FRAMEWORK FOR IDENTIFYING COMPREHENSIVE PLAN DATA

HISTORIC CONTEXT:

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA

Geographic Organization: Piedmont/Western shore

Chronological/Development Period(s):

Modern Period (1945-present)

Prehistoric/Historic Period Theme(s):

Military (World War II/Post World War II Era)
Engineering/Invention

Resource Type:

Category: Buildings

Historic Environment (urban, suburban, village, or rural): suburban

Historic Function(s) and Use(s): Laboratories for testing and development of military (Navy) weapons systems.

Known Design Source:

Eggers & Higgins, Architects, New York, New York
Taylor & Fisher, Baltimore, Associates

Maryland Historical Trust
State Historic Sites Inventory Form

Survey No. M:33-14
Magi No.
DOE ___ Yes ___ No

1. Name (indicate preferred name)

historic White Oak Main Administration/Laboratory Building

and/or common Buildings 1, 2, 3, and 4

2. Location

street & number 10901 New Hampshire Avenue ____ not for publication

city, town Silver Spring ____ vicinity of congressional district 4th

state Maryland county Montgomery

3. Classification

Category	Ownership	Status	Present Use	
___ district	X public	X occupied	___ agriculture	___ museum
X building(s)	___ private	___ unoccupied	___ commercial	___ park
___ structure	___ both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	___ in process	X yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
	___ not applicable	___ no	X military	___ other:

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

name U.S. Navy - White Oak Laboratory

street & number 10901 New Hampshire Ave. telephone no.

city, town Silver Spring state and zip code MD 20903-5000

5. Location of Legal Description

courthouse, registry of deeds, etc. liber

street & number folio

city, town state:

6. Representation in Existing Historical Surveys

title

date ___ federal ___ state ___ county ___ local

depository for survey records

city, town state:

02:CN9900_D4493_BUILDING_1-06/01/94-D1

7. Description

Survey No. M:33-14

Condition		Check one	Check one	
___ excellent	___ deteriorated	___ unaltered	X original site	date of move ___
X good	___ ruins	X altered	___ moved	
___ fair	___ unexposed			

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

The administrative/laboratory complex (Building 1-4) is the largest structure in the Front Area of the White Oak Laboratory. In plan, it forms a large rectangle around a large interior courtyard. This complex consists of four long narrow buildings: the main administrative building (B-1) parallels New Hampshire Avenue from which it is separated by the installation's golf course; two laboratory buildings (B-2 and B-3) which extend eastward from the north and south ends of B-1, respectively, and a rear laboratory building (B-4) that parallels B-1, extending between the eastern ends of B-2 and B-3. The interior central courtyard is bisected by the arcade, a wing of B-1 that extends eastward, connecting to the midpoint of B-4. Building 5 is connected to B-4 by a short passageway. Although it shares the design of Building 1-4, its slightly later date of construction (1949) and the different activities conducted there warrant discussion of Building 5 separately.

In the neoclassical or, more appropriately "starved classicism" of federal architecture of the 1930s and 1940s (Craig 1978), building "facades became simplified, their classical ornaments turning angular and disappearing into the masonry, their walls becoming more planar and their windows openings shallow and anonymous." It was a design "denoted as much by white masonry and the rhythm of wall and window as much as by vestigial columns" (Craig 1978). Incorporation of such a style in the design of military facilities, especially in the Capitol area and during the war years, appears most appropriate in that it enabled economical construction by eliminating the additional costs and time required by elaborate architectural detail while still reflecting the established traditions for design of large federal buildings. Building 1-4 reflects the culmination of this stylistic development in the near absence of architectural elaboration.

B-1 is a three-story brick structure. It is primarily rectangular in plan, although two 3-bay by 6-bay ells project forward flanking the main entrance and, as noted above, the arcade connects B-1 to B-4. The brickwork of Building 1-4 is Flemish bond with headers and stretchers alternating in each row and column. The limestone coping atop the third story facade is curved and projects outwards from the plane of the facade. The smaller fourth story (a utility house) has less massive rectangular limestone coping.

The "starved classicism" exhibited by the main facade (i.e., the west elevation) of B-1 establishes the design elements shared by the other buildings that comprise the Front Area. This style is most strongly evident in the symmetry of each elevation and in the front entrance of B-1 where the facade has been simplified to the point where the traditional classical portico has been collapsed so that all that remains is a projecting granite layer reminiscent of four rectangular columns blending with a nearly undecorated architrave and capped by a simple rectilinear cornice. The architrave bears the inscription "NAVAL ORDNANCE LABORATORY" announcing the initial tenant.

Between the columns are three pairs of metal doors, each with four square lights arranged in a vertical row. An undecorated flat overhang extends outwards just above the doorways. Above the overhang, windows fill the area between the pilasters. Greenstone separates the second from the third floor windows. Free standing letters along the leading edge of the overhang identify the "NAVAL SURFACE WARFARE CENTER" as the current tenant of the Front Area.

A wide granite staircase extending across the central eight bays of the main facade leads up to the main entrance.

The principal entrances in other buildings of the Front Area lack the projecting granite layer but reflect their stylistic connection to B-1 in the presence of the granite trim that surrounds, and isolates, the doorway and the window above it.

In the three story section of B-1, the metal frame, multi-light windows of the first and second levels are placed in vertical pairs set off by a surrounding frame of recessed brickwork. The area between the windows in each pair is greenstone. Each window has two lights that open; the upper light opens awning style while the lower light opens hopper style. On the third level, above each pair of windows, is another 12-light window. Each of these are surrounded in limestone that matches the pair of windows below, although without the corresponding border of recessed brick.

