



Executive Director's Recommendation

Commission Meeting: November 1, 2012

PROJECT Draft Installation Master Plan Naval Support Activity Bethesda 8901 Rockville Pike Bethesda, Montgomery County, Maryland	NCPC FILE NUMBER MP059
SUBMITTED BY United States Department of Defense Department of the Navy	NCPC MAP FILE NUMBER 3101.30(05.14)43568
REVIEW AUTHORITY Advisory per 40 U.S.C. § 8722(b)(1)	APPLICANT'S REQUEST Approve comments on Draft Master Plan
	PROPOSED ACTION Approve comments on Draft Master Plan
	ACTION ITEM TYPE Presentation

PROJECT SUMMARY

The Department of the Navy has submitted a draft Installation Master Plan (draft master plan) to improve facilities, standards, and quality of life at the Naval Support Activity Bethesda (NSAB). The most recent approved master plan for NSAB, the 2008 National Naval Medical Center (NNMC) Master Plan Update, was approved by the Commission in February 2009 while the installation was under the command of the NNMC. The purpose of the 2008 master plan was to address anticipated development and the expansion of services that were the result of the Base Realignment and Closure (BRAC) 2005 requirements. These BRAC 2005 requirements realigned tertiary care and additional activities from the Walter Reed Army Medical Center (WRAMC) in Washington, D.C. to the NNMC. In May 2010, the Navy changed the management of the base from the Navy Bureau of Medicine and Surgery to the Commander of Naval Installations Command, at which time the entire facility became NSAB. The hospital continued as NNMC until September 2011, when it became the Walter Reed National Military Medical Center (WRNMMC).

The draft master plan was developed to bring the existing 2008 master plan up-to-date. It uses post-BRAC construction conditions as the starting point with a time-frame of 10 years. The draft master plan provides a logical basis and framework for anticipated development throughout the campus considering existing constraints and opportunities. Based on input provided by tenants and users at the installation, the draft master plan examines strategies for accommodating changes in missions, increasing efficiency of the installation and improving support for the primary (health care delivery and medical education) and secondary supporting missions. The draft master plan is supported by a draft environmental impact statement that shows how the proposed changes will affect the human and natural environment, and a draft update to the installation's transportation management plan.

KEY INFORMATION

- The National Defense Authorization Act for Fiscal Year 2010 called for the development of a Comprehensive Master Plan to provide sufficient world-class military medical facilities and an integrated system of healthcare delivery for the National Capital Region.
- The draft master plan is focused on mission requirements of NSAB tenants projected over the next 10 years. The employment population of NSAB was 11,686 personnel in 2011; this is projected to grow to 12,611 by 2022 (an increase of 925 personnel).

The personnel growth of medical missions has now leveled-off, and growth in mission support personnel is mostly expected in the short term. Projected short- and long-term growth in education personnel reflect the evolving research- and training-driven mission of the Uniformed Services University of Health Sciences, a main tenant on the installation.

The installation currently receives approximately 1,200,000 patient visits annually, plus other visitors. No growth in these numbers is anticipated within the draft master plan.

- The budgeting process within the Department of Defense distinguishes between short-term projects that have been included in a 6-year Program Objective Memorandum (POM) that is submitted to the Secretary of Defense, and out-year projects that may be included in future POMs. The draft master plan attempts to meet the goal of installation improvement by outlining a combination of short-term planned projects and long-term opportunities that will address inefficiencies, improve accessibility, and provide the flexibility to accommodate future mission changes. The short-term planned projects are projected to be completed by 2018.
- Growth and demolition projected in the draft master plan is based on the best information available through government facility and programming channels. However, many factors could change these assumptions, including policy changes, funding streams, and the political environment. The master plan provides an organized framework for the anticipated development but is flexible enough to adapt to inevitable changes.
- Through implementation of the 2008 NNMC Master Plan Update and associated Transportation Management Plan, the installation has achieved a parking ratio of 1:3.32 (3.32 employees per parking space). This conforms to the Comprehensive Plan for the National Capital: Federal Element's recommended parking ratio of 1:3 for suburban installations within 2,000 feet from a Metrorail station. The draft master plan retains this conformance with a ratio of 1:3.25 to 1:3.54 over the plan's ten-year term (the range is due to various development options).

As part of this effort, the installation has also achieved an employee reduction in the use of Single Occupancy Vehicles from 72 percent to 39 percent, an increase in mass transit use from 11 percent to 44 percent, an increase in walking / biking / drop-off from 2

percent to 5 percent, and an increase in registered carpools from approximately 100 to approximately 450.

RECOMMENDATION

The Commission provides the following comments:

Supports the goals and objectives of the draft master plan

Does not Support and Urges Reconsideration of the potential construction of an underground parking garage in front of Building 1 due to significant potential negative impacts to historic views of Building 1 and its associated landscape from Rockville Pike, and to traffic flows along Rockville Pike due to increased use of Gates 1 and 2 to access the facility

Does not support and Urges Reconsideration of Option 1 as a potential location for the expansion of the Uniformed Service University of Health Sciences due to significant potential negative environmental and visual impacts resulting from construction on a steeply sloped site covered by mature forest along Jones Bridge Road

Recommends that in its completion of the master plan document, the Department of the Navy:

- Continue collaboration with local planning and regulatory agencies to develop and implement county, state and federally-funded traffic and transportation improvements related to the implementation of the master plan
- Incorporate a landscape framework plan that includes strategies to:
 - Preserve and enhance the landscaped buffer at the southern, eastern and northern perimeters, in accordance with planning objectives noted in Section 1.5
 - Increase the tree canopy to the extent possible
 - Minimize and mitigate tree loss, including but not limited to negative impacts to historic views from Rockville Pike, resulting from the construction of a new pedestrian tunnel and Metro entrance, the expansion of the helipad, the underground parking garage in front of Building 1, and a kiss and ride facility
 - Minimize and mitigate potential negative impacts to the view from Rockville Pike due to the placement of temporary structures in the northwest parking area during the construction of a new medical facility behind Building 1

Commends the Department of the Navy for meeting the 1:3 parking ratio recommended in the Comprehensive Plan for the National Capital: Federal Elements

Recommends that in the implementation of the master plan, the Department of the Navy coordinate individual project reviews with the Montgomery County Planning Department for comments at the same time that they consult with the Maryland Historic Trust for the determination of effect on historic properties, and

Requires that future submissions include documentation demonstrating that they have done so prior to submitting to NCPC for review

The Commission further:

Notes that a significant number of construction workers may be on the installation on any given day to complete various components of the proposed actions within the master plan, and encourages the use of alternative modes of transportation and staggered work hours for construction personnel to mitigate impacts on traffic in the surrounding community

Notes that staff will provide additional comments on the Draft Installation Master Plan, Draft Transportation Management Plan, and Draft Environmental Impact Statement to supplement these recommendations.

PROJECT REVIEW TIMELINE

Previous actions	None.
Remaining actions	Approval of the NSAB Installation Master Plan, anticipated in the Spring of 2013.

Prepared by J. Hinkle
October 25, 2012

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I. PROJECT DESCRIPTION

Site / Background

The Naval Support Activity Bethesda (NSAB) is located at 8901 Rockville Pike in Montgomery County, Maryland, just northeast of the Bethesda Central Business District. The campus is comprised of approximately 245 acres and is bound on the west by Rockville Pike, on the northeast by I-495, and on the south by Jones Bridge Road. Land uses in the immediate area include the main campus of the National Institutes of Health (NIH) across Rockville Pike to the west, Stone Ridge School of the Sacred Heart and medium-density residential housing to the north, Rock Creek Park and North Chevy Chase Park to the east, and the Columbia Country Club and medium-density residential housing to the south across Jones Bridge Road. The Medical Center Metrorail station is located on the western side of Rockville Pike and serves both NSAB and NIH. The installation boundaries and immediate surroundings are shown in Figure 1.

The topography of the installation includes gently sloping areas where development is concentrated, and some areas of moderately steep terrain. The installation is divided into development clusters related to medical, administrative, permanent housing, temporary housing, community services, and education. Building 1, the central tower block designed by Paul Philippe Cret in the art deco style, is the prime landmark structure of the installation due to its architectural distinction and association with both President Franklin D. Roosevelt and the installation’s achievements in the practice of military medicine. It is the key structure connected with the Walter Reed National Military Medical Center (WRNMMC), the primary tenant at NSAB, and is listed on the National Register of Historic Places.

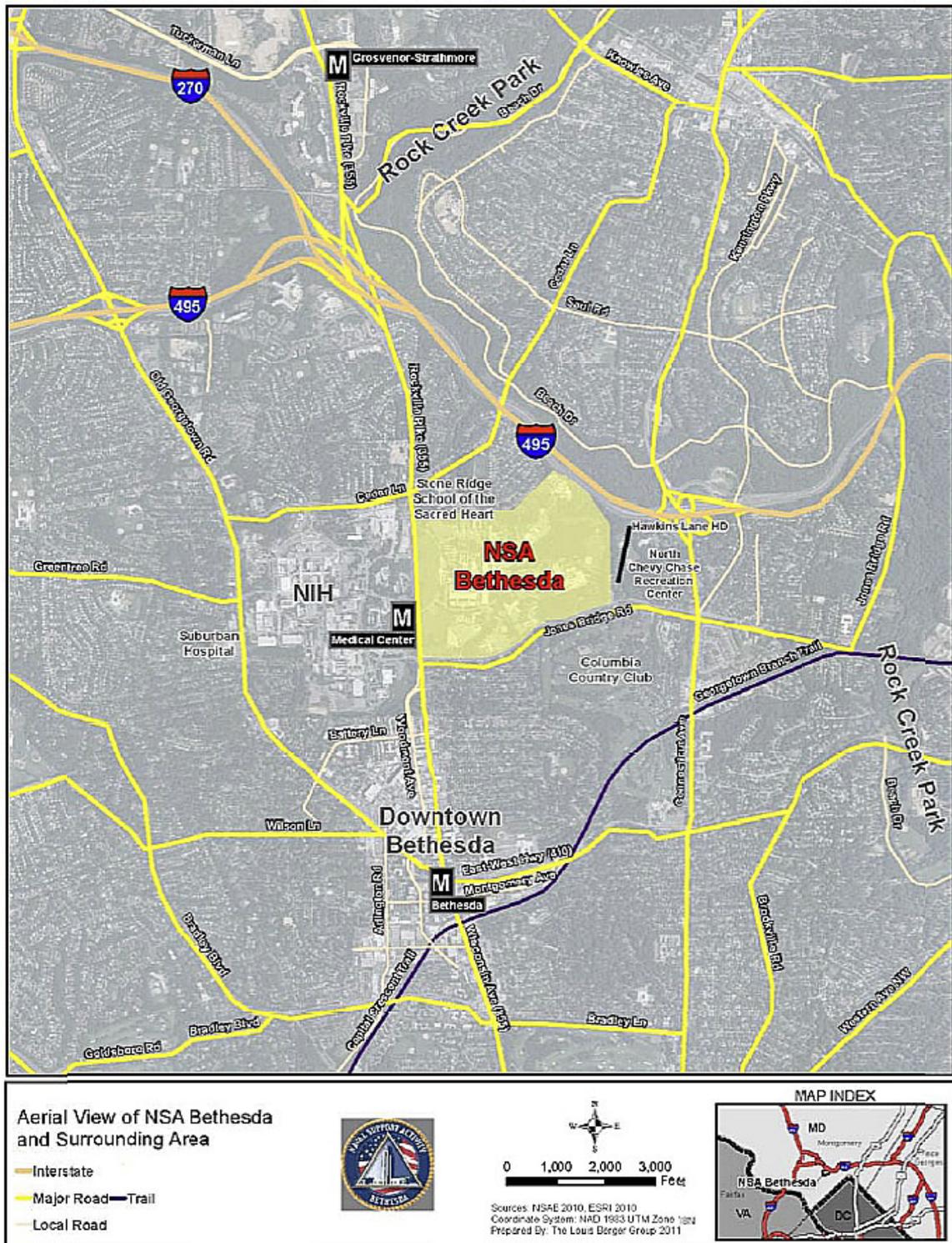


Figure 1: Naval Support Activity Bethesda location map

(Source: Department of the Navy)



Figure 2: Aerial view of Naval Support Activity Bethesda

Building 1 and the Walter Reed National Military Medical Center is in the foreground; the Uniformed Services University of the Health Sciences can be seen in the rear of the installation (at the top of the photograph).

(Source Department of the Navy; Draft Installation Master Plan)

The WRNMMC was founded in Bethesda in 1940 as the National Naval Medical Center (NNMC), and was originally composed of the Naval Hospital, the Naval Medical School, the Naval Dental School, and the Naval Medical Research Institute. Over the years it has undergone many expansion and renovation projects to become one of the largest medical facilities in the country. From the Medical Center's inception to May 2010, the facility was called NNMC. In May 2010, the Navy changed the management of the base from the Navy Bureau of Medicine and Surgery to the Commander of Naval Installations Command, at which time the entire facility became NSAB. The hospital continued as NNMC until August 15, 2011, when in accordance with the 2005 Base Closure and Realignment Act (BRAC), tertiary (sub-specialty and complex care) medical services from the Walter Reed Army Medical Center in Washington, D.C. were relocated to the NNMC. With the transfer and integration of these services with existing functions, the medical center was renamed the WRNMMC. WRNMMC is now the premier Department of Defense medical center offering intensive and complex specialty and subspecialty medical services for personnel from all military services and serves as the military's worldwide tertiary referral center for casualty and beneficiary care.

With this distinction for WRNMMC, the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2010 called for the development of a Comprehensive Master Plan to provide sufficient world-class military medical facilities and an integrated system of healthcare delivery for the National Capital Region. In the FY09 NDAA, Congress recognized the construction of WRNMMC (and the new Fort Belvoir Community Hospital in Virginia) as an opportunity to provide such facilities, and defined world-class as "incorporating the best practices of the premier private health facilities in the country as well as the collaborative input of military

healthcare professionals into a design that supports the unique needs of military personnel and their families.” The draft Installation Master Plan is developed, in part, to support WRNMMC’s goal of achieving distinction as a world-class military medical facility.

