

Addendum to Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. M: 29-52-7

Page 1 of 1

Name of Property: Operations and Utility Buildings and Facilities, Buildings 104, 109, 110, 111, 112, 113, 143, and 159

Location: Naval Support Facility Carderock, Maryland

1

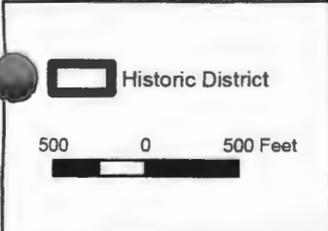
Operations and Utility Buildings and Facilities, Buildings 104, 109, 110, 111, 112, 113, 143, 159

Operations and Utility Buildings and Facilities, Buildings 104, 109, 110, 111, 112, 113, 143, and 159 were surveyed and documented in 2010 as part of the 2011 update to the Integrated Cultural Resource Management Plan for the Naval Support Facility Carderock, formerly known as the Naval Surface Warfare Center Carderock Division (NSWCCD). No known changes have been made to these buildings since they were recorded on an MIHP form in 2003.

Form Prepared by

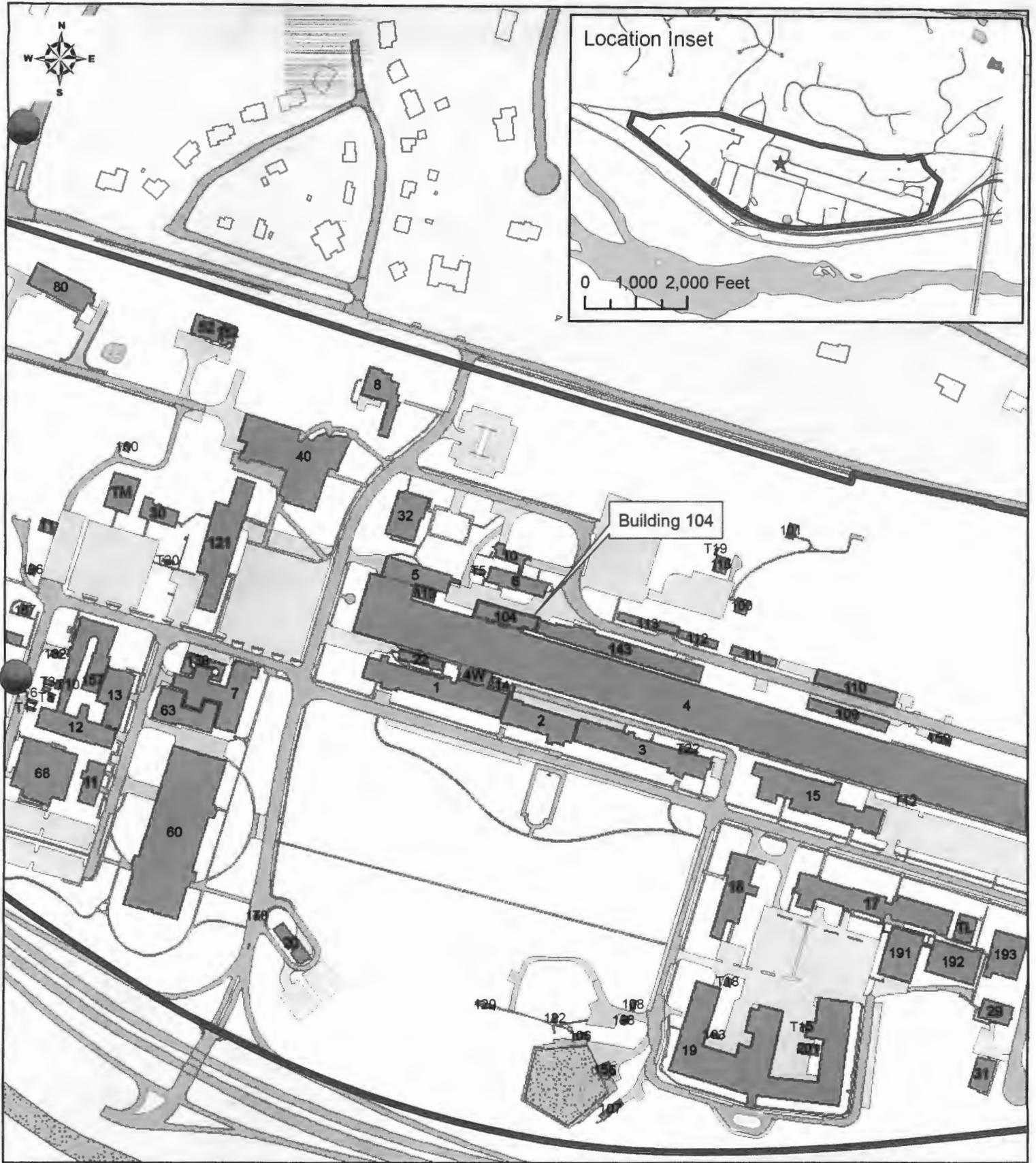
name/title	Patti Kuhn, Architectural Historian		
organization	The Louis Berger Group	date	11/24/2010
street & number	1250 23rd Street, NW	telephone	202-303-2665
city or town	Washington	state	DC

201204174



Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52)†

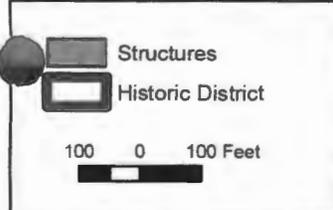
Building Number 104



Location Inset

0 1,000 2,000 Feet

Building 104

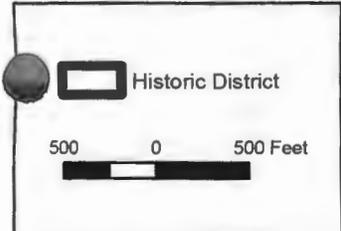


Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52)†

Building Number 104

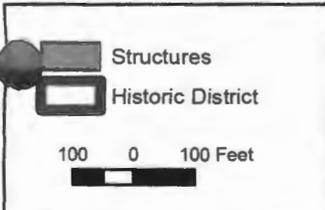
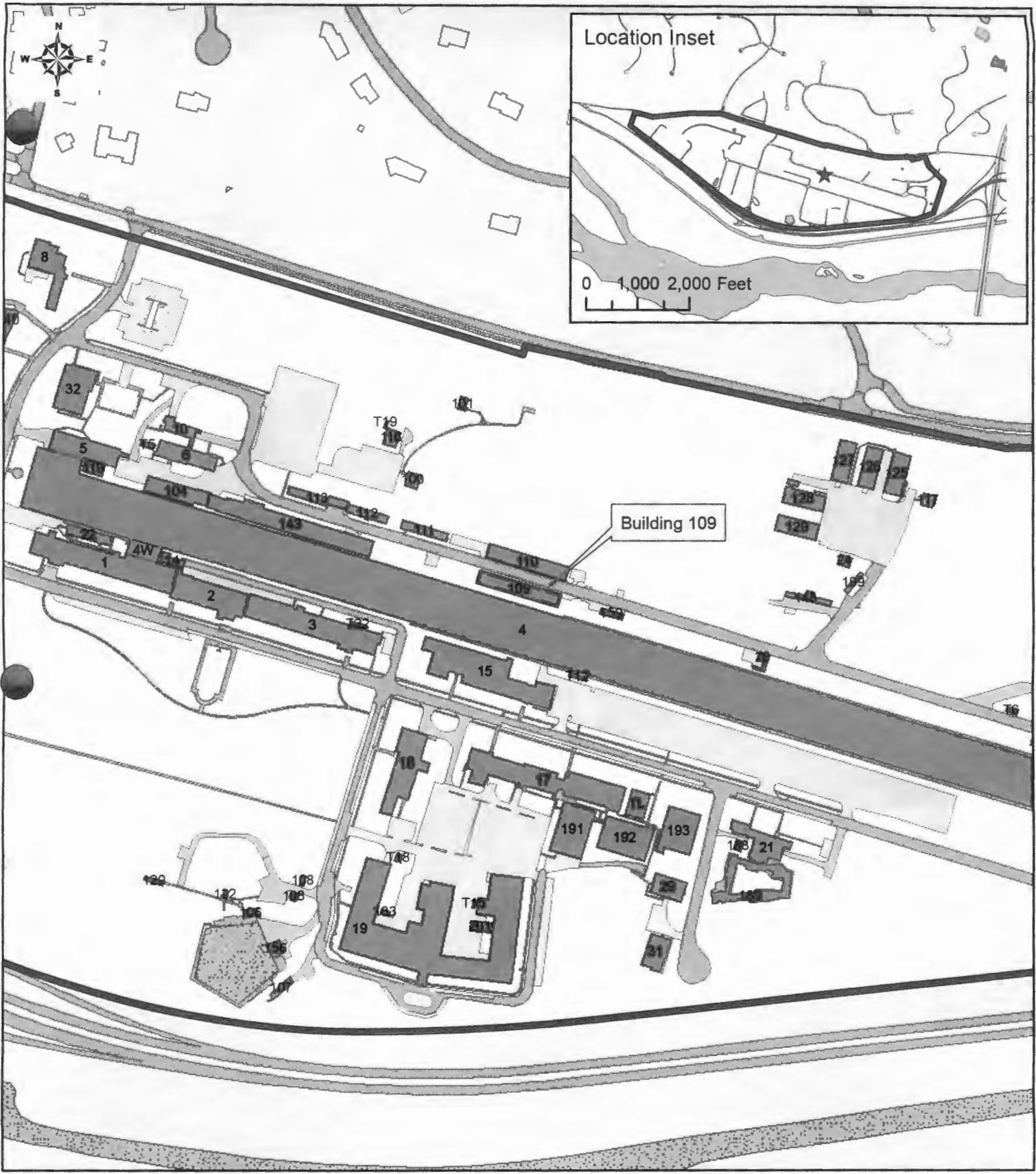


USGS Falls Church Quadrangle

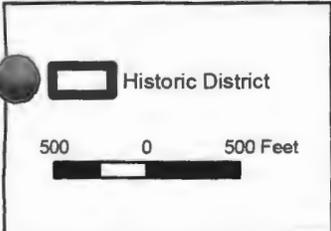
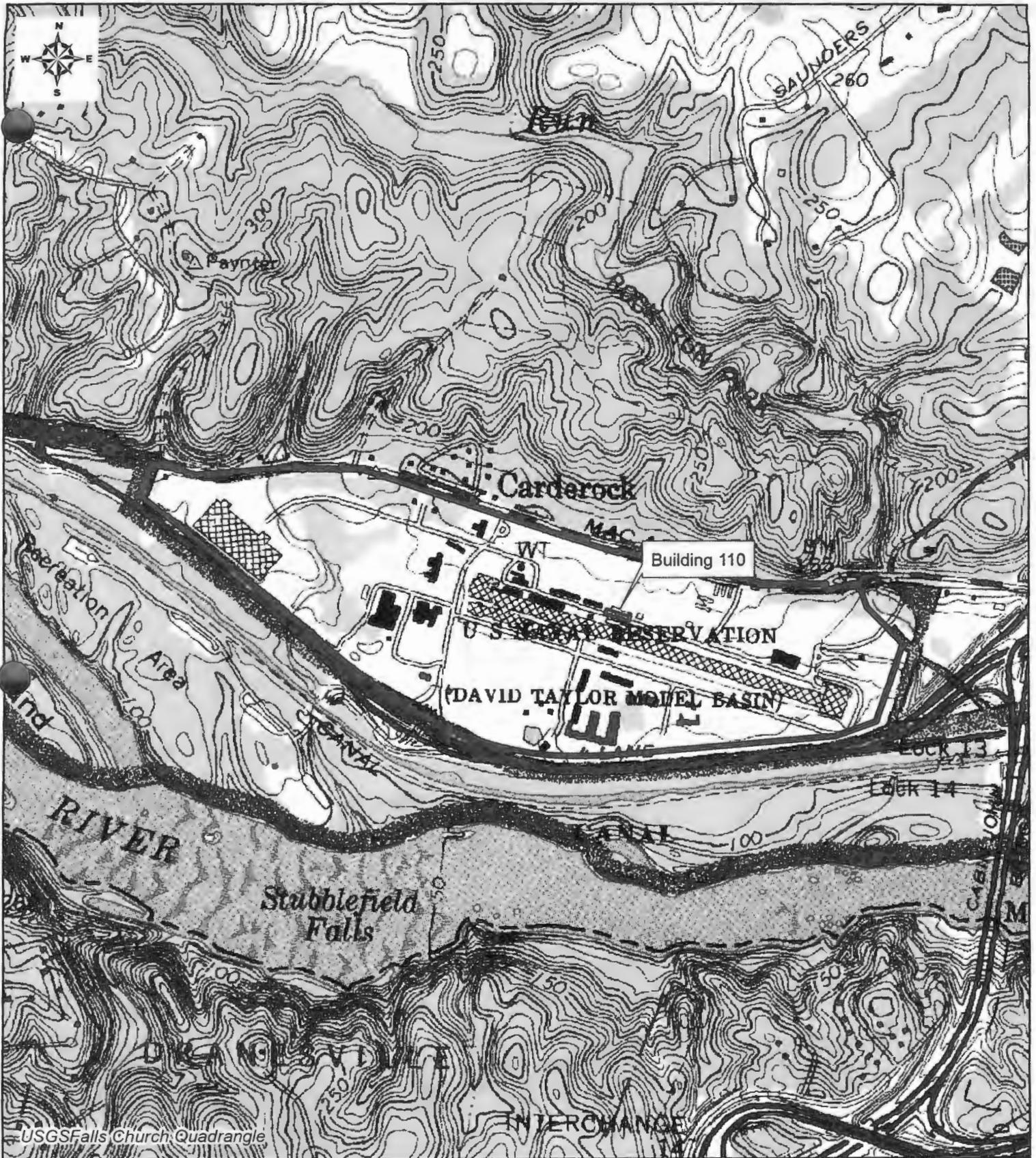


Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) }

Building Number 109

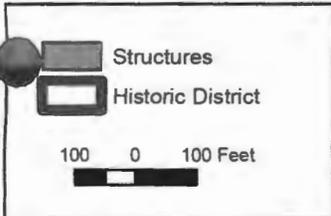
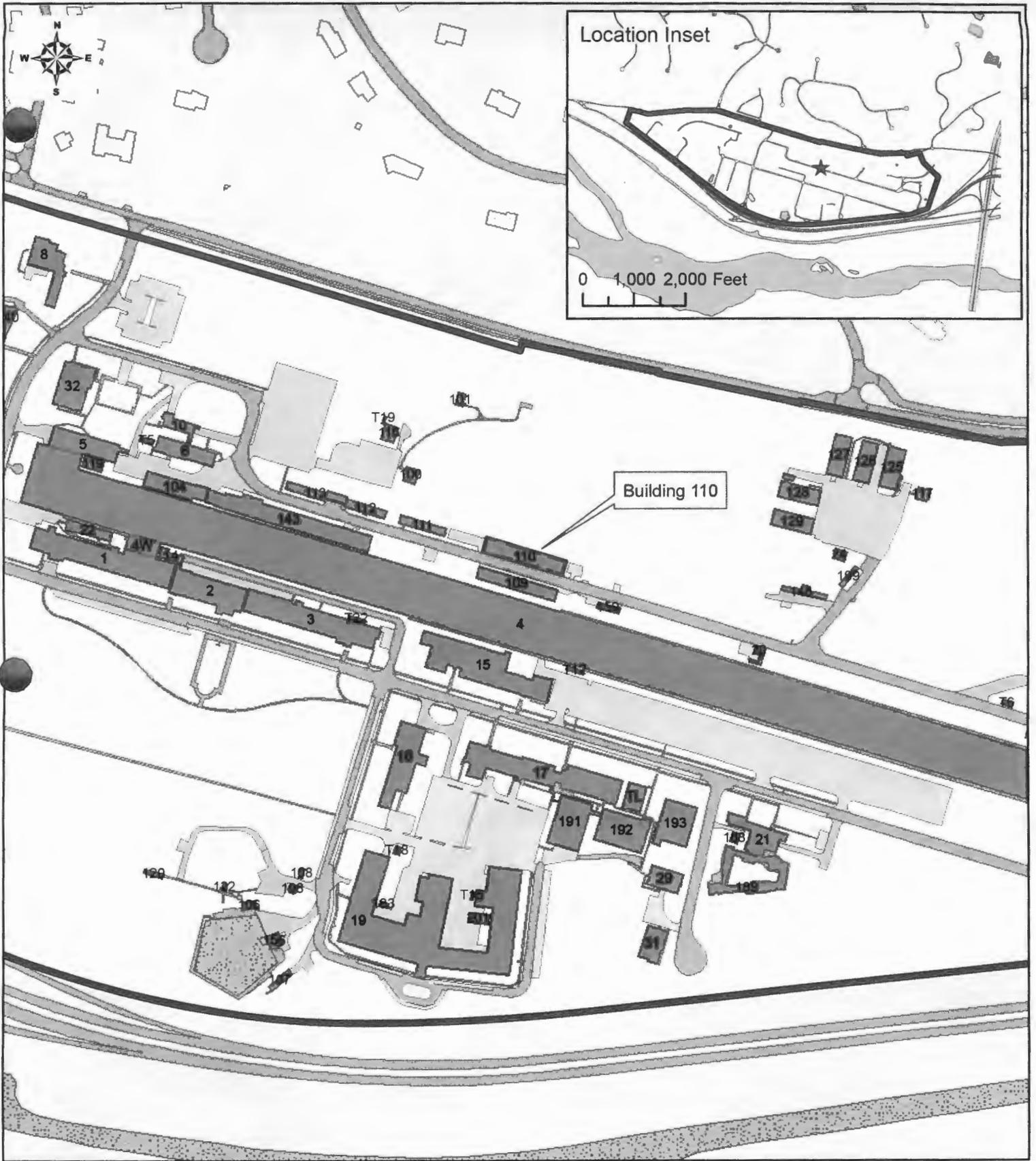


Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) 7
 Building Number 109



Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) 7

Building Number 110



Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) 7
 Building Number 110

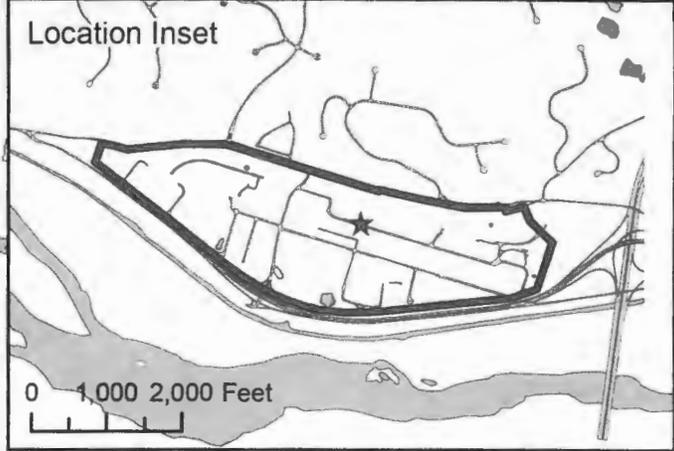
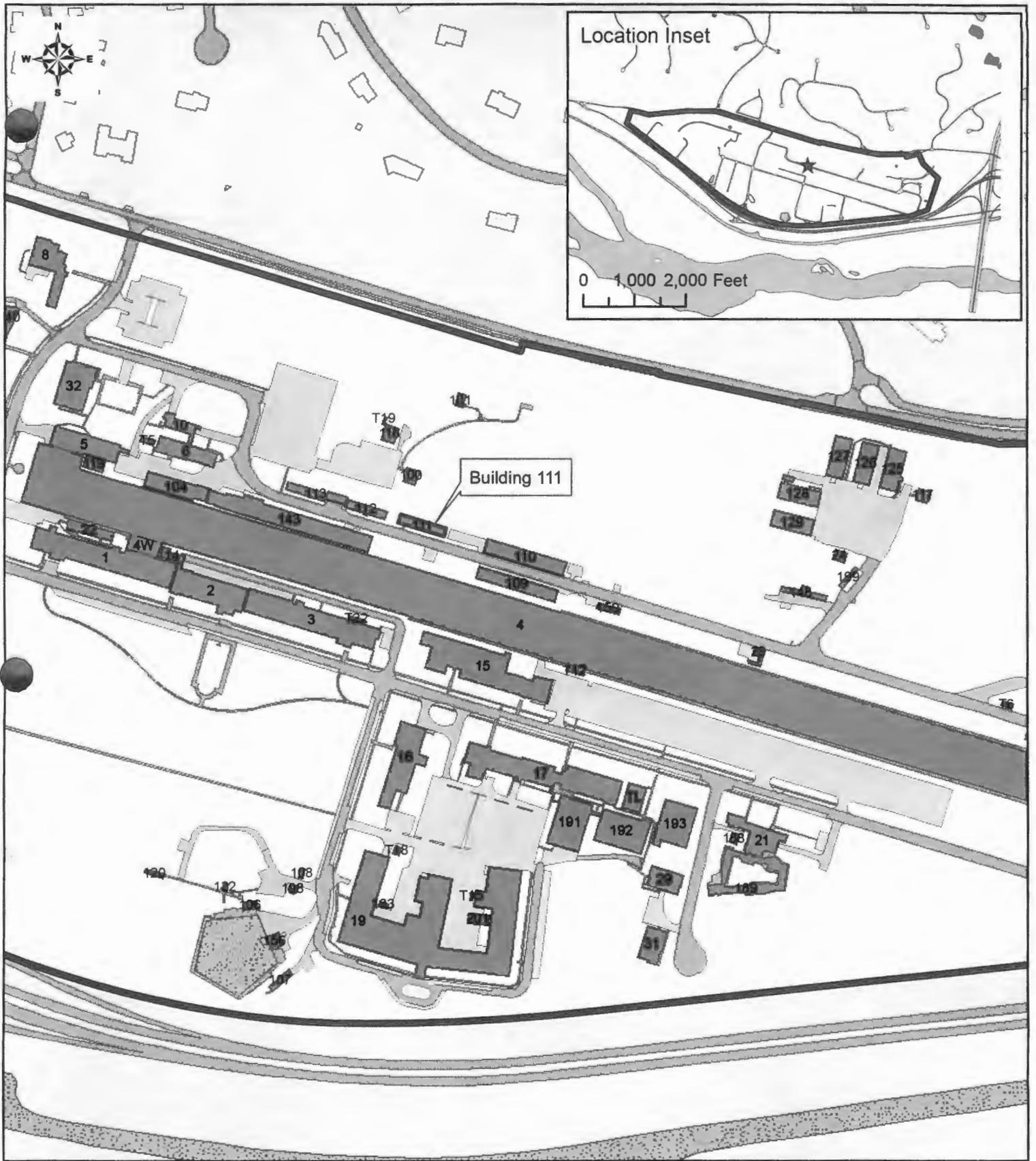


