



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18CA261

Site Name: Barwick's Ordinary

Prehistoric

Other name(s)

Historic

Brief Description:

Mid-late 18th Century Ordinary & county seat; Early & Late Archaic and Late Woodland short-term camp, Contact

Unknown

Site Location and Environmental Data:

Maryland Archaeological Research Unit No. 4

SCS soil & sediment code CdA

Latitude 38.9040

Longitude -75.8399

Physiographic province Eastern Shore Coastal P

Terrestrial site

Underwater site

Elevation m

Site slope 0-2%

Ethnobotany profile available

Maritime site

Site setting

-Site Setting restricted

-Lat/Long accurate to within 1 sq. mile, user may need to make slight adjustments in mapping to account for sites near state/county lines or streams

Topography

- Floodplain
- Hilltop/bluff
- Interior flat
- Upland flat
- Ridgetop
- Terrace
- Low terrace
- High terrace
- Rockshelter/cave
- Hillslope
- Unknown
- Other

Ownership

- Private
- Federal
- State of MD
- Regional/county/city
- Unknown

Nearest Surface Water

Name (if any) Choptank River

Saltwater

Ocean

Estuary/tidal river

Tidewater/marsh

Spring

Freshwater

Stream/river

Swamp

Lake or pond

Spring

Minimum distance to water is 35 m

Temporal & Ethnic Contextual Data:

Paleoindian site

Woodland site

Contact period site

ca. 1820 - 1860

Archaic site

MD Adena

ca. 1630 - 1675

ca. 1860 - 1900

Early archaic

Early woodland

ca. 1675 - 1720

ca. 1900 - 1930

Middle archaic

Mid. woodland

ca. 1720 - 1780

Post 1930

Late archaic

Late woodland

ca. 1780 - 1820

Unknown historic context

Unknown prehistoric context

Unknown context

Ethnic Associations (historic only)

Native American

Asian American

African American

Unknown

Anglo-American

Other

Hispanic

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

- Multi-component
- Village
- Hamlet
- Base camp
- Rockshelter/cave
- Earthen mound
- Cairn
- Burial area
- Misc. ceremonial
- Rock art
- Shell midden
- STU/lithic scatter
- Quarry/extraction
- Fish weir
- Production area
- Unknown
- Other context

Historic

Urban/Rural? Rural

Domestic

- Homestead
- Farmstead
- Mansion
- Plantation
- Row/townhome
- Cellar
- Privy

Industrial

- Mining-related
- Quarry-related
- Mill
- Black/metalsmith
- Furnace/forge
- Other

Furnace/forge

Other

Transportation

- Canal-related
- Road/railroad
- Wharf/landing
- Maritime-related
- Bridge
- Ford

Educational

Commercial

- Trading post
- Store
- Tavern/inn

Military

Battlefield

Fortification

Encampment

Townsite

Church/mtg house

Ch support bldg

Burial area

Cemetery

Sepulchre

Isolated burial

Bldg or foundation

Possible Structure

Post-in-ground

Frame-built

Masonry

Other structure

Slave related

Non-domestic agri

Recreational

Midden/dump

Artifact scatter

Spring or well

Unknown

Other context

Interpretive Sampling Data:

Prehistoric context samples

Soil samples taken N

Flotation samples taken N

Other samples taken

Historic context samples

Soil samples taken N

Flotation samples taken Y

Other samples taken

Dendrochronology - sample of cellar wall plank submitted for analysis



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Diagnostic Artifact Data:

Projectile Point Types		Koens-Crispin	0
Clovis	<input type="text"/>	Perkiomen	<input type="text"/>
Hardaway-Dalton	<input type="text"/>	Susquehana	<input type="text"/>
Palmer	<input type="text"/>	Vernon	<input type="text"/>
Kirk (notch)	<input type="text"/>	Piscataway	<input type="text"/>
Kirk (stem)	<input type="text"/>	Calvert	<input type="text"/>
Le Croy	<input type="text"/>	Selby Bay	<input type="text"/>
Morrow Mntn	<input type="text"/>	Jacks Rf (notch)	<input type="text"/>
Guilford	<input type="text"/>	Jacks Rf (pent)	<input type="text"/>
Brewerton	<input type="text"/>	Madison/Potomac	<input type="text"/>
Otter Creek	<input type="text"/>	Levanna	<input type="text"/>

