
National Park Service
Cultural Landscapes Inventory
2005



Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

Table of Contents

Inventory Unit Summary & Site Plan

Concurrence Status

Geographic Information and Location Map

Management Information

National Register Information

Chronology & Physical History

Analysis & Evaluation of Integrity

Condition

Treatment

Bibliography & Supplemental Information

Inventory Unit Summary & Site Plan

Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI), a comprehensive inventory of all cultural landscapes in the national park system, is one of the most ambitious initiatives of the National Park Service (NPS) Park Cultural Landscapes Program. The CLI is an evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing on the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process and in which the NPS has or plans to acquire any legal interest. The CLI identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into a national database. In addition, for landscapes that are not currently listed on the National Register and/or do not have adequate documentation, concurrence is required from the State Historic Preservation Officer or the Keeper of the National Register.

The CLI, like the List of Classified Structures, assists the NPS in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2006), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7) and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or

treatment guidelines for the cultural landscape.

Inventory Unit Description:

Pennyfield Lock (Lock 22) is one of 74 lift locks built along the Chesapeake and Ohio Canal. It is located at the lower end of the 184.5-mile-long canal, 20 miles beyond the beginning point in Georgetown. The lock is part of the “rewatered” section – the only part of the canal that now carries water – running between Georgetown and Violette’s Lock (Lock 23). A short distance beyond Violette’s Lock is the first of the canal’s aqueducts, spanning Seneca Creek. Red sandstone from the Seneca quarry, just above the creek, was used to build this part of the canal, including the section at Pennyfield Lock. The closest cities in this area are Rockville and Gaithersburg, Maryland. River Road, a route used since early settlement, and an Indian trail before that, parallels the river and canal about a half-mile inland for almost 15 miles in this part of Maryland. The C&O Canal was acquired by the federal government in 1938, and, along with additional buffer land, was designated as the Chesapeake and Ohio Canal National Historical Park in 1971.

The C&O Canal National Historical Park was listed as an historic district on the National Register of Historic Places in 1979. The boundaries of the historic district are the same as the park’s, and include the original canal property and additional buffer land. Pennyfield Lock, an approximate 35-acre site, is composed of about 10 acres that were canal property, about 22 acres of buffer, and another several acres of sediment added onto the riverbank by the hydrological forces of the river. The land purchased as buffer was also oriented to the canal in the historic period.

As used here, the term “lock” means more than the lift mechanism. Historically, it meant all of the features of the canal associated with a particular lock. It applied to the area that surrounded the lock and oriented to the canal and canal activities. In addition to the lock, its bypass flume, waste weir, and prism (the canal waterway and towpath combined), most locks had a lockhouse, many had culverts to carry streams under the canal (the largest streams were crossed by aqueducts over which the canal passed), and some had stores, sheds, warehouses, and wharves. Pennyfield Lock had all of these (though not an aqueduct). Beginning in the 1850s, some of Montgomery County’s flour and grain was shipped from a warehouse and wharf at Pennyfield Lock, and fertilizers were received there. By 1880, Pennyfield House had been built, and in the early 20th century, many small buildings lined the canal. Other buildings faced the canal road, which ran parallel with the canal. The Pennifields (whose name was spelled with an “i”) are the best known of those who resided at Lock 22 and were its lockkeepers for at least two generations. The lock took its name from them. Their occupancy at Pennyfield Lock began in the late 1870s, during the canal’s last good years. This period of canal prosperity quickly passed, but the Pennifields remained at the lock until 1924.

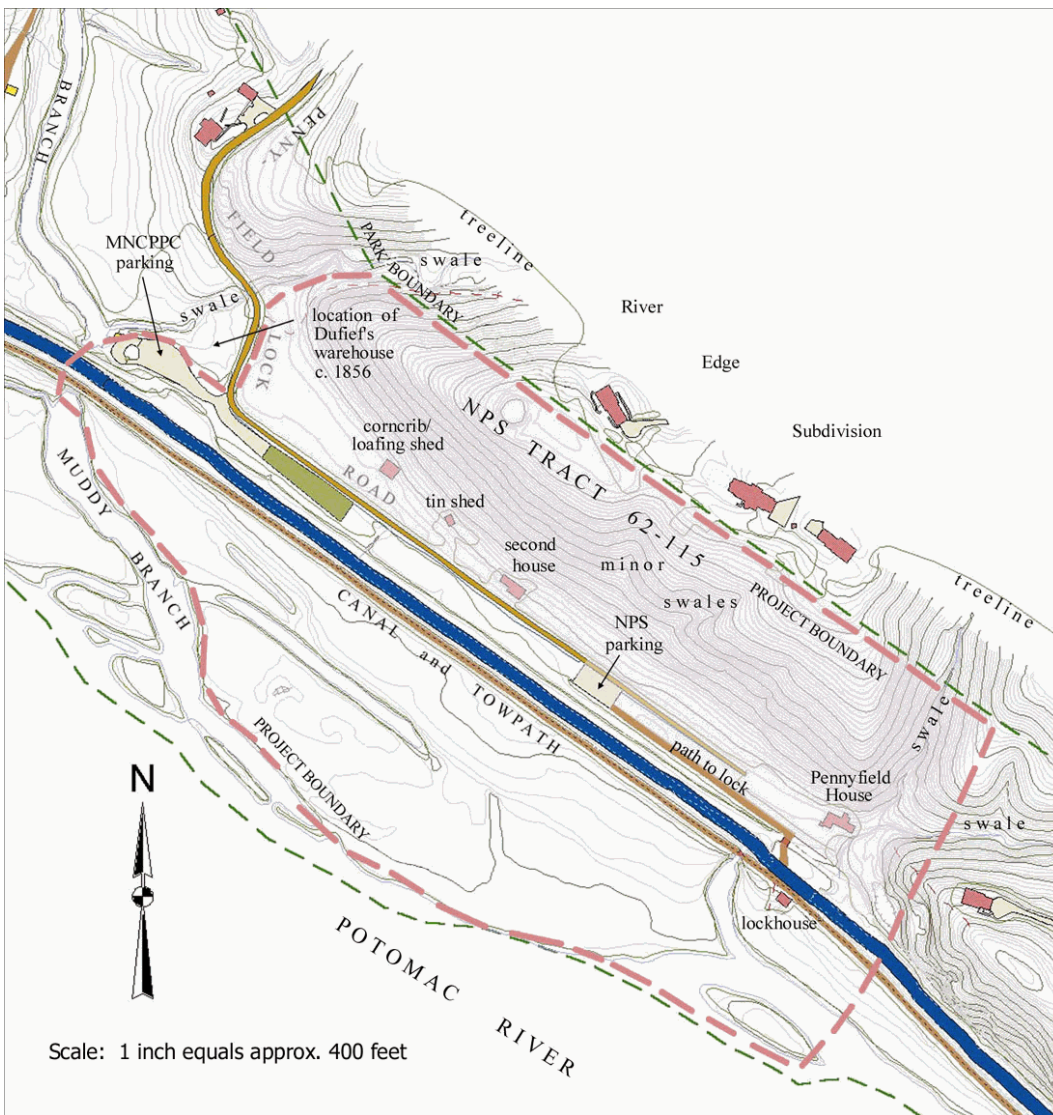
The locks along the canal, especially those offering a variety of services such as at Pennyfield Lock, were small worlds focussed on the rhythms of the canal. Life at the canal continued during the years when canal trade declined, and those who lived and worked alongside it served the diminishing barge traffic and other clientele. Besides heavy cargo, there was the smaller trade of packet boats. This stretch of the Potomac River was an excellent site for bass fishing, and the Pennifields opened their home to fishermen and may have run a fishing camp. One of their most famous visitors was Grover Cleveland, who came to fish these waters while he was President of the United States.

Pennyfield Lock

Chesapeake and Ohio Canal National Historical Park

In addition to significance as part of the larger canal landscape, now a national park, Pennyfield Lock retains elements of the historic scene specific to this site. Though most of the wooden buildings associated with life along the canal are gone, and others are in serious disrepair, the site has characteristics special to it and not found in many parts of the canal. In particular, it retains the open character of the small canal-side settlement. Situated between rocky prominences on east and west ends, the landscape at Pennyfield Lock opens out into flatter terrain, enclosed by the slope of an inland terrace. This was the setting of the small lock community. Pennyfield House, one of the houses built at the lock in the late 19th century, anchors one corner of the site. At its lower end, Pennyfield Lock Road, which accesses the canal from River Road, runs parallel with the canal and suggests the arrangement of buildings and spaces that previously existed. Today, a new fence, old fence remnants, and large trees define the spaces that once lined up along the road and canal. A wide yard adjacent to Pennyfield House remains an open field, unusual along the canal, where successional vegetation and weeds have reclaimed spaces once open. Not all parts of the site remain open; in the past 20 years, vegetation has closed up some formerly-open areas along the lock road and on the inland slope. Wire and post remnants are evidence of yards and property lines that existed during the period of significance. A large structure (corn crib and loafing shed) for feeding and housing sheep or cows still stands within the successional vegetation adjacent to the road. There are remnants of domestic plantings around the property. Within the woods, a flagstone stairway ascends the slope. A small stone footbridge crosses a swale near the Pennyfield House, and dry-laid stone revetments line sections of a spring-fed stream. An old road that formerly ran between the canal and the plateau above the site follows that stream. Such vestiges as these, along with the spatial character and the well-preserved features of the lock itself, set Pennyfield Lock apart as a singular site along the canal. The fact that Pennyfield Lock falls within the short section of the canal that today carries water enhances the site's historic associations. Pennyfield Lock warrants designation as a component cultural landscape of the larger canal landscape because of these special features.

Site Plan



The project boundary is shown within the park boundary, which lies along the top of the ridge and along the riverbank. The site corresponds roughly with NPS tract 62-115 and the original canal property from Muddy Branch to a point about 2,000 feet east.

Property Level and CLI Numbers

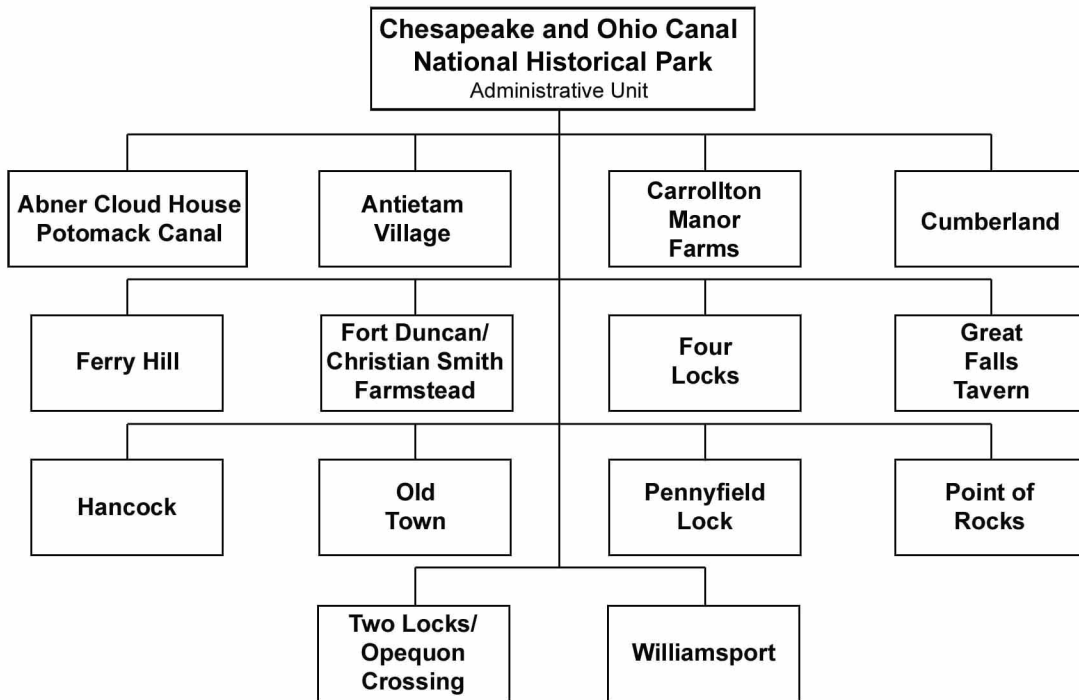
Inventory Unit Name:	Pennyfield Lock
Property Level:	Component Landscape
CLI Identification Number:	600289
Parent Landscape:	600268

Park Information

Park Name and Alpha Code:	Chesapeake and Ohio Canal National Historical Park -CHOH
Park Organization Code:	3100
Park Administrative Unit:	Chesapeake and Ohio Canal National Historical Park

CLI Hierarchy Description

Pennyfield Lock is a component landscape of the Chesapeake and Ohio Canal National Historical Park. The cultural landscape of the site includes the canal, towpath and adjoining land, originally part of the Chesapeake and Ohio Canal. It also includes land acquired by the National Park Service to preserve properties associated with the C&O Canal and to provide a buffer for the resources of the park. The site includes Lockhouse and Lock #22, known as Pennyfield Lockhouse and Pennyfield Lock, and the remains of what was once a small canal-side community on the inland side of the canal.



The cultural landscape for the Chesapeake and Ohio Canal Historical Park contains fourteen component landscapes defined by individual histories, characteristics and conditions, which contribute to the significance of the park as a whole.

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

The cultural landscape inventory for Pennyfield Lock was prepared by Judith Earley, Historical Landscape Architect with the Cultural Landscapes Program of the National Capital Region (NCR). The inventory process was conducted in two phases: research and analysis & evaluation. During the research phase, the historical record was investigated, using both primary and secondary sources, and the existing landscape conditions were documented. Record of this landscape is scant, and the Montgomery County deed records found at the county lands office in Rockville, Maryland constitute the most important of the primary sources. The Montgomery County Historical Society was also an important source of information, including paper and clipping files, maps and shelved items. Some maps were culled from the map collection at the University of Maryland. The National Park Service's National Capital Regional office was the source of most of the pertinent government publications and a selection of photographs. Information found at the C&O Canal park headquarters included historic and current maps, tract information, historic leasing documents and GIS files. From all these sources only the barest outline of a history can be assembled. Marti Gerdes assisted with the field survey and research during the summer of 2002. Additional field work was done in the winter of 2003.

The analysis and evaluation phase of the project involved constructing a partial deed history, identifying key landscape elements and analyzing their evolution over time. Based on the contextual history of the landscape and the evaluation of historic landscape features and patterns, landscape significance was determined. Existing and historic conditions were compared using the historic maps and photographs and other documentation to define the type and concentration of remaining resources. From this information, cultural landscape integrity was determined.

Concurrence Status:

Park Superintendent Concurrence:	Yes
Park Superintendent Date of Concurrence:	08/03/2009
National Register Concurrence:	Eligible -- SHPO Consensus Determination
Date of Concurrence Determination:	12/06/2004

National Register Concurrence Narrative:

The State Historic Preservation Officer for the State of Maryland concurred with the findings of the Pennyfield Lock CLI on 12/6/04, in accordance with Section 110 of the National Historic Preservation Act. It should be noted that the Date of Eligibility Determination refers to this Section 110 Concurrence and not the date of National Register Eligibility, since that is not the purview of the Cultural Landscapes Inventory.

Concurrence Graphic Information:



United States Department of the Interior

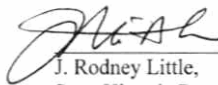
NATIONAL PARK SERVICE
National Capital Region
Office of Lands, Resources and Planning
1100 Ohio Drive, SW
Washington, DC 20242

August 31, 2004

Memorandum

To: Cultural Landscapes Inventory Coordinator, National Capital Region
From: Maryland State Historic Preservation Officer
Subject: Statement of Concurrence, Pennyfield Lock Cultural Landscape Inventory

I, J. Rodney Little, Maryland State Historic Preservation Officer, concur with the findings of the Pennyfield Lock Cultural Landscape Inventory as submitted on August 31, 2004.



J. Rodney Little,
State Historic Preservation Officer
State of Maryland

12-06-04

Date

Concurrence memo for FY2004 signed by the Maryland SHPO on 12/6/2004.



United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
Office of Lands, Resources and Planning
1100 Ohio Drive, SW
Washington, DC 20242

July 7, 2004

Memorandum

To: Regional Historical Landscape Architect, National Capital Region
From: Superintendent, Chesapeake & Ohio Canal National Historical Park
Subject: Statement of Concurrence, Pennyfield Lock Cultural Landscape Inventory

I, Kevin Brandt, Superintendent of Chesapeake & Ohio Canal National Historical Park, concur with the findings of the Pennyfield Lock Cultural Landscape Inventory as submitted on July 7, 2004.


Kevin Brandt, Superintendent
Chesapeake & Ohio Canal National Historical Park


Date

Concurrence memo for FY2009 signed by the CHOH Superintendent on 8/3/2009.

Revisions Impacting Change in Concurrence: Change in Condition

Revision Date: 09/23/2010

Revision Narrative:

Condition re-evaluated in FY2010. Date is the date the latest concurrence memo was signed by the park superintendent. The condition of the landscape remained in Fair.

Revision Date: 07/07/2004

Revision Narrative:

Revisions made in accordance with comments of park and regional staff.

Geographic Information & Location Map

Inventory Unit Boundary Description:

The boundaries of the Pennyfield Lock component landscape extend from the eastern end of the lock, at the east end of the site, to the Muddy Branch culvert and Pennyfield Lock Road on the west, and from the riverbank on the south to a line that lies along the top of the inland slope. This is land that was historically owned by the canal company, as well as what was historically private land, part of which was used in connection with canal activities. The private land was acquired by NPS in 1976 to act as a protective buffer for the newly-created canal historical park.

State and County:

State: MD

County: Montgomery County

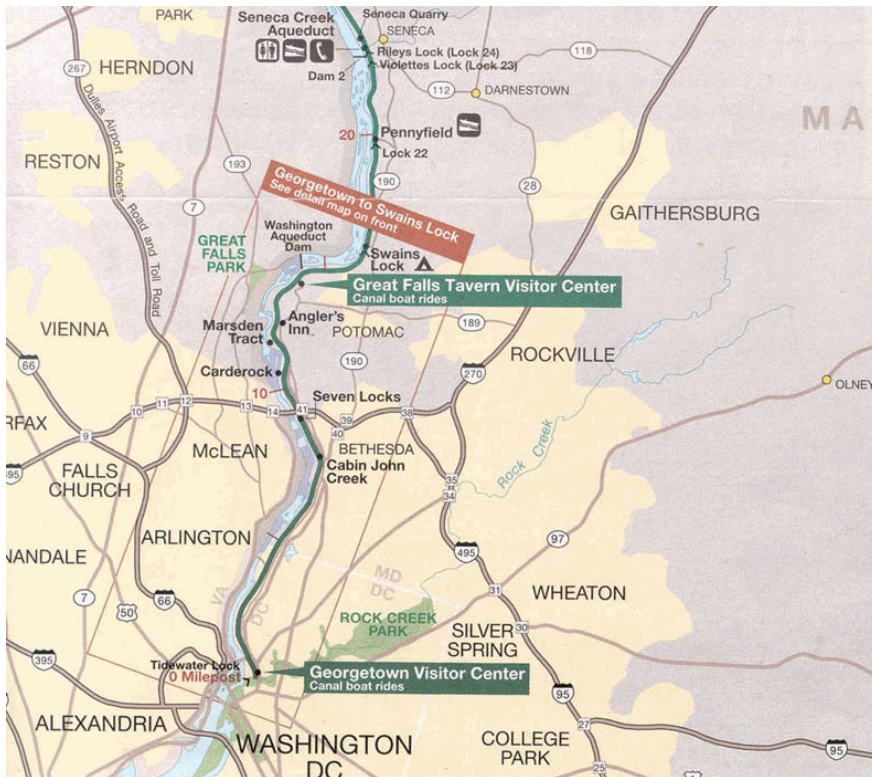
Size (Acres): 35.00

Boundary UTMS:

Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 27
UTM Zone:	18
UTM Easting:	302,050
UTM Northing:	4,325,250

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

Location Map:



Portion of park map shows Pennyfield Lock toward the top of image, below Seneca.

Regional Context:

Type of Context: Cultural

Description:

In the 18th century the area around River Road in the general vicinity of what was later Pennyfield Lock was an agrarian landscape made up of large and small properties. The narrow floodplain where the canal would be built was probably forested land through which paths may have led to the river. Sawmills and, later, grist mills were found along the nearby streams. It was not until the mid- to late-19th century that land alongside the canal at Pennyfield Lock was sold to a few small landholders who provided services to canal users and engaged in subsistence agriculture. Following closure of the canal and purchase of the small lots along it soon after, renters lived in the two houses at the lock and utilized the various structures for agriculture, possibly also providing some commercial services to the nearby neighborhoods of Tobytown and Travilah, to sports fishermen and to other recreationists. This was probably a fading community during the mid-20th century, and there have been no residents since early in the 1980s. Pennyfield Lock is currently both a recreational and historical site.

Type of Context: Physiographic

Description:

Pennyfield Lock is found in the Piedmont plateau region, above the major falls of the river – Little Falls and Great Falls – and below the minor Seneca Falls. The fall line, which begins at Little Falls, marks the boundary between the coastal plain and the Piedmont plateau. From Great Falls west, the river valley rises gently by a series of water-worn plateaus, underlain principally by sandstone, until it reaches the Blue Ridge. Between Great Falls and Seneca Falls -- especially after it turns west at Swains Lock (Lock 21) -- the river is a wide expanse, threaded with a series of long islands that nearly divide the river into two channels. The area is characterized by fairly narrow floodplains and slopes that rise to plateaus 100 to 125 feet above the river. In a few locations, the floodplain widens out, but in other places the ridgeline moves closer to the river, creating majestic river bluffs. At Pennyfield Lock, the floodplain widens and then narrows again a mile to the west. The lock is situated between two stretches of river bluffs. Muddy Branch, just to the north, is the western boundary of the Pennyfield Lock site. Several miles upriver is Seneca Creek, a major tributary to the Potomac River. The riverbank near Pennyfield Lock is muddy and silty, the deposit from the river's tributaries. Plant life occupying the floodplain is that of a second or third growth eastern bottomland forest.

Type of Context: Political

Description:

Pennyfield Lock is a component landscape of the Chesapeake and Ohio Canal National Historical Park, a 184.5-mile-long park created by Public Law 91-664 in January 1971. It is located in Montgomery County, Maryland, the next jurisdiction upstream from Washington, D.C. In 1938, the federal government purchased the canal from the Baltimore and Ohio

Railroad and placed it under the management of the National Park Service. President Eisenhower made the C&O Canal a national monument in 1961. In 1971, with the creation of the C&O Canal National Historical Park, federal funds were authorized for the acquisition of additional land. A swath of land, about 300 feet in width and running parallel to the canal, was purchased here in 1976 by the National Park Service. Pennyfield Lock Road, which reaches the canal from River Road and runs parallel with the canal for about 1,000 feet, falls within Montgomery County's jurisdiction. There is a two-acre, state-owned parking lot located within the site.

Tract Numbers: 62-115

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 08/13/2004

Management Category Explanatory Narrative:

The C&O Canal was listed on the National Register in 1966 and documentation was accepted by the Keeper in 1979. A 1971 congressional act established the Chesapeake and Ohio Canal Historical Park, 33 years after the Canal was purchased by the Federal government and placed under the management of the National Park Service.

The Management Category Date is the date the CLI was first approved by the park superintendent.

NPS Legal Interest:

Type of Interest: Fee Simple

Explanatory Narrative:

Both the original canal property and the inland purchase (NPS tract 62-115) are fee simple properties.

Type of Interest: None - Local Government Owned

Explanatory Narrative:

Pennyfield Lock Road, part of which lies within the site, is owned by Montgomery County, Maryland.

Public Access:

Type of Access: Unrestricted

Explanatory Narrative:

Although there is no physical restriction, there is no trail in the slope section of the site.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

The National Park Service holds scenic easements to adjacent properties on the west side of Pennyfield Lock Road, near the canal, and east of Pennyfield Lock, above the canal. The Maryland National Capital Park and Planning Commission is an abutting property owner to the west. The commission is protecting Muddy Branch in Travilah Regional Park and plans to provide a trail to the towpath along the Muddy Branch tributary. The commission also owns the 380-acre Blockhouse Point Regional Park, managed as a natural area. A few hundred yards west of the site, on the west side of Muddy Branch, is the Dierssen wild waterfowl sanctuary, managed by the Maryland Department of Natural Resources. Just north of the site, on adjacent land, is the Rivers Edge subdivision, with houses on two-acre lots. Nearby are other subdivisions on five-acre lots. The historic African-American community of Tobytown is located where Pennyfield Lock Road meets River Road. The houses of Tobytown were torn down and rebuilt as part of a renewal project in the 1970s.

All of the abutting park land, the location of Tobytown (although not its structures), and the proximity of historic River Road are important adjacent uses. The Potomac River claims the entire southwest boundary of the site.

National Register Information

Existing NRIS Information:

Name in National Register:	Chesapeake and Ohio Canal National Historical Park
NRIS Number:	66000036
Other Names:	Chesapeake and Ohio Canal;Chesapeake and Ohio Canal
Primary Certification:	Listed In The National Register
Primary Certification Date:	10/15/1966
Other Certifications and Date:	Additional Documentation - 8/19/1979

Significance Criteria: A - Associated with events significant to broad patterns of our history

Significance Criteria: C - Embodies distinctive construction, work of master, or high artistic values

Period of Significance:

Time Period:	AD 1828 - 1924
Historic Context Theme:	Developing the American Economy
Subtheme:	Shipping and Transportation by Water
Facet:	Canals
Other Facet:	None
Time Period:	AD 1828 - 1924
Historic Context Theme:	Expanding Science and Technology
Subtheme:	Technology (Engineering and Invention)
Facet:	Transportation
Other Facet:	None
Time Period:	AD 1828 - 1924
Historic Context Theme:	Transforming the Environment
Subtheme:	The Industrial Revolution
Facet:	The Industrial Revolution
Other Facet:	None

Area of Significance:

Area of Significance Category: Commerce

Area of Significance Subcategory: None

Area of Significance Category: Engineering

Area of Significance Subcategory: None

Statement of Significance:

Pennyfield Lock, Lock 22 of the C&O Canal, contains features and remnants of features built by people whose livelihoods were associated with the canal and who lived alongside it. The canal created unique social structures, with children of lockkeepers growing up to become lockkeepers themselves, marrying within the “family” of canal users and operators, and otherwise developing a social strata more closely knit than those of mainstream communities. During the historic period, the land along the inland side of Pennyfield Lock was an expression of this canal-based way of life. Pennyfield Lock takes its name from a family of lockkeepers who lived here, beginning at least in 1880 and continuing until 1924. These were years when the canal achieved a short-lived prosperity and then began a relentless decline. Life along the canal changed with these reverses, but at Pennyfield Lock, and probably at most other places along the length of the canal, those who lived there and were part of its social and economic system remained and adapted. The Pennifields may have opened their home as a boarding house, or run a fishing camp. There were others who owned property at Pennyfield Lock as well – operating a store or warehouse – but who may not have lived there.

The Chesapeake and Ohio Canal Historical Park was listed on the National Register of Historic Places in 1979 as an historic district with boundaries that are the same as the boundaries of the park. The district includes the original canal land and additional land purchased after the establishment of the park in 1971. Documentation of the historic resources of the Canal Historical Park includes features of the canal proper (prism, locks, lockhouses, aqueducts, culverts, dams, weirs) and other visible historic features in the park that are contemporary with the period of the canal’s operation. Pennyfield House was the only such feature listed for this lock. The part of the landscape at Pennyfield Lock that lies beyond the lock proper is described more fully in this CLI, its historic features inventoried, and additional features suggested for inclusion on the National Register.

The period of significance for the Pennyfield Lock component landscape is the same as for the C&O Canal Historical Park – 1828 to 1924 – the years that span the canal’s construction, operation, decline and final closure. Like the rest of the canal, Pennyfield Lock reflects the ascent of canal-based transportation and its ultimate decline in 19th-century America, events that have made a significant contribution to the broad patterns of history (Criterion A).

The Pennyfield Lock component landscape is part of the canal but significant also for its own identity

as one of a discrete number of similar types of places found at intervals along the length of the canal. The landscape at Pennyfield retains a spatial clarity that many of the others do not. Since its listing on the National Register, Pennyfield House has decayed to the point where it probably cannot be restored. However, along with the remaining spatial characteristics, there are small scale features that date from the period of significance and should be recognized as features of the historic district. It is recommended that if the National Register listing is updated, these features be added.

State Register Information

Identification Number: M-12-46
Date Listed: 10/15/1966
Name: Chesapeake and Ohio Canal National Park

Explanatory Narrative:

Built between 1828 and 1850, the canal ran 184.5 miles from Georgetown, D.C. to Cumberland, Maryland. During its active operation until 1924, it suffered periodic damage from floods, war, and other causes that, together with normal deterioration, required the repair and replacement of many structural components. The canal primarily was used for hauling coal from western Maryland to the port of Georgetown in Washington, D.C. Hundreds of original structures, including locks, lockhouses, and aqueducts, serve as reminders of the canal's role as a transportation system during the Canal Era. The park was acquired by the National Park Service in 1938.

