratum, and the exposed stratigraphic profile within each EU was fully documented by means of hand-drawn maps and with black and white print and digital photographs.

All subsurface features identified during this investigation were excavated using a standardized methodology, regardless of probable feature age and/or function. Wherever a feature was encountered all overlying soils were first cleared in order to expose its full size and shape. Each feature was then bisected along an arbitrary axis and a selected portion fully excavated to expose any evidence of internal stratification and to recover any associated artifacts. Bisected features were carefully documented on hand-drawn plan and profile maps, in standardized excavation forms, and with black and white print, color slide, and digital photographs. Following the bisection the remaining portions of the features were systematically removed by observed strata.

Excavated feature soils were screened through ¼ inch hardware cloth to recover any associated artifacts and, in some instances soil and other samples were retained for possible future analysis.

All artifacts recovered during both the Phase I and Phase II elements of this project were taken to KSK's archaeological laboratory facilities in Pennsauken, New Jersey for processing and analysis. At the laboratory, all artifacts were first thoroughly cleaned with water and allowed to air dry. Subsequent analysis of recovered materials consisted of documenting the raw material type, function, and where possible the approximate age of each artifact, as well as the entering of all relevant analytical variables into a computerized database for eventual statistical characterization. Once the analysis of the artifacts was completed, all items were prepared for eventual long-term curation in accordance with the DE SHPO's *Guidelines*.

5.2 RESULTS OF PHASE II INVESTIGATIONS

Completion of the Phase II testing regimen resulted in the completion of a total of 31 five by five-foot square EU's across ten loci throughout the Choptank Road alignment. The level of effort expended at the individual sites varied between one and five EU's, dependent upon the distribution of cultural material identified during the preceding Phase I survey. The Phase II investigations at these sites produced a cumulative assemblage of over 8,000 artifacts, including items of both prehistoric and historical manufacture. With the exception of 7NC-F-76 (prehistoric) and 7NC-F-91 (historical), each area subjected to Phase II investigation produced individual artifact assemblages consisting of both prehistoric and historical cultural material. A total of nineteen features were identified within the Phase II study areas, sixteen of which were historic in origin and generally associated with historical structures, and three that were directly associated with Native American components. Seven additional subsurface anomalies were initially identified as features, but upon further investigation were found to be non-cultural in origin.

5.2.1 7NC-F-97 (KSK #1)

Phase I shovel testing of this site produced a well-defined distribution of historical cultural material toward the southern extent of the KSK #1 test area, with an additional two prehistoric lithic artifacts collected from within the historical site boundaries. This historical artifact concentration is opposite the approximate location of an outbuilding associated with the Governor B.T. Biggs property, as defined on historical maps of the vicinity (Beers 1868). A total of two EU's were proposed for this site, in an effort to locate any possible structural remains associated with the artifacts, as well as to possibly define the relationship between the B.T. Biggs property and the historical artifact presence.

EU's were placed between those Phase I shovel test pits that produced the highest quantities of historical cultural material (Figure 41). Soil profiles of both EU's exhibited an approximately one-foot thick plow zone atop subsoil, with no significant disturbances evident below the plow zone. Artifact content of the EU's consisted of a moderately dense presence of nineteenth century architectural and domestic debris, with no indications of structural elements associated with a possible historical building. Also collected from the plow zone of these EU's are several prehistoric lithic artifacts, consisting of a single quartz biface and fifteen thermally altered lithics (quartz, quartzite, and sandstone). No evidence of undisturbed prehistoric artifact deposits or features was observed during the excavation of either EU.

Table 27. Historical artifact assemblage from 7NC-F-97 (KSK 1).

| Artifact Description | Quantity | Total | % |
|-----------------------------|-----------------|--------------|---------------|
| Ceramics | | 89 | 47.09 |
| Creamware | 15 | | |
| Pearlware | 21 | | |
| Red-bodied | 52 | | |
| Stoneware | 1 | | |
| Glass | | 12 | 6.35 |
| Bottle | 5 | | |
| Bottle, wine | 3 | | |
| Tumbler | 2 | | |
| Unidentified | 2 | | |
| Architectural | | 69 | 36.51 |
| Brick | 23 | | |
| Brick, glazed | 11 | | |
| Mortar | 3 | | |
| Nail, machine cut/wrought | 9 | | |
| Nail, unidentified | 12 | | |
| Glass, window | 11 | | |
| Faunal | | 4 | 2.12 |
| Mammal, unidentified | 3 | | |
| Shell, oyster | 1 | | |
| Miscellaneous | | 15 | 7.94 |
| Belt buckle | 1 | | |
| Pipe, smoking | 1 | | |
| Pipe, stoneware | 7 | | |
| Barrel hoop | 2 | | |
| Iron plate fragment | 2 | | |
| Metal, unidentified | 2 | | |
| Total | | 189 | 100.00 |

5.2.2 7NC-F-98 (KSK #3/1)

Situated within a spatially restricted segment of the Choptank Road proposed alignment, this locus identified at the northernmost test area of KSK #3 is immediately adjacent to the landowner-identified former location of a historical blacksmith shop. The approximate location of this structure is identifiable on the historical maps (Beers 1868) consulted prior to the commencement of the archaeological investigation; however the maps do not identify the structure's function. As defined by the informant (personal communication 2003), it would appear that the structure was located approximately 50 feet east of the current limit of construction, and it is possible that the historic period artifacts that were retrieved during the conduct of the Phase I archaeological investigation may be related to the occupation/utility period of this structure. In addition to the historical artifact assemblage (including pearlware, bottle and table glass shards, and brick fragments), few prehistoric lithics and thermally altered lithic materials were collected during the Phase I survey.

Possible locations for the single Phase II test unit within the narrow confines of the KSK #3/1 site boundaries were restricted by the asphalted roadway and adjacent fenced horse pasture, resulting in a necessary reconfiguration of the proposed five by five-foot EU (see Figure 41). The linear

nature of the available test area required the dimensions of the EU to be 2.5 by 10 feet, producing a standard unit as defined by square footage.

The artifact assemblage from EU 1 of this site consists of few domestic and architectural historical artifacts of nineteenth century manufacture, of which none can definitively be associated with a craft production site, such as the purported adjacent blacksmith shop. The prehistoric artifact assemblage encountered during the Phase II investigation of 7NC-F-98 consists of a single quartz reduction flake encountered from within the plow zone; no cultural material was observed in the B-Horizon. Some measure of prior disturbance to the soil column was anticipated, based upon the extreme proximity of the EU to the edge of the extant hot mix of Choptank Road; excavation revealed that the western half of the plow zone within the unit had been impacted during a previous construction phase of the roadway. This disturbance extends into the underlying soil strata, although with depth the horizontal extents of the intrusion are less pronounced. No features, either prehistoric or historical, were observed during the excavation of this unit.

Table 28. Historical artifact assemblage from 7NC-F-99 (KSK 3/1).

| Artifact Description | Quantity | Total | % |
|-----------------------------|-----------------|--------------|---------------|
| Ceramics | | 4 | 16.00 |
| Creamware | 1 | | |
| Pearlware | 1 | | |
| Red-bodied | 2 | | |
| Glass | | 1 | 4.00 |
| Bottle | 1 | | |
| Architectural | | 14 | 56.00 |
| Brick | 1 | | |
| Nail, machine cut/wrought | 9 | | |
| Glass, window | 4 | | |
| Faunal | | 2 | 8.00 |
| Mammal, unidentified | 2 | | |
| Miscellaneous | | 4 | 16.00 |
| Tack | 1 | | |
| Metal, unidentified | 2 | | |
| Cotter pin | 1 | | |
| | | 4 | |
| Totals | | 25 | 100.00 |

5.2.3 7NC-F-99 (KSK #3/2)

Phase I survey of this portion of the Choptank Road project area resulted in the identification of a small concentration of prehistoric cultural material atop a landform in the vicinity of Back Creek. Included among the prehistoric artifacts collected during the Phase I investigation are a biface midsection, one quartz and six jasper pieces of debitage, and a single thermally altered lithic; based upon this assemblage and its distribution across the landform, five EU's were proposed for this locus.

