

**PHASE I ARCHAEOLOGICAL SURVEY
EBENEZER CHURCH ROAD/POLLY DRUMMOND HILL ROAD
MILL CREEK HUNDRED, NEW CASTLE COUNTY, DELAWARE**

**MANAGEMENT SUMMARY
October 31, 1995**

The following document represents a brief interim statement of findings of a Phase I level archaeological survey carried out by Hunter Research, Inc. for the Delaware Department of Transportation (DelDOT) in connection with planned improvements to Ebenezer Church Road/Polly Drummond Hill Road between State Route 72 (Paper Mill Road) and New Linden Road in Mill Creek Hundred, New Castle County, Delaware (Figures 1 and 2). The planned improvements involve widening of the existing highway and the construction of related stormwater management detention systems. These improvements will take place along a 7,720 foot-long segment of the highway, while the connecting stormwater management detention projects will cover an area totaling approximately 750,000 square feet.

Archaeological investigations have been required in this instance under Section 106 of the National Historic Preservation Act of 1966 (as amended), the regulations of the Advisory Council on Historic Preservation (36 CFR 800) and Corps of Engineers regulations pertaining to Section 106 compliance. All investigative activities were performed in accordance with 48 FR44716: Archaeology and Historic Preservation: Secretary of the Interior's Standards for Archeology and Historic Preservation (1983) and the State of Delaware Guidelines for Architectural and Archaeological Survey in Delaware (October 1993).

The Phase I archaeological survey was designed primarily to test for the presence or absence of potentially significant archaeological resources within the likely project impact zone. Investigations so far have focussed chiefly on background and historical research, field inspection and subsurface investigation. Subsurface testing was confined within the limits of the existing and proposed rights-of-way and the footprints of the proposed stormwater drainage systems. Substantial portions of the highway margins have been heavily modified as a result of residential development, roadside landscaping and utilities installation. Areas that were obviously disturbed were minimally tested.

The study corridor roughly follows the long axis of the interfluvium separating Muddy Run and Pike Creek in Delaware's Piedmont Uplands physiographic zone. These two streams both flow south and during the historic period powered various types of mills. The study corridor is more elevated land, however, and is bordered mostly by 19th- and 20th-century residential properties, interspersed with older farm fields and commercial and community premises and a few remnant farm fields. At the time of the field survey these fields were planted in feed corn. The soils in the area tend to be shallow and poorly suited for crops. There are outcrops of exposed bedrock between Stations 94+00 and 95+00.

1. Potential for Archaeological Resources

A search of the Cultural Resource Survey files in the Delaware State Historic Preservation Office revealed that one prehistoric and 12 historic resources have been documented in the project vicinity over the past 20 years (Figure 3; Table 1). Most of the historic resources are older houses located along Ebenezer Church Road/Polly Drummond Hill Road between State Route 72 (Paper Mill Road) and New Linden Road. As part of a companion historic architectural study performed for this same DelDOT project by Kise Franks & Straw in July, 1991, nine of the 12 previously documented historic resources in the project vicinity were evaluated in terms of their eligibility for inclusion in the National Register of Historic Places. Four of these nine resources, all historic buildings, were considered potentially eligible for the National Register.

With regard to the potential for prehistoric archaeological resources in the project vicinity, this section of New Castle County lies within the Piedmont Uplands. According to the state management plan for prehistoric archaeological resource, this area as a whole is considered to hold a medium to high potential for yielding significant evidence of prehistoric activity (Custer 1983:166). The highway corridor itself holds only a low potential for prehistoric archaeological resources, chiefly because of the extensive modification of the terrain along the highway margins, and because of recent and historic period land use. It is only in the areas where stormwater drainage detention ponds are proposed that a medium to high potential for prehistoric archaeological data is anticipated, since these areas -- located at a greater distance from the highway -- have not been subject to extensive development and have only been disturbed by initial land clearing and agricultural use. The project area lies close to Paleo-Indian resources belonging to the Delaware chalcedony quarry complex, but is considered unlikely to yield archaeological data belonging to this time period. Similarly, the area is located in the Piedmont Archaic and Woodland period study units, but holds only a moderate chance of producing evidence of procurement or camp sites. The closest recorded prehistoric resource (CRS# N-6185) [7NC-D-90] is located just southwest of the southern end of the project area along Muddy Run. This site was identified as an Archaic period camp site based on diagnostic projectile points which were gathered from the ground surface.