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Vernacular

Current and Historic Use/Function:

Primary Historic Function:	Trade
Primary Current Use:	Pedestrian-Related-Other
Other Use/Function	Other Type of Use or Function
Outdoor Recreation-Other	Both Current And Historic
Canal	Historic
Canal Lock	Historic
Culvert (Waste Weir)	Both Current And Historic

Current and Historic Names:

Name	Type of Name
Lock 22	Both Current And Historic
Pennyfield Lock	Both Current And Historic
Whitehouse Lock	Historic

Ethnographic Study Conducted:

No Survey Conducted

Chronology:

Year	Event	Annotation
AD 1720 - 1740	Platted	Speculators and investors began surveying and patenting land in the vicinity of future Pennyfield Lock. Area known as Upper Potomac Hundred.
AD 1721	Platted	Tract named Long Acre (later part of Pennyfield Lock land) surveyed in this year and patented to Daniel Dulany in 1732.
AD 1722	Platted	Tract named Melburn (part of which later became Pennyfield Lock) surveyed by John [B]Radford and patented to Cornelius Eltinge in 1730.
AD 1751	Established	Georgetown, Maryland (now DC) established as a tobacco port.
AD 1774	Built	Public road from Georgetown to Watts Branch laid out, probably following pre-existing route. Later becomes River Road.
AD 1776	Established	Montgomery County, Maryland established.
AD 1782	Built	Road from Georgetown extended to Seneca Creek.
AD 1783	Purchased/Sold	By this date Thomas Johns had purchased land originally owned by Cornelius Eltinge that included site of future Pennyfield Lock.
AD 1785 - 1802	Built	Potomac Canal constructed by the Potomac (or Patowmack) Company, established for this purpose in 1785, along Maryland and Virginia shores of the Potomac River.

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

AD 1815	Purchased/Sold	By about this date Washington Bowie owned Melburn and other tracts that formed one farm. Some of this land later became the canal land at Pennyfield Lock.
AD 1823	Purchased/Sold	By this date Washington Bowie sold Melburn and other tracts to Dennis Jones, a farmer, with a mortgage.
	Established	Chesapeake and Ohio Canal chartered following the first C&O Canal Convention (1820). The rights to the Potomac River originally granted to the Potomac Canal Company transferred to the C&O Canal Company.
AD 1823 - 1825	Developed	First surveys/feasibility studies conducted for a canal parallel to Potomac.
AD 1825	Purchased/Sold	When Dennis Jones defaulted on the mortgage, William Nicholls purchased Melburn and the other tracts.
AD 1828 - 1850	Built	Construction of C&O Canal from the mouth of Rock Creek in Georgetown to Cumberland, Maryland.
AD 1831	Purchased/Sold	Robert P. Dunlop, trustee for William Nicholls, sold 11 acres, 3 roods and 92 square perches of Melburn and Long Acre to the canal company. This would be site of Pennyfield Lock.
AD 1836	Built	Lockhouse at Pennyfield Lock built -- probably after this date.
AD 1836 - 1847	Eroded	Canal is repeatedly damaged by flooding and repaired.
AD 1852	Destroyed	(April) Most severe flood to date, River crested at sixty-four feet at Great Falls. Below Seneca, the Canal was "a shambles".
AD 1856	Built	John L. Dufief petitioned county to build road to canal at Lock 22 where he owned a warehouse.
AD 1858	Purchased/Sold	William Nichols sold Melburn and other tracts to William Cady.
AD 1869	Purchased/Sold	Land at intersection of lock road and River Road sold to Emory Genis, a former slave. This is the beginning of Tobytown.

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

AD 1870 - 1889	Maintained	"Golden Era" of the C&O Canal during which it operated as a profitable enterprise. Canal prism, towpath, locks, weirs, bypass and flumes were regularly maintained.
AD 1875	Purchased/Sold	Raphael Jarboe became new owner of Melburn and other tracts.
AD 1879	Built	Pennyfield House may have been built in this year.
AD 1880	Purchased/Sold	George W. Pennifield bought a half-acre lot at Lock 22 from Raphael Jarboe.
AD 1880 - 1902	Purchased/Sold	Raphael Jarboe sold other lots at the lock and along the full length of the lock road to people such as Hatton Waters, Upton Darby and Anne Harris.
AD 1880 - 1923	Developed	The Pennifields acted a lockkeepers. During part of this time they boarded sports fishermen or ran a fishing camp at the lock, building or adapting existing structures for this purpose.
AD 1889	Eroded	"Johnstown Flood" caused extensive damage to the entire canal and bankrupted Canal Company, sending it into receivership. The Baltimore and Ohio Railroad took over the company.
	Land Transfer	Flood forced canal company into receivership and the B&O Railroad assumed ownership.
AD 1890 - 1924	Stabilized	Unusual flood-free period.
AD 1890	Built	Second frame house at lock built around this time.
	Built	Several company-owned warehouses were recorded at the lock in this year. When they were built and when they disappeared from the site is uncertain.
AD 1891	Reconstructed	The B&O Railroad repairs the damage caused by the Johnstown Flood and reopens the Canal.
AD 1897 - 1917	Purchased/Sold	George Pennifield bought a 9-acre lot on west side of lock road. His son Charles sold it to Hatton Waters in 1917.

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

AD 1898	Purchased/Sold	Maggie Pennifield, Charles Pennifield's wife, purchased approximately 9 acres in two lots adjacent to her father-in-law's 9-acre lot.
AD 1900	Altered	The depth of the lock was increased 8 inches, first with timbers and then with concrete around 1906-1911.
AD 1909 - 1911	Built	A concrete waste weir built at the lock replaced an informal overflow.
AD 1924	Abandoned	Following a devastating flood, the C&O Canal was abandoned except for the 22 miles from Seneca to Georgetown.
	Abandoned	The B&O Railroad, owner of the canal, stopped repairing the canal, effectively closing it down.
AD 1925	Purchased/Sold	Maggie Pennifield sold the Pennifield holdings at the lock.
AD 1931	Purchased/Sold	Demarest Lloyd purchased the property that had been Melburn and other tracts after Raphael Jarboe's son sold it to a holding company. In the next couple of years, Lloyd purchased all the lots along the canal and some islands in the river.
AD 1931 - 1984	Inhabited	The two houses at the lock were probably inhabited by tenants throughout this period, and the farm buildings were used for agricultural and commercial purposes.
AD 1931 - 2003	Altered	The neighborhood on River Road in the vicinity of the lock changed several times over these years, influenced first by wealthy, fox-hunting land owners.
AD 1938	Land Transfer	The National Park Service acquired the defunct canal from the B&O Railroad.
AD 1938 - 1940	Restored	Civilian Conservation Corps (CCC) began restoration of the canal and lock system from Georgetown to Lock 23 (Violette's Lock).
AD 1939	Established	Canal dedicated as a public park.

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

AD 1940	Reconstructed	The CCC repaired and rebuilt various features along the canal such as the bypass flume at Pennyfeild Lock.
	Rehabilitated	The 23 locks from Georgetown to Seneca were now rewatered and open for recreational use.
AD 1942	Damaged	Flood of this year washed many of the repairs away.
AD 1946	Paved	By the end of WWII the NPS had resurfaced and repaired the towpath between Georgetown and Seneca with the exception of the Widewater stretch.
AD 1951	Purchased/Sold	Christian Heurich, Jr., purchased Demarest Lloyd's holdings along River Road and at the lock.
AD 1958	Preserved	Repairs completed along canal allowed hikers to walk the 184.5 miles.
AD 1961	Established	President Dwight D. Eisenhower declared the C&O Canal from Seneca to Cumberland a national monument.
AD 1971	Established	Chesapeake and Ohio Canal National Historical Park established.
AD 1972	Eroded	Major flooding caused by Hurricane Agnes resulted in numerous towpath breaks below Seneca and damage to the Muddy Branch culvert.
AD 1976	Purchased/Sold	Christian Heurich, Jr., sold 20.02 acres to the NPS and put other land into scenic easement.
	Inhabited	Heurich held a ten-year retention on about 5 acres of land at the lock, including two houses and other structures. Various tenants lived there, including his son.
AD 1984	Damaged	The last tenant moved out of Pennyfield House in this year. All the frame buildings, already in disrepair, began to further decay.
AD 1984 - 2002	Retained	Park retained the structures at the lock within its oversight while periodically attempting to lease them under the historic leasing provisions of the preservation law.

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

AD 1984 - 2003	Naturalized	Native vegetation spread over yards connected with the barns and other structures.
----------------	-------------	--

Physical History:

1720 to 1828: Settlement and Development along the Potomac River

The lands west of the Anacostia River (called Eastern Branch), including what would become Georgetown and Washington D.C., were unsurveyed before 1715. The first area of settlement was called the Rock Creek Hundred. (A “hundred” was an area of land inhabited by a hundred taxables.) By 1722, as more surveys were made, both within Rock Creek Hundred and on land further west, Rock Creek Hundred was divided to form Potomac Hundred. The area where Pennyfield Lock would later be located was within what was known as the Upper Potomac Hundred, a subdivision of Potomac Hundred. (Ray Eldon Hiebert and Richard K. MacMaster, *A Grateful Remembrance: The Story of Montgomery County, MD*, Montgomery County Government and the Montgomery County Historical Society, Rockville, MD, 1976:18) As an indication of the rate at which surveying progressed, another hundred – Monocacy Hundred – had been named by 1734. (Grace L. Tracey and John P. Dern, *Pioneers of Old Monocacy: The Early Settlement of Frederick County, Maryland*, Baltimore: Genealogical Publishing Co. Inc., 1987:31)

Maryland’s backcountry gradually changed as speculators and land investors realized profits could be made from rentals and sales of the land to the west. Lord Baltimore, Maryland’s proprietor, stood to benefit too, since his income largely came from the recurring annual quitrents, a form of property tax, paid to him once title to the land passed to individuals. Speculators and investors surveyed large tracts of land, not as in eastern Maryland and Virginia with the intention of settling themselves on a large plantation, but rather to divide the land into small lots that could be rented or sold. In this way the land gradually was made available to settlers of modest means. (Tracey and Dern:23)

Tenantry made land speculation possible. Large investments in land were possible only because tenants could take up part of the tract. Many landowners were always absentee owners. But even those who lived on their land in this part of Maryland normally farmed only a very small portion of it with their own slaves or indentured laborers. The advantages of leasing land outweighed the disadvantages of developing large plantations of the Tidewater type, making tenantry a common practice. (Hiebert and MacMaster:15) The vicissitudes of the world tobacco market also tended to encourage tenantry.

Daniel Dulany the Elder (1685-1753) and John Bradford were among the first to speculate in the Potomac backlands, combining efforts around 1720. Bradford located the best lands, and Dulany used his influence within the colonial government to patent them. The earliest surveyed parcels comprised some of the choicest land, located reasonably close to the Potomac and Monocacy Rivers. (Tracey and Dern:23) “Unlike the large, single land investments made by most of his contemporaries, Dulany spread his acquisitions widely in a large number of smaller surveys.” (Tracey and Dern:33) In 1743, to further promote the development of the region, Dulany established the town of Frederick.

Establishing title to a given piece of land was a several-step process that involved “first the issuance of a warrant authorizing a survey of the land. The actual survey was then made on

the land and a certificate of survey filed at the Land Office showing the metes and bounds of the parcel and a platting to scale of its outlines. Finally, after review, a patent was issued granting ownership. From that point on, one could deed or lease the property to whom he pleased or develop it himself, for title had now been established. In some cases the certificate of survey would be assigned to someone else who would receive the patent.” (Tracey and Dern:25) Profit-seeking speculators could hold the land by warrant and thus not be subject to the quitrent. (Paula S. Reed, Cultural Resources Study: Monocacy Battlefield, [Draft]1999:11)

It is very likely that properties held by Daniel Dulany were subdivided and leased. An illustration of this is Dulany’s 1729 advertisement for tenants in the Maryland Gazette in which he stated that: “Mr. John Bradford in Prince George’s will shew. . . . and agree upon the Terms, with any who desire to take leases. . . . I will take the Rent in Tobacco, Corn, Wheat or other Produce of the Land” (Hiebert and MacMaster:10) John Bradford also leased his own land. In March 1726 in his will, he carefully enumerated each of his land investments, including the tenants on each property. He noted that he had developed three “plantations,” one in the care of an overseer and two others that were leased. (Hiebert and MacMaster:10)

Besides leasing land, early investors also sold land to those coming into the area to settle. Cornelius Eltinge’s many tracts of land along this stretch of the Potomac were probably surveyed before he emigrated from the Hudson River Valley around 1728. Since they were patented in his name, it is likely he purchased certificates of survey from people like Daniel Dulany or John Bradford for tracts that had been previously surveyed and platted but not yet patented to an owner.

Melburn and Long Acre

Daniel Dulany patented a number of properties east of Seneca Creek, of which the river portions eventually became Chesapeake and Ohio Canal property. Dulany, John Bradford and James Stoddert, Dulany’s agent, were all involved in various aspects of the survey and patent of Melburn and Long Acre, the two principle tracts from which canal property at Pennyfield Lock was formed. The 270-acre Melburn tract was surveyed in 1722 by John Bradford (written as Radford) and the certificate of survey or warrant was signed “James Stoddert, Dept. of Lands for Prince Georges County.” (Maryland State Archives digital land survey; Charles T. Zahn, “A Bit of George Town History,” [no date]:2, Montgomery County Historical Society, Vertical file: Georgetown) (A copy of the warrant can be seen at the end of this chapter.)

Melburn was patented to Cornelius Eltinge in 1730. Roughly triangular in shape, Melburn occupied floodplain, slope, and plateau land east of Muddy Branch. (How the various tracts fit together in relation to current roads and other features can be seen on Sheila Cochran’s patent map and index at the Montgomery County Historical Society. A copy can be seen at the end of this section.) One side of the triangular parcel ran for several thousand feet along the river. The opposite angle probably touched the road which was the predecessor of River Road. The other tract, Long Acre, was surveyed in 1721 for 104 acres and patented to Daniel Dulany in 1732. Long and narrow, as its name implies, it was situated along the river immediately west of Melburn. Long Acre lay entirely on floodplain and contained within its boundaries the last part

of Muddy Branch before the tributary empties into the Potomac. Just to the west of Long Acre, where a ridge ran perpendicular to the river, was Dulany's Middle Plantation. This formation, where it looms above the river and canal, would later be called Blockhouse Point.

Most of the earliest tracts in the area between Seneca Creek and Watts Branch were parcels of less than 200 acres, in contrast to patents west of Seneca Creek that were thousands of acres in size. At 270 acres, Melburn was somewhat larger than its neighbors, although Dulany's Middle Plantation with 723 acres was larger still.

Cornelius Eltinge

Cornelius Eltinge (1681-1754) arrived in the Potomac River Valley from the Hudson Valley near Kingston, New York, a Dutch and French Huguenot settlement. He was married to Rebecca van Meter the daughter of John van Meter, a trader, who in 1724 was the first of the early travelers to acquire land in what is present-day Frederick County. (Reed, Monocacy HRS:5) Eltinge and his family left New York to follow the van Meters in 1728. He was already 47 years old. He bought a number of tracts of land near the Potomac River between Watts Branch and Seneca Creek. Based on the early date of these purchases and on the fact that he was the patentee, it is unlikely the land was previously leased and therefore probably was not yet cleared of forest.

In fairly quick succession, between 1730 and 1743, Eltinge acquired seven tracts of land clustered near Muddy Branch and around Seneca Creek. His first purchase was the already-described Melburn in 1730, followed in 1732, by the 170-acre Overplus, a tract west of Melburn and inland from Long Acre. Overplus spread somewhat evenly on both sides of Muddy Branch and extended north of where River Road would eventually cross. Part of its boundary bordered Melburn's western boundary. The third purchase Eltinge made in this vicinity was the 60-acre Eltings Rest, a narrow triangular tract situated on the higher ground of the plateau between Melburn and Overplus, also purchased in 1732. (See Cochran map, this section.)

Though not a land speculator like Dulany, Eltinge bought many tracts of land. He also, apparently, owned much of the Georgetown waterfront and operated one of the first mills on Rock Creek in Georgetown. (Zahn, "A Bit of Georgetown History":2) It's very possible that some of his numerous land purchases were for resale, for lease, or for the setting up of small plantations to raise tobacco or grain. It is entirely likely that these Dutch settlers grew tobacco as well as other crops, since that was the major trade commodity at this time.

Sometime in the 1740s, Eltinge, his wife, and two daughters moved up the river and bought land near the mouth of the Monocacy River, where he had a mill that was "frequently referred to in various road petitions." (Tracey and Dern: 57, 74) It is possible that his son, Isaac, remained in the Muddy Branch/Seneca Creek vicinity, since he patented the tract called Patience in 1754. Patience was located where the future Pennyfield Lock Road would connect with River Road.

Whether Cornelius Eltinge ever actually lived on any of the tracts near Muddy Branch remains

a question, especially if he ran a mill in Georgetown. However, he had grown sons, and they may have been situated on different properties. That Eltinge named one of the tracts Eltings Rest suggests the possibility that it may have been land on which he resided. The farmstead which can be seen on later maps straddles both Melburn and Eltings Rest. (Martinet and Bond map 1865; Hopkins Atlas 1879) Melburn, Eltings Rest, and Overplus, all primarily rolling plateau land, would have been well-suited to grain or tobacco production. (Robert Jones, related to the van Meters through marriage was growing tobacco in Monocacy Hundred in 1734 [Tracey and Dern:74].)

The first known reference to a farm on the Melburn property occurs much later in a deed of 1827, when William Nicholls took possession of the land of Dennis Jones and the mortgage Jones owed to Washington Bowie. (Liber BS 1, folio 347, Dec. 19, 1827. All deed references are for Montgomery County deeds.) Lack of an earlier reference to a farm should not be taken as evidence that there wasn't one at an earlier date. The deed history for this number of tracts is complicated, and all documents have not been seen. There is little doubt that these lands, along what was by then a major road between Georgetown and the country upriver, were agricultural lands. The word "plantations" is used in an 1803 legal document concerning Brooke Beall's land which was adjacent to Melburn. (Liber L, folio 16, Aug. 11, 1803) "Plantations" here were not large like those in the Tidewater, and many were tenanted.

Siltation along the River

Two other tracts have some relevance for this study. The Variation and Short Acre were narrow wedges of land that overlapped the river edge of Long Acre at its western end, just east of where the ridgeline meets the river (later called Blockhouse Point) on the Middle Plantation tract. (See Cochran map, this section.) The Variation was patented at the relatively late date of 1770, and Short Acre after that. Both the shape and the late survey dates of these tracts suggest the possibility that the riverfront land on which they were located was not yet formed in 1720 when Long Acre was surveyed. It is very likely that the shoreline of the river changed over time, even during these early years. Increased deforestation, as land was opened up to agriculture, led to greater loads of sediment being deposited into streams and rivers. Silt washed down tributaries and into the river. As a result, riverbanks widened, islands lengthened and new ones formed. The large Seneca Creek was one source of silt deposits. But Muddy Branch, as its name suggests, probably also carried a large load of silt. Deposition of silt along the riverbank may explain why the 11 acres that the canal company purchased in 1831 in the vicinity of Pennyfield Lock seems to be a larger piece of land today.

Thomas Johns' Ownership

This research has not determined when Cornelius Eltinge sold Melburn and the adjacent tracts, only that Thomas Johns owned them in 1783. Johns began to buy land in the area in 1770. (1783 Assessment [Annapolis]; Frederick County Land Index) The land Johns owned in 1783 was not the complete original acreage for each of these tracts. Instead of 270 acres of Melburn, he owned 183 ½ acres. He owned 84 ½ acres of Eltings Rest which had only been 60 acres when originally patented. He also owned only 11 ¾ acres of the 170 original Overplus

acres. To the east, Brooke Beall owned some of Melburn, and on the west, Clement and Samuel Wheeler owned most of Overplus and some of Eltings Rest.

Thomas Johns was a member of the well-known Johns family, into which Johns Hopkins, the benefactor of the university of the same name, was born later in the century (1795-1873). (Johns Hopkins' great grandmother, Margaret Johns Hopkins, was a generation or two older than Thomas Johns, and may have been his aunt or great aunt. [Extrapolated from dates given on Johns Hopkins University website]) Thomas Johns' brother, Richard Johns, a ship captain from Georgetown, is also recorded in Montgomery County land records. Richard Johns and Brooke Beall, together, owned a mill on Watts Branch, which they purchased in 1782. Watts Branch runs through what was the large Beall property immediately east of Melburn. In 1785, George Washington visited Beall's mill on a trip to Seneca Falls for the Patowmack Canal Company, of which he was the first president. Washington wrote in his diary on the 2nd of August that he "left George Town about 10 o'clock, in company with all the directors . . . and being accompanied by Colo James Johnson . . . and Mssrs. Beall, Johns and others who took with them a cold Collation with Spirits wine eca. . . . We dined at Mr. Bealls Mill 14 Miles from George Town. . . . On the 3rd we proceeded to examine the falls, after which returning back to a Spring . . . we partook of another cold Collation with a Colo. Orme . . . and returned back by way of Mr. Beall's Mill." (Washington's diaries held at the Library of Congress are quoted in Eleanor M. V. Cook, "History of Early Water Mills in Montgomery County, Maryland", [no date]:109, Montgomery County Historical Society) Although there were other Bealls with mills in Montgomery County in 1785, the distance of 14 miles from Georgetown indicates that this was the mill on Watts Branch. (Cook:109)

Brooke Beall was married to Thomas and Richard Johns' sister, Margaret. (Cook:109) Beall appears to have first bought land in this area around 1760. By 1767 he had combined several properties into the 496-acre Beall Mount. After his death in 1795, his sons resurveyed the majority of the holdings around Watts Branch on both sides of River Road into the 1590-acre Resurvey on Beall Mount.

Brooke Beall's son, Aquila, purchased land on the west side of Thomas Johns' holdings from Samuel Wheeler in 1804. These parcels included 33 $\frac{3}{4}$ acres of Long Acre, nearly all of Overplus (158 $\frac{1}{4}$ acres), a small part of Eltings Rest (11 $\frac{1}{2}$ acres), and about half of Patience (33 acres). (Liber L, folio 377, July 12, 1804) Aquila Beall sold the same tracts four years later to John Brackenridge (Liber O, folio 32, Feb. 23, 1808), who 22 years later sold some of Long Acre to the Chesapeake and Ohio Canal Company.

The Eltinge tracts appear to have been divided sometime before this into two parts, rather than into many subdivisions. The subdivisions remained intact for many years to come. Thomas Johns' portion of Overplus (11 $\frac{3}{4}$ acres), together with the 158 $\frac{1}{4}$ acres that Aquila Beall purchased from Wheeler, account for the full original tract. (The Eltings Rest figure of 84 $\frac{1}{2}$ acres given for Johns might be an old transcription error. If it were 48 $\frac{1}{2}$ acres instead, then, with Beall's 11 $\frac{1}{2}$ acres, it would equal the full original 60 acres.) Aquila Beall's 33 acres of Patience and the 29 $\frac{1}{2}$ acres of it owned by Brooke Beall add up (almost exactly) to the original 62 acres.

Long Acre (originally Dulany's 104-acre tract) seems to have been divided into three sections. At the west end was a 52-acre part that went through several hands. The middle 33 $\frac{3}{4}$ -acre section surrounded Muddy Branch. Closest to Melburn, and the part that figures into Pennyfield Lock calculations, was an 18 $\frac{1}{4}$ -acre section. (Maryland State Archives, Montgomery County 1783 Assessment)

Washington Bowie's Ownership

Washington Bowie (1776-1826) is the third person we know to own the 183 $\frac{1}{2}$ -acre Melburn tract and parts of the others. We have no record of his purchase of these tracts, only the sale documents. It may be that he inherited the land through his wife, another Margaret Johns, who was perhaps the daughter or niece of Thomas Johns. Or, before coming into Bowie's possession, the tracts may have passed through other hands, possibly the Wheelers, mentioned above. Bowie bought property in Montgomery County between 1806 and 1819. (Those transactions have not been looked at for this report.

Bowie owned the same parts of Melburn (183 $\frac{1}{2}$ acres) and Overplus (11 $\frac{3}{4}$ acres) that Thomas Johns owned in 1783. He owned less of Eltings Rest – 44 $\frac{1}{2}$ acres versus John's 84 $\frac{1}{2}$ acres (although Johns figure might really have been 48 $\frac{1}{2}$ acres). While neither Cornelius Eltinge nor Johns owned any of Long Acre, Bowie seems to have purchased two parts of it – the 52-acre piece at the tract's west end and 18 $\frac{1}{4}$ acres adjacent to Melburn. The middle 33 $\frac{3}{4}$ -acre portion of Long Acre was at this point owned by John Brackenridge. Johns did not own any of Patience; Bowie purchased 3 $\frac{3}{4}$ acres of it from Upton Beall in 1815. This piece is probably a small triangle of land near the lock road that one can see on the later Bache map. (A.D. Bache, A. D., Supdt. U.S. Coast Survey, "Potomac River [Upper Part]: from Whitesville to Great Falls." U.S. Engineers, Chief Engineer Middle Military Division, 1865. Part of this map is reproduced in the next chapter.)

Washington Bowie did not live on the property in question. As a young man, he moved from Montgomery County to Georgetown, where he was part of a successful shipping and export business under the name of Bowie and Kurtz. In 1810 the Annapolis Gazette reported him to be one of the "wealthiest and most public spirited citizens of Georgetown." (Roger B. Farquhar, "Historic Montgomery County, Md.: Old Homes and History":241-2, in National Register nomination for Oatland Farm, Oct. 1979) In 1820, Bowie retired from Georgetown to live in Montgomery County near present-day Olney on a 2000-acre property where he built a stone house called Oatland. (Oatland Farm National Register nomination, Oct. 1979)

Sometime before 1823, Bowie sold his holdings of Melburn, Eltings Rest, Overplus, Long Acre and Patience to Dennis Jones with a mortgage. We don't know how long Bowie held the mortgage, only that he sold it to his business partners, William Nicholls and John and Daniel Kurtz (Liber W, folio 395, Feb. 4, 1823). In an auction in 1825, Nicholls appears to have purchased the mortgage solely in his name (Liber BS 1, folio 48, March 6, 1827). In the actual deed some months later, the debt was described as "the purchase money due for the farm purchased by the said Dennis Jones of the late Washington Bowie and whereon the said

Dennis Jones now lives.” (Liber BS 1, folio 347, Dec. 19, 1827). These various documents are the first that mention the farm on Melburn and the other tracts. In the deed, Jones “acknowledg[ed] himself from date of this indenture and during the time of his residence upon said farm to be the tenant of William S. Nicholls.” Legal dealings with regard to the property were afterwards managed by a trustee, Robert P. Dunlap. It was Dunlap who sold part of Melburn and Long Acre to the canal company in 1831.

Other properties in the area were also tenanted in this time period. In the document apportioning Brooke Beall’s property among his children in 1799, the property near Watts Branch is referred to as a number of “plantations.” As part of his inheritance, one of Beall’s sons was to receive the “rents for lands near Watts Branch for 1796 and 1797.” (Liber L, folio 16, Aug. 11, 1803)

Landscapes as Revealed in Land Transactions

A history of real estate transactions such as these can only give faint hints about the activities on a landscape or how it is changing. Characteristics, such as the frequency of sale or the subdivision of land, provide a skeleton upon which a speculative story of the land might be constructed. Embedded within many of the land transactions are specific landscape details – the locations of springs, the existence of buildings or fences, a particular species of tree that marks a boundary corner, the existence of roads or a farm, and who owned neighboring tracts. Broad historical forces tell the general story of what happened in a region, but not the particular. Vernacular landscapes, such as most of those found along the Chesapeake and Ohio Canal, are usually not recorded in depth. The names of notable people may be connected with these places, but their fame is not tied to the site and their connection to it does not leave much of an historic record. Properties associated with the non-famous generally have little documentation. Extrapolating from the kinds of sources that must be used in these instances does not provide much of an account of the appearance and use of the land. However, the process of organizing isolated events of local history and broad historical trends into a chronological sequence, made particular by the “who” and the “when” of land ownership, begins to produce an image of the land and its changes, and documents where this information can be found. For reports such as this cultural landscape inventory, time constraints do not permit research into the many possible records, such as tax files, that could give a better picture of what structures existed on a property at a particular time. Historic maps sometimes provide useful evidence of the arrangement of a property.

Earliest Mills

In the 18th and early 19th centuries, streams with enough flow of water were dotted with grist and sawmills. These prime parcels were among the first surveyed. There was a sawmill before 1752 on Watts Branch. Evidence for this is found in the 1782 document recording the purchase of a tract called Beggar’s Benison by Brooke Beall and Richard Johns from someone named William Jones. The property had been patented in 1752 to Walter Evans and was described at that time as “beginning on . . . the north side of a branch called Watts Branch about . . . 40 foot above where an olde Saw Mill stood.” (Liber B, folio 64, in Cook:108) By

1785, Brooke Beall had a grist mill in this location.

There was also an early sawmill owned by Samuel Boone on Muddy Branch. In 1779 Boone sold some of his land containing “buildings, mills, improvements, profits, commodities, and so on” to Nicholas Quarry (or Queary) of Berks County, Pennsylvania. By 1788, there was both a sawmill and a grist mill on Quarry’s land. (Cook:56-57) Unlike the mill on Watts Branch, which was quite near the Potomac River, Boone’s and Quarry’s mills were probably as much as two miles up Muddy Branch. Grist mills are evidence of the change that was occurring by the 1780s. They mark a shift from tobacco to wheat production.

As an example of what a mill property at this time might consist of, when Quarry’s sons sold the mill property in 1795, they advertised it as “an excellent mill-seat containing 237 acres – 6 miles above the falls of the Potomac and 8 from Montgomery Court-house – there is already a grist and saw mill, in tolerable good repair, with other convenient and necessary buildings – there is about 10 acres of meadow ground cleared and more with a trifling expense may be added. The land is well adapted to corn, wheat and tobacco – there is a sufficiency of wood on this land for its support for many years – and an excellent Apple and Cherry orchard.” (Cook:56-57)

Documents such as this and Brooke Beall’s indicate, among other things, that there was a mix of tenanted and owner-occupied lands along this part of the Potomac River, and that corn, wheat and tobacco were grown. Brooke Beall had tenants who paid rents to him for the farms they worked, but Beall also lived on land in the same area. His home, Beall Mount, was on River Road east of Melburn.