Four of the Phase II EU's were placed adjacent to those Phase I investigation shovel test pits that produced the highest quantities of prehistoric artifacts (Figure 42). Soil profiles of most of these EU's exhibited a plow zone of average thickness (0.8 feet \pm) with a thin underlying E-Horizon atop a 10YR5/6 yellow brown silt loam subsoil. Only EU #1, the southernmost unit and the

closest to the edge of the roadway, contained substantial visible disturbance; this subsurface impact is likely a result of roadway construction activities.

Artifact content of these four EU's proved to be minimal, with prehistoric cultural material restricted to nine pieces of debitage. Historical artifacts collected during the Phase II archaeological investigation consisted predominantly of a very light presence of small ceramics and two cut/wrought nails. Given the extremely limited artifact presence encountered during the excavation of the first four EU's and the dearth of intact features, the final five by five-foot EU was not placed on locus KSK#3/2, but rather was reallocated to another locus within 7NC-F-99 that was more likely to produce useful information regarding the prehistoric period of northern Delaware.

Table 29. Prehistoric artifacts from 7NC-F-99 (KSK 3/2).

| Artifact Type | Quartz | Crystal Quartz | Jasper | Chert | Total | Percent |
|---------------------|--------|----------------|--------|--------|----------|---------------|
| Debitage | | | | | | |
| Decortication flake | | | 1 | | 1 | 11.11% |
| Early reduction | 2 | 1 | 2 | 1 | 6 | 66.66% |
| Thinning flake | 1 | | 1 | | 2 | 22.22% |
| Total | 3 | 1 | 4 | 1 | 9 | |
| Percent | 33.33% | 11.11% | 44.44% | 11.11% | | 99.99% |

5.2.4 7NC-F-99 (KSK #3/3)

Situated approximately 400 feet (121.9 meters) down slope from the previously addressed locus, this concentration of material consists of a combination of prehistoric and historical artifacts. Small sherds of utilitarian ceramics constitute the historical array, while the prehistoric material consists of several pieces of jasper and quartzite debitage and a scattering of fire-cracked rock. Sparsely distributed throughout a 250-foot (76.2 meters) corridor on the eastern verge of Choptank Road, these artifacts are predominantly contained within the plow zone; however few debitage were recovered from the upper portion of the B-Horizon.

Phase II testing of this locus was accomplished through the emplacement of two EU's, located in the immediate vicinity of previously identified sub-Ap prehistoric lithic material (Figure 43). The soil profile of the northern EU (EU #6) reveals a thick organic lens atop a 10YR5/8 yellowish brown silt loam plow zone, with an underlying 10YR6/6 brownish yellow silt loam B-Horizon. This deposit is not evident in the southern unit excavated on KSK #3/3. Artifact content of these units is low in proportion to that recovered during the Phase I survey, and consists of three (quartz, jasper, chert) prehistoric lithic debitage and ten historic red-bodied earthenware sherds, with additional individual pieces of yellowware and window glass. No cultural material was collected from below the plow zone in either EU, nor was there any evidence of the presence of features on this locus.

5.2.5 7NC-F-99 (KSK #3/4)

Toward the southern extent of the overall KSK #3 Phase I survey area, shovel testing produced a tightly clustered distribution of prehistoric debitage from within the B-Horizon, as well as a single fragment of fire-cracked rock. The combination of these elements signified the potential

for intact prehistoric features, and two Phase II EU's were proposed for this locus (Figure 44). Within this general area of concentration, two sub-loci were identified; although separated by a wide swath of sterile test probes that exhibit highly disturbed profiles, these concentrations are in all likelihood elements of the same occupation.

The first EU placed on KSK #3/4 (EU #8) contained a historic plow zone relatively dense in prehistoric artifacts in comparison to the northern site loci, with a broad range of lithic material types represented within the assemblage. Fire-cracked rock was also present in large quantity. At the interface of the Ap and the underlying B-Horizon, excavators identified a large oval feature (Feature 6) that extended into the south wall of the EU. A subsequent EU (#9) was excavated immediately to the south of the parent unit, and captured the remainder of Feature 6. This feature is addressed in greater detail below.

Although originally anticipated that the removal of two EU's would be a sufficient level of effort to test 7NC-F-99/Locus 4, two additional EU's were approved by representatives of the DE HCA and DelDOT for placement on the site in an effort to more thoroughly investigate the extents of this locus. EU #10 was situated in proximity to the more southern prehistoric artifact concentration. An increased incidence of historical artifacts was also observed in the shovel tests in this portion of the test area, possibly representing a redeposited scatter associated with the adjacent J. Clayton property. Artifact content within the plow zone of this EU consisted of relatively high quantities of prehistoric debitage intermixed with historical architectural and domestic debris. Also included within the prehistoric content of the EU #10 plow zone are a bifacially modified quartz tool and a vessel body sherd of tentatively-identified Wolfe Neck prehistoric pottery (Plate 12). Full exposure of the remainder of the EU profile revealed a truncated C-Horizon directly below the plow zone, indicating historical subsurface disturbance in the vicinity and therefore a redeposited plow zone.

In an effort to maximize the information retrieved from Locus 4 during the Phase II investigation, the fourth and final EU was divided into four smaller EU's; these four 2.5 by 2.5-foot square units result in a combined area equal to that of a standard five by five-foot unit while permitting a broader sampling area across the site (Figure 45). EU's # 11, 12, 13, and 14 exhibited vastly different soil profiles dependent upon their location within the landform, with the more northern EU's #11 and #13 having relatively undisturbed profiles beyond historical plow impact. The southern units, however, retained the truncated/disturbed profile identified in the larger EU #10 (Plate 13), and produced a similar artifact assemblage.

In an effort to define the extent of the subsurface disturbance within 7NC-F-99/Locus 4, that portion of the site area between the northern and southern EU's containing sterile Phase I shovel test pits was subjected to informal subsurface investigation concurrent with the Phase II site assessment. Test probes roughly one foot by one-foot square were excavated across this section of 7NC-F-99 in two grid-north/south transects, with the probes distributed approximately every five feet across the slope of the site (see Figure 45). Subsurface disturbance was evident in all but two of these probes; the northernmost test along the roadside was placed on the boundary of the prior impacts. None of the soil from these probes was screened, nor was any artifact collected during their excavation.

Overall, the artifact assemblage recovered from this Locus exhibits a high degree of class diversity and is moderately robust in terms of material type. Lithic tools are represented by a variety of both bifacially and unifacially modified objects. The bifacial assemblage includes two early to middle stage quartz tools, three projectile points or point fragments, and an otherwise unidentifiable chert artifact that appears to have been rejected during production. Unifaces are represented by a quartz endscraper, two utilized flakes, and two retouched flakes. Cobble tools

are represented by a single sandstone hammerstone. The assemblage includes nine lithic cores, which are almost evenly divided between flake core and tested cobble types. The single prehistoric ceramic recovered from this locus has a cord or net impressed exterior and a coarse, quartz grit temper; the sherd is 9-mm thick and is most similar to the Wolfe Neck variety common throughout this region. Chipped stone debitage dominates the assemblage at 75% of all artifacts, with flakes representative of all stages of the reduction sequence present in varying proportions. Thermally altered stone is present in the form of both fire-reddened and fire-cracked rock, the latter occurring twice as frequently. Raw materials are distributed across a variety of types. Chert, jasper, and quartz dominate the assemblage with lesser quantities of chalcedony, quartzite, and rhyolite, while the presence of sandstone is mostly limited to thermally altered stone.