In addition to the WRNMMC, many other tenant commands reside at NSAB, including:

- Uniformed Services University of the Health Sciences (USUHS)
- Naval Medical Research Center (NMRC)
- Navy Medicine National Capital Region (NCA)
- Navy Medicine MPT&E Command (NM MPT&EC)
- Navy Exchange Command (NEXCOM) with Navy Exchange (NEX) and Navy Lodge
- Joint Task Force National Capital Region Medical (JTF CapMed)
- Naval Dosimetry Center (NDC)
- Navy-Marine Corps Relief Society
- Navy Medical Inspector General Office (IG)
- Veterans Affairs (VA)
- Fisher House Foundation
- American Red Cross
- Personnel Support Activity Detachment (PSD)
- Medical Evaluation and Treatment Unit (METU)
- Naval Criminal Investigation Service (NCIS)
- Navy Federal Credit Union (NFCU)
- Navy Medical Support Command (NMSC)
- National Intrepid Center of Excellence (NICoE)

The USUHS is the second largest tenant on the installation after WRNMMC, and the draft master plan is primarily focused on new projects to accommodate the missions of both these tenants. The USUHS is a component of the Military Health System and is the nation’s only fully accredited Federal School of Medicine and Graduate School of Nursing. It was chartered by an act of Congress on 21 September 1972, and has the unique mission to provide the nation with health professionals dedicated to career service in the Department of Defense and the U.S. Public Health Service.

Proposal

Following significant growth in facilities, employees, and patients and visitors due to BRAC requirements, the draft Installation Master Plan focuses on improving the quality of life, standards, and facilities at Naval Support Activity Bethesda. The draft master plan outlines a combination of short-term planned projects and long-term opportunities to address operational inefficiencies, improve accessibility, and to provide the flexibility to accommodate any future mission changes.

The short-term planned projects are generally projects of a known scope that address specific near-term plans, goals or challenges. These include several projects from the 2008 NNMC Master Plan Update that have not yet been implemented, as well as current and future renovation and construction projects. Specific short-term projects are focused on the development of WRNMMC as a world class medical facility, the university expansion, and the continued development of support facilities. Many of the short-term projects are currently funded and anticipated to be built within the next five years.

Long-term opportunities identify areas, facilities or strategies that are not currently planned or funded, but which should be recognized as part of the larger installation improvement context.

In addition to the short-term planned projects and long-term opportunities, the draft master plan includes guidelines for potential development areas that may be programmed as future needs become clear.

It should also be noted that some projects within the draft master plan may never be executed or may be modified as funding and priorities change, and that all of the projects are subject to change during the design process (and may require subsequent modifications to the final master plan).

In terms of installation employment populations, BRAC-related growth over the past few years has resulted in a NSAB employment population of 11,686 in 2011. The draft master plan is designed to accommodate an expected employment population growth of 925 by 2022 (for a total employment population of 12,611). As the personnel growth of the installation's medical missions has now leveled-off, the additional employment is mostly expected in the areas of mission support and the evolving research- and training-driven mission of the university.

The installation currently receives approximately 1,200,000 patient visits annually, plus other visitors. No growth in these numbers is anticipated within the draft master plan.

The master plan carries over objectives from the 2008 master plan and expands them to support NSAB and its mission to provide tenants with "efficient and effective shore installation management services and programs in support of mission commanders to enable combat readiness for fleet, fighter and family." These objectives include:

-
- Create an environment that meets the needs and enhances the experience of the installation's primary missions.
 - Provide a land use master plan that accommodates anticipated growth and is flexible enough to remain viable as scopes of specific projects are developed and changed.
 - Maintain and enhance the aspects of security, both for the overall installation and individual projects.
 - Recognize positive features in the built and natural environment and maintain and enhance those features.
 - Preserve the historic character, cultural value and natural resources of the campus.
 - Facilitate an accessible, walkable campus, with clustered functions and a robust pedestrian network.
 - Provide compatibility with the surrounding neighbors by maintaining buffers on the perimeter as required.

The draft master plan addresses the same planning issues as the 2008 master plan. The broad land use patterns established in the previous plan is continued to guide future development and growth of each land use is directed to occur in areas adjacent to the existing land use to allow for an efficient integration and expansion of new mission requirements and programs.

The two largest tenants on the installation are the Medical Center and the USUHS. The Medical Center will continue to be located within the medical hub at the west side of campus and is planned to rebuild the core of the complex as part of its mandate to be a world-class medical facility. USUHS will expand on an adjacent site to its existing complex.

The north side of the installation will be reinforced as the residential area for Bachelor Enlisted Quarters (BEQs), single family dwellings and Warrior Transition Units. Community and family support uses will intensify within the existing "comfort zone" in the south.

Recreation and green space is an essential part of a campus as a healing environment and the natural resources of the stream and eastern woodlands and recreational fields will be enhanced. The northeast corner currently houses the back- of-house storage and support and is a prime area for efficient future growth of those functions that do not directly serve patient care and educational missions.

Utilities improvements are currently planned to meet the increased demand with opportunities for additional capacity identified.

Stormwater management for future development will be to retain and treat stormwater pollutants as close to the source as possible, with the secondary goal of recharging as much stormwater as possible into the ground on site.

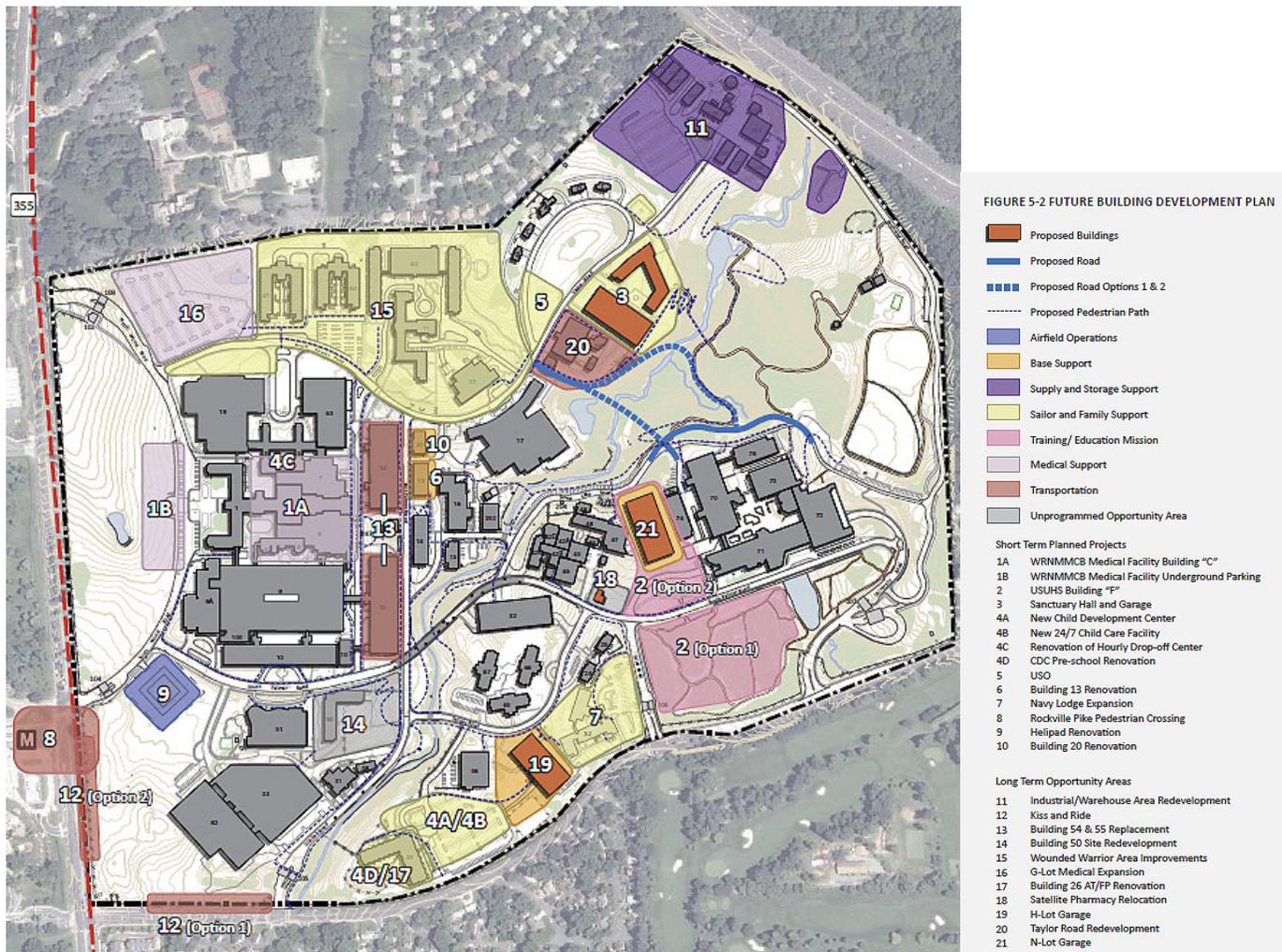


Figure 3: Future building development plan

(Source Department of the Navy; Draft Installation Master Plan)

The following is the current list of requirements identified for the draft master plan, including both short-term planned projects and long-term opportunities:

Building Projects

- Medical Building C
 - Demolition of Buildings 2,4,6,7 and 8
 - Building C development
 - Renovation of existing hospital center
- Medical Building C Underground Parking
- USUHS Education and Research Building
 - Building F development
 - Renovation of existing buildings

- Parking Structure
- Wounded Warrior Barracks Sanctuary Hall and Parking Garage
 - Barracks and two-bedroom suites
 - Parking garage
 - Demolition of Building 141
- Uniformed Services Organization (USO)
- Child Development Center (CDC) Development
- Public Private Venture (PPV) Housing – New Townhouse Units
- Navy Lodge Expansion
- Helipad expansion

Landscape Projects

- University Entry enhancement
- Tower Entry enhancement
- North Palmer Road enhancement
- Quadrangle open space
- Stoney Creek Trail improvements
- Active Recreation Area improvements
- Sport Courts
- Wounded Warrior Area Plan Improvements

Utilities Projects

- Cooling Tower Upgrade
- Electrical Capacity Upgrade
- New Central Utility Plant building
 - 2 new chillers
 - Emergency generators
- Condensate return line replacement
- Backup water supply

Opportunity Areas

- Industrial/Warehouse area redevelopment
- North-South roadway connection options
- G-Lot area medical expansion
- Building 50 site redevelopment
- Buildings 54 & 55 replacement
- Building 26 AT/FP renovation
- Satellite Pharmacy relocation
- Kiss and Ride
- Building 13 renovation
- Building 20 renovation

Parking Opportunities

- N-Lot garage
- H-Lot garage

- Building 53 site parking expansion
- Industrial / Warehouse area parking garage

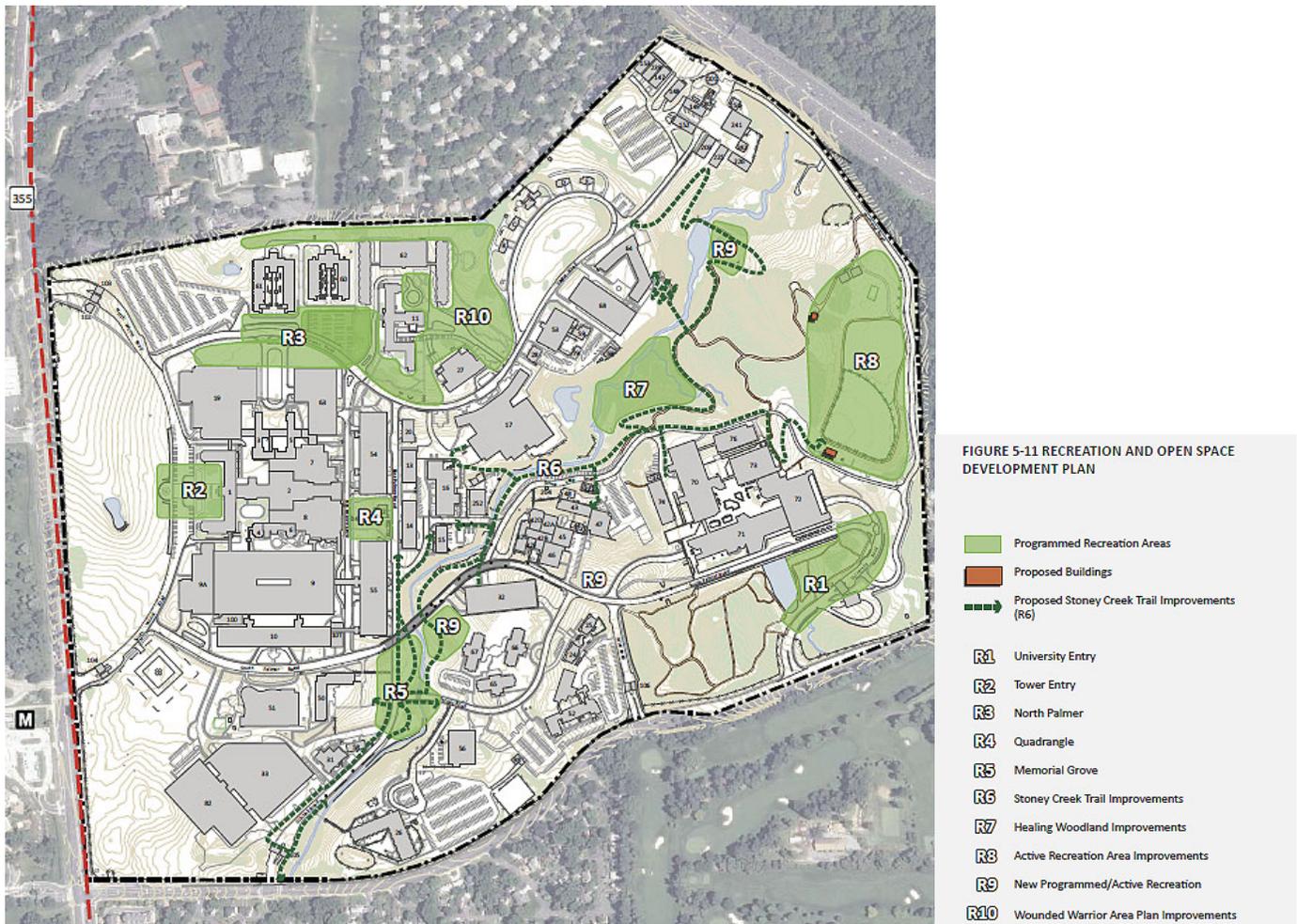


Figure 4: Recreation and open space development plan

(Source Department of the Navy; Draft Installation Master Plan)

Employment Population

Estimates of BRAC-related employment growth over the past few years indicate that the population of NSAB has grown to 11,686 personnel in 2011 and is expected to grow by to 12,611 by 2022. This is an increase of 925. This growth was projected from interviews conducted during the preparation of the draft master plan along with surveys conducted by the installation. With the completion of the integration of the Army missions from WRAMC, the growth in medical missions at the installation is expected to level off. Employment population growth in education reflects the evolving, research- and teaching-driven mission of USUHS, which projects an increase in faculty and class size, and the relocation of personnel from off-base

leased space. Growth in mission support personnel is mostly expected in the short-term as a new NEX facility and administrative support for the recently formed NSAB command come fully on-line.