Road to Georgetown

What eventually became River Road progressed through many stages of road building. First simply the road from Georgetown to Watts Branch, it was one of the first public roads in the Montgomery County area. Money for it was provided in 1774 in a loan to several counties through an Act of Assembly. (T.H.S. Boyd, *The History of Montgomery County, Maryland: From its Earliest Settlement in 1650 to 1879*, Baltimore: Regional Publishing Co., [1879] 1968) In 1782, the road was extended from Watts Branch to Seneca Bridge (Cook:108).

A road along the river must have existed before these dates. The first land investors and surveyors would have traveled along the semblance of one by the 1720s and ‘30s, and crops of tobacco and grain were probably being harvested on some of the properties by the 1730s. Tobacco, grown for export, needed to be carried to a port. Though Georgetown was not laid out until 1751, port facilities existed before then. There were other ports, such as Bladensburg, Elk Ridge (on the Patapsco River), and Baltimore (Boyd:75), but Georgetown was the port for this part of the Potomac River.

Goods were hauled in hogsheads along rolling roads, and supplies brought upriver on the backs of horses. (Boyd: 75) Even before white settlers traveled along the river or hauled agricultural products to Georgetown, Indian paths followed the river. River Road was the Tehoggee Trail of the Canaya Indians, shown on maps as early as 1716. (William M. Offutt, *Bethesda: A*

Social History through Two World Wars 1995, in NPS/NCR, Great Falls Tavern Cultural Landscapes Inventory [history section] 2001:3)

From first settlement of the Potomac Hundred and the Upper Potomac Hundred, a close connection existed between this part of the Potomac River Valley and Georgetown. Many upriver landowners were instrumental in the layout and original governance of Georgetown. Various branches of the Beall family had a close connection to Georgetown. Josias Beall and others were authorized by an Act of General Assembly in 1751 to purchase 60 acres on which to erect the town of Georgetown. Later, Thomas Beall allowed his Rock of Dumbarton to be added to the town (Dumbarton Oaks is a part of that property). Brooke Beall, who owned the grist mill on Watts Branch and a good deal of adjacent property, also owned a warehouse and other buildings along the Georgetown waterfront. (Quoted in deed transfers between children of Brooke Beall after his death [Liber L, folio 16, Aug. 11, 1803].) Beall moved from his property at Watts Branch to Georgetown later in his life and was one of Georgetown's first aldermen, along with John Threlkeld and John Peter, neighbors in the Seneca Creek area, after Georgetown was incorporated in 1789. (Cook: 109; Boyd: 49; and "Property Map of the Chesapeake and Ohio Canal Co., Washington to Seneca, Maryland, surveyed by B. F. Mackall under the direction of G. L. Nicholson," May 1896)

References to Georgetown abound within the deed records of properties that have been looked at for this study, with many purchasers or sellers of land described simply as "of Georgetown." Property owners or their descendants, with ties to this part of the Potomac River Valley, might have been from Georgetown or moved there, or they might have retired from Georgetown to Montgomery County.

Land Values along the River

By the 1780s many of the original tracts in the area of Muddy Branch and Watts Branch were consolidated into larger tracts by wealthy merchant-planters. Upton Beall, Brooke Beall's son, added adjacent tracts and repatented Beall Mount in 1799 as Resurvey on Beall Mount with 1590 acres. Other nearby resurveys were Resurvey on Rich Meadow (1660 acres) in 1768 for Archibald Orme and Resurvey on Piney Grove (1549 acres) in 1770 for Thomas Johns. (Cook:56-57 and 65) Johns did not keep this large property; by 1783, he owned only 292 acres of Piney Grove (1783 Assessment). Consolidation may have been a trend, but it was not universal. The Melburn/Long Acre lands, tracts on which the Pennyfield Lock community would later occupy a small corner, remained in much the same configuration as earlier, and were never resurveyed into a larger property.

Early Plans to Develop a Potomac River Route: the Patowmack Company

As early as 1760, George Washington championed the economic potential of the Potomac River Valley and the need of a route to the Ohio Valley. The Patowmack Company was established in 1785 with Washington as its first president. Its purpose was to improve navigation by deepening the existing river channels, removing rocks, and by building short canals in various places around the rapids and falls. (Perry Wheelock, "Farming Along the Chesapeake and

Ohio Canal,” [Draft] NPS, 1997:20; John R. Miele, *The Chesapeake and Ohio Canal: A Physical History*, 1968:7) Seneca Falls, just a few miles upriver from Melburn and Long Acre, was one of the places where a skirting canal was built (on the Virginia side of the river). Others were Little Falls, Great Falls, Shenandoah Falls (Harpers Ferry), and the House Falls (just above Harpers Ferry). (Mike High, *The C&O Canal Companion*, Baltimore: John Hopkins University Press, 2000:13) The company’s work did not proceed without problems. The locks at Little Falls were completed in 1795, but unusable until those at Great Falls were completed, which took another seven years. (High:16-17)

Even with these improvements, the “almost constant repair necessitated by the Potomac’s floods and the Potomac’s capricious pattern of flood and drought meant that boats could use the river for only a few months of the year. Even at normal levels, the river current was an impediment to transportation.” Bateaux or log rafts, that would be broken apart and sold for lumber upon reaching their destination, were the typical vessel. Any vessel carrying cargo upriver had to be poled. It was soon evident that the only way to carry goods up and down the river was by way of a canal that was completely separate from the river. (High:19)

Agriculture in the Early 19th Century in Montgomery County

By the early 19th century, Montgomery County was a “denuded and exhausted” landscape, according to one description, marked by decaying worm fences, oldfields, and “moldering homesteads,” the result of years of tobacco agriculture. (Boyd:107) Another source makes the same point that Montgomery County was known for its large tobacco plantations, and successive tobacco crops had worn out the land. (Harlan D. Unrau *Chronological History of the Chesapeake and Ohio Canal 1828-1924: A Historic Resource Study*, Vol. 6, C&O Canal Restoration Team, Seneca, Maryland, May 1976:17) In the first four decades of the 1800s, the population of the county decreased more than 14 percent and land values diminished “almost to the vanishing point.” (H. Wilson Taft and Anna B. Taft, *A Rural Survey in Maryland*, Board of Home Missions of the Presbyterian Church, New York City, undated [c. 1910]:7) An upturn came with the discovery and introduction of cheap fertilizer in the form of guano (excrement of seafowl found on rocky islands off Peru). Scientific agricultural ideas began to spread in these years, fostered by the newly-formed agricultural societies and led by the Society of Friends. (Unrau 1976:17) The Montgomery Agriculture Society was organized in 1844. Its third president was Robert P. Dunlop, who was also the trustee for Melburn and the other tracts owned by William Nicholls. (Boyd:106)

Whether the image of exhausted farmland is accurate for the properties near Muddy Branch and Seneca Creek is beyond the scope of this research to verify. These properties probably experienced many of the same problems as elsewhere in the county. But all was not in decline in Montgomery County in the early 19th century: Washington Bowie, for instance, built a large stone house on 2,000 acres in the town of Olney in 1820.

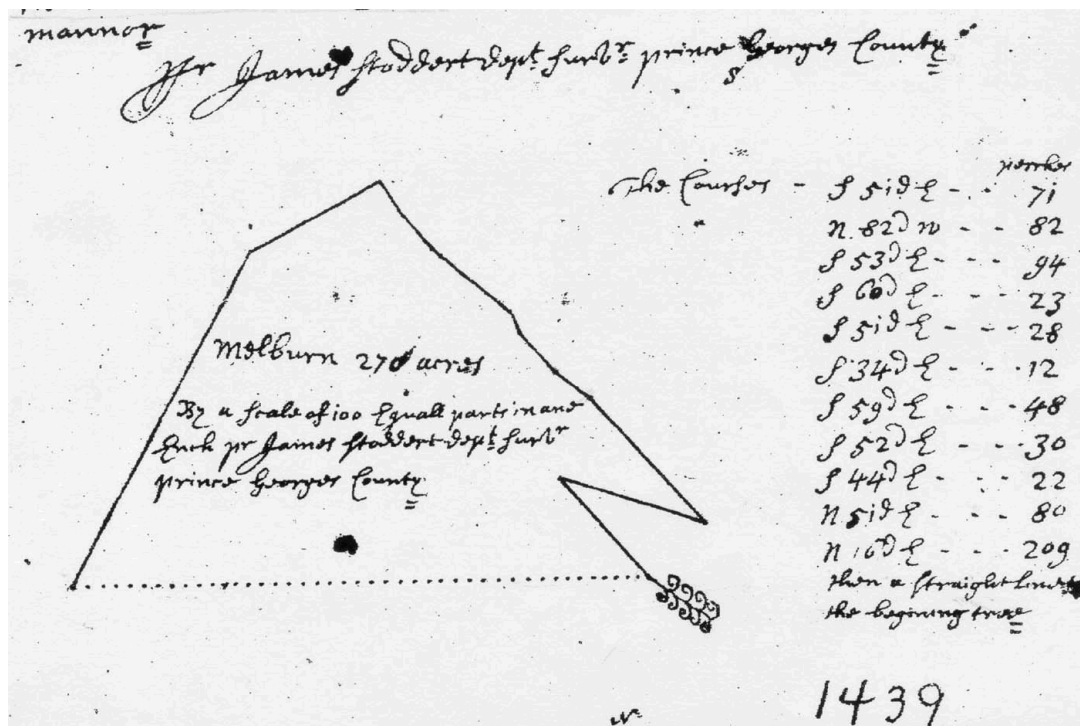
Impetus for the Chesapeake & Ohio Canal

The Potowmack Canal Company remained in operation for the next quarter century and

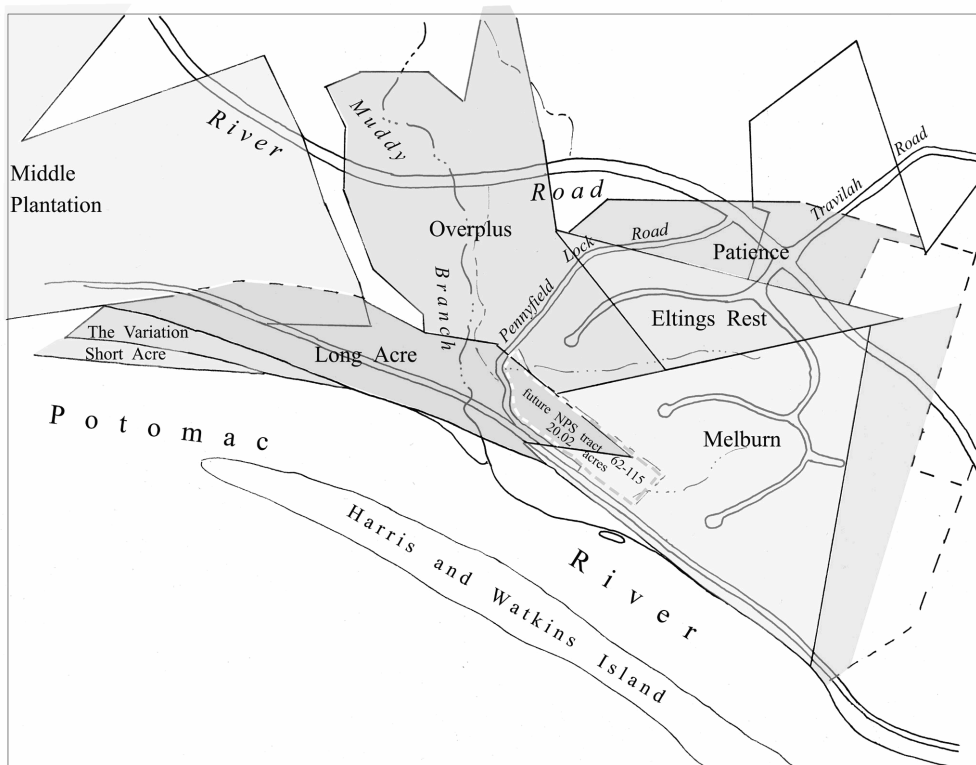
furthered some notable enterprises. Pig iron from the Antietam Furnace was transported to the Foxhall foundries near Georgetown, and “Potomac Marble” used to construct the Capitol was delivered from a quarry near the Monocacy River. But flooding which damaged the constructed works, drought which reduced the river’s flow, and other problems continued to plague the enterprise. (High:16-19)

The desire to access the agricultural bounty of the Ohio Valley spurred competition between those planning a canal through New York State and those supporting a mid-Atlantic route by way of the Potomac River. Alarmed by the near realization of the northern route, a group of influential men interested in the Potomac route met in Leesburg, Virginia in November 1823. The guiding force was Charles Fenton Mercer, who advocated that the canal begin at Georgetown, rather than Baltimore. It was five years before work would begin on the Chesapeake and Ohio Canal. Meanwhile, New York succeeded in building a canal connecting the Hudson River to Lake Erie in 1825. That year, at the instigation of the Potomac canal advocates, the U.S. Board of Engineers (Coast Guard) surveyed a route along the river and projected a price of \$22 million for the project. “The shocked canal lobbyists called for a second survey, which reduced the estimate by about half.” (High:20)

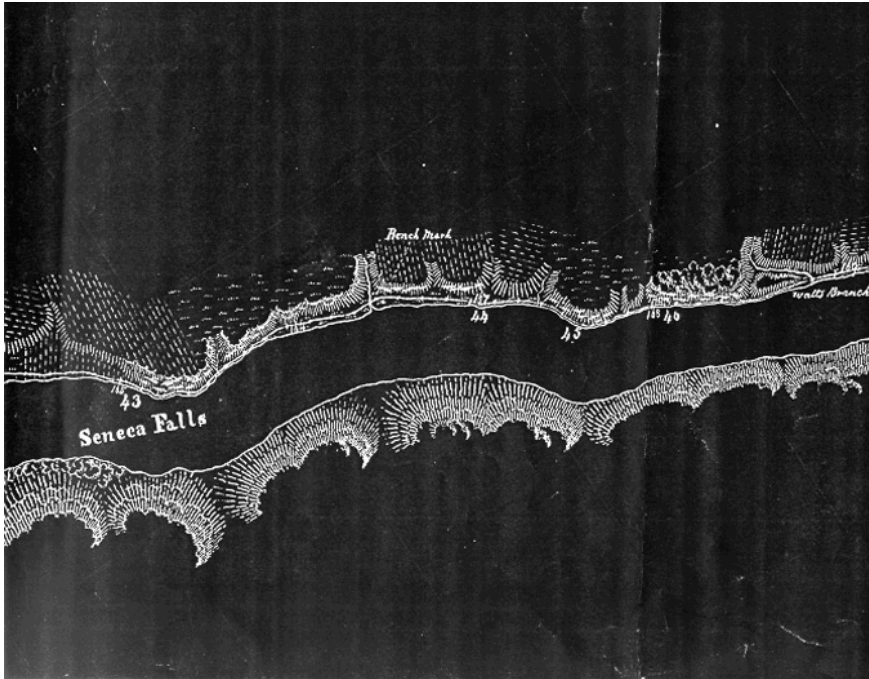
The engineers map (a portion is reproduced at the end of this section) depicted the landforms and the drainages on the Maryland side of the Potomac River. (Col. J. J. Abert et al., Map of the Survey of the Potomac Canal, 1825, United States Topographic Bureau) It provides the first graphic depiction of the land east of Muddy Branch that is the subject of this report. It shows fields on plateaus above the river, inland of the proposed canal line. Parallel dashed lines suggest plowed fields, and other symbols seem to indicate pastureland. Only in the area southeast of Seneca Creek are there floodplain fields. Not much woodland is indicated. There is a patch of woods above the river on the slope west of Watts Branch and another patch on the Virginia shore in the vicinity of Seneca Falls. The map shows stone outcrops along the ridges east and west of where Lock 22 would be built. Minor outcrops are seen along the slopes of the Melburn tract, where the ridge moves inland. The map shows three small drainages east of Muddy Branch (here unnamed).



Section of warrant for Melburn dated October 12, 1722 and assigned to John Radford.
The irregular line of the plat corresponds with the Potomac River's bank and is the
southeast line of the plat. (MD Archives digital land survey)



Cochran's map (early land patents overlaid on current county map of roads and streams) reproduced by hand and Photoshop for this report. Future Pennyfield lockhouse is above small island. (MCHS)



Section of Map of the Survey of the Potomac Canal 1825'showing the project site which extends from the number 44 to the stream left of it (Muddy Branch). Notice the fields on plateau.

1828 to 1879: The Canal and Lock 22 before the Pennifields

Ground Breaking for the Canal

In 1828, work on the Chesapeake and Ohio Canal commenced in Georgetown and progressed upriver in half-mile sections constructed simultaneously by different contractors. “To deal with irregular terrain, the canal had to be broken into different levels of water, and it had to have locks to convey vessels from one level to another.” (High: 50) The ground was cleared and grubbed of trees. Then, by trenching, blasting through rock, and filling-in the lower ground, the workers created stretches of level terrain for the canal prism. A towpath of consistent width was constructed on the river side of the channel. Workmen quarried stone for walls, culverts, dams, locks and aqueducts from different locations near the river.

Before a phase of construction began, company agents negotiated with landowners farther up river to buy land. Initially, agreements were willingly signed by owners. This appears to have been the case in Montgomery County. In Frederick and Washington Counties, some settlements with land owners were less amicable, resulting in extensive condemnation suits in the county courts. (Wheelock:26)

Land Parcels at Lock 22 and Completion of the Canal to Seneca

Robert P. Dunlop, representing William S. Nicholls, sold 11 acres, 3 roods and 92 square perches of the Melburn and Long Acre tracts in the vicinity of the future Pennyfield Lock to the canal company agents. (Liber BS 4, folio 282, April 6, 1831) (Rood and perch measurements were used into the 20th century in Maryland. A rood equals about $\frac{1}{4}$ acre, and there are about 160 square perches in an acre.) The 1831 date of this deed is a little confusing, because by then construction of this segment of the canal was completed. Canal building must have been allowed to go forward under the provisions of a preliminary agreement to sell (called an inquisition) even before the title was transferred. (Liber BS 3, folio 46, July 7, 1829) The inquisition for Nicholls property may have been a separate document. (Liber BS 3, folio 219)

Metes and bounds for the parcel were measured in chains. Transposed into feet, the line on the inland side of the parcel measured approximately 4,000 feet. (The 1974 Beasley & Beasley appraisal for tracts 62-115 and 62-116 [p. 38] measures the same line as 1,851.11 and 2,372.2 feet, respectively, totaling 4,223.31 feet.) No length is given for the opposite side of the parcel along the river's edge or for the short ends of the parcel, described as "running with" the property lines. The width of the parcel varied with the riverbank. The property that Nicholls (Dunlop) sold connected on the east along the Melburn property line to land sold to the canal by the heirs of Upton Beall. On the west it abutted land sold by John Brackenridge. Brackenridge's property line was located about 100 feet east of Muddy Branch and ran diagonally from southeast to northwest. (Liber BS 3, folio 228, put date) The parcel from Nicholls became part of canal section 28, all of section 29, and a very small part of section 30.

The first completed part of the canal, from Little Falls to Seneca, opened to navigation in November 1830. Dam no. 2, a low rubble dam at Seneca Falls (no longer visible), watered the canal down to Little Falls. In celebration, company directors, dignitaries and newspaper editors took the canal packet "Charles Fenton Mercer" up the canal from Little Falls. The lower portion into Georgetown was not completed and watered until 1831. (High:129-131) For three years Dam no. 2 was the head of navigation on the canal.

Manipulation of terrain in the area surrounding Lock 22 for the creation of the canal was in some places quite extensive. The river bluffs at Blockhouse Point and the ones east of Lock 22 were two places that would have required extensive blasting. Soil borrowed from a different location may have had to be brought in to fashion the prism on the exposed rock. This may have been the reason why supporting walls were built along the levels east and west of the lock. Engineers inspecting the canal in 1834 mention a two-mile-long stretch of a "beautiful and well built sloping stone wall of dry masonry" which supported the canal prism along the river side. The inside slope of the canal trough, on the river side, was also revetted with stone. A similar wall was described between Lock 22 and Lock 23. In the same report the culvert for Muddy Branch was described as "well made" and "resting upon a rock foundation," with no evidence of leaking or yielding. (Report to Brig. Gen. Gratiot, Chief Engineer, USA by John J. Abert and James Kearney, Lt. Cols. and Topo. Engs., House of Representatives, 23rd Congress, 17 Apr. 1834. [page not visible on xerox]) Lock 22 and the next mile of canal were located on floodplain land, the ridge being further inland at this point.

The lockkeepers house at Lock 22 was probably not built until after 1836. Lockkeepers houses

(or lockhouses) were built according to specifications drawn up by the canal directors. An early architectural study of the canal by the NPS determined that the lockhouse at Lock 22 was built according to the 1836 specifications, rather than the specifications of 1828-1829. (Dallas D. L. McGrew, "Outline Report of Architectural Work on the Restoration of the Chesapeake and Ohio Canal for Recreational Use, Georgetown, D.C. to Seneca, Md.," 1939:13) What distinguished the latter from the earlier set of specifications is not clear from the portion of this document that has been reviewed. Both sets specified small stone homes, one-and-one-half story high, and generally symmetrical in form. (A more-detailed description of the built features of Pennyfield Lock will be given in the Analysis and Evaluation section of the report under Buildings and Structures.)

Completion of Canal to Cumberland

With completion of the first section of the canal, the cost of shipping a barrel of flour to Georgetown decreased from \$1 to an amount that fluctuated between 30 and 50 cents. Eventually it decreased to seven cents, including tolls. During the last ten days of March 1831, some 30,000 barrels of flour, along with other merchandise, descended the waterway. (Unrau 1976:15) But labor scarcity, cholera outbreaks, and constant funding difficulties brought work to a standstill many times. The greatest challenge to the canal, one which it could never overcome, was the formation of the Baltimore & Ohio Railroad, also pursuing a route to Ohio. A court battle over which company would lay claim to the narrow passage at Point of Rocks, Maryland (where the Catoctin Mountains meet the river), stopped work on the canal for four years. In 1833 the canal reached Harper's Ferry, but more delays and catastrophes brought the canal company nearly to bankruptcy. (High:21-11) In 1835 the company mortgaged all its property to the State of Maryland. (Memorandum on Title to C&O Canal from District to Point of Rocks, November 14, 1936: 83-84.)

To free up funds, the Maryland Assembly passed a resolution in February 1843 to allow the company to sell at auction any of the various small parcels of land which it did not need. One parcel which the canal company divested itself of was located near Lock 22. A 57-acre portion of Long Acre and all of The Variation, located west of Muddy Branch, were bought by Greenbury M. Watkins. (Liber STS 1, folio 38, March 5, 1845) When originally purchased from William Scott in 1831 (as 52 acres of Long Acre and the full 21-acre Variation), the canal company's interest in this land was partly in its "stone, timber, gravel, earth and other materials" useful in constructing the canal. (Liber BS 4, folio 469, Oct. 5, 1831, corrected in Liber BS 7, folio 3, Nov. 27, 1834) No land between the lock at Lock 22 and Muddy Branch was sold as surplus land, but an approximate four-acre parcel, bordering the west bank of Muddy Branch between the river and the canal was sold at some point by the canal company. It is one of the parcels purchased by NPS from Christian Heurich, Jr., in 1976. (Liber 4876, folio 604, Nov. 3, 1976)

Up until the last, there were suspensions of work on the canal for lack of funds, followed by the emergency approval of bonds. Finally, in 1850 the canal was completed as far as Cumberland and the decision was made not to go farther west. (Unrau 1976:7; Donald R. Shaffer, "We are Again in the Midst of Trouble": Flooding on the Potomac River and the Struggle for the

Sustainability of the Chesapeake and Ohio Canal, 1828-1996, 1997:19)

Flour Trade

In the 1840s and 1850s, flour became a principal element of the coastal and foreign trade originating at Georgetown. "Wheat products, some of which passed down the canal from the upper Potomac Valley and much of which were produced in the Georgetown flour mills were shipped via coasting vessels to New York, Boston and to a lesser extent via steamship to foreign ports. The flour trade out of Georgetown was short-lived, as the Baltimore and Ohio Railroad acquired between half and two thirds of the descending canal trade during the Civil War. Thereafter, the Port of Baltimore became the central focus of the coastal and foreign shipment of flour from the Potomac Valley and the flour produced at Georgetown was used primarily to meet the local needs of the District cities." (Unrau 1976:18-19)

Coal Trade

When the canal reached Cumberland, it had access to a greater source of income in the veins of coal that lay just beyond the town. "The canal provided the first direct connection for coal shipments to the port of Georgetown, since the B&O Railroad would not close the gap between Point of Rocks and Washington until it built its Metropolitan Branch after the Civil War. . . .By 1859, the canal was carrying 300,000 tons of coal, and only 20,000 tons of flour, wheat and corn." (High: 25-26) Not a great deal of trade went back up the canal.

Flooding would always remain a problem. There was a great flood in 1852, and a succession of them in 1857, that nearly put the canal out of business. (High:26) The dams were also a frequent source of trouble. The 1866 Annual Report stated that Dam No. 2 and the one at Little Falls were "dilapidated and ineffective for a full supply of water when the river is low." (High:132) After the Civil War and for the next 15 years, the canal enjoyed a brief period of prosperity. In the 1870s, more than 500 boats were plying the canal, carrying mostly coal, but also some lumber, stone, grain, flour and even whiskey. But by the end of this decade, the B&O Railroad had won the competition for coal transport, once the canal's specialty. (High: 41-42)

The Lockhouse and Other Buildings at Lock 22 circa 1840 to 1880

The lockhouse at Lock 22 was built sometime after 1836. Lockkeepers were given an acre of land for a garden and \$150 per year. Married men and large families were preferred for the job, as this meant more hands to do the work. (Miele: 54) A photograph from the early 20th century shows a white picket fence enclosing the lockhouse and a small yard, perhaps only a tenth of an acre in size. (Xerox of photo in CHOH historic lease file: Pennyfield Lockhouse) Although records probably exist, this research did not uncover the names of any lockkeeper at Lock 22 until 1865, when the name R. Selby, L.K., can be seen on the Martenet map.

By 1856 John Dufief had a warehouse along the canal near Muddy Branch, evidenced by a road petition of that date. (Cook:65) An advertisement offering the warehouse for sale in

1865, gave its dimensions as 30 by 50 feet. (Cook:66 or 69) Around 1870, a grocery/feed store existed at Lock 22. (Unrau 1976:22) According to this, the store predated the Pennyfield house by about ten years. Such stores supplied boatmen with provisions for themselves and their families and feed for their mules. About 27 such stores were built along the canal in the years between 1859 and 1877. Nearby stores included one at Lock 20, built c. 1851, Lock 23, built c. 1883 and Lock 24, built c. 1873. (Unrau 1976:22)

Dufief's Road to the Canal

Although the Baltimore port had claimed the major flour trade from Georgetown, farmers along the Potomac River, especially within Montgomery County, shipped their flour or grain to Georgetown. The canal board in 1848 reduced charges on the shipment of fertilizers upriver. (Unrau 1976:17) Within the next decade, John L. Dufief was shipping flour down the canal and bringing back and selling fertilizer from his warehouse at Lock 22. No reference to a warehouse at the lock before Dufief's has been found. Maps from the 1860s show Dufief's "wharf" and "warehouse" (abbreviations for both are used). In 1856 Dufief had petitioned Montgomery County for the construction of a road from near his mill (Glenwood Mill) to the warehouse "at the mouth of Muddy Branch." (Cook:65) The road was approved and built at public expense.

Though Dufief's road was several miles long, extending from the mill and crossing River Road, it is the section between River Road and the canal that is of interest here. The alignment of this section, shown on maps of the period (particularly the Bache map of 1865), is strikingly similar to the current Pennyfield Lock Road. (Map is reproduced at end of this section.) The double bend that one sees in the present road as it approaches the canal marks where the road turned to avoid Dufief's warehouse. When the road was built, it cut through a number of properties, including that of the heirs of John Brackenridge (owner of some of Overplus, Eltings Rest, etc.) and William A. Cady, who then owned the Melburn tract and related tracts. (Cook:65-66; Liber JGH 5, folio 98)

The importance of Dufief's operation is suggested by other petitions he made for roads. In 1861, it was stated in a road petition that "the merchant mill of John L. Dufief near the mouth of Muddy Branch and his warehouse . . . have become the depot for the sale of a considerable portion of the produce of this county and for the purchase of most kinds of fertilizers having a decided advantage, in point of distance, over the markets of the District of Columbia." The road Dufief was then petitioning for would be "the means of putting in direct communication with the canal a large tract of country." (Cook:66; Liber JGH 8, folio 408) Though this description places the mill "near the mouth of Muddy Branch," it was really almost two miles inland.

The 1865 Bache map shows a warehouse (not marked by name) at the foot of the road on the inland side of the canal, close to Muddy Branch (not named). To the east is a structure that must be the lockhouse, since it is in the proper location. Another structure is shown on the inland side of the canal opposite the lockhouse. This may have been a store, although a store is not officially recorded there until 1870. The structure may also have been a mule shed or one

of any number of buildings that served the boatmen, or it may have been a second warehouse. The question arises -- which can't be answered here -- whether it indicates a house, perhaps what became the "Pennyfield House."