In contrast to the window design of the three story main facade of B-1, the windows of the two story section of B-1 and those of B-2, B-3 and B-4 do not have the surrounding frame of limestone and the area between the windows is brick rather than greenstone. The individual windows, however, are the metal sash 12-light windows standard for the Front Area. Security bars have been installed over some of the windows.

B-2 and B-3 are both two-story brick structures, except for their eastern ends where they are three-stories high. They present very similar elevations with the primary variations resulting from the in-filling of some of the windows of B-3 and the addition of an enclosed stairwell on the eastern elevation of B-3.

Each building has two entrances located opposite the points where the central hallways of B-1 and B-4 abut to form the rectangular plan of Building 1-4. Each entrance way continues the design of the windows consisting of a pair of metal frame glass doors with a small transom light covered by a flat undecorated overhang. A small border of recessed brick surrounds the doorway and the second level window immediately above. A half-flight of granite stairs lead to each entrance.

B-4 continues the facade design exhibited on the three-story sections of B-2 and B-3. Each window has two lights that open; the upper light opens awning style while the lower light opens hopper style. On the third level, above each pair of windows, is another 12-light window. Each of these are surrounded in limestone that matches the pair of windows below, although without the corresponding border of recessed brick.

In contrast to the window design of the three story main facade of B-1, the windows of the two story section of B-1 and those of B-2, B-3, and B-4 do not have the surrounding frame of limestone and the area between the windows is brick rather than greenstone. The individual windows, however, are the metal frame 12-light windows standard for the Front Area. Security bars have been installed over some of the windows.

B-2 and B-3 are both two-story brick structures, except for their eastern ends where they are three-stories high. They present very similar elevations with the primary variations resulting from the in-filling of some of the windows of B-3 and the addition of an enclosed stairwell on the eastern elevation of B-3.

Each building has two entrances located opposite the points where the central hallways of B-1 and B-4 abut to form the rectangular plan of Building 1-4. Each entrance way continues the design of the windows consisting of a pair of metal frame glass doors with a small transom light covered by a flat undecorated overhang. A small border of recessed brick surrounds the doorway and the second level window immediately above. A half-flight of granite stairs lead to each entrance.

B-4 continues the facade design exhibited on the three-story sections of B-2 and B-3. B-4 has no direct external entrances. Instead, B-4 abuts B-2 and B-3 on the south and north, respectively, and access to B-4 from the street is through those buildings. In addition, passages located at the mid-point of B-4 connect it to the arcade (to the west) and Building 5 to the east.

External alterations to Building 1-4 have been limited. An enclosed fire stair has been added to the rear (i.e., northeast elevation of B-3) and a handicap access ramp was added to the right (i.e., north side) of the main staircase in front of B-1. In addition, two 12-pound smoothbore cannons were placed on top of small granite walls that flank the staircase of B-1. These cannons, forged in the Philippines in 1777 to 1709, were gifts from the Naval Gun Factory (Washington Naval Yard) in August 1950.

The interior of Building 1-4, as well as the other administration and small laboratory buildings in the Front Area at White Oak, are largely similar consisting of long narrow corridors forming a spine for each structure. Offices and laboratories in a variety of sizes and shapes, from rectangular, one-person offices to large, high ceiling shops off the central hallway.

The Central Arcade was designed to house a variety of shops and services (e.g., post office, cleaners, bank) not otherwise convenient to White Oak at the time of its construction. Similar services still occupy the first floor of the arcade today.

The majority of interior walls are undecorated painted metal. Non-load-bearing walls have been constructed to create specialized space and divide large rooms into smaller ones. These walls are frequently made of the same metal panels used in the hallways. More recent temporary, movable walls and partitions have been used to create individual work areas. Some of the load-bearing walls have been left uncovered, exposing yellow glazed concrete block. This is especially evident along outside walls and around the stair wells and elevators. The floors are linoleum tile which have been covered with carpets in some of the administrative offices.

Suspended ceilings have been added in most areas to cover the formerly exposed utility lines. The original incandescent lights have been replaced by fluorescent lights. Ceilings are still relatively high, contributing to the narrow feeling of some of the hallways.

The interior load-bearing walls that separate the work areas in the large shops and laboratories are typically of brick lain in the same bond as the exterior walls, although windows when filled, may vary in pattern or material (e.g., concrete block).

The interior of the main entrance lobby of B-1 and the arcade are more decorative than other sections of the building. The entrance lobby is two stories high with a balcony along the eastern side. The vertical motif established by the main entrance is maintained inside the lobby through the high ceilings and marble columns framing the doors (external and internal) and supporting the balcony. The ceilings in both the lobby and the Arcade are plaster decorated with receding sets of concentric squares.

8. Significance

Survey No. M:33-14

Period	Areas of Significance—Check and justify below			
__ prehistoric	__ archaeology-prehistoric	__ community planning	__ landscape architecture	__ religion
__ 1400-1499	__ archaeology-historic	__ conservation	__ law	__ science
__ 500-1599	__ agriculture	__ economics	__ literature	__ sculpture
__ 1600-1699	__ architecture	__ education	X military	__ social/ humanitarian
__ 1700-1799	__ art	__ engineering	__ music	__ theater
__ 1800-1899	__ commerce	__ exploration/settlement	__ philosophy	__ transportation
X 1900-	__ communications	__ industry	__ politics/government	__ other (specify)
		__ invention		

Specific dates 1945-1949 **Builder/Architect** U.S. Navy/Eggers & Higgins, N.Y.

check: Applicable Criteria: __ A __ B __ C __ D
and/or
Applicable Exception: __ A __ B __ C __ D __ E __ F __ G

Level of Significance: __national __ state __ local None

Prepare both a summary paragraph of significance and a general statement of history and support.

