

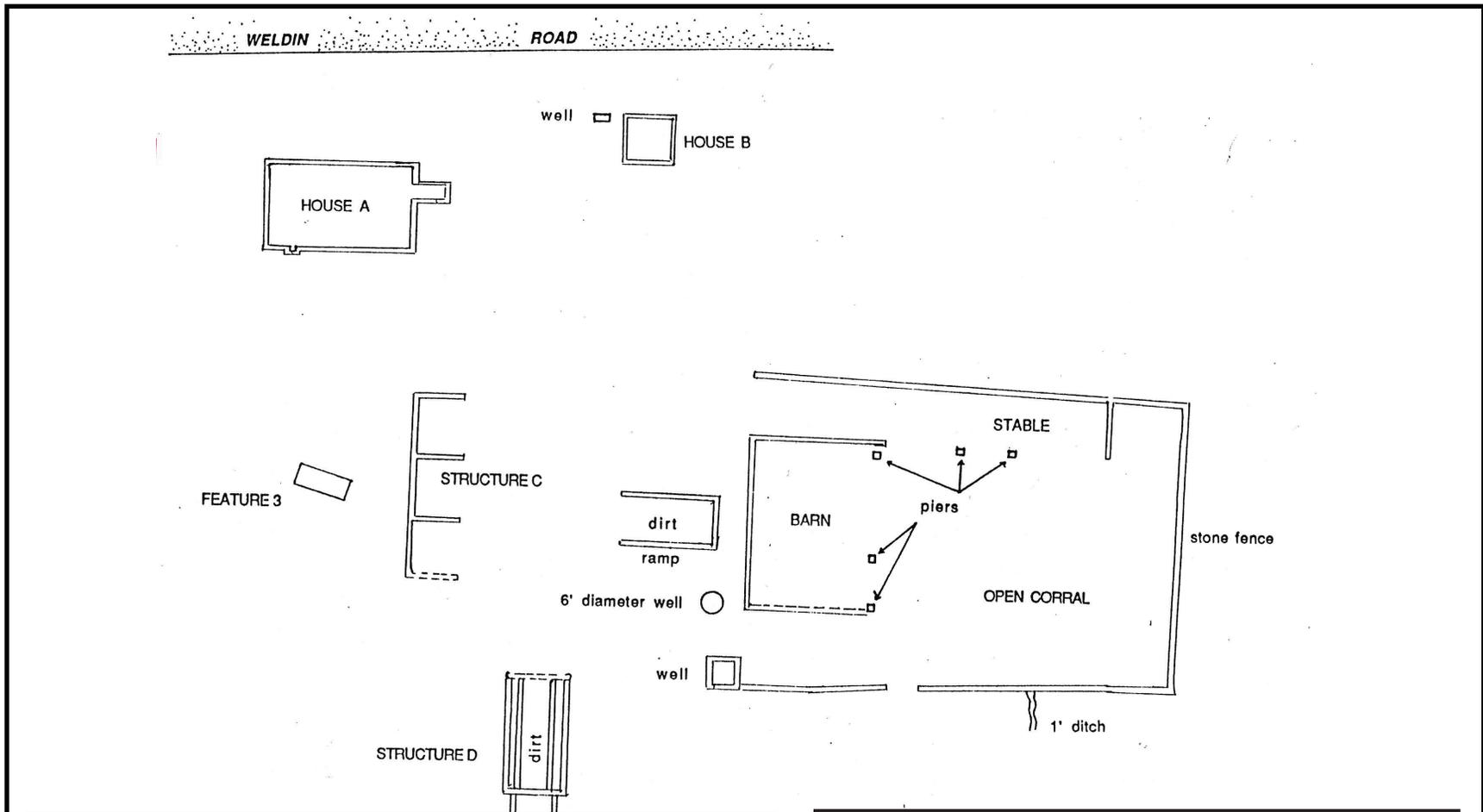
II. Summary of Phase I Archaeological Identification and Phase II Archaeological Evaluation Investigations at 7NC-B-11

A. Phase I Archaeological Identification Survey

The Weldin Plantation Site lies to the south of Weldin Road just east of its intersection with SR 241. It was discovered during the Phase I survey undertaken by Thunderbird Archaeological Associates for the Proposed Dualization of Route 141 (Centre Road), from Route 100 (Montchanin Road) to U.S. Route 202 (Concord Pike) project. Thunderbird's relatively extensive archival investigations indicated that the site was likely established during the first quarter of the eighteenth century and was utilized as a farm into the middle of the twentieth century (Taylor et al. 1989: 261).

Thunderbird's field studies included the arbitrary placement and excavation of 24 STPs, 31 3x3 foot TUs, and two linear trenches (*Figure 2*). Their investigations were successful in locating the stone ruins of numerous structures and features associated with the farmstead. These included the farmhouse (Structure A) which was situated about 20 feet to the south of Weldin Road; a mostly extant structure located about 45 feet to the west of the house which was interpreted to be a detached dependency to the main residence (Structure B); a possible equipment shed (Structure C) located about 40 feet to the south of the house; a concrete pad associated with a structure that was located just west of the equipment shed (Feature 3); a stone structure of unknown function (Structure D); a barn and barn ramp; a barnyard that was enclosed by high stone fence; and three wells (*Figure 3*). A total of 5690 mostly nineteenth century artifacts were recovered during the Phase I survey. The 1797 historic ceramic sherds generated a mean date of 1842 (Taylor et al 1989: 260). Thunderbird recommended Phase II investigations based on the presence of intact contexts and features that would provide information regarding tenant occupied farms from the late eighteenth through mid nineteenth centuries in contrast to the owner occupied period from in the late nineteenth century (Taylor et al 1989: 261).

Phase I identification and Phase II evaluation surveys were conducted by McCormick Taylor, Inc. from October 2000 to July 2001 for the Blue Ball Properties Area Transportation Improvement Project. The Phase I testing, which included the excavation 496 STPs, encompassed the area surrounding the previously identified Weldin Site. No previously undiscovered archaeological sites were identified during the Phase I Survey. However, three previously identified archaeological sites were subjected to Phase II Archaeological Evaluation Testing. These included the Weldin Plantation Site (7NC-B-11), the Augustine Cutoff Site (7NC-B-49), and the Ronald McDonald House Site (7NC-B-54). The Augustine Cutoff Site (7NC-B-49) was recommended not eligible for listing in the NRHP. The site was heavily disturbed during the widening of Concord Pike and the subsequent placement of utilities along the edge of the western roadway in the twentieth century. The pre-contact Ronald McDonald House Site (7NC-B-54) was recommended eligible for listing in the NRHP under Criterion D, as the site offered a unique opportunity to consider a procurement site in the context of the broader network of sites within the Piedmont region. McCormick Taylor also recommended the Weldin Plantation Site (7NC-B-11) eligible for listing in the National Register of Historic Places under Criterion D for the significant information it can contribute to our understanding of the evolution

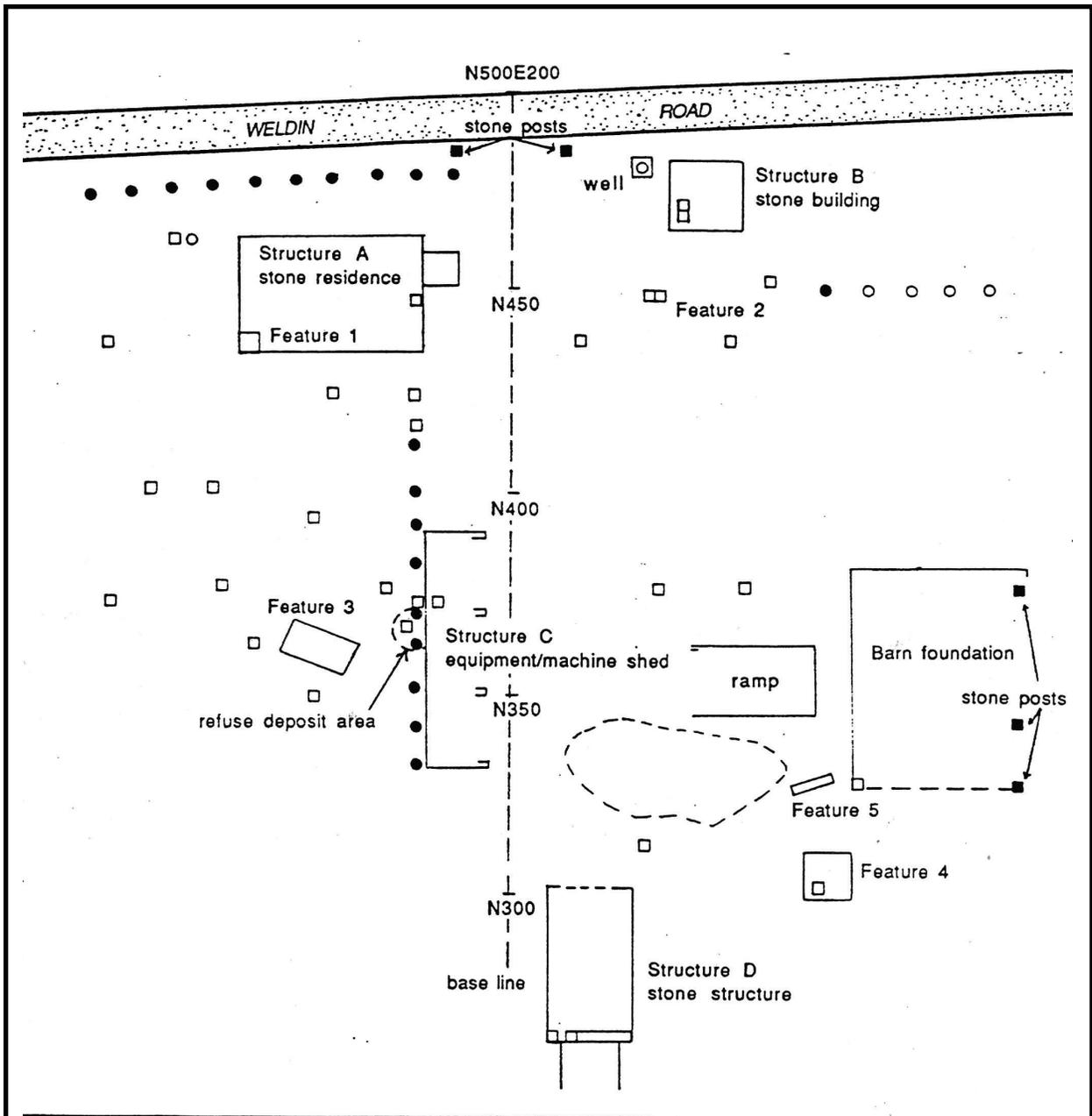


0 30 feet

A north arrow is positioned in the center, with 'N' at the top, 'S' at the bottom, 'E' on the right, and 'W' on the left. Below the north arrow is a scale bar showing a distance of 30 feet, starting from 0.

McCormick Taylor
 Engineers & Planners
 Since 1946

Figure 2
Plan Map of Weldin Plantation Site
(from Taylor et al. 1989)
 Weldin Plantation Site, 7NC-B-11
 Phase III Archaeological Data Recovery
 Blue Ball Properties Area Transportation Improvement Project
 Brandywine Hundred,
 New Castle County, Delaware



- = 3'x3' test unit
- = 1'x1' shovel test with artifacts
- = 1'x1' shovel test without artifacts
- (dashed) = modern dump area

McCormick Taylor
Engineers & Planners
Since 1946

Figure 3
Location of Phase I Test Units
(from Taylor et al. 1989)

Weldin Plantation Site, 7NC-B-11
 Phase III Archaeological Data Recovery
 Blue Ball Properties Area Transportation
 Improvement Project

Brandywine Hundred,
 New Castle County, Delaware

of rural farm life in New Castle County Delaware from the late eighteenth to early twentieth centuries.