TABLE 2-1 BASE POPULATION

Fall 2011	2022	Installation Mission
7,483	7,539	Medical Mission
2,995	3,521	Education Mission
1,208	1,551	Support Mission
11,686	12,611	TOTAL PERSONNEL

FIGURE 2-1 BASE POPULATION

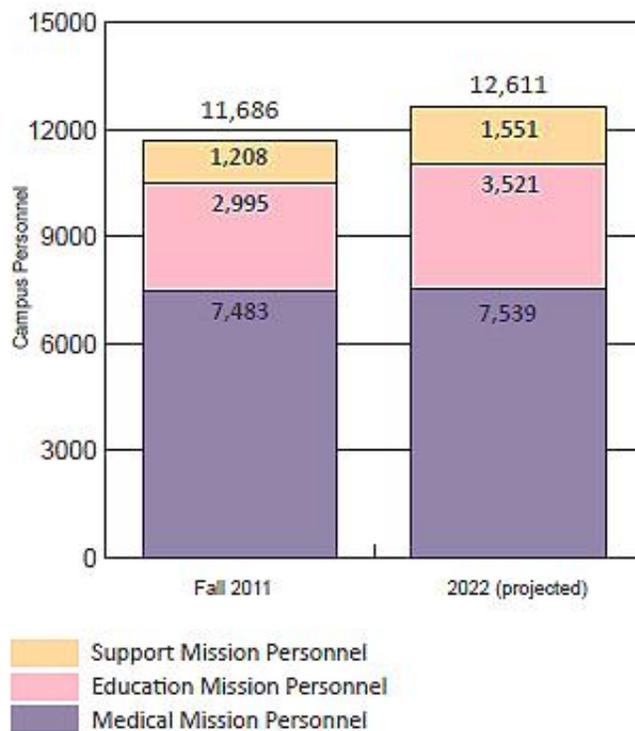


Figure 5: Projected installation population increase

(Source: Department of the Navy; Draft Installation Master Plan)

Security

The master plan recognizes that perimeter security, gate access queues, vehicle inspection areas, and setback requirements from the installation's perimeter, roads, and parking areas all must be considered in planning for any proposed development. Anti-terrorism and Force Protection (AT/FP) requirements as established in UFC 4-010-01 October 2003 (revised January 2007), Department of Defense Minimum Antiterrorism Standards for Buildings are used as a basis for security considerations and have influence the proposed locations of projects within the draft master plan.

Transportation Management Plan

Key planning principles which support the installations' transportation-land use relationships have been developed by NSAB and form the basis for transportation related recommendations within the draft master plan. These principles include:

- The vast majority of roads at NSAB cannot be widened to accommodate additional traffic. Growth on campus will occur in concert with the existing road system and strategies for alternative forms of access.
- The construction of new surface parking lots is discouraged. Where possible, structured parking will be provided in areas of future development, which may contribute to the preservation and increase of open, green space on campus.
- Impacts of future growth on the surrounding communities will be mitigated to the maximum extent possible.
- Shuttle services within the campus will continue to be expanded as development increases.
- A robust, universally accessible pedestrian network will be established within the campus and will connect to the community through the planned gate improvements.

With these principles in place, a draft Transportation Management Program (TMP) has been completed based on the draft master plan. A TMP is required in compliance with federal standards established by NCPC and documented in the General Services Administration Federal Agency Transportation Management Program Handbook (2008). The requirements stipulate that federal agencies with master plan projects resulting in over 500 employees should prepare and effectively implement a TMP approved by NCPC.

The TMP addresses existing and proposed site access and roadway networks, vehicular circulation, transit and pedestrian facilities, planned developments and improvements, and intersection capacity analyses. The TMP includes various Transportation Demand Management (TDM) strategies that effectively allow the installation to continue to meet the planned employee parking ratio of one vehicle for every 3 employees (1:3), in accordance with the Comprehensive Plan recommendations for suburban federal facilities within 2,000 feet of a Metrorail station.

The TMP outlines aggressive goals to continue to reduce the number of single occupant vehicle trips to the site (through alternative modes of transportation as well as limiting employee parking), to reduce traffic congestion, and to improve air quality.

Overall the installation currently has 7,686 parking spaces, with 3,525 spaces available for staff and the remainder available for patients, visitors/retail, lodging and government vehicles. With approximately 11,686 current employees, the vast majority of employees cannot park at the installation since there are not enough parking spaces to accommodate the need.

NSAB's parking needs are subject to multiple design and planning criteria including: the Unified Facilities Criteria (UFC); the Comprehensive Plan, and the Montgomery County Building Code. These various design criteria differ in the specific parking ratios/guidelines for development, in particular relative to the provision of staff parking. If parking were designed and developed strictly according to the established UFC criteria the installation would require 14,446 parking spaces; however, when accounting for the 1:3 staff parking ratio the installation would require 9,830 parking spaces.

The master plan provides a high and low estimate of parking that may occur for the range potential development at the installation through 2022. This range increases the existing number of 7,686 parking spaces to between 8,840 and 9,012, with between 3,712 and 3,884 spaces available to employees. Parking on the installation is further discussed in the Analysis section of this report, but with a proposed increase of only 925 employees, the distribution of parking as proposed within the master plan will retain the 1:3 parking ratio that the installation has achieved since implementation of the 2008 master plan.

The remaining of goals within the draft TMP are to improve upon the successes of the TMP developed with the 2008 master plan. These goals include:

- Add smart parking technology to all parking facilities and link all parking to a central control to limit access delays, vehicle circulation and idling.
- Improve roadways (e.g. lane widening, add turning lane), sidewalks, ADA accessibility and other measures.
- Continue the existing program of workshops and commuter education to inform existing and new employees of the transit subsidies available to them.
- Work with tenant management to determine if more telecommuting can be achieved given their respective missions.
- Track use of the various shuttles and suggest improvements as needed and as possible.
- Continue informing commuters of options, increase understanding of Guaranteed Ride Home and rideshare parking.
- Continue educating workers on installation bike facilities and explore redistributing some rack locations. Improve facilities.
- Continue to work with management to increase use of Alternative Work Schedules.
- Continue to inform commuters of the GRH program and how to register.

- Explore opportunities for carshare or bikeshare, kiss & ride facility, increase alternate fuel vehicles.

II. PROJECT ANALYSIS/CONFORMANCE

Executive Summary

The draft Installation Master Plan for the Naval Support Activity Bethesda carries over goals and objectives from the installation's 2008 National Naval Medical Center Master Plan Update (approved by the Commission in February 2009) and expands them to further support Naval Support Activity Bethesda and its mission to provide tenants with "efficient and effective shore installation management services and programs in support of mission commanders to enable combat readiness for fleet, fighter and family." As noted above in the Proposal section, these objectives include:

- Creating an environment that meets the needs and enhances the experience of the installation's primary missions.
- Providing a land use master plan that accommodates anticipated growth and is flexible enough to remain viable as scopes of specific projects are developed and changed.
- Maintaining and enhancing the aspects of security, both for the overall installation and individual projects.
- Recognizing positive features in the built and natural environment and maintaining and enhancing those features.
- Preserving the historic character, cultural value and natural resources of the campus.
- Facilitating an accessible, walkable campus, with clustered functions and a robust pedestrian network.
- Providing compatibility with the surrounding neighbors by maintaining buffers on the perimeter as required.

The draft master plan continues the broad land use patterns established in the 2008 master plan update while addressing current operational inefficiencies with a framework of both short-term planned projects and long-term opportunity areas. It also anticipates and accommodates a limited increase in the installation's employment population, and directs expected growth from expanded missions or programs to areas with associated existing land uses. As such, **staff recommends that the Commission support the goals and objectives of the draft master plan.** In addition, staff recommends that the Commission provide the Navy with additional comments on the draft master plan as noted below.

Analysis

The following is an analysis regarding the specific draft master plan proposals within the land use areas of Medical Support, Training and Education Mission, Sailor and Family Support, Research and Training Mission, Supply and Storage Support, Airfield Operations, Utilities, and Open Space and Recreation and Cultural Resources. Following this analysis is a discussion on transportation issues.

Functional and Spatial Relationships of Land Uses

The built environment of NSAB currently consists of approximately 106 buildings, roadways, parking structures and surface parking, walks, and utilities and supporting structures for the medical mission and tenants located on the campus. In general, land uses consist of medical, administrative, housing, community services, support and educational functions, as reflected in Figure 6. Locations of new structures and improvements proposed within the draft master plan, either as short-term planning projects or long-term opportunities, remain consistent with the existing land uses, and only minor changes are proposed between the existing land uses denoted on Figure 6 and the proposed land use map (Figure 7 below).

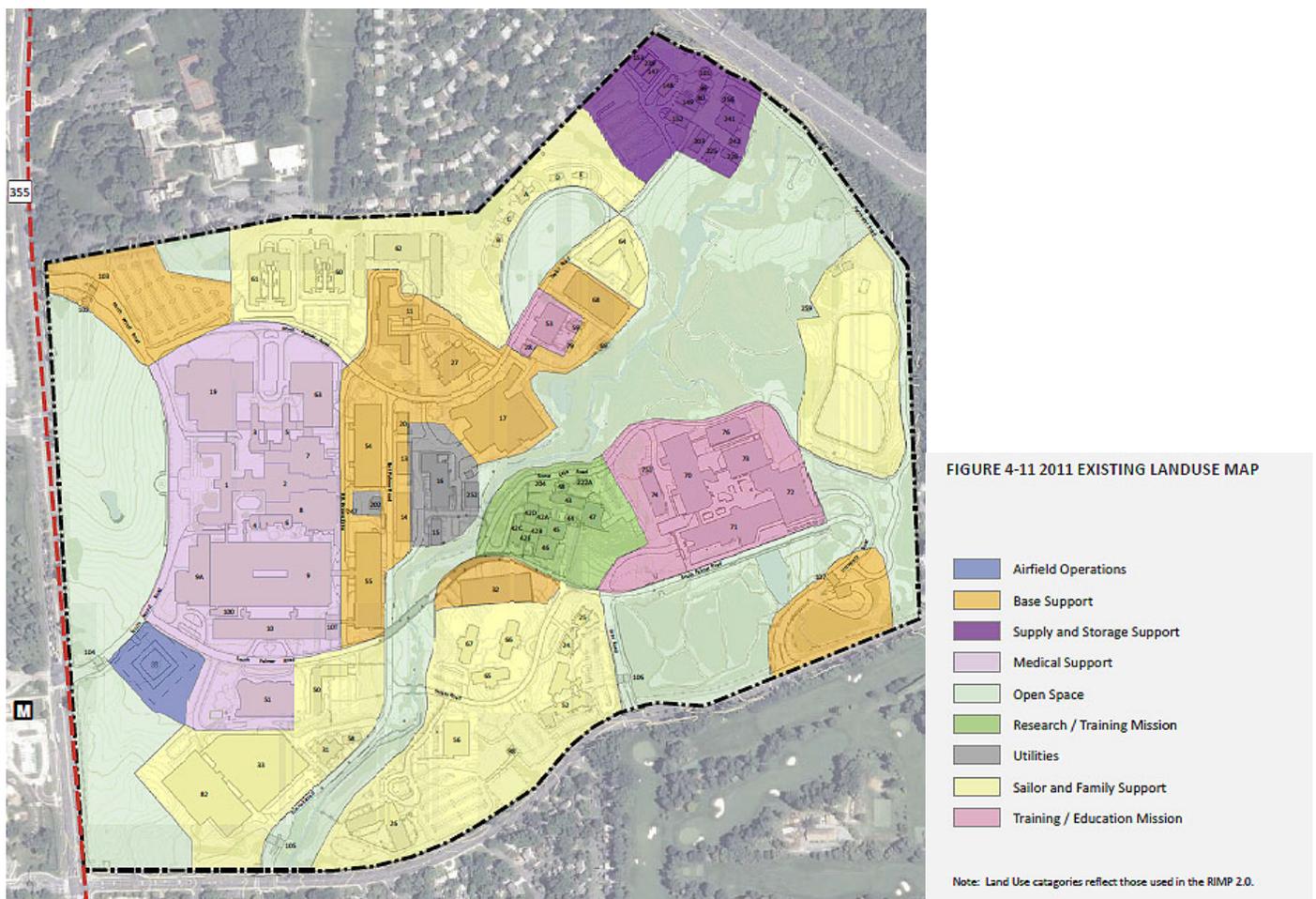


Figure 6: 2011 Existing land use map

(Source Department of the Navy; Draft Installation Master Plan)