Statement of Significance

Discussions of the potential NRHP eligibility of Building 1-4 which is one of the eight World War II era structures that comprise the Front Area at the White Oak Laboratory are influenced by three factors:

- The apparent absence of unique and significant events/developments or persons associated primarily with Naval activities at White Oak;
- The absence of unique architectural styles or architecture that embodies the best characteristics of a style or period; and,
- The relatively recent age (e.g., construction of the first structure was begun in 1945) in light of the absence of overwhelming significance as noted above.

Historical background and significance:

Established when existing facilities of the Naval Ordnance Laboratory became insufficient to meet the increasing need for Research, Development, Testing, and Evaluation facilities late during World War II, the White Oak Laboratory was only one of a variety of such facilities established throughout the areas of Maryland and Virginia around Washington, D.C. These technical and administrative centers were developed to maximize accessibility to military headquarters in Washington while being located in areas that provided the environmental conditions necessary for the performance of their missions and the social atmosphere necessary to attract and keep skilled personnel. For White Oak, these resources included the scientific/academic community of Washington and the surrounding area of Maryland while still being somewhat removed from the city congestion and security problems presented by a more urban center. Also, electromagnetic experiments (conducted in areas east of the Front Area) required magnetically neutral conditions.

The White Oak facility that developed during the final years of World War II reflected administrative and research work that was task-specific, contributing to larger weapons system development programs that included work done at other naval facilities. The White Oak Laboratory remained a group of buildings housing offices, laboratories, and shops designed for the tasks at hand. Upon completion of a set of activities, the facilities were refitted for the next set of required tasks. As a result, the facilities in the Front Area of White Oak were continuously changing with new sets of equipment installed for as long as necessary, before they were replaced or moved to a new area of the Laboratory or to another naval facility.

The result of this role for White Oak was that, while it was an integral part of the Naval research and development program during World War II, there are no obvious manifestations of that role in the buildings or the setting of the Front Area of the White Oak Laboratory as they exist today, the generally high degree of integrity of location, setting and design not withstanding.

Building 1-4 as well as all of the structures of the Front Area, whether viewed individually or as a potential district, do not exhibit the integrity of association with events that have made a significant contribution to the broad pattern of history (i.e., NRHP Criteria a, 36 CFR 60.4).

The Naval Ordnance Laboratory, while housed at White Oak, included Naval and civilian personnel who may have achieved considerable personal or professional renown. However, such individual importance was not connected with their tenure at White Oak and so would not satisfy NRHP Criteria b.

Since the White Oak Laboratory is a product of Navy activities begun during World War II and a relatively recent entity, it is unlikely that Building 1-4, or any component of the environment of the Front Area has the potential to yield information important to history itself. White Oak's potential historic importance lies in the scientific developments that have occurred there. Information about these developments are likely to be contained in documentary sources such as scientific notes and archives that exist separately from the physical structures that constitute the Front Area of White Oak. In addition, detailed plans and drawings exist that document the buildings of the Front Area are archived by the Public Works Department at White Oak, further reducing the potential for NRHP eligibility under Criteria d.

Building 1-4 exhibits the principal design shared by the original administration/laboratory buildings of the Front Area at the White Oak Laboratory. The exterior facades of any of these buildings (with the exception of Building 71) have not been substantially modified and appear largely the same as they would have shortly after their construction.

Although this building has maintained its architectural integrity, the combination of the campus-like setting and the "starved classicism" style that is expressed is not unique in the architecture of the period, or in federal buildings in general in the region around Washington, D.C. The stylistic elements suggests the continuation of modern architectural influences on the more formal classical designs as expressed in other buildings designed during the 1920s and the 1930s.

The buildings of the Front Area do not appear to satisfy eligibility Criteria C, for inclusion in the NRHP since they are neither distinctive examples of this architectural type nor "a significant and distinguishable entity" (U.S. Department of the Interior 1991).

9. Major Bibliographical References

Survey No. M:33-14

Anonymous, 1959, "History of the Naval Ordnance Laboratory", manuscript on file at NSWC, White Oak, Maryland.

Craig, Lois, 1978, *The Federal Presence: Architecture, Politics, and Symbols in United States Government Buildings*, The MIT Press, Cambridge, Massachusetts.

Dittman, Richard B., 1973, letter to Stanley S. Jones, U.S. Naval Ordnance Laboratory, White Oak, Maryland, January 29, 1973, on file at Department of Public Works, NSWC, White Oak, Maryland.

Greenhorne & O'Mara, Inc., 1992, *Historic and Archaeological Resources Protection (HARP) Plan for Naval Surface Warfare Center, White Oak, Maryland,* on file at U.S. Navy, Engineering Field Activity-Chesapeake, Washington, Navy Yard, Washington, D.C.

Smaldone, Joseph P., 1977, *History of the White Oak Laboratory 1945-1975*, Naval Surface Weapons Center, Silver Spring, Maryland.

U.S. Naval Ordnance Laboratory, 1949, The U.S. Naval Ordnance Laboratory; General and Descriptive Information.

10. Geographical Data

Acreage of nominated property

Quadrangle name	Beltsville, MD	**Quadrangle scale**	7.5 Min.