Prehistoric Sherd Types

Marcey Creek	<input type="text"/>	Popes Creek	<input type="text"/>	Shepard	<input type="text"/>	0	Keyser	<input type="text"/>	0
Dames Qtr	<input type="text"/>	Coulbourn	<input type="text"/>	Townsend	<input type="text"/>	0	Yeocomico	<input type="text"/>	0
Selden Island	<input type="text"/>	Watson	<input type="text"/>	Minguannan	<input type="text"/>	0	Monongahela	<input type="text"/>	0
Accokeek	<input type="text"/>	Mockley	<input type="text"/>	Sullivan Cove	<input type="text"/>	0	Susquehannock	<input type="text"/>	0
Wolfe Neck	<input type="text"/>	Clemson Island	<input type="text"/>	Shenks Ferry	<input type="text"/>	0			
Vinette	<input type="text"/>	Page	<input type="text"/>	Moyaone	<input type="text"/>	0			
				Potomac Crk	<input type="text"/>	0			

Historic Sherd Types

Earthenware		Ironstone	0	Staffordshire	0	Stoneware			
Astbury	<input type="text"/>	Jackfield	<input type="text"/>	Tin Glazed	<input type="text"/>	0	English Brown	<input type="text"/>	0
Borderware	<input type="text"/>	Mn Mottled	<input type="text"/>	Whiteware	<input type="text"/>	0	Eng Dry-bodied	<input type="text"/>	0
Buckley	<input type="text"/>	North Devon	<input type="text"/>	Porcelain	<input type="text"/>	0	Nottingham	<input type="text"/>	0
Creamware	<input type="text"/>	Pearlware	<input type="text"/>				Rhenish	<input type="text"/>	0
							Wt Salt-glazed	<input type="text"/>	0

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts		Other fired clay	0
Flaked stone	<input type="text"/>	Human remain(s)	<input type="checkbox"/>
Ground stone	<input type="text"/>	Modified faunal	<input type="text"/>
Stone bowls	<input type="text"/>	Unmod faunal	<input type="text"/>
Fire-cracked rock	<input type="text"/>	Oyster shell	<input checked="" type="checkbox"/>
Other lithics (all)	<input type="text"/>	Floral material	<input type="checkbox"/>
Ceramics (all)	<input type="text"/>	Uncommon Obj.	<input type="text"/>
Rimsherds	<input type="text"/>	Other	<input type="checkbox"/>

Prehistoric Features

Mound(s)	<input type="text"/>	Storage/trash pit	<input type="checkbox"/>
Midden	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>
Shell midden	<input type="checkbox"/>	Ossuary	<input type="checkbox"/>
Postholes/molds	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
House pattern(s)	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Palisade(s)	<input type="checkbox"/>	Koens Crispin point cache	<input type="checkbox"/>
Hearth(s)	<input type="checkbox"/>		
Lithic reduc area	<input type="checkbox"/>		

Lithic Material

Jasper	<input checked="" type="checkbox"/>	Fer quartzite	<input type="checkbox"/>	Sil sandstone	<input type="checkbox"/>
Chert	<input checked="" type="checkbox"/>	Chalcedony	<input type="checkbox"/>	European flint	<input checked="" type="checkbox"/>
Rhyolite	<input checked="" type="checkbox"/>	Ironstone	<input type="checkbox"/>	Basalt	<input type="checkbox"/>
Quartz	<input checked="" type="checkbox"/>	Argilite	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Quartzite	<input checked="" type="checkbox"/>	Steatite	<input type="checkbox"/>	Other	<input type="checkbox"/>
		Sandstone	<input type="checkbox"/>		