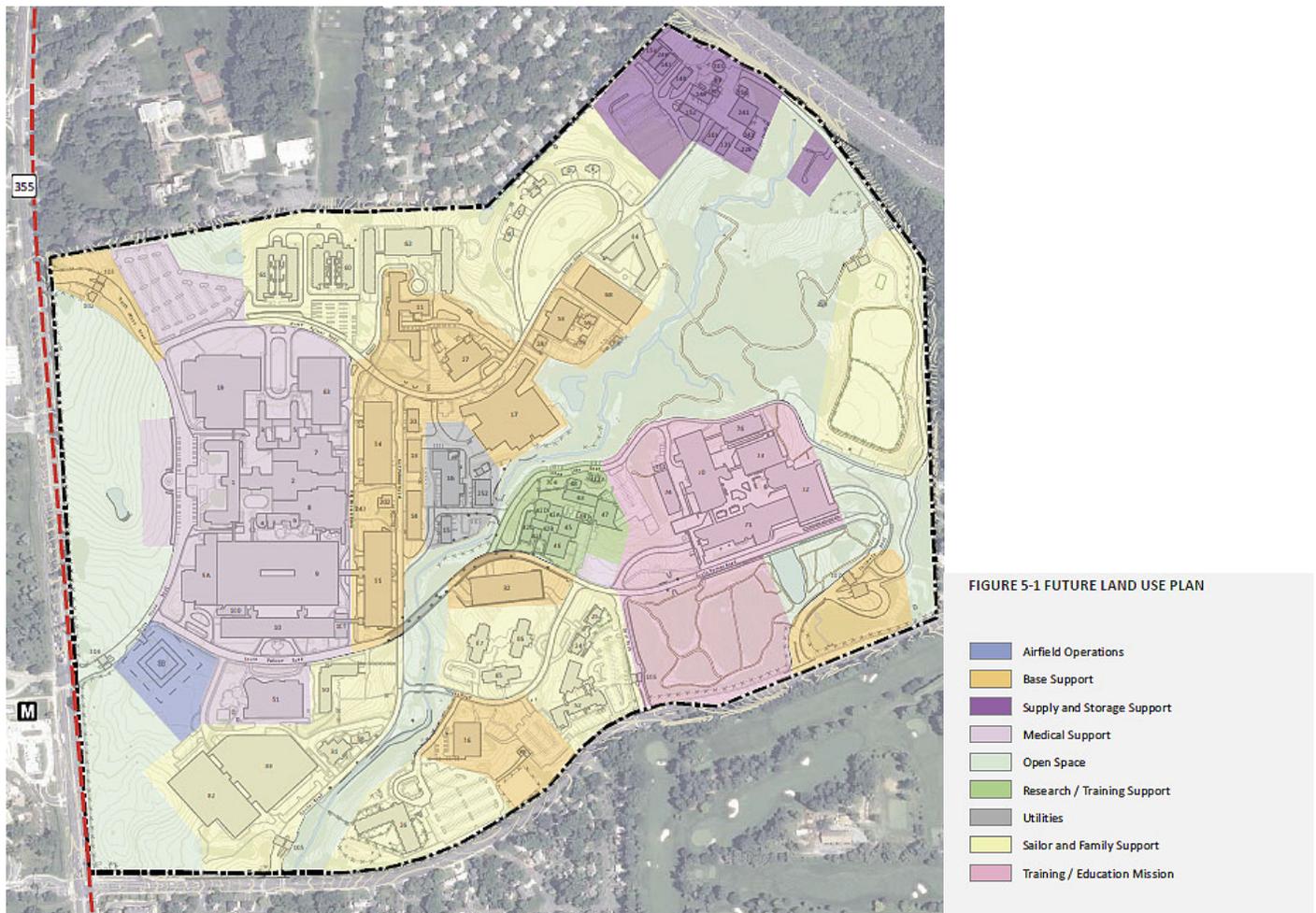


Figure 7: Future land use map

(Source Department of the Navy; Draft Installation Master Plan)

The primary short-term projects and long-term opportunities proposed within the draft master plan are described below, organized by their associated land use category.

Medical Support

The Medical Support land use area is the “face” of the installation and includes the medical core, with Building 1 as the prominent feature. The medical core is located in the center of the western portion of the campus and consists of the primary medical functions at the installation, including inpatient and outpatient care, clinics, and administrative functions. These facilities provide services to a wide-variety of patients external to the installation and in residence on the installation. Others Medical Support facilities with less patient contact are located in areas surrounding the medical core. In particular, these Medical Support facilities are located to the immediate east of the medical core; however, there are a few facilities spread throughout the

installation. Medical Support facilities include administrative offices for several base support commands and organizations, surface parking lots, parking structures and security facilities.

The primary change in Medical Support facilities proposed within the draft master plan is the Medical Facilities Development. Much of the Medical Facilities Development project is designed to ensure that WRNMMC can meet its new statutory requirements for a world-class medical center, which includes reallocating space for medical units to ensure operational efficiencies and decompressing patient rooms from doubles to singles. The project includes:

- Demolition of five hospital buildings located behind Building 1 (Buildings 2,4,6,7 and 8; approximately 326,000 square feet)
- Construction of a single 5-story facility (Building C; approximately 573,000 square feet)

The new construction would be in the same basic footprint of the demolished facilities and would be generally consistent with the height of the tallest building to be demolished. The new construction would mostly house the departments from the buildings to be demolished and would right-size (or provide optimal space) these existing departments. The new construction would also provide space for departments that would be relocated from buildings to be renovated. This movement of departments and clinics would open up available backfill spaces that would relieve spatial pressures elsewhere and provide complementary functions to existing clinics. The new construction would also accommodate program requirements such as a state-of-the-art simulation and education center, a health innovation center, and an hourly child care drop-off center.

- Construction of a new parking garage for visitors, patients, and very important persons (VIPs)

Construction of an approximately 225,000 square foot, 500-space underground parking garage west of Building 1 is proposed. This garage would serve the medical facilities and overall unmet parking needs across NSAB. This underground site was selected to: provide conveniently located parking relative to the Building 1 entrance of WRNMMC; minimize the traffic within and around the installation by providing parking convenient to a major entrance; and optimize a site that has no potential alternative mission use. For the underground garage, there are two options under consideration for ingress/egress of vehicles: 1) G-Lot: vehicles would enter G-Lot and access the garage via descending ramps underneath North Wood Road (the ingress/egress would be near, but would not interfere with, the temporary medical facilities); and, 2) Wood Road: vehicle ingress/egress points within the current limits of Wood Road at symmetrical locations flanking the Building 1 terraces (the stretch of road below the entrance would remain unencumbered by traffic and reinvigorate the use of Building 1's entrance as the historic front door of NSAB).

- Internal renovation of five hospital buildings (Buildings 1, 3, 5, 9, and 10; approximately 120,000 square feet)

- Temporary medical facilities to provide uninterrupted patient care during construction (approximately 100,000 square feet)

The temporary facilities would be located at G-Lot, in the northwest corner of the installation near Gate 1. The temporary facilities would be converted back to parking lot after the completion of Building C.

The Medical Facilities Development also includes six landscape projects for accessibility and aesthetic enhancements in high-profile areas of the installation. Most of the six projects involve improvements to existing infrastructure, including widening / realigning sidewalks, installing directional indicators and guides, and additional landscaping. These projects are:

- North Palmer Road – This project focuses landscape improvements in areas immediately north of the Medical Center, along north of North Palmer Road.
- Courtyard – This project adds a variety of plantings for color and texture improvements within a courtyard in the Medical Center.
- Memorial Grove – This project addresses a severe grade transition from South Palmer Road to East Palmer Road. This area is critical for continued accessibility to the Fisher Houses, Navy Lodge, and Bowling Center because the existing sidewalks associated with the bridges along South Palmer Road are not considered accessible.
- Building 17 Connector – This project provides a pedestrian pathway to the Fitness Center, Flag Officer Quarters, and the future Sanctuary Hall and United Service Organization (USO) Warrior and Family Center. Most improvements are along North Palmer Road, Taylor Road, and Van Reypen Road.
- University Entry - This project provides additional flowering azaleas along the section of University Road near the pond to improve the appearance of this area.
- Stoney Creek Trail System – This project involves a fully accessible, 6-foot wide, asphalt trail that never slopes more than 5 percent and would generally follow the footprint of the existing trail, limiting the amount of associated tree clearing. This project would include one existing and one new bridge over Stoney Creek.

In many areas, these projects surpass the current requirements of the Architectural Barriers Act (ABA) Accessibility Standard for Department of Defense Facilities and Americans with Disabilities Act (ADA) Accessibility Guidelines and are being proposed for implementation per the recommendations in the Accessibility Capital Improvement Plan in the 2011 NSA Bethesda Accessibility Plan (approved by NCPC April 7, 2011; see NCPC File No: 7226).

Utility capacity upgrades, which are components of the Medical Facilities Development project, are described below in the Utilities sections.

While supportive of the Medical Facilities Development project as a whole, and the demolition of outdated medical buildings behind Building 1 and their replacement with a modern medical facility—Building C, staff notes that adverse effects to Building 1's rear façade and the façades of the Building 1's rear wing should be avoided with this demolition and construction.

Further, the potential construction of an underground parking garage in front of Building 1 may have significant impacts to the installation's historic view from Rockville Pike and associated landscaping, as well as to Building 1 and the retaining wall and flagpole plaza (as historic resources). In addition, the placement of a parking garage in this location has the potential to increase traffic on Rockville Pike as vehicles will use Gates 1 and 2 to access the facility. As such, staff cannot support the potential construction of an underground parking garage in front of Building 1 until further design details are available to review and suggests that the alternative locations analyzed within the draft Environmental Impact Statement—at H-Lot, on Taylor Road, or within the warehouse area—be considered furthered (See Figure 9). **Staff recommends that the Commission comment that it does not support and urges reconsideration of the potential construction of an underground parking garage in front of Building 1 due to significant potential negative impacts to historic views of Building 1 and its associated landscape from Rockville Pike, and to traffic flows along Rockville Pike due to increased use of Gates 1 and 2 to access the facility.**

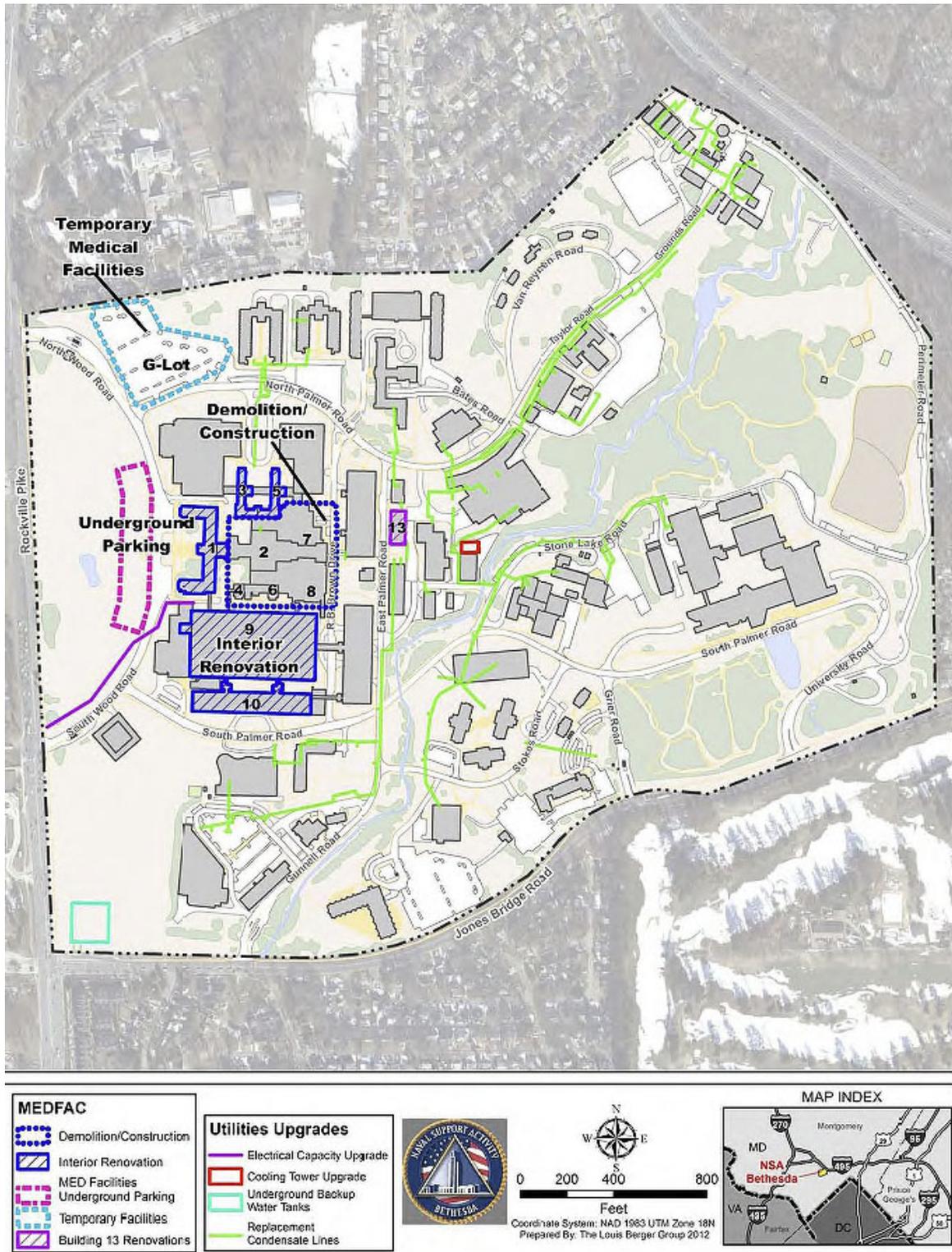


Figure 8: Medical Facilities Development map

(Source Department of the Navy; Draft Environmental Impact Statement)

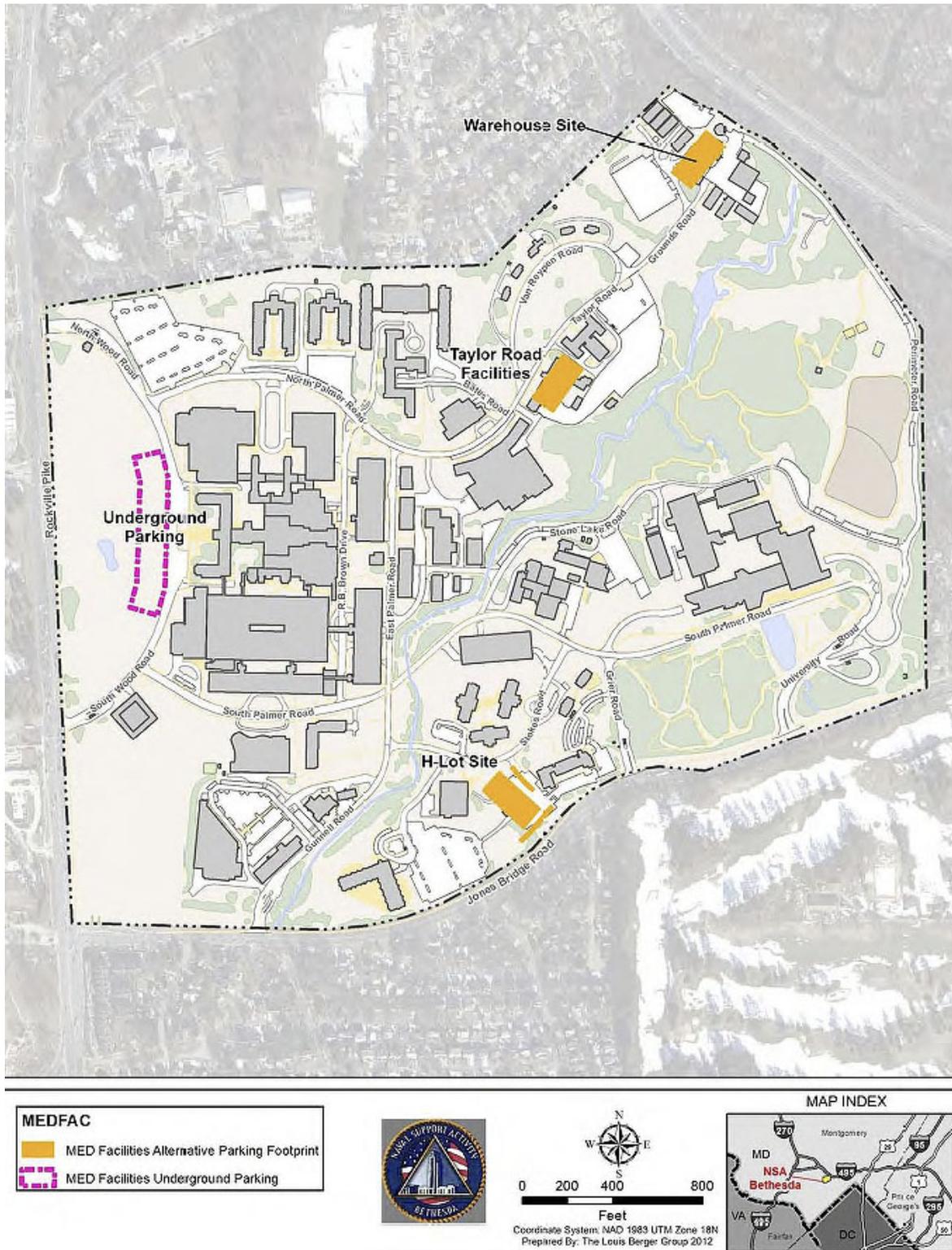


Figure 9: Medical Facilities Development Alternative Parking Sites map

(Source: Department of the Navy; Draft Environmental Impact Statement)