B. Phase II Archaeological Evaluation Investigations at the Weldin Plantation Site (7NC-B-11)

The Phase II Evaluation Survey conducted by McCormick Taylor was conducted in December 2000 and January 2001. A survey of the site's vegetation was conducted prior to the initiation of the Phase II work in to identify the plant species that occur on the property (*Appendix C*). A diverse array of tree species was identified. These included specimens such as Catalpa, Tree of Heaven, White Pine, Oak (Pin or Red), Honeylocust, Apple, Sweet Cherry, Silver and Norway Maple, Black Walnut, Box Elder, Hickory, Sassafras, Osage Orange, Apple, and American Hazlenut. Shrub species included Privet, Hackberry, Blackberry, Rose of Sharon, Amur Honeysuckle. Ground cover species such as Periwinkle, Japanese Honeysuckle, Poison Ivy, and English Ivy were documented.

Because the site was heavily overgrown, it was cleared of vegetation prior to the initiation of the Phase II work for better visibility of the site's layout. The main structures originally documented by Thunderbird were re-located and photo-documented. These included the main farmhouse (Structure A) (*Photographs 1 and 2*), the structure they interpreted as a detached dependency to the main residence (subsequent research by McCormick Taylor indicated that it was a milkhouse) (Structure B) (*Photograph 3*), the equipment shed (Structure C) (*Photograph 4*), the additional outbuilding of unknown function (Structure D) (*Photograph 5*), and the barn/barnyard complex (*Photographs 6, 7, 8*). The Phase II fieldwork involved the excavation of 170 systematically placed STPs at mostly 20 foot intervals, followed by 20 arbitrarily placed 3x3 foot TUs (*Figure 4*).

1. Shovel Test Pit Excavations

The majority of the STP profiles excavated at the Weldin site consisted of a dark yellowish brown (10YR 4/4) loam silt A/Ap horizon overtop a yellowish brown to dark yellowish brown (10YR 5/6-4/6) clay loam subsoil, as seen in the profiles for STP 5 (*Figure 5*). In some cases, an initial very dark grayish brown (10YR 3/2) silt loam O horizon was found to overlay the A horizon (*Figure 5*).

Several exceptions to this stratigraphic sequence were noted. In STP 51, excavated immediately to the west of Structure C (the equipment shed), two fill horizons were noted beneath the modern O horizon (Stratum I) and above the original A horizon (Stratum IV) (*Figure 5*). These fill horizons appeared to be associated with the excavation and re-deposition of the soils to the west of the foundation prior to its construction. In STP 53 the original Ap horizon appeared truncated and the profile of this tests consisted of the modern O horizon (10YR 3/2 silt loam) overtop the subsoil (7.5YR 5/6 clay).

In addition, the majority of the tests in the two transects containing STPs 74-103 exhibited disturbances associated with an early twentieth century parking area to the east of the main dwelling (*Photograph 9*). Shovel Test Pit 91, excavated in the road, is representative of these



Photograph 1: Remains of the Weldin farmhouse, facing southeast.



Photograph 2: Remains of the Weldin farmhouse, facing northwest.



Photograph 3: Milkhouse ruins during the late twentieth century, facing northeast.



Photograph 4: Remains of the equipment shed, facing south.



Photograph 5: Remains of the outbuilding foundation located near the southern edge of site, facing south.



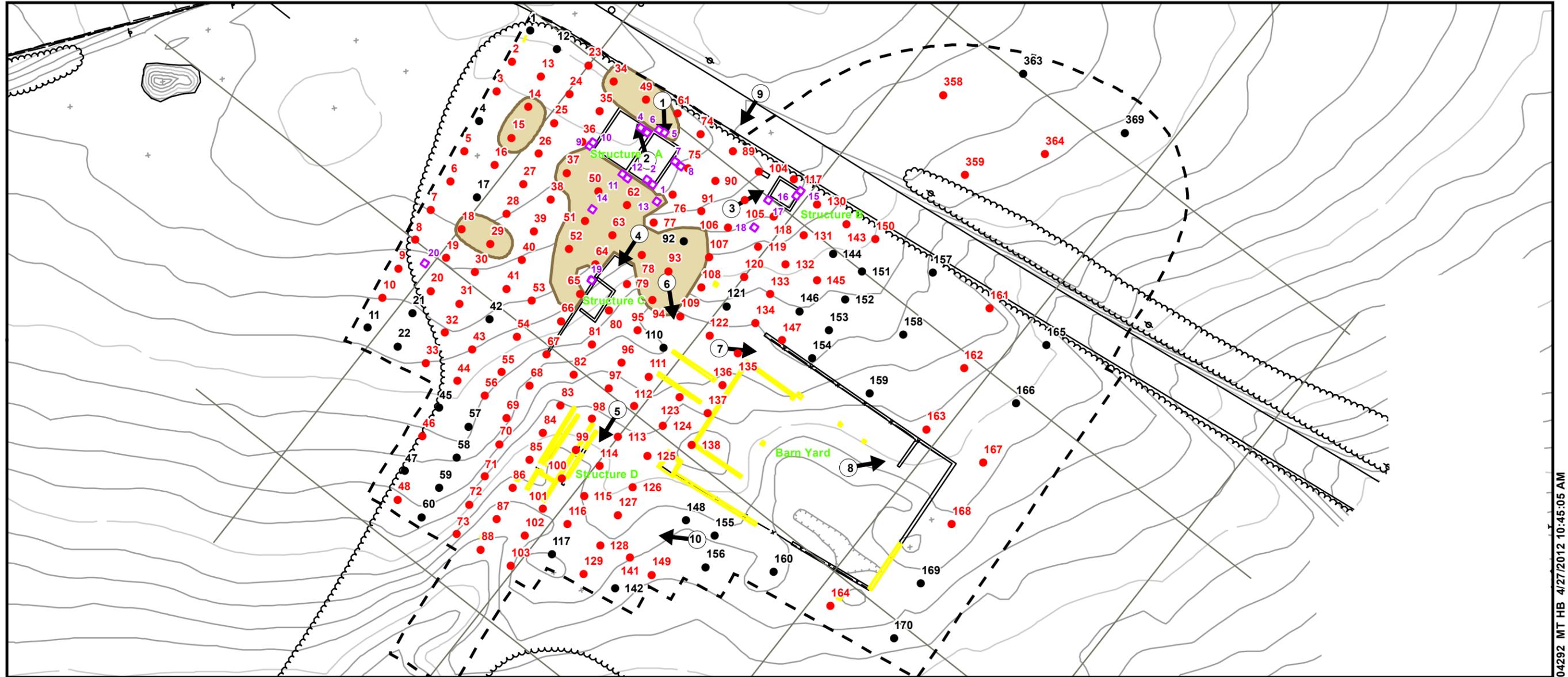
Photograph 6: View of the barn ramp, facing southeast.



Photograph 7: View of the barn foundation, facing east.



Photograph 8: View of the barn foundation, facing north.



04292 MT HB 4/27/2012 10:45:05 AM

● Shovel Test Pit Containing Prehistoric Artifacts	Photograph Locations
● Shovel Test Pit Containing Prehistoric and Historic Artifacts	Archaeological Site Boundary
● Shovel Test Pit Containing Historic Artifacts	Structures Constructed after 1862
● Shovel Test Pit Not Containing Artifacts	Context from which Pre-Mid 19th Century Artifacts Were Recovered
	Test Unit

0 50 100 Feet
0 6 12 18 24 30 Meters

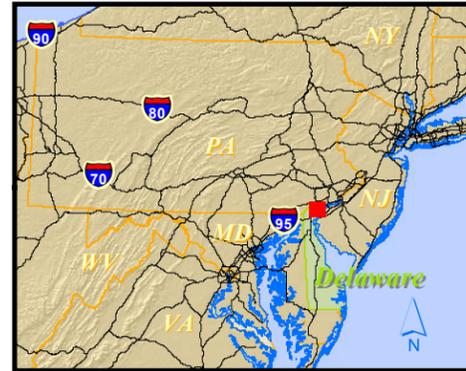
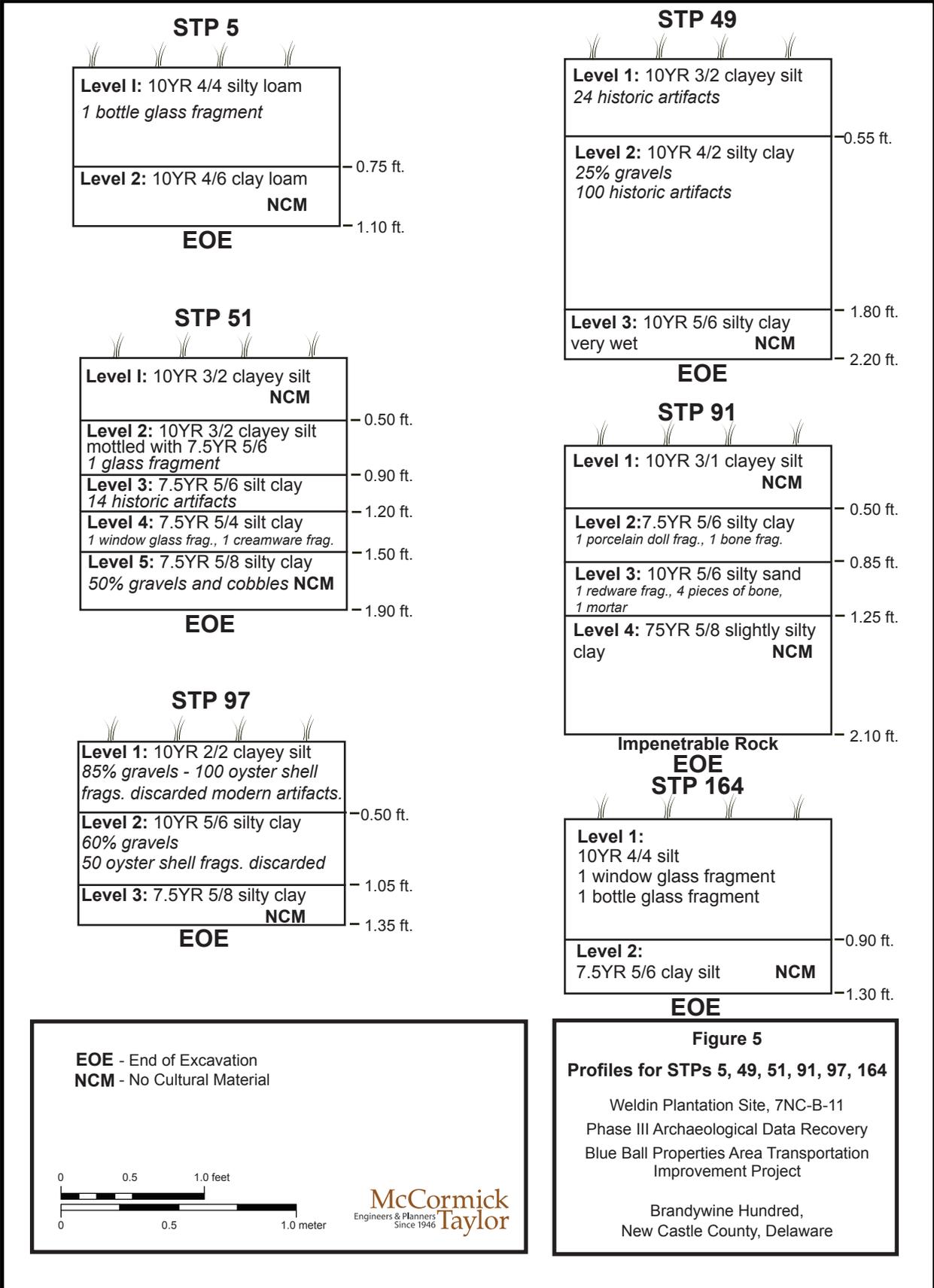


Figure 4
Phase II Archaeological Evaluation Testing and
Photograph Location Map
Weldin Plantation Site, 7NC-B-11
Blue Ball Properties Area Transportation
Improvement Project
Brandywine Hundred, New Castle County, Delaware





Photograph 9: View of the entrance and driveway to the farm, facing south.

tests. The soil profile consisted of several layers of fill overlying bedrock (*Figure 5*). The STPs south of 79 and 94 contained a large amount of oyster shell and gravel fill, which would have been used as fill to improve the drainage of the roadway. The parking area would have likely been susceptible to poor drainage due to the clay B horizon underlying the fill.