USGS Falls Church Quadrangle

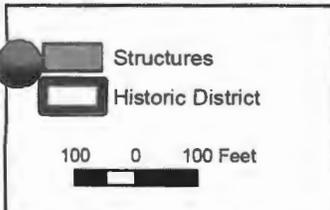
 Historic District
 500 0 500 Feet

Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) 7

Building Number 111

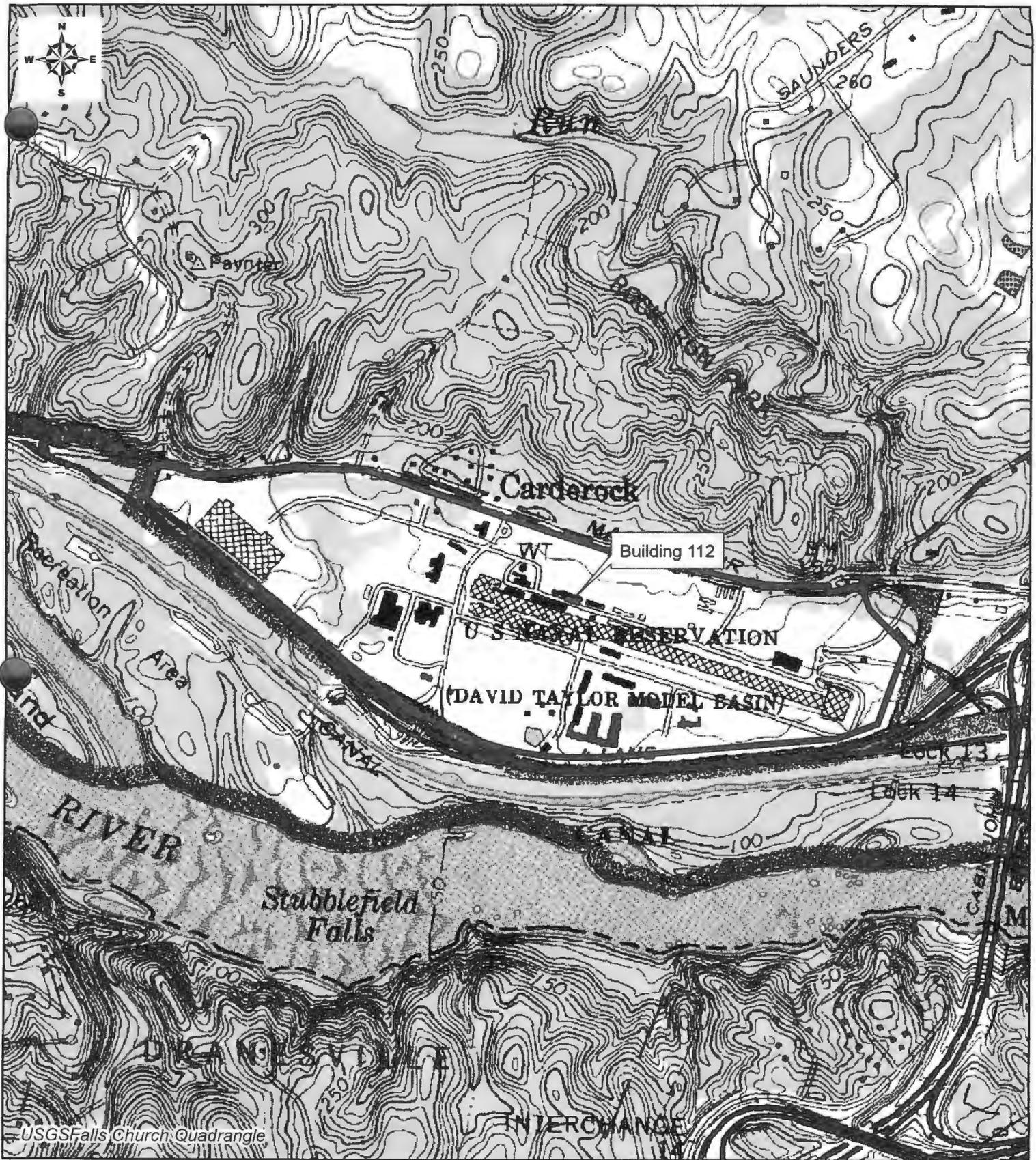


Building 111



Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52)7

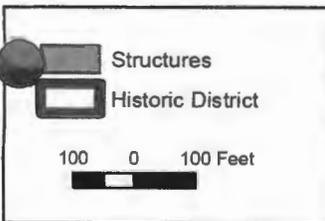
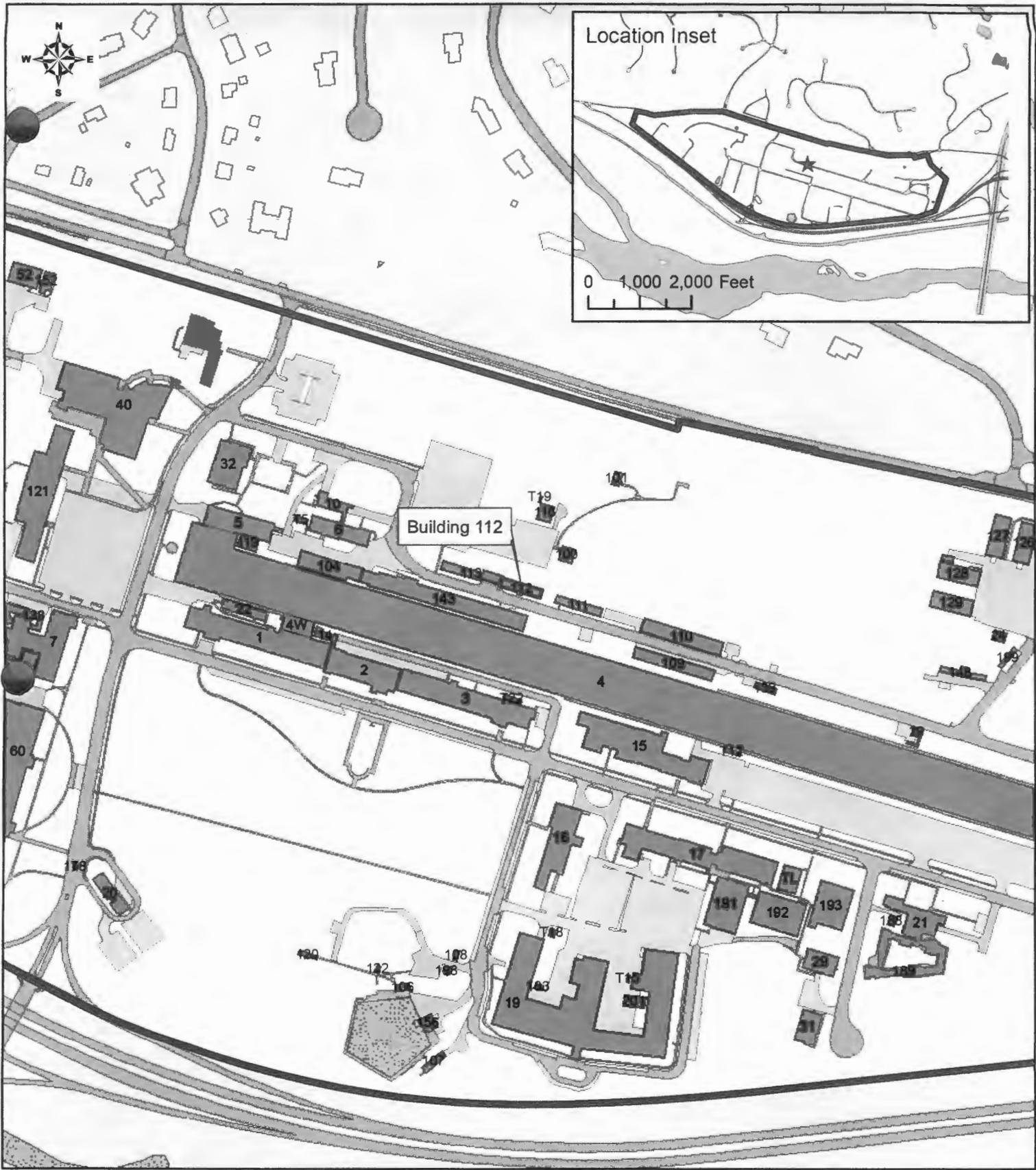
Building Number 111



 Historic District
 500 0 500 Feet

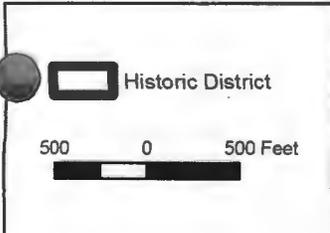
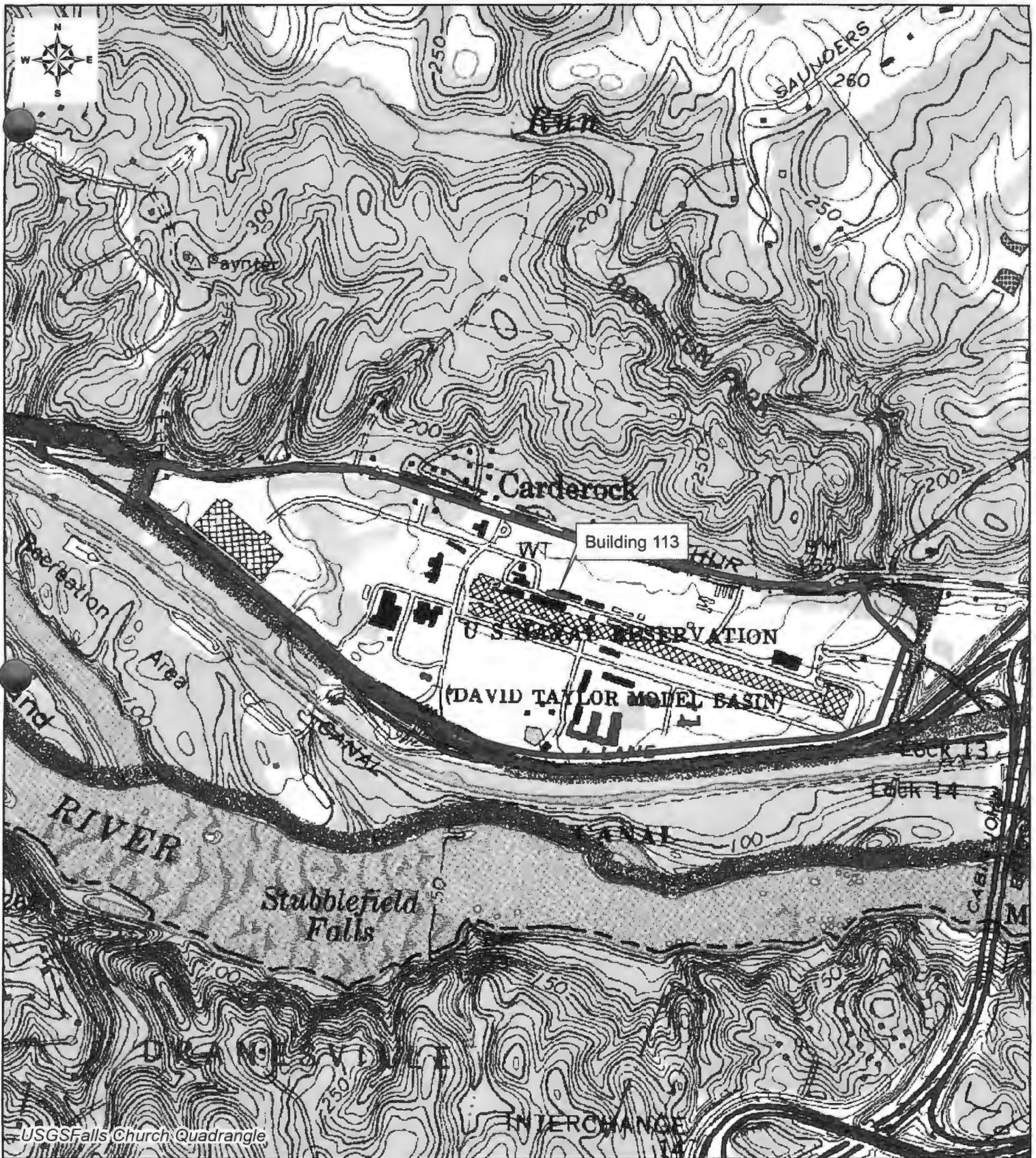
Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52)7