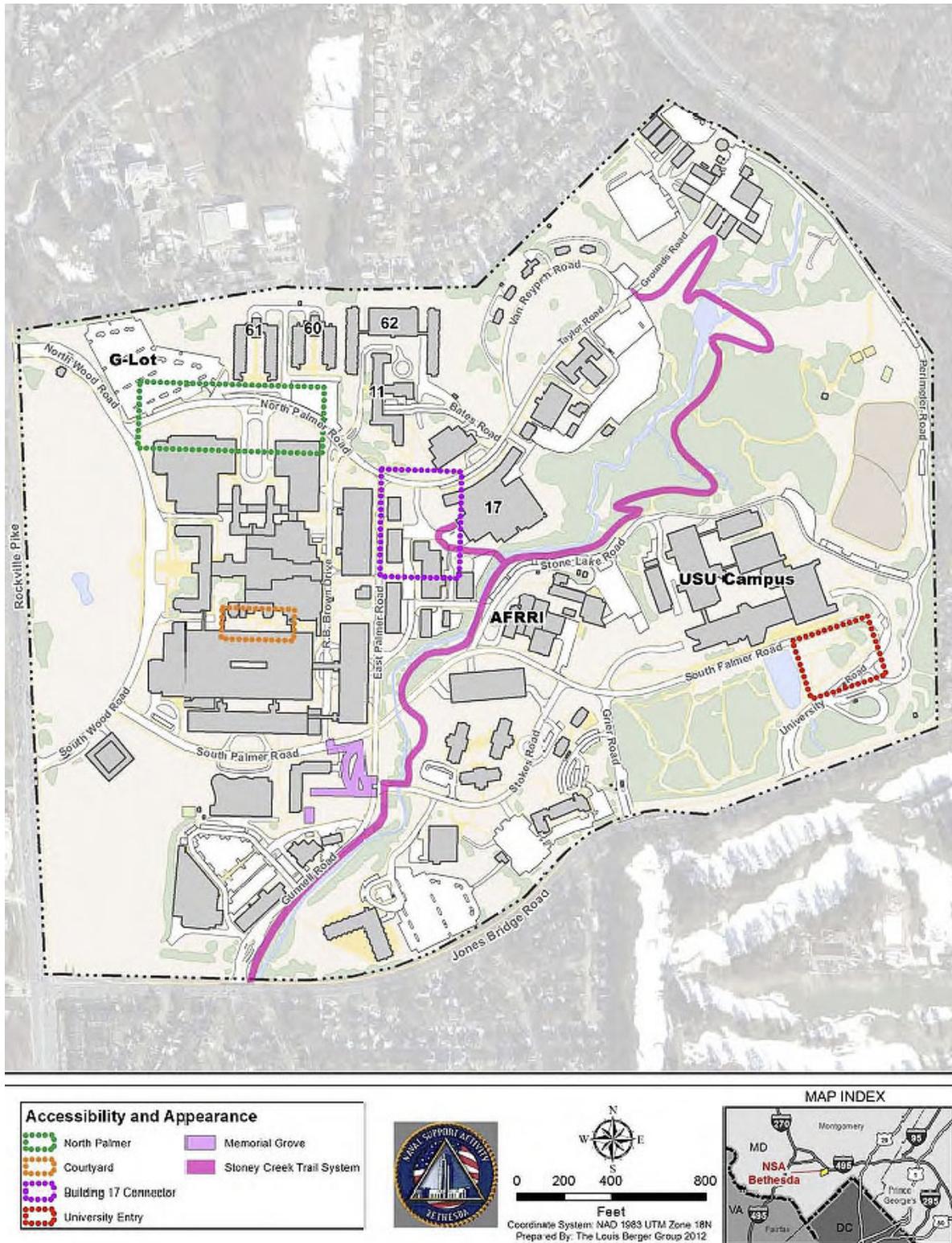


Figure 10: Medical Facilities Development Accessibility and Appearance Projects map

(Source Department of the Navy; Draft Environmental Impact Statement)

Training / Education Mission

The primary facilities of the USUHS are located in the southeastern portion of the campus. The USUHS complex is comprised of multiple buildings (Buildings 70, 71, 72, 73, 74, 75T and 76 in the main university complex and Buildings 28, 53, 59 and 79 outside of this complex).

The primary change in Training / Education Mission facilities proposed within the draft master plan is the proposed University Expansion project. The University Expansion project entails the construction of a new, approximately 341,151 square foot education and research building—Building F—primarily to consolidate 19 departments, centers, and activities dispersed in inadequate and temporary spaces at NSAB or in off-campus leased space in Montgomery County. The consolidation of the dispersed off-campus departments would result in termination of lease agreements.

The University Expansion would also include an approximately 144,000 square foot, 400-space parking structure to accommodate the consolidation of off-site personnel to the University campus and to provide needed staff parking at the installation. The University Expansion project also includes renovating and modernizing approximately 39,000 square feet of administrative and educational space in the existing University Buildings

The draft master plan identifies two sites to accommodate the proposed new education and research building. One site (referred to as Option 1 in the draft master plan and Alternative 1 in the draft EIS) was identified in the 2008 master plan and is located in the forested lot east of Grier Road south of the USUHS. Under this option, Building F and an above ground parking garage would be two separate buildings. The other site (Option 2 in the draft master plan and Alternative 2 in the draft EIS) is immediately west of the USUHS. This is a developed area between the USUHS and the Armed Forces Radiobiology Research Institute that primarily consists of a surface parking lot and a tree buffer between the two uses.

While supportive of the University Expansion project, staff is not supportive of expansion of the USUHS at the Option 1 site. Under this alternative, forested areas—approximately 4.2 acres—and will be impacted. In addition, this alternative will be detrimental to the visual character of the area, impact existing recreational trails, result in the direct loss of wildlife and wildlife habitat, and add 2.8 acres of new impervious surface in a previously forested area. As such, **staff recommends that the Commission comment that it does not support and urges reconsideration of Option 1 as a potential location for the expansion of the USUHS due to significant potential negative environmental and visual impacts resulting from construction on a steeply sloped site covered by mature forest along Jones Bridge Road.**

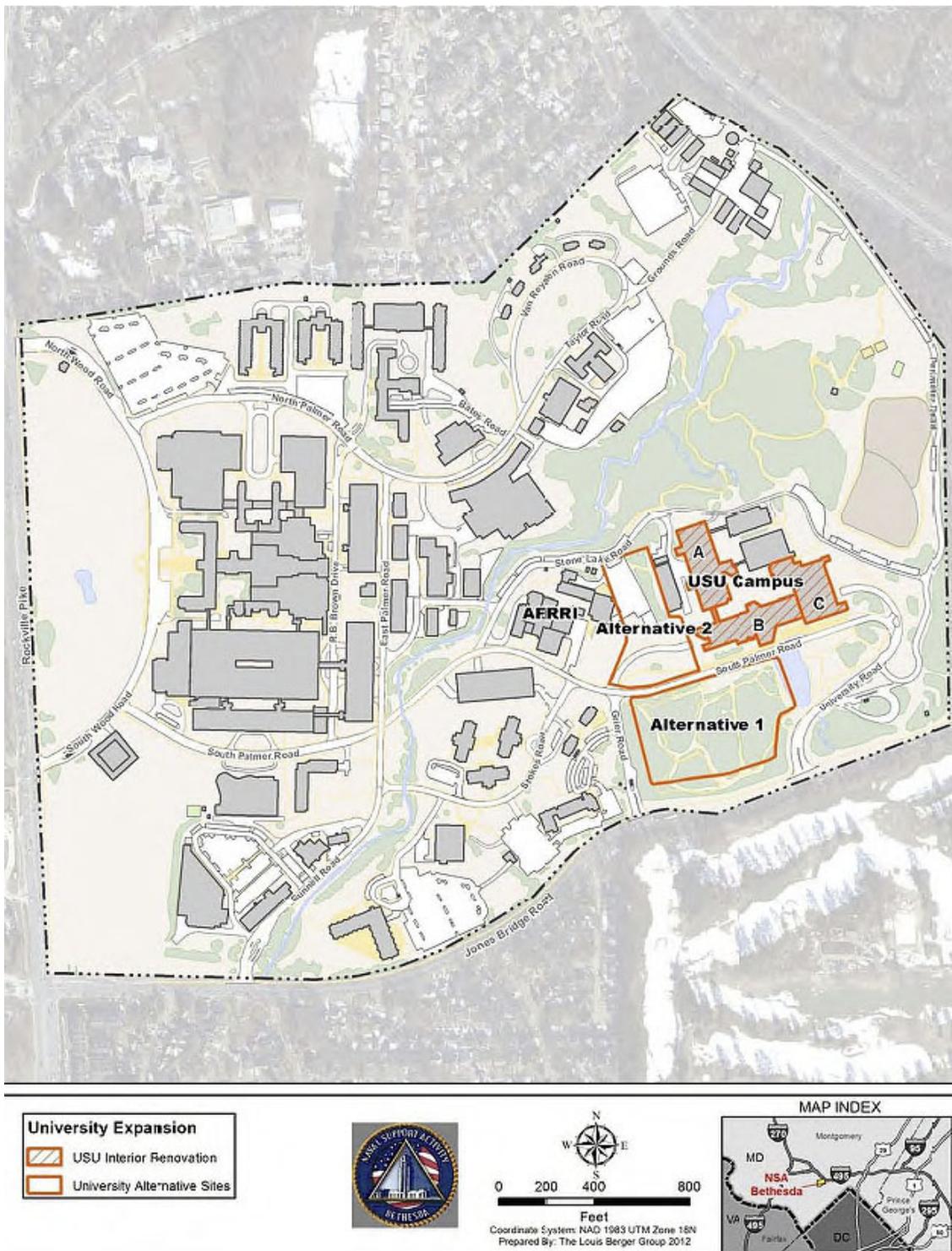


Figure 11: Proposed University Expansion Alternatives Sites and Interior Renovations map

(Note: The University alternative site areas identified in the figure are planning-level footprints and do not reflect the total area of disturbance for the projects, which likely would be smaller following detailed facility design.)

(Source: Department of the Navy; Draft Environmental Impact Statement)

Sailor and Family Support

Sailor and Family Support facilities consume the largest amount of land on campus. Located in the northern, southern and eastern edges of campus, this land use consists of a variety of community services, as well as temporary and permanent housing.

The southern side of campus includes both retail and lodging components. The retail cluster contains several suburban style structures, including a fast food restaurant and a gas station. It also includes the Naval Exchange, a bowling center, as well as a child development center. Temporary housing is located primarily at the southern edge of the campus and includes the Navy Lodge and the Fisher Houses. Building 50 is also considered temporary housing and is used for patients requiring frequent follow up visits that no longer need full time care in a hospital setting. (Other facilities on the installation—including Buildings 50, 60 and 61—also are used for patients requiring frequent follow-up care. Recent projects have been initiated to improve the accessibility in these facilities and increase flexibility for these options.)

Permanent housing is located to the northern half of the campus and consists of facilities for enlisted quarters and five Senior Officer/Flag single-family homes.

The Sailor and Family Support land use also includes a portion of the eastern campus used for active recreation, including ball fields and a running track.

The draft master plan proposes four primary projects for the Sailor and Family Support land use, the Wounded Warrior Barracks Sanctuary Hall and Parking Garage, the Uniformed Services Organization Warrior and Family Center, the Child Development Center (CDC) Development, and the Navy Lodge Expansion. These are described below

- Wounded Warrior Barracks (Sanctuary Hall) and Parking Garage

The project is to provide adequate transient housing at the installation to support military personnel being treated at the WRNMMC, whose injuries require an extended recovery/transition period before the service members can be returned to their unit or released to civilian life. The project includes construction of a seven-story, 100 two-bedroom suite facility to house the wounded warriors in transition and their medical / non-medical attendants, and a parking structure with 470 spaces. (Approved by NCPC on May 3, 2012; see NCPC File No: 7370.)

- Uniformed Services Organizations (USO) Warrior and Family Center

The project and associated Healing Gardens are dedicated to the mission of supporting the wounded, ill, and injured and their families throughout the rehabilitation process. The facility is designed to provide places for USO Warrior and Family Care programs and activities that promote physical health and recreation; family strengthening; positive mental health; and education, employment and community reintegration. (Approved by NCPC on September 6, 2012; see NCPC File No: 7384.)

- Child Development Center (CDC) Development

The additional personnel from BRAC and BRAC-related projects have brought an increased demand for CDC services at the installation and existing CDC facilities are not adequate to meet this new demand. As such, the following CDC projects are proposed within the master plan:

- New Child Development Center for 300 children near existing CDC. This will be a standard facility of 34,291 square feet.
 - New 20-child 24/7 care residence. This 5,262 square-foot “residential home” structure will be able to accept children at any time of the day or night and will be built near the new CDC.
 - Renovation of the Hourly Drop-Off Center, currently 9,484 square feet in Buildings 3 and 5. This project will be addressed as part of the construction of the new Medical Center facility (Building C). This drop-off center will satisfy the needs of the hospital and will benefit from its location within the hospital complex.
 - Existing CDC renovation will address space issues in the current daycare center, adding a 24-child preschool room to maximize occupancy.
- Navy Lodge Expansion

A new 7-story lodging structure, with 62,812 square feet is planned to be constructed adjacent to the existing 6-story Navy Lodge. Supporting facilities include new surface parking to serve the lodge addition, and improvements to the existing parking to meet required AT/FP standoff distances.