UTM **References** do NOT complete UTM references

A	Zone	Easting	Northing	**B**	Zone	Easting	Northing
C				**D**			
E				**F**			
G				**H**			

Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	Maryland	code	MD	county	Montgomery	code	031
state		code		county		code	

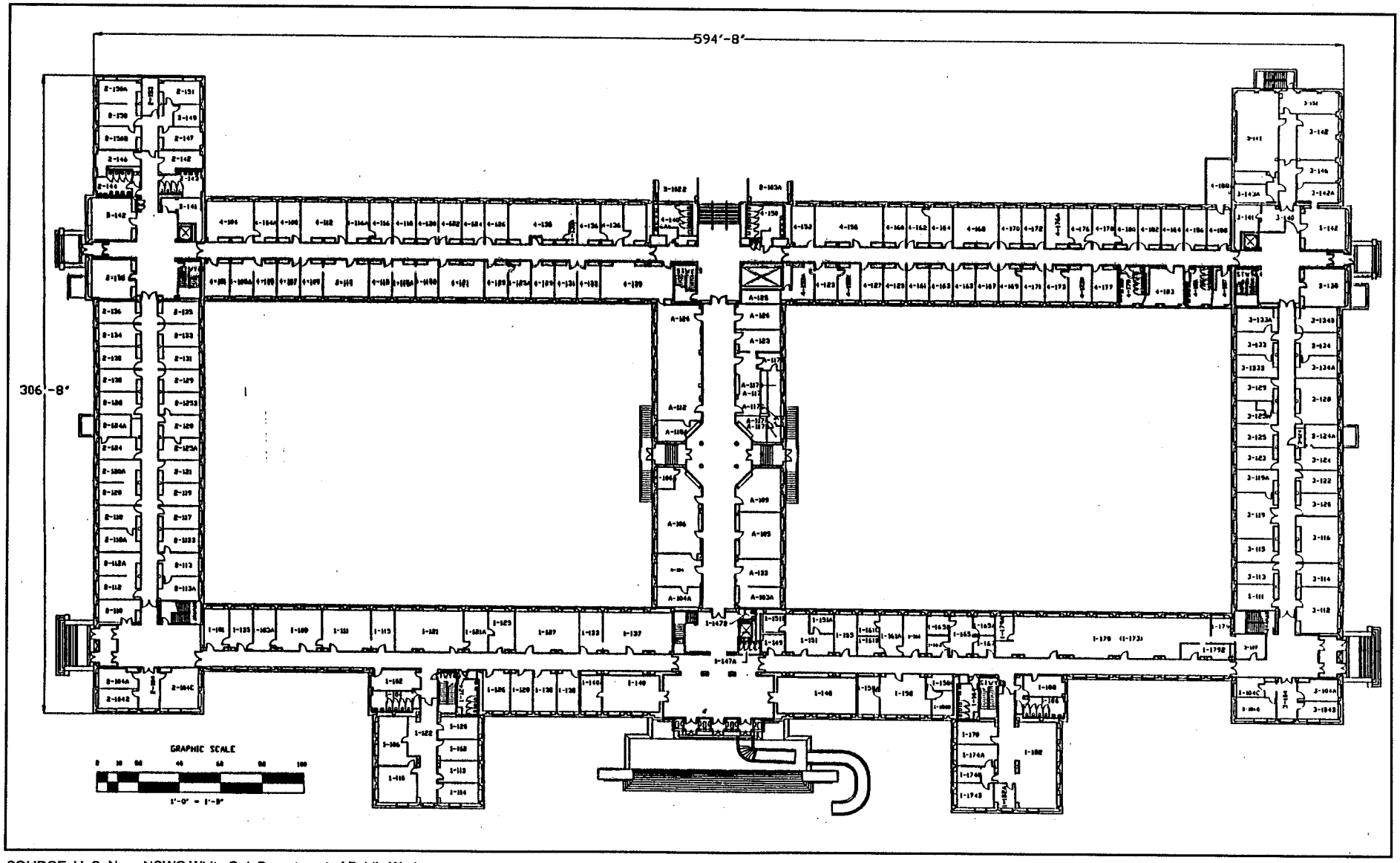
11. Form Prepared By

name/title	Mark Rosenzweig, Ph.D./Chief Archaeologist		
organization	Ecology and Environment, Inc.	date	March 25, 1994
street & number	368 Pleasantview Drive	telephone	716/684-8060
city or town	Lancaster	state	New York

The Maryland Historic Sites Inventory 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.

