

The background of the entire page is an aerial photograph of Washington, D.C., showing a mix of urban development, green spaces, and water bodies. A semi-transparent map overlay is visible on the left side, featuring a circular pattern of concentric lines and radial lines, resembling a compass rose or a map grid.

ARMED FORCES RETIREMENT HOME - WASHINGTON MASTER PLAN

Final Environmental Impact Statement

November 2007

Prepared by

Armed Forces Retirement Home

3700 North Capitol Street, NW
Washington, DC 20011-8400

In Cooperation with the:

National Capital Planning Commission

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AFRH's goal is to generate sufficient revenue to continue providing the best housing and comprehensive support services in an independent living retirement community for America's Armed Forces retired enlisted personnel, and have the ability to develop future facilities for their changing population.

To achieve this goal, AFRH-W is implementing a financial strategy that will:

- Create financial net growth and stability for its Trust Fund;
- Generate additional revenues to meet the continuous capital improvement and day-to-day operating needs of AFRH-W; and
- Reduce AFRH-W's reliance on variable and unpredictable revenue sources.

The magnitude of AFRH's immediate capital requirements (\$366 million), projected future capital needs for new facilities, and the recent availability of special land sales/lease authority to benefit the AFRH Trust Fund (24 USC 411(e)(3)) has led AFRH to focus on a range of land development alternatives to meet its need. AFRH has never had direct Congressional appropriations, and has been directed by Congress and the Department of Defense to manage its Trust Fund and operate as a self-sufficient non-appropriated agency. It is highly unlikely that AFRH will become an appropriated agency, especially given the magnitude of funding required for its capital program, existing budget deficits, and current military spending priorities. AFRH has in the past sought legislation that would incrementally increase returns on its Trust Fund by allowing AFRH to invest in vehicles other than Treasury bills, as it is currently limited to, but no legislation of this type has been passed; even if it were, returns would not likely be sufficient to meet AFRH's immediate capital requirements. In addition, even if AFRH were to receive additional funding, a Master Plan would still be needed to guide development on AFRH-W. For these reasons, AFRH's need is best met by considering the land development alternatives and developing a Master Plan for AFRH-W.

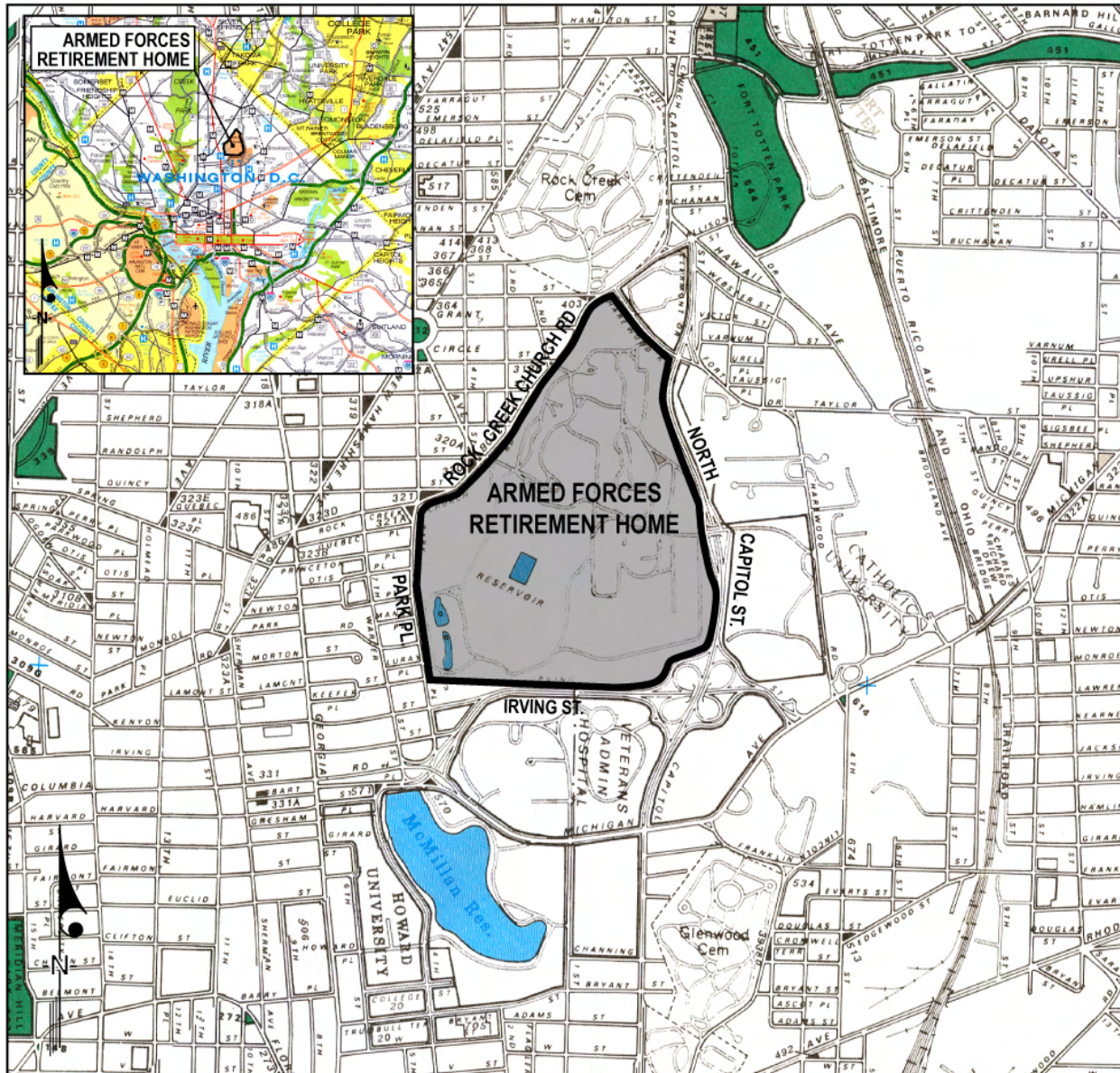


Figure 1-1: Regional Location Map

EIS to provide a baseline for assessing the magnitude of environmental effects of the action alternatives.

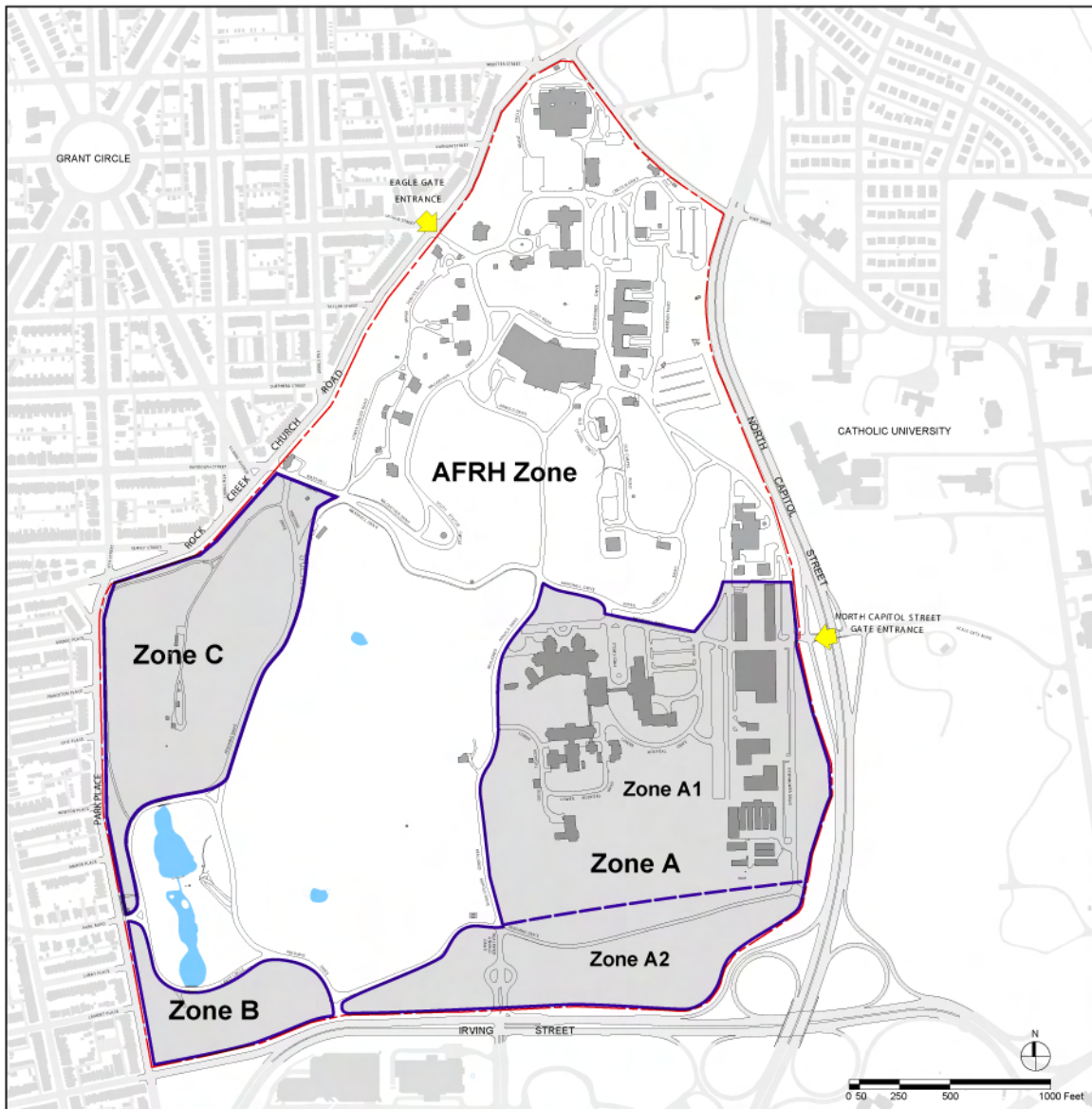


Figure 2-1: Proposed Development Zones

2.1.2 Alternative 2

Under Alternative 2, AFRH-W would be developed to accommodate the development outlined in Table 2-2. The program and density were derived from private sector concepts to redevelop portions of the site for medical and research and development purposes, given the site's proximity to the medical area to the south and planned expansions on the part of some of those hospitals.

Table 2–2: Alternative 2 Proposed Development

	Gross Square Footage
Institutional	2,550,000
Residential	992,000
Hotel/Conference Center	200,000
Research & Development	3,200,000
Retail	130,000
Medical	1,600,000
TOTAL	8,672,000

Figure 2–2 delineates the distribution of development uses under Alternative 2 on the four AFRH-W development zones. Table 2–3 provides a summary of types of development, building heights in each zone, gross building square footage, and proposed number of parking spaces.

- the AFRH Zone is designated for institutional uses and new residential units compatible with AFRH-W operations. There would be moderate in-fill development within these Zones.
- Zone A1 is designated for educational use.
- Zones A2 and B would be developed with medical uses compatible with the Washington Hospital Center development south of Irving Street.
- Zone C would contain residential development compatible with the residential development west of Rock Creek Church Road. This zone would also potentially include retail development to serve the residential areas.