Research / Training Mission

The Research / Training land use is comprised of AFRRRI facilities in the center of the installation at the intersection of South Palmer Road and Stokes Road. Access to this area is provided on South Palmer Road, and its parking areas and service entries are located at a lower elevation along Stone Lake Road.

No primary projects are proposed within the draft master plan for the Research / Training land use.

Supply and Storage Support

The Supply and Storage Support land use is located in the northeast corner of the installation and is accessed by Perimeter Road from the south. The supply area is characterized by multiple metal sided and slope-roofed warehouse structures.

As a long-term opportunity area, the draft master plan proposes the following in the Supply and Storage Support land use area:

- Industrial/Warehouse area redevelopment

The existing industrial and warehouse area is currently developed in a decentralized arrangement of modular warehouse buildings (each approximately 4,000 square feet) and several other specialized buildings used for storage and some lab and administrative space.

Because of its relatively low density, accessibility via both North Palmer Road and Perimeter Road and lack of adjacent neighbors, this area presents an opportunity for more intense development and efficient use of land. By consolidating the warehouse space and outdoor storage area, additional land will be available for more intensive development of parking and administrative uses that do not require close proximity to the Medical Center.

Currently, nine warehouses (temporary administration space) provide approximately 36,000 square feet of storage, the Armed Services Blood Bank Center occupies over 6,000 square feet and the remainder of the buildings provide approximately 6,000 SF of additional space.

A new consolidated 40,000 square-foot warehouse facility would allow for the consolidation of existing warehouse space and could accommodate an anticipated need for an additional 2,000 square feet of future growth.

Approximately 25,000 square feet of outdoor storage area can be located north of the proposed PPV housing in the former Z-Lot. This outdoor storage would need to be appropriately screened from neighboring residents, and every attempt should be made to preserve existing vegetation along the edges of this area. Possible uses for this outdoor storage area are emergency and security equipment storage, emergency vehicle storage, blood bank and other tenant-special vehicle storage, and other typical maintenance uses. This area would replace the several smaller storage and laydown areas across the installation.

Consolidation of the warehouse space would allow for the redevelopment of the area between Grounds Road and Stoney Creek as a hub for a new Fire Station, administrative functions, lab and offices for tenants that do not require close proximity to the Medical Center. The Fire Station building is projected to be a two-story, three company firehouse that may accommodate up to 44 staff.

A new parking garage may be built on the north side of Grounds Road that would provide required parking for administration and general parking for the installation.

Staff supports the potential redevelopment of the northeast warehouse area, but redevelopment of this area should be further studied to ensure that potential impacts to the neighborhood directly to the north are minimized in terms of proposed facility setbacks and heights, as well as noise and light pollution.

Airfield Operations

Airfield Operations land use is limited to the existing helipad, located off the historic lawn just southwest of the medical core.

The location of the helipad is driven by its proximity to required medical services. Therefore, it cannot be relocated. Since the helipad is primarily used during the event of a medical emergency, there are specific criteria to protect the airspace surrounding the landing area. The criteria is identified in UFC 3-260-01, November 2002 (and changes May 2006), United Facilities Criteria, Airfield and Heliport Planning and Design. These criteria regulate the size of the primary surface of the helipad, clear zones, approach/departure and transitional surfaces, and the accident potential zone (APZ).

To meet these criteria, the master plan proposes to reconfigure and expand the existing helipad. This renovation will add 13,500 square feet of bituminous pavement and will require significant grading in to level the new primary surface area. A new retaining wall will be required along South Palmer Road and numerous trees that penetrate the helipad's primary surfaces will need to be removed.

Utilities

The majority of land use designated for utilities exists in the center of the installation, east of Rixey Road. This area is characterized by the presence of two large structures: a power plant and a cooling tower as well as several one and two story buildings.

The Medical Facilities Development will require utility upgrades within this area and throughout the installation. These upgrades include: demolition and reconstruction of three existing cooling towers and construction of a fourth tower; replacement of deteriorating condensate return lines across the installation; reparation of damaged water lines; provision of backup water supply storage tanks and distribution lines; and doubling the number of the high voltage feeder lines from Potomac Electric Power Company's (PEPCO) Woodmont substation across Rockville Pike.

Open Space / Recreation and Cultural Resources

The landscape patterns of the installation can be simplified into two categories: man-made and natural. The man-made landscape pattern is most easily described as areas where development has removed the native landscape and replaced it with a more formal landscape. Because of the age of the installation many of the plantings have matured and appear to be natural to the site. The man-made landscape pattern can be seen in the protected visual area of Building 1, along streets and parking areas, and adjacent to buildings. The steeply sloping topography in some areas of the installation allows for native trees to remain inside the man-made landscape, adjacent to Stoney Creek and the landscape buffers at the perimeter of the installation.

The most recognizable open space on the Bethesda campus is the front lawn of Building 1. This front lawn is a more passive space used for viewing or individual activities, since security prefers

this area remains unpopulated. Most often outdoor spaces on campus are courtyards defined by building edges. Some of these courtyards are easily accessible, well defined, and have landscape and other amenities to attract visitors. Other courtyards are not accessible, seem too confined and are difficult to maintain. Several open spaces exist on the east side of the campus. One of the only designated open spaces for active recreation is east of the USUHS complex where the baseball field and running track are located. North and south of the USUHS complex are large woodland areas that contain asphalt walking trails which are heavily used for active and passive activity.

Recreational activities are continuing to grow in importance on campus in support of the Installation's primary mission. There are multiple indoor recreation facilities throughout the campus, including a bowling center, a new fitness center, and an enlisted club that provides movies, billiards and other indoor recreational opportunities. Some additional small fitness rooms are located within various buildings for employees.

There are limited opportunities for active outdoor recreation. The only designated outdoor recreation area includes a ballfield, a running track and some open areas for impromptu activities. More passive recreation areas exist throughout campus along wooded trails, in the form of picnic shelters and plazas to sit and enjoy outdoor spaces.

Cultural conditions include those elements of the built environment that have some historic, archaeological or cultural significance. Generally these conditions present opportunities to build on a tradition or existing character of the site and may constrain use in deference to preservation or study of a significant building, site, or landscape.

Currently the Historic District consists of Building 1 with its distinguished architectural design, materials, austere detailing and prominent setting at the top of a knoll with a broad lawn, small lake and flagpole on the down slope to Rockville Pike, plus the remnants of a larger 1940's hospital complex designed by Paul Cret and the Navy's Bureau of Yards and Docks. Certain other landscaping and site planning features of the Historic District survive such as sections of looping roads, the rolling topography and trees which break up the density of the complex, the loop of Colonial Revival style houses along a half-circle shaped green and the Beaux Art style ramifying wings of Buildings 3 and 5 embedded in newer construction. In summary, the character defining features of all remaining historic district buildings consist of their materials, scale, architectural style, relation to Cret's original site plan and (in some cases) landscaped setting.

The Historic District boundaries are irregular in shape but take in approximately a third of the 243 acre Installation toward the west and north. The row of Colonial Revival Flag officers' quarters to the northeast of the installation are the only architectural resources that differ from the Stripped Classicism style of the ensemble.

Not as well documented, but of obvious importance is the rolling terrain with mature trees and plantings that characterize the majority of the property. There is an evident transition from the formality and limited planting of Building 1's lawn with its terrace and flagpole on axis with the

building's entrance, and an increasingly naturalistic landscape determined by wooded stream valleys further to the east.

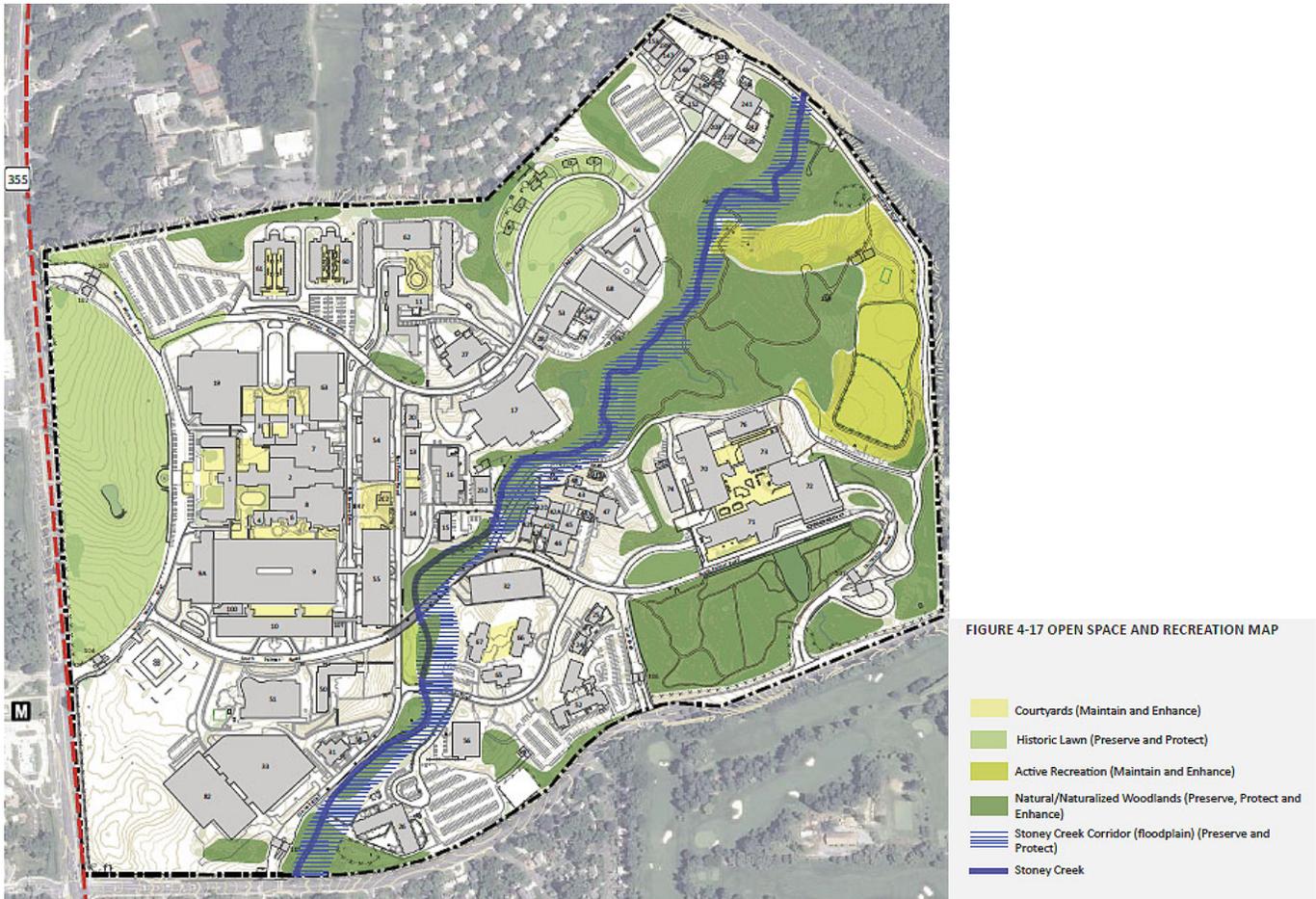


Figure 12: Open space and recreation map

(Source Department of the Navy; Draft Installation Master Plan)

The potential for archaeological resources at NSAB has been limited by the extensive ground disturbance from farming prior to Navy acquisition and coverage in hardstand and building footprints due to the construction of the hospital complex and later buildings, especially in the western, more developed section of the Installation. In the northeast area of the installation, the low rising landforms above the streambeds of Stoney Creek and its tributaries have some potential for archaeology.

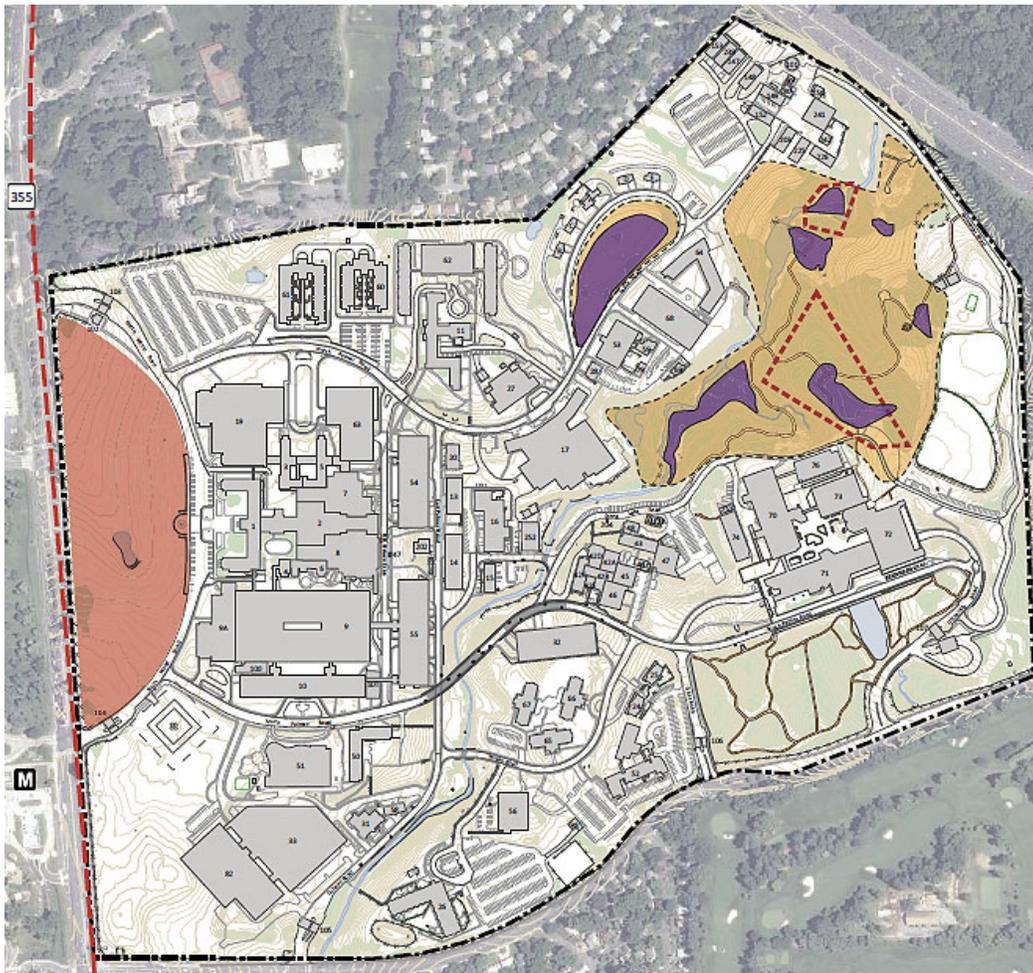


FIGURE 4-7 CULTURAL RESOURCES MAP

-  Avoidance Zone (around potential NHRP eligible site)
-  Archaeological Survey Area
-  Moderate to High Probability Area
-  Historic Lawn and Protected Viewshed