The road was abandoned sometime after Weldin purchased the property in 1862. Weldin Road was constructed at some time during the third quarter of the nineteenth century; it is probable that the Weldin Plantation Drive was no longer in use as the main entrance to the property at that time. The Weldin Plantation Road was likely not being used as the entrance at the time that Structure D was constructed, Structure D was built in the center of the Weldin Plantation Road. The portion of the road north of Structure D was used as a driveway after the construction of Weldin Road.

The area roughly delineated by STPs 41, 45, 137, and 156 exhibited variable disturbances, as this portion of the site was used as a dump throughout the twentieth century. The soils encountered in STP 97 are representative of this portion of the site. It contained an initial gravel and oyster shell laden very dark brown (10YR 2/2) clayey silt O/A Horizon that was underlain by a predominantly yellowish brown (10YR 5/6) silty clay with gravels and oyster shell, and the strong brown (7.5YR 5/6) silty clay subsoil, respectively (*Figure 5*). As excavations proceeded towards the east, a relatively intact profile consisting of a dark yellowish brown (10YR 4/4) silt plowzone overtop the strong brown (7.5YR 5/6) silty clay subsoil, as seen in STP 164 (*Figure 5*).

The Phase II shovel testing successfully identified the west, south, and east boundaries of the Weldin Site, which was found to roughly correspond to the existing tree line. The western and southernmost transects of shovel tests, excavated just inside the tree line, yielded relatively low densities of artifacts. Just one of the tests along the westernmost transect, STP 8, yielded more than 10 artifacts; it contained three pieces of bottle glass, a piece of clay pigeon, two pieces of whiteware, one piece of redware, one piece of pearlware, one ceramic electrical insulator, one piece of window glass, and one piece of coal. The area west of this transect of STPs was disturbed during the installation of underground utilities and is currently used a parking and staging area. Along the southern treeline, STP 129 yielded 32 artifacts, but 20 of these were bottle glass and five were pieces of an oil can; four pieces of roofing slate, two pieces of window glass, and one piece of bone were also recovered from the test. It represents one of two STPs along the southern edge of the site yielding more than 10 finds. Shovel Test Pit 103 yielded 11 artifacts, although eight of these were pieces of brown bottle glass; three pieces of clam shell were also recovered from the test. One transect of STPs was excavated to the east of the barnyard area. Shovel Test Pit 167 was the only STP on this transect containing more than 10 artifacts. It contained eight pieces of bottle glass, seven pieces of window glass, and one unidentifiable nail. No additional testing was conducted to the east due to the low artifact densities in the easternmost STP transect. The northern site boundary was delineated during the Phase I testing. Thirty-four artifacts, the majority of which date to the nineteenth century, were recovered from a group of three STPs excavated north of Weldin Road (within approximately 45 meters [~147 feet] of the Weldin site), and were therefore considered to be associated with the site and were included within the site boundary (*Figure 4*). The highest density of artifacts recovered within the revised site boundary was from STP 359. The 25 artifacts recovered from

this test included a horseshoe, eight pieces of brick, two pieces of bottle glass, eight pieces of redware, one piece of creamware, one piece of whiteware, one unidentifiable nail, one piece of window glass, one chain link, and one piece of Styrofoam. Additionally, STP 364 contained three pieces of whiteware, one piece of creamware, one piece of brick, and one chunk of slag, and STP 358 contained two pieces of redware and one piece of Styrofoam.

The density of historic artifacts across the site was found to be variable due to the amount of secondary deposition of twentieth century debris on the site, and for this reason, artifact counts encountered in the STPs were deceptively high. This was particularly evident in the area roughly bounded by STPs 41, 45, 137, and 156. This portion of the site was used as a dump throughout the twentieth century. Modern artifacts such as rusty buckets and barrels, tires, plastic and glass bottles, sheets of aluminum, mattress springs, chunks of concrete, assorted car parts and other twentieth century materials were observed on the ground surface (*Photograph 10*). Therefore, the majority of the STPs excavated in this area contain high volumes of twentieth century trash in the A horizon. For example, STP 67 contained a relatively high quantity of artifacts (267), but 185 of the finds consisted of pieces of broken glass (148 vessel glass, 35 window glass, one safety glass, and one piece of salad dressing bottle) that appear to date to the twentieth century. Additionally, 16 pieces of plastic were recovered from the test, in addition to an oil can, coal fragments, and miscellaneous pieces of metal. The artifacts datable to the nineteenth century included 39 ceramic fragments (18 redware, 15 whiteware, five ironstone, and 1 yellowware) but the association of these finds to the site's inhabitants is not clear due to the secondary deposition in this area. For this reason, this portion of the site lacks the level of integrity exhibited in the areas in which modern dumping has not occurred.

The highest quantity of artifacts dating to the mid-nineteenth century or earlier were recovered in the areas to the north and south of Structure A and to the west of Structure C. In the area north of Structure A, STP 49 contained 125 artifacts, 53% of which were domestic by class. These included 17 ceramic sherds dating to the eighteenth century (13 pieces of creamware and four pieces of Jackfield), in addition to 39 shards of nineteenth century ceramics (19 pieces of pearlware, 19 pieces of redware, one piece of porcelain), one piece of oyster shell, and seven pieces of bottle glass. Forty-four percent of the finds were architectural items. These included 17 pieces of brick, 26 pieces of window glass, two nails, and a chunk of plaster. Two pieces of mirror glass and one piece of slag were also recovered from STP 49.

To the south of Structure A, STP 50 contained 85 artifacts, the highest quantity in the south yard area. Architectural items represented 71% of the assemblage; these included 39 pieces of brick, 11 pieces of window glass, seven unidentifiable nails, four pieces of roofing slate, and an electrical insulator. Domestic finds included 11 pieces of redware, five pieces of creamware, two pieces of whiteware, one piece of pearlware, and two pieces of bottle glass. One piece of coal and one piece of bone were also recovered from STP 50.

The area west of Structure C also appeared to be an area used primarily for refuse disposal. Shovel Test Pit 65 contained the highest concentration, it yielded 82 artifacts. These included 10 shards of whiteware, 10 shards of redware, three pieces of Jackfield, 41 pieces of bottle glass, one piece of yellowware, three pieces of window glass, seven nails, four oyster shell fragments, and three pieces of automobile safety glass.



Photograph 10: View of refuse associated with modern dumping activities, facing south.

Relatively high artifact densities were also encountered recovered from the STPs excavated in the location of the original road, although many of the artifacts were interpreted as fill related. In STP 94, approximately 250 fragments of brick were recovered and STP 96 contained hundred of shell fragments. In both of the tests, the brick and/or shell appeared to be deposited as road fill.

2. Test Unit Excavations Associated with Structure A

Structure A is the main house on the site. It is located approximately 25 feet south of Weldin Road at the northwest corner of the property. At ground surface, the structure is divided into two sections (an east section and west section) by a visible interior basement wall. Both sides of the cellar were filled with demolition debris at time of the Phase II Evaluation. Based on the results of the Phase I Survey (which located a well/sump in the western portion of the building), the potential for features in the cellar were high. As a result, four TUs were excavated within Structure A; Test Units 1 and 2 were placed within the southwest corner of the eastern portion of the structure (just south of a suspected doorway to the first floor), and TUs 3 and 4 were placed within the northeast corner of the western portion of the structure.

Eight additional TUs were placed on the exterior of the foundation; Test Units 5 and 6 were placed against the exterior of the north wall on the east side of the building in an area which tested positive for a relatively high concentration of early artifacts such as creamware, slipped redware and several varieties of pearlware. Test Units 7 and 8 were placed against the southern exterior of a potential bulkhead entrance near the northeast corner of the building to investigate the presence of a builder's trench associated with it. Test Units 9 and 10 were excavated at the southwest corner of the building to further investigate the buried A horizon contacted in STPs 36 and 37 that produced a low density of early artifacts including pearlware and slipped redware. Test Units 11 and 12 were placed adjacent to the southern wall of Structure A at the location where the interior partition wall of adjoins with the south foundation wall. The goal of this excavation was to obtain additional information regarding the construction chronology of the two sections of the house.

a. Test Units 1 and 2

Test Units 1 and 2 were placed in the southeast corner of the Structure A, several feet south of the suspected doorway to the house (*Figure 4*). Interestingly, a large rectangular stone with the initials "WT" carved into the face was located on the surface of the demolition debris near this location. This stone probably represents the lintel that would have been located above the doorway. The letters inscribed into the lintel stone may represent the last initials of Jacob Weldin and his wife Hannah Talley; deed research failed to identify any other inhabitants of the property with the initials WT.

Level I of the excavation consisted of demolition debris containing predominantly unconsolidated large foundation stones and decaying mortar. Several bricks were also noted within the architectural debris. The bricks were probably associated with a brick-lined bulkhead entrance which was situated along the south wall approximately 1.5 feet west of the southeast corner. Level I was excavated to approximately 4.5 feet below ground surface where a concrete basement floor (Level II) was uncovered. The concrete floor was removed and was found to

overlie a layer of coal slag and ash fill (Level III) approximately 0.2-0.3 feet in thickness. Level III, was underlain by a thin mottled sand silt and clay fill horizon which (Level IV), in turn overlaid subsoil (*Figure 6*).

Level I, the demolition fill, contained mostly late nineteenth and twentieth century artifacts which were deposited subsequent to the abandonment of the property. Level II consisted of the concrete floor, therefore it lacked artifacts, although it appeared to seal early to mid nineteenth century contexts. Level III (the coal and slag layer directly beneath the concrete) appeared to date to the mid-nineteenth century based on the recovery of eight nails (three machine cut and five unidentifiable), three pieces of window glass, and one shard of slipped redware. Level IV contained 27 artifacts that dated to the early to mid nineteenth century. These included 10 sherds of redware, four sherds of creamware, three sherds of pearlware, two sherds of whiteware, three pieces of non-diagnostic bottle glass, two pieces of window glass, two pieces of cow bone, and one pewter button. Additionally, Features 2 and 3 were identified during the excavation of TUs 1 and 2.

i. Feature 2

Feature 2 was identified by a dark yellowish brown (10YR 4/6) funnel-shaped stain near the center of TU 1 (*Figure 7*). The anomaly measured approximately 0.8 feet wide at the southern terminus of the unit and narrowed to 0.2 feet at the northern limits of excavation. Feature 2 was relatively shallow (0.1-0.2 feet in depth) and was excavated in its entirety. The feature fill was silty in texture and contained some carbon flecking. Artifacts recovered from the feature included six pieces of brick, five pieces of redware, and one piece of window glass. It is possible that Feature 2 represents the remains a small drainage channel associated with Feature 3.