The Martenet and Bond Map of Montgomery County, also from 1865, though less informative about features such as roads, streams, and landforms, gives the names of those residing on each of the properties. (See reproduction of map at end of this section.) It is this map that shows R. Selby as the lockkeeper at Lock 22. "G.W. Pennifield L.K." appears at the next lock upriver. This map identifies a structure at the foot of the lock road as "Jno L. DuFief's Whf." Curiously, the building is shown on the river side of the canal – as it is in the 1879 Hopkins Atlas map, where it is identified as "warehouse." However, the more-detailed Bache map, which places the warehouse on the inland side, is probably correct. It would be unusual for a warehouse to be on the river side of the canal, where it would be difficult to get to. (Hopkins map also presented at end of section.)

Actually, there was both a warehouse and a wharf at this location. The wharf (located at canal milepost 19.95) consisted of a widening of the canal on the berm side, which could serve as both a loading area and turning basin and, probably, some sort of dock. (J. R. Prentice and T. Hahn. "Historic Structures Report," C&O Canal, 1972-73: photo caption, no page number) The 1896 Mackall map shows two shapes on the east side of the canal west of Muddy Branch, which may have been turning basins, but no basin or widening east of Muddy Branch. This may have been a minor basin; it does not appear in a later listing of them. (Miele:110) (See Mackall map at end of section.)

In 1865, as shown on the Bache map, a number of roads traversed the slopes above Lock 22 in addition to Dufief's road, recognizable by its shape. Two roads that generally paralleled Dufief's followed ridgelines on east and west sides of it, as opposed to Dufief's, which for some of its length lay in a hollow. The road east of Dufief's road crossed Melburn and Eltings Rest. Near the bottom of the slope it turned west, crossed Dufief's road and Muddy Branch, and climbed back up the slope to reconnect with River Road about a mile west. The other road lay west of Dufief's road, above Muddy Branch. (See Bache map, this chapter, and Cochran map, last chapter.)

William A. Cady's Ownership

William S. Nicholls sold Melburn and the related tracts to William A. Cady in 1858 (Liber JGH 7, folio 140, October 25, 1958). Nicholls had owned this property since at least 1827 and Robert P. Dunlop continued as trustee during Nicholls' ownership. It is uncertain who lived on this land during these years. When Dennis Jones lost the property in 1827, because he could not pay the mortgage, he acknowledged himself the tenant of Nicholls. Jones may have continued to farm it as a tenant. Nicholls, who had a shipping business in Georgetown, did not live here. Certainly, someone was farming the land.

Cady purchased the 183 ½-acre part of Milburn (as Melburn began to be written), 48 ½ acres of Ellings Rest (Eltings was now generally spelled this way and sometimes as Ettings), 11 ¾

acres of Overplus and 18 ¼ acres of Long Acre – almost the same land owned by Washington Bowie and briefly by Dennis Jones. As written in the deed: “the four pieces of land contained together 262 acres except about 10 acres sold to the Chesapeake and Ohio Canal.” The 3 ¾ acres of Patience bought by Bowie were not mentioned. It may have been combined with Eltings Rest to get the 48 acres. The deed conveyed rights to the “buildings, improvements, ways, waters, water courses” etc., providing other evidence that there were buildings on the property at this time.

By 1865 Sarah E. Cady seems to have been the primary resident. Her name is shown on the Martenet and Bond map, suggesting that she actually lived there and was not an absentee landowner. Sarah Cady may have been William Cady’s wife or daughter. The Martenet and Bond map shows a structure on the property fairly close to River Road. The more detailed Bache map shows several structures where the farm would be. A dashed line suggests a fenceline around the fields closest to the house. (This same fenceline appears in future plats and deed documents, even on the park’s tract map [also called the Kimball map] of 1971.) The Bache map also shows the straight east boundary of the Melburn tract dividing the generally-cleared land of Melburn and Eltings Rest from the wooded west side of the adjacent Beall property.

The property did not remain in Cady’s hands for very long. For some reason, in 1866 the county court named George Peter as trustee of the property (mentioned in a later Montgomery County deed: Liber EBP 24, folio 405, Sept 11, 1881). Why a trustee became involved is not known. It may have had something to do with Cady’s death. He died before 1869. (The “late” William Cady is mentioned in an unrelated deed. Liber EBP 11, folio 206, Dec. 31, 1869.) John Brewer and his executrix, Elizabeth Brewer, are also mentioned in the 1866 document. Whether this was a suit is not clear. John Brewer was a judge in the Montgomery County court. (Hiebert and MacMaster:147)

(As an historical aside, it is interesting to note that in the early 1860s, after John Brown’s raid at Harper’s Ferry, Judge John Brewer addressed a Montgomery County meeting discussing the expulsion of all free blacks from the county. John Dufief was a delegate to this meeting and part of a mounted rifle company that formed in response to the incident. The county also appointed Brewer to a grand jury charged to ensure that no blacks possessed guns. [Hiebert and MacMaster:159-162])

The Civil War had other small impacts on the immediate area. At times during the war, Union soldiers camped nearby. A Union blockhouse, built just up the river from the Cady property where the river bluffs project into the Potomac, gives Blockhouse Point its name. Union soldiers used a hill just west of Sarah Cady’s land for a signal station and an encampment. Farther up Muddy Branch was another Civil War encampment, occupied by the 8th Illinois Cavalry, on land donated for that purpose by John Dufief. (Newspaper article: Jeanne Blackburn. Newspaper not named [Gazette?], May 9, 1990, Montgomery County Historical Society)

Tobytown

When Dufief's new public road to the canal was built sometime after the petition in 1856, it affected the land around it in a number of ways. By cutting across property lines, it created new edges and seems to have inaugurated new land uses. South of River Road, the new road cut through Patience, Eltings Rest, Overplus, and Long Acre. (See Cochran map at end of previous chapter.)

In 1869, a John Rouzee sold land situated near the intersection of Dufief's road and River Road to Emory Genis, a former slave, marking the beginnings of an African-American enighborhood, later known as Tobytown (Liber EBP 11, folio 206, Dec. 31, 1869). Genis's seven acres were situated on both sides of the lock road (Liber 2820, folio 689, Feb. 14, 1961). William Davis and Tobias Martin (from whom the name Tobytown comes), other former slaves, purchased adjacent land from the Rouzees in 1875. Freed slaves were "in demand as laborers" in the flourishing agriculture of Montgomery County. (Jesse E. Lewis Jr., Tobytown report, Washington Post, undated clipping probably c. 1965. Montgomery County Historical Society, vertical file: Tobytown)

As has been described earlier, the tracts Patience, Eltings Rest, Overplus and Long Acre had been divided probably only once since the original patents in the 18th century. The western part of Overplus, Eltings Rest, and Patience, and the middle part of Long Acre had been purchased by Aquila Beall in the early 19th century, who quickly sold them to John Brackenridge. By the 1860s, some or all of the Brackenridge property was owned by John Rouzee (also written as Rowzee and probably the same as Rowser). The Rouzees, apparently, were residents of Fairfax County, Virginia, directly across the river. Rowsers Ford, a few miles upriver, just below Dam no. 2 at Seneca Falls, probably takes its name from this family. The ford was an important river crossing during the Civil War. Most notably, it was the place where J. E. B. Stuart's cavalry crossed on their way to join Robert E. Lee in the summer of 1863, enroute to Gettysburg. (High:130)

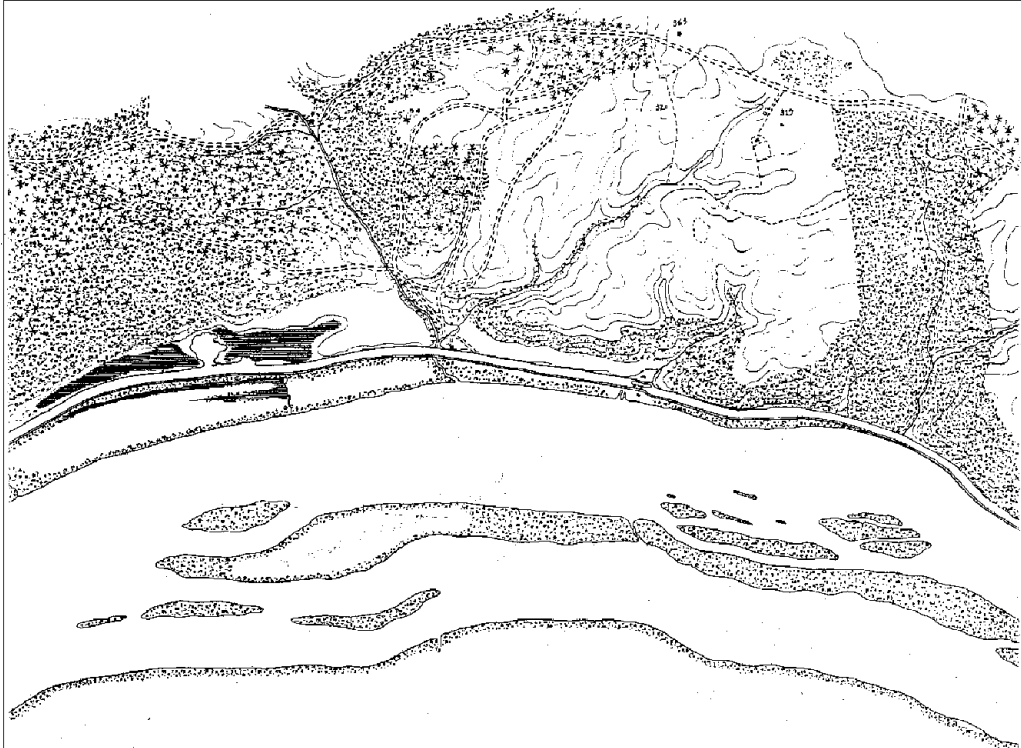
The 1879 Hopkins Atlas shows William Davis on River Road fairly close to Muddy Branch, T. Martin on both sides of Dufief's road, close to River Road, and Emory Germs (Genis) a little farther down Dufief's road, on the east side. (As of the 1970s, descendants of some of the original African-American purchasers still lived on this land. At the time of John Lewis's articles for the Washington Post [c. 1965], mentioned above, all the old houses of Tobytown were being torn down, and new ones built.)

Raphael Jarboe's Ownership

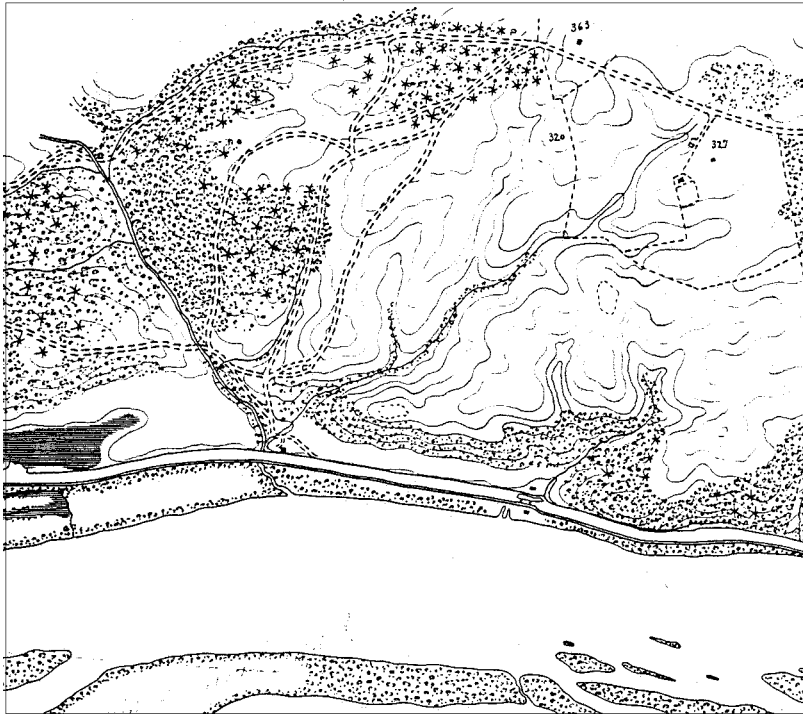
Raphael Jarboe's name was first recorded in connection with Melburn/Eltings Rest, etc. in an 1873 Montgomery County circuit court case involving himself, his wife, Elizabeth A. Jarboe and Sarah A. Cady. (June 6, 1873) In January 1875, a deed was "made by" Thomas Waters, who sold the "rights" of Sarah Cady to Melburn, Long Acre, Overplus and Elling's Rest, containing 252 acres, to Raphael and Elizabeth Jarboe. (Liber EBP 13, folio 76, Jan. 7, 1875) Thomas Waters, only mentioned this once in connection with these properties, is identified as a sheriff. For some reason the sale required another deed in 1881, in which George Peters (trustee from

the 1866 court decree) was shown as the seller and Jarboe as buyer. (Liber 24, folio 405, Sept. 10, 1881) It is likely that Jarboe took up residence by 1875.

Raphael Jarboe may have been the same person or related to the Jarboe who owned a store near Edwards Ferry, about ten miles upriver, built c. 1864-65, the ruins of which can still be seen today (High:136; Unrau 1976:22). There was also a William Jarboe who was assistant collector for Division No. 1 of the canal in 1874 (Unrau 1976:43).

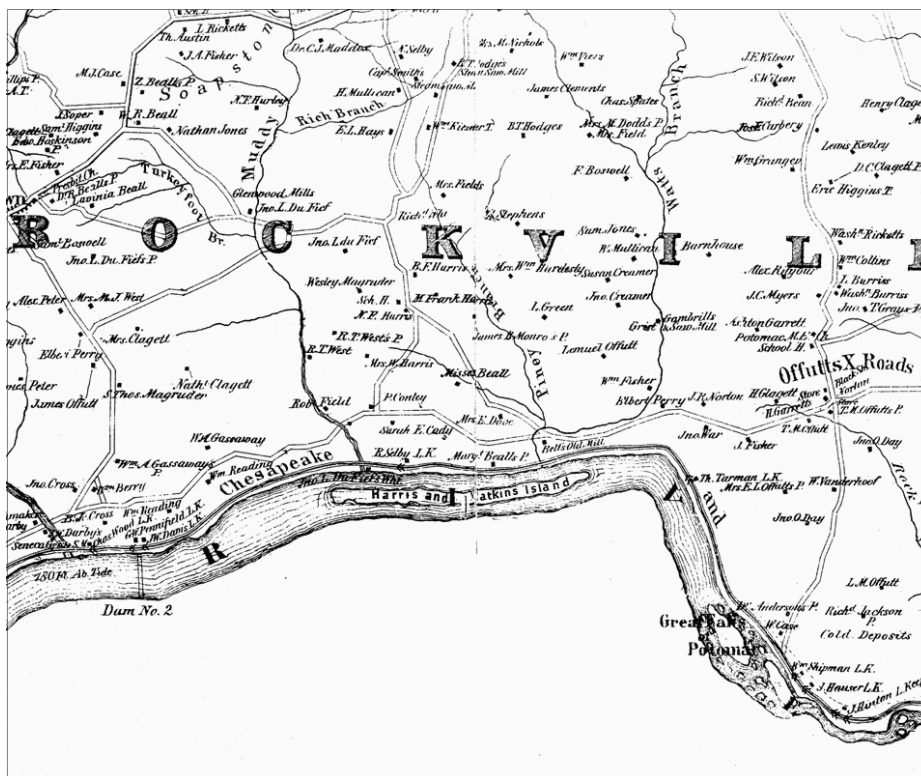


Section of 1865 Bache map showing land between River Road and the river, with the line of the canal running parallel to the river. Shows Muddy Branch and a small web of roads, one of which is Pennyfield Lock Road.

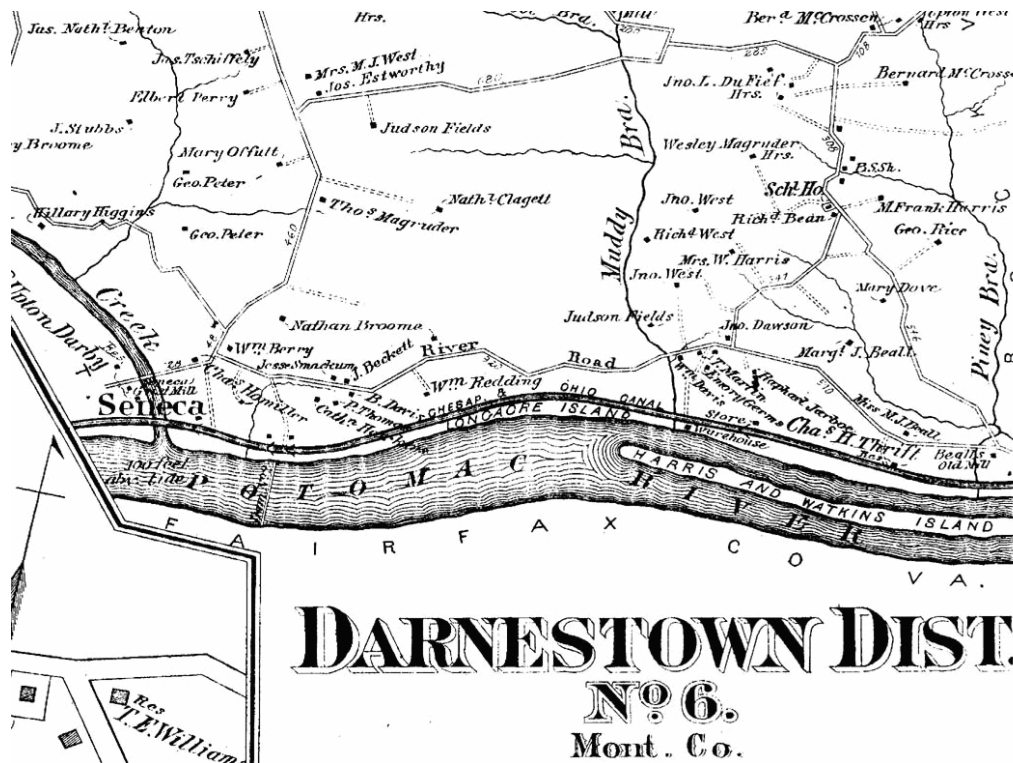


Blown-up section of the foregoing Bache map showing the roads more clearly. The middle road is the lock road, partly lying within a swale and not along the ridge as is the one to the right.

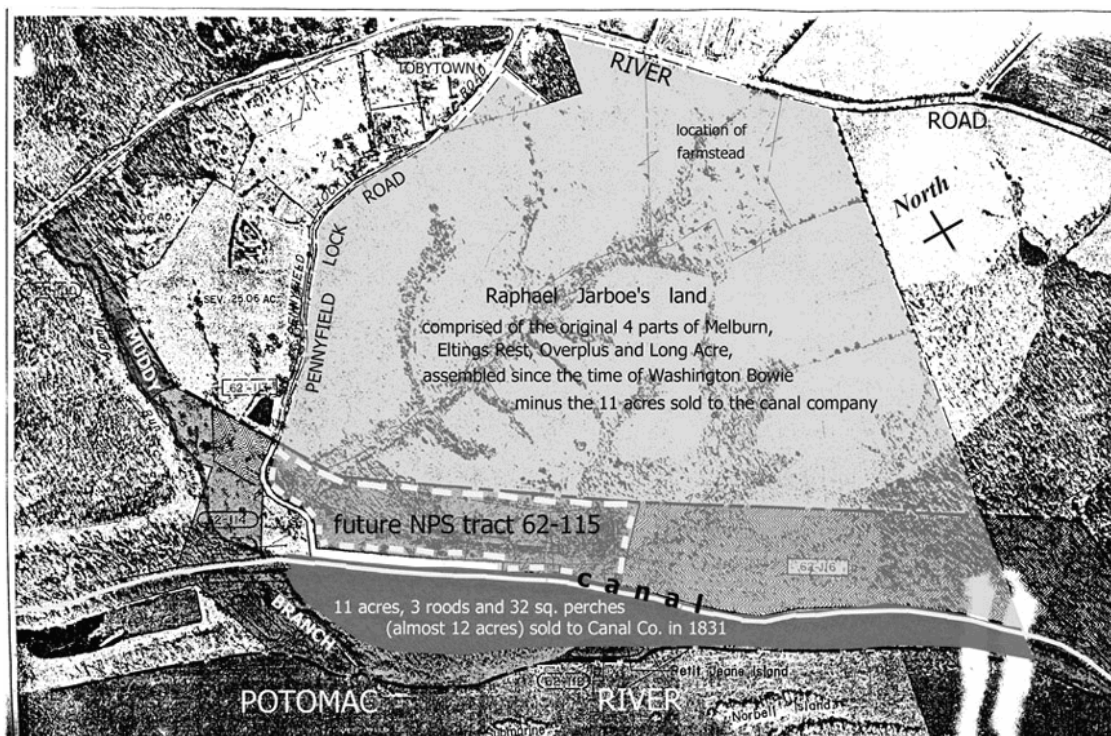
Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park



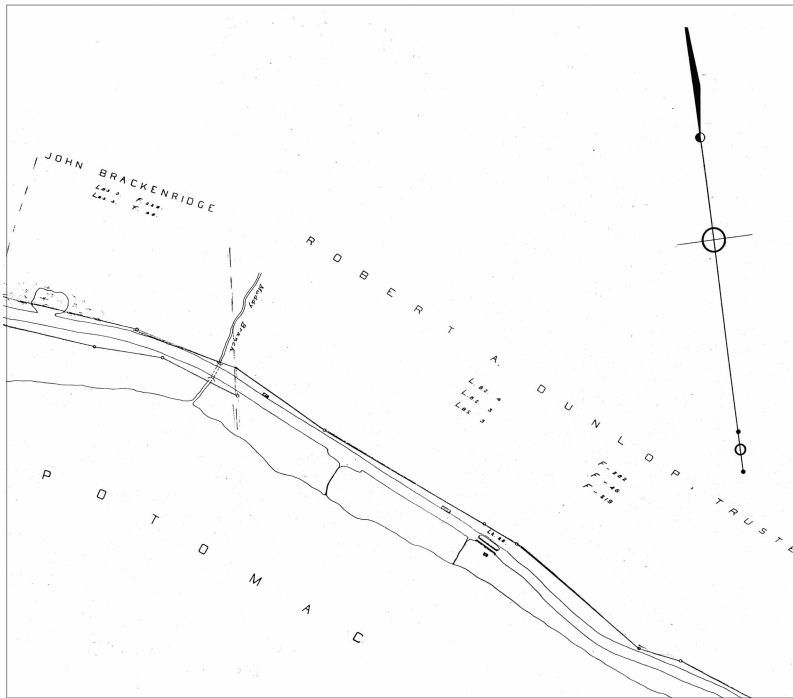
Martenet and Bond map of 1865 gives the names of the area's residents and the lockkeepers. The name R. Selby, L.K., is shown at Lock 22. A structure close to River Road is marked with the name Sarah. E. Cady.



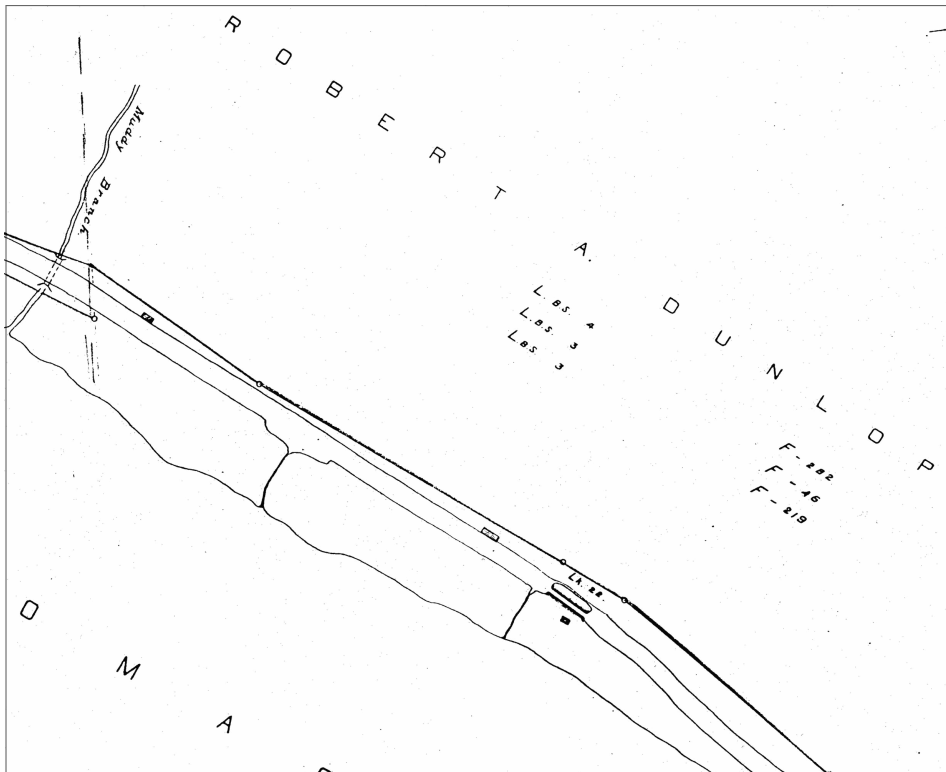
Map from Hopkins Atlas of 1879. Raphael Jarboe's name is seen to right of Muddy Branch, along with T. Martin and Emory Germs [sic], Tobytown founders. There is a store and warehouse shown at the lock.



Before Raphael Jarboe sold the first small lot along the canal within area marked tract 62-115, he owned the land in grayed area from River Road to the canal. (CHOH tract map adapted)



Mackall map of 1896 shows the canal and various structures at Lock 22, such as the two overflows, the lockhouse, and two structures on the berm side. The names are those of the original sellers c. 1831.



Closer view of the foregoing Mackall map. Here the structures can be seen a little more clearly.

1879 to 1924: The Canal Community at Lock 22

Soon after Jarboe bought Melburn/Eltings Rest, etc., he sold a few, generally small, parcels of it, all of which abutted or nearly abutted the canal. (See map at the end of this section showing where the parcels were located.) Probably the first parcel sold was the 82½-square-perch (half acre) lot bought by George Pennifield in 1880. (Liber EBP 21, folio 448, Jan 17, 1880) This represents the first purchase of land by Pennifield at Lock 22. (It is possible that George Pennifield had been living at Lock 22 before then. In 1873 Elizabeth Fields was recorded as the lockkeeper at Lock 22. George Pennifield married Mary Jane Fields, who probably was related to Elizabeth, perhaps her daughter. [NARA. RG79. C&O Canal payrolls, 1873-74]) Jarboe sold another half-acre piece immediately west of the Pennifield lot to Upton Darby, possibly around the same time (mentioned in Liber 520, folio 150, April 20, 1931). Then in 1886, Jarboe sold a 3-acre, 6-perch parcel to Anne D. Harris. (Liber JA 3, folio 430, Nov. 19, 1886) Hatton Waters was the next to purchase land from Jarboe, in 1890 and again in 1893. The first, a 5-acre, 2-rood, 30-square-perch lot, was situated northwest of Upton Darby's half acre and east of Anne Harris's three acres, and included floodplain and slope land. (Liber JA 17, folio 207, March 4, 1890) Waters' second parcel of 2 acres, 2 roods, 11 square perches, mostly slope, abutted the Pennifield land on its northeast boundary line. (Liber JA 28, folio 361, June 30, 1893) In 1894, James Bailey purchased 4 and 84/100 acres that surrounded Muddy Branch on the inland side of the culvert. (Liber JA 42, folio 211, March 9, 1894) The largest

land parcel Jarboe sold was 61 acres, bought by Edward S. Hunter in 1902, which bordered the east side of the lock road for almost its full length. The tract was bounded on the east by a major swale on Jarboe's property. (Liber TD 22, folio 467, Sept. 1. 1902)

The road to the lock at this point was no longer thought of as the road to Dufief's warehouse. It is often referred to in deeds as the public road, or the county road to the lock, which is sometimes described as the white house lock, because the lockhouse was whitewashed. Dufief's road will be described from this point on as the lock road. It eventually takes the name Pennyfield Lock Road.

The Canal's Brief Period of Prosperity

When Jarboe bought the property that included Melburn, Eltings Rest, Long Acre, etc., the canal was at its most prosperous. Tonnage increased each year after the Civil War, reaching almost a million tons in 1871 (High:42). In 1872, comprehensive repairs and improvements of the canal were undertaken (Shaffer:40-44). The canal was desilted and locks and other structures repaired. Replacement of Dam No.1 and Dam No. 2, of which there was "hardly a trace," was planned (High:132). But flooding kept apace of repairs, and other troubles, such as periodic strikes, beset the company. In the 1880s, canal revenues continued to decline as the railroad cut its prices. (High:42)

Between 1885 and 1887, the canal company sold all its bonds, leaving it with no future assets to fall back upon (Shaffer:47). In 1889, the largest flood in the history of the Potomac devastated the canal, washing away canal boats, lockhouses and sheds. It forced the canal company into receivership to the B&O Railroad, which held the biggest part of the canal's debt. The B&O decided to repair the canal in order to prevent the right-of-way from falling into competitors' hands. In a bankruptcy court in 1890, it was agreed not to order the sale of the canal if it continued to function as a profitable enterprise. The B&O met these requirements by organizing the Chesapeake and Ohio Transportation Company, which it used to funnel enough money into the canal to pay back the repair loans and keep it operating, but little more. (High:44) In September 1891, repairs from the 1889 flood were completed and canal returned to full operation. It was used now almost solely to transport coal for Consolidation Coal Co., owned by the B&O. (Shaffer:53-4)

The Pennifields and their Neighbors at Lock 22

The earliest record of the Pennifields found in this research is that of Thomas Pennifield, who was a Private in the Second Maryland Regiment during the Revolutionary War, having enlisted in 1780. He settled in Montgomery County, possibly upon the receipt of bounty lands due him for his military service. Because the Pennifield lineage is often confused in the various reports, it is presented here in some detail. Thomas Pennifield was married to Esther Beane. They had 11 children. One was Thomas W. Pennifield (b. 1798, d. 1869) who married Ann Maria Williams (b. 1802, d. 1860). Thomas W. was the first Pennifield who lived along the canal. In 1860, the census records him as a lockkeeper, probably at Lock 23, not Lock 22. (The 1865 Martenet map shows G.W. Pennifield, Wm. Reading, and J.W. Davis as lockkeepers at Lock

23, and R. Selby as the lookkeeper at Lock 22.) Earlier, in the 1850 census, Thomas appears as “overseer” which may have been another word for the job of lockkeeper, although not necessarily. Thomas W. Pennifield died from a gunshot wound in the head in 1869. His son was George Washington Pennifield (b. 1826, d. 1911), who married Mary Jane Fields (b. 1833, d. 1917). He is the Pennifield who bought property at Lock 22 and was the first to live at (and probably built) Pennyfield House. George and Mary Jane’s one child was Charles Henry Washington Pennifield (or Charles H., b. 1856, d. 1923), who married Mary Margaret McCrossin, also known as Maggie (b. 1866, d. 1950). Charles and Maggie had one son, born in 1893, named George W. Pennifield, after his grandfather. George W., the grandson, did not remain in the community after serving in World War I, and was not listed as a survivor at the time of his mother’s death in 1950. (Most of the above information comes from the 2002-2003 compilation from various sources, including newspaper articles and genealogical files by Carole A. Pennifill Thwaits, entitled “Descendants of Thomas Pennifield and Esther Beane,” located at the Montgomery County Historical Society.)