Building Number 112



Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) 7

Building Number 112



Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52)-7

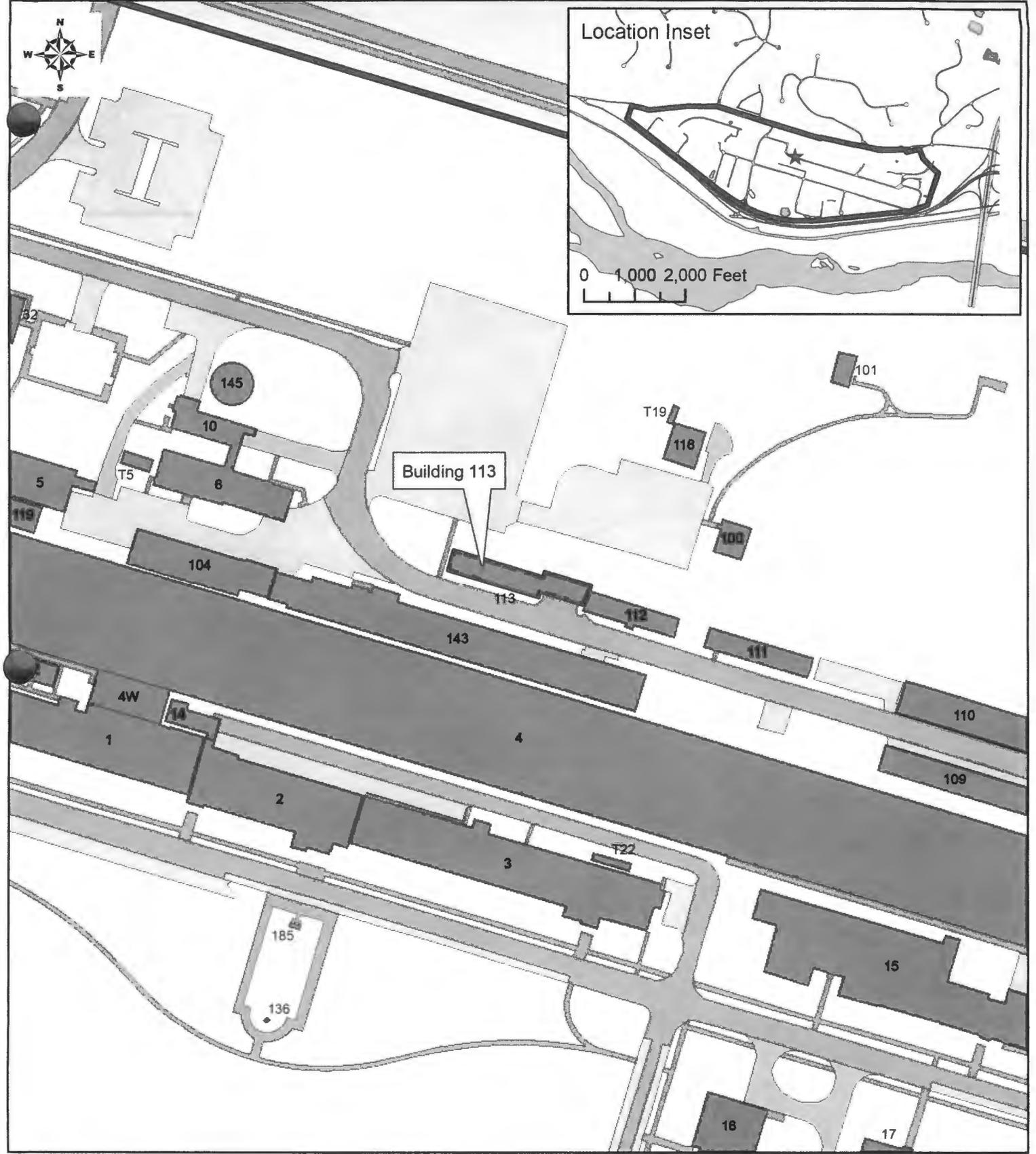
Building Number 113



Location Inset

0 1,000 2,000 Feet

Building 113



Historic District

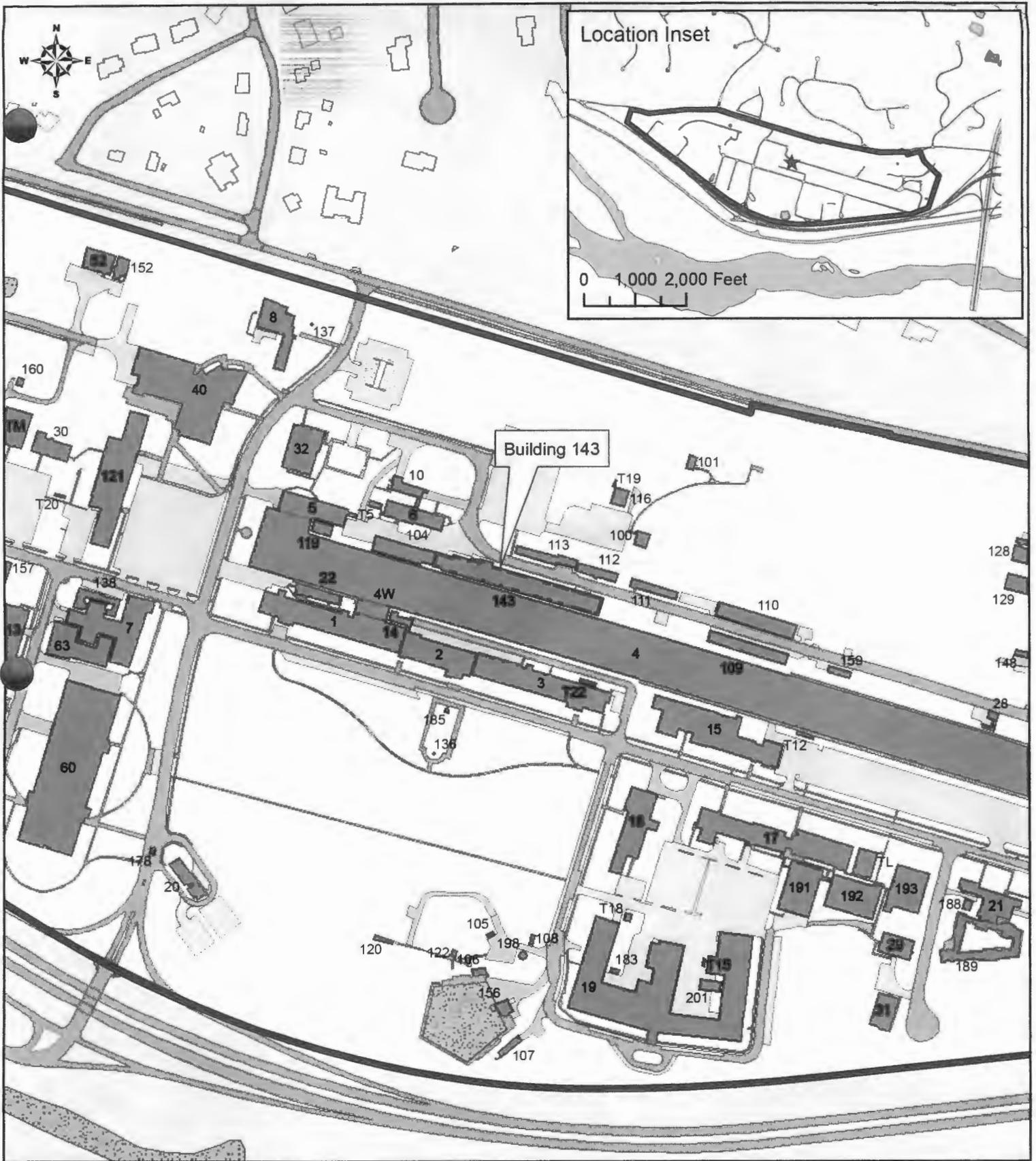
 Structures

 50 0 50 Feet

Naval Support Facility, Carderock

 NSWCCD Historic District (MIHP No. M:29-52)7

Building Number 113



Location Inset

0 1,000 2,000 Feet

Building 143

Structures

Historic District

100 0 100 Feet

Naval Support Facility, Carderock
NSWCCD Historic District (MIHP No. M:29-52)

Building Number 143



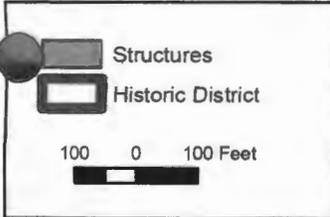
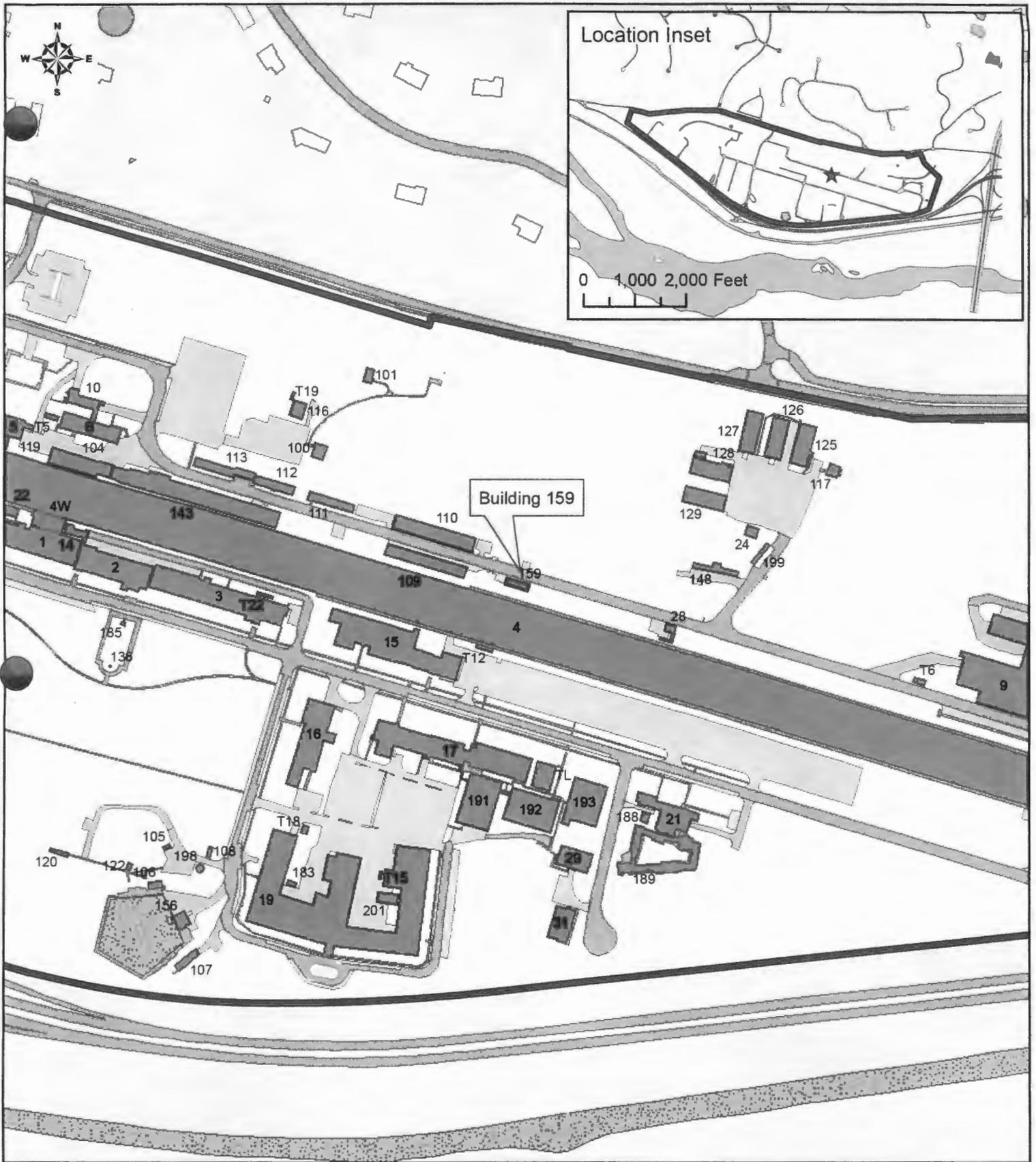
USGS Falls Church Quadrangle

Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) 7

Building Number 159

 Historic District

500 0 500 Feet

Naval Support Facility, Carderock
 NSWCCD Historic District (MIHP No. M:29-52) †

Building Number 159



104

FIELD WARE WASH RETRACTING

M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF ~~CANDELL~~)

BLDG 104. GARAGE

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

NORTH ELEVATION, LOOKING SOUTHWEST

PHOTO 1 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF (CARDEROCK))

BLDG 109. SUPPLY STORAGE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

NORTHWEST CORNER, LOOKING SOUTHEAST

PHOTO 2 OF 15



109

M:29-52-7

NSWCCD HISTORIC DISTRICT (NSF (ARDEROCK))

BLDG 109. SUPPLY STORAGE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

NORTHEAST CORNER, LOOKING SOUTHWEST

PHOTO 3 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF BORDER ROCK)

BLOG 110. MODEL STORAGE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTHWEST CORNER, LOOKING NORTHEAST

PHOTO 4 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF CANTEROCK)

BLDG 110. MODEL STORAGE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTHEAST CORNER, LOOKING WEST

PHOTO 5 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT

BLDG III. OFFICE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTHWEST CORNER, LOOKING NORTHEAST

PHOTO 6 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF (GARDEROCK))

BLDG. III. OFFICE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTHWEST CORNER, LOOKING NORTHEAST

PHOTO 7 OF 15



M: 29-52.7

NSWCCD HISTORIC DISTRICT (NSF CARDEROCK)

BLOG 112. PRINT SHOP

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTH ELEVATION, LOOKING NORTHEAST

PHOTO 8 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSFCARDEROCK)

BLDG 112. PRINT SHOP

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MD SHPO

SOUTHEAST CORNER, LOOKING NORTHWEST

PHOTO 9 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF (C/DEPEROUL))

BLDG 113. WAREHOUSE

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTHWEST CORNER, LOOKING NORTHEAST

PHOTO 10 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF CORDEROCK)

BLDG 113. WAREHOUSE

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

ADDITION BETWEEN BLDG 113 AND BLDG 112, LOOKING NORTHWEST

PHOTO 11 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF (ORDERED))

BLDG 143. WAREHOUSE

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

NORTH ELEVATION, LOOKING SOUTHEAST

PHOTO 12 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF (ARDEROCK))

BLDG 143. WAREHOUSE

MONTGOMERY COUNTY, MD

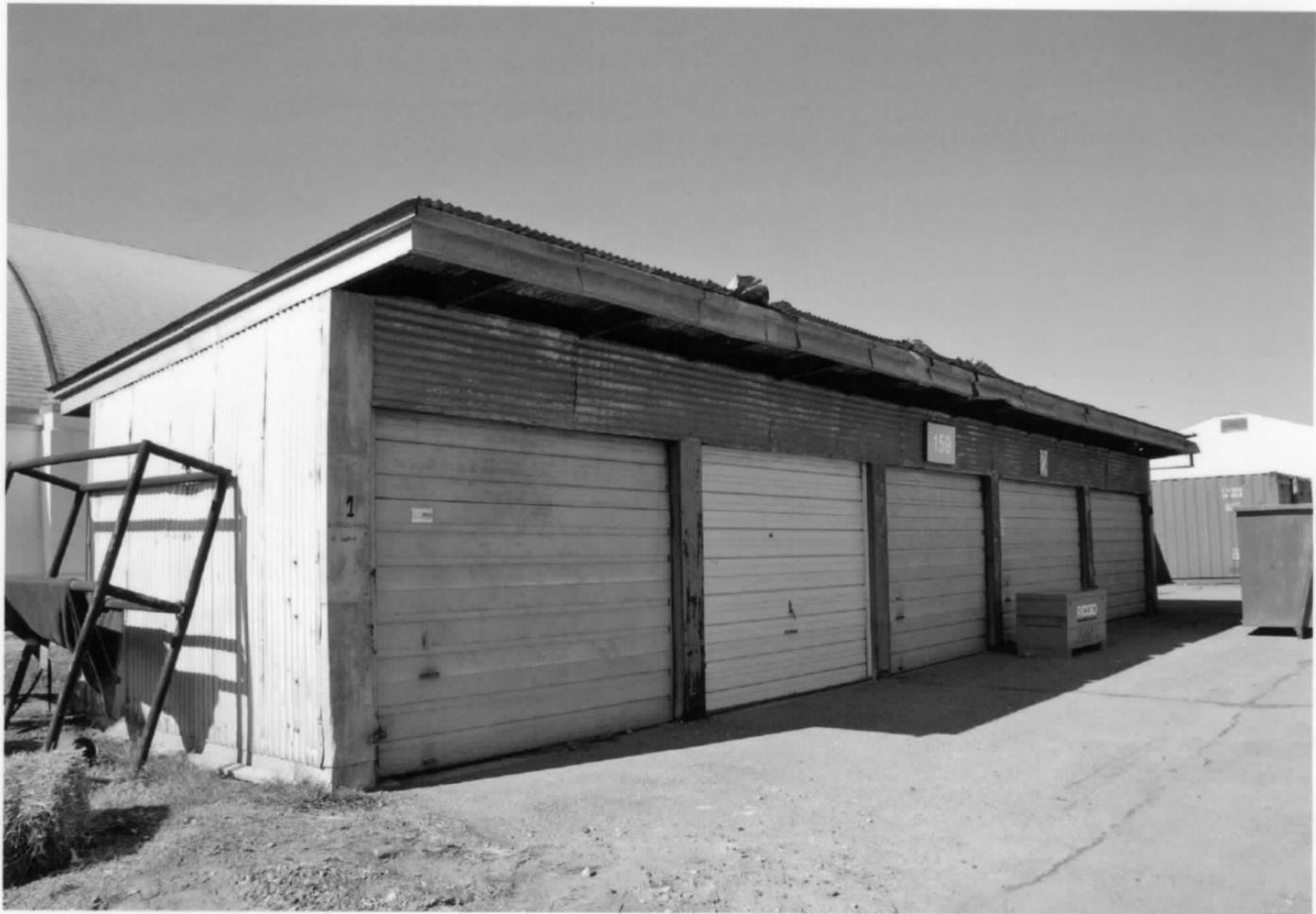
LOUIS BERGER GROUP

4/2010

MDSHPO

NORTHEAST CORNER, LOOKING SOUTHWEST

PHOTO 13 OF 15



M:29-52-7

NSWCCD HISTORIC DISTRICT (NSF CARDEROCK)