Table 2–3: Alternative 2 – Summary of Development Areas

	Height (# of Floors)	Gross Square Footage	Parking Spaces
the AFRH Zone	4 to 6	392,000	742
Institutional		350,000	700
Residential		42,000	42
Zone A1	6 to 8	5,680,000	11,200
Hotel/Conference Center		200,000	200
Research & Development		3,200,000	6,400
Institutional		2,200,000	4,400
Retail		80,000	200
Zone A2 & B	6 to 8	1,600,000	3,200
Medical		1,600,000	3,200
Zone C	6 to 8	1,000,000	1,075
Residential		950,000	950
Retail		50,000	125
<i>New Parking Demand for Grant Building and King Hospital Complex</i>			538
TOTAL		8,672,000	16,755

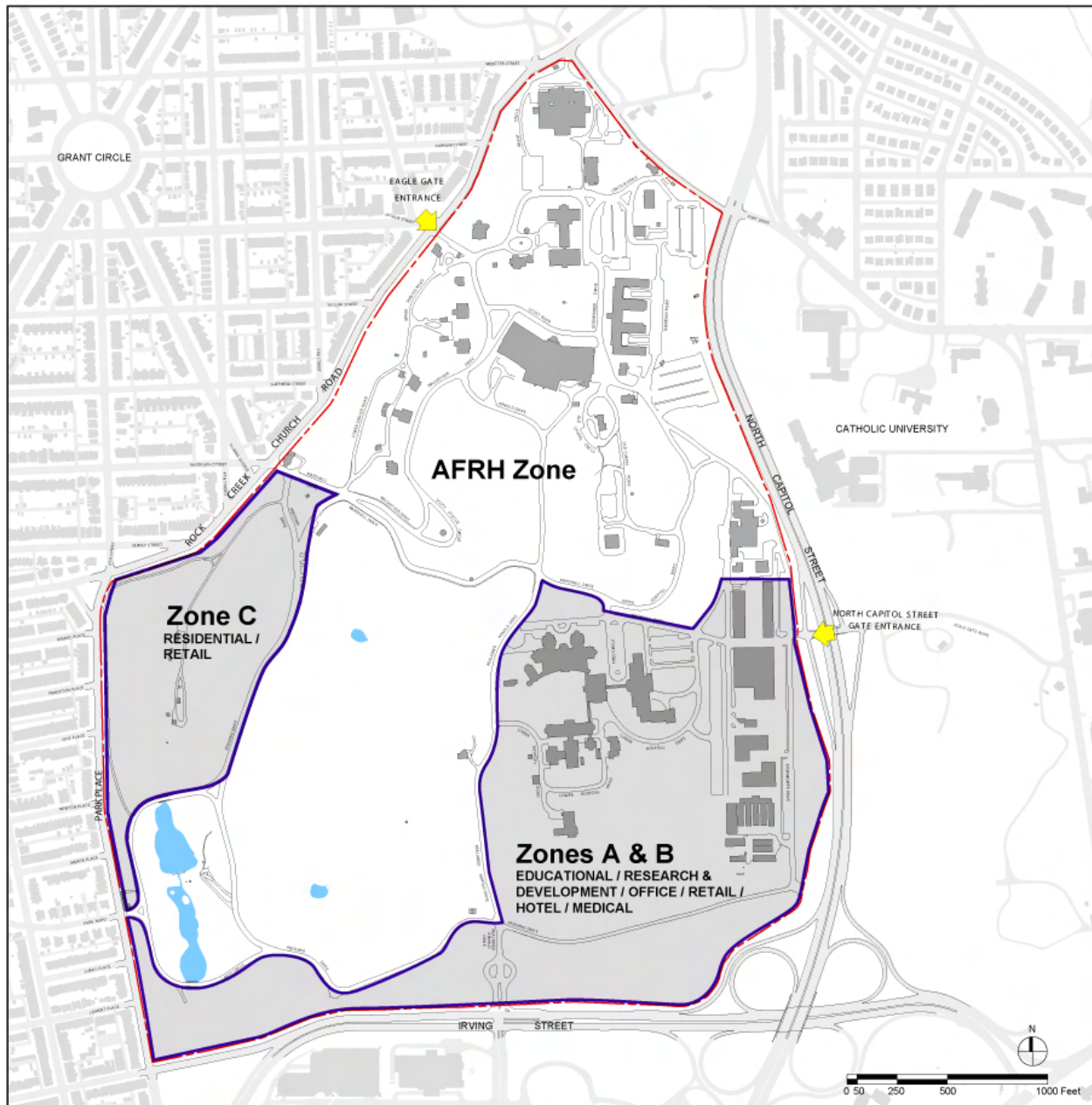


Figure 2–2. Alternative 2 Development Zones

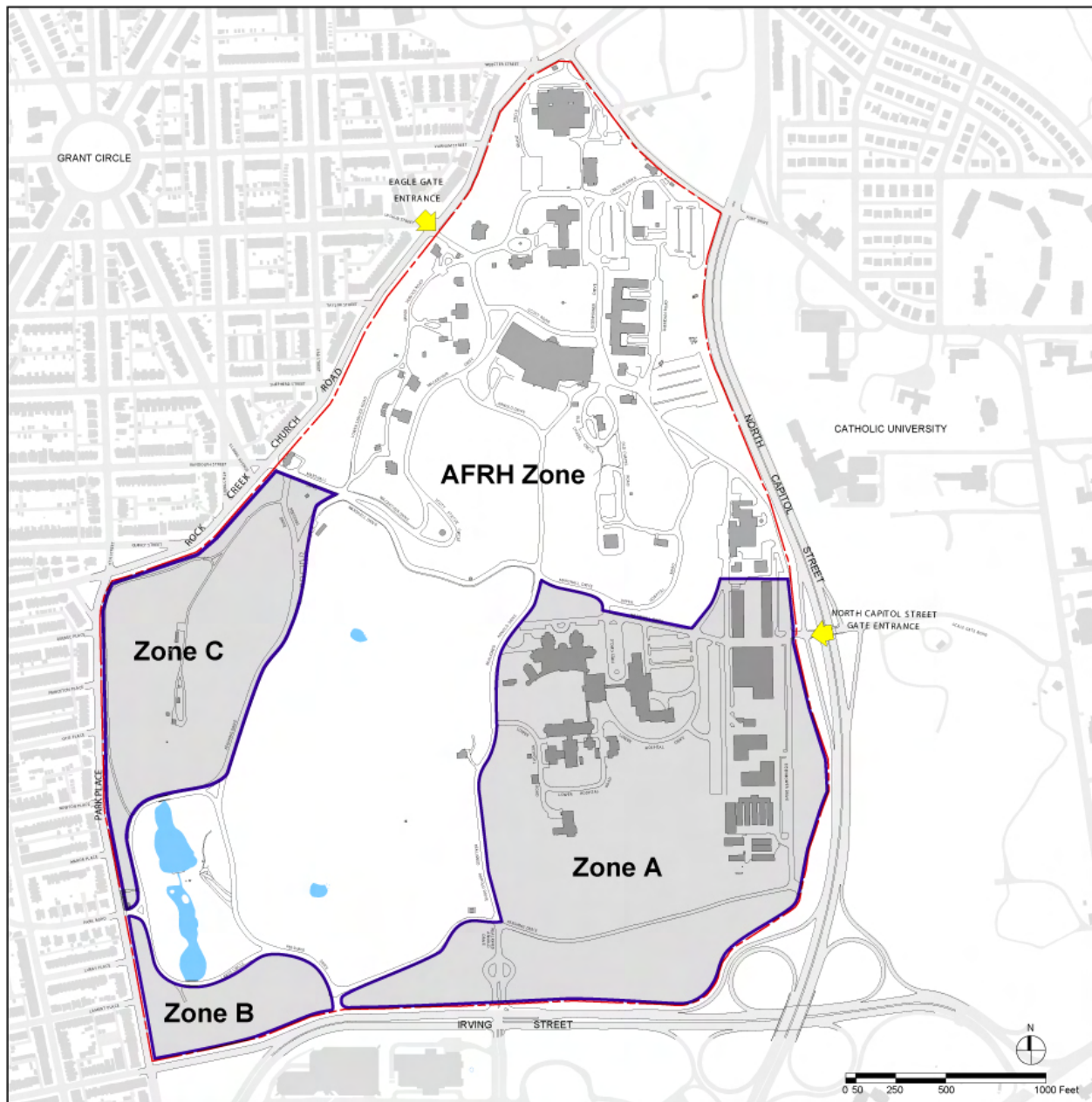


Figure 2-3. Alternative 3A, 3B, and 3C Development Zones

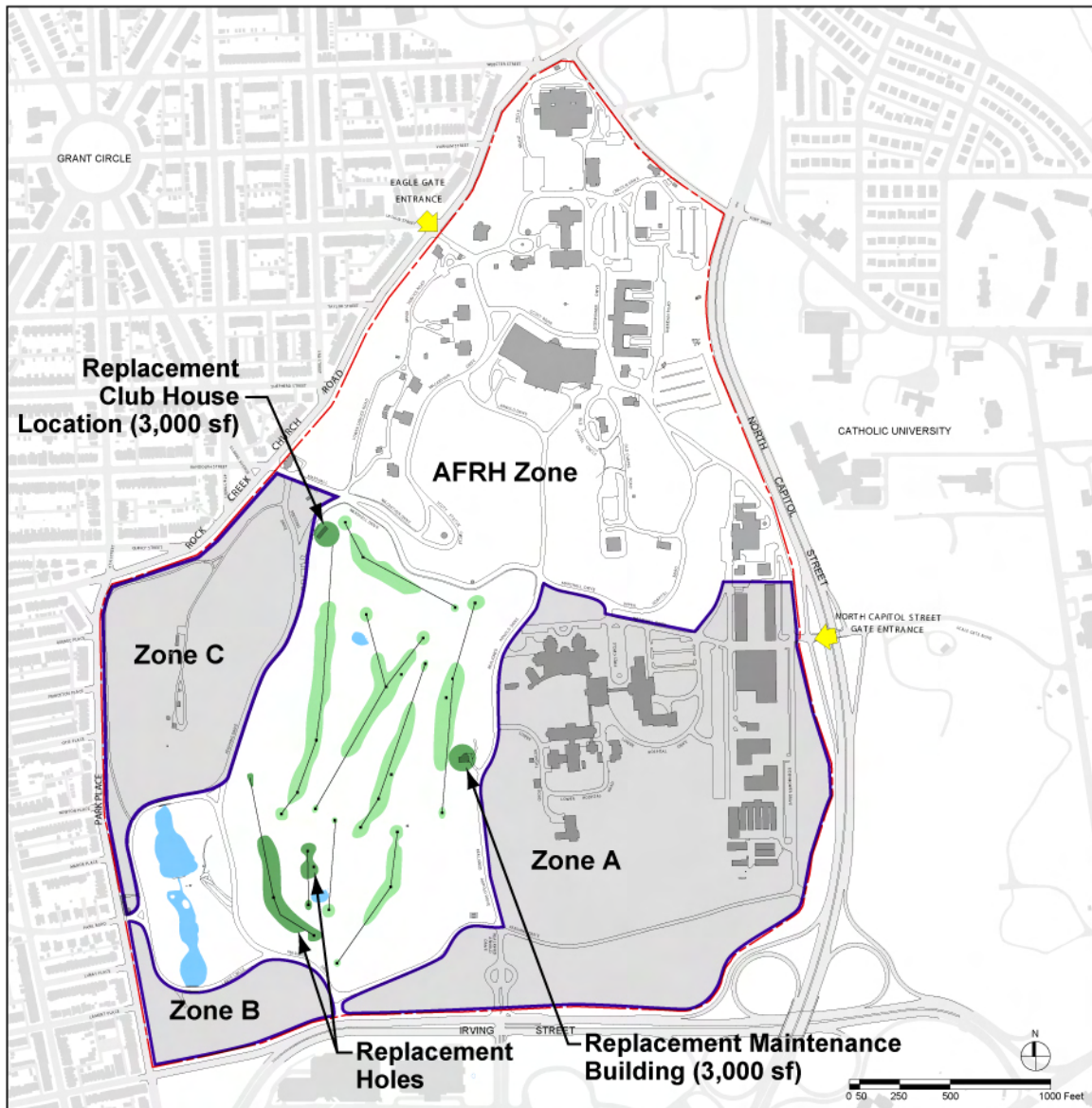


Figure 2-4. Golf Course Reconfiguration



Figure 2-5: Alternative 4 Development Zones

2.2 Preferred Alternative

AFRH has identified Alternative 3A as the Preferred Alternative for redevelopment of AFRH-W. This alternative best meets the needs of AFRH and the objectives of the Master Plan including:

- Maximize development of AFRH-W while maintaining the historic character of the site and retaining significant existing open space;

- Provide development uses that are complementary to the Home;
- Ensure that AFRH's facilities are conveniently located for its residents and that there is room for new AFRH facilities on the north campus;
- Provide for the security of the residents of the Home;
- Encourage the rehabilitation and reuse of historic buildings;
- Integrate the landscape and the built form; and
- Where appropriate, respect the character of the adjacent communities and integrate the new development into the city fabric.

The preferred alternative is nearly the least dense of the alternatives. It best addresses issues raised through community review, Section 106 consultation and National Capital Planning Commission actions on the draft Master Plan. From the revenue generating perspective, it includes a diverse program of uses, thus allowing for flexibility to adjust to changes in market conditions and demand for particular uses.

2.3 Alternatives Eliminated from Detailed Study

As discussed previously, AFRH has focused on the land development option for a number of reasons. The magnitude of the immediate and projected future capital needs, the direction from Congress and Department of Defense to manage its trust fund and to be self-sufficient, the unlikelihood of obtaining appropriations, and absence of legislation that would allow AFRH to seek higher returns on its Trust Fund monies. However, several additional alternatives were assessed to determine whether they were feasible and whether they would meet the project's purpose and need and objectives. Alternatives that were considered in response to suggestions from stakeholders and were not included for further study are described below.