**TABLE 1. EBENEZER CHURCH ROAD/POLLY DRUMMOND HILL ROAD
PREVIOUSLY DOCUMENTED PREHISTORIC AND HISTORIC RESOURCES IN THE PROJECT VICINITY**

CRS#	SITE NAME	AGE/PERIOD	SOURCES	NATIONAL REGISTER ELIGIBILITY
N-4023	"Stoic Farm House"	Historic	DSHPO Site Files	further evaluation required
N-4040	Ebenezer Methodist Episcopal Church	erected 1859	KFS, DSHPO Site Files Beers map of 1868, Baist map of 1893	not architecturally eligible *
N-10185	Vansant Family Farmstead	erected 1924	KFS, DSHPO Site Files	not architecturally eligible *
N-10095	Joseph Worrall Farmhouse	erected 1850s	KFS, DSHPO Site Files Beers map of 1868, Baist map of 1893	apparently eligible on architectural grounds *
N-10088	Morrison Farmhouse	erected 1860s	KFS, DSHPO Site Files Beers map of 1868, Baist map of 1893	not architecturally eligible *
N-10216	Samuel Worrall Farmstead	erected early 19th century	KFS, DSHPO Site Files Rea & Price map of 1849 Beers map of 1868, Baist map of 1893	apparently eligible on architectural grounds *
N-10094	LaFountain Residence	erected 1902	KFS, DSHPO Site Files	apparently eligible on architectural grounds *
N-10089	Louis Whiteman Residence	erected late 19th century	KFS, DSHPO Site Files	not architecturally eligible *
N-10090	Unnamed 1 1/2 Story House	erected 1920s	DSHPO Site Files	-
N-4027	J.B. Morrison House	erected c. 1868	DSHPO Site Files Beers map of 1868, Baist map of 1893	-
N 259	Fairview School (Schoolhouse No. 90)	erected 1867	KFS, DSHPO Site Files Beers map of 1868, Baist map of 1893	not architecturally eligible *
N-10093	Davis Farmstead	erected 1936	KFS, DSHPO Site Files	apparently eligible on architectural grounds *
N-6185	Unnamed Camp Site	Archaic	DSHPO Site Files	further evaluation required

* Resources termed "appears eligible for the National Register of Historic Places" by Kise Franks & Straw (KFS).

The study area is considered somewhat more likely to yield evidence of a historical archaeological nature. A review of historic maps of the area shows a well established rural agricultural landscape in place by the mid-19th century comprising a dispersed settlement pattern of isolated farmsteads strung out along a latticework of country roads (Figures 4-6). A few small hamlets, such as Corner Ketch and Pleasant Hill, had taken root at road intersections and around river crossings. The particular section of Ebenezer Church Road/Polly Drummond Road under study was bordered by a half dozen or so structures, most of which were farmhouses. In these instances, numerous other structures are likely to have been in existence within each farm complex (barns, sheds and various other domestic and agricultural outbuildings), although maps of this period generally do not show each structure individually. Of particular note on the mid- to late 19th-century historic maps are a schoolhouse and the Methodist Episcopal Church (which is the source of the road name) and a schoolhouse (termed Schoolhouse No. 90 in the Baist Atlas of 1893). From an archaeological standpoint, buried cultural deposits and structural remains might be anticipated in association with any of the farm complexes, the church or the school, all of which are known to have been in existence in the late 19th century. There is also some potential for historical archaeological resources on sites taken up and abandoned prior to the earliest detailed maps of the area, although identification of such sites, if indeed they exist, would require detailed archival study to reconstruct land ownership and land use in the early historic period.