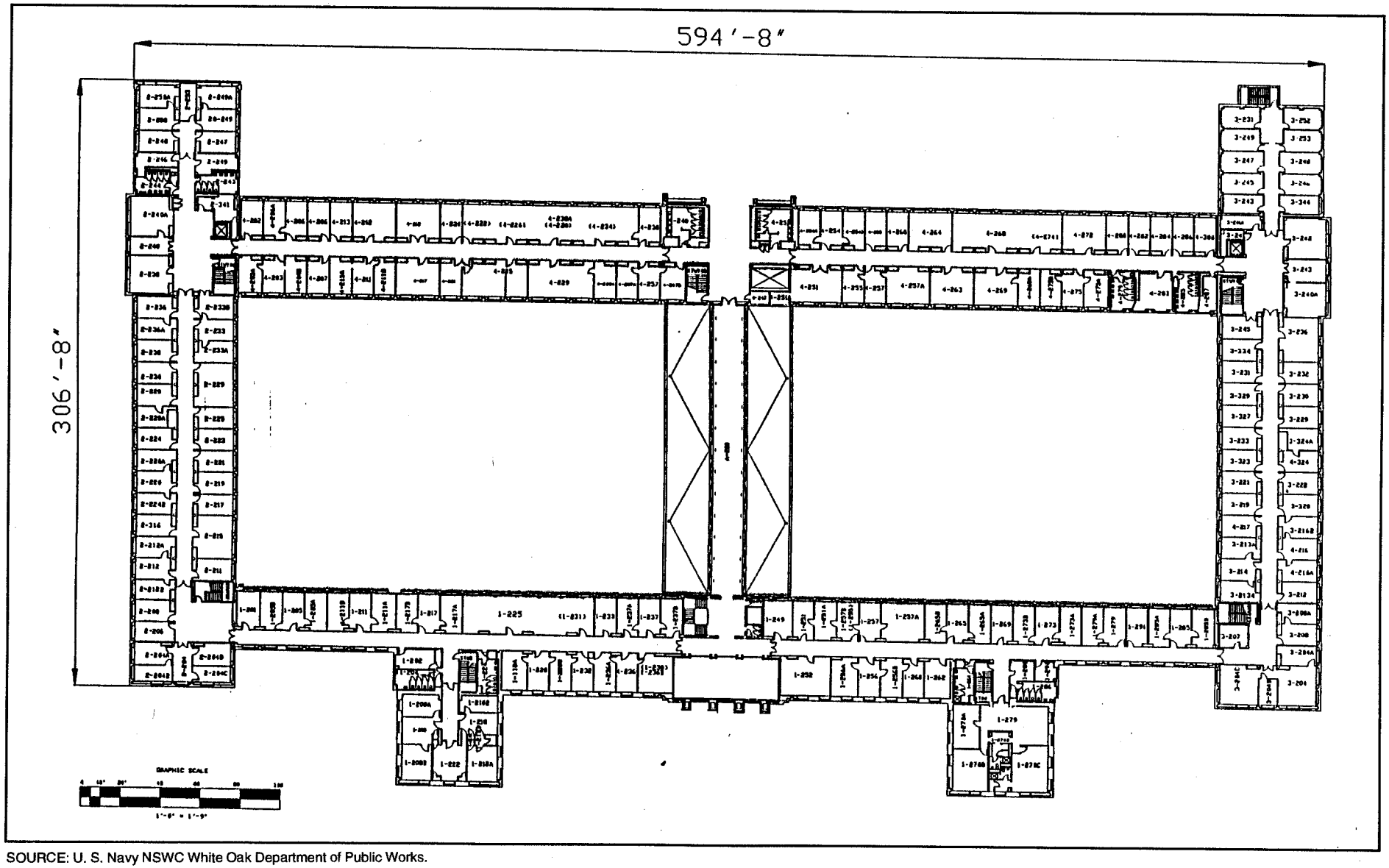
The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

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



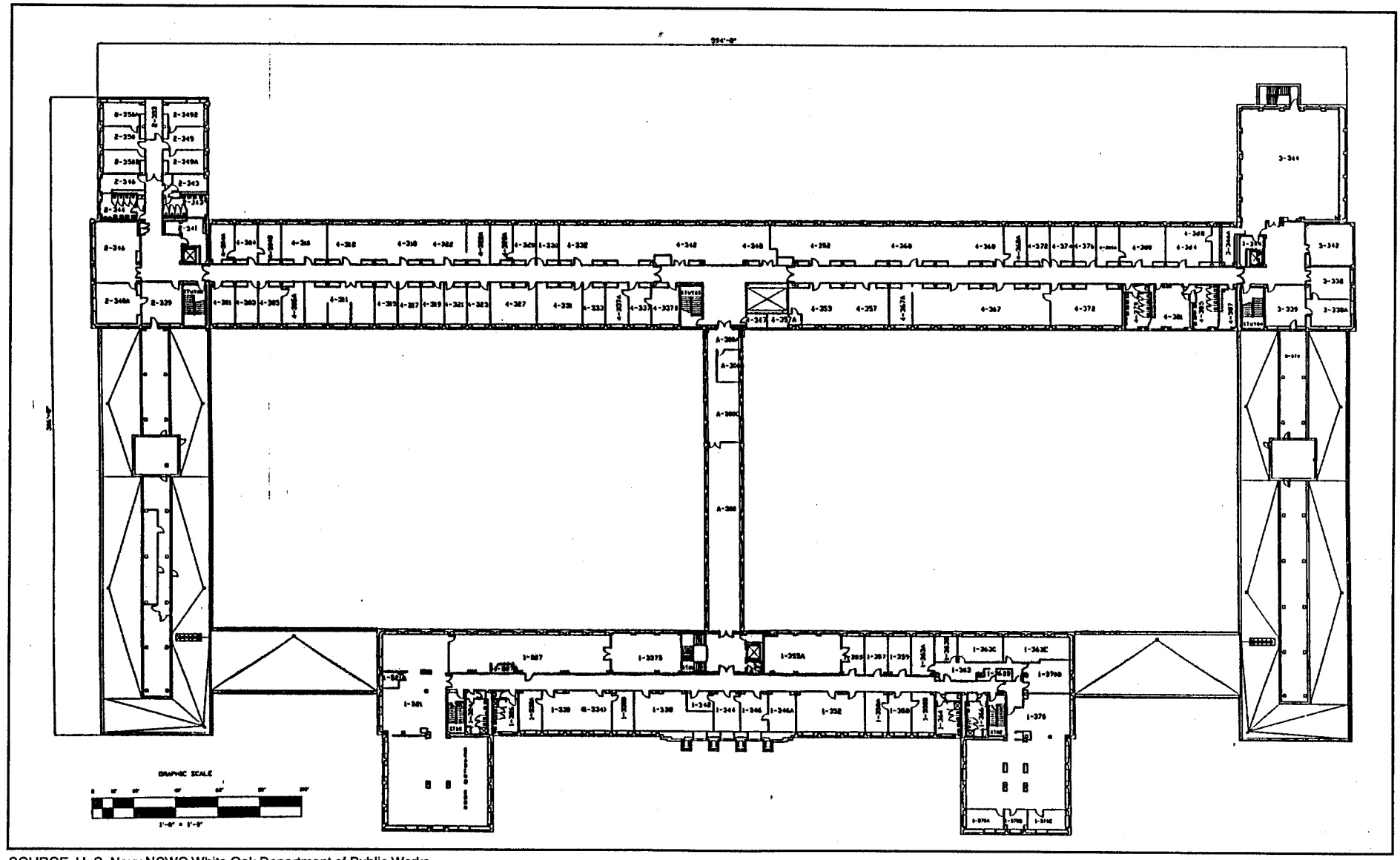
SOURCE: U. S. Navy NSWC White Oak Department of Public Works.