Dated features present at site

Historic Artifacts		Tobacco related	0
Pottery (all)	<input type="text"/>	Activity item(s)	<input type="text"/>
Glass (all)	<input type="text"/>	Human remain(s)	<input type="checkbox"/>
Architectural	<input type="text"/>	Faunal material	<input checked="" type="checkbox"/>
Furniture	<input type="text"/>	Misc. kitchen	<input type="text"/>
Arms	<input type="text"/>	Floral material	<input type="checkbox"/>
Clothing	<input type="text"/>	Misc.	<input type="text"/>
Personal items	<input type="text"/>	Other	<input type="checkbox"/>

Historic Features

Const feature	<input checked="" type="checkbox"/>	Privy/outhouse	<input type="checkbox"/>	Depression/mound	<input type="checkbox"/>	Unknown	<input checked="" type="checkbox"/>
Foundation	<input type="checkbox"/>	Well/cistern	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Cellar hole/cellar	<input checked="" type="checkbox"/>	Trash pit/dump	<input type="checkbox"/>	Railroad bed	<input type="checkbox"/>	dairy	<input type="text"/>
Hearth/chimney	<input checked="" type="checkbox"/>	Sheet midden	<input type="checkbox"/>	Earthworks	<input type="checkbox"/>		
Postholes/molds	<input checked="" type="checkbox"/>	Planting feature	<input type="checkbox"/>	Mill raceway	<input type="checkbox"/>		
Paling ditch/fence	<input type="checkbox"/>	Road/walkway	<input type="checkbox"/>	Wheel pit	<input type="checkbox"/>		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

Additional radiocarbon results available



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Unknown

External Samples/Data:

Collection curated at N/A

Additional raw data may be available online

Summary Description:

Site 18CA261, also known as Barwick's Ordinary site, is a historic site situated on a low terrace approximately 65 meters southeast of the Choptank River. It is located northeast of a large eastward bend in the river above the confluence of the Choptank and Chapel Branch, and about 1.4 miles north of Denton, the modern-day seat of Caroline County government. The site sits 6-7 meters above sea level with slopes that range between 0 and 2%. Most of the site is situated in a mowed field, but portions of it likely extend into wooded areas and more formal residential yards.

Archival background research reveals that 18CA261 is likely the remains of an 18th-century ordinary or tavern associated with James Barwick of Dorchester, later Caroline County. This tavern was part of a small complex known as "Melville's Warehouse" or "Melville's Landing" that served as the first county seat for Caroline County from its founding in 1774 until its relocation to Denton, or "Edenton", in 1790 (with the exception of some short-lived removals to the Greensboro area). Melville's landing appears to have consisted of a large tobacco-prizing warehouse (which served as the courthouse), a storehouse that was converted to the county jail, a landing, a ferry across the Choptank, the ordinary, and likely some outbuildings.

William Harper sold the property, known as Cedar Point at the time, to David Melville on March 4th, 1736 for £25 current money. Both deeds mention houses, outbuildings, and orchards, but this may simply be pro forma language rather than an accurate description of extant landscape features. The 1736 deed describes David Melville as a tailor of Dorchester County. He is believed to have lived in lower Dorchester County, but had a functioning mill east of the site on a branch of Ingram's Creek.

Melville began piecing together a sizable tract of land near the mouth of Ingram's Creek on the Choptank. To the 300 acre Cedar Point tract, he would add 200 acres to the north called "Lookout" in 1738, 400 acres to the northeast called "Venture" in 1747, and a 4 acre "Addition to Cedar Point" to fill a gap between the tract and the river in 1747. The most interesting of these patents is the last one, which mentions the presence of several structures and other landscape features. When it was patented, Addition to Cedar Point, a triangular "wedge" in the vicinity of 18CA261, already contained a small apple orchard, a 40 by 25 foot clapboard tobacco pressing and packing warehouse, a 30 by 20 foot clapboard storehouse, and a 15 by 10 foot clapboard dwelling house described as "old" and "much shuttered". It seems likely that these structures were situated at the northwest corner of Cedar Point or the eastern edge of Addition to Cedar Point. Again, the surveys prior to 1779 are problematic due to the faulty recordation of the original Cedar Point patent.