BLOG 159. SUPPLY STORAGE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

NORTHEAST ELEVATION, LOOKING SOUTHWEST

PHOTO 14 OF 15



M: 29-52-7

NSWCCD HISTORIC DISTRICT (NSF CARDEROCK)

BLDG 159. SUPPLY STORAGE BUILDING

MONTGOMERY COUNTY, MD

LOUIS BERGER GROUP

4/2010

MDSHPO

SOUTH ELEVATION, LOOKING NORTH

PHOTO 15 OF 15

NSWCCD Operations and Utility Buildings and Facilities,
Buildings 104, 109, 110, 111, 112, 113, 143, and 159

MIHP #~~M:29-58~~ M:29-52-7

Montgomery County

West Bethesda

1943-1957

Public

Buildings 104, 109, 110, 111, 112, 113, 143, and 159 are located in the north central portion of the 183.6 acre Naval Surface Warfare Center Carderock Division (NSWCCD). The installation is comprised of 116 buildings and structures that function as research laboratories, administration facilities, and operations and utility structures. At the center of the installation is the David Taylor Model Basin (Buildings 1-4) a group of interconnected buildings that include a model basin, administration building, a shop building and laboratory. The David Taylor Model Basin was listed on the NRHP in 1985. In 1996 the NSWCCD Historic District was determined eligible for the NRHP, and forty-four of the 116 buildings were recognized as contributing resources in the NSWCCD Historic District. Buildings 104, 109, 110, 111, 112, 113, 143, and 159 are contributing resources in the NSWCCD Historic District.

Buildings 104, 109, 110, 111, 112, 113, 143, and 159 were constructed to support the numerous research and testing activities of the NSWCCD. Classified as Operations and Utility Buildings and Facilities, these structures were built as part of the rapid expansion occurring at NSWCCD from 1943 to 1958 and represent the increase need for support facilities. Buildings 104, 109, 110, 143, and 159 are wood frame multi-bay structures set on concrete foundations with corrugated metal siding and open floor plans. Buildings 111, 112 and 113 are one-story wood frame structures set on raised concrete foundations with vinyl siding and semi-open floor plans. The structures have retained their historic function as support facilities and continue to operate as garages, warehouses, and offices.

Maryland Historical Trust Maryland Inventory of Historic Properties Form

M:29-52-7
Inventory No. ~~M:29-58~~

1. Name of Property (indicate preferred name)

historic Operations and Utility Buildings and Facilities, Buildings 104, 109, 110, 111, 112, 113, 143, 159
other _____

2. Location

street and number Naval Surface Warfare Center Carderock Division, 9500 MacArthur Boulevard not for publication
city, town West Bethesda vicinity
county Montgomery

3. Owner of Property (give names and mailing addresses of all owners)

name United States Navy
street and number 9500 MacArthur Boulevard telephone _____
city, town West Bethesda state MD zip code 20817-5700

4. Location of Legal Description

courthouse, registry of deeds, etc. Montgomery County Courthouse liber _____ folio _____
city, town Rockville tax map _____ tax parcel _____ tax ID number _____

5. Primary Location of Additional Data

- Contributing Resource in National Register District
 Contributing Resource in Local Historic District
 Determined Eligible for the National Register/Maryland Register
 Determined Ineligible for the National Register/Maryland Register
 Recorded by HABS/HAER
 Historic Structure Report or Research Report at MHT
 Other: _____

6. Classification

Category	Ownership	Current Function	Resource Count
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> agriculture	Contributing
<input checked="" type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> commerce/trade	<u>3</u>
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input checked="" type="checkbox"/> defense	Noncontributing
<input type="checkbox"/> site		<input type="checkbox"/> domestic	<u>5</u>
<input type="checkbox"/> object		<input type="checkbox"/> education	<u>8</u>
		<input type="checkbox"/> funerary	Total
		<input type="checkbox"/> government	
		<input type="checkbox"/> health care	
		<input type="checkbox"/> industry	
		<input type="checkbox"/> landscape	
		<input type="checkbox"/> recreation/culture	
		<input type="checkbox"/> religion	
		<input type="checkbox"/> social	
		<input type="checkbox"/> transportation	
		<input type="checkbox"/> work in progress	
		<input type="checkbox"/> unknown	
		<input type="checkbox"/> vacant/not in use	
		<input type="checkbox"/> other:	
			Number of Contributing Resources previously listed in the Inventory
			<u>8</u>

7. Description

Condition

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> excellent | <input type="checkbox"/> deteriorated |
| <input type="checkbox"/> good | <input type="checkbox"/> ruins |
| <input checked="" type="checkbox"/> fair | <input type="checkbox"/> altered |

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Buildings 104, 109, 110, 111, 112, 113, 143, and 159 are located in the north central portion of the 183.6 acre Naval Surface Warfare Center Carderock Division (NSWCCD). Located approximately 12 miles northwest of Washington, DC near Bethesda, Maryland, NSWCCD is situated north of the Potomac River and is bordered by the Clara Barton Parkway to the south and MacArthur Boulevard to the north and east. The installation is composed of 116 buildings and structures that function as research laboratories, administration facilities, and operations and utility structures. At the center of the installation is the David Taylor Model Basin (Buildings 1-4) a group of interconnected buildings that include a model basin, administration building, a shop building and laboratory. The David Taylor Model Basin was listed on the NRHP in 1985. In 1996 the NSWCCD Historic District was determined eligible for the NRHP, and forty-four of the 116 buildings were recognized as contributing resources in the NSWCCD Historic District. Buildings 104, 109, 110, 111, 112, 113, 143, and 159 are contributing resources in the NSWCCD Historic District.

Building 104 was constructed as a garage in 1943. Situated on the south side of Witek Road, the one-and-a-half-story, wood frame structure spans 11 bays across the length of the building. Building 104 is clad with corrugated metal panels, has a flat tar roof with galvanized steel soffits, and is set on a concrete foundation. Building plans dating from 1989 depict many of the changes made to the structure including the replacement of all wood trim around the windows and doors with metal trim and the addition of new vertical galvanized steel siding.

The main (north) façade of Building 104 fronts Witek Road. The main façade is characterized by eight garage bays with overhead track doors and two entrance ways. All the track doors are metal with the exception of the door located three bays from the northwest corner which is wood and most likely original to the structure. One entrance is located four bays from the northwest corner and the other is four bays from the northeast corner. The two bays located at the northeast corner are taller in profile and slightly set back from the main façade. This section of the garage dates from 1966. The east façade has a single one-over-one-light double-hung aluminum sash and a pair of one-over-one-light double-hung aluminum sash. The south façade has no fenestration. The west façade at the southwest corner is adjoined to a parking shed, and two one-over-one-light double-hung aluminum sash windows are located on the northwest half of the façade.

The interior layout of Building 104 is divided into four distinct spaces that have doors leading into one another. The first section, from the northwest corner, is four bays and constitutes the auto repair shop. Restrooms are located in the southeast corner of this section. The second section, comprised of four bays, contains small office and storage spaces on the first level with auto parts storage on the mezzanine level in the first two bays and a equipment repair shop in the third and fourth bays. The third section has an entrance door and an open garage space. The final section is two bays and houses a vehicle repair shop.

Buildings 109 and 110 are similarly constructed model storage facilities dating from 1943. The structures are ten bays long and one bay deep. Each bay has metal overheard track doors on the main facades. The structures have wood frames and walls and concrete floors. The exterior walls, were originally clad with horizontal wood planks, are now covered with vinyl siding. The roof material for both of the structures is asphalt shingles.

The main (north) façade of Building 109 fronts the south side of Witek Road and the ten bays, with metal overhead track doors, front the street. The east façade has two one-over-one-light double-hung sash aluminum windows centered on the facade. The south and west facades of Building 109 have no fenestration. The interior space of bays 1 and 2, at the east end of the structure, contain enclosed office space that are access by double doors locate inside the track door. The third bay has stairs along the east wall that lead to the mezzanine level. The mezzanine level is located over bays 4-10, with open space below.

The main (south) façade of Building 110 fronts the north side of Witek Road and the ten bays, with overhead metal tack doors, front the street. The east and west facades of Building 110 are a identical. A single metal door is located at southeast corner of the east façade and at the southwest corner of the west facade. It appears the south corners of the east and west facades were closed in some time after the building was erected, with the west façade extended out flush with the roofline. The north façade has no fenestration. The interior space of the ten bays is open with stairs along the west wall of the second bay leading to the mezzanine level located above all the bays.

Maryland Historical Trust

Maryland Inventory of Historic Properties Form

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Name
Continuation Sheet

Number 7 Page 1

Building 111 was constructed in 1944 as the Shop Stores Building. It was enlarged with an addition in 1957, when it became a math lab. Today it is used as the headquarters and storage for maintenance personnel. Situated on the north side of Witek Road, the one-story, wood-frame building, adopts a rectangular footprint and has a side-gable roof and concrete foundation. The one-over-one-light double-hung aluminum sash windows are replacements, and the original clapboard siding has been covered with vinyl siding.

The main (south) façade fronts Witek Road and is ten bays long. The main entrance is a set of metal double doors located four bays from the southeast corner. The door is accessed by concrete steps and landing, and a series of three vertical, fixed transoms flank the doors. The entrance was altered to its current state in 1962. A second entrance is located at the southwest corner, on the 1957 addition to the west façade. Seven windows are located on the south façade. The west façade has two one-light aluminum windows. The rear (north) façade has a door at the northwest corner and nine windows. The east façade has a door at the southeast corner.

The interior space of Building 111 has carpeted floors and drop ceilings. The central section of the building is mostly open. The 1957 addition at the west end of the structure contains restrooms and the generator room. The space at the east end is divided into offices.

Buildings 112 and 113 are west of Building 111 and situated on the north side of Witek Road. Building 112 was originally built as an office; today, it is the copy center for the installation. Building 113 is used as a storage facility. Similar in design to Building 111, the one-story structures are wood frame set on a concrete foundation, rectangular in plan with side-gable roofs, and clad in vinyl siding. The windows on Building 112 have been replaced with one-over-one-light double-hung aluminum sash, while the original six-over-six-light double-hung wood sash windows remain on Building 113. A concrete loading dock and ramp that was built in 1949 connects the two structures.

Constructed in 1946 as storage facilities, Buildings 112 and 113 are eight bays long and two bays deep. The main (south) façade of each structure has a main door centered on the façade with three windows to the east and four windows to the west. The double doors are access by concrete stairs and landing. Building 112 has an enclosed vestibule with a door on the west façade.

The west façade of Building 112 has a single window at the southwest corner and a door at the northwest corner that leads to the loading dock. There is no fenestration on the rear (north) façade, and a single window on the east façade of Building 112. The interior space has carpeted floors and drop ceilings. The floor plan is open with the exception of an office located west of the main door and restrooms located in the easternmost section of the building.

The west façade of Building 113 has a single window at the southwest corner. The rear (north) façade has five windows, and the east façade has a single door that leads to the loading dock. The interior space is open with the exception of an office in the southeast corner and a restroom in the northwest corner of the building.

Building 143 is a linear warehouse that fronts Witek Road on the south side. Constructed in three phases beginning in 1948, Building 143 originally served as the machine shop. Today it is the main shipping and receiving center for the installation. The wood frame building features twenty-five bays on the main (north) façade. The corrugated metal walls terminate in a side-gable roof that has been modified with foam insulation.