Seek Congressional Appropriations - AFRH has never had direct Congressional appropriations, and has been directed by Congress and the Department of Defense to manage its Trust Fund and operate as a self-sufficient non-appropriated agency. It is highly unlikely that AFRH will become an appropriated agency, especially given the magnitude of funding required for its capital program, existing budget deficits, and current military spending priorities. AFRH has in the past sought legislation that would incrementally increase returns on its Trust Fund by allowing AFRH to invest in vehicles other than Treasury bills, as it is currently limited to, but no legislation of this type has been passed; even if it were, returns would not likely be sufficient to meet AFRH's immediate capital requirements. In addition, even if AFRH were to receive additional funding, a Master Plan would still be needed to guide development on AFRH-W. For

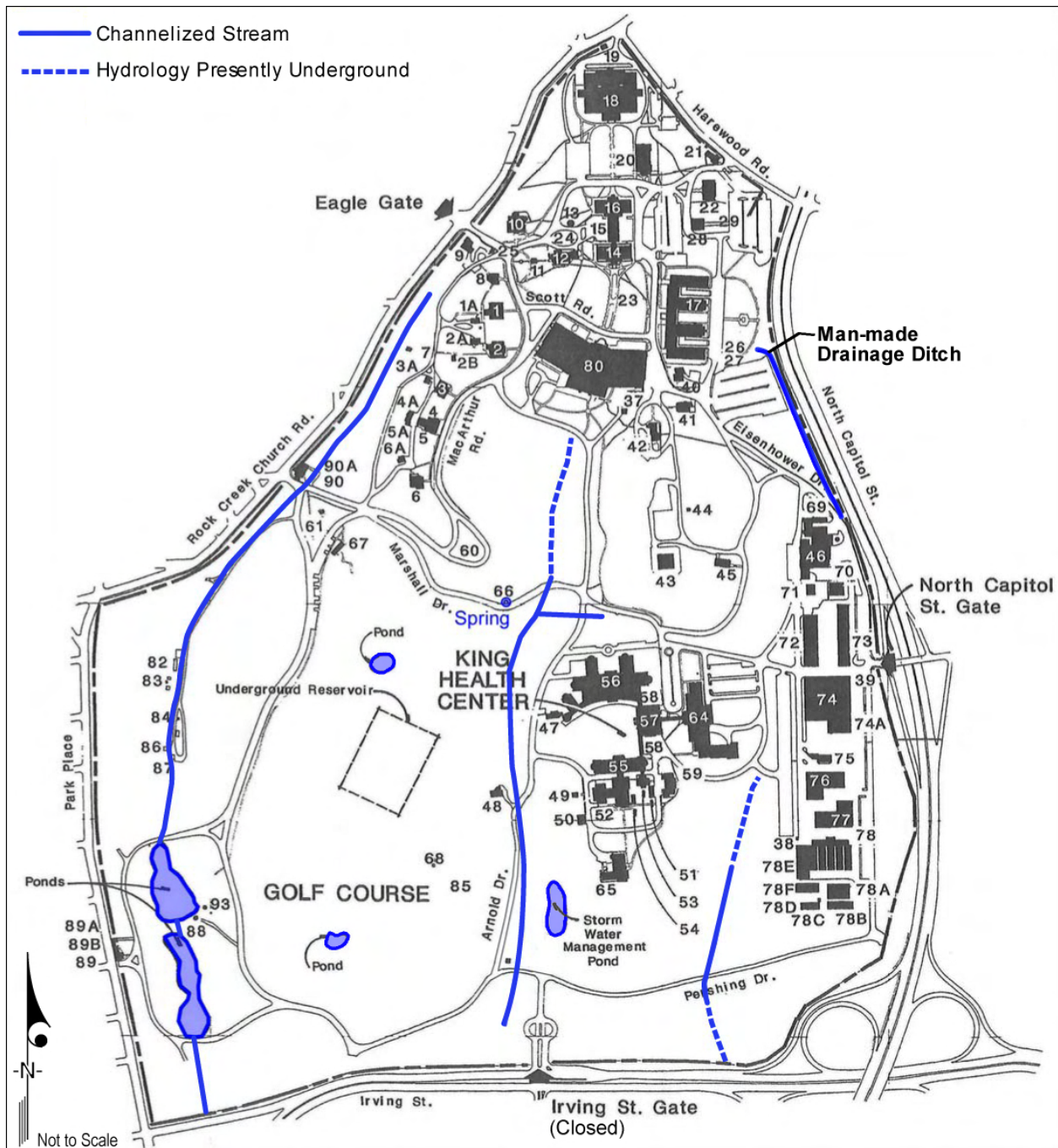


Figure 3-1: Water Resources

3.1.3 Biological Resources

3.1.3.1 Terrestrial Biota

Wildlife

Due to AFRH-W's proximity to highly developed residential and urban areas, wildlife within the project area is limited to those species that have adjusted to human activity. Common wildlife species within the project area are primarily those associated with open spaces and forest edge habitats. During site investigations in 2004 and 2005, the following species were observed: gray squirrel (*Sciurus carolinensis*), red-tailed hawk (*Buteo jamaicensis*), and northern mockingbird (*Mimus polyglottos*). Ducks and geese (*Anatidae*) were also observed near the on-site ponds and in the vicinity of the golf course. Species that may also be present on site include mammals such as white-tailed deer (*Odocoileus virginianus*), fox (*Vulpes vulpes*), and groundhogs (*Marmota monax*), as well as migratory birds.

Vegetation

Much of AFRH-W is covered with landscaped green space, specifically in the golf course area and the north portion of AFRH-W. Large expanses of native and nonnative vegetation are present within AFRH-W. Table 3-1 provides a list of native tree species that were recorded during a vegetation inventory of AFRH-W in 2004.

Table 3-1: Native Tree Species Observed at AFRH-W

Location Observed	Common Name	Scientific Name
Northern Region	willow oak	<i>Quercus phellos</i>
	white oak	<i>Quercus alba</i>
	northern red oak	<i>Quercus rubra</i>
	chestnut oak	<i>Quercus prinus</i>
	scarlet oak	<i>Quercus coccinea</i>
	red maple	<i>Acer rubrum</i>
	eastern red cedar	<i>Juniperus virginiana</i>
	American basswood	<i>Tilia americana</i>
	eastern white pine	<i>Pinus strobus</i>
	mockernut hickory	<i>Carya alba</i>
	bigleaf magnolia	<i>Magnolia macrophylla</i>
	blackgum	<i>Nyssa sylvatica</i>
	tuliptree	<i>Liriodendron tulipifera</i>



Figure 3-2: Site Vegetation

3.2 Social Environment

3.2.1 Population and Housing

Population data from the 2000 Census were used to determine current population numbers for the area. AFRH-W is located within Census Tract 23.02. Census tracts immediately adjacent to the site include 23.01, 24, and 32 (see Figure 3-3). Table 3-2 provides a summary of the demographic characteristics of all the census tracts.

The predominant race in the census tract, including AFRH-W and the tracts adjacent to the project area, is black, with percentages higher than the District in all tracts except 23.02 where AFRH-W is located. The percentage of white individuals in the study area is highest in Census Tract 23.02 (29.9 percent), with the other census tracts ranging from 4.4 percent to 7.3 percent. The percentage of Asian individuals (1.6 percent) is also highest in Census Tract 23.02, followed by 0.5 percent in Census Tract 23.01, 0.4 percent in Census Tract 24, and 0.2 percent in Census Tract 32. Approximately 2.4 percent of individuals in Census Tract 23.02 are recorded in the Census as some other race; 4.4 percent in 23.01; 6.6 percent in Census Tract 24; and 8.4 percent in Census Tract 32. The percentage of individuals who are two or more races is very similar for all census tracts in the study area.

The Hispanic/Latino population the study area is similar to the District as a whole. Hispanic/Latinos comprise approximately 8.1 percent of the population in Census Tract 23.01, 3.9 percent of the population in Census Tract 23.02, 12.6 percent of the population in Census Tract 24, and 15.0 percent of the population in Census Tract 32. Approximately 7.9 percent of the District population is Hispanic/Latino.

The median household income for Census Tract 23.02 is higher than that of the District and the areas adjacent to AFRH-W. The median incomes in the project area are slightly lower for Census Tracts 24 and 32 than the total for the District and slightly higher for Census Tracts 23.01 and 23.02. The percentage of individuals living below the poverty level in the study area is slightly higher in Census Tracts 23.02 and 32 than in the District as a whole and is slightly lower in Census Tracts 23.01 and 24.

There are 587 housing units in Census Tract 23.02. Of these, 3.4 percent were vacant, 29.3 percent were owner-occupied, and 70.7 percent were renter-occupied. In Census Tract 23.01 there are 1,154 housing units, 9.2 percent of which are vacant. Approximately 72.5 percent were owner-occupied and 27.5 percent were renter-occupied. There are 1,369 housing units in Census Tract 24, 8.6 percent of which are vacant.

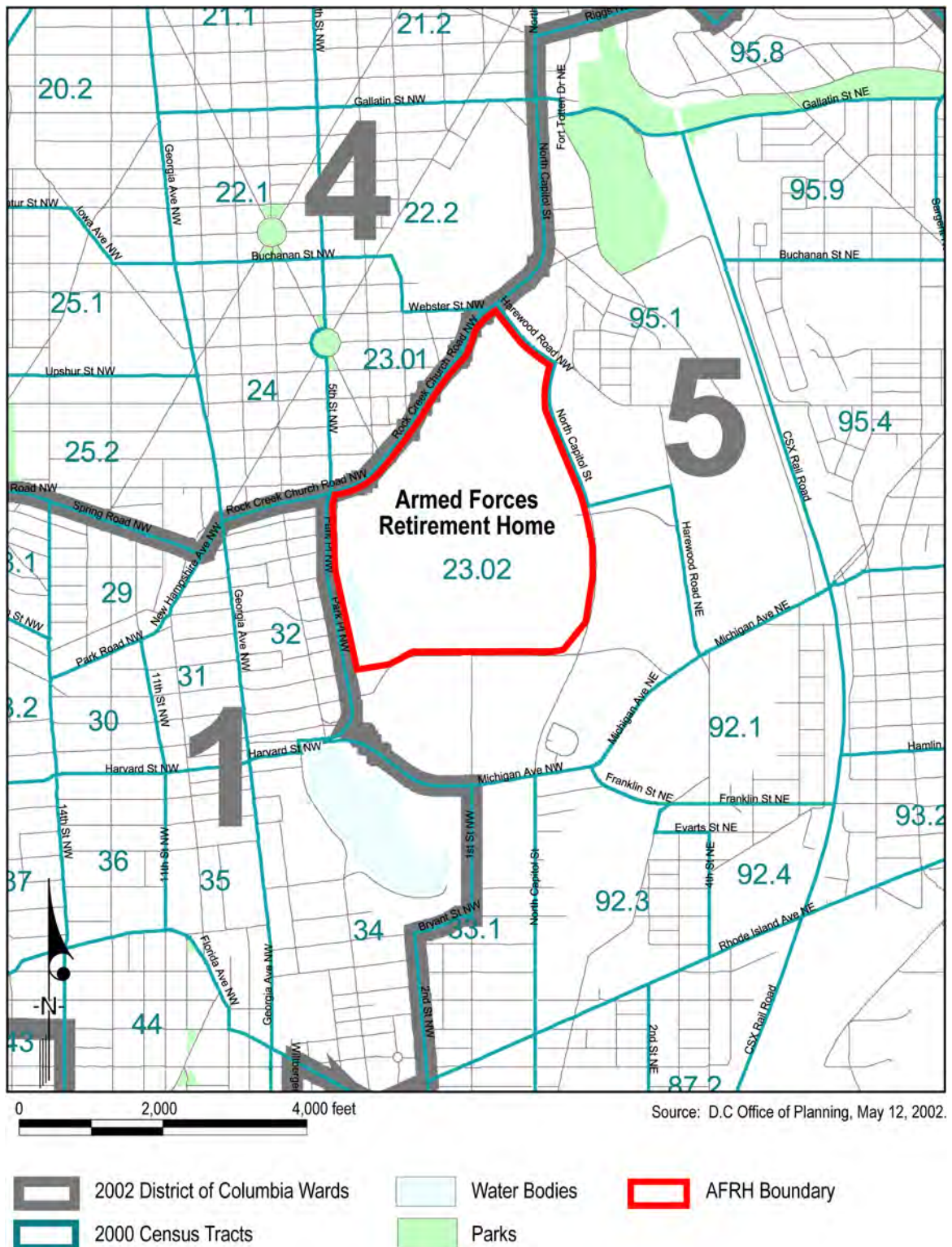


Figure 3-3: Census Tracts in AFRH-W Study Area

Table 3-2: Study Area Demographics

	Washington, DC	Census Tract 23.01	Census Tract 23.02	Census Tract 24	Census Tract 32
Population	572,059	2,993	1,347	3,580	4,480
Race					
White	30.8%	4.4%	29.9%	7.3%	5.6%
Black	60.0%	88.1%	63%	82.8%	82.1%
American Indian	0.3%	0.3%	0	0.1%	0.6%
Asian	2.7%	0.5%	1.6%	0.4%	0.2%
Hawaiian	0.1%	0.1%	0	0	0
Other Race	3.8%	4.4%	2.4%	6.6%	8.4%
Two or More Races	2.4%	2.2%	2.5%	2.7%	3.2%
Hispanic/Latino	8.0%	8.1%	3.9%	12.6%	15.0%
Median Household Income	\$40,127	\$44,069	\$49,519	\$37,304	\$31,662
Poverty Status	20.2%	18.3%	23.9%	15.1%	27.7%

Approximately, 63.3 percent of the occupied housing units in this census tract are owner-occupied and 36.7 percent are renter-occupied. In Census Tract 32, there are 1,787 housing units; 13 percent of these are vacant; 55.6 percent of the occupied units are owner-occupied; and 44.4 percent are renter-occupied.