ii. Feature 3

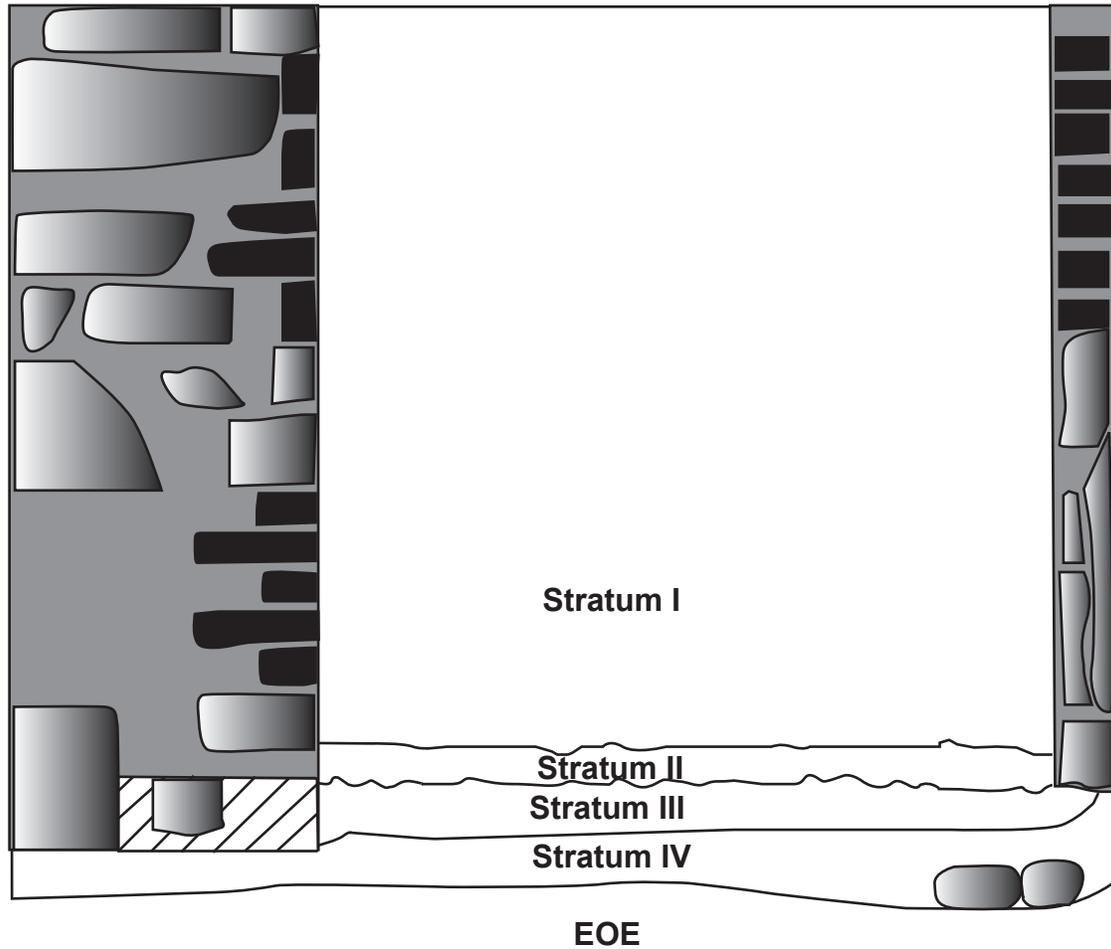
Feature 3 represents a series of deliberately placed rocks (oriented N-S) intrusive to Level IV, (*Figure 7 and Photograph 11*). The removal of several of the larger rocks revealed that the feature was two courses deep, with the second layer of rocks being oriented E-W and laid into a shallow channel that was intrusive to the subsoil. The clayey soils surrounding the feature appeared poorly drained and heavily mottled (light gray [5YR 7/1], light olive brown [2.5Y 5/4], and strong brown [7.5YR 5/8]), indicating poor drainage. It is likely that the feature represents a French drain. Feature 3 appears to represent an early nineteenth century context based on the recovery of two shards of pearlware and one piece of non-diagnostic window glass.

b. Test Units 3 and 4

Test Units 3 and 4 were excavated in the northeastern corner of the western portion of Structure A (*Figure 4*). Strata I and II were mostly composed of demolition debris, with Level 1 exhibiting a slightly darker matrix due to the accumulation of organic material. Both Levels yielded artifacts dating predominantly to the twentieth century. The architectural debris was underlain by a brick basement floor laid in a herring-bone pattern. The brick floor was found to overlie a relatively thin horizon of brown (7.5YR 5/6) sandy fill (Level IV), which was void of cultural materials. Subsoil (Level V) was contacted approximately 7.2 feet below ground

Test Units 1 and 2 - South Profile

datum elevation



Stratum I: Bulkhead filled with demolition debris

Stratum II: Concrete

Stratum III: Ash and Coal Cinder Fill

Stratum IV: Mottled 7.5YR 5/8, 7.5YR 5/6, and 2.5Y 5/4 sand, silt, clay

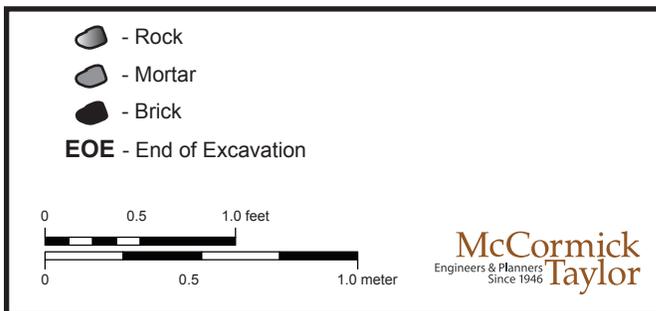


Figure 6

Test Units 1 and 2 South Profile

Weldin Plantation Site, 7NC-B-11
Phase III Archaeological Data Recovery
Blue Ball Properties Area Transportation
Improvement Project

Brandywine Hundred,
New Castle County, Delaware

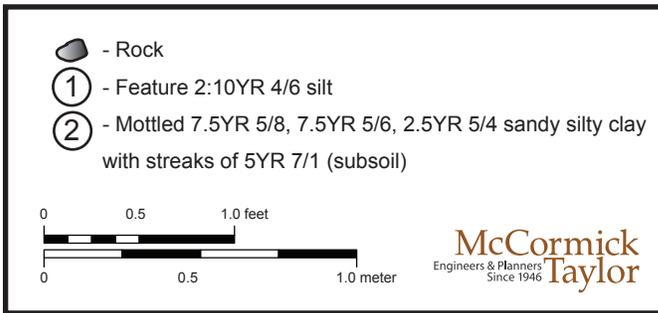
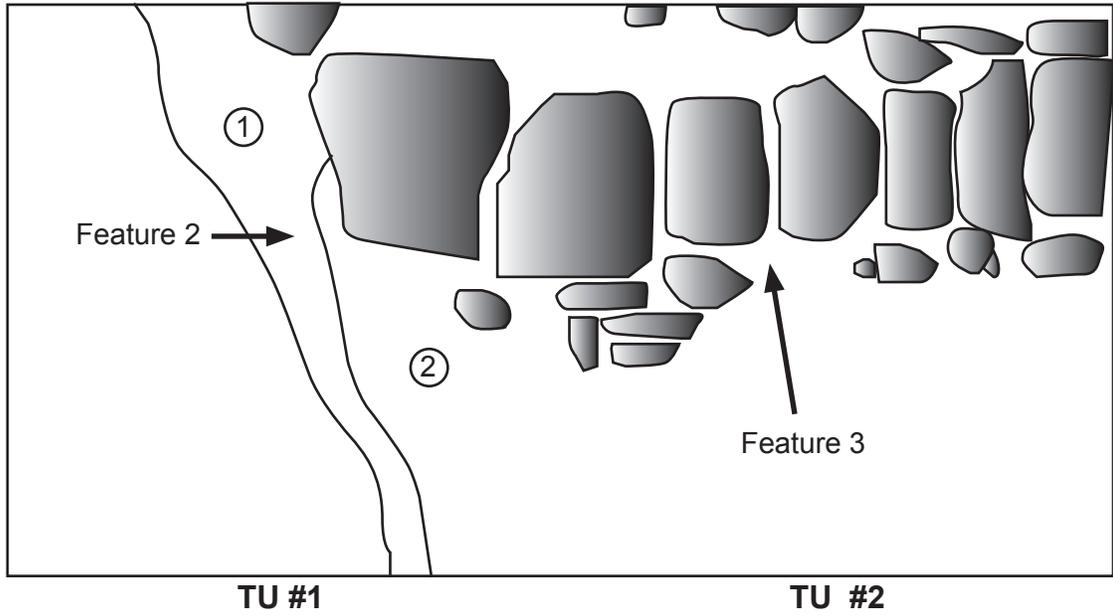


Figure 7
Features 2 and 3 Planview

Weldin Plantation Site, 7NC-B-11
Phase III Archaeological Data Recovery
Blue Ball Properties Area Transportation
Improvement Project

Brandywine Hundred,
New Castle County, Delaware



Photograph 11: TUs 1 and 2 and Feature 3 planview, facing south.

surface. It consisted of a mottled yellowish red (5YR 5/8) and light yellowish brown (2.5Y 6/4) silty clay. Feature 8 was discovered along the east wall of TU 3.

i. Feature 8

A 1.25 foot wide trench feature oriented parallel to the interior basement wall was encountered at the interface with the subsoil. The feature fill, which was approximately 0.6 feet in depth, consisted of rocks covered by deteriorating mortar and sand (*Figure 8 and Photograph 12*). A total of three unidentifiable nails were recovered from the feature. Feature 8 likely represents either a builder's trench or a drainage feature (such as a French drain).

c. Test Units 5 and 6

Shovel Test Pits 34 and 49 both tested positive for artifacts dating to the late 18th and early 19th Centuries. Test Units 5 and 6 were placed in this area to investigate the potential early nineteenth century contexts (*Figure 4*).

The upper four strata were found to correspond in the two units. Level I consisted of the initial A horizon, a very dark gray (10YR 3/1) silt loam with a maximum thickness of 0.6 feet. It overlaid a dark yellowish brown (10YR 4/4) sandy loam that ranged between 0.5-1.0 feet in thickness; it was designated Level II. Both Levels I and II contained twentieth century artifacts in addition to numerous pieces of bottle glass (n=1631) and high quantities of window glass (n=575) and other architectural debris such as nails, roofing slate, mortar, plaster, and foundation stones. The mean dates for the artifacts recovered from Levels I and II are attributable to the early twentieth century. Based on the soil morphology and the relatively late dates of these contexts, Levels I and II appears to date to the structure's demolition in the early to mid-twentieth century.

Level III consisted of a friable yellowish brown (10YR 5/4) loam that ranged between 0.2-0.5 feet in thickness. Combined, a total of 417 artifacts were recovered in TUs 5 and 6 from Level III. Seventy-four percent of the finds were architectural by class. The finds from Level III generated a mean date of 1857 in TU 5 and 1859 in TU 6. Based on the recovery of numerous sherds of late eighteenth and early nineteenth century ceramics such as creamware, spattered whiteware, and transfer printed pearlware, this context appeared to represent a mid-nineteenth century context.

At the interface of Level II and III, a brick pier located adjacent to the southeastern corner of the wall was uncovered. The brick pier was found to be four courses high and cemented to a stone footer. The stone footer rested on the subsoil. The brick pier was interpreted as the footer for a porch, and based on its stratigraphic position, likely dates to the mid nineteenth century.