Table 30. Prehistoric artifact assemblage from 7NC-F-99, Locus 4 (KSK 3/Locus 4).

| Artifact Type | Chalced. | Chert | Jasper | Quartz | Quartzite | Rhyolite | Sandstone | Ceramic | Total | % |
|--------------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|------------|--------|
| Biface | | | | | | | | | 6 | 2.34 |
| Early Stage | | | | 1 | | | | | 1 | |
| Middle Stage | | | | 1 | | | | | 1 | |
| Projectile Point | | | 2 | | | 1 | | | 3 | |
| Unidentified | | 1 | | | | | | | 1 | |
| Uniface | | | | | | | | | 5 | 1.95 |
| Endscraper | | | | 1 | | | | | 1 | |
| Utilized Flake | | 1 | 1 | | | | | | 2 | |
| Retouched Flake | | 1 | 1 | | | | | | 2 | |
| Cobble Tool | | | | | | | | | 1 | 0.39 |
| Hammerstone | | | | | | | 1 | | 1 | |
| Core | | | | | | | | | 9 | 3.51 |
| Flake Core | | 2 | | 3 | | | | | 5 | |
| Tested Cobble | | | | 4 | | | | | 4 | |
| Debitage | | | | | | | | | 192 | 75.00 |
| Primary | 1 | 7 | 10 | 8 | 1 | | | | 27 | |
| Secondary | 1 | 20 | 19 | 7 | | | 2 | | 49 | |
| Thinning | 4 | 33 | 20 | 6 | | 1 | | | 64 | |
| Tertiary | 7 | 11 | 9 | 1 | | 2 | | | 30 | |
| Shatter | | 1 | | 1 | | | | | 2 | |
| Fragment | | 7 | 7 | 5 | 1 | | | | 20 | |
| FCR | | | | | | | | | 42 | 16.41 |
| Fire-reddened | | | | 1 | | | 13 | | 14 | |
| Fire-cracked | | | | 5 | 8 | | 15 | | 28 | |
| Ceramic | | | | | | | | | 1 | 0.39 |
| Wolfe Neck | | | | | | | | 1 | 1 | |
| Total | 13 | 84 | 69 | 44 | 10 | 4 | 31 | 1 | 256 | |
| Percent | 5.08 | 32.81 | 26.95 | 17.19 | 3.90 | 1.56 | 12.11 | 0.39 | | 100.00 |

The vertical distribution of artifacts is largely limited to the disturbed plow zone context; however, 36 artifacts (14%) were recovered from intact subsoil deposits. Horizontally, artifacts are bimodally distributed across the locus in roughly equal proportions in the northern and

southern sub loci as described above. These sub loci are spatially separated by a swath of culturally sterile and extensively disturbed terrain as defined by test pits and each is described in detail below.

Northern Sub-Locus:

The northern artifact concentration was identified through the excavation of EUs # 8, 9, 11, and 13. Artifacts associated with this concentration are a subset of the overall assemblage and are detailed in Table 31. The only temporally diagnostic artifact is the Susquehanna Broadspear (see Plate 12), a type traditionally associated with Late Archaic cultures, or early Woodland I in Delaware chronology. Debitage dominates the assemblage with flake proportions roughly equivalent to the broader assemblage as described above. Thermally altered stone occurs in moderate quantity.

Table 31. Prehistoric artifact assemblage of 7NC-F-99, northern sub-locus.

| Artifact Type | Chalced. | Chert | Jasper | Quartz | Quartzite | Rhyolite | Sandstone | Total | Percent |
|--------------------------|----------|-----------|-----------|-----------|-----------|----------|-----------|------------|--------------|
| Biface | | | | | | | | 3 | 1.94 |
| Mid-Stage | | | | 1 | | | | 1 | |
| Broadspear | | | | | | 1 | | 1 | |
| Non-diagnostic Point Tip | | | 1 | | | | | 1 | |
| Uniface | | | | | | | | 4 | 2.58 |
| Utilized Flake | | 1 | 1 | | | | | 2 | |
| Retouched Flake | | 1 | | | | | | 1 | |
| Endscraper | | | | 1 | | | | 1 | |
| Cobble Tool | | | | | | | | 1 | 0.64 |
| Hammerstone | | | | | | 1 | | 1 | |
| Core | | | | | | | | 1 | 0.64 |
| Flake | | | | 1 | | | | 1 | |
| Debitage | | | | | | | | 114 | 73.55 |
| Primary | | 4 | 2 | 1 | 1 | | | 8 | |
| Secondary | | 16 | 13 | 6 | | | | 35 | |
| Thinning | 4 | 25 | 17 | 1 | | 1 | | 48 | |
| Tertiary | 4 | 2 | 5 | 1 | | 3 | | 15 | |
| Flake Fragment | | 3 | 3 | 2 | | | | 8 | |
| Fire Altered Rock | | | | | | | | 32 | 20.65 |
| Reddened | | | | | | | 10 | 10 | |
| Cracked | | | | 5 | 6 | | 11 | 22 | |
| Total | 8 | 52 | 42 | 19 | 7 | 6 | 21 | 155 | |
| Percent | 5.16 | 33.55 | 27.09 | 12.26 | 4.52 | 3.87 | 13.55 | | 100.00 |

Feature 6 was identified in the western portion of this concentration, in EUs 8 and 9, at the interface between the plow zone and B-horizon. The feature was differentiated from the

surrounding subsoil on the basis of slightly darker soil color and light to moderate amounts of charcoal flecking. In planview, the feature is oblong with a maximum length diameter of 5.3 feet and a width of approximately 3 feet (see Figure 45). The maximum depth of the intact portion of the feature is 0.3 feet, and the cross-section is very slightly basin-shaped. Artifacts recovered from within feature matrix include several bifacial thinning and secondary reduction flakes (N=6), the distal tip of a jasper projectile point, and two unmodified quartz cobbles. No fire-cracked rock was recovered from within the feature matrix. Historical artifacts include two small fragments of red-bodied earthenware and one small fragment of functionally unidentifiable glass. These objects were recovered from the small rodent burrow identified in the southwest portion of the feature and are considered intrusive.

Feature 18 was identified adjacent to, and less than a foot south of, Feature 6 (see Figure 45). The exposed portion of this feature is oval-shaped in planview with a maximum length diameter of 1.1-feet and a width of 1-foot. As with Feature 6, only a small portion of the vertical extent of this feature was intact and the cross-section indicated a very shallow basin shape with a maximum depth of 0.12-feet. This feature was identified on the basis of a slightly darker soil color, in comparison to the surrounding subsoil matrix, and included light to moderate amounts of charcoal flecking. No artifacts were recovered from within the feature. Given the highly truncated condition and complete lack of an artifact assemblage, the function of this feature remains unknown. Its close proximity to Feature 6 suggests that the two are associated but the nature of that relationship cannot be discerned.

Southern Sub-Locus:

The southern artifact concentration was identified by the excavation of EUs # 10, 12, and 14. Artifacts associated with this concentration are a subset of the overall assemblage and are detailed in Table 32. Temporally diagnostic artifacts include the early Woodland Wolfe Neck ceramic sherd and a jasper triangle projectile point. This latter object has a slightly concave basal indentation and is most similar to the Levanna type (see Plate 12), which is normally associated with late Woodland cultures, or the Woodland II period of Delaware chronology. Clear evidence of thermally induced reddening was also observed on one of the basal corners of this point. Other tools include a single jasper retouched flake. Chipped stone debitage dominates the assemblage at 78% and flakes representative of all reduction stages are present in nearly even proportions. Primary reduction flakes are the most common, an observation that is likely related to the increased quantity of lithic cores recovered from this concentration. Raw materials occur in proportions similar to the overall assemblage with the exception that rhyolite is not present in this sub-locus.