Building 143 has three main sections. The first section, at the westernmost end, was constructed shortly after the original section. The main (north) façade contain seven bays. The first four bays contain three nine-light industrial sash windows, followed by a metal door, and overhead track door. The seventh bay projects from the main building façade and contains a pair of one-over-one-light double-hung aluminum sash windows. The second section of Building 143 is the original building block. A single door is located at the northwest corner, and several nine-light industrial sash windows are evenly spaced on the façade. The third section dates from

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Name
Continuation Sheet

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1974. An overhead metal track door is located at the northwestern corner of the third section, and a pair of one-over-one-light, double-hung aluminum sash are located at the northeastern corner.

The east façade of the third section has an overhead metal track door flanked on either side by one-over-one-light double-hung aluminum sash windows. The south façade of the third section has no fenestration. Evenly spaced nine-light industrial sash windows are located along the south façade of the second section and third sections. The west façade has a bathroom addition dating from 1953 at the southwest corner. A rolling door and a pair of windows are located north of the bathroom, and a concrete loading dock is flush with the façade.

The interior space of Building 143 retains an open floor plan. The interior space of the first section is open except for three office spaces and the bathroom addition. The second section is open with the exception of two storage rooms and stairs that lead to a small storage room on the mezzanine level. An overhead metal track door separates the second and third sections. The third section is one open space.

Building 159, built in 1952, is a one-story storage shed located on the south side of Witek Road. The structure contains five storage bays with metal overhead track doors. The wood frame structure is sheathed with corrugated metal panels and set on a concrete pad. The roof is metal. The interior space is five open bays.

8. Significance

Inventory No. M:29-58

Period	Areas of Significance	Check and justify below		
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> health/medicine	<input type="checkbox"/> performing arts
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> archeology	<input type="checkbox"/> education	<input type="checkbox"/> industry	<input type="checkbox"/> philosophy
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> architecture	<input type="checkbox"/> engineering	<input type="checkbox"/> invention	<input type="checkbox"/> politics/government
<input checked="" type="checkbox"/> 1900-1999	<input type="checkbox"/> art	<input type="checkbox"/> entertainment/ recreation	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 2000-	<input type="checkbox"/> commerce	<input type="checkbox"/> ethnic heritage	<input type="checkbox"/> law	<input type="checkbox"/> science
	<input type="checkbox"/> communications	<input type="checkbox"/> exploration/ settlement	<input type="checkbox"/> literature	<input type="checkbox"/> social history
	<input type="checkbox"/> community planning		<input type="checkbox"/> maritime history	<input type="checkbox"/> transportation
	<input type="checkbox"/> conservation		<input checked="" type="checkbox"/> military	<input type="checkbox"/> other: _____

Specific dates 1943-1958 **Architect/Builder** U. S. Navy, Bureau of Yards and Docks

Construction dates 1943-1957

Evaluation for:
 National Register Maryland Register not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

Summary

Buildings 104, 109, 110, 111, 112, 113, 143, and 159 are considered contributing resources in the National Register eligible NSWCCD Historic District. In 1996 the NSWCCD Historic District was found to possess the qualities of exceptional importance defined under National Register Criterion Consideration G with the historic context of Military research, design, testing, and evaluation. NSWCCD also meets eligibility criteria A and C. NSWCCD is associated with events that have made a significant contribution to the broad patterns of military technology (Criterion A) and retains an intact collection of research, design, testing, and evaluation buildings and facilities (Criterion C).

Historic Context

The U. S. Navy's first laboratory for studying ship behavior was the United States Experimental Basin (EMB). Constructed in 1898 under the leadership of Rear Admiral David Watson Taylor, the EMB was located at the Washington Navy Yard. Designed for the testing of ship hulls, propeller studies, and rudder developments, the basin contained a carriage that towed wooden shop models and carried cameras to allow engineers to study how eddy and wave making resistance were generated (Melhuish 1996). In 1912, due to advancements in aviation, the Navy expanded its laboratory facilities to include a wind tunnel. Designed by aeronautical engineers, Holden C. Richardson and William W. McEntree, the Navy's first wind tunnel was completed in 1913 and was used to test the resistance of shapes in air to improve the aerodynamics of airfoils, body shapes, and windshield design (Carlise 1998: 78).

The facilities at the Washington Navy Yard soon proved inadequate. The basin was resting on an unsteady foundation undermined by springs, and it had become technically insufficient to meet the demands of both commercial users and the rapidly modernizing Navy (Carlise 1998: 132). In 1936 Congress authorized funding for the construction of a new basin, and in 1937, 107 acres in Carderock, Maryland was chosen for the new installation due to the presence of bedrock, level terrain, nearby water supply, and accessibility to downtown Washington (Carlise 1998: 144).

Commander Ben Moreell is credited with the design of the new basin. His architectural plans called for a long rectangular basin building running east and west, covered by a barrel arch roof with a 110-foot span and a three-story combination office-laboratory that would connect with the basin structure (Carlise 1998: 143-44). Designed in the Art Moderne style of architecture, the office-laboratory won Moreell an Association of Federal Architects' award. Construction at Carderock began in 1937, and the official dedication was held on November 4, 1939 for the David Taylor Model Basin, named in honor of David W. Taylor. In 1985 the David Taylor Model Basin (DTMB) and associated buildings were listed on the National Register of Historic Places.

The primary mission of the DTMB, as defined by Congress, was to investigate and determine the most suitable and desirable shapes and forms for naval vessels and aircraft (Melhuish 1996). During its first year of operation, the DTMB was mostly involved in design work, but at the outset of World War II, activities at the DTMB were focused on war-related topics. Research became a major

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Inventory No. ~~M:29-58~~

Name
Continuation Sheet

Number 8 Page 1

directive, and new facilities and staff were added to support research activities. New facilities added to installation included a research pit for explosion testing (1941), wind tunnels and associated buildings (1942), a pentagonal test pond to test under water explosives (1943), Circulating Water Channel to test the angles and drag of underwater towed devices (1944), and two supersonic wind tunnels that had been dismantled in Germany and installed at Carderock (1946) (Melhuish 1996).

During this rapid expansion, careful consideration was given to the overall physical planning and growth of the installation. Under the direction of Captain H. S. Howard, the installation grew in acreage with the addition of 47 acres in 1943 and 55 acres in 1946. Howard wrote in 1945, "Having in mind the architecture of the main building, I visualize something in the nature of a college campus or graduate school grown up around and in front of the main building. A row of buildings might well grow to the east and to the west of the main building toward the south but the central area should be kept free of building so that eventually a U-shaped group is formed with the open end toward the Highway," (Carlise 1998: 192). The campus of buildings created at Carderock during this period was determined eligible for the National Register as the Naval Surface Warfare Center Carderock Division Historic District in 1996.

During the second half of the twentieth century, NSWCCD research grew to incorporate the use of computers. The Applied Mathematics Laboratory was established in 1952, and the first computer used at the facility was the Universal Automatic Computer. A second addition was the Livermore Atomic Research computer acquired in 1960. Research in calculation, forming solutions on specific engineering research problems, and handling operation, maintenance and design improvements for naval vehicles was conducted on the computers (Melhuish 1996). Today, both the experimental and computer facilities play a key role in the operations taking place at NSWCCD, and the installation has retained its campus-like setting, with a mixture of old and new structures.

Buildings 104, 109, 110, 111, 112, 113, 143, and 159 were constructed to support the numerous research and testing activities of the NSWCCD. Classified as Operations and Utility Buildings and Facilities, these structures were built as part of the rapid expansion occurring at NSWCCD from 1943 to 1958 and represent the increase need for support facilities. The structures have retained their historic function as support facilities and continue to operate as garages, warehouses, and offices.

9. Major Bibliographical References

Inventory No. ~~M:29-58~~

See Continuation Sheet.

10. Geographical Data

Acreage of surveyed property _____

Acreage of historical setting _____

Quadrangle name Falls Church

Quadrangle scale: 1:24000

Verbal boundary description and justification

The boundary of the of the survey occupies the footprint of the buildings and structure located within the Naval Surface Warfare Center, Carderock Division near Bethesda, Maryland.

11. Form Prepared by

name/title	Megan Rupnik, Architectural Historian		
organization	The Louis Berger Group	date	October 2003
street & number	2300 N Street, NW	telephone	(202) 912-0200
city or town	Washington	state	DC

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
DHCD/DHCP
100 Community Place
Crownsville, MD 21032-2023
410-514-7600

Maryland Historical Trust Maryland Inventory of Historic Properties Form

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Inventory No. ~~M: 29-58~~

Name
Continuation Sheet

Number 9 Page 1

Allison, David K

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Allison, David K, Ben G. Keppel, and C. Elizabeth Nowicke

1988 *David W. Taylor*. U. S. Government Printing Press, Washington DC.

Carlise, Rodney

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Giglio, W. Patrick

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Kuranda, Katherin M., April L. Fehr, and Brook V. Best

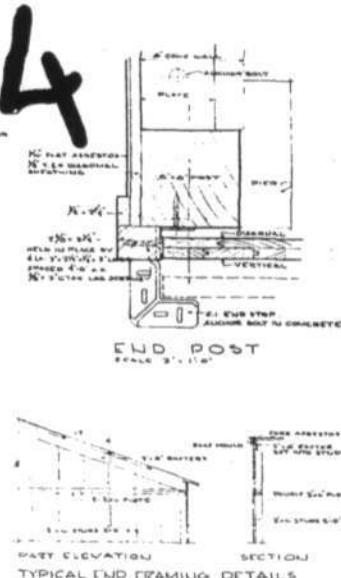
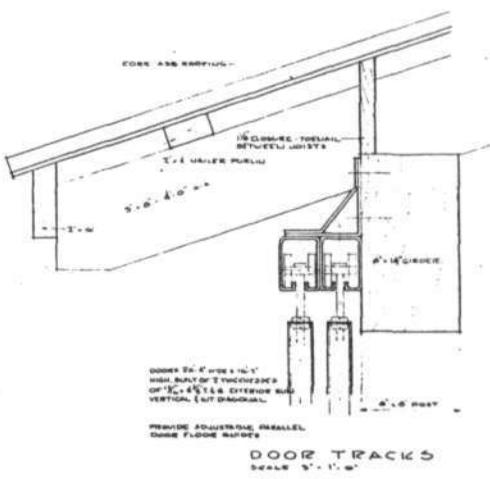
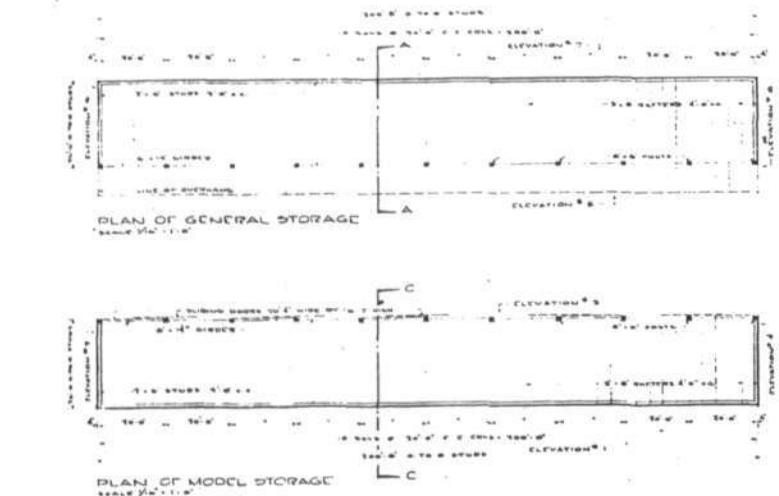
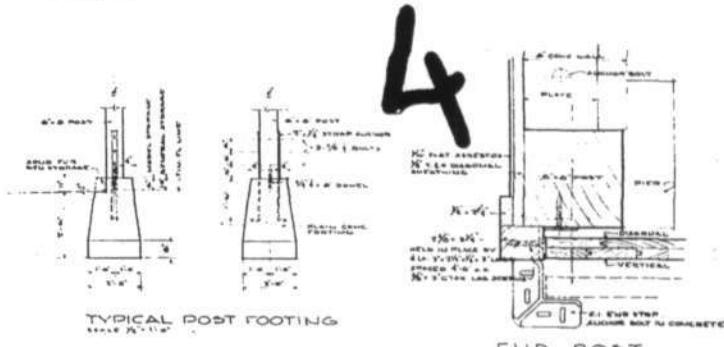
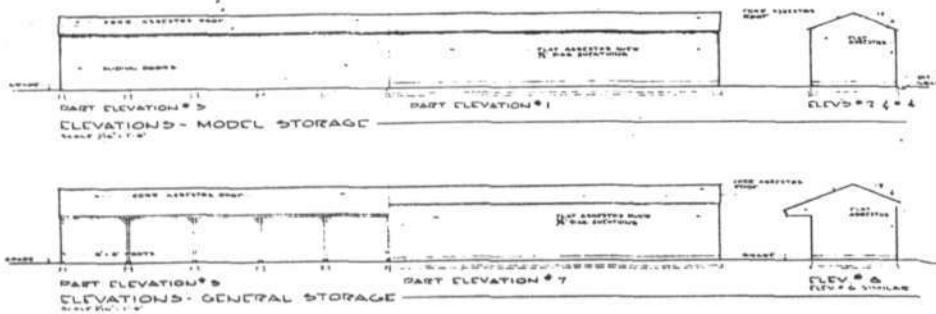
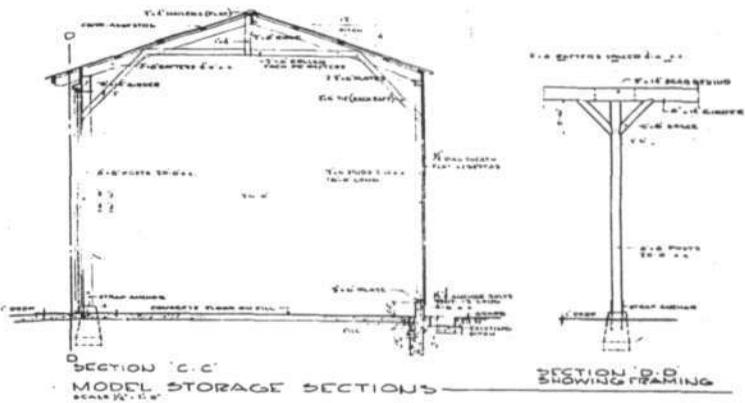
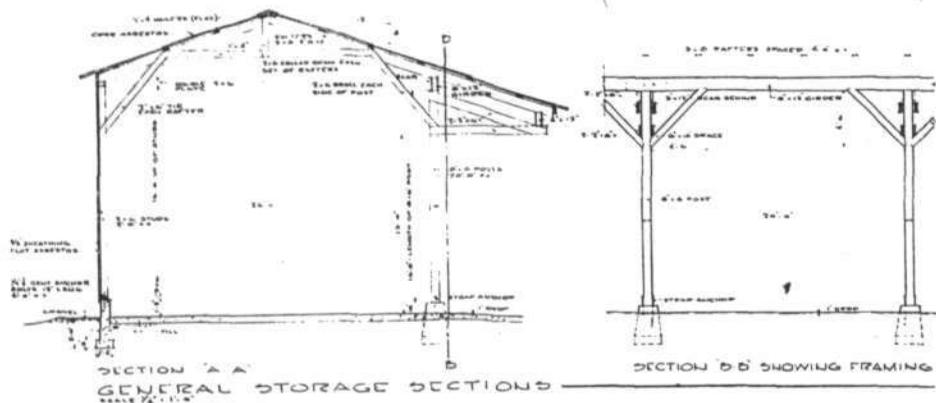
2000 *Integrated Cultural Resource Management Plan: Naval Surface Warfare Center, Carderock Division*. On file at the Naval Surface Warfare Center, Carderock Division, West Bethesda, MD.