It is likely that David Melville already operated the tobacco warehouse described in the certificate for Addition to Cedar Point regardless of the fact that he had only just patented the land. The tract was surveyed in November of 1747, and already by June of 1748, the Maryland General Assembly considered it established enough to relocate tobacco inspection to Melville's Warehouse from a warehouse on Peter Rich's land near Greensboro. Recording the extant structures on the 1747 patent may have simply been a way for Melville to ensure that he held title to the land on which his infrastructure sat regardless of where the boundary lines for Cedar Point and its Addition actually lay. He may even have begun construction of the tobacco warehouse and storehouse as early as 1736. The small 15 X 10 ft dwelling already described as old and shuttered in 1747 probably pre-dated the 1736 deed.

David Melville died in 1756. His will, written three years prior, devised the Cedar Point tract (in portions) to his daughters Elizabeth, Mary, and Tryphenia. Addition to Cedar Point, Venture, and Lookout were left to his heirs at large. The Melville heirs did not split up the property and the warehouse continued to be known as "Melville's Warehouse" or "Melville's Landing" until the end of the 18th century. Presumably either they, or an inspector who leased the warehouse continued to operate the packing and inspection station.

In 1763, the Melville heirs sold all of Cedar Point, Addition to Cedar Point, Venture, and Lookout to Richard Lloyd of Kent County. Richard Lloyd may have purchased the parcel for his nephew, Colonel Edward Lloyd of Talbot County. The Deed books of Caroline, Dorchester, Kent and Talbot Counties were all searched for evidence of a conveyance from Richard Lloyd to Edward Lloyd, but none was found.

Nevertheless, we know that by early 1776 it was owned by Edward and not Richard. It appears that the Lloyd's were largely absentee landlords as Richard lived and primarily had business dealings in Kent County, and Edward lived and primarily had business dealings in Talbot County. On January 4th, 1776, the newly formed Caroline County Court resolved to pay 5£ current money to Col. Edward Lloyd for the use of the "old storehouse at Melvills" as a county jail. The Caroline County Court had been meeting on the Lloyds' land at Melville's Warehouse since its founding two years prior in 1774. The December 1773 Act by the Maryland General Assembly that divided portions of Dorchester and Queen Anne's Counties to create Caroline, had specified that a county courthouse and prison be established, "at or adjoining Pig Point on the East Side of Choptank River below Melvins [sic] Warehouse". The specified location was on the Lloyd lands south of Site 18CA261 at Denton. That location would eventually become the county seat, but not until after the American Revolution and ratification of the U.S. Constitution. Until then, Melville's Landing, the closest thing to a settlement near the center of the newly formed county, would have to serve.

The early records of the court at Melville's provide some interesting documentation concerning the facilities at the location, and who was charged with maintaining them. Orders of the court between 1774 and 1776 included direction for one James Barwick, to locate a suitable room at the settlement within which the county clerk could hold regular hours, where court could be held, and that firewood would be at the ready for court use. Barwick was paid in tobacco (as most at the time were) for his services. James Barwick was the local innkeeper at Melville's landing and the practice of paying a tavern or ordinary keeper to maintain public facilities at courthouse towns was not uncommon.

Barwick received his tavern license to keep an ordinary at Melville's Landing from the Caroline County Court on November 24th, 1775. It is not presently known if he had a prior license under Dorchester County. The license specifies that the ordinary was in his dwelling house and that Barwick would, "...not suffer loose idle or disorderly persons to tittle, game, or commit any disorders or other irregularities in his said Ordinary".

In addition to being the local innkeeper, James Barwick, also operated the ferry at Melville's Landing. On January 4th, 1776 the court agreed to pay Barwick 3,500 pounds of tobacco to operate and maintain a ferry across the Choptank from Melville's Landing to the "Causeway Opposite". Among Barwick's many duties as caretaker at the county seat, was maintenance of the county jail. In November of 1775, Barwick was ordered to make repairs to the jail; presumably the old storehouse at Melville's owned by Edward Lloyd that was mentioned above.