The soils excavated from Level IV were composed of a yellowish brown (10YR 5/6) clayey loam mottled with carbon flecking and small pieces of burned wood. This soil horizon was heavily disturbed by rodent burrows, some of which penetrated the underlying subsoil. Combined, a total of 661 artifacts were recovered from Level IV (272 from TU 5 and 389 from TU 6). These included a high quantity of domestic artifacts including a bone handled fork and

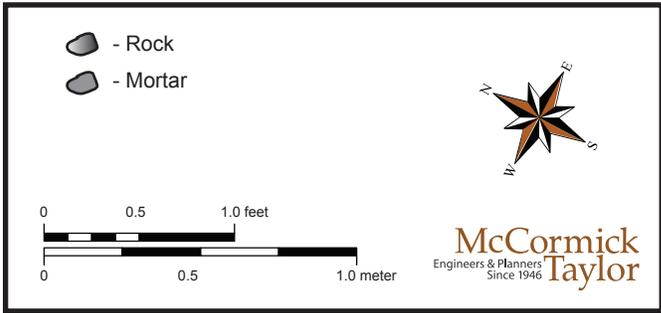
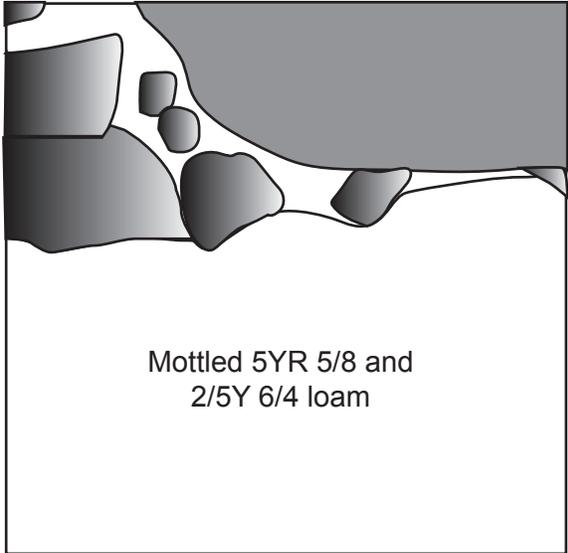


Figure 8
Feature 8 Planview

Weldin Plantation Site, 7NC-B-11
Phase III Archaeological Data Recovery
Blue Ball Properties Area Transportation
Improvement Project

Brandywine Hundred,
New Castle County, Delaware



Photograph 12: TU 3 and Feature 8 planview, facing east.

knife, a brass spoon, and historic ceramics such as pearlware, porcelain, redware, Jackfield, creamware, and delftware. A total of 324 pieces of bone were recovered from Level IV in the two units. A diverse array of specimens such as pig, cow, turkey, chicken, pheasant, rabbit, goose, and deer, in addition to ground hog and rat were found within this context. A relatively high number of architectural artifacts were recovered as well. The attribution for the diagnostic domestic artifacts was consistently to the late eighteenth to early nineteenth century, suggesting a secure context, probably the original ground surface associated with the farmhouse. Several pieces of mold blown bottle glass dating to the twentieth century were recovered from TU 6 (TU 5 was void of later artifacts), although these artifacts were likely intrusive from the overlying strata.

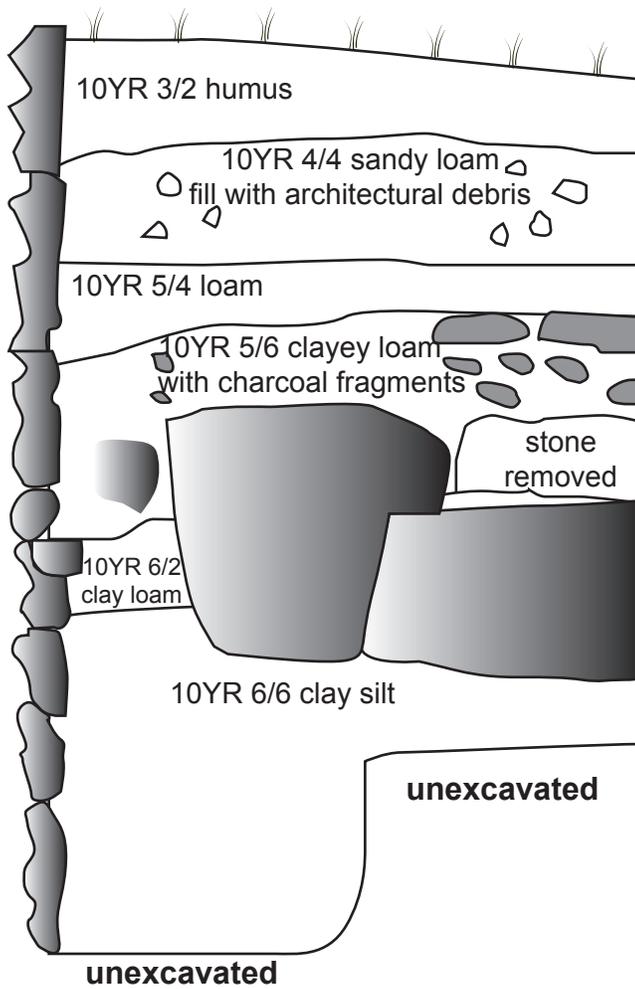
An additional lense of soil (Level V; a light brownish gray [10 YR 6/2] clayey silt) approximately 0.4 feet in thickness was encountered just above the B horizon in TU 6. This deposit feathered-out as excavations proceeded toward the east and was not observable in TU 5. Level V contained just four artifacts; a bone comb and three additional pieces of bone. A potential foundation wall was uncovered within the lower portion of Level IV in TU 6. It consisted of two courses of cut stone oriented perpendicular to the north wall of the house. A concentration of mortar was found to overlie the cut stones (*Figure 9*) supporting that the anomaly is the remains of a wall, rather than demolition debris. The soils comprising Level V were likely associated with the original construction of this wall.

The brownish yellow (10YR 6/6) clayey silt subsoil was reached approximately 3.0 feet below ground surface in both test units (*Figure 9 and Photograph 13*). It contained 16 artifacts in TU 5 and was void of artifacts in TU 6. The artifacts found in the subsoil were likely deposited through the heavy bioturbation noted within the overlying stratum.

d. Test Units 7 and 8

TUs 7 and 8 were placed on the eastern side of Structure A against the south bulkhead wall (*Figure 4*). Level I was composed of a mottled dark yellowish brown (10YR 4/4) and strong brown (7.5YR 5/6) loam that contained foundation stones, brick fragments and numerous twentieth century artifacts. It was interpreted as a fill horizon associated with the demolition of the structure in the twentieth century. Level II, a very dark grayish brown (10YR 3/2) silt loam appeared to represent an A/O horizon. Level III consisted of the yellowish brown (10YR 5/6) clay loam subsoil, although a small pocket of mottled brown (10YR 4/3) and yellowish brown (10YR 5/4 and 10YR 5/6) was found in TU 7 at the interface with the subsoil. This soil deposit may represent the original truncated A/Ap horizon (*Figure 10*). Two irregular soil anomalies containing modern artifacts were found to be intrusive to the subsoil. The first, located in TU 7, originated at the existing ground surface and was composed of Level I soils, and the second, located in the southwest corner of TU 8, originated at the interface of Levels II and III and contained Stratum II soils. All of the contexts from TUs 7 and 8 contained modern artifacts. It appears that the area around the bulkhead was subjected to relatively severe ground disturbing activities sometime during the 20th century, likely during the demolition of the structure.

**Test Unit 6
West Wall**



-  - Rock
-  - Mortar



**McCormick
Taylor**
Engineers & Planners
Since 1946

Figure 9

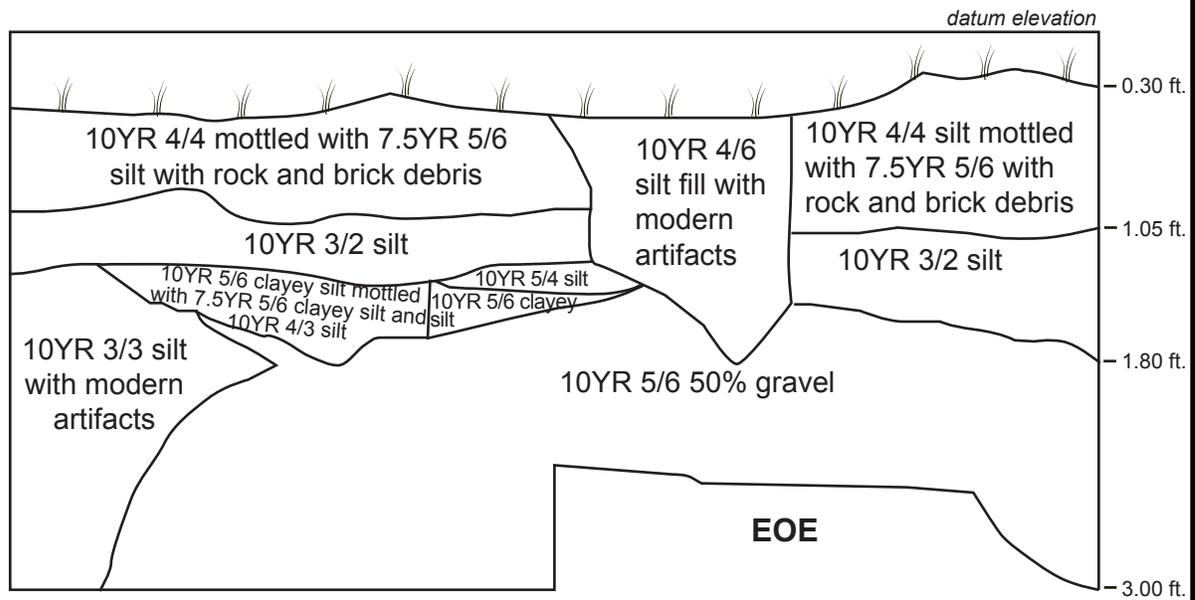
Test Unit 6 West Profile

Weldin Plantation Site, 7NC-B-11
Phase III Archaeological Data Recovery
Blue Ball Properties Area Transportation
Improvement Project

Brandywine Hundred,
New Castle County, Delaware



Photograph 13: TUs 5 and 6 north profile.



EOE - End of Excavation



McCormick Taylor
Engineers & Planners
Since 1946

Figure 10

Test Units 7 and 8 South Profile

Weldin Plantation Site, 7NC-B-11
Phase III Archaeological Data Recovery
Blue Ball Properties Area Transportation
Improvement Project

Brandywine Hundred,
New Castle County, Delaware

e. Test Units 9 and 10

Test Units 9 and 10, excavated along the west wall of Structure A, penetrated four strata. Level I consisted of a layer of demolition debris that was composed of mostly foundation stones, brick, and mortar. The underlying Level II soils were comprised of a strong brown (7.5YR 5/8) silty clay fill that contained a total of 59 artifacts that date to the mid to late nineteenth century. Level III, a brown (10YR 4/3) silt loam, appeared to represent the original A horizon. It contained a total of 40 artifacts, 73% of which were domestic by class. These included shards of creamware, delftware, and shell edged whiteware that date the assemblage to the late eighteenth to early nineteenth century. The undisturbed subsoil (Level IV) was found to underlie the buried A horizon (*Figure 11*).

i. Feature 4

Feature 4, a linear trench feature comprised of 7.5 YR 5/8 silty clay fill, was found at the interface of Levels II and III along the Structure A foundation (*Photograph 14*). This feature was possibly created during the excavation of the cellar hole and was filled subsequent to the construction of the foundation wall. The feature fill contained four chunks of mortar, one cut nail, one shard of creamware, and one shard of pearlware.