SURVEY NO. M:33-14, BUILDING 1-4 (FIRST FLOOR)
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND



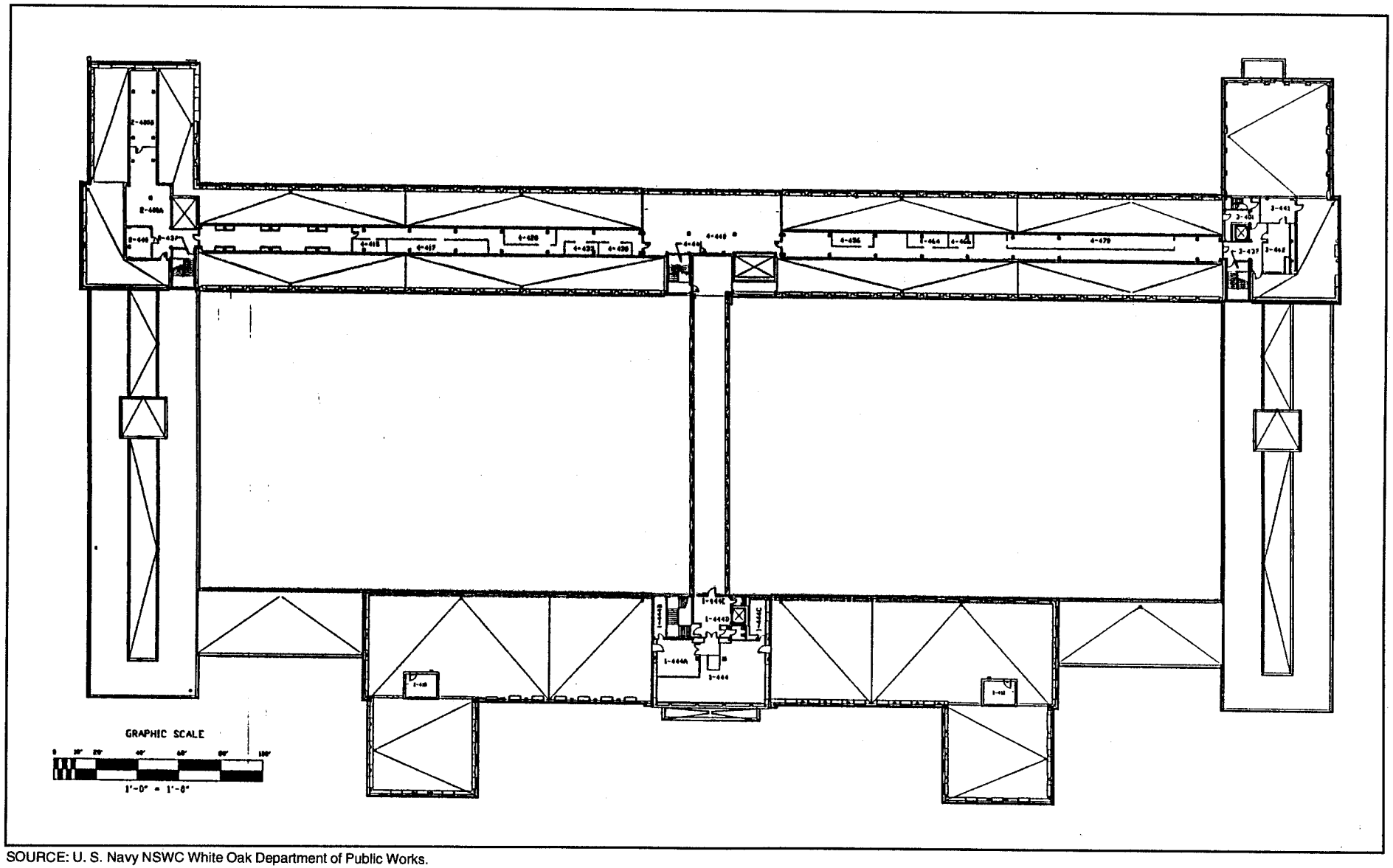
SOURCE: U. S. Navy NSWC White Oak Department of Public Works.