AFRH-W houses approximately 1,200 retired military personnel.

Private residential areas consisting primarily of two- and three-story row houses are located northwest and southwest of AFRH-W.

Brookland Elementary School – 1150 Michigan Avenue NE
Cardozo Senior High School - 1300 Clifton Street, NW
Macfarland Middle School – 4400 Iowa Avenue NW
Park View Elementary School – 3560 Warder Street NW
Roosevelt Senior High School – 4301 13th Street NW
Tri-Community Public School – 3700 N. Capitol Street NW

Universities

Catholic University – 620 Michigan Avenue NE
Trinity University – 125 Michigan Avenue NE

Service Facilities

Washington Hospital Center – 110 Irving Street NW
Children’s National Medical Center – 111 Michigan Avenue NW
National Rehabilitation Center – 102 Irving Street NW
Washington, DC Veterans Affairs Medical Center – 50 Irving Street NW
Petworth Library – 4200 Kansas Avenue NW
Capitol Area Food Bank – 645 Taylor Street NE
U.S. Post Office, Lammond-Riggs Station – 6200 N. Capitol Street NW

Recreational Facilities

Edgewood Recreation Center – 3rd and Evarts Street NE
Parkview Recreation Center – Warder Street and Princeton Place NW



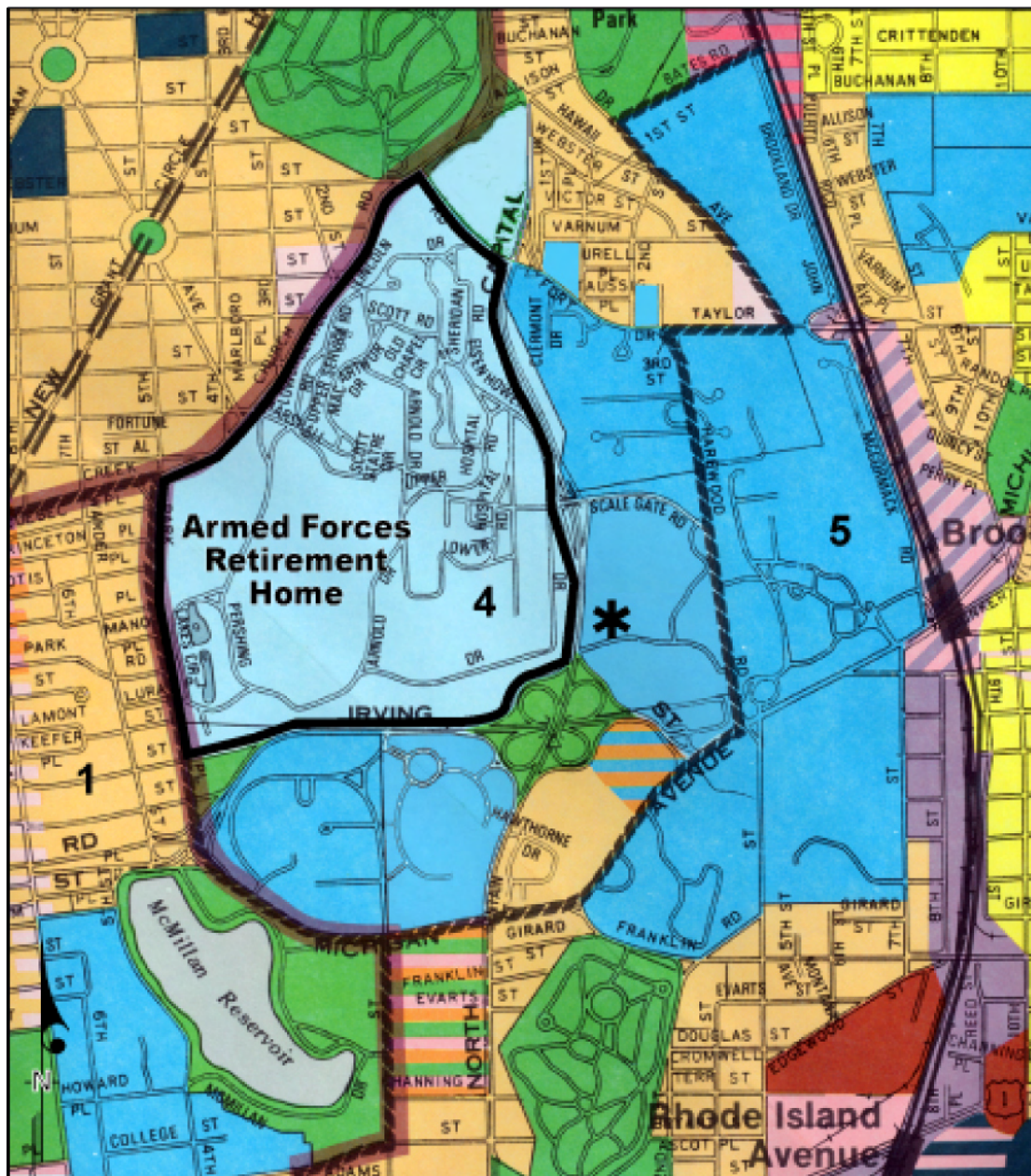
- | | | |
|--|------------------------------------|--|
| 1 Holy Family Church and Ukrainian Catholic Shrine | 11 Parkview Elementary School | 21 Cardozo High School |
| 2 Jerusalem Church of the Lord | 12 Roosevelt Senior High School | 22 Fifth Police District |
| 3 Victory Church of Jesus Christ | 13 Tri-Community Public School | 23 Police Station - ROC North |
| 4 Emanuel Faith Tabernacle | 14 Catholic University | 24 Engine Company 17 |
| 5 The Basilica | 15 Trinity University | 25 Engine Company 14 and Medic Unit 14 |
| 6 Rock Creek Church | 16 Washington Hospital Center | 26 Howard University |
| 7 Arc of DC - School | 17 Washington DC VA Medical Center | |
| 8 Archbishop Carroll High School | 18 Petworth Library | |
| 9 Brookland Elementary | 19 Capitol Area Food Bank | |
| 10 Macfarland Middle School | 20 US Post Office | |

Base Map Source: DC Metro.

Figure 3-4: Community Facilities and Services

Zoning

AFRH-W is zoned GOV, Government (see Figure 3-6, Zoning). As a federal property, AFRH-W is not subject to local zoning regulations. The area immediately west of AFRH-W is zoned R-4. The areas to the east and south of the site are zoned R-5-A. Areas north of the site are zoned R-5-A, R-3, and C-1. See Table 3-3 for the definitions of each zoning district. On Aug 2, 2007, GSA signed an MOU with DC Office of Planning and NCPC to establish a hybrid approach for controls over the mixed use redevelopment of a portion of AFRH-W.

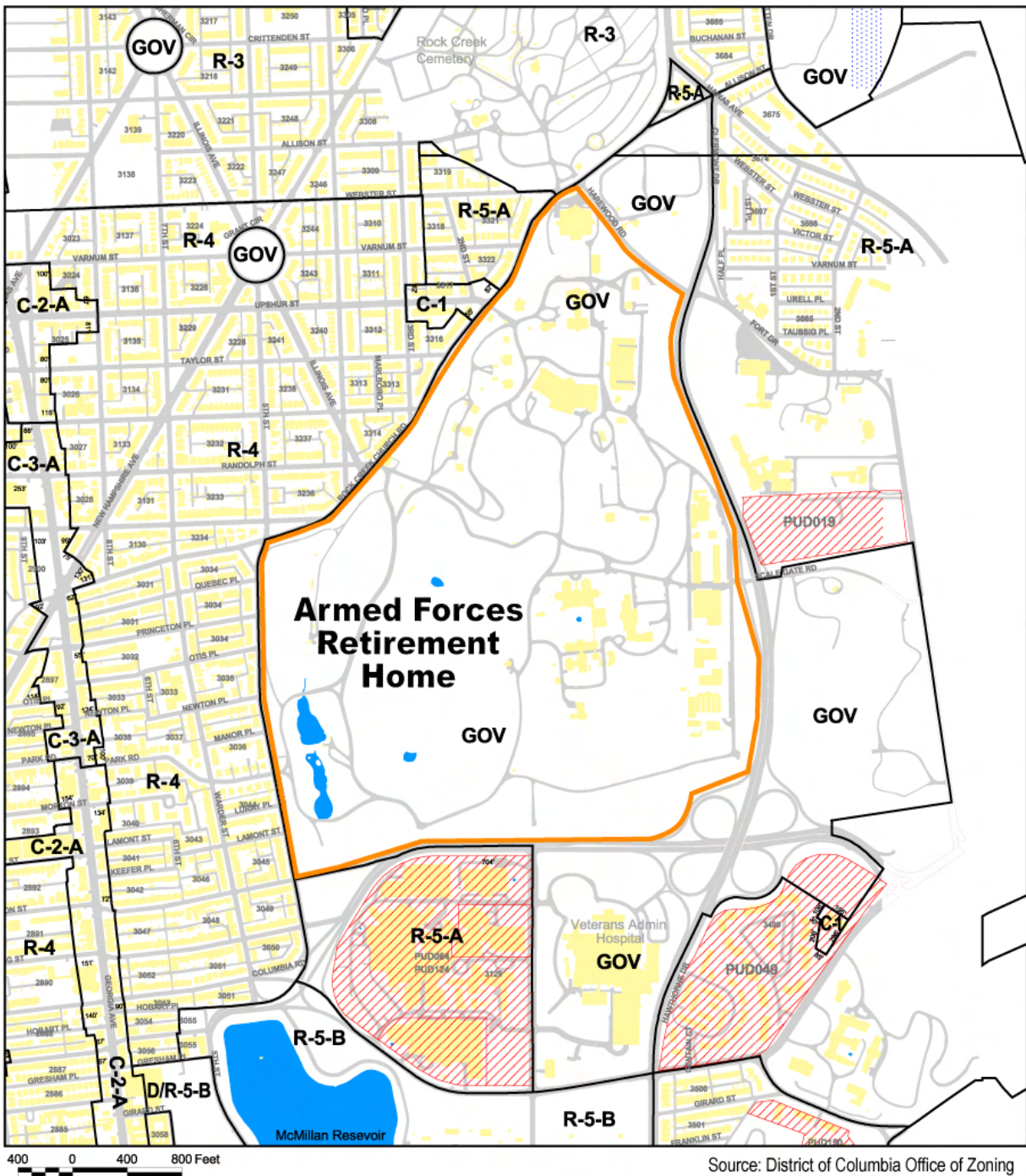


Source: District of Columbia Office of Planning, January 2002.

Figure 3-5: Land Use

Table 3-3: Zoning Districts and Definitions

Zoning District	Summary Definition
R-4	Permits matter-of-right development of single-family residential uses (including detached, semi-detached, row dwellings, and flats); churches and public schools with a minimum lot width of 18 feet; a minimum lot area of 1,800 square feet and a maximum lot occupancy of 60 percent for row dwellings, churches and flats; a minimum lot width of 30 feet and a minimum lot area of 3,000 square feet for semi-detached structures; a minimum lot width of 40 feet and a minimum lot area of 4,000 square feet and 40 percent lot occupancy for all other structures; and a maximum height of three stories/40 feet. Conversions of existing buildings to apartments are permitted for lots with a minimum lot area of 900 square feet per dwelling unit (DC Office of Zoning, 2004).
R-5-A	Permits matter-of-right development of single-family residential uses for detached and semi-detached dwellings, and with the approval of the Board of Zoning Adjustment, new residential development of low density residential uses including row houses, flats, and apartments to a maximum lot occupancy of 40 percent and 60 percent for churches and public schools; a maximum floor area ratio (FAR) of 0.9; and a maximum height of three stories/40 feet. Conversion of existing buildings to flat or apartment use is permitted as a matter of right provided all other provisions of the zoning regulations are complied with.
R-3	Permits matter-of-right development of single-family residential uses (including detached, semi-detached, and row dwellings); churches and public schools with a minimum lot width of 20 feet; a minimum lot area of 2,000 square feet and a maximum lot occupancy of 60 percent for row dwellings; a minimum lot width of 30 feet and a minimum lot area of 3,000 square feet and 40 percent lot occupancy for semi-detached structures; and a minimum lot width of 40 feet and a minimum lot area of 4,000 square feet and 40 percent lot occupancy for detached structures; and a maximum height of three stories/40 feet.
C-1	Permits matter-of-right neighborhood shopping and low density development to a maximum lot occupancy of 60 percent for residential use; a maximum FAR of 1.0; and a maximum height of three stories/40 feet.