2. Fieldwork

Phase I archaeological field survey was carried out along the study corridor and in areas of the proposed stormwater detention basins between July 10 and July 28, 1995. The following tasks were conducted: 1). pedestrian survey to identify surface evidence of buried archaeological resources, assess ground disturbance and determine locations for subsurface testing; 2). manual subsurface testing using shovel tests and excavation units; and 3). recording of resources and field investigations through note-taking, mapping and photography. This work was performed in hot, humid weather by a team of seven archaeologists (William B. Liebeknecht, Principal Investigator; Frank Dunsmore and Sue Ferenbach, Assistant Archaeologists; and Joelle Browning, Jim Skocik, Cathy Battersby, Chris Cerny and Eric Kidd, Field Assistants).

In all, 251 shovel test pits were excavated. The locations of the subsurface tests are shown in Figures 7a-p, with selected soil profiles illustrated in Figure 8. Stratigraphic data from these excavations are summarized in Appendix A and a catalog of artifacts is presented in Appendix B.

Shovel testing was initially conducted systematically along both sides of the highway except in areas where development had clearly disturbed the original soils through landscaping, road cutting or utilities installation. A 50-foot testing interval was used along the existing roadway with a tighter 25-foot interval employed within areas designated for stormwater drainage systems. This testing showed that there was very little intact stratigraphy within the project

limits. Soil disturbance from road cutting and landscaping is both extensive and severe. Most shovel test pits alongside the road produced truncated soil profiles. Shovel tests located outside the existing right-of-way, within the agricultural fields, showed a 16 to 20-centimeter-deep clay loam plowzone overlying a silty clay loam subsoil (which was observed to depths ranging between 50 and 60 centimeters).

Shovel tests excavated on both sides of the highway between Stations 117+25 and 118+25 produced possible prehistoric artifacts within the upper plowzone layer (Figure 7h). These artifacts comprise ten probable flakes -- two of jasper, six of quartz, one of quartzite and one of ironstone. No artifacts were recovered from the subsoil in this area. It should be noted, however, that the identification of the quartz and quartzite fragments as debitage is questionable, since years of plowing and cultivation in the area has produced an abundance of broken pieces of quartz and quartzite which give the appearance of having been fashioned through Native American stone working. The very small number of certain flakes and their distribution entirely within the plowzone on both sides of the road implies that, if a prehistoric site existed in this area, it has been largely obliterated by the construction of Ebenezer Church Road and subsequent roadside land alteration.

No other sure evidence of prehistoric occupation was noted along the study corridor, although numerous other pieces of the locally abundant quartz and quartzite fragments were saved and cataloged. There is a possibility -- very remote in the view of this consultant -- that these materials may relate to prehistoric resources whose foci lie outside the study area limits. If such resources are located in the future then these possible artifacts should be probably re-examined.

As noted earlier, 12 previously documented historic resources are located near or along the section of Ebenezer Church Road/Polly Drummond Road being studied during this survey. Testing within the proposed limits of the road widening in some cases resulted in the recovery of artifacts from the front yards of these properties. However, artifacts found in these locations appear to be mostly peripheral finds around the edges of larger yard deposits (e.g., sheet scatters/middens) that are centered some distance from the highway, closer to the nuclei of the historic resources in question. In some instances, historic vegetation (trees and hedges) lie close to or just within the proposed right-of-way on these older properties.