Table 32. Prehistoric artifact assemblage from 7NC-F-99, southern sub-locus.

| Artifact Type | Chalced. | Chert | Jasper | Quartz | Quartzite | Sandstone | Ceramic | Total | Percent |
|-----------------|----------|-----------|-----------|-----------|-----------|-----------|----------|------------|---------|
| Biface | | | | | | | | 2 | 2.00 |
| Early-Stage | | | | 1 | | | | 1 | |
| Triangle Point | | | 1 | | | | | 1 | |
| Uniface | | | | | | | | 1 | 1.00 |
| Retouched Flake | | | 1 | | | | | 1 | |
| Core | | | | | | | | 8 | 8.00 |
| Flake | | 2 | | 2 | | | | 4 | |
| Tested Cobble | | | | 4 | | | | 4 | |
| Debitage | | | | | | | | 78 | 78.00 |
| Primary | 1 | 3 | 8 | 7 | | | | 19 | |
| Secondary | 1 | 4 | 6 | 1 | | 2 | | 14 | |
| Thinning | | 8 | 2 | 5 | | | | 15 | |
| Tertiary | 3 | 9 | 4 | | | | | 16 | |
| Shatter | | 1 | | 1 | | | | 2 | |
| Fragment | | 4 | 4 | 3 | 1 | | | 12 | |
| Ceramic | | | | | | | | 1 | 1.00 |
| Wolfe Neck | | | | | | | 1 | 1 | |
| FCR | | | | | | | | 10 | 10.00 |
| Reddened | | | | 1 | | 3 | | | |
| Cracked | | | | | 2 | 4 | | | |
| Total | 5 | 31 | 26 | 25 | 3 | 9 | 1 | 100 | |
| Percent | 5.00 | 31.00 | 26.00 | 25.00 | 3.00 | 9.00 | 1.00 | | 100 |

As discussed above, the substantial subsurface disturbance evident in this area precluded the identification of any features. Temporally diagnostic artifacts indicate that there may have been some degree of stratified deposits in this sub-locus prior to disturbance. Time periods represented by these artifacts span from roughly the middle of the Woodland I through Woodland II, however the highly impacted nature of soils within this sublocus devalues the presence of these artifacts with regard to site interpretation.

5.2.6 7NC-F-100 (KSK #4)

Subsurface Phase I testing toward the southern extent of KSK #4 produced a moderately dense artifact assemblage containing historical domestic and architectural debris, as well as secondary stage lithic material from within the plow zone (Plate 14). Located in relative proximity to Back Creek, this test area is situated on the opposite bank of Choptank Road from KSK #3/Locus 4 and is potentially an extension of that site (see Figure 44). In addition to the lithic debitage, three pieces of fire-cracked rock were recovered from the plow zone during the Phase I survey, indicating the potential for prehistoric features. Historical cultural material was collected from a limited section of the test area in association with the prehistoric artifacts and consisted of cut nails, several pearlware and redware vessel sherds, and brick fragments.

The two proposed EU's were located in proximity to the shovel tests with the highest artifact content as defined during the Phase I investigation. Both units were situated toward the edge of a fallow field, with the northern EU placed so as to overlap the plowed extent of the field and intrude slightly onto the sloped, grassy verge of Choptank Road (Figure 46).

The southern EU (EU #1) contained a thick plow zone that extended 1.7 feet (.52 meters) below ground surface and produced both historical and prehistoric cultural material throughout the stratum. The historical creation of this deep soil package has likely occurred through a combination of factors, including eolian transport as well as the repetitive plowing of the field and the resultant deposition of displaced soil at the edge of the cultivated area. Artifact presence was strong throughout the plow zone, consisting of both historical and prehistoric artifacts (N=252). The historical cultural material collected from this stratum consists of a variety of architectural and domestic debris, including window glass, hand wrought nails, pearl and creamware sherds, and a fragment of delft. Brick fragments are distributed throughout the plow zone.

A single feature was identified along the north wall at the interface of the plow zone and the underlying B-Horizon of EU # 1; this anomaly proved to be a well-defined rectangular post hole with an associated post mold. Cultural material from within the feature is contemporary with that collected from throughout the plow zone, consisting of very small brick fragments, a small piece of iron, a single redware vessel sherd, and a fragment of bottle glass.

EU # 2, located toward the northern extent of the Phase I-identified artifact concentration, yielded over 100 historical and prehistoric artifacts comparable to those found in EU # 1. Subsequent to the removal of the plow zone, a large semi-circular pit feature was identified in the southern half of the unit. Intruding into the south wall of the EU, this feature (#20) contains intact handmade bricks and several large brick fragments, both glazed and unglazed, as well as several unmodified field stones (Plate 15). In addition, the pit contained historical domestic artifacts with manufacture dates restricted to the second half of the eighteenth century, consisting of wrought nails, redware sherds, and a possible case bottle shard.

The profile of Feature 20 exhibits horizontal lensing below the base of the plow zone; the large pieces historical artifacts occur exclusively below the plow zone/B-Horizon interface in this profile (Figure 47). This feature is of substantial size both horizontally, with a maximum diameter of three feet (.91 meters), and vertically, as the floor of the feature intrudes 1.9 feet (.58 meters) below the terminus of the plow zone.

Following consultation with representatives of DelDOT and DE HCA, a third EU was approved for placement upon 7NC-F-100. An attempt to confirm the limited manufacture date range of the historical artifacts collected from the site and to seek further evidence of any possible structural remnants, this EU was placed between the two previously excavated test units. The plow zone of EU #3 was of comparable thickness to the adjacent EUs, and yielded a similar artifact assemblage. Of particular note within the collected historical material are a finely engraved pewter button, approximately one half of a decorated lead buckle, and two large fragments of lead caming (Plate 16).

As in the adjacent units, the exposure of the interface of the plow zone with the B-Horizon of EU 3 resulted in the identification of subsoil-intrusive features. Feature 21, a shallow rectangular stain, was present at the northern extent of the unit; no cultural material was observed within the feature, and its function is unknown. Feature 22, toward the center of the EU, is a large pit nearly identical in dimensions and construction to the pit encountered in the EU to the north. One

Table 33. Historical artifact assemblage from 7NC-F-100 (KSK 4).

| Artifact Description | Quantity | Total | % | Artifact Description | Quantity | Total | % |
|----------------------------|----------|-------|-------|----------------------|----------|------------|---------------|
| Ceramics | | 380 | 61.09 | Faunal | | 12 | 1.93 |
| Delftware | 5 | | | Mammal, unidentified | 12 | | |
| Creamware | | | | | | | |
| Plain | 52 | | | Miscellaneous | | 14 | 2.25 |
| Dipped | 1 | | | Belt buckle | 1 | | |
| Feather edged | 2 | | | Button, pewter | 1 | | |
| Banded | 14 | | | Jew's harp | 1 | | |
| Underglaze handpainted | 1 | | | Knife | 1 | | |
| Underglaze transferprinted | 1 | | | Fireplace hangar | 1 | | |
| Pearlware | | | | Gunflint | 1 | | |
| Plain | 59 | | | Button, glass | 1 | | |
| Dipped | 3 | | | Metal, unidentified | 4 | | |
| Underglaze | 9 | | | Barbed wire | 1 | | |
| Overglaze handpainted | 6 | | | Chain | 1 | | |
| Red-bodied | | | | Game piece | 1 | | |
| Unglazed | 23 | | | | | | |
| Glazed | 157 | | | Total | | 622 | 100.00 |
| Slipped | 25 | | | | | | |
| Stoneware | 5 | | | | | | |
| Porcelain | 6 | | | | | | |
| Whiteware | 7 | | | | | | |
| Yellowware | 4 | | | | | | |
| | | | | | | | |
| Glass | | 77 | 12.38 | | | | |
| Bottle | 61 | | | | | | |
| Wine | 15 | | | | | | |
| Mineral water | 5 | | | | | | |
| Tumbler | 1 | | | | | | |
| Unidentified | 9 | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Architectural | | 139 | 22.35 | | | | |
| Brick | 36 | | | | | | |
| Brick, glazed | 6 | | | | | | |
| Building block | 5 | | | | | | |
| Mortar | 2 | | | | | | |
| Plaster | 2 | | | | | | |
| Nail | | | | | | | |
| Hand wrought rosehead | 9 | | | | | | |
| Machine cut/wrought | 25 | | | | | | |
| Wire | 4 | | | | | | |
| Unidentified | 23 | | | | | | |
| Strap hinge | 1 | | | | | | |
| Glass, window | 18 | | | | | | |
| Window hardware | 2 | | | | | | |
| Hardware, general | 1 | | | | | | |
| Tack | 1 | | | | | | |
| Fastener | 4 | | | | | | |

noticeable difference between these pit features, however, is a much stronger artifact presence in this southern intrusion; 44 artifacts were retrieved, including a large delft charger sherd (Plate 17). As was observed throughout the site, all historical material collected from the feature has a manufacture date constrained to the second half of the eighteenth century through the early nineteenth century, and as in each EU, prehistoric cultural material has been displaced (i.e. plow, historical feature construction).