**Zoning**

- C-1 Neighborhood Shopping
- C-2-A Community business center-low moderate density
- C-3-A Medium bulk major business and employment
- R-3 Row dwellings and flats
- R-4 Row dwellings and flats
- R-5-A Low density apartments
- D Diplomatic

GOV Major Federal Tracts

- Streets
- PUDs
- Water
- Buildings

Figure 3-6: Zoning

attention to the work of Surgeon General of the Army and Board president General Joseph K. Barnes. The agricultural activities of AFRH-W played a continuing role in its history. Although the original goal of self-sufficiency was never achieved, the agricultural activities were a key component of AFRH-W's character from its beginnings through 1951. Agricultural enterprises, dating to the Riggs' era, were expanded from one to three farms in the 1870s and by the twentieth century, the Board of Commissioners operated AFRH-W as a model urban agribusiness. Known as a site of agricultural experimentation, the dairy farm was a nationally significant resource between 1907 and 1951 for its tuberculosis-free herd (which received the first USDA certificate awarded for such) and its use as an experimental facility to test breeding techniques and feed storage. The Board of Commissioners discontinued the dairy and farming activities in 1951 when it transferred several large parcels of land from the southern portion of the property to other federal agencies for the construction of two major hospital facilities.

3.3.2 Archeological Resources

A Phase 1A Archeological Assessment was conducted on AFRH-W in October 2004. The study consisted of background research including review of the archeological and historical site files of the DCHPO, soil surveys of the U.S. Department of Agriculture (USDA), as well as local cultural resource management reports and the National Register of Historic Places (NRHP). Additional research was conducted at the National Archives in Washington, where relevant historic documents including maps and published histories were examined and incorporated in the Phase 1A Archeological Assessment.

This archeological study found that, despite its central location and historic significance, the extensive construction and grading activities associated with the operation of the Soldiers' Home during the 19th and 20th centuries has greatly altered many areas within AFRH-W. However, there are four previously identified historic archeological resources on the site: site of a post-1873 cross-gable, wood-frame building; site of the Corlise Cottage; site of the 1876 Barnes building (now demolished); and site of a possible late 19th-century building. Particular sections of AFRH-W may yet retain intact archeological remains dating to the prehistoric and historic periods. Therefore, AFRH-W has an overall moderate probability to contain intact cultural remains.

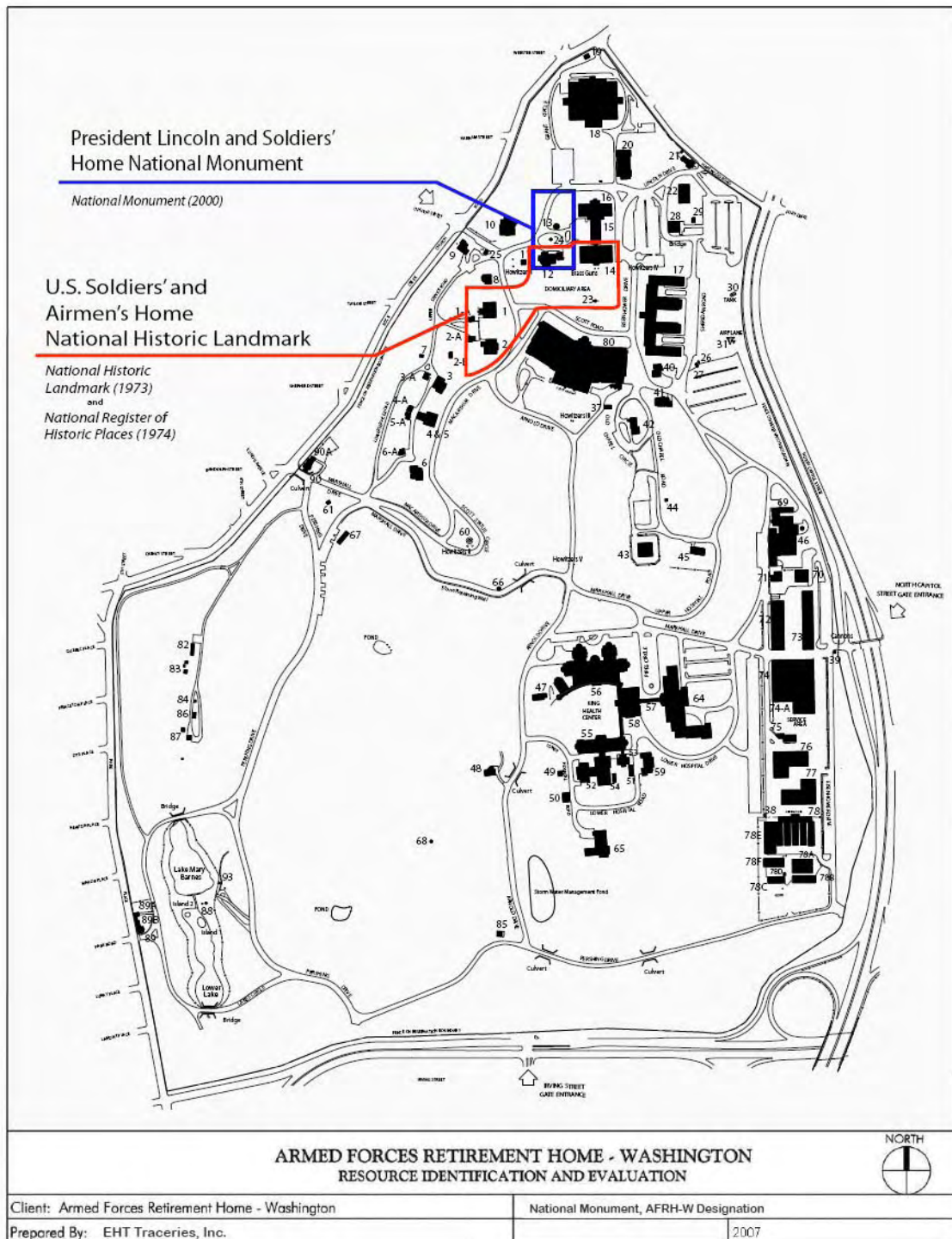


Figure 3-7: U.S. Soldiers' and Airmen's Home National Historic Landmark and U.S. Soldiers' and Airmen's Home Historic District (blue outline)

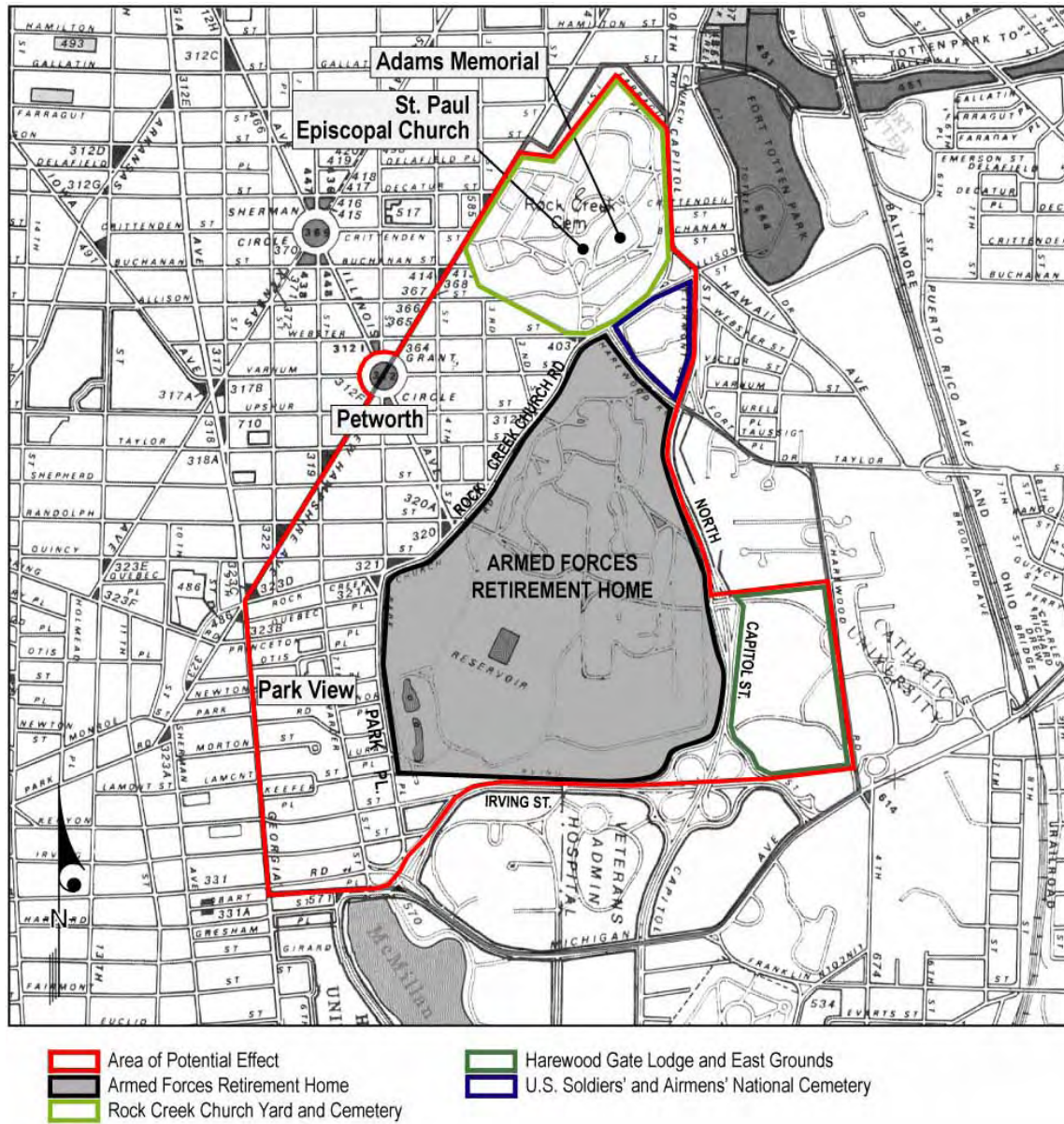


Figure 3-8: Area of Potential Effects

National Historic Landmark

On November 7, 1973, in recognition of AFRH-W's outstanding national significance, the federal government designated a portion of the property as a National Historic Landmark (NHL). This designation is documented with the concomitant listing of the small area in the National Register of Historic Places.⁵ It is listed as "United States Soldiers' and Airmen's Home" and also can be found as the "United States Soldier's Home."

The designation focuses on the historical development during the initial years as illustrated through the earliest buildings at AFRH-W, but does address landscape issues and the rest of the property. The NHL recognizes four buildings at AFRH-W. These buildings, which are the first buildings occupied and/or built by AFRH, are Lincoln Cottage (Building 12), Main Building (Building 14 only - the oldest portion of the three-part Sherman Building, which is the southern portion completed in 1857 to the design of Lieutenant Barton S. Alexander), Officer's Quarters One (Building 1), and Officer's Quarters Two (Building 2) (See Figure 3-9). The boundaries adopted for the NHL are the same as those defined by the District of Columbia Historic District listing.

National Register of Historic Places

The DC SHPO determined the entire acreage of AFRH-W (known at the time as the United States Soldiers' and Airmen's Home) eligible for listing in the National Register in 1988, when the acreage exceeded 318 acres. The National Historic Preservation Act (NHPA) required that Section 106 consultations be conducted prior to the demolition of the Barnes Building and construction of an Intermediate Care Facility (ICF). During these consultations, DC SHPO, in consensus with AFRH, made the determination that the entire land area forming AFRH-W was eligible for listing in the National Register as an historic district. This determination is recorded in a staff report to the District of Columbia Historic Preservation Review Board (HPRB), acting as the State Review Board.⁶ On February 11, 1974, a portion of the property was listed in the National Register of Historic Places. The designation boundaries correspond to those of the United States Soldiers' and Airmen's Home National Historic Landmark.

⁵ National Historic Landmarks Program, *Code of Federal Regulations*, title 36, part 65, section 2(b), 2005 ed. [36 CFR §65.2(b)].

⁶ See Appendices.