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Unknown

Barwick was to repair the foundation of the storehouse by placing logs under the sills and sinking them into the ground (i.e. he was to convert an earthfast sill-on-ground structure to a more stable post-in-ground framework). The old storehouse and jail became the centerpiece of a dispute within the county over where court should be held. An order of the court in August of 1778, moved the court to Choptank Bridge or "Bridgetown" to the north (today's Greensboro). The court further ordered that the sheriff should remove county prisoners from the jail at Melville's to a jail at Bridgetown, "...fit to receive them". The advanced age of the storehouse/prison at Melville's, it seems, was being used as an excuse to move the county court. This turn of events was short-lived. In late 1778, the court ruled that the move had been unwarranted and though court was held off-and-on at both locations in 1779 and early 1780, after the March 1780 session, all business moved back to Melville's Warehouse and Landing.

On April 14th, 1779, a deed was drawn up which is of extreme interest to the present study. On that date, Colonel Edward Lloyd sold the tracts he had acquired from his uncle to Colonel Matthew Driver of Caroline County. Driver owned much of the land to the east of Melville's Landing in addition to the newly acquired 642 acres that included the county seat. Driver was a wealthy planter, a Justice of the County Court, and would go on to serve during the American Revolution as Chairman of the Committee of Observation. Most importantly, the 1779 deed describes the conveyance beginning as follows: "Beginning for the outline of the whole at a marked Beach Tree standing also on the South East side of Choptank River about one hundred and twenty perches above the House where James Barwick now lives in, it being the first Bounder of the aforesaid tract called Venture...".

Thus, we know that the dwelling house in which James Barwick operated his ordinary was situated approximately 120 perches (or 1,980 feet) below this marked beech tree on the Choptank. Matthew Driver's 1783 patent certificate for a tract he called "Solomon's Desire" provides even more information: "Beginning at a marked beach Stump Standing on the North Side of a gully by the brigateen [brigantine] Landing and on the East Side of Choptank River about a hundred perches above Melvills ware house it being a boundary of a tract of Land Called Venture...".

The gully mentioned in the Solomon's Desire patent is still visible today as a LiDAR (Light Detection And Ranging) anomaly north of the site. If one plots a location for Melville's landing 100 perches due south of this LiDAR anomaly (i.e. "below"), it places the warehouse above the marshy lands on the north bank of Chapel Branch (Ingrams Creek). However, if one plots a location for Melville's landing 100 perches south following the course of the Choptank River (also "below") a location is attained which is roughly 20 perches (330 feet) northeast of Site 18CA261, or 120 perches from the gully and the beech tree mentioned in the 1779 deed. In other words, 18CA261 is the location of James Barwick's house and ordinary.

James Barwick is believed to have given up managing the ferry and ordinary around 1783. After that time, he is referred to in contemporary records as a "planter" and Benjamin Denny became the caretaker at the Melville complex. Barwick relocated south to Pig Point and purchased a 1 acre lot in what would become the town of "Edenton" or Denton. A few years later, Matthew Driver donated the land on which the complex sat to Caroline County. On May 30th, 1786 he provided a Deed of Gift to the Commissioners of Caroline County for 2 acres of land containing the warehouse and other infrastructure as "town lands". The two acre tract as described in the deed would have included Site 18CA261.

Despite Driver's donation of lands to the public use, the court would determine that Pig Point, the site originally designated by the Maryland General Assembly for the county seat, should be the location chosen for construction of a permanent courthouse. In November of 1790, The Maryland General Assembly passed An Act for the Removal of the Seat of Justice from Melville's Warehouse to Pig Point, in Caroline County. The new courthouse was built shortly thereafter in 1791 and Melville's Landing ceased to function in any official government capacity. In 1795, Matthew Driver had the two-acre town lands, and all of the surrounding tracts he had acquired resurveyed into a new parcel and re-patented as "Pine Grove" and the land reverted to agricultural uses.