With reference to the prehistoric component documented at 7NC-F-100, Phase I and II archaeological investigations throughout this site resulted in the recovery of 171 prehistoric artifacts. These objects were recovered from seven sampling locations, including four shovel test probes and three test units (see Figure 47). The large majority of artifacts (N=117, 68%) were recovered from EU #3, in the central portion of the KSK 4 study area. Lesser amounts of prehistoric cultural material were recovered from EU #1 (N=17, 10%) and EU #2 (N=32, 18%).

The remaining 4% of artifacts (N=5) were recovered from the four positive Phase I shovel test probes, which are clustered to the north of EU #3 and to the south of Test Unit #1. The vertical distribution of artifacts is largely confined to the five or six excavation levels that comprise the plow zone, with only 16% (N=27) of the artifacts were recovered from intact B-horizon soils.

Table 34. Prehistoric artifact assemblage from 7NC-F-100 (KSK 4) combined PH I/II.

| Artifact Type | Chalced. | Chert | Jasper | Quartz | Quartzite | Sandstone | Hematite | Total | Percent |
|-------------------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|------------|---------------|
| Biface | | | | | | | | 2 | 1.17 |
| Early-Stage | | | | 1 | | | | 1 | |
| Fishtail Point | | 1 | | | | | | 1 | |
| Uniface | | | | | | | | 1 | 0.58 |
| Spokeshave | | | 1 | | | | | 1 | |
| Core | | | | | | | | 4 | 2.34 |
| Freehand | | | | 1 | | | | 1 | |
| Tested Cobble | | | | 2 | 1 | | | 3 | |
| Debitage | | | | | | | | 128 | 74.85 |
| Primary | | 12 | 10 | 14 | | | | 36 | |
| Secondary | | 3 | 1 | 2 | 1 | | | 7 | |
| Thinning | 2 | 9 | 17 | 5 | 1 | | | 34 | |
| Tertiary | 1 | 8 | 4 | 1 | | | | 14 | |
| Shatter | | | 1 | 2 | | | | 3 | |
| Fragment | | 6 | 14 | 13 | 1 | | | 34 | |
| FCR | | | | | | | | 32 | 18.71 |
| Reddened | | | | 4 | 1 | 13 | | 18 | |
| Cracked | | | | | 12 | 2 | | 14 | |
| Mineral | | | | | | | | 1 | 0.58 |
| Hematite | | | | | | | 1 | 1 | |
| Unmodified | | | | | | | | 3 | 1.75 |
| Pebble | | | | 3 | | | | 3 | |
| Total | 3 | 39 | 48 | 48 | 17 | 15 | 1 | 171 | |
| Percent | 1.75 | 22.81 | 28.07 | 28.07 | 9.94 | 8.77 | 0.58 | | 100.00 |

With the exception of one small sample of hematite, the artifact assemblage associated with 7NC-F-100 is entirely lithic tool or tool production-derived in composition. Two bifaces and a single

uniface comprise the recovered tool assemblage, all from within the plow zone. The bifaces are represented by an early-stage quartz object that exhibits cortex and very light amounts of use-wear on a single lateral margin. As such, it is likely that this tool was manufactured for expedient use and was not intended for further bifacial reduction. The other biface is the proximal half of a broken chert projectile point (Plate 18) recovered from EU 2. This object has a Fishtail-like morphology despite being slightly broader than most points assigned to that type. If not a true Fishtail, the shallow side-notching near the proximal base suggests that this point is likely associated with early to middle portions of the Woodland I cultural period. The single unifacial tool is a jasper spokeshave that exhibits a moderate amount of use-wear on the interior convex margin.

Including cores, lithic debitage comprises approximately 75% of the overall prehistoric artifact assemblage. Three of the four cores are tested cobbles and the remaining object is a freehand core. All cores are of quartz or quartzite. Actual chipped stone debitage artifacts are distributed across all reduction stages and a variety of raw material types are represented. Primary decortication, bifacial thinning, and flake fragments are the most abundant debitage types, while lesser amounts of secondary reduction, late-stage finishing flakes, and angular debris are also present. Raw material types are dominated by jasper, chert, and quartz with much lesser quantities of chalcedony and quartzite.

Other artifacts within this assemblage include a moderate quantity of thermally altered lithic material, within which fire-reddened and fire-cracked objects are evenly represented. The majority of these artifacts are sandstone or quartzite; several fire-reddened quartz nodules are also present. Finally, three unmodified quartz pebbles were recovered in association with other more definitive artifact types.

5.2.7 7NC-F-76 (KSK #6)

Located atop a terrace above Back Creek, this site was previously identified by representatives of the DE HCA during the construction of the immediately adjacent Back Creek Golf Course. Shovel testing in this area produced a tightly-clustered distribution of lithic material, consisting of four pieces of debitage and two fire-cracked rock fragments. The presence of fire-cracked rock is indicative of the possibility for prehistoric features; this coupled with the concentration of positive shovel test pits provided an excellent opportunity for the discovery of such features.

The proximity of the test area to the golf course and associated subsurface disturbances as defined during the Phase I survey served to limit the potential locations for the single EU placed on this site. In an effort to capture the thermal feature associated with the collected fire-cracked rock, the EU was placed immediately adjacent to the artifact-bearing shovel test pit (Figure 48). Excavation of the Phase II unit produced a single quartz thinning flake from the plow zone, with no further evidence of thermal features. The exposed soil profile revealed a narrow plow zone atop a sterile sandy clay B-Horizon, with prior impact to the deeper stratum limited to shallow historical plow intrusion.

5.2.8 7NC-F-92 (KSK #8)

This site was the most productive during the Phase I with regard to prehistoric material, in terms of quantity of artifacts, variety of materials, and classification of use. Consisting of a narrow swath of level terrain in relatively close proximity to Back Creek, this site 7NC-F-92 contains artifact-bearing shovel test pits that produced a total of 49 prehistoric artifacts from 20 test pits.

Of the prehistoric artifact assemblage, ten pieces are characterized as fire-cracked rock, contributing to the potential for prehistoric thermal features. Within the prehistoric artifact distribution, the most concentrated artifact-producing area is limited to an approximately 100-foot (30.48 meter) long segment of the test area, extending from the edge of the pavement to the limit of construction. Historical cultural material was limited to general domestic debris scattered widely across the test area. Phase II investigation recommendations consisted of the placement of five EU's within the prehistoric component (Figure 49).

Phase II excavation of units 1, 3, and 5 produced very small quantities of cultural material, none of which exceeded a total count of six artifacts. EU #4 yielded a slightly higher quantity of artifacts (N=10). Soil profiles of these units did not exhibit evidence of extensive previous disturbance, with only a historical plow zone to indicate subsurface impact. In contrast, EU #2 produced a total of 28 artifacts from the plow zone. At the interface between the plow zone and the underlying B-horizon subsoil a large, amorphous feature-like anomaly containing copious amounts of lithic material was detected (Feature 1) (Plate 19). The horizontal extent of this anomaly continued beyond the northern and southern boundaries of the unit. In order to fully assess the size and nature of this feature, additional units of varying size were placed to the north and south of EU #2 (Figure 50). The three additional EUs consist of EU #6 and #7 (2.5- by 2.5-foot each) situated north of the parent unit and EU #8 (2.5- by 5-foot) to the immediate south of EU #2.

The unit immediately adjacent to the previously excavated EU #2 (EU #6) encompassed the northern extent of the feature and produced a small additional amount of the sedimentary lithic recovered from the bulk of the anomaly; the depth of the feature along this boundary is significantly more shallow than that observed at the center of the feature. To the south, EU # 8 was excavated from immediately adjacent to the parent unit. This unit defined the southern boundary of the feature and also yielded relatively few additional artifacts. The resultant exposed Feature #1 exhibits a roughly D-shaped outline with a steeply sloped profile (Plate 20; see Figure 50). Artifacts recovered from the plow zone of these additional units (# 6, 7, & 8) include a total of 38 objects, all of which are related to lithic reduction activities. The excavation of these units succeeded in defining the horizontal extent of Feature 1.