Melhuish, Geoffrey E.

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Unpublished Materials

Naval Surface Warfare Center, Carderock Division, Public Works Office. West Bethesda, Md. Floor plans.



APPROVED BY: BUREAU OF P. 107

DATE: _____

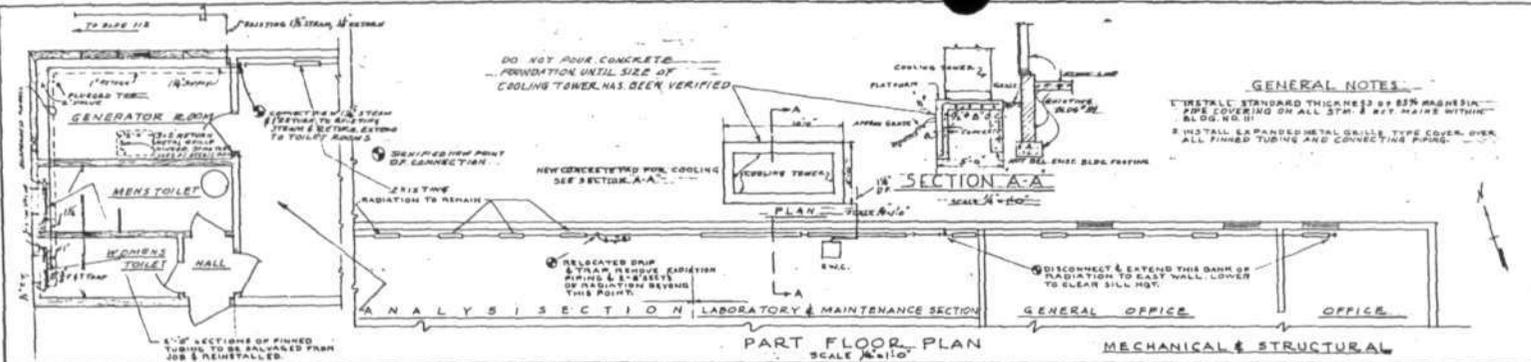
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 Checked by: _____
 Supervisor: _____
 Group Chief: _____
 Chief Clerk: _____

Drawn by: _____
 Pkg. Mgr.: _____
 Design Mgr.: _____

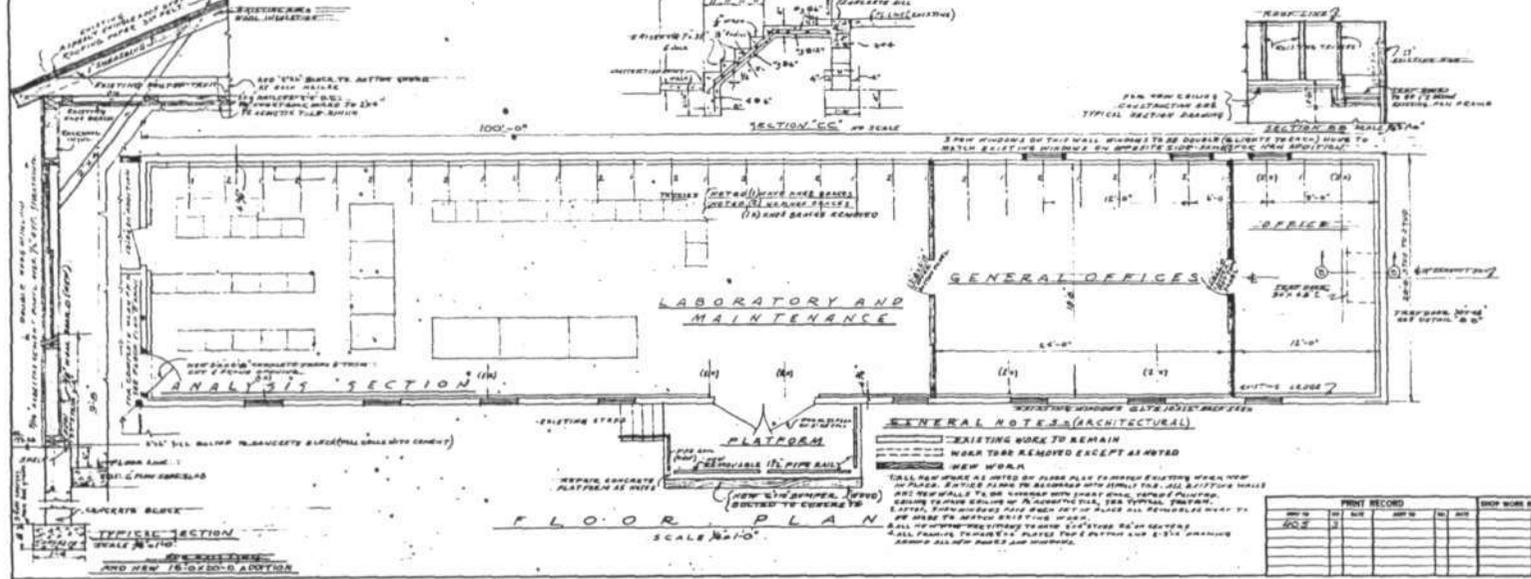
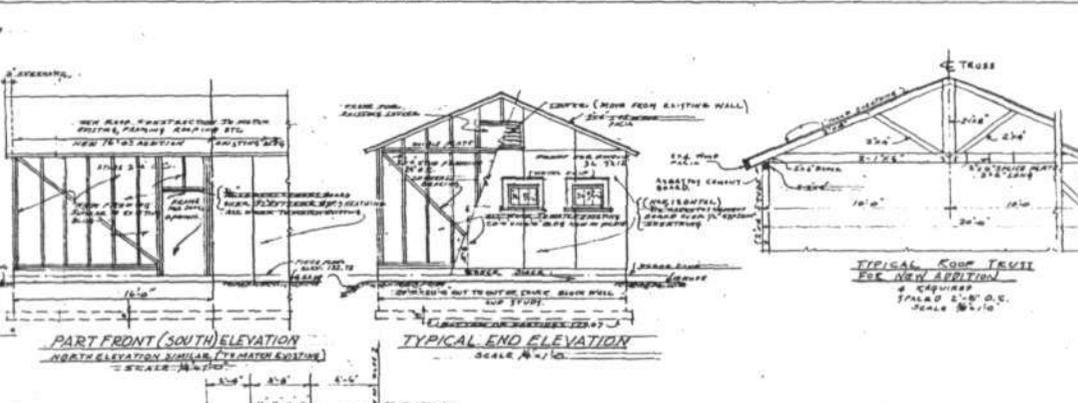
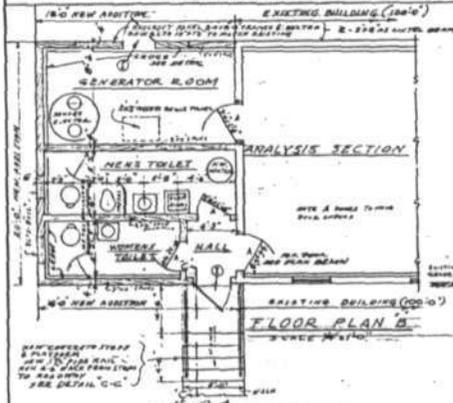
Client: _____
 Approved: _____
 Date: _____

216020

MHP#M: 29-22-7
 BLDGS. 109+110
 NSWCCD, CARPERS
 MONTGOMERY LWN



LIST OF MATERIALS			
NO.	QUANTITY	NAME OF ITEM	REMARKS
1	30 FT	1/2" BLACK STEEL PIPE	
2	80 FT	1/2" "	
3	45 FT	1/2" "	
4	10 FT	3/4" "	
5	10 FT	3/4" GALVANIZED STEEL PIPE	
6	2	3/4" STEAM VALVE (ANGLE)	
7	2	3/4" THERMOSTATIC TRAP (ANGLE)	
8	1	3/4" FLOAT & THERMOSTATIC TRAP	
9	2	1 1/2" x 3/4" REDUCING TEE	
10	2	1 1/2" x 1/2" REDUCING TEE	
11	1	1 1/2" x 1/2" BRASSING TEE	
12	12 FT	1/2" GALVANIZED STEEL PIPE	
13	10 FT	3/4" GALVANIZED STEEL PIPE	
14	1	1 1/2" TRAP	
15	2	1 1/2" 90° BRASSING ELB	
16	2	1 1/2" 90° C. L. BRASSING	
17	1	ELECTRIC WATER COULM.	
18	85 FT	3/4" INSULATED ROSE	
19	300 FT	2 1/2" TUBULAR 80% MAGNESIA PIPE COVERING	
20	20 FT	1 1/2" GALVANIZED STEEL PIPE COVER 7/8" INSULATED WITH 2" BLACKSLATE	
21	1	1" GATE VALVE	
22	1	1" STEAMER (Y)	
23	1	1" GATE VALVE	
24	2	1" ROOF	
25	4	1" 90° ELB.	
26	4	1 1/2" 90° ELB.	
27	1	1 1/2" GATE VALVE	