f. Test Units 11 and 12

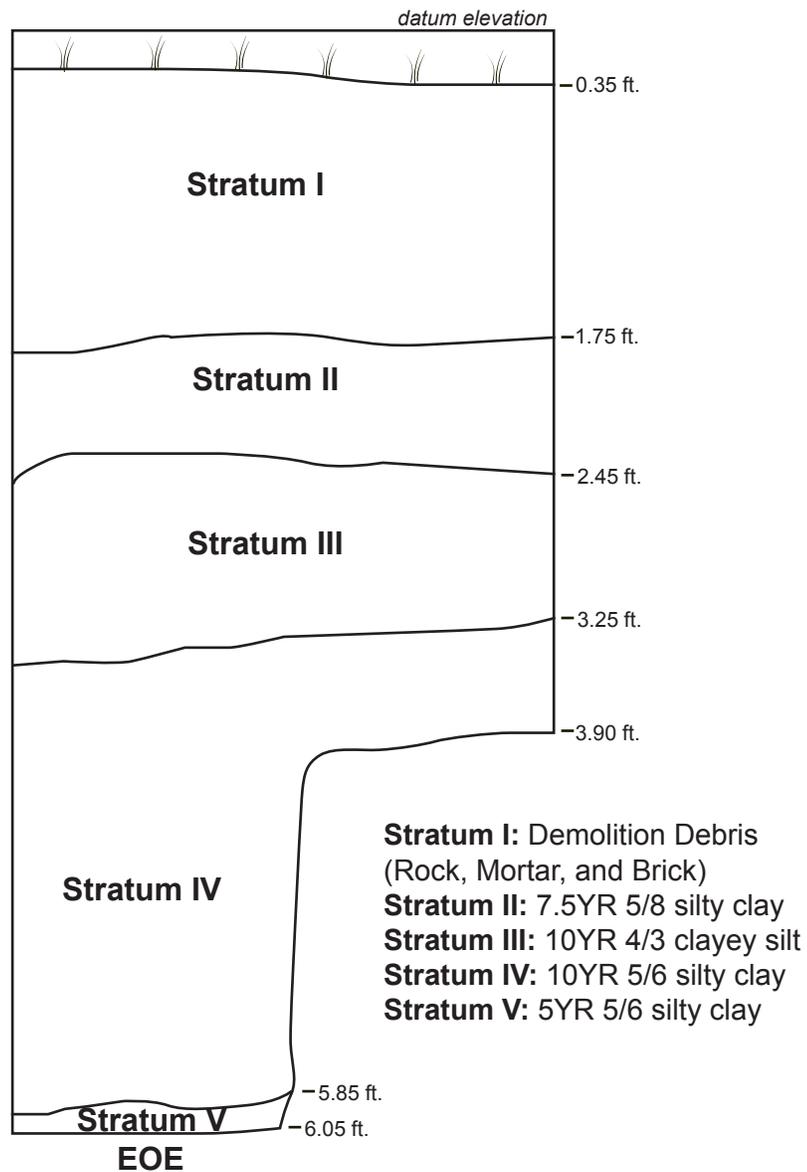
Test Units 11 and 12 were placed along southern wall of Structure A at the approximate location of the interior partition wall (*Figure 4*). The stratigraphy of the units closely matched that of TUs 9 and 10. The portion Structure A exterior exposed in TU 11 indicates that the western portion of the foundation likely represents a later addition to the house. The eastern portion of the foundation exhibited a finished wall at its southwest. At this point the western portion of the foundation appears to be butted against the east section (*Photograph 15*).

i. Feature 9

Feature 9 consisted of a brick footer that was four courses in thickness and two bricks in width (*Photograph 16*). The bricks were built upon a stone foundation that rested on the subsoil. Along with the brick footer found in TU 6, Feature 4 was interpreted as the footer for a porch. It was exposed within the fill layer overlying the original A horizon. Based on its stratigraphic position, it likely dates to the mid nineteenth century.

g. Test Unit 13

TU 13 was excavated just outside the southeast corner of Structure A. Level I in this unit consisted of dark brown (10YR 3/3) A horizon that extended to approximately 1.1 feet below ground surface. It contained a total of 79 artifacts that dated mostly to the late nineteenth to twentieth century. It was underlain by a thin ash lens (Level II) with a maximum thickness of 0.2 feet. The ash lense produced 44 artifacts including nineteenth century ceramics, architectural items, and two porcelain doll fragments. It rested on a mottled strong brown (7.5YR 5/8) and light gray (2.5Y 7/1) silty clay fill horizon that appeared to be re-deposited subsoil. This



EOE - End of Excavation



McCormick Taylor
 Engineers & Planners
 Since 1946

Figure 11

Test Unit 9 South Profile

Weldin Plantation Site, 7NC-B-11
 Phase III Archaeological Data Recovery
 Blue Ball Properties Area Transportation
 Improvement Project

Brandywine Hundred,
 New Castle County, Delaware



Photograph 14: TUs 9 and 10 and Feature 4 planview, facing east.



Photograph 15: TUs 11 and 12 north profile.



Photograph 16: TU 12 and Feature 9 planview.

stratum, designated Level III, contained 71 artifacts that were mostly architectural (83%) by class. This fill deposit was found to overlie a dark yellowish brown (10YR 3/4) Ab horizon (Level IV) that ranged between 0.05 and 0.46 feet in thickness. The Ab contained 172 artifacts that were consistent with a mid nineteenth century date. The Ab was underlain by the subsoil (Level V); a yellowish brown (10YR 5/6) clay loam. In the southeast corner of TU 13, a mottled dark yellowish brown (10YR 3/4) and yellowish brown (10YR 5/6) semi-circular stain was exposed (Level VI). In profile, this anomaly was basin shaped and reached a depth of 0.65 feet (*Figure 12*). It contained 32 artifacts that date the context to the early nineteenth century.

h. Test Unit 14

Test Unit 14 was placed in the south yard of Structure A. The initial stratum, a brown (10YR 4/3) silty clay approximately 0.9 foot in thickness, contained 71 artifacts attributable to the late nineteenth to twentieth century. It was overtop a brown (10YR 5/3) clay loam that was approximately 0.6 foot in thickness. Level II yielded 31 artifacts, all of which were domestic by class. The mottled strong brown (7.5YR 5/8) and light gray (2.5Y 7/1) clay loam subsoil was excavated as Level III. It was void of cultural materials.

3. Test Unit Excavations Associated with Structure B

Structure B is located approximately sixty feet east of Structure A, approximately ten feet south of Weldin Road. At the time of the Phase II survey, the foundation walls are roughly 80% intact. While fieldwork was in progress, McCormick Taylor learned through personal communication with Thomas Weldin (2003) that this structure was in use during the Weldin dairy operation. It was utilized as an ice house to keep milk cold.

a. Test Units 15 and 16

Test Units 15 and 16 were excavated within the northeast corner of Structure B. Level I consisted of mostly demolition debris that contained predominantly twentieth century artifacts. It was found to directly overlie a concrete floor (Level II), which in turn, overlaid a brick floor (Level III) that was one course in depth and laid in no particular pattern. A layer of stone and mortar that was excavated as Level IV was found beneath the brick floor. The soils excavated from Level V consisted of a thin (approximately 0.05 feet) dark yellowish brown (10YR 4/4) silt from which five brick fragments and one unidentifiable nail were recovered (from TU 16). It was underlain by the mottled strong brown (7.5YR 5/6) and light gray (2.5Y 7/1) silty clay subsoil (Level VI) that was void of artifacts.

b. Test Unit 17

Test Unit 17 was excavated at the southwest corner of Structure B. It penetrated three strata. Level I consisted of a black (10YR 2/1) loam that contained a high quantity of deteriorating mortar, foundation stones, and broken pieces of concrete. It yielded 148 artifacts (54% bottle glass) that dated from the late nineteenth to twentieth century. It was underlain by a very dark grayish brown (10YR 3/2) silty sandy loam (Level II) that was approximately 0.4 feet in thickness. It contained 255 artifacts that again dated to the late nineteenth to early twentieth

century. Level III consisted of a very wet mottled yellowish brown (10YR 5/6) and very dark grayish brown (10YR 3/2) clay loam fill horizon that contained 43 artifacts and was underlain by subsoil (*Figure 13*). Based on the recovery of a dry cell battery, this context dates to the late nineteenth century.

i. Feature 10

Feature 10, a dark circular stain approximately 0.55 feet in diameter and 1.1 foot in depth was located in the eastern portion of the TU 17 at the interface of Levels II and III (*Figure 13*). One unidentifiable nail was recovered from Feature 10. It is interpreted as a posthole.

c. Test Unit 18

Test Unit 18 was placed in the south yard area associated with Structure B. It penetrated three strata. The first, a very dark grayish brown (10YR 3/2) silt loam A/O horizon contained 37 pieces of bottle glass, one cut nail, and one piece of redware in addition to a very high density of shell. It overlaid a mottled dark yellowish brown (10YR 4/4) and strong brown (7.5YR 5/8) loam that ranged between 0.25 and 0.44 feet in thickness. It yielded 37 artifacts that were attributable to the mid nineteenth century. This level appeared to represent the truncated original Ap horizon. It was underlain by the culturally sterile yellowish brown (10YR 5/6) clay loam subsoil.

4. Test Unit Excavations Associated with Structure C

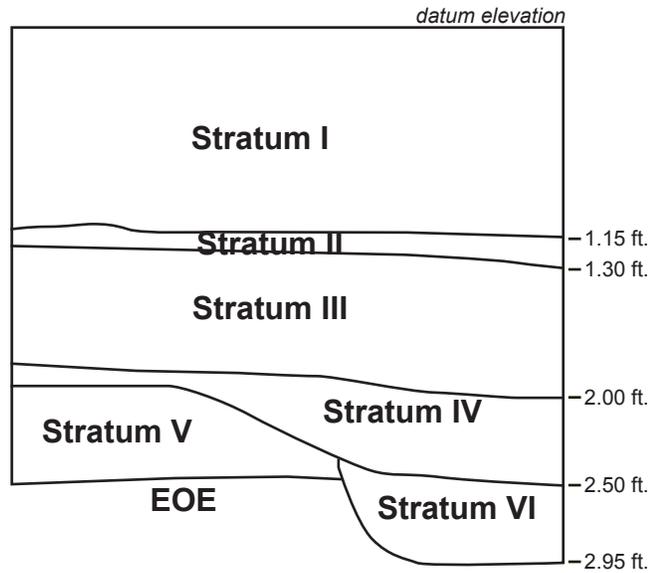
a. Test Unit 19

Test Unit 19 was placed adjacent to the west wall of Structure C. The initial A/O horizon consisted of a dark grayish brown clay loam that contained 262 artifacts, 170 of which were beer or soda bottle glass. Level II appeared to represent the original disturbed/truncated A horizon, it was characterized by a mottled brown (10YR 4/3) and strong brown (7.5YR 5/8) silty clay that was approximately 0.35 foot in thickness. It contained 195 artifacts that were attributable to the mid to late nineteenth century. Level III, the strong brown (7.5YR 5/8) silty clay subsoil, was excavated as Level III. It was void of artifacts. An amorphous area of brown (7.5YR 4/4) soil, that was excavated as Level IV, was noted in the southwest corner of the unit (*Figure 14*). In plan, this anomaly extended beyond the limits of the excavation. It contained a total of 48 artifacts (22 bottle glass, 23 window glass, one unidentifiable nail, and two pieces of pearlware).

5. Test Unit Excavations Not Associated with Structures

a. Test Unit 20

Test Unit 20 was placed along the western periphery of the site and exhibited plowzone/subsoil stratigraphy. It contained a total of 12 artifacts from A horizon contexts.