Figure 13: Cultural Resources map

(Source Department of the Navy; Draft Installation Master Plan)

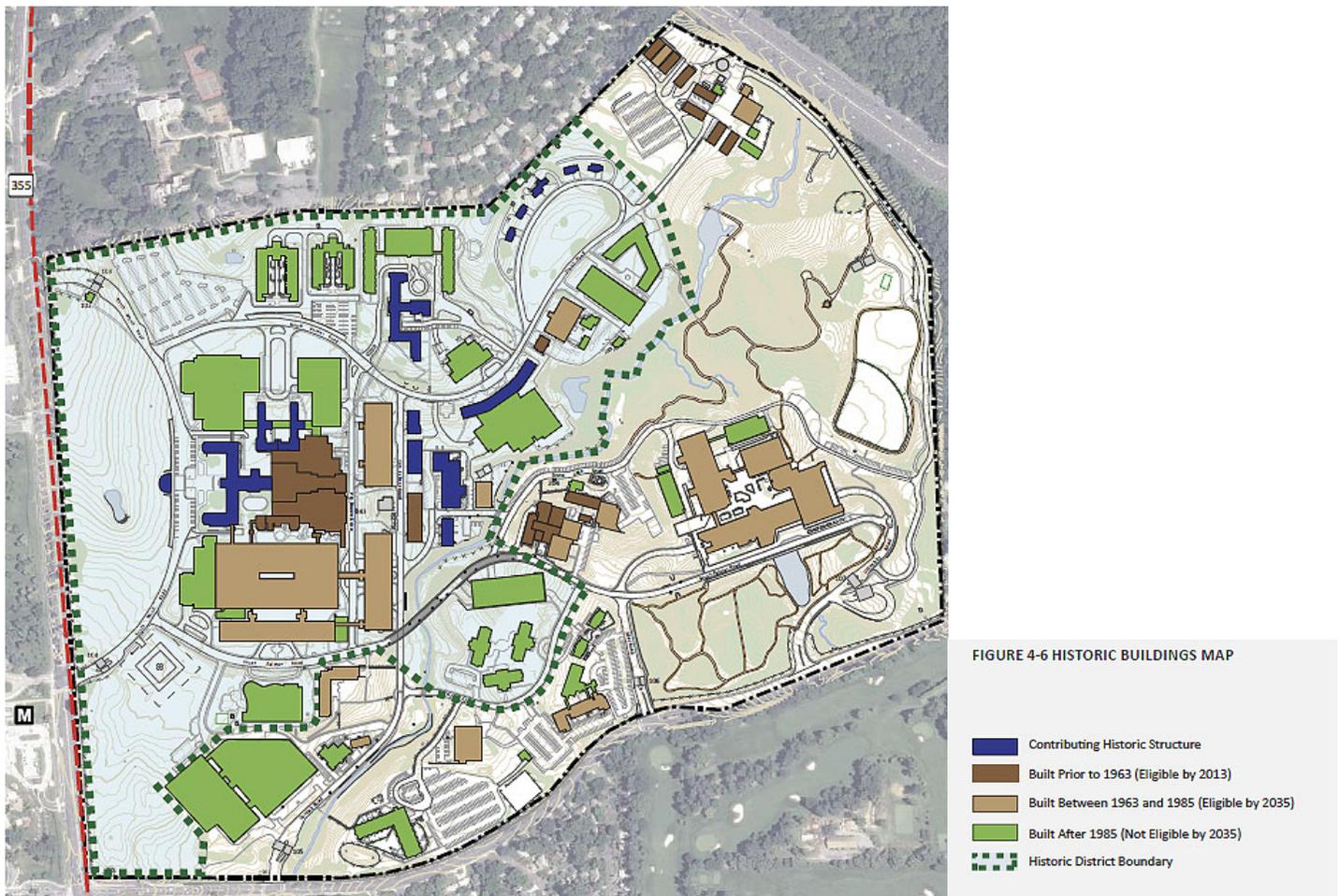


Figure 14: Historic Buildings map

(Source Department of the Navy; Draft Installation Master Plan)

NSAB is located in a highly developed area of Montgomery County. As a result, there is both internally- and externally generated noise.

Major external sources of noise, in approximate order of significance, include I-495 (Capital Beltway Inner Loop), Rockville Pike and Jones Bridge Road. For I-495, with the exception of NSAB maintenance and storage buildings located adjacent to the Interstate, a significant amount of noise is attenuated by the trees along the eastern and northeastern portions of the campus. Rockville Pike is a relatively low speed road compared to I-495 and, as a result, the intensity of the noise is less than I-495. Additionally, the extensive lawn area on the western side of the campus provides a significant set back from the noise source. As a result, a large portion of this noise is attenuated. Noise generated from traffic on Jones Bridge Road to the south is also buffered for the most part by stands of trees and changes in elevation.

Within the campus, there are also noise considerations. This includes the helicopter landing pad, Building 252 (cooling towers) and Building 16 (power plant). The helipad is located in the southwestern portion of the campus adjacent to Gate 2 and located away from major populated areas. The helipad is used for medevac operations, both non-VIP and VIP (including the President of the United States).

Generally, air traffic volumes are low. Some noise is produced by the power plant located at the center of NSAB. Noise generated from these facilities is shielded from the main medical complex to the west by parking structures and other buildings to the north, south and west by stands of trees, secondary buildings and topography.

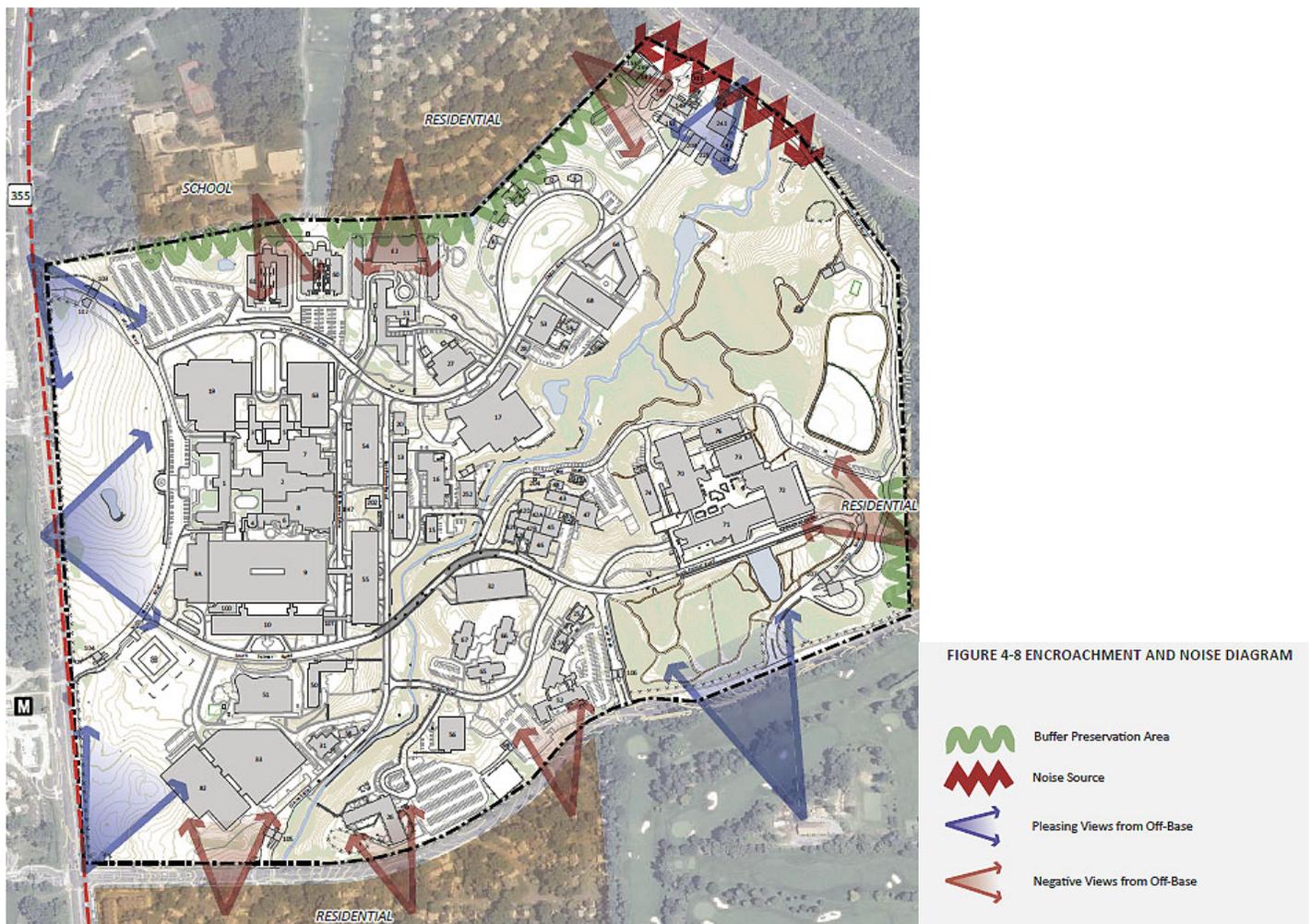


Figure 15: Encroachment and Noise Diagram map

(Source Department of the Navy; Draft Installation Master Plan)

Additional variable noise results from day-to-day activities of people using the campus, exterior maintenance and grounds crews.

The surrounding land uses are stable and generally built-out. Impacts of encroachment are more likely to be related to the impact of construction at NSAB than on adjacent properties. Planning should seek to minimize the impact of noise and vibration near the perimeter.

Negative views from off-base residences and schools are mainly associated with taller buildings near the perimeter, such as Buildings 60, 61 and 62. Several houses are very close to Bethesda's perimeter fence and impacts of these taller buildings include, taking away from a neighborhood's visual appeal and shadows cast at certain times of the day. There are also pleasing views from off-base, such as the ones established from Rockville Pike to the historic lawn and tower.

While development at the installation has historically occurred away from the perimeter, since the 2008 master plan update many new and larger structures have been built or are planned in locations close to the installation's perimeters on all sides. To mitigate potential negative impacts from these new structures, staff recommends that the Navy incorporate a comprehensive landscape framework plan that supports a robust landscaping buffer on the northern, eastern and southern perimeters of the installation and addresses potential negative impacts upon the historic lawn and protected viewshed along Rockville Pike. In particular, **staff recommends that the Commission recommend that in its completion of the master plan document, the Navy:**

- **Incorporate a landscape framework plan that includes strategies to:**
 - **Preserve and enhance the landscaped buffer at the southern, eastern and northern perimeters, in accordance with planning objectives noted in Section 1.5 of the draft master plan**
 - **Increase the tree canopy to the extent possible**
 - **Minimize and mitigate tree loss, including but not limited to negative impacts to historic views from Rockville Pike, resulting from the construction of a new pedestrian tunnel and Metro entrance, the expansion of the helipad, the underground parking garage in front of Building 1, and a kiss and ride facility**
 - **Minimize and mitigate potential negative impacts to the view from Rockville Pike due to the placement of temporary structures in the northwest parking area during the construction of a new medical facility behind Building 1.**

In regards to stormwater, the NSAB campus operates with a Storm Water Pollution Prevention Plan (SWPPP) in place. NSAB is also responsible for maintaining two NPDES permits (a State Discharge Permit and a General Discharge Permit) and tracking sediment and erosion control compliance. As a result, future projects are required to comply with Maryland Stormwater Management Guidelines that establish minimum storm water quality standards and maximum storm water discharges from a given site. Projects that will be impacted are new construction over 5,000 square feet of disturbed area and redevelopment of existing impervious areas of 5,000 square feet and more. For redevelopment projects, MSMG requires a net reduction of 20 percent of the existing impervious area.

Stoney Creek is the receiving stream for much of the runoff from the NSAB campus. In the past, storm water discharge to this creek has caused erosion near the points of discharge from the respective storm systems. Stream bank damage has occurred due to the increased storm water

runoff from impervious areas within the campus. As discussed above, current MSMGs address both new development and redevelopment. As a result, as new construction and redevelopment occur, the creek's environmental condition will improve.

The installation is currently planning a storm water study. New storm water regulations require the implementation of low impact development storm water solutions. The purpose is to minimize impervious footprint, protect natural vegetation, extend time of concentration, filter and infiltrate, and store and reuse runoff with the use of techniques such as bioretention, dry wells, filter/buffer strips, swales, rain barrels, cisterns, and infiltration trenches.

Transportation

As noted above in the Project Description section, a draft Transportation Management Plan has been developed in conjunction with the draft master plan. The TMP addresses existing and proposed site access and roadway networks, vehicular circulation, transit and pedestrian facilities, planned developments and improvements, and intersection capacity analyses and includes various demand strategies that effectively allow the installation to continue to meet NCPC's recommended employee parking ratio of one vehicle for every 3 employees (1:3), in accordance with the Comprehensive Plan recommendations for suburban federal facilities within 2,000 feet of a Metrorail station.

This document is an update of the current TMP in use at NSAB. Many of the measures identified in the previous 2008 TMP, as well as others, have been implemented in an effort to limit the use of Single Occupancy Vehicles (SOVs) by daily commuters to the installation. The measures included in the 2008 TMP include adjusting and improving internal facility/Metrorail shuttle bus service; establishing and implementing a Parking Management Plan; developing a commuting newsletter and a section of the NSAB website dedicated to commuting; performing ride matching services to increase the use of vanpools/carpools; and holding regular transportation/commuting meetings at the installation. These measures have been very successful in having the installation meet reducing NCPC's recommended employee parking ratio of 1:3, reducing the use of SOVs, and increasing the use of alternative transportation methods:

- The pre-BRAC employee parking supply ratio was 1 parking space for every 2.5 employees; following implementation of the 2008 TMP the existing (2011) ratio is 1:3.32
- Employee use of SOVS has been reduced from 72 percent to 39 percent
- Mass transit use has increased from 11 percent to 44 percent
- Walking, biking, and drop-off has increased from 2 percent to 5 percent, and
- Registered carpools have increased from approximately 100 to approximately 450.