The distribution of cultural materials across the horizontal and vertical extent of the site reveals two distinct contexts within which prehistoric artifacts were recovered. The first context is the relatively light scatter of artifacts distributed across most of the horizontal extent of the site boundary. Second is the discrete context of Feature 1. Each of these contexts is discussed separately below.

The non-feature portions of 7NC-F-92 are comprised of all artifacts and sample locations not explicitly defined as Feature 1. Cultural materials from this context include a total of 107 artifacts that are representative of a fairly narrow range of activities (Table 35). The single lithic tool associated with this context is an unidentifiable point fragment manufactured of quartz. Lithic cores are represented by single examples of a variety of core types, including freehand, bifacial, flake cores, and tested cobbles. With the exception of a single sedimentary "greenstone" flake core, all objects in this category are quartz. Debitage comprises approximately 86% of the overall artifact assemblage and all stages of the lithic reduction sequence are represented. Primary decortication and bifacial thinning flakes dominate the debitage assemblage. Secondary reduction and flake fragments are the next most common debitage types, with lesser amounts of late-stage reduction flakes and angular shatter present as well. Raw materials are dominated by quartz and sedimentary greenstone in almost equal proportions, followed by decreasing quantities of quartzite, jasper, chert, and chalcedony. Thermally altered stone is present in the form of fire-

cracked rock, the majority of which is sandstone and quartzite. No ceramics or diagnostic lithic artifacts were recovered.

Table 35. Prehistoric artifact assemblage from 7NC-F-92, exclusive of Feature 6 cultural material.

| Artifact Type | Chalced. | Chert | Jasper | Quartz | Quartzite | Greenstone | Sandstone | Total | % |
|-------------------------|----------|----------|-----------|-----------|-----------|------------|-----------|------------|-------|
| Biface | | | | | | | | 1 | 0.93 |
| Unidentified Point Base | | | | 1 | | | | 1 | |
| Core | | | | | | | | 4 | 3.74 |
| Freehand | | | | 1 | | | | 1 | |
| Bifacial | | | | 1 | | | | 1 | |
| Flake | | | | | | 1 | | 1 | |
| Tested Cobble | | | | 1 | | | | 1 | |
| Debitage | | | | | | | | 92 | 85.98 |
| Primary | | 2 | 6 | 11 | 3 | 19 | | 41 | |
| Secondary | 1 | | | 6 | | 4 | | 11 | |
| Thinning | | 1 | | 13 | 6 | 7 | | 27 | |
| Tertiary | 1 | | | 3 | | | | 4 | |
| Shatter | | | 1 | 1 | | | | 2 | |
| Flake Fragment | | | 1 | | 1 | 5 | | 7 | |
| FCR | | | 2 | | 2 | | 6 | 10 | 9.34 |
| Total | 2 | 3 | 10 | 38 | 12 | 36 | 6 | 107 | |
| Percent | 1.87 | 2.80 | 9.34 | 35.51 | 11.21 | 33.64 | 5.61 | | 100 |

It should be noted that approximately 62% (N=66) of these artifacts originated in the plow zone from the EUs surrounding or overlying Feature 1. As such, they are very likely to have originally been associated with that context prior to plow disturbance. The resulting sitewide, non-feature assemblage is therefore limited to 41 artifacts, which are distributed across the site area in a way that can best be described as a light, diffuse scatter.

Feature 1, located in the southern portion of the site boundary, is irregular and oblong in planview (see Figure 50). It has a maximum length diameter of 8-feet and a maximum width of 5-feet. In cross-section, the feature is a steep-sided pit that extends to a maximum depth of 3.7-feet below the level of detection at the top of subsoil. This feature was initially identified on the basis of a concentration of sedimentary “greenstone” cobbles at the base of the plow zone in EU #2. The feature was further identifiable on the basis of a distinct soil matrix that is slightly darker than surrounding subsoil and includes moderate amounts of charcoal flecking. This feature does not exhibit internal stratification and it was excavated in seven arbitrary levels of the standard 3.5-inch vertical interval.

Artifacts in direct association with Feature 1 include 414 objects, which are distributed across a moderate variety of artifact classes and raw material types (Table 36). The small tool assemblage is limited to a single not further identifiable “greenstone” biface and a unifacial chert spokeshave. Lithic cores are represented by a variety of core types, including freehand, bifacial, flake cores, and a tested cobble. With the exception of the large tested cobble, which is red jasper, all cores

are of the sedimentary “greenstone” variety. Debitage dominates the assemblage at 93% of all artifacts. Flake types representative of the entire lithic reduction sequence are present. However, there is a noticeable paucity of smaller, late-stage reduction flakes and shatter. Also noticeable is the very even representation of primary decortication, secondary reduction, bifacial thinning, and flake fragments. This is true for both quartz and “greenstone” raw materials. Fire-cracked rock comprises just less than 5% of the overall assemblage and is almost completely comprised of sandstone. Raw materials are heavily dominated by the as yet unidentified sedimentary “greenstone”, which represents approximately 85% of the assemblage (Plate 21). Quartz is the next most common material at 10%; chert, quartzite, and jasper are present in very small quantities. Sandstone is limited to the fire-cracked rock assemblage.

Table 36. Prehistoric artifact assemblage from 7NC-F-92, Feature 1.

| Artifact | Chert | Jasper | Quartz | Quartzite | Greenstone | Sandstone | Total | Percent |
|-----------------|-------|--------|--------|-----------|------------|-----------|------------|---------|
| Biface | | | | | | | 1 | 24.00 |
| Unidentifiable | | | | | 1 | | 1 | |
| Uniface | | | | | | | 1 | 24.00 |
| Spokeshave | 1 | | | | | | 1 | |
| Core | | | | | | | 9 | 2.17 |
| Freehand | | | | | 3 | | 3 | |
| Bifacial | | | | | 2 | | 2 | |
| Flake | | | | | 3 | | 3 | |
| Tested Cobble | | 1 | | | | | 1 | |
| Debitage | | | | | | | 385 | 92.99 |
| Primary | 1 | | 7 | | 78 | | 86 | |
| Secondary | | | 10 | | 78 | | 88 | |
| Thinning | | | 11 | 1 | 79 | | 91 | |
| Tertiary | 1 | | 3 | | 22 | | 26 | |
| Shatter | | | 2 | | 4 | | 6 | |
| Flake Fragment | | | 8 | | 80 | | 88 | |
| FCR | | | 1 | 1 | | 16 | 18 | 43.50 |
| Total | 3 | 1 | 42 | 2 | 350 | 16 | 414 | |
| Percent | 0.72 | 0.24 | 10.14 | 0.48 | 84.54 | 3.86 | | 100.00 |

The lithic material within Feature 1, referred to above as “greenstone” is green-gray in color and appears to be sedimentary, while visible with minor magnification are small white inclusions and iron staining. The exterior exhibits no discernable weathering as with examples of rhyolite, argillite or hornfels that are recovered from prehistoric archaeological contexts. The stone material also exhibits flat surfaces.

Expert opinion was sought from Dr. Kelvin Ramsey of the Delaware Geological Survey regarding potentials that the stone might be: 1) colored modern concrete recently disposed of; 2) serpentine from southern Chester County, PA; or, 3) a type of sedimentary “greywacke”.

Dr. Ramsey inspected the sample under a microscope and conducted a surface test to determine the presence/absence of calcium carbonate (utilizing a solution of hydrochloric acid as a reagent); no visible reaction was observed, indicating that there was no calcium carbonate present. Therefore, Dr. Ramsey confidently stated that the material was not concrete. He also stated that it was not serpentine. As to “greywacke”, Dr. Ramsey pointed out that we were correct in guessing

that the stone was sedimentary, which was also evident from the fact that many of the retrieved specimens appear to have relatively smooth ventral and dorsal surfaces. However, although the term “greywacke” is technically correct, he stated that this dated German geological term is inaccurate because it is considered not to be unspecific.