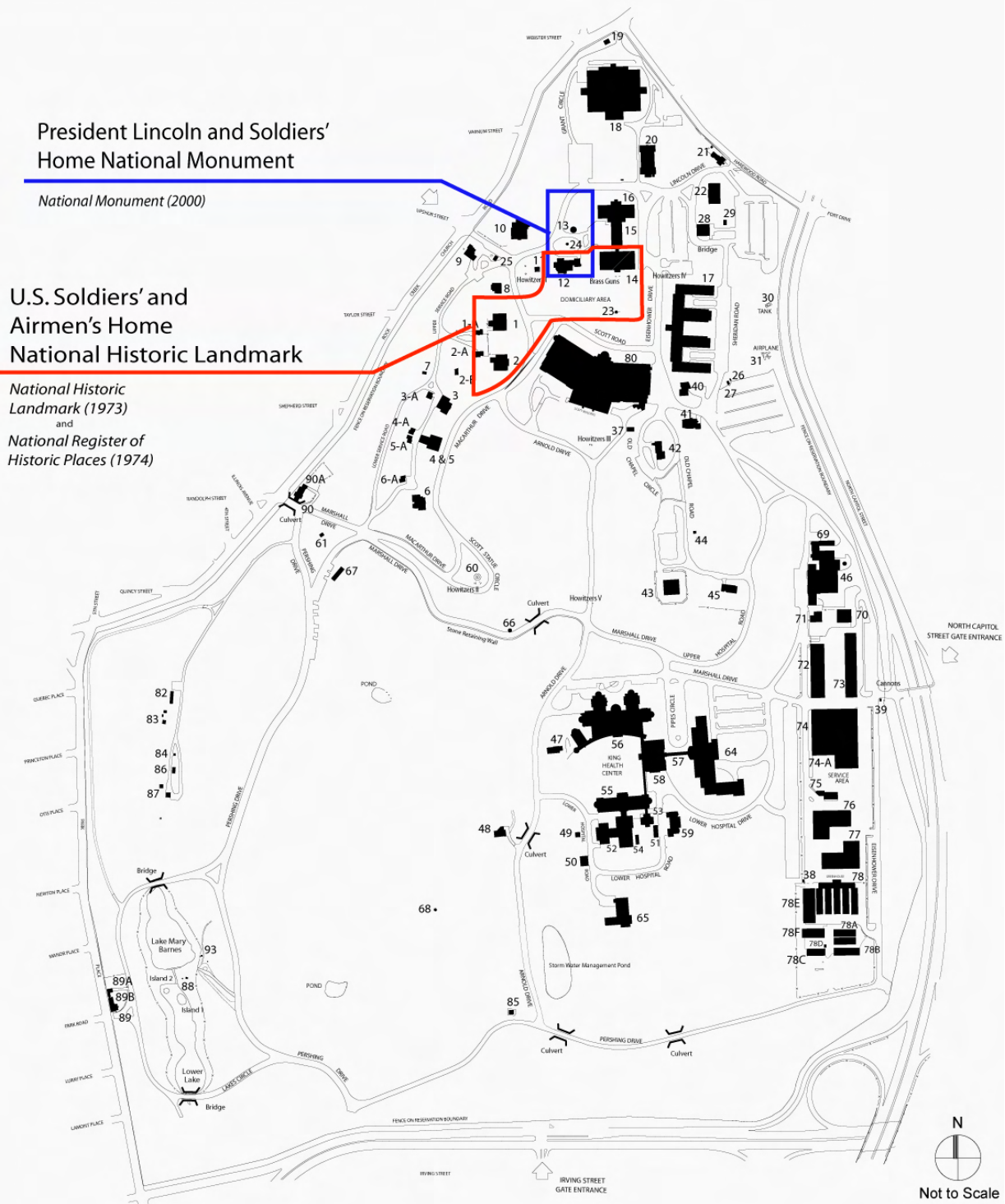


Figure 3-9: Historic Buildings within the National Historic Landmark and National Register Historic District

In October 2007, a National Register Historic District nomination was submitted for the entire 272-acre Armed Forces Retirement Home-Washington. The nomination documents that AFRH-

W is significant under the areas of Military, Politics/Government, Social History, Health/Medicine, Entertainment/Recreation, Architecture, Landscape Architecture, Agriculture, and Archeology. The two continuous periods of significance are (1) 1842 to 1851, when George Washington Riggs owned, improved, and occupied the farmland, and (2) 1851, when the Washington branch of the Military Asylum was established, to 1951 when the Board of Commissioners liquidated its remaining agricultural assets and disposed of the southern portion of the property. There are 250 resources at AFRH-W, including buildings, structures, objects, and sites. One hundred forty-four resources contribute to the areas and period of significance, while 106 resources are non-contributing.

Therefore, the Armed Forces Retirement Home-Washington Historic District is eligible for listing in the National Register of Historic Places as an historic district under National Register of Historic Places Criteria:

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

National Monument

President William Jefferson Clinton, in a public proclamation signed July 7, 2000, declared Anderson Cottage (Lincoln Cottage, Building 12) as a national monument to be known as the “President Lincoln and Soldiers’ Home National Monument” in recognition of its outstanding national significance.⁷ The national monument consists of a 2.27-acre rectangular area

⁷ Presidential Proclamation, “President Lincoln and Soldiers’ Home National Monument, Proclamation 7329,” *Federal Register* 65, no. 135 (July 2000): 43673. [65 FR 43673].

extending north from Anderson Cottage and including the Bandstand (Building 11) and Water Tower (Building 13).⁸

A cooperative agreement was established between the National Trust for Historic Preservation and the U.S. Soldiers' and Airmen's Home, with two modifications (2001 and 2004), that enables the two parties to share in the preservation and rehabilitation of Lincoln Cottage.⁹

AFRH and the National Trust for Historic Preservation entered into a programmatic agreement in 2005 that permits the National Trust to research and restore Lincoln Cottage, and to interpret and manage 2.3 acres that comprise the United States Soldiers' Home National Historic Landmark, including "a circa 1890 stone water tower, a circa 1890 summerhouse, and a circa 1906 bandstand."¹⁰

The *Resource Identification and Evaluation* identified contributing and non-contributing resources to the Historic District based on a Period of Significance from 1851 to 1944. The site was divided into eight Character Areas that are generally consistent with historical patterns of development of AFRH-W site (see Figure 3-10). Within these Character Areas, a total of 355 individual and site-wide resources were documented. Individual resources include buildings, structures, and objects that are self-contained resources surveyed individually on the property. Site-wide resources are either individual resources present in multiple locations on the site or Cultural Landscape features that are found throughout AFRH-W. The study identified a total of 122 contributing resources, 203 non-contributing resources, and 30 unknown resources (EHT Traceries, 2004).

⁸ The President Lincoln and Soldier's Home National Monument was created pursuant to the Antiquities Act of 1906 (*Antiquities Act of 1906*, Public Law 59-209, *U.S. Statutes at Large* 34 (1906): 225. Codified at 16 USC §431, et. seq. [34 Stat. 225; 16 USC 431]).

⁹ "Cooperative Agreement Between the National Trust for Historic Preservation and The U.S. Soldiers' and Airmen's Home," November 1999; "First Modification to Cooperative Agreement Between the National Trust for Historic Preservation and The U.S. Soldiers' and Airmen's Home)," May 2001; "Second Modification to Cooperative Agreement Between the National Trust for Historic Preservation and the Armed Forces Retirement Home (formerly The U.S. Soldiers' and Airmen's Home)," 2004. See Appendices for copies of the agreements and modifications.

¹⁰ "Programmatic Agreement Among Armed Forces Retirement Home, National Trust for Historic Preservation in the United States and the District of Columbia Historic Preservation Office Regarding the Preservation of Historic Property Pursuant to a Cooperative Agreement Between the National Trust for Historic Preservation in the United States and the Armed Forces Retirement Home," April 2005. The programmatic agreement does not explain the inconsistency between the 2.27 acres of the National Monument and 2.3 acres used in the programmatic agreement.

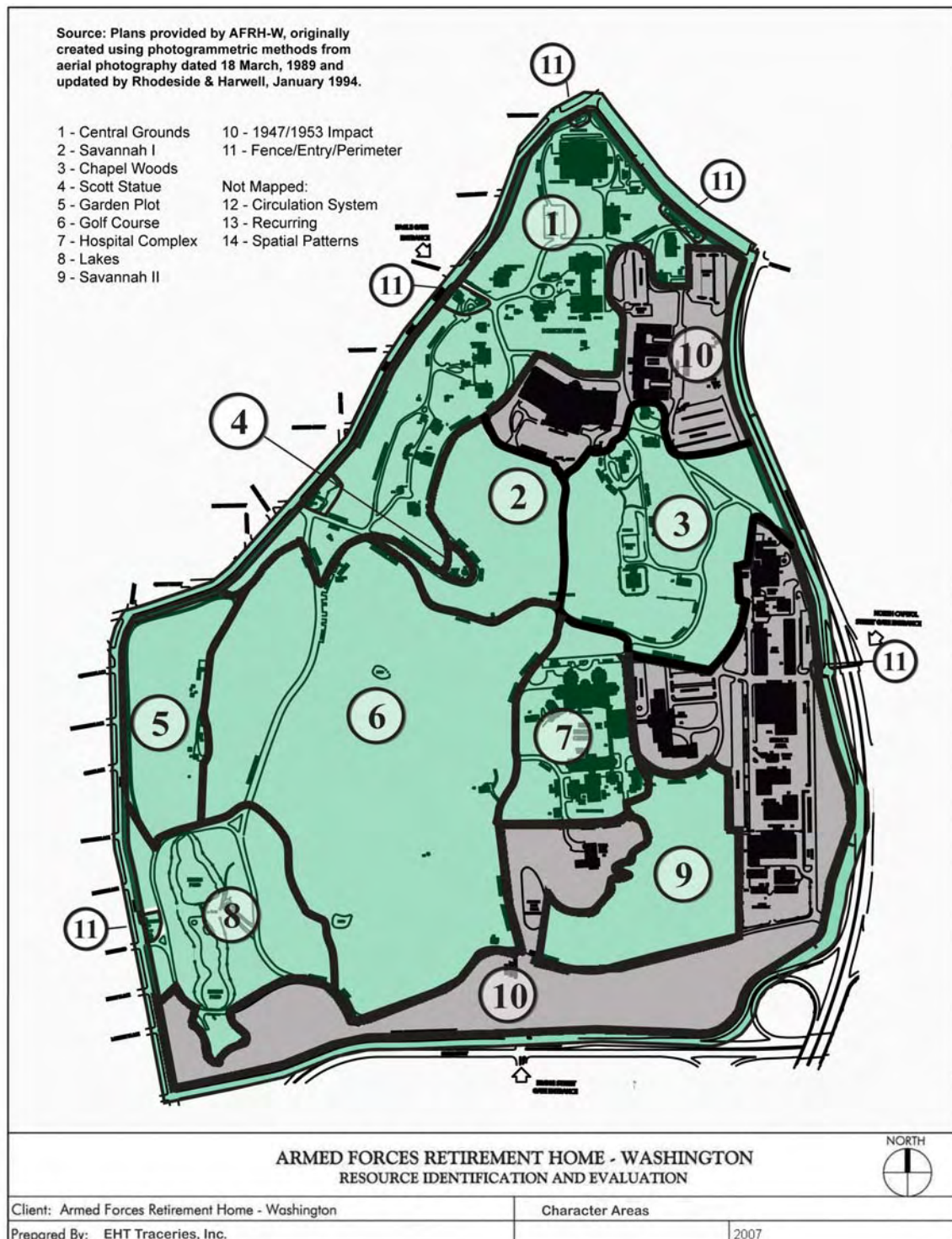
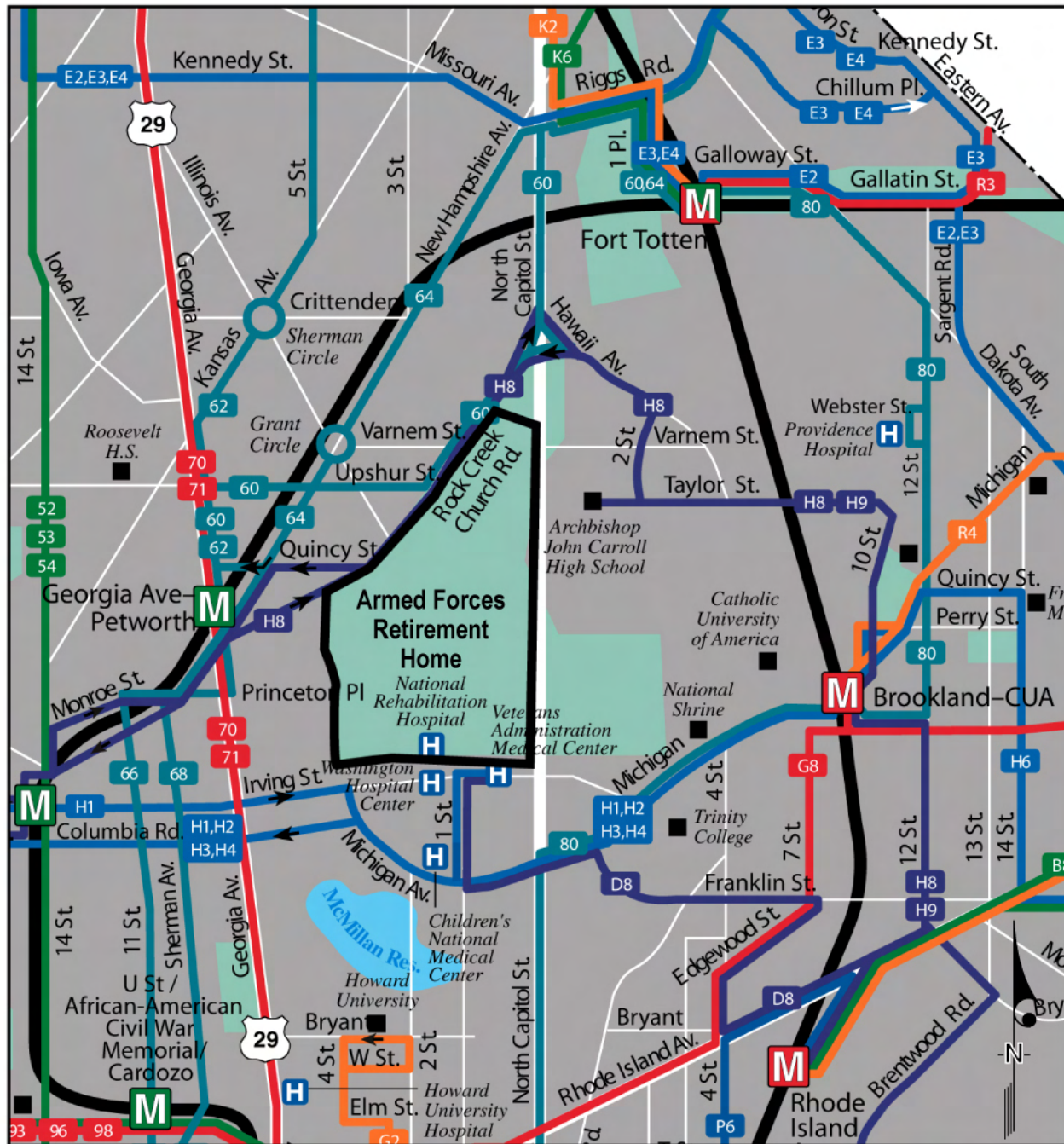


Figure 3-10: AFRH-W Character Areas



Source: DC Metro.