The U.S. census (information given in Thwaits) records the different occupations of George W. Pennifield, Thomas’s son: in 1850 he was a laborer; in 1860 a farmhand; in 1870 a laborer in a quarry; in 1880 a retail grocer; and in 1900 a fisherman. For some reason, he was never recorded as a lockkeeper. (The 1890 census is not listed in Thwaits’ genealogical compilation. According to the U.S. census website, the 1890 census records for the county were destroyed in a fire.) Local tradition and many local accounts, however, record George Pennifield as the lockkeeper at Lock 22, which was eventually named for him. (As mentioned earlier, the Pennifields appear to have spelled their name with an “i”. That is how it is written in deed documents and the spelling used here when referring to the family. But the name used for the lock has come down as Pennyfield, the spelling used in this report when referring to the lock and to the Pennyfield House.)

George’s wife, Mary Jane Fields, was probably from a local family, long-settled in the neighborhood. The Fields name appears on two maps of the vicinity – the 1865 Bond and Martenet map shows a Rob Field (sic) on the east side of Muddy Branch just north of River Road, and the 1879 Hopkins Atlas records a Judson Fields in the same location. In an 1804 land transaction between the Beall heirs, “a white oak standing by Mrs. Fields house . . . (near the) west side of the main road leading to Georgetown” is used as a landmark. (Liber L, folio 455, Oct 22, 1804)

Those who lived along the canal often found their social life and marriage partners among other canalers. This is exemplified by George Pennifield’s sister, Leanna, who married a boatman, James H. Hill. That was his occupation in 1860, anyway; the 1870 census records his occupation as farmer. (Thwaits)

Pennyfield House

The house situated on the 82 ½ square perches of land that George W. Pennifield purchased appears to have been constructed prior to the purchase of the property, since in 1879 Pennifield was assessed for an improved lot valued at \$300. The property had the same value when

assessed in 1896. (HABS report on Pennyfield House, Ann Deines, NPS/NCR, 1994: 2) In the National Register nomination for the C&O Canal (August 9, 1979), Pennyfield House is described as estimated to date “from the 3rd quarter of the 19th century.”

Some confusion exists regarding when additions were made to the house. One report says there was an addition to the “west” side of the house “prior to 1909,” evidenced by a survey map drawn up when the larger Jarboe property was subdivided after Jarboe’s death. (Maryland Hall of Records, Annapolis, Maryland. Equity Case 2428, “Plat of the Estate of the late Raphael T. Jarboe . . . , April 1, 1909.” Referenced in HABS report on Pennyfield House: 2 and 6.) Another document states that significant changes were made to the house after 1919 when a second story was added over the east wing and a rear addition built onto the original structure. At an even later date, a one-story cinder block-supported addition was built onto the east wing of the house. (NPS/CHOH, Request for Proposal, 1997, p. 1) It is not clear what the 1909 plat was being compared with to suggest the pre-1909 date for a “west” addition.

Assuming that George Pennifield was the only lockkeeper during his tenure at Pennyfield Lock, it is unclear how the lockhouse was used after the construction of Pennyfield House.

Second House at the Lock

In various recent reports, the second frame house at Pennyfield Lock is referred to as the “daughter’s house,” perhaps because George Pennifield’s son and daughter-in-law lived there. A 1998 appraisal for 5.02 acres at Pennyfield Lock commissioned by NPS gives 1890 as a generalized date of construction for this house, described in the document as “the Daughter’s House, aka Pennyfield Store.” (John McClurg, “Appraisal Report and Valuation Analysis Pennyfield House,” September 1998: 8) Hatton Waters bought this lot from Raphael Jarboe in 1890 and may have constructed the house and its attached store. The 1998 appraisal refers to the store as “the store addition,” but doesn’t suggest a construction date (McClurg: 8). Charles and Maggie Pennifield are recorded in the 1900 census as living next door to his parents, presumably in this house (recorded in census as building #13). Charles worked as a canal worker in 1880 and as a farm laborer in 1900, according to the census. (Census information presented in Thwaits. The 1890 census is again not recorded here.)

Other Property Owners along the Canal

Upton Darby’s half-acre was immediately west of the Pennyfield House property. (It is the grassy field we see on the west side of the Pennyfield House today. See park tract map at end of this section which has been adapted to show the parcels described here.) Darby is recorded in 1890 as leasing one of the three canal-owned warehouses at Lock 22. The others were George Pennifield and W.L. Thrasher. (Unrau 1976, Appendix C:43) He probably used this land in connection with his business. Hatton Waters’ two parcels have already been described. Just west of Waters’ five acres was the three-acre parcel owned by Anne Harris. On the slope behind Harris’s parcel was a two-acre woodlot that was apportioned to Raphael Jarboe’s widow. (Insert later deed which gives this information.)

With almost eight acres on the berm side of the canal, some riverfront property beyond Muddy Branch, and islands in the river, Waters owned a fair amount of land in the immediate area. It does not seem likely that Waters ever lived on the properties he owned along the canal. He had a farmhouse near the center of the nearby village of Travilah on the north side of River Road, where he was at one point the village's third postmaster and seems to have also operated a store. At some time in his life, he also ran a canal boat. (Newspaper articles: Sally Simmons, [possibly Gazette], May 9, 1990; Gazette, Feb. 24, 1993. Montgomery County Historical Society, Vertical file: Travilah)

Although the second house is described as also being a store (or having a store addition), there are no dates given for when it was in operation. Waters may or may not have been involved in running it. It is also possible that the store began operation at a later time when Waters no longer owned the property. In any case, he must have rented the house to Charles Pennifield, because Charles and his wife Maggie appear to have lived there. The Pennifields never bought the property from Waters.

In 1892 the canal company, under B&O direction, ended independent boat ownership and formed the Canal Towage Company. The boats now carried numbers instead of names and were run on a schedule. Boat captains became company employees. (High:44)

As with the canal boats, warehouses along the canal, such as the one owned by Dufief in an earlier period, appear to have been leased from the canal company in 1890. Three warehouses at Lock 22 were listed as canal company real estate in 1890 and itemized as follows: warehouse of W. L. Thrasher (lease expiration in 1897, \$5/year); the warehouse of Upton Darby & Co. (lease expiration date and rent not shown); and the warehouse of George Pennifield (carried away by 1889 flood; lease expiration in 1897, \$36/year) (Unrau 1976, Appendix C:43). It seems likely that Thrasher's warehouse would have been in the same location as Dufief's – at the bend in the lock road – since Thrasher owned that property. The Mackall map of 1896 shows two structures along the edge of the canal on the berm side. These were presumably within the canal right-of-way. One is close to Muddy Branch, although not as close as Dufief's warehouse would seem to have been, and the other is a couple of hundred feet west of the lock. They are not named or otherwise identified.

Sometime before 1900, the depth of Lock 22 was increased eight inches by bolting wood timbers to the lock's coping stones. The timbers on the towpath side of the lock were replaced between 1906 and 1911 with eight inches of concrete. (National Register nomination 1979:26; Prentice-Hahn survey, captions to pictures #5 and 6, draft 11/18/72) Concrete first came into use along the canal just after 1900 and typified canal construction after that. (High:57) The wooden frames of early waste weirs were replaced by concrete all along the canal after 1906. The waste weir at Pennyfield Lock bears the dates 1909 on the riverside wall and 1911 on towpath side. (Prentice-Hahn, captions to photos of waste weir) The Prentice-Hahn survey points out that the Mackall map (1896) does not show an actual waste weir at Pennyfield Lock, but, instead, a rather long (over 200 feet) informal overflow located about 940 feet above the foot of the lock. (Prentice-Hahn, informal overflow, milepost 19.81) Review of the Mackall map for the CLI reveals what appear to be two overflows above Lock 22 -- a small one near

the lock, and a larger one, perhaps 940 feet above the foot of the lock.

President Grover Cleveland's Fishing Trips to Pennyfield Lock

Possibly on several occasions, though only one is confirmed, George and Mary Jane Pennifield provided room and board to President Grover Cleveland on fishing trips to this part of the Potomac River. The "Montgomery County Sentinel" reported on October 12, 1888 that "On Thursday of last week President Cleveland and Commissioner Miller visited Pennifill's [sic] Lock, at the mouth of Muddy Branch, on the Potomac, to enjoy the fine bass fishing at that point. They returned to Washington on Friday evening with a large supply of bass, the President having caught eleven. Both of the distinguished gentlemen expressed themselves as highly pleased with their trip." (HABS report on Pennyfield House 1994:2)

A story that is quoted on the park's wayside at Pennyfield Lock describes Mrs. Pennifield fixing breakfast for the President and calling up to him: "Mr. President, how do you want your eels cooked, skun or unskun?" (The story is also found in the following book, which may be the source for the wayside: Board of Education of Montgomery County and Maryland State Department of Education, "Living in Montgomery County," Maryland Picture Portfolio Series, Vol. 15, 1954) According to another story, President Cleveland took the packet boat up the canal from Georgetown. (cite) And in yet another story, President Cleveland invited George Pennifield to visit him at the White House, which Pennifield did. (Newspaper article: Potomac Gazette, Ann Harris, Jan 18, 1989, Montgomery County Historical Society, Vertical file: Potomac) Another source describes the Pennifields as running a fishing camp. (Pennyfield Foundation lease document, October 1, 1998; McClurg appraisal, September 1998. Both in CHOH historic leasing files)

Continued Land Purchases at the Lock by the Pennifields and Others

Almost twenty years after buying the half acre lot on which his house was built, George Pennifield purchased a 9-acre, 2-rood, 19-square-perch parcel from James M. Matthews. This parcel occupied sloping land on the west side of the lock road, several hundred feet north of the canal. (Liber JA 58, folio 62, March 11, 1897) Matthews had previously bought this land from the Rouzee heirs. (See maps at end of this section for location of properties discussed.)

The next year, Maggie Pennifield, George's daughter-in-law, purchased two parcels, containing 4 and 84/100 acres and 3 acres, 3 roods and 23 square perches from James Bailey, who bought the first from Raphael Jarboe and the second from the Rouzee heirs. (Liber TD 6, folio 131, Oct. 25, 1898) Both lots were on the west side of the lock road. On its north side, the smaller parcel appears to have abutted George Pennifield's 9-acre purchase of the previous year. The larger parcel, located southwest of the smaller, bordered the lock road just briefly at the first bend near the canal, and included within its bounds the last stretch of Muddy Branch before it passed into the culvert under the canal. The tract lay directly west of where Dufief's (and later, Thrasher's) warehouse was located. (The two tracts that Maggie Pennifield bought are very similar, but not exactly the same, as tracts 62-113 and 62-114, so numbered by NPS in 1976. The tract boundaries may have been slightly reconfigured as fee simple and scenic

easement lands at that time.)

In 1909, Maggie Pennifield purchased one other lot along the canal. (Liber 202, folio 185, Jan 12, 1909) This was the property Anne Harris bought in 1886, containing 3 acres, 6 square perches, and situated on the east side of the lock road near its foot at the canal. Within the string of lots facing the canal, this one was at the western end, opposite where Dufief's warehouse had stood, and it is the one that contained most of the farm buildings that are later surveyed in 1974. When these buildings were constructed is uncertain, but it is very likely that they date to before 1930, when all the lots were sold to the next owner, Demarest Lloyd.

W. L. Thrasher has been mentioned as leasing one of the warehouses at the lock in 1890. William T. (not L.) and Thomas E. Thrasher bought the parcel where Dufief had his warehouse from William F. Duncan in 1894. (Liber JA 42, folio 397, April 26, 1894. Mentioned in later deed, Liber 564, folio 261, Feb. 26, 1934) The property's size is given as 1 acre, 3 roods and 33 square perches, and in another place as 1.912 acres. It appears to be NPS tract 62-103, which is today the state-owned parking lot adjacent to the Muddy Branch culvert, listed in park documents as containing 1.87 acres. The Thrashers also owned a second parcel, containing 3 acres, 3 roods and 30 square perches, bordering the west bank of Muddy Branch on the river side of the canal, which they bought from William Duncan at the same time. This is tract 62-104 on the park tract map, listed there as containing 3.84 acres. No deed has been seen that records the canal company's sale of this land, but it was owned by the canal at one time.

George and Mary Jane Pennifield continued to live in their frame house at the lock until the end of their lives. George Pennifield died first, in 1911, and Mary Jane died in 1917. Their son, Charles, and his wife, Maggie, stayed on at the lock, perhaps occupying the Pennyfield House. Charles is described in one source as the last lockkeeper at Lock 22. (Thomas Hahn, "The Chesapeake & Ohio Canal Lock-Houses & Lock-Keepers," Institute for the History of Technology and Industrial Archeology, West Virginia Univ., Monograph Series, Vol. 3, 1996: 86) Two years after Charles died in 1923, Maggie sold Pennyfield House and the 3-acre, 6-square perch lot to Mary Eugenia Thrift and Agnes Fisher. (Liber 373, folio 395, June 5, 1925)

Hatton Waters owned many parcels of land in the vicinity of the canal. In 1903, he bought 40 acres west of Muddy Branch situated on either side of the canal from the Rowzee (or Rouzee) heirs (Liber TD 26, folio 269, June 9, 1903). He also owned about 60 acres of islands. In 1919, Charles Pennifield sold Waters the 9-acre parcel on the west side of the lock road that his father bought in 1897 (Liber 280, folio 240, May 26, 1919). He sold it "[t]ogether with all and singular buildings and improvements, ways, waters, etc.," suggesting that there was a building or buildings on that property. (There is no reference to buildings in the 1897 purchase document.)

Waters held onto most of his land at the canal until he sold it to Demarest Lloyd in 1931. He did sell two small lots that he subdivided from the 5-acre parcel. In 1923, the same year that Charles Pennifield died, Waters sold James W. Lowe the 65 square perches (less than one half acre) on which the second house and store were located. (Liber 340, folio 13, September 1923.

The surveyed location of the house/store comes from plat, "Part of Tract of Land called the Christian Heurich Tract," drawn up by Frey, Sheehan, Stoker & Associates in 1976. It also can be determined by overlaying the tract map on the park GIS map.) The second subdivision from his 5-acre parcel was a one-half-acre lot, near the Pennyfield House, which he sold to Mary E. Thrift and Agnes Fisher. (Liber 414, folio 342, September 1926) Mary Thrift and Agnes Fisher had already purchased the Pennyfield House lot and the 3 acre, 6 square perch lot, at the west end of the canal-side properties, from Maggie Pennifield. The two women sold all three properties to Demarest Lloyd in 1931. (Liber 520, folio 178: April 22, 1931)

How these lands owned by the Pennifields and others, and situated along the canal, were used can only be speculated about. Maggie Pennifield's last purchase of land in 1909 – the 3-acre, 6-square-perch lot – is where the majority of the farm buildings (other than the houses), still standing in 1976 when NPS purchased the property, were located. Some of these structures probably dated to the Pennifield years, or could even date to when Anne Harris owned the lot. Maggie Pennifield's two parcels and that of her father-in-law on the slope west of the lock road may have been used as pasture. Upton Darby's small lot next to the Pennyfield House probably had some connection to the warehouse he leased. Waters' 5-acre lot contained the second house and store, which he may have leased to Charles Pennifield and then sold to James Lowe after Pennifield died.

Raphael Jarboe must have died around 1909. After that, his land, which included parts of Milburn, Ellings Rest, Long Acre, and Overplus, was resurveyed and platted into three lots, together equaling about 159 acres. Lot one was the farmstead, set aside for Jarboe's wife, Ellen H. Jarboe (also called Elizabeth). The farmstead was located off River Road, occupying parts of Ellings Rest and Milburn and containing 16 acres, 2 roods and 38 square perches. Lot two, the major part of the property, containing 139 acres, 3 roods and 20 square perches, was made up entirely of land of the Milburn tract. The third was a small woodlot, containing 2 acres, 1 rood, and 2 ½ square perches, apportioned to Jarboe's widow, as part of her "dower rights." The woodlot was situated on the Long Acre tract near the canal, directly behind the 3-acre, 6-square perch lot then owned by Maggie Pennifield. (Court order March 9, 1909. Plat dated April 1, 1909. Cite deed in which this information is found. Also see last map previous chapter.)

One can still see the Jarboe farmhouse on the 1908 USGS map. The east boundary of Milburn, after it had been pared down from 270 acres to 184 acres in the early 18th century, had remained a property boundary all these years. Visible on the 1908 map, it can still be read as a fenceline on the 1970 aerial. Lot two, the major piece of the property, probably continued to be farmed by Jarboe's son, John A. Jarboe. (Maps at end of chapter use the 1970 aerial as their base.)

Like the canal, the agricultural prosperity that the area experienced in the mid-to-latter part of the 19th century did not continue. The large farms of the vicinity were no longer managed by their owners and the area on the whole was rather poor. (Blackburn, newspaper (Gazette?), May 9, 1990, Montgomery County Historical Society, vertical file: Travilah) In nearby

Pennyfield Lock

Chesapeake and Ohio Canal National Historical Park

Frederick County, dairy farming was a lucrative pursuit. It is possible that the Pennifields, and Mary Thrift and Agnes Fisher after them, pastured cows and produced some milk, raised chickens for their eggs, or in other ways made do. Fishermen would still have found this spot a good one, and the store addition to the second house could have continued in operation.



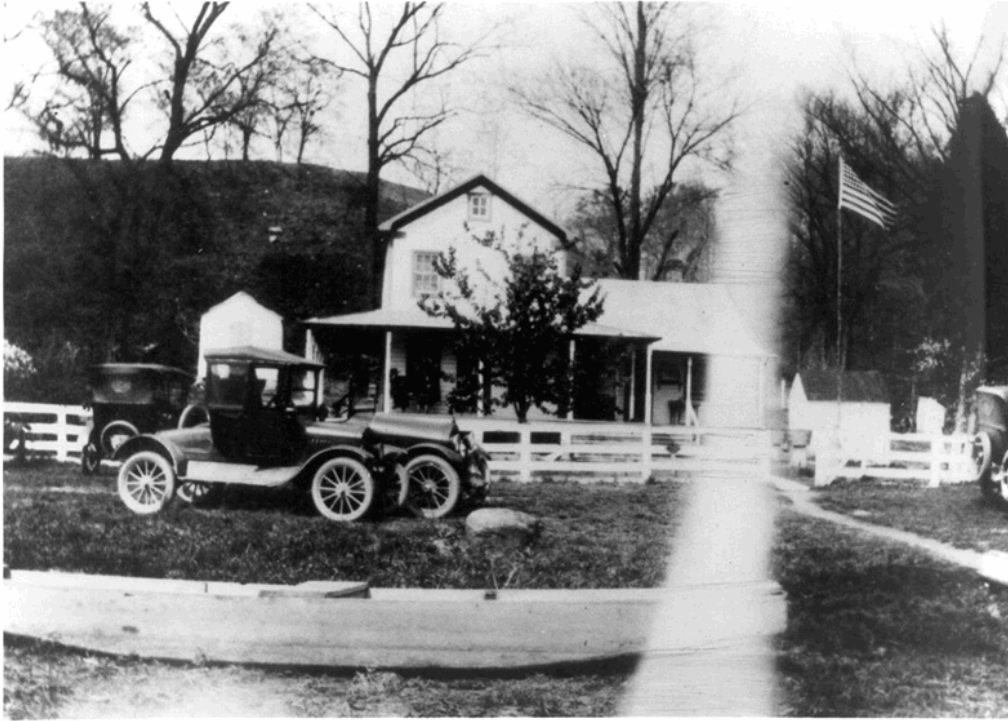
View from towpath looking west approaching Pennyfield Lock c. 1919. The lock, lockhouse and various structures immediately alongside the canal can be seen. To right of image is Pennyfield House. (CHOH photo files)



Similar view to previous, with packet boat. These photos have been studied, but are worthy of more study to determine what the various structures were. (CHOH photo files)



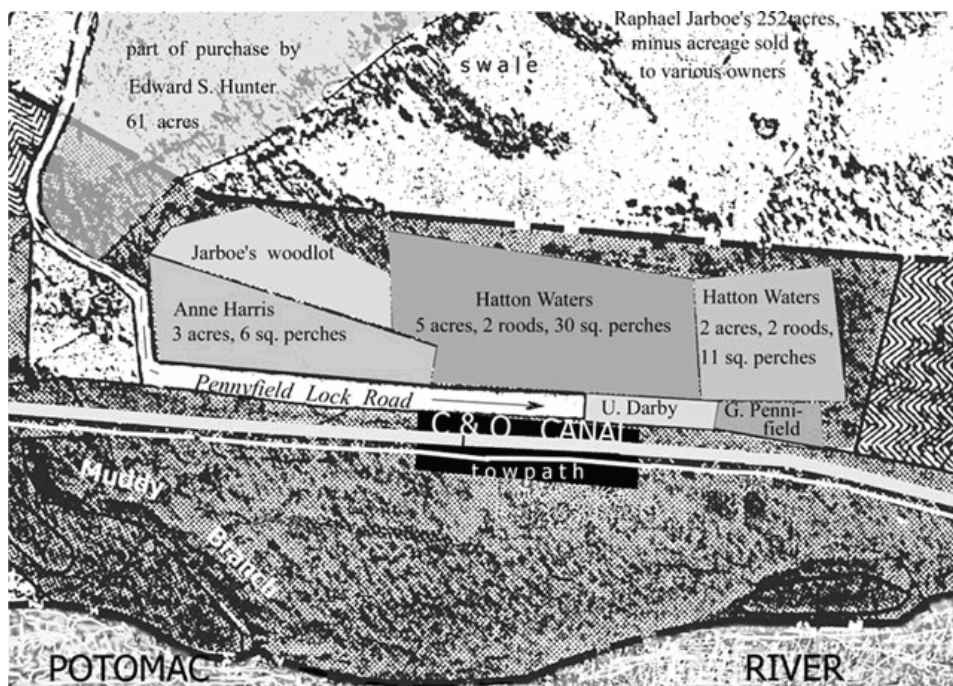
One more view from the same vantage, this one in winter. Taken on January 19, 1919, as photo indicates. (CHOH photo files)



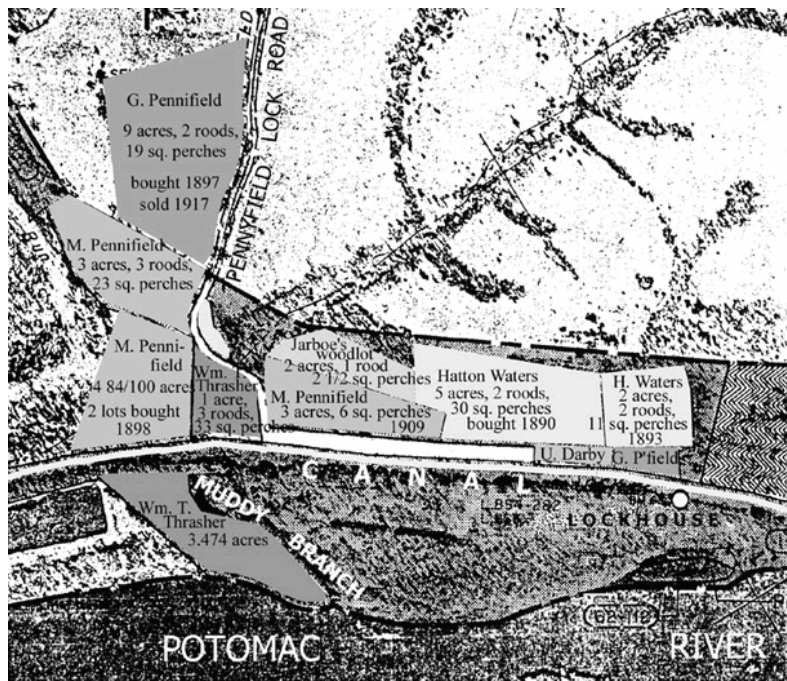
Pennyfield House from edge of canal c. 1919. A path leads from canal to the house. Inside fence there are several outbuildings, probable fruit tree, and flagpole. The slope is barer than today. (CHOH photo files)



Charles Pennifield, sometime before 1923 (date of his death), standing on towpath with canal behind and unknown structures - maybe sheds for fishermen - lined up along edge. (Unknown newspaper. MC Hist Soc files)



NPS tract map -- or Kimball map -- which uses 1970 aerial. Overlay shows lots and property owners c. 1902.



NPS tract map with overlay of property lots showing owners c. 1915. More extended view than previous image.

1924 to 1938: The C&O Canal Ceases to Operate

In March 1924 the first major flood in 35 years damaged the upper reaches of the canal, followed by a second flood in May along the length of the canal. (Shaffer:56-7) These were not severe floods, but the time had come when the railroad would not expend further funds and the C&O Canal ceased to operate. (High:45) The lower stretch of the canal was maintained enough to supply water to the mills in Georgetown, but the canal bed and masonry structures were allowed to decay. (High:46) What effect the closure had on those living at Pennyfield Lock and how it impacted the landscape there is open to speculation and not easily researched. The area was within the part of the canal that was kept watered.

Demarest Lloyd Reassembles the Original Tracts

In 1929, John Jarboe, Raphael's son, sold the Milburn, Ellings Rest and other lands, which had been divided into three lots at the death of his father in 1909, to the R. E. Latimer Company. (Liber 482, folio 493, April 8, 1929) Demarest Lloyd bought them a year later. (Liber 514, folio 11, Dec. 3, 1930) In the next few years, Demarest Lloyd and his wife, Katharine Norbell Lloyd, of Washington D.C., bought many additional small pieces of land, reassembling most of what Jarboe had sold, as well as buying other adjacent acreage that had never been part of the historic assemblage. He purchased the 61 acres Jarboe sold to Hunter (then in the hands of Spencer Gordon). He bought the 2-acre and 5-acre tracts (minus the two small subdivisions) along the canal from Hatton Waters. He bought the two small subdivisions from James Lowe and Agnes Fisher and Mary Thrift. He bought from Samuel W. Magruder the small lot that had been Upton Darby's. He also bought the Pennyfield House on its one-half acre lot and the 3-acre, 6-square-perch lot at the far end of the lock from Agnes Fisher and Mary Thrift. (put deeds in here)

Demarest Lloyd was the son of Henry Demarest Lloyd (1847-1903), a well-known writer and reform advocate of the late 19th century. Henry Lloyd had been the chief editorial writer for the Chicago Tribune. He belonged to the "muckraking" era, and his writing dealt with corruption in business and politics. The best known of his books was entitled "Wealth against Commonwealth." (Websites: Fordham.edu and Spartacus.schoolnet.) The younger Lloyd seems to have had a less well-known career than his father.

Demarest Lloyd's purchase of the various tracts and the assorted parcels between River Road and the canal coincides with a suburbanizing trend. Land in this part of Montgomery County began to be bought by wealthy city dwellers as rural retreats, probably spurred by the greater use of automobiles. Foxhunting and horseback riding were part of this change. Foxhunting clubs, formerly found within the city of Washington, had moved out into the country in Montgomery County in the early decades of the 20th century. The town of Potomac was the location of at least one club. (Potomac Club brochure, Montgomery County Historical Society, Vertical file: Potomac)

What exactly the Lloyds did with the land they bought is not discernable from such evidence as we have. They probably rode horses, hunted, and used the river for fishing or other sports.

Jarboe's farmhouse, which may have been the same one that Sarah Cady lived in, and could have dated to Dennis Jones or before, still stood in 1908 (as seen on the USGS map of that date). There is conflicting evidence about its existence during the middle part of the century. It is not shown on a 1937 map, which shows structures identified as dwellings, farm units and stores; however, a structure in the location of Jarboe's farmhouse appears on a 1953 map. (Montgomery County, Maryland [map], Maryland State Roads Commission and U.S. Department of Agriculture Bureau of Public Roads, 1937; Geologic Map of Montgomery County and the District of Columbia, [no publisher given, possibly U.S. Geologic Survey], 1953) No house was standing in this location at the time of the 1974 Beasley & Beasley appraisal of what was then the Christian Heurich property, extending from River Road to the canal. Only two old barns were recorded on the plateau part of the Heurich property at that time.