No work by professional archaeologists is known to have taken place at or in the vicinity of 18CA261 prior to the present study. However, Caroline County genealogist and deed researcher, Eleanor F. Horsey, reported discovery of the site in 1981 after visiting the location in an effort to resolve deed discrepancies encountered during her research. She writes that her search of a field between the Choptank and Chapel Branch, and located south of a dirt road extension to Garey Road (now known as Smith Landing Road), "...turned up numerous artifacts of the colonial period including a pewter button, the bottom of an old English wine bottle, portions of clay pipes, pieces of old china, rose-head nails, and parts of glazed bricks, as well as pieces of Indian pottery". Horsey's find is believed to have been based on surface observations, and it is not known if artifacts were collected or left in the field. No report was made to the State Office of Archaeology at MHT, and so no site number was assigned until the present study.

The MHT Office of Archaeology was first contacted about the site in the spring of 2019 by Ed Otter, of CRM firm Edward Otter, Inc., and Jok Walsh, President of the Caroline County Historical Society, who stated that the owners of the property, Joe and Cheryl Smith, had encountered colonial artifacts on their property. During a brief site visit on June 20, 2019, Mr. Smith relayed that a couple of years earlier, he had been making some landscaping changes on the property using heavy equipment. While digging a large pit near his vegetable patch, Mrs. Smith began signaling for him to stop as artifacts were coming out of the ground. After clean-up of this pit it was evident that semi-articulated brick remains had been exposed. Subsequent to that work, Mr. Smith permitted one of his relatives who was a metal detectorist to examine the backdirt pile and several mid-late 18th-century coins, handwrought nails, colonial ceramics, pipestems, and other artifacts were encountered. Ceramic sherds observed by MHT during the site visit included Delftware, Creamware, possible Astbury, possible Buckley, and White Salt-glazed Stoneware. At the invitation of Mr. and Mrs. Smith, MHT returned to the site in July of 2019, and again in June and July of 2020 to carry out a tripartite remote sensing survey at 18CA261.

The primary objective of the 2019 and 2020 remote sensing surveys at Barwick's Ordinary was to obtain detailed imaging of the subsurface features believed to be yielding the surficial and plowzone artifact finds on the Smith property. The first stage of examination involved an effort to refine the extent of these features using a combination of magnetic susceptibility and fluxgate gradiometry (i.e. magnetometry). The second stage of examination involved an effort to obtain images of individual features in three dimensions using high-resolution ground-penetrating radar (GPR). The data collectively provide a detailed picture of the architectural footprint of Barwick's Ordinary.

Fieldwork was conducted on Wednesday, July 10th, and Thursday July 11th, 2019. Fieldwork was also conducted on Tuesday, June 23, 2020. The final day of fieldwork occurred on Monday, July 27th, 2020. Ground conditions within the field at 18CV261 consisted primarily of manicured lawn, however a few isolated trees, a fence, a small vegetable patch, along with the landscaping excavation pit and backdirt pile acted as obstacles to survey. These appear as gaps or blurred areas in the geophysical data, since data collection could not proceed through these impediments. However, prior to the July 2020 fieldwork the landscaping excavation pit was backfilled by the property owners, improving data collection and also helping to preserve the brick feature exposed there. Occasional artifacts of both colonial



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and Native manufacture were frequently observed on the ground. These were typically left in the field, but pointed out to the property owners. Three exceptions were a Jasper Palmer Point, a Townsend sherd, and a Minguannan sherd recovered from the surface in the northeast corner of the field. These were given to the property owners.

For the 2019 magnetic susceptibility (or MagSusc) survey, the corner points for four 20 X 20 meter squares were laid out with the total station in the western portion of the field where the aforementioned brick feature had been encountered, and extending west across a driveway and into a wooded portion of the Smith yard. Grid of 2 m cells was established across the survey area so that readings could be taken at the approximate center of each cell. Due to time constraints the southeastermost 20 X 20 m survey block was not collected. Also, no data was collected in the area of the backdirt pile from the property owners' landscaping effort, or from the disturbed driveway. Grid cells were sampled using a Bartington MS-2 Magnetic Susceptibility Meter fitted with a MS2D Surface Scanning Search Loop. The MS2D search loop is 185 mm in diameter and designed specifically for making surface measurements in the field on exposed soils. The MS-2 unit was zeroed out between each reading and 2 readings were taken at each sample location to monitor for instrument drift. As long as there was little variability between the 2 readings, the higher reading was accepted and recorded. If widely disparate readings were being recorded, the field crew continued to zero out the instrument and take readings until the numbers stabilized. In practice, these incidents are generally found to be the result of vegetation interfering with the field loop and an accurate reading is eventually attained once the vegetation is cleared. A total of 261 two meter grid cells were sampled thus, encompassing an area of roughly 0.25 acre (0.1 hectare) within the roughly .7 acre field and adjoining yard areas.