SURVEY NO. M:33-14, BUILDING 1-4 (SECOND FLOOR)
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND



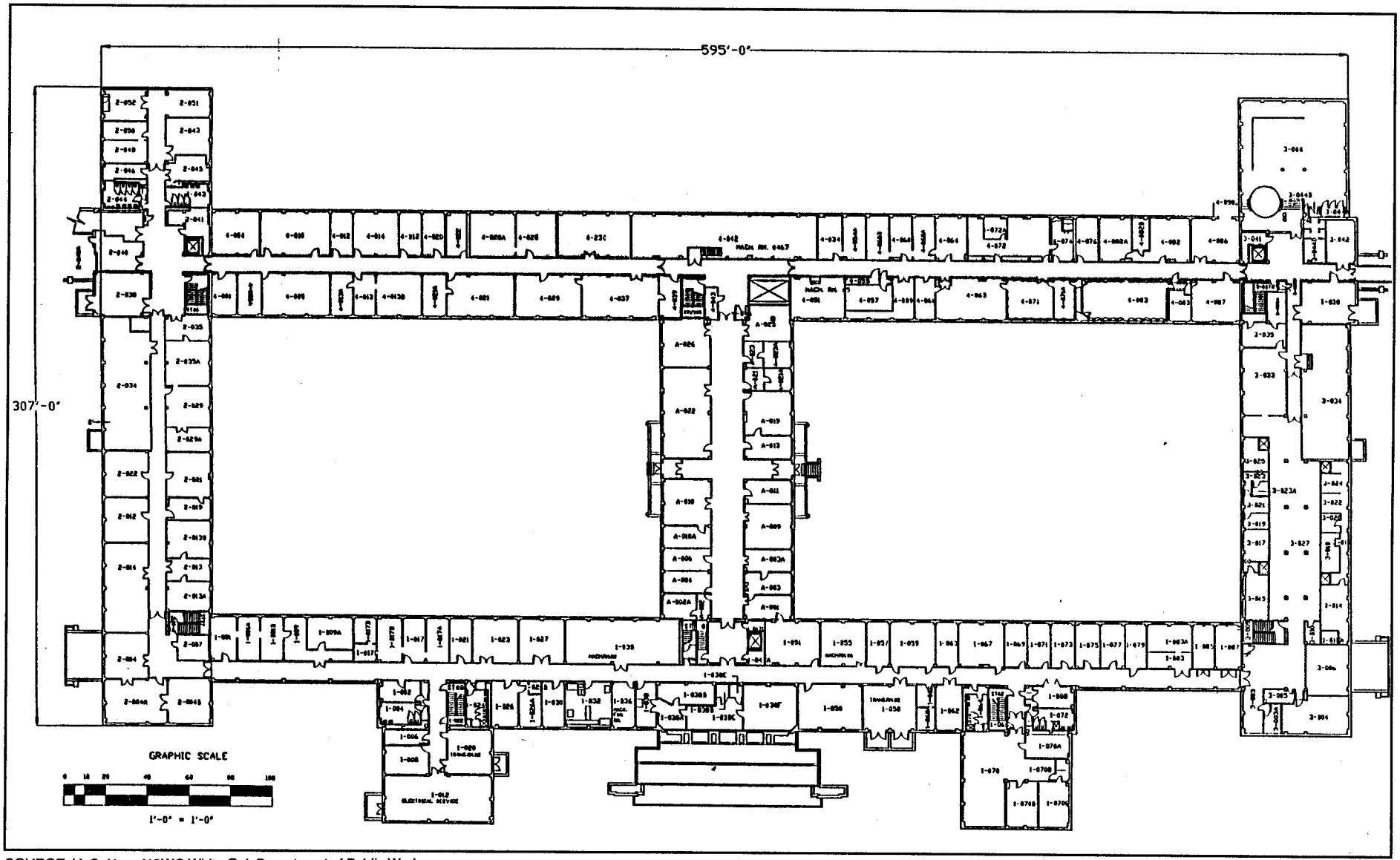
SOURCE: U. S. Navy NSWC White Oak Department of Public Works.

SURVEY NO. M:33-14, BUILDING 1-4 (THIRD FLOOR)
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND



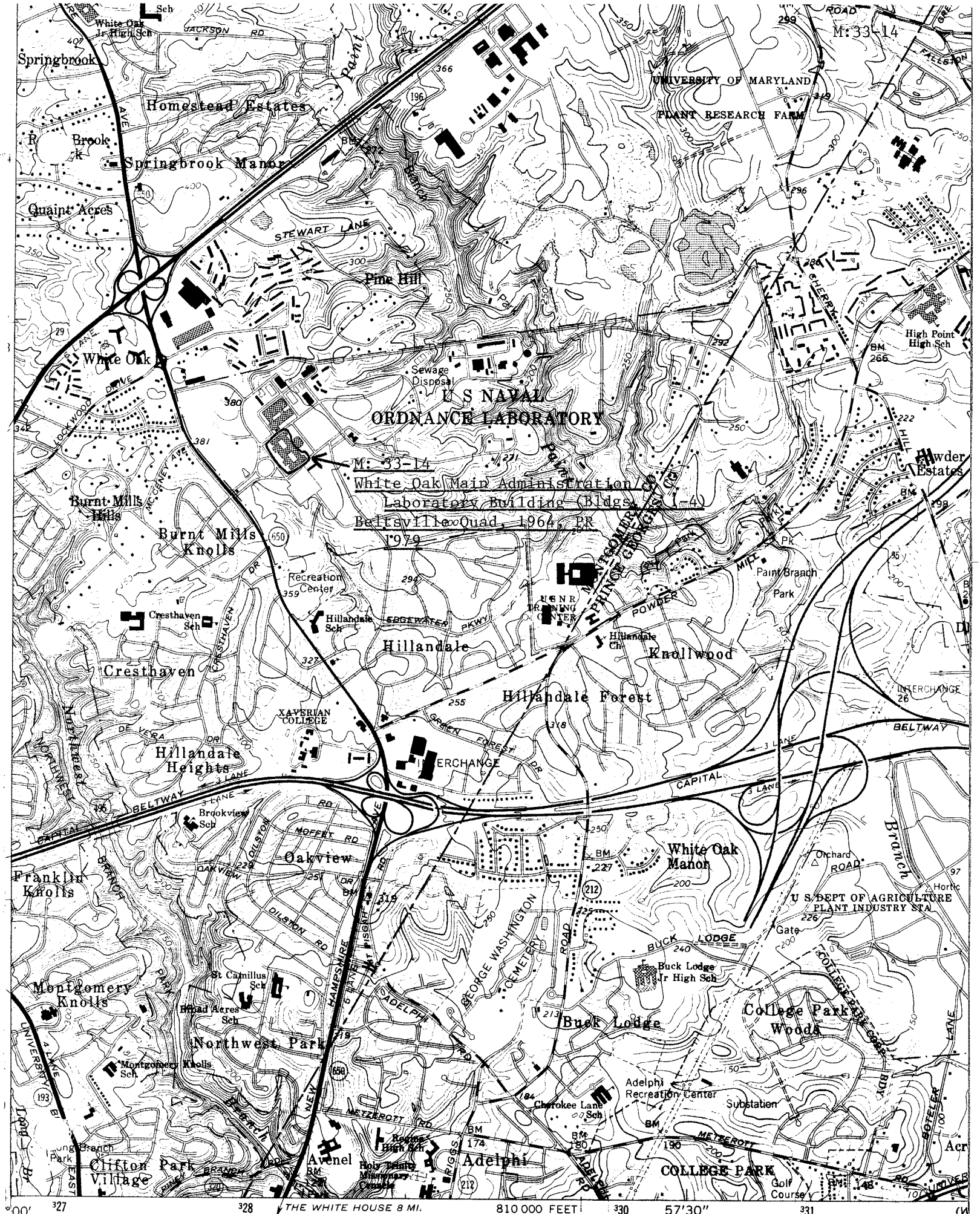
SOURCE: U. S. Navy NSWC White Oak Department of Public Works.