Dr. Ramsey was confident that this sedimentary stone does not naturally occur in DE, but comes from the Ridge and Valley Province of Pennsylvania and Maryland. The relatively smooth ventral and dorsal surface speak to the sedimentary nature of the stone and its natural planes of cleavage. The fact that the cobbles recovered at 7NC-F-92 (KSK #8) are not rounded further bolstered Dr. Ramsey’s opinion that this type of stone was not deposited in Delaware as an ‘erratic’ by means of some glacially-related fluvial action.

The vertical distribution of artifacts within the feature indicates a general decline in artifact count per excavation level from the top to the bottom of the feature. In an effort toward assessing the taphonomy and use history of the feature, some preliminary refitting of artifacts was attempted. These efforts resulted in the refitting of 24 flakes to five different “greenstone” cores and a lesser quantity of quartz flakes refitted to cores of the same material. For practical reasons, the most common refits occur with flakes representative of early stages in the reduction sequence. The most productive information gained from this exercise is the recognition that artifacts recovered from distinct vertical proveniences were refit to the same core. In fact, refits were accomplished between artifacts that originated in the both the lowest and highest excavation levels. This is interpreted as evidence that the formation and filling of this pit occurred over the span of a relatively short period of time and perhaps occurred as a single, punctuated event.

5.2.9 7NC-F-94 (KSK #14 West)

7NC-F-94 (KSK 14 West) is the location of a historical architectural and domestic debris concentration. Situated adjacent to a drainage associated with Great Bohemia Creek (Plate 22), this locus is also in the approximate vicinity of two structures documented on historical atlases of New Castle County (Hopkins 1881, Baist 1893). At the time of composition of the 1931 USGS Quad map, only one structure is depicted in this location (see Figure 27); this is the last cartographic evidence of a structure in this location as depicted on any historical maps consulted by KSK.

Of particular interest during the Phase I investigation was the occurrence of architectural debris in large quantities at the approximate mid-slope of the drainage, in close association with a large unmodified fieldstone. The densest presence of architectural material, including window glass, brick fragments, and cut nails, was limited to an approximately 75-foot long area extending north/south at the edge of the limits of construction. Predictive models for the location of tenant houses or outbuildings as reported in DeCunzo and Catts (1990) and Siders and Andrzejewski (1997) suggest the likelihood of such structures being situated in less than ideal surroundings, such as adjacent to poorly-drained soil and on less than level slopes. Five EU’s were proposed as the Phase II level of effort at this site in an attempt to define the nature of the historical deposit, as well as locate any possible remnants of the historical structures.

The initial EU placed in 7NC-F-94 was situated immediately adjacent to the Phase I shovel test that yielded the highest quantity of artifacts; this STP was also in greatest proximity to the fieldstone noted in the above paragraph (Figure 51). Two additional EU’s were distributed to the north within the dense artifact presence as defined during the Phase I investigation (Figure 52). EU #1 exhibited an average (0.9 feet) plow zone atop a 10YR6/3 pale brown loamy sand B-Horizon. Disturbances were observed in the east and south walls of the unit; on the eastern edge

of the unit is a post hole with a distinct post mold, while a large tree disturbance was documented against and within the southern extent of the unit. Despite these intrusions, the remainder of the unit yielded in excess of 800 historical artifacts, consisting of a variety of domestic and architectural debris datable to the late nineteenth through early twentieth centuries.

Two subsequent units distributed to the north exhibited similar soil profiles, but contained a more substantial artifact presence; the excavation of EU #2 resulted in the collection of over 2,000 historical artifacts, while EU #3 contained in excess of 1,000. Although the artifact assemblage of these northern units is of higher quantity, the categories and percentages of frequency within those artifact classes are similar to those of EU #1; in addition both of these units contained square post holes with definable post molds.

Of particular note is the presence of prehistoric material in EU #2. Encountered in both the disturbed plow zone and the intact B-Horizon, the prehistoric artifact assemblage from this test location consists of several pieces of jasper and quartz secondary debitage as well as a quartz biface. Tentative typological identification of this tool as a possible Rossville or Bear Island projectile point potentially defines this prehistoric component as belonging to the Woodland I Period; however the biface was recovered from the plow zone and therefore is not in its original context or in direct association with the B-Horizon debitage.

The extremely high quantities of historical cultural material as well as the presence of a non-plow disturbed prehistoric component in EU #2 lead to the placement of a fourth EU to the immediate south of this parent unit. Within the first level of the removal of the plow zone, excavators identified a mortared brick wall extending in an east/west direction across the unit. The uppermost course of brick had been impacted, presumably by prior agricultural activities in this location, and several bricks had been displaced across the unit. When fully exposed within the bounds of the EU, the wall stretched across the length of the five-foot square EU and consists of three courses of mortared machine-made bricks. The base course is laid as a header row, with attention to the placement of glazed bricks at semi-regular intervals to create a decorative effect (Plate 23). A builder's trench was also identified to the immediate south of the wall and contained few artifacts, including glass shards and machine cut nails; the remainder of the unit, including three additional features (a post and two amorphous stains), yielded approximately 1,700 historical artifacts. Included among the domestic materials collected from EU #4 are metal cuff links, a pocket knife fragment, a hand-carved wood gaming die (Plate 24), an array of ceramic material (Plate 25), and several .22-caliber long shell casings.

Investigation of the test area surrounding EU #4 using a tile probe (Plate 26) resulted in the identification of what potentially may be the footprint of one of the historically documented structures in this vicinity, with a rectangular outline measuring approximately 26 by 16-feet (see Figure 52). The final EU proposed for the Phase II investigation of 7NC-F-94 was placed to the southeast of EU #4 in an effort to capture the southern wall of the structure, based upon the results of the tile probe exploration. Removal of the plow zone in this unit exposed an identically constructed brick wall, with an identifiable builder's trench along the southern edge. Although the artifact count from EU #5 is lower than from other portions of the site, this unit produced in excess of 700 historical artifacts; counted within this assemblage is a metal hair straightening comb with a "Kentucky Maid" makers mark (patent date 1894) (Plate 27). This comb is still in production, and is advertised as a product commonly used by the African-American community. An additional artifact of potential African-American origin was encountered in EU# 1, and consists of an oyster shell that has been twice drilled adjacent to an interior edge (Plate 28); this artifact may alternatively been created during a prehistoric period, although the edges of the modifying holes are very crisp and do not exhibit signs of wear that might be indicative of age.

Recovered from EU's across the site are metal toy fragments, marbles (Plate 29), part of a bisque doll, and a very small suspender clasp, all of which suggest the presence of children at 7NC-F-94.

The complete prehistoric artifact assemblage collected from 7NC-F-94 consists of a relatively narrow array of lithic materials and artifact categories, although is generally comparable to the results of testing in other segments of the Choptank Road project area. Quartz and jasper are well represented throughout the overall project area among the collected prehistoric material; a notable difference between the tested sites however is the predominance of lithic material on 7NC-F-94 encountered in the B-Horizon. Excavations in sub-plow soils at this site resulted in the collection of 11 prehistoric artifacts (57.89% of the total 7NC-F-94 prehistoric assemblage), which although much lower in total than those encountered at 7NC-F-92, 7NC-F-99, or 7NC-F-100, represents a much higher percentage of the plow zone/B-Horizon-combined assemblage.