- Stratum I:** 10YR 3/3 Silt Loam
- Stratum II:** Ash lense
- Stratum III:** Mottled 7.5YR 5/8, 10YR 4/4, and 2.5YR 7/1 Clay Silt
- Stratum IV:** 10YR 3/4 Silt Loam
- Stratum V:** 10YR 5/6 Clay Loam
- Stratum VI:** 10YR 3/4 and 10YR 5/6 Clay Loam

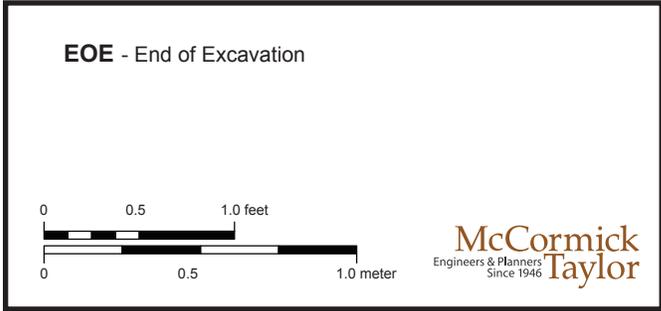
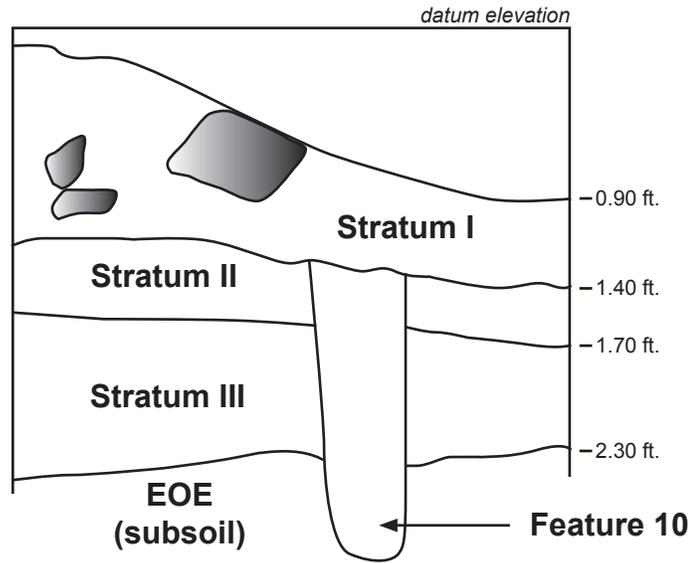


Figure 12
Test Unit 13 East Profile

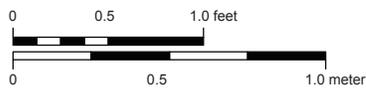
Weldin Plantation Site, 7NC-B-11
Phase III Archaeological Data Recovery
Blue Ball Properties Area Transportation
Improvement Project

Brandywine Hundred,
New Castle County, Delaware



Stratum I: 10YR 2/1 loam with large rocks
Stratum II: 10YR 3/2 loam
Stratum III: mottled 10YR 5/8 and 10YR 3/2 clay loam

EOE - End of Excavation
 - Rock



McCormick Taylor
 Engineers & Planners
 Since 1946

Figure 13
Test Unit 17 East Profile

Weldin Plantation Site, 7NC-B-11
 Phase III Archaeological Data Recovery
 Blue Ball Properties Area Transportation
 Improvement Project

Brandywine Hundred,
 New Castle County, Delaware

C. National Register Evaluation of 7NC-B-11

7NC-B-11 was evaluated for eligibility in the National Register of Historic Places. A property is eligible for the National Register if it possesses integrity of location, design, setting, workmanship, feeling, and association and meets one of the following criteria (Little : 2000):

- Criterion A: Associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: Associated with persons significant in our past.
- Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- Criterion C: Have yielded, or may be likely to yield, information important in prehistory or history.

Within the context of farmstead archaeology in Delaware, the Weldin Plantation Site (7NC-B-11) possesses a number of unique and exceptional features that make it eligible for listing on the National Register of Historic Places under Criterion D. A National Register of Historic Places Registration Form was completed for the site (*Appendix D*).

1. Historical Documentation and Oral History

As has been demonstrated by the Phase I report generated by Taylor (1989), there is a great deal of documentary evidence concerning the site and its occupants. Deeds for the site show a clear chain of ownership back to the original survey in 1680. Most of the proprietors drafted wills providing at least partial descriptions of the property and their possessions (excepting Israel Peterson 1722-?). Fire Blotter Records from 1796 and 1803 provide a good description of the farmhouse and outbuildings during the property's period of tenancy. Census information from 1790 provides information on the household and possessions of one of the farm's tenants, William Little, who occupied the site as early as 1796, and as late as 1799. Tax assessments on Albanus Logan (husband of Maria Dickinson and co-owner of the property in the mid-nineteenth century) dating to 1837 and 1852 provide information on the size of the property and buildings. In addition, data from the Brandywine Hundred tax assessments (1849, 1852, 1861) and U.S. Agricultural Census of 1850 and 1860 provide information on the household, stock, and crop yields of John Bradford, tenant-occupant from 1849-1861. A Land Survey from 1743-1745 provides the metes and bounds of the property as originally surveyed in 1680. Historic Maps (Rea and Price 1849, Beers 1868 and Baist 1893) provide general information as to building location and general development of the area through time. In addition to these primary resources, Scharf (1888); Thompson (1984); Passmore (1975); and Runk (1899); and Talley (1899), provide personal/historical information on several of the site's owners.

The researchers were also able to make contact with Mr. Thomas Weldin, a family descendant who worked on the farm as a child in the 1920's and early 30's. Mr. Weldin has stated that he would be happy to relate his recollections of the property from that time period. There is therefore a high probability that an oral history of a period in the property's life can be created.

2. Archaeological Integrity

The site was occupied continuously from its first occupation in the early eighteenth century through its abandonment in 1934. There is some evidence of dateable, spatially discrete deposits (particularly later deposits), although Jacob R. Weldin and son appear to have engaged in a great deal of earth-moving during the mid to late nineteenth century. Some excavated contexts demonstrate mixing of artifacts dating from the mid eighteenth through the mid nineteenth century, probably a result of these activities.

Since only a small portion of the site has been sampled, the knowledge of the site assembled thus far is still fragmentary in this regard. The farmstead proper is large, and only a small portion has been sampled. There is potential for earlier, intact middens, privies and other features in the side and rear yards, as well as under Weldin Road. Future excavations should be geared towards revealing potential deposits, perhaps through mechanical stripping.

The physical integrity of the site is excellent. While the identification of the location of all of the early structures is incomplete at this stage, the remains of many structures dateable to (at least as early as) the mid-nineteenth century are visible at the ground surface. Preliminary excavations have also revealed evidence of post-constructed buildings in the rear yard, buried foundation remains of a separate room or building on the north side of the dwelling, and footings from possible porch features on the north and south side of the dwelling. The extant stone foundation walls to four buildings are evident on the surface. The corral walls and the bank (of the former bank barn) are extant. The site artifact assemblage thus far consists of 13,555 artifacts from the most recent excavations and an as yet undetermined number of artifacts from earlier excavations by Thunderbird, Inc. (No complete inventory was available at the time of this writing.) On the basis of the information collected during the excavations at the Weldin Plantation Site, it is clear that the site contains artifacts from all periods of occupation, as well as a wealth of faunal remains.

3. Representativeness

The site is located on an upland setting on the Piedmont Plateau Physiographic Province. The mapped soils are Talleyville silt loam, with 2-5% slopes, moderately eroded (TaB2), a well drained soil (Mathews and Lavoie 1970). The Weldin Plantation Site is an historic farmstead that may date to the early eighteenth century and was occupied until the mid-twentieth century. The site was identified previously and is discussed in greater detail in *Archeological Investigations of the Proposed Dualization of Route 141 (Centre Road), From Route 100 (Montchanin Road) to U.S. Route 202 (Concord Pike), New Castle County, Delaware*, Thunderbird Archeological Associates, Inc., 1989.

Because the site may date to the 1710s, it could have been occupied throughout each of the periods described in the *Management Plan for Delaware's Historic Archaeological Resources*. During the Exploration and Frontier Settlement Period, the *Management Plan* indicates that dispersed English farmsteads are located along the major creeks. Information relating to domestic economy, manufacturing and trade, landscape interaction, and social group identity, behavior, and interactions might be obtainable from excavations at this site.

The Intensified and Durable Occupation Period continues to provide a context for domestic economy for farmsteads that may have slaves or indentured servants. The evolution of the site throughout the Transformation from Colony to State, Industrialization and Capitalization, and Urbanization and Suburbanization Periods may allow a unique opportunity to compare the occupation of one site during the eighteenth, nineteenth, and twentieth centuries. The property was owner occupied at various times throughout its history and tenant occupied during other times. Comparison of different occupations, with presumed differences in economic status, may provide important data concerning socioeconomic patterns throughout the history of this site.

Farm use at Chestnut Hill varied through time. During its first seventy-five years of existence it was owner occupied. No historical data is available concerning farm produce from that era. However, it seems likely that the site followed known agricultural patterns and focused on market wheat production. During the farm's tenancy period, the property was almost certainly devoted principally to the raising of livestock, with perhaps some attention to dairy farming. The importance of dairy farming increased in the area towards the middle of the nineteenth century. The documentary evidence regarding the early to mid-nineteenth century tenant, John Bradford, indicates increasing emphasis on dairy farming. The documentary and archaeological evidence (size, nature and layout of structures, dairy related ceramics, glass) demonstrate a shift towards dairy production in the mid-nineteenth century until the site's abandonment in the twentieth century.

4. Research Questions and Needs

a. Landscape

The extant ruins of the Weldin Plantation Site can reveal a great deal about the arrangement of daily activities on a large nineteenth century dairy farm. Other farmsteads excavated in the region (cf. William Strickland Site [7K-A-117], Whitten Rd. Farm [7NC-D-100]. W. Eager Farm) have lacked the integrity of Weldin's structural remains and as a consequence have required more substantial field efforts to identify and map building locations and layout. Because the stone foundations of many of the structures at Weldin are still evident on the surface, such work is not necessary. The visible evidence provides us with a "key" to the activities carried out on the farmstead.

Aside from providing a base map for intra-site activity, the Weldin structures can also provide us with a sample of the layout of a large, apparently successful, owner-occupied farm that can be of value in discussing such properties on a regional level. Detailed data generated at the Weldin Plantation Site can be compared to that collected at other farmsteads to interpret differences and similarities of farm layout across spatial, temporal, and socioeconomic lines. Potential comparisons may be made to the William Strickland Site (7K-A-117); the Whitten Road Farm (7NC-D-100); the W. Eager Farm; The Grant Tenancy Site (7NC-B-6); and the Buchanon-Savin Farmstead, for example.

In addition to the known structural remains - most of which are associated with the mid-nineteenth through twentieth centuries - further excavations would certainly yield evidence of other, perhaps earlier, building remains. Evidence for one such building appears to have been identified on the north side of the extant dwelling remains, where buried foundation walls were

discovered. Excavations near this wall, in the north yard (backyard of the dwelling) revealed the site's greatest number of early artifacts (plain white salt-glazed stoneware and scratch-blue; delft; early glass) and a notable lack of late-nineteenth century artifacts in the buried strata. Howard Weldin, a descendant of the site's owner-occupants from the mid-nineteenth through early twentieth centuries, also recalls that there was a stone-lined well in the field on the north side of Weldin Road. Considered together, this suggests that early architectural/landscape remains are likely to be found in the north yard, as well as under the existing Weldin Road.

The size of the buildings, their style (as much as can be determined from the remains), layout, materials, and construction methods, provide a wealth of information that can be interpreted with relation to the ideas, beliefs, and values of the site's most significant (and well-known) occupants, Jacob R. Weldin and his son, J. Atwood Weldin. As recent research has shown (Mascia 1996; Grettler 1991; Siders 1991; Herman 1989), middle nineteenth century architecture and farm layout indicates much about the ideology of a site's occupants. When considered in tandem with issues such as socioeconomic status, ethnicity, and other factors, the size of a site's buildings, their durability, style, and layout all take on added significance. The question is phrased more explicitly by De Cunzo and Catts (1990: 132):

How do socioeconomic status and aspirations, level of technological development, household economy, ethnicity and ideology, values and beliefs all influence the construction of domestic buildings and the use and improvement of the land? (132).

This research topic seems especially suited to the Weldin site, since both Jacob and his son Atwood invested so much in their farm's structures. It can be examined at a functional level (what are the functional attributes of massive, durable outbuildings, the choice of a bank barn etc.), and at an aesthetic level (the Weldin Plantation Road Entrance, wood-framing over the stone house, possible addition of porches, planting of trees, etc.).

To better answer questions as to why the Weldins "dressed" their farm as they did, it would be useful to examine the literature pertaining to progressive farming at this time. Information on the Weldin's themselves, contained in Scharf (1888); Runk (1899); and Talley (1899) will also be vital to developing the type of personal details on the Weldins that will be necessary to address questions of ideology. Grettler's (1991) work on rural reform and its archaeological manifestations will provide important perspectives as well. Finally, historical analyses that deal with such topics as the economic and social implications of progressive farming in the region (cf. Michel 1985; Passmore 1978; Passmore 1975) and the consideration of "elite" agricultural families in New Castle County, particularly in the late nineteenth century will provide excellent cross-disciplinary perspectives.