More substantial historical archaeological deposits of potential interest were identified at only two locations within the study corridor. The first location is within the yard of the Fairview School (also referred to as Schoolhouse No. 90) at the intersection of Ebenezer Church and Smith Mill Roads at Station 93+75 (Figure 7e). This school was identified in the companion historic architectural survey by Kise Franks & Straw, but was judged ineligible for inclusion in the National Register of Historic Places on architectural grounds because of alterations made in connection with the building's conversion into a residence following the closure of the school in the 1920s. A careful inspection of the property revealed a concrete-capped, stone-lined shaft

in the front yard within the right-of-way limits. This shaft is noted on the project maps and is scheduled to be filled. Mrs. Harold Little, the property owner, reported a possible second shaft located under a chicken coop located towards the rear (north) of the property. This structure is slated for removal along with a line of older trees, shrubs and ground cover that borders Ebenezer Church Road. Shovel testing in the vicinity of the schoolhouse produced several artifacts, including brick fragments, an ironstone granite china sherd, window pane fragments and a shell button.

The second location where historical archaeological materials were recovered was between Stations 81+90 and 84+10, along the west side of Ebenezer Church Road (Figures 7c and d). This area was noted during the initial pedestrian survey as having periwinkle ground cover and overgrown hedges. Behind the historic vegetation is a cultivated field, planted in corn at the time of the survey. Immediately south of the historic vegetation is an area currently occupied by a well maintained grass lawn. The Rea & Price map of New Castle County in 1849 shows a structure owned by H. Rumer (?or Kumer) in approximately this location, most likely a farmhouse associated with a small farmstead. Neither the Beers Atlas of New Castle County in 1868 nor the Baist Atlas of New Castle County in 1893 show a building here, implying that it may have been destroyed by around 1860. Artifacts recovered from shovel tests in this area range in date from 1825 and 1860 and include sherds of redware, pearlware and whiteware. Brick fragments were also recovered from these tests indicating the possible former presence of a building in this area.

3. Preliminary Evaluation and Recommendations

Very little evidence of prehistoric occupation was observed within the study corridor. A minor scatter of lithic debitage was noted in the plowzone in shovel tests excavated on both sides of the highway between Stations 117+25 and 118+25, but many of the quartz and quartzite specimens may not be authentic, since they could have been formed as a result of plowing. The only certain artifacts were two jasper flakes. The site -- such as it is -- is small, dispersed and appears to have been mostly removed by the construction of the highway. It is not regarded as a National Register eligible archaeological resource, and no further prehistoric archaeological investigation is proposed in connection with the project as currently planned.

The Phase I archaeological survey did, however, find evidence of two potentially significant historical archaeological resources within the project limits. In this instance, these resources require evaluation with reference to the following research domains identified in the Management Plan for Delaware's Historical Archaeological Resources: Domestic Economy; Landscape; and Social Group Identity, Behavior & Interaction. Relevant historic themes within these domains are: Agriculture; Transportation; Settlement Patterns and Demographic Change; Education; and Religion (De Cunzo and Catts 1990:121-122).

One of the two historical archaeological resources of interest consists of buried deposits and cultural materials found in association with the Fairview School (Schoolhouse No. 90), which is located in the northwest quadrant of the Ebenezer Church Road/Smith Mill Road intersection. The schoolhouse, built in 1867, still stands on this property, but was heavily altered in the 1920s when it was converted into a residence. This building is not considered eligible for inclusion in the National Register of Historic Places on architectural grounds (Kise Franks & Straw 1991). With regard to archaeological remains, the property contains a concrete-capped, stone-lined shaft feature (presumably a well, cistern or privy) which is located in front of the house within the proposed right-of-way. This feature is slated to be filled during construction. Historic vegetation (trees and shrubs) and a possible second shaft feature also fall within the currently proposed construction limits, while sheet trash deposits have yielded cultural materials of late 19th and early 20th-century date which probably reflect the site usage for educational purposes.

In terms of archaeological integrity, this property has remained relatively intact and may yield useful comparative information for the small number of other schoolhouse sites excavated within the region (e.g., the Harmony Schoolhouse Site [N-202, 7NC-A-16] and the Welsh Tract Schoolhouse [N-5274]). Public property type sites represent only 2% of the total historical archaeological sites recorded in the State of Delaware and 4% of those in New Castle County as of 1990 (De Cunzo and Catts 1990:111). If the proposed highway improvements cannot be carried out in such a manner so as to minimize effects on this site and preserve archaeological deposits and historic vegetation, it is recommended that a Phase II level archaeological investigation be performed to fully evaluate and delimit this resource. Phase II level study should include more detailed historical research (into school and land records) and a program of field investigation that involves additional shovel testing, probing and the excavation of units.