SURVEY NO. M:33-14, BUILDING 1-4 (FOURTH FLOOR)
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND



SOURCE: U. S. Navy NSWC White Oak Department of Public Works.

SURVEY NO. M:33-14, BUILDING 1-4 (BASEMENT)
NSWC WHITE OAK, SILVER SPRING, MONTGOMERY COUNTY, MARYLAND



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, USSCS, and WSSC

0 M:33-14

NSWC White Oak Laboratory

Administration/Laboratory Complex

Building No 1

Montgomery Co. MD

Ecology and Environment Inc

Nov. 1993

US NAVY EFA Chesapeake

looking ENE

West elevation

main entrance to Building 1

26 1'33

(1)

. M:33-14
. NSWC - White Oak Laboratory
Administrative/Laboratory Complex
. Building No. 1
. Montgomery Co., MD
Ecology & Environment, Inc
Jan. 1994
US NAVY - RFA-Chesapeake
Main facade - looking SE at
West elevation.

(2)

MA: 33-14

NSWC - White Oak Laboratory
Administration / Laboratory Complex
Building No. 1.
Montgomery Co. MD
Ecology & Environment Inc
Jan 1994

US Navy - EFA Chesapeake

Main facade - looking ENE
main entrance
west elevation

26 134

(3) M: 33-14
NSWC - White Oak Laboratory
Administrative / Laboratory Complex
Building No. 1
Montgomery, Co. MD.
Ecology & Environment Inc.
Jan 1994
US Navy. EFA Chesapeake
Lockn. ESE
West elevation of northern ell.

MD-33-14

NSWC White Oak Laboratory

Administrative/Laboratory Complex

Montgomery Co. MD.

Ecology and Environment Inc.

Jan. 1994

U.S. NAVY EFA Chesapeake

Interior view of

Representative hall

28 82
1.9.4

M.33-14
NSWC White Oak Laboratory
Administrative/Laboratory Complex
Building No. 1
Montgomery Co. MD
Ecology & Environment Inc
Jan 1994
U.S Navy - EFA - Chesapeake
Looking SW Interior view of
main entrance

26 194

(6) 11:33-14

NSWC - White Oak Laboratory

Administrative / Laboratory Complex

Building No 1

Montgomery Co. MD

Ecology & Environment Inc

Jan 1994

US Navy EFA - Chesapeake

Cooking SE - Cannon and handicapped ramp at south side main entrance

(5)

M:33-14
NSWC White Oak Laboratory
Administrative/Laboratory Complex
Building No 2
Montgomery Co MD
Ecology and Environment Inc.
Nov 1993
NS NAVY - EFA Chesapeake

Looking W
S elevation of Building 2

(E)

M-33-14

NSWC White Oak Laboratory

Administrative / Laboratory Complex

Building No 3

Montgomery Co MD

Ecology & Environment Inc.

Nov 1993

US Navy - EFA - Chesapeake

Looking WNW to S elevation

of Bldg 3

9

M: 33-14
NSWC. White Oak Laboratory
Administration/Laboratory Complex
Buildings 2 and 4
Montgomery Co. MD
Ecology & Environment, Inc
Nov 1993
US NAVY - EFA Chesapeake
Looking W at East elevation
of Building 2 w/ Building 4 on left.

3

(10)

M:33-14

NSWC White Oak Laboratory

Administrative/Laboratory Complex

Building No 3

Montgomery Co. MD

Ecology & Environment Inc

Nov 1993

US NAVY - EFA CHesapeake

Looking N Southern and eastern elevation of east end of building

(11)

M: 33-14

NSWC White Oak Laboratory

Administration/Laboratory Complex

Building 3 & 4

Montgomery Co MD

Ecology & Environment Inc

Nov 1993

US NAVY EFA-CHESAPEAKE

Looking SW - N elevation of Building 3 and West elevation of Building 4