Gradiometer data was collected from the four 20 X 20 m survey blocks in July of 2019. Much of the data was re-collected from a 30 X 30 m survey block when MHT returned to the site in July of 2020, expanding the data collected slightly to the southeast. This study was carried out using a Bartington Grad601-2 Dual Fluxgate gradiometer. Data was collected within each survey block at a sampling interval of 12.5 cm (8 samples per meter) along transects that were spaced 50 cm apart. The first transect was placed 75 cm from the northern edge of a given survey block. The second was placed 125 cm from the northern edge. Beginning at the northeast corner of each collection square, each line was walked in opposite directions in a zig-zag pattern. Following field collection, the raw gradiometer data was downloaded using TerraSurveyor Lite for data processing. There are a considerable number of voids in the dataset due to the presence of fences, vegetable patches, the mechanical excavation hole and backdirt, as well as other obstructions. Thus, it was determined to re-collect the data in 2020, as the mechanical excavation pit had been refilled and the survey block could be changed in size and reoriented based on the preliminary results.

A new 30 X 30 m survey block was established in 2020, focusing on the central area where the MagSusc analysis picked up evidence of disturbed soils, along with areas to the north where preliminary GPR data suggested the presence of a larger buried feature. The same data filtering processes were performed in TerraSurveyor Lite that were used in processing of the 2019 data. At least 8 major clusters of magnetic anomalies were detected through gradiometer survey, ranging from weak to very strong. A long linear cluster to the west is almost certainly associated with the modern driveway, a fence alongside it, and tomato cages and other metal in the Smiths' vegetable patch. But many of the most substantial anomalies likely represent clusters of metallic objects such as nails or other hardware in historic features, especially when examined alongside the GPR results (below). No clear linear anomalies were identified in the gradiometer data (aside from the one along the road), but a rectilinear area of generally "noisier" data was discerned extending from the vegetable patch area northeast towards several of the large dipoles, and corresponding with the trend seen in the MagSusc results.

Ground-penetrating radar data was collected in June and July of 2020. GPR is a non-invasive geophysical technique that uses electromagnetic pulses to detect and delineate subsurface conditions. The June survey was carried out in two 20 X 20 m survey blocks oriented to the field edges rather than the UTM grid; an orientation that also corresponded to the general alignment of anomalous soils identified through prior MagSusc and Gradiometry work. It also avoided the area where mechanized digging had taken place and the associated backdirt pile. However, based on preliminary results, as well as the decision by the landowners to refill the excavation pit near the vegetable patch, a decision was made to return in July of 2020 to collect better GPR and gradiometer data from a 30 X 30 m survey block that could be centered, on UTM grid, over a great number of apparent anomalies (GPR, MagSusc, and Gradiometer). Both GPR surveys employed a GSSI UtilityScan System equipped with a 350 MHz central-frequency antenna. All collected GPR data were processed using GSSI's RADAN 7 software.

Because a substantial subsurface anomaly appeared in the western portion of the June 2020 survey block, and several smaller anomalies around it appeared to be truncated by the size and orientation of survey block, the decision was made to revisit the site and reorient to the original UTM-based configuration. In addition, the refilling of the landscaping pit with soils from the spoils pile provided better access to the area of interest.