The Lloyds probably leased the two frame houses and outbuildings along the canal, perhaps to the very people from whom they bought those small parcels. They may have also leased their fields on the plateau to local farmers. When the National Park Service purchased the canal property at the end of the 1930s, there were 180 tenants on canal land along the length of the canal. (Mackintosh, p. 21) Whether anyone still lived in the Pennyfield lockhouse has not been determined through this research. Nor do we know when the last time was that someone did live there.

1938 to 1971: National Park Service Acquires the Canal

When the C&O did not resume operation after the 1924 flood, it became a subject of increased government interest. (Mackintosh:6) As the Great Depression settled over the country in the early 1930s, work relief projects were devised to revive the economy and help those without work. President Franklin D. Roosevelt's uncle, Frederick Delano, chairman of the National Capital Park and Planning Commission, thought that the canal would be a good project for the Civilian Conservation Corps (CCC). Because the B&O Railroad owed the Reconstruction Finance Corps \$80 million and wanted to borrow more money, the government was able to acquire the canal in exchange for \$2 million in 1938. (High:46) Initially the plan was to use the canal right-of-way to build a highway from Washington to Cumberland, an idea which wasn't abandoned until the mid-1950s. The government made arrangements to restore the 22 miles of the canal from Georgetown to Seneca and to conserve the whole as a national historic site, notwithstanding the still vague plans to build a highway along the canal above the restored section. (Mackintosh:19-20)

The deed to the canal passed to the Park Service on September 28, 1938. In 1939 the canal was dedicated as a public park. By February 1940, the 23 locks from Georgetown to the inlet at Violettes Lock had been returned to operating condition to be used as a recreational waterway within the National Capital Parks system. The CCC rebuilt the bypass flume at Pennyfield Lock, as they did at many of the other locks in the restored section. (J. Prentice survey, Nov. 28, 1972, Binder "Levels 20, 21, 22") All of the locks of this section received new wooden gates, with ironwork salvaged from the old ones and from locks further up the canal. (Mackintosh:35) With entry of the country into World War II, work on the canal stopped, except in the vicinity of Georgetown, and then the flood of 1942 swept the repairs away. (High:46)

Land along the Canal between 1931 and 1976

The 1937 state roads map shows three structures on the inland side of the canal; two are marked as non-farm dwellings and one as a farm unit in use. These are probably the Pennyfield House, the second house, and the larger of the barns. Two other dwellings were shown near the canal on the west side of the lock road. This research has uncovered minimal record of what activities the canal side community engaged in during these years. One newspaper account reports that Earl Henderson, 80 years of age in 1993, remembered a beer joint down by Pennyfield Lock, “a short jaunt down Travilah Road,” sometime around the late 1930s. (Name of newspaper not shown, Feb. 24, 1993, Montgomery County Historical Society, vertical file: Travilah) The beer joint was probably in the store addition to the second house. Nor has this research determined the names of those who lived along the canal between for the earlier part of this period. An appraisal in 1974, made in connection with the planned government purchase of the land adjacent to the canal, gives the names of people living at Lock 22, their occupations, and describes the place at this time (Beasley & Beasley Appraisal). It also provides photodocumentation.

Dam and Road Proposals

Toward the end of the 1940s, the U. S. Army Corps of Engineers unveiled a proposal it had been developing to build a series of 14 massive dams that would have inundated large portions of the Potomac Valley. The plan included a 119-foot dam just above Great Falls and another dam at Harpers Ferry. (High:46) Against this backdrop, “an alternate plan to turn the canal into a parkway modeled after Skyline Drive began to look much more attractive.” (High:47; “Report on Joint Reconnaissance Survey and Study. . .,” PL 618 – 80th Congress, Chapter 435, 2nd Session, approved June 10, 1948 and transmitted May 5, 1950)

Ownership of the Land at Pennyfield Lock by Christian Heurich

In 1951, Christian Heurich, Jr., heir of the Washington beer-making family, purchased from the Guaranty Trust Company of New York the land Demarest Lloyd had assembled between River Road and the canal, including the lots at Pennyfield Lock. (Liber 1578, folio 376 and 377, September 21, 1951) He also purchased numerous islands in the Potomac River. He continued to own the land until 1976, when he sold a portion of it to the National Park Service for the newly-created Chesapeake and Ohio Canal National Historical Park.

Saving the Canal

Variations on the parkway and dam proposals went through hearings and draft bills during the Eisenhower, Kennedy, Johnson, and Nixon administrations. When the Washington Post endorsed the parkway plan in 1954, Supreme Court Justice William O. Douglas invited the newspaper's editors to join him in walking the towpath, calling attention to the conservation movement. (High: 47) The activity of parkway-building moved slowly into gear: lockhouse 5 was razed, and the section of the road now known as the Clara Barton Parkway was

Pennyfield Lock

Chesapeake and Ohio Canal National Historical Park

constructed. (High:47)

In 1956 the National Park Service abandoned its plan to build the parkway, and by 1958, canal repairs were completed, allowing hikers to walk the entire 184.5-mile length without flood damage detours. (Mackintosh: 99; Shaffer:83) In January 1961, two days before he left office, President Eisenhower proclaimed the C&O lands between Seneca and Cumberland a national monument, making this portion of the canal a unit of the national park system. In practical terms, it had little effect, authorizing no development or funding. (Mackintosh:90) In 1963 the Seneca Dam proposal was officially abandoned. (Mackintosh:119)



Canoers are Rudy Kauffman and Elwood Baker of the Evening Star and Abbie Rowe and Donald E. McHenry of NPS, shown just below Pennyfield Lock, September 24, 1940. Occasion is the rewatering of the canal. (NPS)

1971 to 2003: The Chesapeake and Ohio Canal National Historical Park

In 1971 President Nixon established the Chesapeake and Ohio Canal National Historical Park, authorizing expansion of its landholdings from about 5,000 acres to more than 20,000. (PL 91-664) The act gave the NPS the authority and the means, with subsequent appropriations, to enlarge its narrow canal right-of-way into a viable park. Land acquisition was the primary purpose of the legislation and became the first priority following its enactment (Mackintosh:103)

Christian Heurich Sells Land at Pennyfield Lock to the National Park Service

The land along the berm side of Pennyfield Lock was identified by NPS planners as a needed buffer. Canal land extended to the river in this section. Following land appraisal in 1974

(Beasley & Beasley), Christian Heurich, Jr., sold the National Park Service a 20.02-acre tract of land (tract number 62-115) on the inland side of Pennyfield Lock. (Liber 4876, folio 604-605. November 30, 1976) This newly-amalgamated tract contained many of the small lots alongside the lock, the Pennyfield House, the second house, and about a dozen outbuildings. It was made up of a small part of the historic Milburn and Long Acre land. Heurich also agreed to place 28 acres that adjoined tract 62-115 on its east side (tract 62-116) into scenic easement, and sold the NPS a 3-acre tract on the west bank of Muddy Branch on the river side of the canal (tract 62-104) and a small island of less than one acre (tract 62-112--called Petite Jeane Island) formed by the outwash from the lock's waste weir. At the same time, he donated 150 acres of islands in the Potomac River to the Nature Conservancy. (C&O Canal National Historical Park, Annual Report, 1976) Earlier, in 1971 he had donated about two acres (tract 62-103) at the foot of Pennyfield Lock Road to the Maryland National Capital Park and Planning Commission to be used as parking for the state's Blockhouse Point Park.

At the time of these transactions, the Heurich land was leased to a number of tenants. Luvie Moore Pearson leased and sublet the second house/store property to James Settle, a self-employed bricklayer, and his wife. Settle used a number of the outbuildings for storage of equipment. He and his wife also raised a few hogs and chickens. They had lived here for four years and built one of the outbuildings – a meat curing house. Luvie Pearson was the widow of the noted Washington Post columnist Drew Pearson, and lived at "Merry-Go-Round Farm," a large River Road property east of Heurich's, that had historically been part of the Bealls' land. She leased the main Heurich property of 183 acres on the plateau, which was not sold to the Park Service, to Paul Doody, who managed her land as a tenant farmer. Doody cropped the near-level inland portions of the Heurich property and grazed the rest, probably including the slope above the canal. George Kelly and his wife rented the Pennyfield House from Heurich, and acted as caretakers of some of the other property along the canal. (Beasley & Beasley appraisal, 1974:20-22)

The Heurichs reserved a ten-year occupancy and use on 5.02 acres of tract 62-115, which was the part that contained all the buildings. They continued to lease this property to Annie and Ridge (not George?) Kelly, who had lived there since 1968. The Kellys raised sheep. ("Appraisal Report and valuation analysis, Pennyfield House," John P. McClurg, appraiser, prepared for NPS, September 16, 1998:8) A plat shows the five acres as primarily flood plain land; the remaining 15 acres of the tract would have been the slope. (Frey, Sheehan, Stoker & Associates) During this time, the Kelly's lived in the main house and Heurich's son, Christian Heurich III, lived in the second house. The sheep, which probably browsed much of the five acres, tended to keep the fields around the houses and outbuildings clear of trees and underbrush. In 1998 Annie Kelly relayed (to McClurg) that a white picket fence with roses was around the property and there was an orchard behind the Pennyfield House. What time period she was referring to was not stated. She said that there were stone steps that led up the hill to a blacksmith shop. (McClurg:8)

Attempts at Historic Leasing of the Pennyfield Property

Following enactment of amendments to the Historic Preservation Act in 1979, it became

Pennyfield Lock

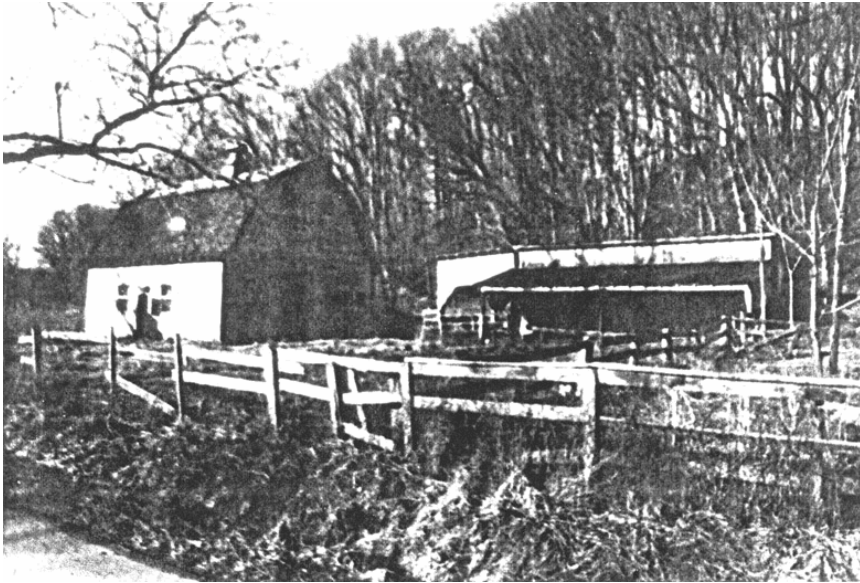
Chesapeake and Ohio Canal National Historical Park

possible to lease federal property to private individuals. Inquiries began to be made to the park regarding lease of the Pennyfield House a few years after that. The park invested several years into one proposal which in the end was denied bank financing. Important details, such as the length of lease, the size of the property to be leased, and whether the lease could be for a commercial establishment, were never fully settled and became stumbling blocks. The local chapter of the Sierra Club also raised environmental questions over the leasing.

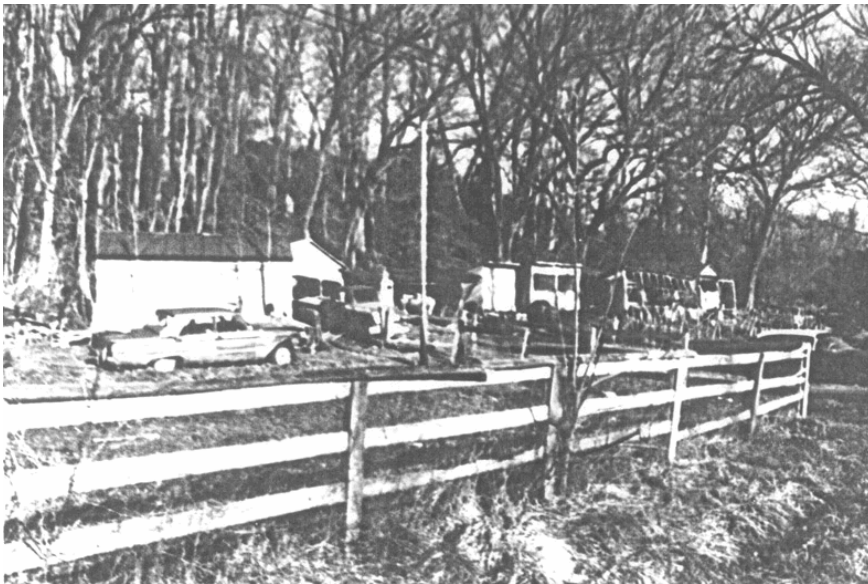
In 1995, with demolition of Pennyfield House a likely outcome, the park made a last effort to lease the property. Various plans for refurbishing the houses were floated, only to collapse. By 1997 the National Park Service was contemplating demolition of the two houses because of safety concerns. At that point, a group of Potomac residents, affiliated with Historic Medley, Inc., and calling themselves the Pennyfield Foundation, made a proposal which looked promising. That latest effort, however, stalled when park concessionaires protested the historic leasing law as an encroachment on their businesses and Congress halted future leasing. Pennyfield Foundation remains interested in at least the Pennyfield House, but, by 1998, deterioration had proceeded to the point that only parts of the house could be salvaged and the entire structure would need to be taken down and reassembled. As of 2003, the park is still proposing to tear down the two houses, which have not been lived in since 1984. Still standing are two other structures, a large corncrib and a tin-sided garage. Tree saplings have invaded the barnyards and partly engulfed the second house. Invasive vegetation and some plantings were removed from around Pennyfield House during the 1990s.



West end of project area in 1974 with view of the barn and other structures sited along Pennyfield Lock Road where it parallels the canal. (CHOH, Beasley appraisal)



Barn and corncrib/loafing shed c. 1974. Thick woods behind were the Jarboe's woodlot c. 1910. (CHOH, Beasley appraisal)



Outbuildings just west of second house c. 1974, which is seen faintly at right of photo. (CHOH, Beasley appraisal)



Second house at the lock, called the daughter's house. "Store addition is on the right. Pennyfield Lock Road passes in front. (CHOH, Beasley appraisal)



Pennyfield House c. 1974. The property was not yet purchased by NPS. (CHOH, Beasley appraisal)



Pennyfield House c. 1994. Substantial damage had occurred by this time. (NPS/NCR)



Ailanthus trees (since cleared) had sprung up along the perimeter of Pennyfield House, 1994. Tree to the left is a planted fir or spruce of uncertain vintage. (NPS/NCR)

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The project area is a component landscape of the Chesapeake and Ohio Canal National Historical Park. It incorporates land that historically belonged to the canal company and land adjacent to the canal, where historically there was a small cluster of buildings – domestic, commercial, and agricultural in function – occupied by a family group and others involved in the operation of the canal and providing for their own subsistence. Later, when the canal fell into decline, the small community provided other services related to the unique location, such as those related to sports fishing. Even when the canal was no longer shipping coal, once its primary cargo, local trade still plied the canal waters, especially at the this lower end. A period of significance of almost a hundred years (1828-1924), which applies to the canal as a whole, is also appropriate for this site.

Pennyfield Lock was a working landscape, expressive of the way of life that developed along a canal. The domestic and commercial uses of the land at Pennyfield Lock evolved over the years, first to include a warehouse, then a store, and eventually two houses and ten or 15 domestic and agricultural outbuildings and canal- and river-oriented commercial buildings. This area adjacent to the canal (not part of the canal property) was divided among several owners, and the yards and spaces along the lock reflected these ownership patterns.

In the National Register nomination for the C&O Canal, the canal is described as “one of the most intact and impressive survivals of the American canal-building era.” (NR 1979:8) The survival of the various features of the canal is in large part attributable to the quality of its stone masonry, which survived periods of neglect. The part of the Pennyfield Lock site that is the historic canal property is mostly comprised of stone structures and has high integrity. Wooden structures have survived less well, and many were purposefully removed. The part of the site that was purchased in 1976 has little integrity, primarily because its wooden structures have decayed. The houses, barns, sheds, etc. were already in varying states of disrepair when the government bought the land, and have declined further in the succeeding years. Of the four buildings that remain (two houses, a corn crib/loafing shed and a tin shed), the two houses are, by some estimates, beyond repair. Had the houses survived, but not the other structures, this part of the site would have partial integrity. When the houses are gone, there will be less. However, elements of the site, such as the openness of the landscape around the Pennyfield House, the linear spatial arrangement of yards along Pennyfield Lock Road, and various historic small scale features, such as a stone bridge, stair case and in-stream revetments, retain integrity and contribute to the historic scene.

Landscape Characteristic:

Natural Systems And Features

The primary natural component and feature of the site is the Potomac River. It is a natural system of great force, with which the canal company had to contend – in the form of flooding – during the years of canal operation. Flooding remains a threat to the structures of the canal, but not in the same way as when the canal was a commercial venture and damage affected

company solvency and livelihoods.

Water drains from the inland portions of the site, following the land's natural contours and carving stream beds as it flows. Muddy Branch, a tributary of the Potomac River, has a fairly extensive inland watershed. It passes under the canal in the Muddy Branch culvert at the west end of the site, but otherwise lies outside the site's boundaries, protected within a regional park managed by the Maryland National Capital Park and Planning Commission. A much smaller drainage, which runs with water part of the year, originates in the plateau above the site. It angles obliquely across the site to join Muddy Branch just before the culvert. At the east end of the site is another swale that passes around Pennyfield House and drains into the canal, near the mouth of the bypass flume.

Construction of the canal impeded the natural drainage of the land. In some places, such as opposite the second house, water accumulates on the inland side of the canal and creates a wet area. The constructed waterway functions in some ways as a natural system. Water animals populate the canal: for instance, turtles were seen sunning themselves on branches that had fallen into the canal, and a water snake swam near its grassy banks.

At the outset of canal construction in 1828, the riverbanks and floodplain were probably forested and would have been heavily impacted by canal construction. Today the floodplain at Pennyfield Lock is more wooded than it was at the end of the historic period (1924), and the riverbank has a full canopy of trees.

Except for the increase in tree cover, there has been little change to the natural systems of the site since the end of the historic period.

Landscape Characteristic Graphics:



Looking across the Potomac River to islands, from bank near Pennyfield Lock. (2002, M. Gerdes)

Spatial Organization

The primary organizing feature of the Pennyfield Lock landscape was, and remains today, the canal itself. Along it were arranged the various buildings that sprang up at different times in relation to the canal and the river. The linearity of the canal and the topography of the site, with its two-hundred-foot-wide floodplain on the berm side, determined the linear arrangement of buildings. Pennyfield Lock Road winds down the hill, but at the bottom it conforms to the linear shape of the site and runs parallel to the canal.

By the 1870s, there were several warehouses at the site which may have been located within the canal right-of-way. By 1880 land that adjoined the canal began to be sold in small lots of one-half to five acres. Fences at one time divided up the different domestic and commercial spaces and probably marked the boundaries of the individual lots. Such spaces are organized functionally, generally in rectilinear but not rigid fashion.

Pennyfield Lock continues to have a linear spatial arrangement, with the canal, towpath and road running parallel. The once-open yards have been partly overtaken by woodland, and there is little sense of the subdivisions that formerly existed. Some old fencelines, such as the one along the inland side of the road, can be traced in the large trees that periodically mark its location. The present appearance of the grassy field adjacent to Pennyfield House belies the many structures and activities that filled that area during the canal years. Still, Pennyfield Lock is more open than many other parts of the canal, suggesting that it was the site of some activity.

Landscape Characteristic Graphics:



Linear character of the canal, looking west. Structure on left is waste weir inflow. (2002, M. Gerdes)



Grass field west of Pennyfield House, which is seen in distance. Path on right of fence leads from parking lot to lock and towpath. (2002, M. Gerdes)



Back of lockhouse (not whitewashed), looking toward Pennyfield House on inland side of lock. (2003, J. Earley)



Lower level of canal with towpath on extreme left, looking west toward lock. Tree grows on land between bypass flume and lock. Fence delineates field by Pennyfield House. (2002, M. Gerdes)

Land Use

Historically and until 1972

Pennyfield Lock and its immediate environs only began to have a connection with the Pennifields around 1880. Others lived at the lock before then -- at the lockhouse which was built sometime after 1836. By 1856 there was also a warehouse and wharf. There may have been a road to the canal and river that preceded Dufief's road to his warehouse at Lock 22 (today's Pennyfield Lock Road), built c. 1856, but it was not a public road like Dufief's. Before the warehouse and road, there was probably one family, but no community, at the lock.

Agriculture and milling were the main activities in the area at the time the canal was built. As shown on the 1825 engineers map ("Map of the Survey of the Potomac Canal, 1825," Lt. Col. J. J. Abert), fields and pasture spread out on either side of River Road along the plateau. The 1825 map does not show any fields in this section of the floodplain. The slopes between the floodplain and plateau may have been a mixture of woods and pasture. The mills on Muddy Branch were a couple of miles up the stream.

During the latter part of the 19th century, when George Pennifield, Hatton Waters, Upton Darby, Anne Harris and others purchased parcels along the inland side of the canal, a greater variety of activities developed at the site. Besides acting as lockkeepers, the Pennifields also provided accommodations to sports fishermen, including President Grover Cleveland. Whether they opened their house to boarders or ran a fishing camp is not established definitively anywhere. (Pennyfield Foundation proposal, CHOH historic leasing file) The second house at the site, where the younger Pennifield (Charles) and his wife (Maggie) lived, had a store addition. Whether the store was contemporary to the construction of the house (c. 1890) or added later is not known. This was not the company store that appears on the canal company books in 1870. The company store would have been within the canal right-of-way, along the canal side of the lock road, and it would likely have been one of a string of buildings such as is seen in historic photos from c. 1919.

Commercial enterprise continued at Pennyfield Lock during the 20th century. The lock hosted various small businesses alluded to in a few references. For instance, one 80-year-old in 1990 remembered a "beer joint" there in the 1930s. (Name of newspaper not shown, Feb. 24, 1993, Montgomery County Historical Society, Vertical file: Travilah) And in 1972, shortly after the park was created, the operator of a bicycle and canoe rental business wrote to the National Park Service about whether he would be able to continue his business at the lock. (Larry Fawley, April 27, 1972, in CHOH tract file 62-104. He located his business on tract 62-115.) There were other tenants at this time as well. One couple raised sheep; another tenant was a brick layer, who used some of the existing farm sheds to store his work equipment. (Beasley & Beasley appraisal 1974)

Today

There are few features today that provide evidence of this past activity and land use. The two houses and the other farm buildings are mostly in ruins. A widening in the canal is faint evidence of the wharf or turning basin that flanked Dufief's warehouse.

For the time being, commercial activities have ceased at Pennyfield Lock, but visitors come for recreational purposes and because of the historical nature of the canal. It is a good location from which to access the towpath. It is also where one can launch a small boat into the Potomac River. Park administration has mentioned that there are plans to move canoeing and bicycle rental here and enlarge the parking facilities.

Landscape Characteristic Graphics:



Walkers on towpath and bench under tree illustrate active and passive recreational uses at Pennyfield Lock. Stream from bypass flume feeds in from the left and main flow through lock comes in from right. (2003, J. Earley)

Topography

For the most part, the site of Pennyfield Lock is level terrain parallel with the canal for a length of about 2,000 feet. It is situated at a point along the Potomac River where the Potomac ridgeline moves inland, away from the canal, leaving a wider floodplain than is found nearby. At Blockhouse Point to the west, and a short distance east of the lock, the ridges about the canal with sharp cliff faces and slopes of 60 degrees or greater. In contrast, the floodplain at Pennyfield Lock extends 100 to 200 feet from the inland side of the canal to where the land begins to rise as a gradual slope, leveling off in a plateau about 100 to 125 feet above the river. The plateau land is heavily rolling and slopes toward the ridge line. Water drains from the

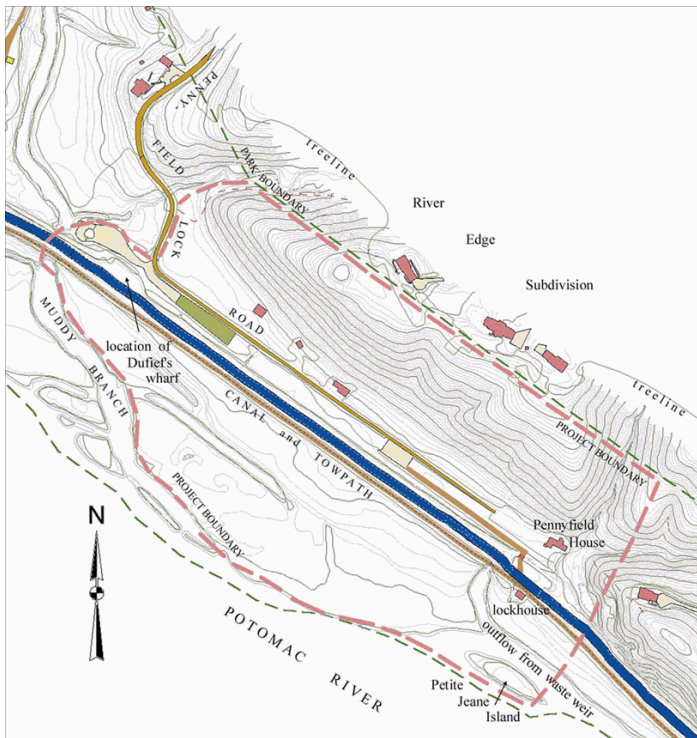
higher ground in three locations. Two of the drainage swales carry running water at least part of the year. The third swale is less pronounced. Together these drainages divide the plateau and slope into a number of irregular shapes. The major swale to the west, recognizable on maps by the oblique angle it makes to the canal, is spring-fed. Another is located just east of the Pennyfield House. It is the source of some of the moisture that has contributed to the deterioration of the house. A third swale is located east of the second house. Although there is no running water in this swale, it is the source of the water that backs up between the road and the canal opposite the second house.

The land crossed by the canal had to be shaped into a uniform grade between locks. For much of its length at Pennyfield Lock – using that term in its general application to refer to a length of about 2,000 feet between the lock and the Muddy Branch culvert – the canal prism is level with the natural grade of the land on the canal's inland side and has an embankment on the river side. As the canal approaches Muddy Branch, the grade falls away, making the embankment more pronounced on the inland side as well.

The land on the river side of the canal has been shaped and reshaped by a number of forces: the river, outflow from Muddy Branch, the older overflow from the canal, the waste weir that replaced it; and human manipulation of the land. The remains of the older canal overflow can still be discerned near the riverbank. On the river side of the canal, there is a deposit of earthen material left by excavation for the Dulles Interceptor Sewer (Prentice-Hahn survey, milepost 19.81, draft 11/18/72). Behind the lockhouse and along the lower level of the canal to the east, earth is shaped into a flood dike, a narrow embankment which rises a couple of feet above the towpath.

Human reshaping of the ground at the project site that has occurred since the historic period has not been enough to significantly impact the historical integrity of the site's topography. Other topographical changes, such as those to the riverbank and along streams, are part of the ongoing, natural rearrangement of land by water.

Landscape Characteristic Graphics:



Site's contour lines reveal a narrow floodplain and slope on inland side. On river side, the silty floodplain is dissected by outflow of Muddy Branch and from waste weir. (J. Earley with Park GIS, 2002)



Overflowing water from the canal upper level through the waste weir has carved a small stream in the floodplain. (2002, M. Gerdes)



Stream from waste weir has shaped a small island at its mouth. (2002, M. Gerdes)



Quarried rock ridge with canal flowing at base of it, east of Pennyfield Lock. (2002, M. Gerdes)



Highlands on the Virginia and Maryland sides of the Potomac gorge can be seen through trees on slope. Though not closed to the public, there is no trail in this location. (2003, J. Earley)

Vegetation

A description of floodplain vegetation along the Piedmont and Appalachian portions of the Potomac River in 1976 remains true today, although all these species are not necessarily present at the Pennyfield Lock site. Generally, the floodplain plant life in these locations is that of a second or third growth eastern bottomland forest. The dominant tree species are sycamore (*Platanus occidentalis*), elms (*Ulmus* spp.), silver maple (*Acer saccharinum*), box elder (*A. negundo*), and green ash (*Fraxinus pennsylvanica*). Less common are birch (*Betula* spp.), oaks (*Quercus* spp.), cottonwood (*Populus deltoides*), yellow poplar or tulip tree (*Liriodendron tulipifera*), locust (*Robinia pseudoacacia*), hickory (*Carya* spp.), walnut (*Juglans nigra*), beech [*Fagus grandifolia*], cedar [*Juniperus virginiana*] and pine (*Pinus* spp.); although these may dominate in certain areas due to climatic or soil conditions. Common understory trees and shrubs include paw paw (*Asimina triloba*), dogwood (*Cornus florida*), sumac (*Rhus* spp.), hornbeam (*Carpinus caroliniana*), mountain laurel (*Kalmia latifolia*), spicebush (*Lindera benzoin*), and redbud (*Cercis canadensis*). Introduced species include ailanthus (*A. altissima*) and paulownia (*Paulownia tomentosa*) which have become naturalized. Also present in places is Osage orange (*Maclura pomifera*), often used in hedgerow plantings in the piedmont. Though native to the United States, this tree naturally grows west of the Appalachians. (John Parsons, General Plan 1976:6)

The vegetation at Pennyfield Lock reflects both natural distribution and the influence of human occupation. One small but interesting example of this shaping effect is the small American beech woodland located on the slope just east of the major swale. This is a former woodlot, identified as such when it was platted for Elizabeth Jarboe's use in 1909. Its boundaries can be seen on the tract map in the history section of this report. The trees here will be older than the surrounding woods that have reclaimed the slopes during the 20th century.