Source: WMATA, 2007

Figure 3-12: Metrobus and Metrorail Service in the Vicinity of AFRH-W

- The Camden Line serves downtown Baltimore through College Park, Laurel, and Jessup. There are six scheduled morning arrivals at Union Station (at 22- to 59-minute intervals), with three scheduled morning departures to Baltimore (at 25- to 58-minute intervals). There are two scheduled mid-day departures to Baltimore, and in the afternoon/early evening, there are six scheduled departures (at 26- to 55-minute intervals) and three scheduled arrivals (at 47- to 107-minute intervals).
- The Penn Line serves northeastern Maryland through Bowie, Baltimore-Washington Airport, Penn Station in Baltimore, Aberdeen, and terminates in Perryville. In the peak direction, there are 14 scheduled morning arrivals at Union Station (at 5- to 53-minute intervals) and 16 scheduled afternoon/early evening departures (at 9- to 55-minute intervals). In the off-peak direction, there are 10 scheduled morning departures for Baltimore (at 9- to 60-minute intervals) and 13 scheduled afternoon arrivals from Baltimore (at 22- to 66 minute intervals).

Virginia Railway Express operates two, weekday-only, intercity lines to Union Station. In addition, VRE tickets are honored on Amtrak weekday trains.

- The Manassas Line serves Northern Virginia through Crystal City, Alexandria, and Fairfax. There are six scheduled VRE and one Amtrak morning arrivals (at 25- to 58-minute intervals) and six scheduled afternoon/early evening and one Amtrak departures (at 20- to 40-minute intervals).
- The Fredericksburg Line serves Fredericksburg through Crystal City, Alexandria, and Woodbridge. There are six scheduled VRC two Amtrak morning arrivals (at 10- to 48-minute intervals) and six scheduled afternoon/early evening and two Amtrak departures (at 10- to 40-minute intervals).

3.5 Air Quality

New development can affect air quality in three ways: 1) through airborne dust generated by the construction process; 2) by introducing new stationary sources of pollutants, such as heating plants and boilers for new buildings; and 3) through increasing vehicular traffic to the site, which raises vehicle emission levels near the site, and possibly in the region.

3.5.1 National Ambient Air Quality Standards

The EPA, under the requirements of the 1970 Clean Air Act (CAA) as amended in 1977 and 1990, has established National Ambient Air Quality Standards (NAAQS) for six contaminants,

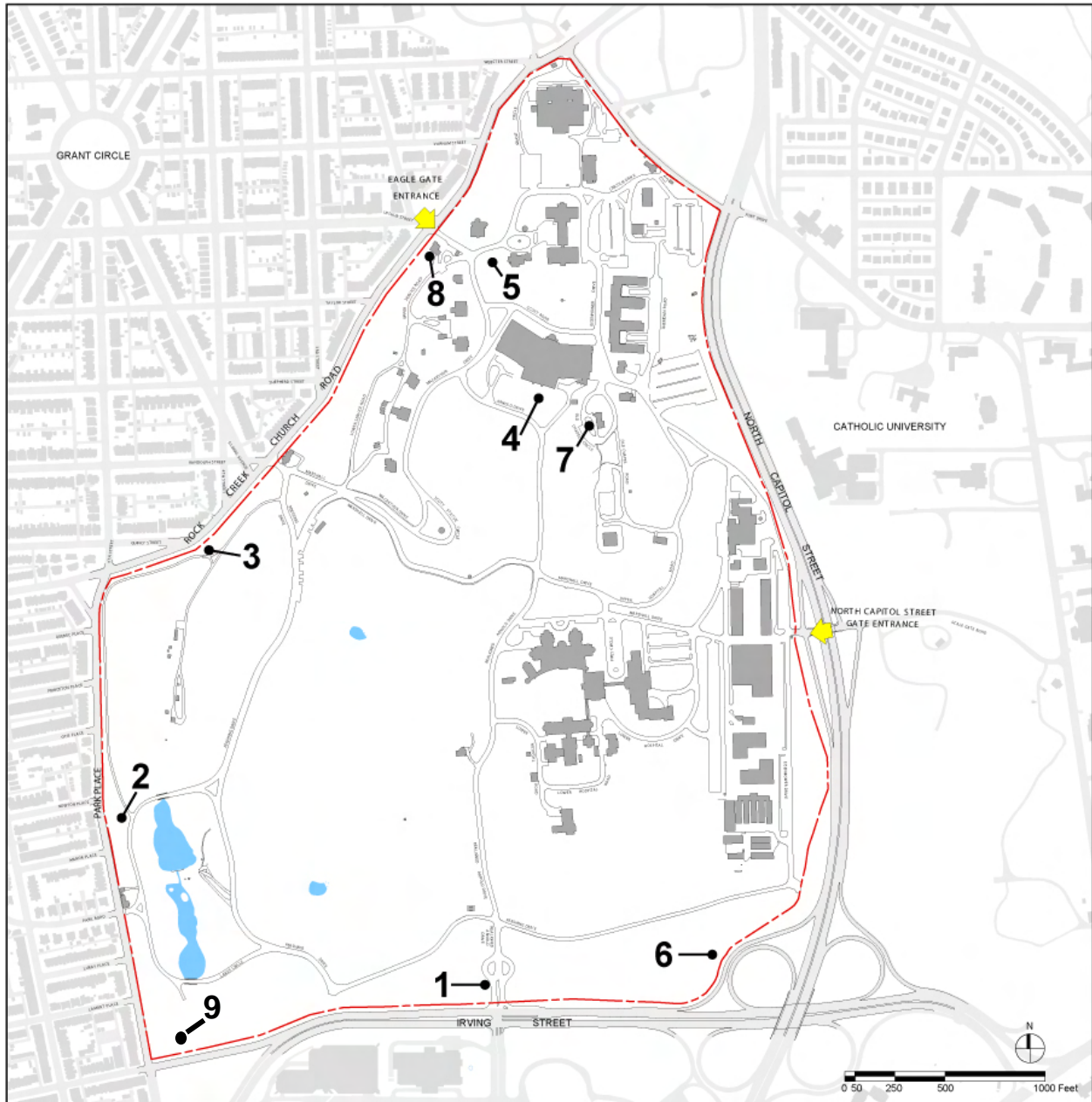


Figure 3-13: Noise Receptors

Table 3-10: Noise Level Results

Receptor	Location	Existing Noise Levels dBA
1	Irving Street Entrance	67
2	Park Place Row Homes	68
3	Rock Creek Church Road Row Homes	65
4	Scott Building Patio	51
5	Bandstand	61
6	Irving Street/North Capitol Street Interchange	59
7	Rose Chapel	51
8	Rock Creek Church Road	62

Validation. The traffic count, vehicle mix, and speed data collected during the measurements were used as input into the noise model. The model results were compared with the field noise measurements to determine whether the noise model developed for AFRH-W realistically characterized the acoustic environment of the study area. In general, model results within 3 dBA of field measurements indicate that the model is a reasonable representation of existing conditions. Differences greater than 3 dBA indicate that the model inputs require re-evaluation, potential adjustment, or additional field noise measurements.

Because traffic is the largest noise generator in the vicinity of AFRH-W, FHWA's Traffic Noise Model (TNM) Version 2.5 was used to validate measured noise levels. The FHWA model uses traffic volume data, average speeds, and vehicle type mix to generate noise level predictions. The FHWA Traffic Noise Model does not account for general community noise. Measured noise levels at receptor sites adjacent to the roadways surrounding the study area matched TNM-predicted noise levels within the 3 dBA guidelines. However, the model under-predicted noise levels for receptor sites on the interior of AFRH property. The model under prediction is attributable to these sites' distance from roadways, building mechanical systems contribution to ambient noise and to activity at the guard gate (human voices and vehicle movement not accounted for in the model). Therefore, these sites were not used for validation, but were included in the assessment to evaluate the future impact of change in traffic noise levels.

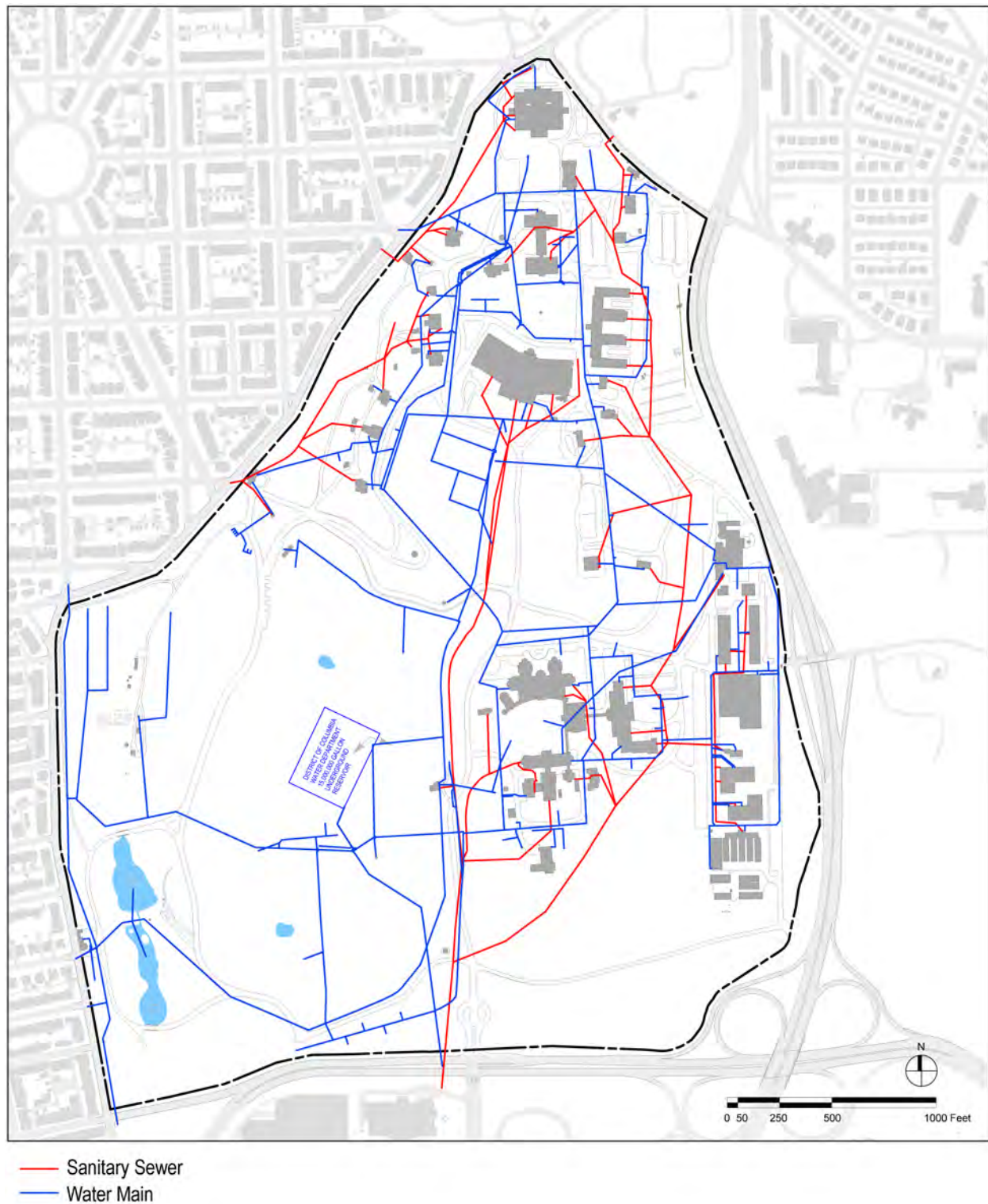


Figure 3-14: Water and Sewer

Stormwater management, quantity requirements: As per the *Stormwater Management Guidebook*, stormwater quantity controls are required to ensure that stormwater discharging off site is limited to pre-development flows. This alleviates additional load on the existing combined sewer system in an effort to reduce combined sewer overflow pollution. During short periods of intense rainfalls and when the combined sewer systems reach their capacity limits for treatment at the Blue Plains Wastewater Treatment Plant, wastewater is diverted to a discharge system without treatment. This situation is referred to as “combined sewer overflow pollution”. One of the benefits of providing stormwater management quantity protection is that it detains stormwater discharging off the site to its pre-development rate, as described earlier, and thus tends to minimize the “combined sewer overflow pollution.”