Again, the archaeological evidence and interpretation of ideologically motivated choices can be compared to that seen at other sites in the region, across temporal, socioeconomic and ethnic lines. If earlier structures can be positively identified at the site level at the Weldin Plantation, then the data these present can be compared with the mid- to late-nineteenth century architectural remains at the site to construct a better picture of the interplay of ideology and architecture at the site during earlier periods.

It should be noted that any discussion of ideology is highly interpretive. However, there appears to be adequate historical research to "reconstruct" a good picture of the Weldins as well as some of their predecessors at Chestnut Hill. Combined with archaeological evidence of architecture and farm layout, we believe that the Weldin Plantation possesses excellent potential for research on this theme.

b. Socioeconomic Phenomena

Because of the changes that occurred in the local agricultural economy during the period of time the Weldin Plantation Site was occupied, and because the farm was both tenant- and owner-occupied over the course of its history, the site presents a significant resource that may yield important archaeological data regarding the shift in the product focus of the farm over time, the changes in its relative emphasis on subsistence vs. market production, and the contrast between the household assemblages associated with its tenant occupants vs. those associated with resident owners. The farm's history appears to reflect the agricultural trends seen more generally in the region: initial (probable) emphasis on wheat production in the early to late eighteenth century under a resident owner, more generalized farm production during the years of its tenancy (1785-1862), followed by a shift during the Weldin family's ownership to large-scale dairying, which continued up to the first quarter of the twentieth century. This very closely parallels the pattern evidenced in northern Delaware as a whole (Bidwell and Falconer 1941; De Cunzo and Catts 1990; Munroe 1978).

As noted above, the historical record provides sufficient information to construct a fairly detailed view of the Weldins' farming activities and, to a lesser extent, those of the previous occupants of the farm (Scharf 1888; Runk 1899; Taylor et al. 1989). Although the Weldins' extensive construction activities have substantially disturbed some areas where the evidence of earlier buildings and other archaeological features might have been found, there are still several parts of the site that were unaffected by this work. In addition, because the orientation of the access road to the property changed over the time of its occupation, the orientation of the farm's structures is likely to have changed as well, increasing the likelihood that subsurface evidence of previous activities remains intact in areas the Weldins would have found logistically less advantageous. The identification of such features and the interpretation of their function should yield information that would be of use in identifying the specific agricultural activities undertaken at the site, as well as shedding light on the domestic lives of the farm's residents over the years. This data, when considered in conjunction with the available textual records, should yield valuable information regarding the character of the lives of the residents of the farm during discrete periods, both before and during the Weldins' occupation.

De Cunzo and Garcia (1992) suggest that the comparison of households in an area with regard to their class status and role in the agricultural economy ("Large land-owning agriculturalists vs. tenants vs. small subsistence agriculturalists vs. small commercial, diversified agriculturalists, etc." [pg. 277]) represents an important avenue for historic archaeological research. The conclusions drawn from the analysis of the data collected at the Weldin Plantation Site will be ideal for use in such a higher-level study. Because the site promises to yield information relative to comparisons across a variety of dichotomous socioeconomic classifications, it should be of

use in comparative studies that include other sites in the region across a fairly wide spectrum of site types and chronological periods.

D. Assessment of Effect

An effect to an eligible historic property may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register of Historic Places, as defined in 36 CFR § 800.16(i). If the project is determined to have an effect on an eligible or potentially eligible resource, then the Criteria of Adverse Effect (36 CFR § 800.5) is applied. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

The portions of 7NC-B-11 that is located within the APE for this project will be destroyed by the proposed construction project. Therefore, the project will have an adverse effect on this National Register eligible archaeological site.

E. Proposed Mitigation

The text below is what was included in the Phase II Archaeological Evaluation Management Summary (Simons et al. 2001); therefore, it is written as a proposal, as though the work has not yet been completed.

Archaeological data recovery is recommended to mitigate the adverse effect that the project will have on 7NC-B-11. The recommended data recovery involves a combination of intensive background research and archaeological excavations.

This work will be designed to meet the requirements of all applicable federal and state mandates that apply to the project, as well as Stipulation VII.A of the Memorandum of Agreement executed for the project. Federal mandates for cultural resources protection include: The United States Department of Transportation Act of 1966 as amended; the National Environmental Policy Act of 1966; the National Historic Preservation Act of 1966 as amended; Executive Order 11-593; the Archaeological and Historic Preservation Act of 1974. This work will be performed in accordance with the Delaware State Historic Preservation Office's *Guidelines for Architectural and Archaeological Surveys in Delaware* (October 1993 as amended) under the supervision of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards.

The following mitigation plan was developed in April of 2003 in consultation with DeIDOT, FHWA, and the Delaware SHPO.

1. Background Research

Additional background research will be conducted to develop a context in which to discuss the data recovered from the site. The background research will consist of gathering data about similar archaeological sites in Delaware and on the Piedmont in adjacent states as well as information about farming during the period of occupation of the site. The research questions pertain to landscape use and socioeconomic phenomena. The additional research will be geared toward obtaining information about these topics in this region during the eighteenth and nineteenth centuries. Additional research will be conducted about the Weldin family and this property, and will include examination of newspapers, property inventories, court records (orphans court, wills, marriage/birth records). Oral interviews of Weldin descendants or individuals who remember the property during the early part of the twentieth century will be attempted. Appropriate reference documents will be utilized and will include, but not be limited to, “Dwellings of the Rural Elite” and “Agricultural Buildings and Complexes of Mill Creek Hundred”.

2. Recordation of above ground foundations

The existing above ground foundations will be recorded using photographs and sketches by Watson & Henry prior to any stabilization or removal of the foundations. Watson & Henry will provide an informal recordation report, based on the DE SHPO’s *Delaware Guidelines for Documentation of Historic Properties as an Mitigation of Adverse Effect under Section 106 of the NHPA*. The purpose of this work is to recover information that may be relevant to research topics in areas of the site directly affected by the construction. The information and graphics derived from this work could also be useful in developing public outreach materials. McCormick Taylor will not be involved in this work and the results of this task are not discussed in this report.

3. Archaeological Field Work

The project will impact approximately 22,690 square feet of the archaeological site. Structure A will be destroyed during construction, while the other structures will not be directly impacted. It has not yet been determined if Structure A will be reconstructed or how it will be interpreted after construction is completed. The portion of the site that will be impacted contains the majority of the contexts of the site with eighteenth century TPQs. The majority of the contexts that date to the eighteenth century are under strata that date to the nineteenth century. Therefore, there is the opportunity to obtain data from both centuries.

It is anticipated that 30 3x3 foot test units will be excavated in the portion of the site that will be impacted by the project. Each 3x3 test unit will be excavated by natural strata. All soils recovered from these tests will be screened through ¼ inch hardware cloth, and all artifacts will be segregated by stratigraphic context. Drawings will be made of all stratigraphic tests, and representative stratigraphic profiles will be included in any reports. Photographs will be taken as per the Delaware SHPO’s *Guidelines for Architectural and Archaeological Surveys*.

The field work has been designed to focus on the areas of the site which appear to contain intact eighteenth century contexts.

Proposed placement of first twenty units at the Weldin site:

- (1) Expand TUs 5 and 6 into a 3x2 block – 4 units
- (2) Expand TUs 1 and 2 into a 2x2 block – 2 units
- (3) Expand TUs 11 and 12 into a 2x2 block – 2 units
- (4) Expand TU 9 and 10 into a 2x2 block – 2 units
- (5) Expand TUs 7 and 8 into a 2x2 block – 2 units
- (6) Expand TU 13 into a 1x2 block – 1 unit
- (7) Place a TU near STP 49 – 1 unit
- (8) Place a TU near STP 14 – 1 unit
- (9) Place a TU near STP 29 – 1 unit
- (10) Place a TU near STP 50 – 1 unit
- (11) Place a TU along the exterior of the north wall – 1 unit
- (12) Place two TUs within the interior of the newer part of the building - 2 units

The other ten units will be placed as seems appropriate based on the results of the previous excavations. The decision on placement of the additional units will be made in consultation with DelDOT, the Delaware SHPO, and DNREC.

4. Laboratory Analysis

The analysis of the recovered artifacts will focus on the interpretation of the assemblage regarding the socioeconomic stature of the inhabitants of the site during the different occupations of the site. The analysis will include, but not be limited to, mapping of artifact distributions, mapping and discussion of artifact patterning, and information concerning use and change in use on different areas of the site.

Flotation samples will be taken and processed from excavated features. Floral and faunal analysis will be completed for all floral and faunal materials recovered by experts in those fields.

All artifacts will be processed, inventoried, catalogued and analyzed as per *Guidelines for Architectural and Archaeological Surveys in Delaware*, Delaware State Historic Preservation Office, October 1993 and *Curation Guidelines and Standards for Archaeological Collections*, Delaware State Museums, ca. 1997. The Delaware State Museum will be consulted concerning any unusual or fragile artifacts which might need specialized processing or stabilization.

An archaeologist from MCCORMICK TAYLOR will visit the Delaware State Museum to examine the collection of artifacts and associated paperwork from the Phase I survey completed by Thunderbird Archeological Associates. This data will be incorporated into MCCORMICK TAYLOR's analysis.

Per Stipulation VII.D of the MOA, the archaeological artifacts and all records generated from this data recovery will be curated at the Delaware State Museum. MCCORMICK TAYLOR will

transfer this material to the Delaware State Museum after the final data recovery report is concurred upon by DelDOT and the SHPO.

5. Stabilization of Existing Foundations

The stabilization of the foundations for Structures B, C, and D and the Barnyard Complex will be part of the mitigation for the site. This stabilization will be completed by Watson & Henry; they are currently completing a proposal and scope of work. McCormick Taylor will not be involved in this work and the results of this task are not discussed in this report. In addition, an evaluation will be made of the foundations to determine if they are likely to be impacted by vibration during construction. Coordination will occur with the Delaware Department of Natural Resources and Environmental Control to determine how much stabilization is appropriate.

6. Technical Report Preparation

Brief management summaries will be prepared for distribution to DelDOT, the Delaware SHPO, and DNREC for review when consultation is required to determine the need for additional testing. The summaries will include sufficient information to evaluate the progress of the data recovery and determine if adequate work has been completed.

A technical Data Recovery report will be prepared which will document the field work and laboratory analysis and discuss the significance of the site. The document will contain an abstract, introduction, project location and general description, results of background research, research goals and design, field methodology, field results, artifact description and analysis, interpretations, significant information the site has contributed, references, and appropriate mapping, photographs, figures, and appendices. The report will also be provided in a format so that it can be available on DelDOT's website.

7. Public Involvement and Outreach

Six open house days will be scheduled while the excavations are in progress. The general public and/or specific groups will be invited to the site for a tour and hands-on assistance.

Information which interprets the significance of the site will be prepared and distributed in a publicly accessible manner. This information would be disseminated by one or more of the following means: exhibits/display boards at public locations; resource information brochure(s)/booklets; lesson plan/slide or video presentation that can be used by schools and other appropriate interested groups and organizations; posters; DelDOT's website; and/or presentations at local schools or meetings for interested groups. The specific appropriate public outreach will be developed in consultation with the Consulting Parties and other interested members of the public.

8. Monitoring of Structures B, C, D, and the Barn Complex

The foundations will be evaluated by a structural engineer prior to project construction. McCormick Taylor will not be involved in this work and the results of this task are not discussed

in this report. Portions of the free standing walls may have to be removed for safety reasons. The structural engineer will monitor the foundations during construction to ensure that they are not damaged. An evaluation will be conducted after construction. If any damage occurred due to vibration or other project related activities, coordination will occur among the consulting parties to determine the appropriate course of action.

9. Monitoring of Removal of Weldin Road

An archaeologist from MCCORMICK TAYLOR will be present during the removal of existing Weldin Road to document any archaeological features or artifacts that are identified. If archaeological resources are identified, DelDOT will determine, in consultation with the SHPO, how to proceed.