First, it should be noted that there is considerable agreement between the various remote sensing datasets. Magnetic Susceptibility detected a general area of soils with enhanced magnetizability extending northeast from the area of the vegetable patch and landscape digging for a distance of roughly 32 m (or 105 ft). Both the gradiometry and the GPR data reveal several anomalies that are suggestive of buried architectural elements. Even more intriguing, four of the seven GPR anomalies overlap directly with discrete clusters of anomalous magnetism identified through gradiometry. This likely indicates the presence of buried architectural features, such as shafts, privies, or storage pits, containing metallic objects like nails. Initial interpretations of these anomalies were generated through the comparison of three-dimensional (GPR) and two-dimensional (GPR and gradiometry) data combined with historical background research for Barwick's Ordinary. However, interpretation of the natural and anthropogenic features causing such anomalies is conditional and should be investigated further via ground-truthing.

The linear anomaly running from the south-central portion of the survey block to the northwest is likely a modern water pipe. The property owners stated that a water line was installed across the field to service a cabin in the woods south of the site. The dendritic anomalies at the edges of the 30 X 30 m survey block appear to be tree roots. The largest soil anomaly is rectilinear in shape and is situated towards the center of the collection block. This rectilinear anomaly measures approximately 8 by 4 meters (26 X 13 ft) in size. The feature is first visible around 30 cm below surface and extends to at least 130 cm below surface. Its dimensions suggest that it represents an in-filled cellar. A more-or-less square-shaped anomaly is the southernmost feature identified within the 30 X 30 m survey block. It measures approximately 2 X 2 meters (6.5 X 6.5 ft) in area. Like the rectilinear feature, this anomaly also becomes visible around 30 cm below surface and extends to a depth of at least 130 cm below surface. The dimensions of the squarish anomaly suggest that it represents an in-filled storage pit, privy, or cellar. A cluster of magnetic dipoles in the gradiometer data, suggest that this anomaly also contains metallic objects or other artifacts with magnetic signatures significantly different from the surrounding soils.

Five shaft anomalies range in size from 4 X 3 m (center-left), 3 X 4 m (center-right), 2.5 X 2 m (right-most), 2 X 2 m (upper-center), and 2 X 2 m (uppermost).



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18CA261

Site Name: Barwick's Ordinary

Prehistoric

Other name(s)

Historic

Brief Description:

Mid-late 18th Century Ordinary & county seat; Early & Late Archaic and Late Woodland short-term camp, Contact

Unknown

Three of these five shaft anomalies were also detected by the gradiometer, suggesting the presence of metallic objects or highly-magnetized soils within subsurface features. The upper-most shaft feature is first visible around 70cm below surface, whereas the other four shaft features first appear around 30 cm below surface. All of the features extend to a depth of at least 130 cm below surface. The two largest shaft features in the center of the grid may represent privy pits or storage pits. The three smaller shaft features in the upper right portion of the grid likely represent storage pits, borrow pits, or other disturbances.

The various anomalies encountered, when taken as a whole, suggest that a large abandoned structure or complex of smaller structures is present in the field at 18CA261. Historic deed research, combined with court records, and other historical documentation strongly suggest that this is the site of Barwick's Ordinary, the tavern and home of James Barwick situated 120 perches south of the gully by the brigantine landing. This building was a significant part of the colonial settlement that served as the first county seat for Caroline County.

A tri-partite geophysical remote sensing survey was carried out at 18CA261 near Denton in Caroline County, Maryland in July of 2019, as well as June and July of 2020. The survey work consisted of magnetic susceptibility survey, fluxgate gradiometry, and ground-penetrating radar data collection. All three methods reveal the presence of anomalous soils within the field at 18CA261. These anomalous soils strongly suggest the presence of a buried historic structure or structures at the site.

Examination of the property owners' artifact collection, coupled with detailed archival research on the property suggest that the buried complex of features might be associated with the colonial-era county seat of Caroline County. More specifically, a 1779 deed, and a 1783 patent all place the tavern and home of James Barwick at this precise spot on the landscape. However, as is always the case with remote sensing data, these potential features are just that: potential features. Without archaeological ground-truthing through excavation it is not possible to conclude with absolute certainty what the various anomalies identified at Site 18CA261 represent. MHT will continue to work with the property owners, who are amenable to excavation work, to see that ground-truthing is carried out to determine if such features are intact and capable of answering significant research questions about Maryland's and Caroline County's early history.

External Reference Codes (Library ID Numbers):

95006148, 18CA261 SF