Stormwater management, quality requirements: For most storm events, studies show that the first flush, or first half-inch of rainfall, contains as much as 85 to 90 percent of surface water pollutants. For this reason, it is required that the first flush be detained and treated before leaving the site.

3.7.3 Electric Service

The Potomac Electric Power Company, Inc. (PEPCO) is the only distributor of electricity in the District of Columbia metropolitan area. Consumers in the area have the option to choose between several suppliers of electric generation services. Electric generation suppliers in the area include PEPCO, PEPCO Energy Services (PES), BGE Homes, and Washington Gas and Energy Services. As of November 2004, PEPCO had approximately 92.8 percent of the share of residential and non-residential generation and transmission services. Electrical lines run throughout the developed portions of AFRH-W property.

3.7.4 Natural Gas Service

Washington Gas supplies natural gas to the District of Columbia through a network of underground conduits fed through larger high-pressure transmission lines, generally located within street rights-of-way (see Figure 3-15). Natural gas lines run throughout the developed portions of AFRH-W property. Three steam boilers in the Heat Plant are fueled by natural gas.

3.7.5 Communication Service

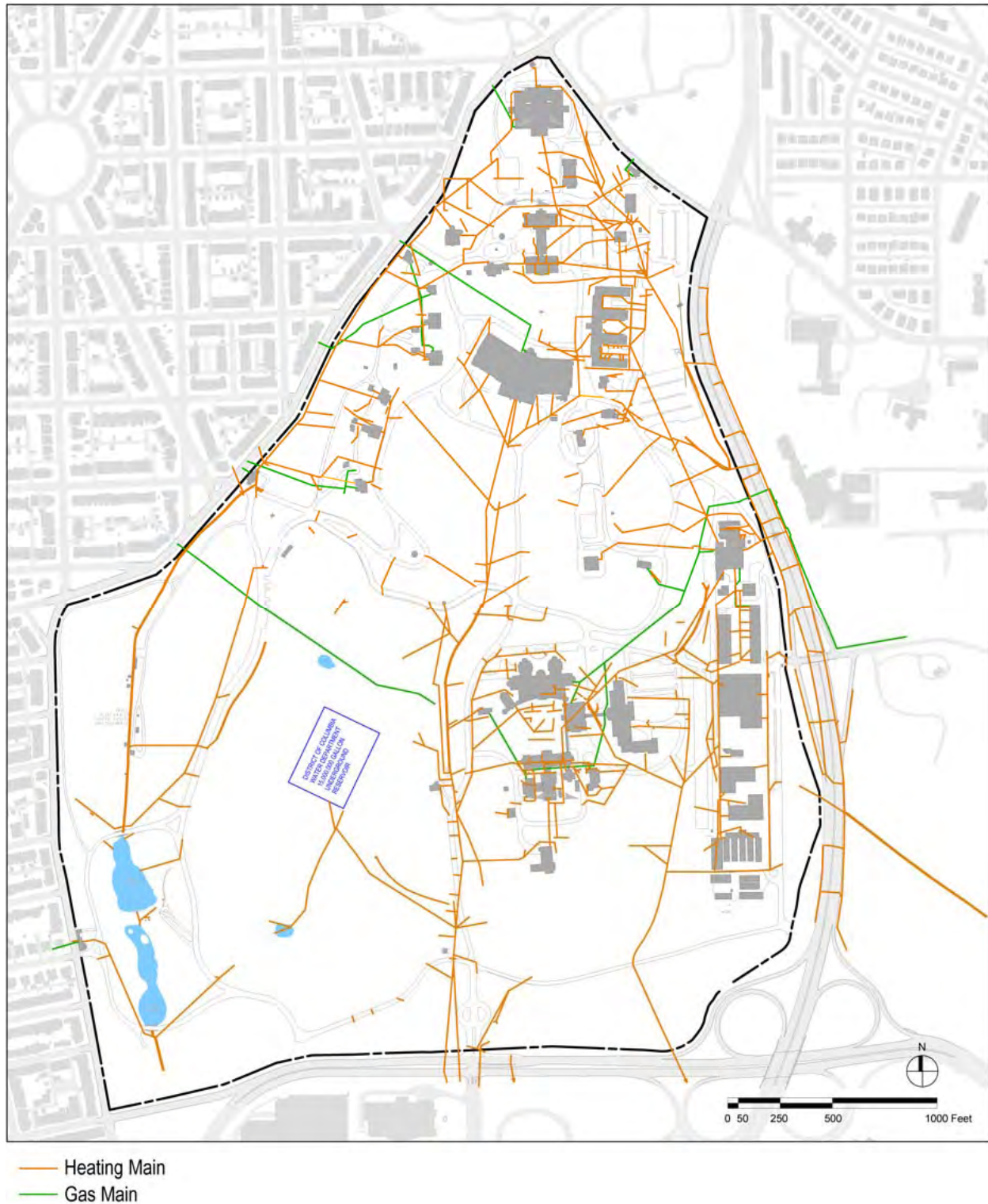
Telephone service to AFRH-W is provided by Verizon Telephone Company.

3.7.6 Solid Waste

The District of Columbia Department of Public Works operates a fleet of trash hauling trucks that collect refuse from residences with less than four dwelling units. Buildings with four or more residential units and commercial enterprises must arrange to have a commercial trash hauler collect and dispose of their refuse. DCMR Title 21, Water and Sanitation, Sections 700 through 707 regulate the storage and collection of solid wastes.

Residential and commercial generators of trash are required by DC law (and DCMR Title 21, Sections 2021 and 2022) to separate out recyclable material (aluminum, glass, plastic, and paper) from the remainder of the refuse. District and commercial trash haulers are required to deliver the recyclable wastes to a recycling center. Solid waste from federal government facilities in the District of Columbia may be hauled by commercial trash haulers directly to the I-95 Resource Recovery Facility in Lorton, Virginia.

In the District of Columbia, there are several major commercial waste hauling companies that provide this service. For AFRH-W, the Defense Reutilization and Materiel Office (DRMO) Ft. Meade processes and landfills the waste. Biomedical waste and sharps are picked up by a service contractor.

**Figure 3-15: Gas and Heating**

Source: Plans provided by AFRH-W, originally created using photogrammetric methods from aerial photography dated 18 March, 1989 and updated by Rhodeside & Harwell, January 1994.

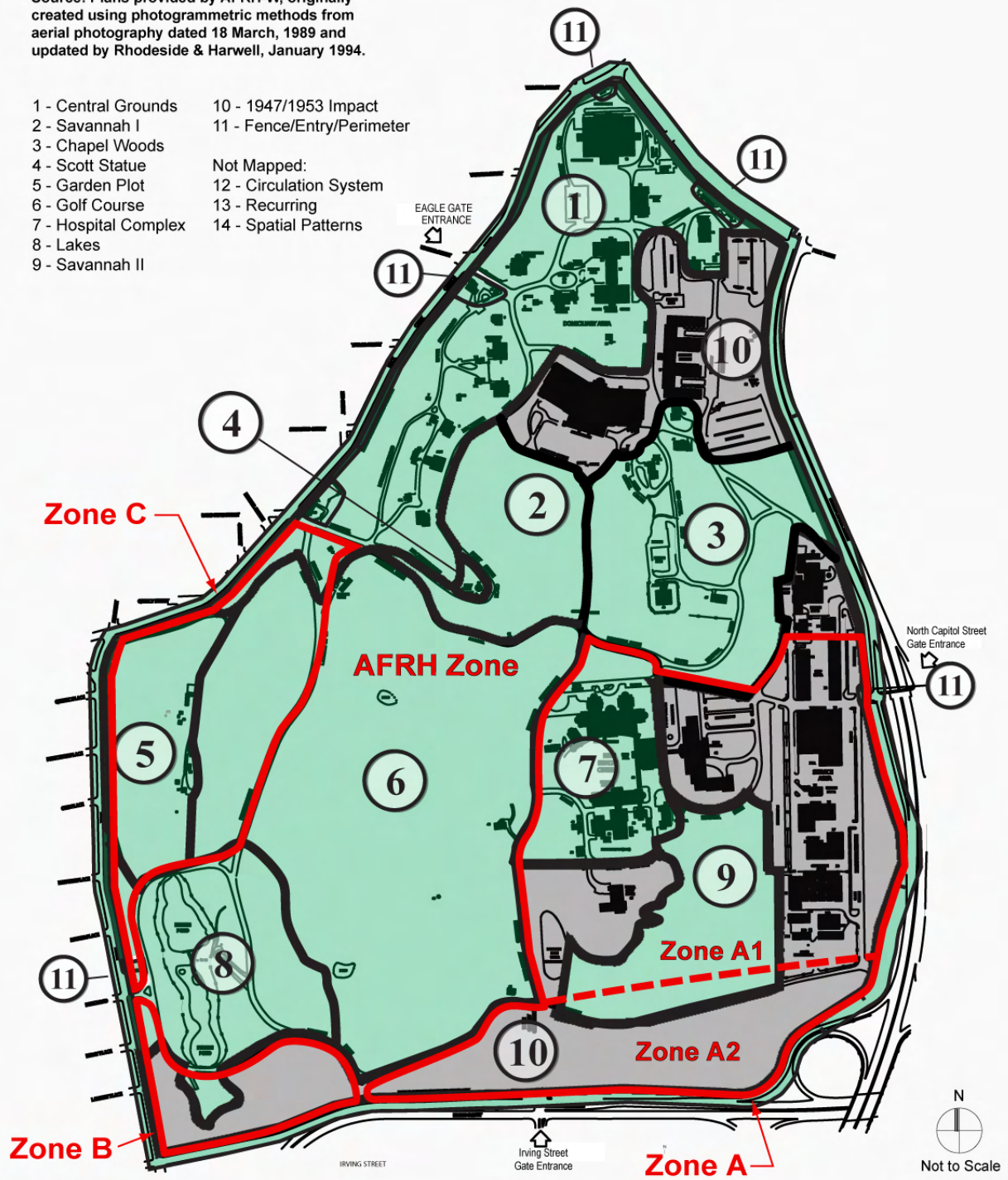


Figure 4-1: Development Zones and Character Areas

President Lincoln and Soldiers' Home National Monument (NM). No contributing features of the President Lincoln and Soldiers' Home National Monument would be demolished or physically altered under the Master Plan Alternatives. Therefore, there would be no direct impacts to this resource.

The National Monument could be indirectly affected by new construction in the AFRH Zone. Under all of the build alternatives, new construction in the AFRH Zone would be between four and 6 stories in height. New construction (up to 55 feet in height) on the existing Grant parking lot could result in a change to the existing setting. As the land adjoining the National Monument has experienced development since the initial years of AFRH-W, new construction is consistent with AFRH-W's history. However, depending on its location, density, height, scale, mass, and architectural articulation, the character of new construction could change the setting and views of the National Monument resulting in indirect, long-term, moderate, adverse impacts. Given that, the preferred alternative locates most of the new construction in the AFRH Zone to the easternmost side of the zone, away from the National Monument and in most cases, behind existing buildings. Construction of a building on the site of the demolished Sheridan Building would be of a scale and in keeping with the character of that building; its construction would recreate the quadrangle located near the National Monument area.

U.S. Soldiers' and Airmen's Home National Historic Landmark (NHL) and National Register Listed Historic District. No contributing features of the U.S. Soldiers' and Airmen's Home National Historic Landmark (NHL) and Historic District (NR-Listed) and would be demolished or physically altered under the Master Plan Alternatives. Therefore, there would be no direct impacts to this resource.

The NHL and Historic District could be indirectly affected by new construction in the AFRH Zone. Through the Master Plan and its guidelines for the preferred alternative, the NHL and Historic District would be protected from adverse impacts because development is not located within or close to the resources.

AFRH-W Historic District (NR-Eligible). All the character areas of AFRH-W Historic District could be directly affected by the Master Plan Alternatives. The 272 intact acres of AFRH-W, part of AFRH-W since 1873, would potentially be affected by the construction of new buildings and would be reduced in size by the private development of some areas of AFRH-W. Some cultural landscape features such as roads, paths, tree lines, and streams could be disrupted or lost entirely. New construction could potentially alter the historic context of individual buildings and building groups, and may obscure the relationship between buildings and the landscape. For