The second historical archaeological resource of interest is the site of the house shown on a map of 1849 as being owned by H. Rumer. Historic map data and archaeological evidence combine to suggest that this site was occupied from around 1825 until 1860. The only visible above-ground sign of this site is the historic vegetation that borders the road. There are no above-ground remains of the house itself or its outbuildings. The actual site of the house may lie back from the road outside the proposed construction limits, but domestic artifacts and brick fragments have been recovered from within the limits of the proposed right-of-way. At this Phase I level of investigation, the presence of an early to mid-19th century archaeological resource in the immediate project vicinity has been documented, but further work would be required to establish whether a significant resource extends into the proposed right-of-way limits. If the proposed highway improvements cannot be carried out in such a manner so as to minimize effects on this site and preserve archaeological deposits and historic vegetation, it is recommended that a Phase II level archaeological investigation be performed to fully evaluate and delimit this resource. Phase II level study should include more detailed historical research (into land records, and tax and census data) and a program of field investigation that involves additional shovel testing, probing and the excavation of units.

Elsewhere along the study corridor, no significant buried deposits have been found that can be associated with the various historic properties identified in the companion historic architectural study (Kise Franks & Straw 1991) and on historic maps. In some instances, historic vegetation still survives in the front yards of these properties, and in those instances where potentially eligible buildings have been identified, it is recommended that efforts be made to avoid removal of older trees and shrubs that contribute to the setting of these buildings. No further historical archaeological investigations are recommended, however, except in the case of the Fairview School and Rumer farmstead properties.

4. Bibliographic References

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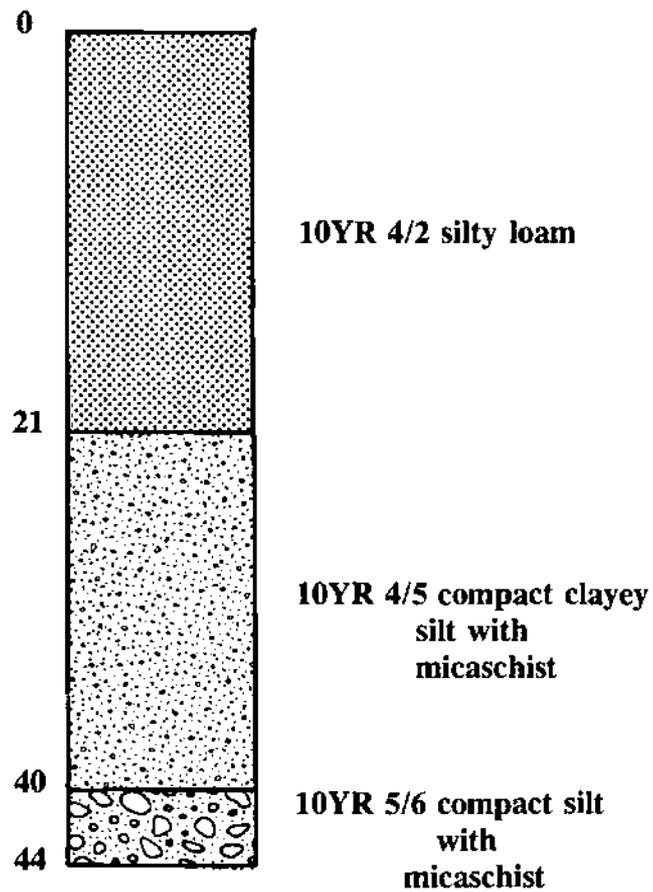
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Shovel Test #221



Shovel Test #250