Lockkeepers were traditionally given an acre on which to plant a kitchen garden. Thus, even before the Pennifields arrived at the lock, a vegetable garden and possibly some fruit trees were located reasonably near the lockhouse. The Pennifields would have had a vegetable garden as well, although where it was is not known. It probably wasn't in what is today a grass field adjacent to the house, since they didn't own that property. Almost 20 years after the Pennyfield House was built, George Pennifield bought some land on the slope that he might have used as pasture. His daughter-in-law bought adjacent land.

Tree Cover and Open Land

The ten or so farm buildings situated along the floodplain that were counted in 1974 are now mostly in ruins and stand amidst a successional thicket of vegetation. Photos taken in 1974 show these buildings within cleared, fenced fields. The slope above the floodplain, now also a successional woods, was mostly open land (except for the beech woodlot) as recently as thirty years ago (Montgomery County planning department map, c. 1970). The former openness of the slope can also be seen in one of the few historic photos. (See photo of Pennyfield House with cars in history section of this report.) The slope may have also been used as pasture.

Ornamental and Other Character-defining Vegetation

There are singular trees here and there, which, though naturally occurring, have cultural significance and are character-defining features. There is also some vegetation that clearly was planted, particularly near Pennyfield House. Documentation, specifically three or four photos c. 1919, a survey in 1939 (McGrew), and photos taken in the 1970s provide some history with regard to the vegetation in the 20th century. Several areas are described below.

Near the lock: The large sycamore that overhangs the lower level of the canal just east of the lock is an example of naturally occurring vegetation that has cultural significance, in this case for its picturesque effect. The tree is located on the small spit of land between the bypass flume and the lock. Historic photos from 1919 show a tree (actually a number of trees) in this location.

Lockhouse: According to the 1939 survey of the canal structures, lockhouses were often flanked by "a pair of fine trees" (McGrew, caption to photo of house at Lock 8). A single tree can be seen in several different photos of Pennyfield lockhouse c. 1919, located west of the front door. It is identified in the McGrew study as a black walnut (caption for photo of the

lockhouse at Lock 22). The tree is not seen in photos from the 1970s and is not there today.

Pennyfield House: One of the c. 1919 photos shows what might be a fruit tree in front of the Pennyfield House at the west end of the facade. (See photo of Pennyfield House with cars in history section.) In the same photo, the shapes of some conifers can be made out faintly east of the house near the drainage. Annie Kelly, who tenanted Pennyfield House between 1968 and 1985, reported that when the Pennifields lived in the house there was a white picket fence with roses around the property and an orchard behind the house. (McClurg appraisal 1998:8) She may have had this wrong or McClurg may have confused some of the information. An orchard behind the house seems unlikely because of the steepness of the slope, and the fence shown in the c. 1919 photos is a white-washed post and board fence, not a picket fence. In photos from the early to mid-1970s, a few rounded shrubs can be seen in front of the house. A vine (revealed in later photographs to be wisteria) climbs on the porch roof, and there are a number of recently-planted saplings that could be fruit trees. The vine is not visible in the 1919 photos. By the late 1970s, when a photo of Pennyfield House was taken for inclusion in the National Register nomination, the saplings (probably fruit trees) in front of the house had grown a little larger. Later photos from the 1980s and 90s show self-seeded vegetation, such as ailanthus trees, closing in around the house. A fir or spruce tree is first seen in front of the house in the 1980s photos. Its size suggests it must have been there for a while, although it clearly did not exist at the time of the 1919 photos. It has since died, but is still standing in the yard.

Today, there is at least one quite large flowering tree in front of the Pennyfield House, positioned to the east, near the bypass flume. Its species has not been botanically identified, but the bark looks like cherry. Newspaper articles refer to several flowering trees; in one article it is called a Japanese cherry. The site has not been visited in spring to confirm whether there is more than one flowering tree or to attempt to name the species of the known tree. In the 1990s the vegetation around the house was cut back to protect the structure from further damage.

Vegetation near the second or “daughter’s house”: Some trees that self-seeded along a fence formerly bounding Pennyfield Lock Road where it parallels the canal have now grown large and mark the line where the fence ran. Some of them, such as the one found just to the east of the second house, are mulberry trees (*Morus* sp.). There is also a line of hibiscus shrubs (*Hibiscus syriaca*) that follows the line of a vanished fence located near the back and on the west side of the second house.

Summary

With the loss of the site’s former functions, its vegetative outlines have softened and lost distinction. The floodplain along the river side of the canal is also more forested than historically. Thus there is a fair degree of change. A mitigating factor in evaluating vegetative integrity is the fact that native species predominate in the successional woods, protecting this site from the added problem of a large number of invasive trees and shrubs.

Character-defining Features:

Feature: Large sycamore overlooking lower level of canal. (Location and indigenous character more important than exact species.)

Feature Identification Number: 95112

Type of Feature Contribution: Contributing

Feature: Large flowering tree (or trees) in Pennyfield House yard

Feature Identification Number: 95111

Type of Feature Contribution: Contributing

Feature: Occasional large tree along old fenceline paralleling road and canal

Feature Identification Number: 95114

Type of Feature Contribution: Contributing

Feature: American beech woodland on slope

Feature Identification Number: 94361

Type of Feature Contribution: Contributing

Feature: Native species on slope and floodplain (more recent successional vegetation in outbuilding yards excluded)

Feature Identification Number: 95113

Type of Feature Contribution: Contributing

Feature: Exotic vegetation

Feature Identification Number: 95110

Type of Feature Contribution: Non-Contributing

Landscape Characteristic Graphics:



This large sycamore may be one of the trees seen in historic photos c. 1919. (2002, M. Gerdes)



Large multi-trunked tree, which appears to be a cherry, in southeast corner of yard in front of Pennyfield House. Tree was probably planted for ornament, rather than fruit. (2003, J. Earley)

Circulation

Circulation at the site is comprised primarily of two elements – the canal and Pennyfield Lock Road, which connects the canal to River Road. Since closure of the canal in the 1920s, it is the canal's towpath, rather than the waterway, that serves a circulation function. However, the waterway gets some use from canoers. The section from Georgetown to Seneca is the rewatered section of the canal, first repaired in the 1940s.

Pennyfield Lock Road, a county road, is a two-lane, macadam road, with no gutters or curbs. It winds downhill from River Road, and upon reaching the lock, makes a right turn to the southeast, running parallel with the canal for about a thousand feet. It ends at a parking lot and at a gated, unused drive that continues the road's alignment across the grass field west of Pennyfield House.

A pedestrian trail from the parking lot leads along the berm side of the canal to a set of wooden bridges over the canal. The trail lies south of a grass field west of the Pennyfield House. A fence separates the path and the field. Two of the wooden bridges are built to support vehicles and a third is a narrow bridge that only carries foot traffic. The first of the larger bridges crosses the bypass flume onto the small island between the flume and the lock, and then crosses the lock on the second bridge. The narrow bridge crosses the lock a dozen feet south of the wider bridge. Why it is situated so close is a question. Once on the river side of the canal, one can follow the towpath in either direction or proceed past the lockhouse along a more informal trail to the river.

A second parking lot is located at the foot of Pennyfield Lock Road. This one belongs to the State of Maryland (Maryland National Capital Park and Planning Commission or MNCPPC). It provides parking for the Dierssen waterfowl refuge and Blockhouse Point Regional Park just to the west. The southwest corner of the parking lot lies at the Muddy Branch culvert and is where small boats such as kayaks or canoes can be launched into the Potomac River via Muddy Branch.

The park's GIS maps and field survey reveal several other isolated paths that probably would not be considered part of the park's circulation system. One of them is just east of Pennyfield House. It has a small stone bridge and stone steps that lead up the steep slope east of the house. When this path was constructed and what its function might have been, other than a pedestrian route to the higher land, has not been verified in this research. According to Annie Kelly, who lived in the Pennyfield House with her husband between 1968 and c. 1980, a blacksmith shop was located there (told to John McClurg, appraiser, in 1998). She did not give a timeframe for the blacksmith shop. Blacksmithing was a livelihood associated with the canal. Among other things, blacksmiths shod the mules that pulled the canal boats.

One other trail is located at the northwest end of the site, on the east side of the most prominent of the swales that divide the upland slope. This trail appears to be the trace of an old road. It is narrow and its bank on the uphill side is gently worn. The route is probably currently used by walkers from the mainland part of the property, now the River Edge Subdivision, to reach the

canal and river. If it is as old as it seems, it may have served owners of the larger property in the 19th century and possibly earlier. Some distance up the slope, a gate blocks passage beyond that point.

Pennyfield Lock Road is the historic road to the lock which John Dufief, a miller and shipper, petitioned the county for in 1856. His warehouse at the canal was located where the MNCPPC parking lot is located today. Neither the NPS parking lot at the east end, nor the MNCPPC lot at the west end, is historic. The boundaries of the lock road, where it parallels the canal, need to be further studied for clarification of county vs. federal land. The location of this section of the road is historic, dating perhaps to the later part of the 19th century, when the houses were built. It is likely that the road, which was probably dirt or gravel historically, continued as far as the Pennyfield House. It probably had a less straight alignment than the gated asphalt drive that crosses the grass field west of the house today. No information has been found about the origins of the asphalt drive that's there today. One historic photo shows a number of cars parked between the buildings along the canal and Pennyfield House. Some sort of drive, probably quite informal, ran from the end of Pennyfield Lock Road to where the cars were parked. There may have been little to distinguish where the lock road ended and where the driveway began. The same photo also shows a path worn in the grass from the lock to Pennyfield House.

In summary, the canal and Pennyfield Lock Road are in their historic locations and have high integrity. The towpath appears to be its historic width – 12 feet – and is surfaced with one of the canal's historic materials – sand possibly mixed with clay. When Pennyfield Lock Road was first paved with asphalt is not known, but it is curbless, which is in keeping with the historic scene. Whether the path from the parking lot to the towpath, along the south side of the present field, is historic is hard to verify. Photographs seem to suggest its alignment could have been 25 feet or so inland of the present location. Historically a path extended between Pennyfield House and the lock, but there is none today. A path also led past the lockhouse to the river, as one does today. The two other trails – the path east of the house with the stone steps and the one alongside the drainage swale at the west end of the site – appear to be old, especially the one on the west which may be a road trace, but these do not generally figure as elements of the site's circulation today.

Character-defining Features:

Feature: Towpath

Feature Identification Number: 94351

Type of Feature Contribution: Contributing

IDLCS Number: 046578

LCS Structure Name: Mile 19-20, Towpath

LCS Structure Number: 019.00

Feature: Road trace along major swale at west end of site

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

Feature Identification Number: 94350

Type of Feature Contribution: Contributing

Feature: Pennyfield Lock Road

Feature Identification Number: 94349

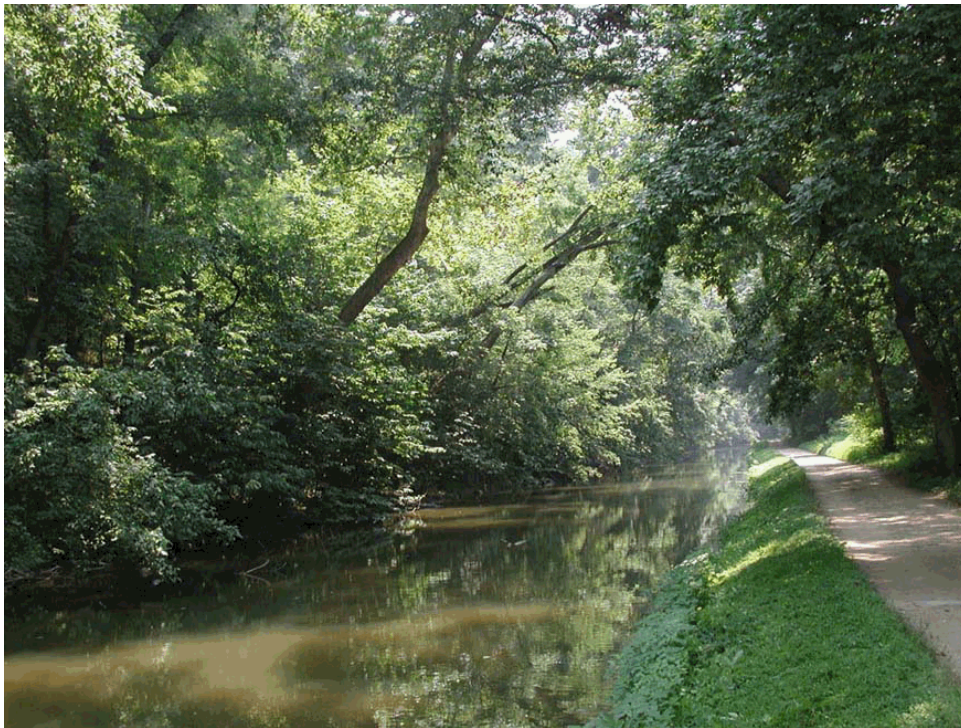
Type of Feature Contribution: Contributing

Feature: Path to river alongside lockhouse

Feature Identification Number: 94348

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



Towpath, looking east, along the lower level of the canal. The lock is to the viewer's back. Historically, scene would have been less picturesque, with less overhanging vegetation. (2002, M. Gerdes)

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

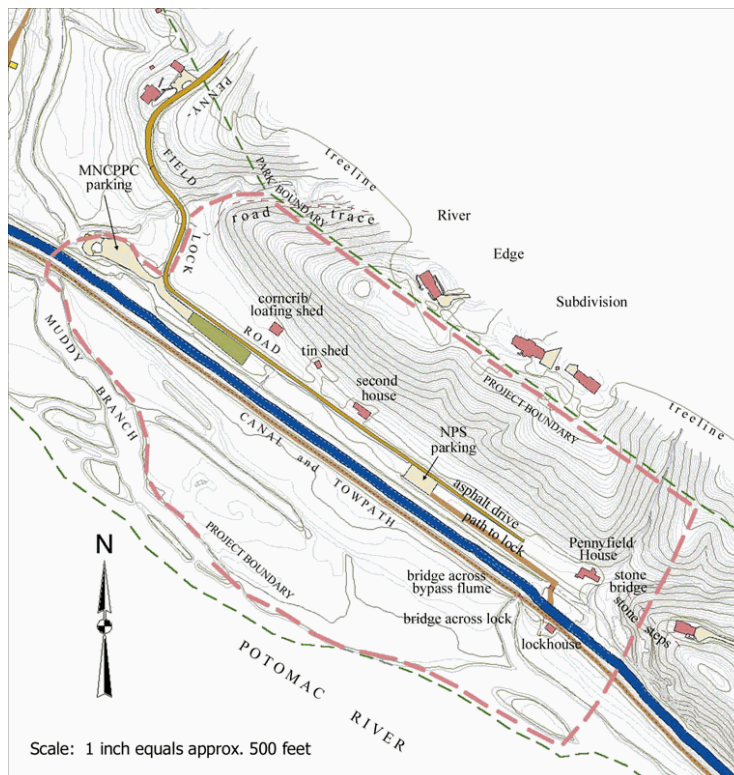


Image shows location of various circulation features, including the bridges over the lock and the parking lots. (J. Earley with Park GIS, 2002)



Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

Bridge across bypass flume, with bridge across lock behind. Lockhouse stands alongside towpath. Water from upper level of canal flows through bypass and lock. Spit of land lies between the two. (2002, M. Gerdes)



A worn path runs from the towpath past the lockhouse to the river. (2002, M. Gerdes)



Path to lock from parking lot, looking east, with Pennyfield House in corner of field. It is not clear if historic drive to Pennyfield House and lock area followed this alignment. (2002, M. Gerdes)

Buildings And Structures

The builders of the Chesapeake and Ohio Canal intended that it be of the highest quality. Carefully drawn specifications guided the construction of the masonry structures and the canal itself, closely supervised by company engineers. As a result, the masonry structures on the C&O Canal were generally of better construction than those on other canals of the same period and the canal is the best preserved of the US canals. (John Miele, Chesapeake and Ohio Canal: Physical History 1968:4)

The basic elements of the canal are its lift mechanisms, called locks, and the level stretches between the locks, called "levels." Together these form the "trunk" of the canal. The primary canal structure, the built-up, earthen corridor within which the canal waterway (or trough) and the towpath are set, was built in the form of a prism. The prism generally had at least one, and sometimes two, sloping sides. The sloping walls of the prism and the sloping walls of the canal waterway, which was wider at the top than at the bottom, were supported sometimes by mortared or unmortared (dry) stone walls. The width of the canal from west of Georgetown to Harpers Ferry was generally 60 feet at the top and 42 feet at the bottom, and that of the towpath was 12 feet. (Harlan D. Unrau, Chronological History. . . 1976:154; Miele:21) The towpath was to have a smooth surface. In some areas, sand and clay were used, in other areas, it was covered with broken stone, and in some places slate (presumably crushed) was used. (Miele:21)

The lock:

The lock itself was made up of a number of features: lock walls, gates and a bypass flume. The flume was found at locks beyond Georgetown and its purpose was to allow a continuous flow of water downstream, even when the lock was not in use. Upstream of the lock, there might be a waste weir or drain built in the wall of the canal that was used in times of flooding or when that level of the canal had to be emptied for major repairs. At Lock 22, there was originally an informal overflow, which was replaced by a concrete waste weir between 1909 and 1911. (J. R. Prentice and T. Hahn, Report on Historic Structures, C&O Canal, 1972-74. The Prentice-Hahn report has been reviewed in draft form, produced in sections between 1972 and 1974 and often not paginated. Thus, citations have many dates and no page numbers. The milepost number is given as an aide to searching the report. The milepost number for the waste weir is milepost 19.81. The draft is dated 6/5/74.)

At a lock, the canal narrowed from 60 to 15 feet. If possible the lock was sited on bedrock. If not, a wooden mat formed of heavy timbers and clay puddling provided the foundation. (Miele:23) It is unclear from this research whether Pennyfield Lock is on a stone foundation. Locks were usually 100 feet long and 16 feet deep. The walls extended beyond the lock at both ends, opening out at their terminus at right angles to the lock, which made the lock structure about 140 feet in total length. The walls were built of massive blocks of stone, at least in the first sections of the canal, where the nearby stone was of better quality. The lock

walls at Pennyfield Lock are of Seneca sandstone from the quarries at Seneca, about three and a half miles upstream. The lower extension walls, turns and wing walls at Pennyfield Lock were whitewashed, which was typical of the historic period (Prentice-Hahn, milepost 19.63, draft 11/28/72). The mechanism of the wooden lock gates allowed the level of the water within the lock to be raised or lowered, depending on whether a boat was moving upstream or down. A breast wall ran the width of the lock beneath the upstream gates. Locks generally accommodated eight feet of rise or increased elevation. Pennyfield Lock was originally built for only seven feet of lift. Later, timbers, and then concrete, were added to raise the height of the lock to seven feet, eight inches.

Bypass flume:

The bypass flume, a ditch on the inland or berm side of the canal, carried the water flowing in the canal around the lock when the lock was not in use. There was no set pattern of construction for the flume, but it generally had stone walls and a stone floor or “tumble.” The eight-foot drop over the distance of about 140 feet meant there was plenty of erosion and plenty of repair. Maintenance was the responsibility of the lockkeeper. (Thomas Hahn, Towpath Guide. . . 1988:48) Like many others in the rewatered section up to Seneca Falls, the bypass flume at Pennyfield Lock was rebuilt by the CCC in the 1939-42 period. (Prentice-Hahn, milepost 19.63, draft 11/28/72:4) It has mortared stone walls of irregular shape, with smooth faces, and a floor of stone rip-rap set in concrete.

Waste weir:

Waste weirs were used to regulate the water level in the canal by providing an outlet for excess water. They were generally located on the towpath side of the canal, though some were on the berm bank. The original waste weirs were built of masonry with planks across the top forming a towpath bridge. Many were replaced by concrete weirs, c. 1906-1914. (Miele:102-104)

According to the Prentice-Hahn report, Pennyfield Lock did not have an actual waste weir until the concrete one that is there today was built c. 1909-1911 (Prentice-Hahn, milepost 19.67, draft 11/18/72, picture 2. Dates inscribed on the concrete walls of the weir). The report also says that the Mackall map of 1896 shows a single “informal towpath overflow,” rather than a waste weir, at Pennyfield Lock (Prentice-Hahn survey, milepost 19.81, draft 6/4/74). Informal overflows differed from actual waste weirs, which were constructed of stone. Our study of the Mackall map shows that, instead of one, there were two such drainages at Pennyfield Lock – a small one near where the waste weir is located today and a larger one about midway between the lock and Muddy Branch culvert. The Prentice-Hahn report states that no evidence remains of the older overflow -- that vestiges of it were probably obliterated with the construction of the Dulles Interceptor Sewer in the early 1960s. According to the report, the sewer was placed in the bed of the canal here, and surplus earth and stone from the excavation was piled along the riverside of the towpath and used in the creation of vehicle turn-arounds for the construction vehicles. (Prentice-Hahn, draft 6/4/74) There actually might be some physical evidence of where the earlier overflow was located. Topographic maps showing two-foot contours, such as the GIS maps, show a straight channel perpendicular to the riverbank where

the overflow might have been. (See site map at front of report.) The waste weir at Pennyfield Lock is described as a “good working example of a typical board-and-concrete waste weir” (Mike High, C&O Canal Companion, 2000:129).

Muddy Branch culvert:

Culverts under the canal allowed the passage of small streams and tributaries. For larger streams, the canal was carried on a bridge called an aqueduct. Culverts below Harpers Ferry were generally about 110 feet long due to the greater width of the canal; above Harpers Ferry, they were about 100 feet long on average. The curve of the culvert arch was generally a semicircle, and the arch thickness varied according to the length of the span. Wherever possible, the culvert was to rest upon solid rock. (Miele: 74-75) The barrels of arch culverts consisted generally of uncoursed rubble laid with lime mortar. The facial ringstones were of ashlar. (Report on Joint Reconnaissance Survey and Study by the Bureau of Public Roads. June 10, 1948 (1950), Appendix D: 1. The term ashlar refers to hewn, squared stones and to the masonry of such stones.)

The Muddy Branch culvert is located about 2,000 feet upstream of the lock, at the foot of Pennyfield Lock Road. In historic records, it is identified as culvert 30 of section 30. The culvert rests on solid rock, has a span of 16 feet, and rises eight feet above the normal waterline (Prentice-Hahn survey, milepost 20.01, draft 1974, picture 2). For comparison, the culvert at Watts Branch, which is the next major tributary downstream, had (and probably still has) a span or chord of 20 feet, a rise of ten feet, and a length of 115 feet (Report to Brig. Gen. Gratiot, Chief Engineer, USA, from John J. Albert and James Kearney, Lt. Cols. and Topo. Engs., 1834: no page number visible). No exact measurement for the length of Muddy Branch culvert is given in these sources. It is probably between 110 and 115 feet long. Field survey shows the headwall and wing walls to be ashlar. The ringstones of the arch are finely dressed sandstone that has a hammered finish and smooth margins.

Twenty two culverts, including the one at Muddy Branch, suffered major damage from Hurricane Agnes in June 1972 (Mackintosh, C&O Canal: The Making of a Park, 1991: 159). Damage to the Muddy Branch culvert included collapsed wing walls, headwall damage, and damage to the arch barrel on the downstream side where the towpath washed out (Prentice-Hahn survey, milepost 20.01, draft 1972-74, photos 1, 2 and 3). Repair included the uncovering and pargeting of the culvert's barrel, reconstruction of headwalls and wingwalls mostly on the outflow end, placement of rip rap upstream for stabilization, and the repair of 500 feet of towpath (Mackintosh:163-164).

Supporting walls for the canal prism:

Dry stone walls, running for a couple of thousand feet east of the lock and west of Muddy Branch in the vicinity of Blockhouse Point, were described in one of the early canal company reports (Report to Brig. Gen. Gratiot, 1834:n.p.). The walls were constructed where stone ridges blocked the path of the canal and extensive blasting or other removal was done. It is likely the walls were made of the very stone that was being removed. The continued existence

of these walls, which are outside the study area, has not been verified during fieldwork; however, one source seems to indicate that they are still there (Hahn, 1988:47-48).

Lockhouse:

Like the other canal structures, the canal company prepared detailed specifications for the construction of lockhouses. "The building was to measure 30 by 18 feet with a cellar below and an attic above. The walls of the main story were to be 20 inches thick, and masonry and carpenter work were to be of the highest quality. These early specifications were followed in building the lockhouses on the lower end of the canal. . . ." (Miele:55)

According to a detailed architectural study done when the government assumed responsibility for the canal, the lockhouse at Pennyfield (milepost 19.64) was built following the second set, or 1836 specifications, as opposed to the earlier 1828 specifications (Dallas McGrew, *Outline of Architectural Work*. . . , 1939:13). This would mean that the lock was in operation for at least five years before there was a lockhouse. The lockhouse at Lock 16 below Great Falls was the first built from the 1836 specifications (McGrew: 11 and photo caption in same source, n.p.). How the first and second set of lockhouse specifications differed is not exactly clear. The second set must have called for similar dimensions, because Pennyfield lockhouse is 30 feet 2 inches by 18 feet 2 inches, and its stone walls as thick as the earlier lockhouse. Dormer windows in the attic level are mentioned as characteristic of the later specifications, but the lockhouse at Pennyfield does not have dormers (McGrew:8). It does have windows at the gable ends in the attic story; perhaps those were a 1836 innovation. The placement of the chimneys may also be indicative of the later specifications, as many, but not all, of the earlier lockhouses seem to have a central chimney, and Pennyfield lockhouse has two end wall chimneys (McGrew, photos, n.p.; National Register, foreword of typical structures and buildings, 1979:2-b).

Pennyfield lockhouse is located mid-lock on the towpath side, about 40 feet from the towpath wall of the lock. The long side faces the canal and has a door at its center and a window on either side. A narrow transom, divided into three panes, is above the door. Boarded-up now, the windows on the front and back of the house were six-over-six sashes. A small stone stoop is positioned at the front door. Historically, a narrow door yard, the full width of the house, was bounded by an approximately three-and-one-half-foot high, white-washed picket fence of uneven width boards and sharply-pointed ends. The lockhouse is a one-and-one-half-story building with a full basement accessible from the river side. On the west elevation, the narrow west end of the house, the land falls away from the lock. The house has a flush exterior chimney at each end and no first floor end-wall windows. The roof was shingled, but is now covered with metal roofing. The stonework is roughly-coursed grayish-green shale, except for cut Seneca red sandstone door and window lintels and sills. (National Register, August 9, 1979:27) The corners of the house have larger squared stones for corner quoins and there is a heavy protruding box-like wooden cornice which follows the bottom edge of the roof and has returns on the gable end. Pennyfield lockhouse was traditionally white washed. In some older deeds, the lock is called "White House Lock." As a result of damage from flooding in 1996, the

wooden first floor has collapsed.

Other buildings that were probably within the canal right of way:

Assorted mule barns, tool sheds, feed sheds and other wait houses clustered around the locks, probably within the canal right-of-way. Many locks also had a hut near the lock gate to shelter the lockkeeper in inclement weather. (High:53) Pennyfield Lock had a store, a changing number of warehouses, and a simple wharf and turning basin. These were structures not found at every lock. Many of them dated to before the Pennifields built their house at Pennyfield Lock. In the waning years of the canal, some of these or other structures may have served very different purposes, such as the "fishing camp" alluded to in some of the park's historic leasing documents. It is not certain when the buildings immediately adjacent to the canal disappeared. Visible in the c. 1919 photos, they were no longer extant in 1974. (Beasley & Beasley 1974)

Houses and outbuildings that were not on canal company property:

Other buildings were arrayed along the inland side of the canal outside of the canal property. These included Pennyfield House and the second house sometimes called the "daughter's house." Two appraisals of the buildings standing in 1974 and 1998 have been reviewed for this report. The first, by the firm of Beasley & Beasley, dated 1974, was conducted before the National Park Service acquired properties adjacent to Pennyfield Lock from Christian Heurich, Jr., in 1976. The second was conducted for the park by John McClurg in 1998.

Pennyfield House, mostly in ruins today, is a frame, L-shaped structure, with four bedrooms, two baths, and a porch that winds around the front and west facades of the house. The house is situated roughly opposite the lockhouse on the inland side of the canal, about 80 feet from the bypass flume and a little more than 200 feet from the lockhouse. The second house is a three-bedroom, one-bath structure with a screened porch, about 800 to 900 feet west of the Pennyfield House. The east wing of this house (possibly the part that was used as a store) appears to be a later addition (Beasley:18). The 1974 appraisal described the two houses as "farm style buildings." Both houses were flooded above the first floor window sills during Hurricane Agnes in 1972.

According to the National Register, the estimated date of construction for Pennyfield House is the third quarter of the 19th century (27). Tax documents confirm that it would have existed by 1879. There seems to be confusion about when additions were made to the house. One report refers to an addition made to the "west side of the house sometime prior to 1909," based on a plat of that date (estate of Raphael T. Jarboe; Historical American Building Survey, 1994:1, 2, 6). But in other documents, the addition was made to the east side of the house – possibly the one-story ell seen in a 1919 photo. Whether the ell (east wing) is an addition or part of the original structure is unclear. (Park documents such as Request for Proposal and McClurg appraisal, 1998:10) What is certain is that sometime after the 1919 photo was taken, a second story was built over the ell. The 1919 photos also indicate that at that time the house did not have shutters and that the porch, which by the 1970s was enclosed with a railing and balusters,

was open on all sides.