Table 37. Prehistoric artifacts from 7NC-F-94 (KSK 14).

| Artifact Type | Quartz | Jasper | Sandstone | Total | Percent |
|--------------------------|---------------|---------------|------------------|--------------|----------------|
| Projectile Point | | | | | |
| Rossville/Bear Island | 1 | | | 1 | 5.26 |
| Debitage | | | | | |
| Decortication flake | 5 | 1 | | 6 | 31.58 |
| Thinning flake | 3 | | | 3 | 15.79 |
| Flake fragment | 2 | | | 2 | 10.53 |
| Thermally altered | | | | | |
| Fire cracked rock | 1 | 4 | | 5 | 26.31 |
| Thermally altered | | | 2 | 2 | 10.53 |
| Total | 12 | 5 | 2 | 19 | |
| Percent | 63.16 | 26.31 | 10.53 | | 100.00 |

Table 38. Historical artifact assemblage from 7NC-F-94 (KSK 14).

| Artifact Type | Total | % | Artifact Type | Total | % | Artifact Type | Total | % |
|------------------------|-------------|--------------|----------------------------|------------|-------------|--------------------|-------------|------------|
| Ceramics | 609 | 10.29 | Architectural cont. | | | Misc. cont. | | |
| Creamware | 5 | 0.82 | Wire, electrical | 1 | | Metal, unident. | 329 | |
| Plain | 5 | | Lighting fixture | 4 | | Tack | 14 | |
| Pearlware | 15 | 2.46 | Glass, window | 1725 | | Spike | 3 | |
| Plain | 10 | | Door knob | 1 | | Spring | 2 | |
| Rim motif | 2 | | Hinge | 1 | | Barbed wire | 5 | |
| Embossed body | 2 | | Hardware, general | 5 | | Staple | 6 | |
| Overglaze handpainted | 1 | | Bolt/Nut/Washer | 13 | | Rivet | 3 | |
| Red-bodied | 16 | 2.63 | Screw | 5 | | Rubber/Synthetic | 7 | |
| Unglazed | 9 | | Fastener | 15 | | Chain | 1 | |
| Glazed | 7 | | | | | Can fragment | 8 | |
| Porcelain | 17 | 2.79 | Faunal | 168 | 2.83 | Mason jar lid | 5 | |
| Plain | 7 | | Bird | 14 | | Collar, hardware | 1 | |
| Underglaze | 4 | | Mammal, misc. | 7 | | Miscellaneous | 5 | |
| Other | 6 | | Mammal, unident. | 120 | | | | |
| Stoneware | 17 | 2.79 | Amphibian | 3 | | Total | 5917 | 100 |
| Whiteware | 507 | 83.25 | Shell, oyster/clam | 19 | | | | |
| Plain | 446 | | Unidentified | 5 | | | | |
| Shell edge | 2 | | | | | | | |
| Transfer print | 23 | | Miscellaneous | 509 | 8.60 | | | |
| Embossed | 18 | | Buckle | 4 | | | | |
| Overglaze | 13 | | Coal | 6 | | | | |
| Underglaze | 5 | | Harness | 1 | | | | |
| Yellowware | 32 | 5.25 | Horseshoe | 2 | | | | |
| Plain | 7 | | Button | 3 | | | | |
| Rockingham glaze | 25 | | Button, brass | 5 | | | | |
| | | | Button, glass | 6 | | | | |
| Glass | 1748 | 29.54 | Button, iron | 1 | | | | |
| Bottle | 1140 | 65.22 | Bisque doll | 1 | | | | |
| Soda | 17 | | Marble | 3 | | | | |
| Mineral water | 8 | | Collar stud | 1 | | | | |
| Food container | 39 | | Comb | 5 | | | | |
| Medical/Pharmaceutical | 26 | | Cuff link | 3 | | | | |
| Wine | 3 | | Button, plastic | 4 | | | | |
| General | 1047 | | Button, rubber | 1 | | | | |
| Tableware | 22 | | Eyelet | 2 | | | | |
| Inkwell | 20 | | Suspender clasp | 2 | | | | |
| Jar | 7 | | Caster | 1 | | | | |
| Lamp | 134 | | Pencil | 3 | | | | |
| Mirror | 2 | | Slate | 7 | | | | |
| Vase | 16 | | Pipe, smoking | 2 | | | | |
| Unidentified | 407 | | Jewelry | 2 | | | | |
| | | | Knife | 2 | | | | |
| Architectural | 2883 | 48.72 | Whetstone | 1 | | | | |
| Brick | 67 | | Utensil | 2 | | | | |
| Brick, glazed | 9 | | Dice | 1 | | | | |
| Mortar/Plaster | 32 | | Bullet/shotgun | 22 | | | | |
| Nail | 1005 | 34.86 | Bicycle tire valve | 1 | | | | |
| Roofing | 1 | | Machine part | 7 | | | | |
| Machine cut/wrought | 150 | | Ceramic insulator | 1 | | | | |
| Wire | 177 | | Metal, misc. | 18 | | | | |
| Unidentified | 677 | | | | | | | |

5.2.10 7NC-F-102 (KSK #16)

The final test area subjected to Phase II investigation, KSK 16 contained historical architectural and domestic debris throughout the test area. Historical atlases (Beers 1868, Hopkins 1881, Baist 1893) document the presence of a single structure at this approximate location. The earliest atlas on which this structure appears, the 1868 Beers map, attributes this outbuilding to T.R. Hanson, owner of a structure at the end of the drive that originates adjacent to this test area. A total of three EU's were recommended for KSK 16 in an effort to further define the historical presence and potentially identify a structural element associated with the historical outbuilding (Figure 53).

Soils encountered in these EU's varied significantly, with indications of repetitive water presence increasing to the south of the test area. The southernmost EU (#1) contains a 10YR6/2 light brownish gray silt loam subsoil and produced a very limited artifact assemblage, consisting of historical domestic and architectural debris. The central and northernmost EU's produced higher quantities of historical material, with the array having manufacture dates ranging from the late eighteenth to early twentieth centuries.

Features encountered during the Phase II investigation of 7NC-F-102 were also limited to the two northern EU's, and consisted of a post hole at the northern extent of EU #2, and a shallow linear trench in EU #3. This trench, Feature 9, was visible at the interface of the plow zone with the B-Horizon and extended north/south throughout the western half of the unit. Approximately one-foot in width, the feature contained several late eighteenth century-late nineteenth century artifacts of both domestic and architectural natures, including window and bottle glass shards, pearlware and redware sherds, and brick fragments. In an effort to identify the horizontal extent of this apparent trench feature, the plow zone to the north of the unit was removed in a two-foot wide strip approximately thirteen-feet long (Figure 54). The trench extends northward for this distance, at which point the feature appears to turn to the west. None of the plow zone in this test strip was screened, and all soil was backfilled subsequent to the documentation of the feature.

Table 39. Historical artifact assemblage from 7NC-F-91 (KSK 16).

| Artifact Total | Quantity | Total | % |
|------------------------|-----------------|--------------|---------------|
| Ceramics | | 93 | 21.43 |
| Creamware | | 12 | |
| Plain | 8 | | |
| Miscellaneous | 4 | | |
| Pearlware | | 10 | |
| Plain | 4 | | |
| Shell edge | 1 | | |
| Underglaze | 3 | | |
| Dipped | 2 | | |
| Red-bodied | | 20 | |
| Unglazed | 3 | | |
| Glazed | 17 | | |
| Porcelain | | 5 | |
| Plain | 5 | | |
| Whiteware | | 46 | |
| Plain | 37 | | |
| Shell edge | 2 | | |
| Transfer print | 3 | | |
| Colored glaze | 4 | | |
| Glass | | 91 | 20.97 |
| Bottle | | | |
| Mineral water | 5 | | |
| Medical/Pharmaceutical | 2 | | |
| Wine | 8 | | |
| General | 58 | | |
| Tableware | 3 | | |
| Lamp | 2 | | |
| Unidentified | 13 | | |
| Architectural | | 204 | 47.00 |
| Brick | 82 | | |
| Brick, glazed | 8 | | |
| Mortar/Plaster | 1 | | |
| Nail | | 91 | |
| Roofing | 1 | | |
| Machine cut/wrought | 31 | | |
| Unidentified | 62 | | |
| Lighting fixture | 1 | | |
| Glass, window | 109 | | |
| Faunal | | 16 | 3.69 |
| Mammal, miscellaneous | 13 | | |
| Shell, oyster/clam | 2 | | |
| Coral | 1 | | |
| Miscellaneous | | 30 | 6.91 |
| Buckle | 5 | | |
| Button, glass | 1 | | |
| Slate | 1 | | |
| Knife | 3 | | |
| Metal, unidentified | 2 | | |
| Barbed wire | 16 | | |
| Staple | 2 | | |
| Total | 434 | | 100.00 |