ARCHITECTURAL - STRUCTURAL			
1	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
2	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
3	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
4	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
5	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
6	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
7	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
8	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
9	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
10	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
11	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
12	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
13	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
14	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
15	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
16	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
17	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
18	1 1/2\"	APPLY PLASTER TO EXISTING CONCRETE	
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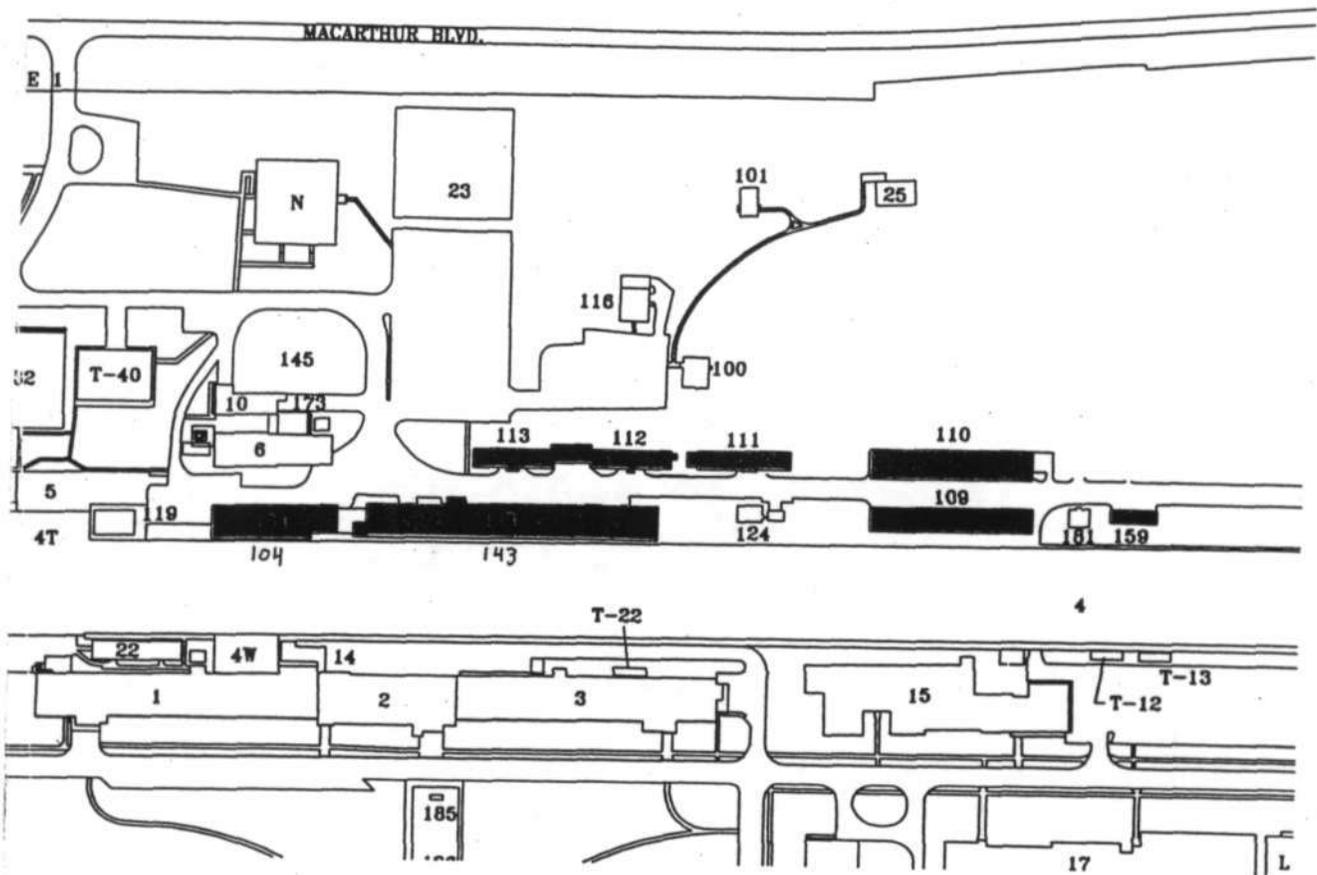
REVISIONS		DATE	DESCRIPTION	BY

NAVY DEPARTMENT WASHINGTON, D. C.
DAVID W. TAYLOR MODEL BASIN

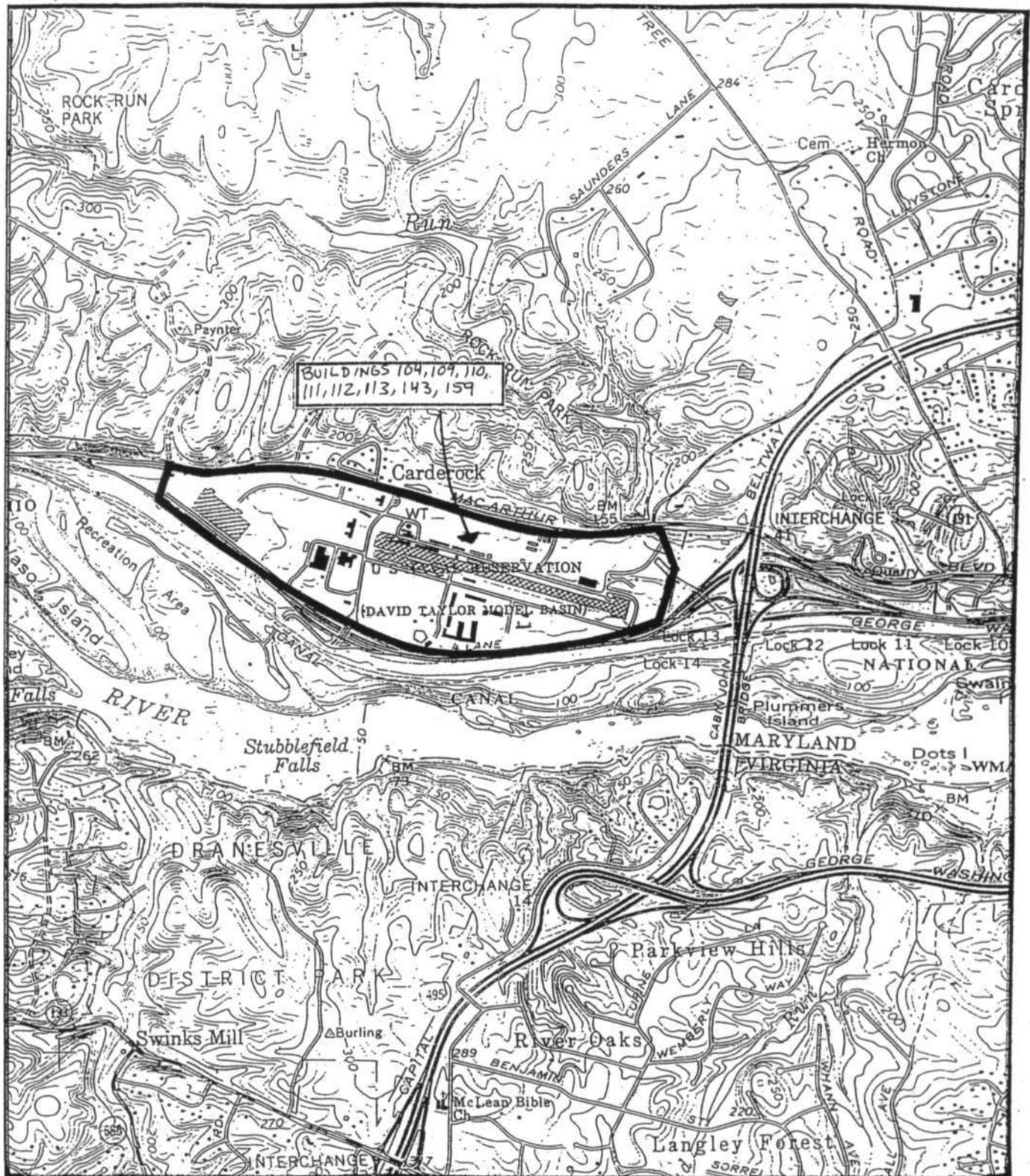
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NAVAL ANALYSIS LABORATORY
ARCHITECTURAL - STRUCTURAL
MECHANICAL

DATE: 15 MARCH 1957
NO. 10 4A-1703-426
D-1955-1 ALT. I

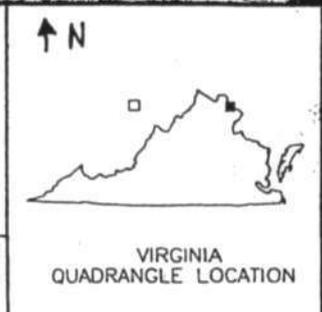
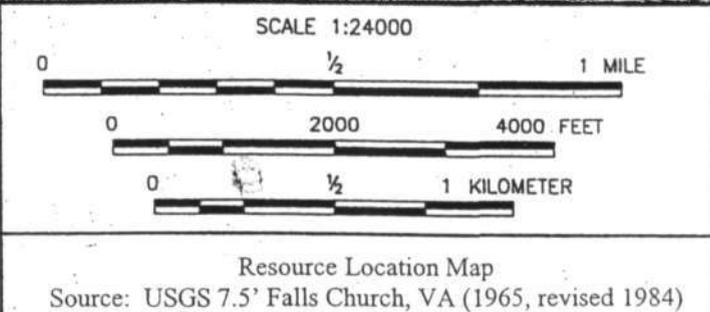
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BLDG 111 (1957)
NSWCCD, CARDEROCK
MONTGOMERY COUNTY



Resource Sketch Map
 MIHP# ~~M:29-58~~ M:2952-7
 Buildings 104, 109,
 110, 111, 112, 113, 143,
 and 159
 NSWCCD, Carderock
 Montgomery County



MIHP# M:29-52
 BUILDINGS 104, 109, 110,
 111, 112, 113, 143,
 159
 NSWCCD, CARDEROCK
 MONTGOMERY
 COUNTY





MIFIP # M:29-52-7

BUILDING 104, NSWCOLD HISTORIC DISTRICT
MONTGOMERY COUNTY, MD (M:29-52)

M. RUPNIK

9-5-02

NEG. LOCATION: MD. SHRO

NORTHWEST CORNER

1/4



MIHP# M:29-52-7

BUILDING 104, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG LOCATION: MD SHPO

SOUTHEAST CORNER

2/4



MIHP# M:29-52-7
BUILDING 104, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG LOCATION: MD SHPO

INTERIOR

3/4



MIHP# M:29-52-7

BUILDING 104, NSWCCD HISTORIC DISTRICT (M:2952)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

INTERIOR - CENTER BAY

4/4



MIHP# M:29-52-7
BUILDING 109, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. KUPNIK
9-5-02
NEG LOCATION: MDSHPD
NORTHWEST CORNER
1/4



MIHP# M:29-52-7

BUILDING 109, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MIDSHIP

NORTH EAST CORNER

2/4



MIHP # M:29-52-7

BUILDING 109, NSWCLD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

SOUTH FACADE

3/4



MHP # M:29-52-7
BUILDING 109, NSWOOD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

INTERIOR

4/4



MIHP# M:29-52-7
BUILDING 110, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. KUPNIK
9-5-02
NEG. LOCATION: MID SHPO
SOUTHWEST CORNER

1/3



MIHP# M:29-52-7

BUILDING 110, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG LOCATION: MD SHPO

SOUTHEAST CORNER

2/3



MIHP # M:29-52-7
BUILDING 110, NSWCDD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M RUPNIK
9-5-62
NEG LOCATION; MD SHPO
INTERIOR
3/3



MIHP# M:29-52-7

BUILDING III, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M RUPNIK

9-5-02

NEG LOCATION: MD SHPO

SOUTHEAST CORNER

1/4



MIHP # M:29-52-7

BUILDING III, NSWOOD HISTORIC DISTRICT (M:2952)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

314



MIHP# M:29-52-7
BUILDING III, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD

M. RUPNIK

9-502

NEG. LOCATION: MD SHPO
SOUTHEAST CORNER

2/4



MIHP# M:29-52-7

BUILDING III, NSWCCD HISTORIC DISTRICT (M29-52)

MONTGOMERY COUNTY, MD

M RUPNIK

9-5-02

NEG LOCATION: MD SHPO

INTERIOR - WEST END

4/4



MIHP # M:29-52-7
BUILDING 112, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK

9-502

NEG. LOCATION: MD SHPO
SOUTHEAST CORNER

1/3



MIHP # M:29-52-7

BUILDING 112, NSWCCO HISTORIC DISTRICT (M:29-54)

MONTGOMERY COUNTY, MD

M. RUPNIK

4-8-02

NEG LOCATION: MD SHPO

SOUTHWEST CORNER

2/3



MIHP # M:29-52-7
BUILDING 112 NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK
9-5-02
NEG LOCATION: MD SHPO
INTERIOR - WEST END
3/3



MIHP# M:29-52-7

BUILDING 113, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

SOUTHWEST CORNER

1/2



MIHP# M:29-52-7
BUILDING 1B, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK
9-5-02
NEG. LOCATION: MD SHPO
SOUTHEAST CORNER
2/2



MIHP# M:29-52-7
BUILDING 143, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK
9-502
NEG LOCATION: MID SHED
LOADING DOCK AND NORTHWEST CORNER

RECEIVING
PLATFORM



MIHP# M29-52-7
BUILDING 143, NSWCCD HISTORIC DISTRICT (M29-52)
MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

LOCATION: MD SHPO

NORTH FACADE

2/7



MIHP# M:29-52-7
BUILDING 143, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M RUPNIK

9-5-02
NEG. LOCATION: MD SHPC
NORTH FACADE

3/7



MIHP # M:29-52-7

BUILDING 143, NSWOOD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M RUPNICK

9-5-02

NEG. LOCATION: MD SHPO

NORTH EAST CORNER

4/7



MIHP# M:29-52-7
BUILDING 143, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK

9-5-02

NEG LOCATION: MD SAPO
SOUTHEAST CORNER

5/7



MIHP # M:29-52-7
BUILDING 143, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK
9-5-02
NEG LOCATION: MD SHPO
INTERIOR

4/7



MJHP# M:29-52-7

BUILDING 143, NSWOOD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M RUPNIK

9-5-02

NEG LOCATION: MD SHIP

INTERIOR, EAST END

7/7



MIHP# M29-52-7

BUILDING 159, NSWCCD HISTORIC DISTRICT (M:29-58)

MONTGOMERY COUNTY, MD

M RUPNIK

9-5-02

NEG LOCATION: MD SHPO

NORTHEAST CORNER

1/2



MIHP # M:29-52-7
BUILDING 159, NSWCCD HISTORIC DISTRICT (M:29-52)
MONTGOMERY COUNTY, MD
M. RUPNIK
9-5-62
NEG LOCATION: MD SHPO
SOUTHEAST CORNER 2/2