The second house is referred to in park documents and in the 1998 appraisal as “the Daughter’s House, aka Pennyfield Store” and assigned a construction date of circa 1890. It is described as a two-story, four-bay, woodframed, I house with a front gable on the right side and a store addition to the right of the house. (McClurg:10)

When the property was purchased in 1976, the houses were occupied by tenants and many of the buildings were in use. The owner (Christian Heurich, Jr.) maintained a ten-year retention on five acres of the property, which contained the buildings. By the 1980s, it was apparent that the buildings were falling out of repair, and the park initiated the first of many attempts to lease some of them to someone who would maintain them. The primary effort was to lease Pennyfield House, but some potential leasees also expressed interest in the second house. Even as recently as this year (2003), one organization was still interested in leasing Pennyfield House. The houses have been empty for almost 20 years now, and there is general agreement that they cannot be repaired as standing structures at this point. Two other structures, a corn crib/loafing shed and a tin-sided structure that was either a hog barn or a one car garage, are still standing.

The following are the buildings identified and assessed for condition in the 1974 appraisal of the entire Heurich property (Beasley & Beasley:23). They are presented in two groups -- those near the Pennyfield House and those near the second house -- with an additional group of two barns that were on the plateau and not within the boundaries of land sold to the park. The buildings marked with asterisks are those that are standing today.

Pennyfield House:

two-story frame residence, 30' x 65', poor*
metal lean-to, 10' x 16', fair (owned by the tenant and removed on vacating)
frame sheep barn , 8' x 8', good (owned by tenant and removed on vacating)

The Second House (12201 Pennyfield Lock Road):

two-story frame residence, 58' x 24', poor condition*
two-story frame barn, 36' x 32', very poor
frame feeding shed, (corncrib/loafing shed), 51 x 29, fair*
metal hog barn, 12' x 18', fair*
metal one-car garage, 12 x 18, poor
frame one-car garage, 12' x 18', dilapidated
frame lean-to, 18' x 30', dilapidated
frame curing house, 6' x 8', good
frame chicken coop, 12' x 15', fair
frame chicken coop, 12' x 30', dilapidated
frame studio (with porch), 9' x 17', fair

Other:

two-story frame barn, 20' x 32', dilapidated (on plateau outside park boundary)

two-story frame barn, 20' x 50', dilapidated (on plateau outside park boundary)

Bridges:

The bridges that cross the canal at the lock are described within the category of Small Scale Features, which follows.

Character-defining Features:

Feature: Lockhouse at Lock #22

Feature Identification Number: 94343

Type of Feature Contribution: Contributing

IDLCS Number: 012866

LCS Structure Name: Lockhouse - Lock #22

LCS Structure Number: 019.64

Feature: Lock structure at Lock #22

Feature Identification Number: 94342

Type of Feature Contribution: Contributing

IDLCS Number: 012741

LCS Structure Name: Lock #22

LCS Structure Number: 019.63

Feature: Culvert #30 (Muddy Branch)

Feature Identification Number: 94340

Type of Feature Contribution: Contributing

IDLCS Number: 012744

LCS Structure Name: Culvert #30

LCS Structure Number: 020.01A

Feature: Waste weir

Feature Identification Number: 94347

Type of Feature Contribution: Contributing

IDLCS Number: 012743

LCS Structure Name: Wasteweir

Pennyfield Lock
Chesapeake and Ohio Canal National Historical Park

LCS Structure Number: 019.67

Feature: Bypass flume

Feature Identification Number: 94338

Type of Feature Contribution: Contributing

IDLCS Number: 012742

LCS Structure Name: Bypass Flume - Lock #22

LCS Structure Number: 019.63A

Feature: Pennyfield House

Feature Identification Number: 94344

Type of Feature Contribution: Contributing

IDLCS Number: 047532

LCS Structure Name: Pennyfield House

LCS Structure Number: 019.64A

Feature: Canal prism

Feature Identification Number: 94339

Type of Feature Contribution: Contributing

IDLCS Number: 046577

LCS Structure Name: Mile 19-20, Canal Prism

LCS Structure Number: 019.01

Feature: Second or "daughter's" house

Feature Identification Number: 94345

Type of Feature Contribution: Non-Contributing

Feature: Frame feeding shed (corncrib/loafing shed)

Feature Identification Number: 94341

Type of Feature Contribution: Non-Contributing

Feature: Tin-sided garage

Feature Identification Number: 94346

Type of Feature Contribution: Non-Contributing

Landscape Characteristic Graphics:



Lock walls, including lock extension walls and headwalls, seen from lower level. Fence at upper right encloses grass field by Pennyfield House. (2002, M. Gerdes)



Pennyfield lockhouse from land between lock and bypass flume. (2003, J. Earley)



Pennyfield House. Stonework in lower part of view is bypass flume retaining wall. (2003, J. Earley)



Concrete waste weir inflow on upper level of canal, with towpath crossing it. Waste weir was built c. 1909. Before that, there seems to have been an informal overflow a little farther upstream. (2002, M. Gerdes)



Headwalls of Muddy Branch culvert on inland side. (2002, M. Gerdes)



Closeup view of stonework of arch ringstones. View through culvert to other side. (2002, M. Gerdes)



*Secondary (daughter's) house and store. Masonry feature in front may be remains of well.
(2002, M. Gerdes)*



*Corncrib and loafing shed combined, part of agricultural landscape at lock, now hidden in
successional growth. (2002, M. Gerdes)*



Tin-sided one-car garage still standing. Some of the dilapidated structures have handhewn beams. (2002, M. Gerdes)

Constructed Water Features

The canal itself, the bypass flume and the waste weir – in fact, maybe all the structures of the canal – are constructed water features. However, rather than separating certain structures from the rest, all structures are discussed within the category of “Buildings and Structures.” The only feature discussed here is a remnant – the wharf or turning basin of John Dufief, built in the mid-19th century, and still readable as a widening of the canal near the foot of Pennyfield Lock Road. (See site plan for location of this feature.)

Character-defining Features:

Feature:	Wharf and turning basin
Feature Identification Number:	94352
Type of Feature Contribution:	Contributing
IDLCS Number:	047572
LCS Structure Name:	John L. DuFiefs Mooring Basin
LCS Structure Number:	019.96

Landscape Characteristic Graphics:



*Canal widens at point where boat turnaround was. This was also the site of Dufief's wharf.
(2002, M. Gerdes)*



Bypass flume. Water cascades on riprap "tumble" and banks are secured with dry masonry. Feature is discussed in Buildings and structures." (2002, M. Gerdes)

Cluster Arrangement

Historically, the various buildings along the lock were arranged in a functional way. Based on early maps and c. 1919 photos, the sheds, warehouses and store that served the canal were lined up immediately adjacent to the canal on the inland side. Today the only building alongside the canal is the lockhouse on the towpath side.

Pennyfield House and the second house, the barns, garages and other outbuildings were also arranged in a linear fashion, but on the inland side of the lock road and closer to the slope. The buildings were oriented to the lock road, as well as to the canal, which it paralleled. The two houses and farm structures seem to have been grouped into several nodes. The barn and loafing shed formed one cluster at the west end of the site. A series of garages, chicken coops and other types of sheds formed a second cluster along with the second house. The Pennyfield House with its two or three small outbuildings formed a third node. (Photos of Pennyfield House from c. 1919 show a small building on either side of the house, but those must have been removed, and the two identified in the 1974 appraisal were more recent.)

None of these clusters exists today. The two houses stand, along with a couple of the outbuildings, but the character that the multiplicity of small work buildings might have conveyed is absent.

Landscape Characteristic Graphics:

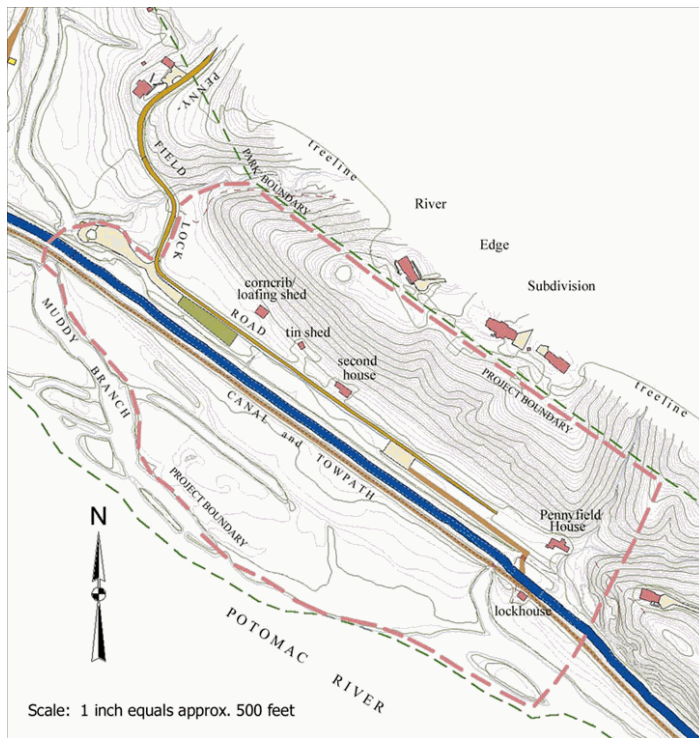


Image shows buildings that are still standing lined up along the lock road and facing the canal. (J. Earley with Park GIS, 2002)

Small Scale Features

The historic site was replete with small-scale features. Fences marked the boundaries of individual properties and probably divided some up into different use areas. One of the c. 1919 photos shows various objects of domestic life, such as a washtub, in the Pennyfield House yard. That photo also shows a flagpole with a raised American flag in the Pennyfield yard. Various features have been found during field survey which presumably date to the historic period. There are others, seen in photos that may or may not be historic, but which are no longer extant. For instance, in one c. 1950 photo, there is a sign on a post located on the river side of the towpath, just east of the lockhouse – undoubtedly an older park wayside than the one there today. A c. 1970 photo shows an iron railing forming a protective barrier along the riverside of the towpath at the waste weir.

In order to keep them in one discussion category, all the bridges are treated as small-scale features. Today, there are three wooden bridges that cross over the canal at the lock. Two are sturdy enough to carry vehicles and one is a pedestrian bridge. The sturdier bridges cross the bypass flume and the lock. Immediately adjacent to the lock's vehicular bridge is a narrower and somewhat redundant pedestrian bridge. These replacements may date to repairs following the 1972 hurricane (Agnes). If there was a bridge historically at the lock, it would likely have been a pivot bridge, which could swivel out to allow boats to pass.

Before 1972 there was a wooden footbridge near the foot of Pennyfield Lock Road just east of

the Muddy Branch culvert (c. 1970 planning map from Montgomery County). Apparently, it was also destroyed in Hurricane Agnes (Ann Mariano, Washington Post, Oct. 25, 1986). There was also a staircase near the footbridge that descended the canal embankment on the river side. A picnic area was located nearby. ("Great Falls to Muddy Branch" [map], in American Youth Hostels guide, 1967) The stairs were probably washed out in the same hurricane.

There are several masonry features that may be of a similar age, probably dating to the historic period. One is a stone bridge with mortared joints that crosses the small tributary or swale just to the east of Pennyfield House. Flagstones lead to it, and a few scattered flagstones in front of house are probably remnants of that path. A short distance past the bridge is a long flight of steps constructed of irregular-shaped flat stones leading up the fairly steep west-facing slope. At the west end of the project site is the major swale which runs with water probably year-round. Dry stone walls reinforce some of its banks along the floodplain section of the stream. Other rocks within that stream line up to form a number of small dams. This drainage was noted in one of the deed documents as arising from Raphael Jarboe's spring.

A contemporary post and board fence encloses two sides of the grass field next to the Pennyfield House, and forms a boundary between the field and the path to the lock. Its location may or may not be historic. Circa 1919 photos that show a very similar type of fence in roughly this location seem to suggest that it was a little further back from the canal, closer to the Pennyfield House. But it is difficult to estimate distance from photographs.

The remains of older fences, many of which bounded the individual small properties along the floodplain and slope, can be found within the site. They are constructed of a number of materials, mostly post and board. Some of the posts are very substantial, perhaps ten inches on a side or in diameter. Some posts are metal. Wire of different sorts, some barbed, but mostly woven wire, was also used. The 1974 appraisal, conducted for the entire 200+ acres owned by Christian Heurich, documented 7,000 feet of wire fencing and 3,300 feet of board fencing (Beasley & Beasley:23). The locations of numerous gates can be determined by the hardware remaining on fenceposts.

Some features are hard to define. There is a line of stones that extends for about ten feet from the northwest corner of the second house. This may have been the edging of a driveway. And there is a structure of mortared quartz stone in front of the store portion of the second house that may have been a well.

New small-scale features include all the signage – the entrance sign, a wayside, and a small sign that reads "Lock 22", near the lockhouse. There is a donated bench with a plaque under the sycamore tree that stands at the end of the small spit of land between the lock and the bypass flume. The port-o-john in the parking lot is a small-scale feature.

In summary, there are a number of small-scale features at the site that are historic features. Some are functioning, such as the stone bridge and steps. Others, such as the fence remnants,

are evidence of former characteristics of the site. Further research is needed to determine the historic location for the fence that ran between the Pennyfield property and the lock. The one there now may or may not be in the proper location.

Character-defining Features:

Feature: Stone bridge

Feature Identification Number: 94357

Type of Feature Contribution: Undetermined

Feature: Stone steps

Feature Identification Number: 94359

Type of Feature Contribution: Undetermined

Feature: Remnant fences (some, maybe all)

Feature Identification Number: 94356

Type of Feature Contribution: Contributing

Feature: NPS signs

Feature Identification Number: 94355

Type of Feature Contribution: Non-Contributing

Feature: bench

Feature Identification Number: 94353

Type of Feature Contribution: Non-Contributing

Feature: Masonry (well?) structure

Feature Identification Number: 94354

Type of Feature Contribution: Undetermined

Feature: wooden bridges

Feature Identification Number: 94360

Type of Feature Contribution: Non-Contributing

Feature: stone dams and walls within major swale

Feature Identification Number: 94358

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:



NPS entrance sign at foot of Pennyfield Lock Road by canal. (2002, M. Gerdes)



Wayside on towpath side of canal with Pennyfield House in background. (2002, M. Gerdes)



Stone masonry bridge over small tributary or swale on east side of Pennyfield House. (2003, J. Earley)



Stone slabs set into slope create staircase east of Pennyfield House. (2003, J. Earley)



*Gate hardware and post indicate where one enclosure opened into another or to a path.
(2002, M. Gerdes)*

Views And Vistas

Though more open than many sections of the canal, the site is more extensively wooded than historically, limiting some views.

The view from the lower level of the canal as one approaches the lock from the east has many of its historic elements. One has passed through a beautiful stretch where rock walls rise above the canal and, depending on the time of year, caught glimpses of the river. At this point the lockhouse is on a slight rise adjacent to the canal, and a spit of land with a rounded bank and a large sycamore tree fills in the space between the lock and bypass flume, which spills into the lower level of the canal. In the distance there are trees. There are more trees in this view than there were historically, and it is much more serene than it was historically, with none of the busy activity of former times. But the relation of canal, towpath, lockhouse, lock, bypass flume, and small island between the flume and lock, with the large tree perched above the canal, is historic.

As one proceeds in this direction, Pennyfield House and the grassy field adjacent to it come into view. This view has changed greatly from the historic period, when many more structures – various sheds and warehouses – would have crowded the foreground. But the relative openness is a contributing feature. Coming along the towpath from the opposite direction, the view is also historic, although from this vantage the absence of the many structures that would

have been there historically is more apparent. At the lockhouse, one can take a path to the river, where views of the Potomac River and its islands are largely unchanged.

From some locations on the upper reaches of the slope, park land since 1976, near where the land begins to flatten out into rolling plateau, one can see across to Virginia and west to a gorge between highlands on either side of the river. This is an historic view, but it is one that is not readily available to the visitor.

Character-defining Features:

Feature: Views east and west along towpath

Feature Identification Number: 95116

Type of Feature Contribution: Contributing

Feature: View of river and islands in it from riverbank

Feature Identification Number: 95115

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



View of the Potomac River from shoreline. Note silty banks. (2002, M. Gerdes)

Condition

Condition Assessment and Impacts

Condition Assessment: Fair

Assessment Date: 08/13/2004

Condition Assessment Explanatory Narrative:

The canal portion of the site is generally in good condition, but the inland section, purchased in 1976, is in poor condition.

The Assessment Date refers to the date that the park superintendent concurred with the Condition Assessment. The Date Recorded information refers to the date when condition was first assessed by the author of the report.

Condition Assessment: Fair

Assessment Date: 09/23/2010

Condition Assessment Explanatory Narrative:

The canal portion of the landscape remains in good condition, but the inland section remains in poor. One of the primary contributing features of the inland section, Pennyfield House, was demolished in FY2010.

The Condition Assessment Date is the date the latest concurrence memo was signed by the park superintendent.

Impacts

Type of Impact: Removal/Replacement

External or Internal: Internal

Impact Description: Pennyfield House, located on the inland portion of the landscape was demolished in 2010. This was a primary contributing feature of the landscape. The park plans to install a 'ghost' of the house foundation and an explanatory wayside.

An adjacent structure, known as the Daughter's House is scheduled to be demolished in 2011. Once this house is removed there will be no structures remaining on the inland side of the site. The only remaining historic features will be some aspects of the circulation and some small scale features on the hillside. (stone steps and bridge across the small stream to the east of the houses).

Type of Impact: Visitation
External or Internal: Internal
Impact Description: Some efforts to accomodate visitors threaten the histoirc integrity of the site.

Type of Impact: Other
Other Impact: Inability to lease structures
External or Internal: Internal
Impact Description: The land alongside Pennyfield Lock was purchased by the government in 1976 to provide a buffer that would protect this section of the canal. Ironically, the purchase has had the effect of putting the structures standing on the purchased land into greater jeopardy. The structures were tenanted and utilized at that time, though generally they were in only fair to poor shape. Within ten years, all the structures were vacated and began to fall into ruin.

Type of Impact: Flooding
External or Internal: External
Impact Description: Periodic floods have impacted the towpath, culvert, lockhouse and other structures and probably will continue to do so. The flood of 1996 (correct date?) caused the floor of the lockhouse to collapse.

Treatment

Treatment

Approved Treatment: Undetermined
Approved Treatment Document Explanatory Narrative:
No approved cultural landscape treatment currently exists.

Bibliography and Supplemental Information

Bibliography

Citation Author: Abert, Lt. Col. J.J.
Citation Title: Map of the Survey of the Potomac Canal 1825
Year of Publication: 1825
Citation Publisher: Engineering Department, United States Topographic Bureau
Source Name: Other

Citation Author: American Youth Hostels
Citation Title: A Collection of Maps of the Chesapeake and Ohio Canal
Year of Publication: 1967
Citation Publisher: Potomac Area, American Youth Hostels, Inc.
Source Name: Other

Citation Author: Bache, A.D. (Superintendent U.S. Coast Survey)
Citation Title: Potomac River (Upper Part): from Whitesville to Great Falls
Year of Publication: 1865
Citation Publisher: U.S. Engineers, Chief Engineer Middle Military Division
Source Name: Other

Citation Author: Beasley & Beasley Appraisers
Citation Title: Appraisal of Tract Nos. 62-104, 62-112, 62-115, 62-116 of Christian Heurich, Jr.
Year of Publication: 1974
Source Name: Other

Citation Author: Board of Education of Montgomery County and Maryland State Department of Education
Citation Title: Living in Montgomery County
Year of Publication: 1954
Citation Publisher: Maryland Picture Portfolio Series
Source Name: Library Of Congress/Dewey Decimal

Citation Author:	Boyd, T.H.S.
Citation Title:	The History of Montgomery County, Maryland: From its Earliest Settlement in 1650 to 1879
Year of Publication:	1968
Citation Publisher:	Regional Publishing Company, Baltimore
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Bureau of Public Roads and National Park Service
Citation Title:	Report on Joint Reconnaissance Survey and Study of the Federally Owned Chesapeake and Ohio Canal
Year of Publication:	1948
Source Name:	Other
Citation Author:	Chesapeake and Ohio Canal National Historic Park
Citation Title:	Annual Report
Year of Publication:	1976
Source Name:	Other
Citation Author:	Cochran, Sheila Smith
Citation Title:	River Road: An Early History
Year of Publication:	1986
Citation Publisher:	None listed
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Cochran, Sheila
Citation Title:	Manuscript Land Plat Overlay of Seneca-Darnestown and Vicinity
Year of Publication:	1989
Citation Publisher:	M-NCPPC, Montgomery County Regional Office, Silver Spring, Maryland
Source Name:	Other

Citation Author: Cook, Eleanor M.V.
Citation Title: History of Early Water Mills in Montgomery County, Maryland
Citation Publisher: unpublished
Source Name: Other
Citation Type: Narrative
Citation Location: Montgomery County Historical Society Library

Citation Author: Frey, Sheehan, Stoker & Assoc., Inc.
Citation Title: Part of Tract of land called the Christian Heurich Tract
Year of Publication: 1976
Source Name: Other
Citation Type: Graphic
Citation Location: Chesapeake and Ohio Canal National Historic Park headquarters

Citation Title: Geologic Map of Montgomery County and the District of Columbia
Year of Publication: 1953
Source Name: Other
Citation Type: Graphic
Citation Location: Maryland Room

Citation Author: Deines, Ann
Citation Title: Pennyfield (Pennifield) House
Year of Publication: 1994
Citation Publisher: Historic American Buildings Survey, National Park Service
Source Name: HABS

Citation Author:	Hahn, Thomas Swiftwater
Citation Title:	The Chesapeake & Ohio Canal Lock-Houses & Lock-Keepers
Year of Publication:	1996
Citation Publisher:	West Virginia Univ: Institute for History of Technology & Industrial Archeology
Source Name:	Library Of Congress/Dewey Decimal
Citation Number:	Volume 3f
Citation Author:	Hahn, Thomas F.
Citation Title:	Towpath Guide to the Chesapeake & Ohio Canal: Georgetown Tidelock to Cumberland
Year of Publication:	1988
Citation Publisher:	American Canal and Transportation Center
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Hiebert Ray Eldon and Richard K. MacMaster
Citation Title:	A Grateful Remembrance: The Story of Montgomery County, Maryland
Year of Publication:	1976
Citation Publisher:	Montgomery County Govt and the Montgomery County Historical Society, Rockville
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	High, Mike
Citation Title:	The C&O Canal Companion
Year of Publication:	2000
Citation Publisher:	John Hopkins University Press, Baltimore
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Hopkins, G.M.
Citation Title:	Atlas of Fifteen Miles Around Washington Including the County of Montgomery
Year of Publication:	1879
Source Name:	Other

Citation Author: Kimball, L. Robert
Citation Title: Chesapeake and Ohio Canal National Historic Park
Year of Publication: 1971
Citation Publisher: National Park Service, Office of Land Acquisition and Water Resources
Source Name: Other
Citation Type: Graphic
Citation Location: C&O Canal Headquarters

Citation Author: Luzader, John F.
Citation Title: Historic Structures Report: Towpath, Chesapeake and Ohio Canal
Citation Publisher: National Park Service
Source Name: Other
Citation Number: Parts 1 and 2

Citation Author: Mackall, B.F.
Citation Title: Property Map of the Chesapeake and Ohio Canal Co. Washington to Seneca, Maryland
Year of Publication: 1896
Source Name: Other
Citation Type: Graphic
Citation Location: C&O Canal Headquarters

Citation Author: Mackintosh, Barry
Citation Title: C&O Canal: The Making of a Park
Year of Publication: 1991
Citation Publisher: U.S. Department of the Interior, Washington, D.C.
Source Name: Other

Citation Title: Map of the 9th Subdivision and the Seneca Creek Feeder
Citation Publisher: Eastern Section Sub. Div.
Source Name: Other
Citation Number: No. 1, Map sheet No. 1
Citation Type: Graphic
Citation Location: C&O Canal Headquarters

Citation Author: Martenet, Simon J.
Citation Title: Martenet and Bond's Map of Montgomery County
Year of Publication: 1865
Source Name: Library Of Congress/Dewey Decimal
Citation Type: Graphic
Citation Location: Maryland Room, University of Maryland

Citation Title: Maryland: Seneca Quadrangle
Year of Publication: 1908
Citation Publisher: United States Geological Survey
Source Name: Other
Citation Type: Graphic
Citation Location: Maryland Room, University of Maryland

Citation Title: Maryland: Seneca Quadrangle
Year of Publication: 1994
Citation Publisher: U.S. Geological Survey (USGS)
Source Name: Other

Citation Author: McClurg, John P.
Citation Title: Appraisal Report and Valuation Analysis Pennyfield House (with a separate appraisal for the lockhouse)
Year of Publication: 1998
Source Name: Other
Citation Type: Narrative
Citation Location: C&O Canal Headquarters, historic leasing files

Citation Author:	McGrew, Dallas D.L.
Citation Title:	Outline Report of Architectural Work on the Restoration of the Chesapeake and Ohio Canal for Recreational Use (Georgetown, D.C. to Seneca, MD)
Year of Publication:	1939
Citation Publisher:	NPS, Branch of Plans and Design, Thos. C. Vint, Chief of Planning
Source Name:	Other
Citation Title:	Memorandum on Title to C&O Canal from District to Point of Rocks
Year of Publication:	1936
Source Name:	Other
Citation Type:	Narrative
Citation Location:	C&O Canal Headquarters Tract Files, 1st drawer
Citation Author:	Miele, John R.
Citation Title:	The Chesapeake and Ohio Canal: A Physical History
Year of Publication:	1968
Citation Publisher:	National Park Service
Source Name:	Library Of Congress/Dewey Decimal
Citation Title:	Montgomery County, Maryland
Year of Publication:	1937
Citation Publisher:	MD State Roads Commission and U.S. Dept of Agriculture Bureau of Public Roads
Source Name:	Other
Citation Title:	Nomination for the Chesapeake and Ohio Canal
Year of Publication:	1979
Citation Publisher:	National Park Service
Source Name:	Other

Citation Title: Nomination for Oatland Farm

Year of Publication: 1979

Citation Publisher: National Park Service

Source Name: Other

Citation Author: Parsons, John G.

Citation Title: Chesapeake & Ohio Canal National Historic Park: General Plan

Year of Publication: 1976

Citation Publisher: National Park Service

Source Name: Other

Citation Title: Part of Map of Portions of the Military Departments of
Washington, Pennsylvania, Annapolis and Northeastern Virginia

Year of Publication: 1861

Citation Publisher: Bureau of Topographical Engineers War Department

Source Name: Other

Citation Author: Prentice, J.R. and T. Hahn

Citation Title: Report on Historic Structures

Year of Publication: 1972

Citation Publisher: Chesapeake and Ohio Canal, Locks 1-75

Source Name: Other

Citation Author: Reed, Paula S. and Associates, Inc.

Citation Title: Cultural Resource Study: Monocacy Battlefield

Year of Publication: 1999

Citation Publisher: Paula S. Reed and Associates, Inc., Hagerstown, MD

Source Name: Library Of Congress/Dewey Decimal

Citation Author:	Albert, John J. and James Kearney, Lt. Cols. And Topographic Engineers
Citation Title:	Report to Brig. Gen. Gratiot, Chief Engineer, USA
Year of Publication:	1834
Citation Publisher:	House of Representatives, 23rd Congress
Source Name:	Other
Citation Author:	Sanderlin, Walter S.
Citation Title:	The Great National Project
Year of Publication:	1946
Citation Publisher:	The Johns Hopkins Press, Baltimore
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Shaffer, Donald R.
Citation Title:	"We are Again in the Midst of Trouble": Flooding on the Potomac River and the Struggle for the Sustainability of the Chesapeake and Ohio Canal, 1828-1996
Year of Publication:	1997
Citation Publisher:	University of Maryland, College Park, MD
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Taft, H. Wilson and Anna B. Taft
Citation Title:	A Rural Survey in Maryland
Citation Publisher:	Board of Home Missions of the Presbyterian Church, New York City
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Temkin, Martha
Citation Title:	Great Falls Tavern Cultural Landscape Inventory
Citation Publisher:	National Park Service
Source Name:	Other

Citation Author:	Thwaites, Carole A. Pennifill
Citation Title:	Descendants of Thomas Pennifield and Esther Beane
Year of Publication:	2003
Citation Publisher:	unpublished
Source Name:	Other
Citation Type:	Narrative
Citation Location:	Montgomery County Historical Society Library
Citation Author:	Tracey, Grace L. and John P. Dern
Citation Title:	Pioneers of Old Monocacy: The Early Settlement of Frederick County, Maryland
Year of Publication:	1987
Citation Publisher:	Genealogical Publishing Co., Inc., Baltimore
Source Name:	Library Of Congress/Dewey Decimal
Citation Author:	Unrau, Harlan D.
Citation Title:	Chronological History fo the Chesapeake and Ohio Canal 1828-1924: An Historical Resource Study
Year of Publication:	1976
Citation Publisher:	C&O Canal Restoration Team, Seneca, MD
Source Name:	Other
Citation Author:	Weber, Edward
Citation Title:	Map B: A Geology Map of Montgomery County
Year of Publication:	1839
Citation Publisher:	Ed. Weber & Co.
Source Name:	Other
Citation Type:	Graphic
Citation Location:	Maryland Room, University of Maryland

Citation Author:	Wheelock, Perry
Citation Title:	Farming Along the Chesapeake and Ohio Canal
Year of Publication:	1997
Citation Publisher:	National Park Service
Source Name:	Other
Citation Author:	Zahn, Charles T.
Citation Title:	A Bit of George Town History
Citation Publisher:	unpublished
Source Name:	Other
Citation Type:	Narrative
Citation Location:	Montgomery County Historical Society, vertical file: Georgetown