In terms of parking supply, the installation currently has 7,686 parking spaces, with 3,525 spaces available for staff and the remainder available for patients, visitors/retail, lodging and government vehicles. With approximately 11,686 current employees, the vast majority of employees cannot park at the installation since there are not enough parking spaces to accommodate the need.

The draft master plan proposes to increase the number of parking spaces on the installation to between 8,840 and 9,012 (an increase in parking spaces of 1,154 to 1,326), based on alternatives to the proposed short-term development projects outlined within the plan. Anticipating a growth in 925 employees, the new spaces will be distributed between employees and government vehicle use, and patient and visitor needs. Patient and visitor needs are developed using the Unified Facilities Criteria while employee spaces are distributed to meet the employee parking ratio of one vehicle for every 3 employees (1:3). The proposed distribution is noted in the below table:

	Employee parking			Patient / Visitor / etc. parking				Installation capacity Total
	Staff vehicles	Gov't vehicles*	Total	Patient	Visitor / Retail	Barracks / Lodge	Total	
Existing - 2011	3,525	148	3,673	2,436	1,120	457	4,013	7,686
2018 parking with Short-Term Projects - High Estimate	3,884	229	4,113	2,786	1,512	601	4,899	9,012
<i>Increase from Existing</i>	359	81	440	350	392	144	886	1,326
2018 parking with Short-Term Projects - Low Estimate	3,712	229	3,941	2,786	1,512	601	4,899	8,840
<i>Increase from Existing</i>	187	81	268	350	392	144	886	1,154

*Includes 100 swing spaces to be used by other uses due to construction/other activities

Figure 16: Existing and proposed parking spaces

(Source NCPC)

With the proposed distribution of parking between employees and government vehicle use, and patient and visitor needs, both the high- and low-estimate of the number of installation parking spaces following development of short-term projects within the draft master plan will meet NCPC's recommended employee parking ratio of one vehicle for every 3 employees (1:3). The high-estimate will result in a parking ratio of 1:3.32 and the low-estimate will result in a parking ratio of 1:3.40; these are noted in the following table.

	Employee parking Staff vehicles	Employees (2018 has increase of 925)	Ratio (NCPC recommends 1 : 3)
	-	-	-
Existing - 2011	3,525	11686	1 : 3.32
2018 parking with Short-Term Projects - High Estimate*	3,884	12611	1 : 3.25
2018 parking with Short-Term Projects - Low Estimate*	3,712	12611	1 : 3.40

Figure 17: Existing and proposed employee parking ratio

(Source NCPC)

A prescriptive parking management plan was instituted in 2011 to accommodate the realignment with Walter Reed Army Medical Center. Staff parking is divided equitably among tenant commands based on their percentage of population. Each tenant command identifies which staff receives parking privileges based on their specific business rules. Since the parking management system was modified in September 2011, the number of carpool groups increased by about 3.5 times and the number of applications for mass transit benefit applications increased significantly as well.

As part of their parking management efforts, NSA Bethesda has added electronic message boards on some parking structures to inform commuters of the availability of parking spaces within the structure and the level on which they can be found. This “smart parking” technology should be added to all parking facilities to improve vehicle movement. NSA Bethesda is exploring adding access control to garages and lots for both patients and staff (with specific control technology for each end user). There is a desire to link all parking to a central control that can post updates at the five entry points to the installation. These measures, along with minor roadway work within the installation (lane widening, adding turn lanes, etc.) would all be useful measures to employ and their strong consideration is recommended.

There is always a loss of parking spaces due to ongoing construction/renovation projects on the installation, so the full complement of staff parking is not available. As such, the installation always has a quantity of staff parking spaces (“swing parking”) that is needed for general construction-related parking. These spaces are not in a specific location, but are generally supplied from the spaces available for staff parking. During an individual construction project, space is made available near the construction site for the construction staff and laydown, and the

installation staff that use those displaced parking spaces are temporarily reassigned to other parking spaces. This essentially provides "floating" laydown/staging space to accommodate construction as it progresses throughout the installation. It is estimated that at least 100 parking spaces are lost due to construction conditions on the average day; often more. To keep the installation functioning, and to provide adequate parking during construction, NSAB has taken three basic steps. First, as possible, temporary parking lots are provided on-installation to accept displaced vehicles; second, the installation regularly displaces approximately 100 parking spaces out of the pool of available employee spaces for construction (the location and actual number of these spaces varies by need but it is estimated that on average 100 cars are continually unavailable for employees); and last, NSA Bethesda is leasing remote parking on a short-term basis. Staff is required to use public transit to access the installation from the off-site parking.

Staff is pleased to see that the draft TMP includes continues the several progressive measures of the 2008 TMP that have successfully reduced the use of Single Occupancy Vehicles for travel to and from the installation, and for achieving a reduction in the pre-BRAC employee parking supply ratio of 1 parking space for every 2.5 employees to 1 parking space for every 3.32 employees. **Staff recommends that the Commission commend the Navy for meeting the 1:3 parking ratio recommended in the Comprehensive Plan for the National Capital: Federal Elements.**

In addition to NSAB's efforts to manage transportation and limit the use of SOVs, there are a number of projects and planning initiatives in the vicinity of NSAB designed to improve transportation in the immediate area in which the Navy has been active in their coordination. These include:

- Medical Center Metrorail Station Crossing Project

Project includes a new pedestrian tunnel between NSAB and the Medical Center Metrorail station along with high-speed elevators connecting directly to the mezzanine of the Metrorail station; improve pedestrian mobility and safety.

The Montgomery County Department of Transportation is the primary agency; completion is estimated in 2015.

- Major Intersection Improvements

Project includes improvements at Rockville Pike at Cedar Lane, Connecticut Avenue at Jones Bridge Road, Rockville Pike at Jones Bridge Road, and Cedar Lane at Old Georgetown Road

The Montgomery County Department of Transportation and the State Highway administration are the primary agencies; completion of the projects is estimated to be 2014 or later.

Since the 2008 master plan and implementation of BRAC, the Navy has worked diligently and successfully with the state and local agencies to implement projects to mitigate vehicular traffic within the NSAB area. As such, **staff recommends that the Commission encourages the Navy to continue this collaboration with local planning and regulatory agencies to develop and implement county, state, and federally-funded traffic and transportation improvements related to implementation of the master plan.**

Staff recognizes that the Navy has worked diligently over the past number of years to balance the transportation needs of the installations employees, patients and visitors, as well as those of its construction contractors. However, recognizing the significant short-term projects proposed to be constructed within the draft master plan and the potential impact the associated construction workers, who are not considered in the parking calculations above, may have on local roadways, **staff recommends that the Commission highlight this issue and note that a significant number of construction workers may be on the installation on any given day to complete various components of the proposed actions within the master plan, and encourages the use of alternative modes of transportation and staggered work hours for construction personnel to mitigate impacts on traffic in the surrounding community.**

Comprehensive Plan for the National Capital

As noted above in the Project Description section, the draft master plan carries over objectives from the 2008 National Naval Medical Center Master Plan Update and expands them to support NSAB and its mission to provide tenants with “efficient and effective shore installation management services and programs in support of mission commanders to enable combat readiness for fleet, fighter and family.” These objectives include:

- Create an environment that meets the needs and enhances the experience of the Installation’s primary missions.
- Provide a land use master plan that accommodates anticipated growth and is flexible enough to remain viable as scopes of specific projects are developed and changed.
- Maintain and enhance the aspects of security, both for the overall Installation and individual projects.
- Recognize positive features in the built and natural environment and maintain and enhance those features.
- Preserve the historic character, cultural value and natural resources of the campus.
- Facilitate an accessible, walkable campus, with clustered functions and a robust pedestrian network.
- Provide compatibility with the surrounding neighbors by maintaining buffers on the perimeter as required.

These objectives are generally in conformance with the Comprehensive Plan for the National Capital, and particularly conform to the goals and policies of the Federal Workplace Element by expanding federal facilities at an existing federal site. The proposed action is also likely to provide additional opportunities to benefit both the local and regional economy and to provide high-quality medical care for military personnel.

Staff notes that the Montgomery County Planning Department requests to have individual proposed projects reviewed by that agency. And staff further notes that the Federal Workplace Element recommends that federal agencies: consult with local agencies to: ensure that federal workplaces enhance the design qualities and vitality of their communities; plan federal workplaces to be compatible with the character of the surrounding properties and community and, where feasible; and associate federal workplaces in urban areas to their urban context and appropriately scale them to promote pedestrian activity.

While NCPC does not require federal agencies to submit individual proposed projects on an installation for formal review by local agencies once a master plan is approved, it will potentially benefit the region and the applicant if the applicant consults with local agencies to ensure that federal and county planning efforts are complementary to each other.

As such, **staff recommends that the Commission recommends that in the implementation of the master plan, the Navy coordinate individual project reviews with the Montgomery County Planning Department for comments at the same time that they consult with the Maryland Historic Trust for the determination of effect on historic properties, and requires that future submissions include documentation demonstrating that they have done so prior to submitting to NCPC for review.**

Relevant Federal Facility Master Plan

The Commission approved the 2008 National Naval Medical Center Master Plan Update for the installation at its February 5, 2009 meeting. The purpose of the 2008 master plan was to address anticipated development and the expansion of services that were the result of the Base Realignment and Closure (BRAC) 2005 requirements. The draft master plan was developed to bring the existing 2008 NNMC Master Plan up-to-date; it uses post-BRAC and Closure (BRAC)-construction conditions as the starting point and provides a logical basis and framework for anticipated development throughout the installation considering existing constraints and opportunities.

National Environmental Policy Act (NEPA)

In compliance with the NEPA, the Department of the Navy has prepared a September 2012 draft environmental impact statement (EIS) that evaluates the potential environmental effects associated with the two primary proposed actions at NSAB, the Medical Facilities Development and the University Expansion. The Medical Facilities Development includes: the demolition of five hospital buildings and construction of a single 5-story facility and associated parking garage for visitors, patients, and very important persons (VIPs); internal renovation of five hospital buildings; temporary medical facilities to provide uninterrupted patient care during construction; utility capacity upgrades; accessibility and appearance improvement projects; and internal and external renovations of a workshop/warehouse to office space. The University Expansion includes the construction of a new education/research facility and associated above-ground parking garage, and the internal renovation of existing university buildings. The draft EIS also considers a No Action Alternative that evaluates the impacts at NSA Bethesda in the event that the proposed actions do not occur.

The proposed actions are components of the draft master plan, which reflects both ongoing projects previously considered under NEPA and potential future development opportunities at NSAB. For the potential future development opportunities identified in the draft master plan, the Navy will ensure that appropriate NEPA review is completed when the projects are proposed for implementation.

A final Environmental Impact Statement and Record of Decision will be submitted to NCPC in conjunction with the submission for approval of the final Installation Master Plan.

NCPC does not have an independent NEPA responsibility for federal projects outside the District of Columbia.

National Historic Preservation Act (NHPA)

In conformance with Section 106 of the NHPA, the Department of the Navy submitted the draft master plan for review by the Maryland Historic Trust (MHT), the Maryland State Historic Preservation Office (MD SHPO).

The MHT, in a letter dated October 9, 2012, determined that the draft master plan will have no adverse effect on historic properties provided that “the MD SHPO continues to review all individual construction, demolition, and ground-disturbing projects that are undertaken, funded, or permitted by a federal or state agency.”

NCPC does not have an independent NHPA responsibility for federal projects outside the District of Columbia.

III. CONSULTATION

Maryland State Clearinghouse

On June 11, 2012 the draft master plan and draft update to the installation's Transportation Management Plan (TMP) were referred by NCPC to the Maryland State Clearinghouse (Clearinghouse). In June the Clearinghouse referred the draft TMP to affected agencies for review and comment. Following technicalities, the Clearinghouse subsequently referred the draft master plan to affected agencies for review and comment in August. The affected agencies that received the documents for review include: the Maryland Department(s) of Transportation, the Environment, and Natural Resources; the Maryland Military Department; the County of Montgomery; the Maryland National Capital Park and Planning Commission; and the Maryland Department of Planning.

Staff received the following recommendations on the draft update to the TMP from the Clearinghouse on August 16, 2012:

- The Maryland Department(s) of Natural Resources, and Transportation; and Montgomery County found this project to be consistent with their plans, programs, and objectives.
- The Department of Natural Resources stated that this project supports the smart, green and growing initiative.
- The Department of Transportation stated that "as far as can be determined at this time, the subject has no unacceptable impacts on plans or programs."
- The Maryland Department(s) of Environment; Maryland National Capital Parks and Planning Commission Montgomery County; and the Maryland Department of Planning; including the Maryland Historical Trust found the draft TMP to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments as summarized below.
 - The Maryland Department of Environment (MDE) also noted processes for construction debris disposal and water quality / stormwater management, and recommended that site Designs should consider all Environmental Site Design to the Maximum Extent Practicable and "Green Building" Alternatives.
 - The Maryland National Capital Parks and Planning Commission -Montgomery County (MNCPPC) stated that based upon the information provided it is recommend that the following considerations be incorporated into the next complete submittal of the draft TMP and draft Environmental Impact Statement: the TMP must include a greater commitment (than included in the draft TMP) to implement the Capital Bikeshare program at the Installation through coordination with the county Department of Transportation to explore the feasibility of enhancing bikeshare opportunities for staff and visitors at the installation, with bikeshare stations at gate locations; NSAB develop a "live-near-work" program to further enhance the pool of employees who could walk, bike, or take a short shuttle or transit trip to/from the installation; update the TMP every two years until the full employee population of 12,611 at the installation is realized; and develop an annual report on TMP progress monitoring prepared by the Transportation Program Manager (TPM)/Transportation Program Coordinator (TPC), to be shared with county planning and transportation staff. However, MNCPPC staff was not able to complete their review of the draft TMP because they were waiting for distribution of the associated draft Environmental Impact Statement.
 - The Maryland Department of Planning concurred with the Maryland National Capital Parks and Planning Commission - Montgomery County (MNCPPC).
 - The Maryland Historical Trust (MHT) determined that the draft TMP will have no adverse effect on historic properties provided the MD SHPO continues to review all projects deemed to have a potential effect upon historic resources or their settings.

To date staff has not received recommendations from the Clearinghouse on the draft master plan; however, these are expected to be received on October 29, 2012.

Montgomery County Planning Board

In response to NCPC's referral of the draft master plan and draft TMP, and the Navy's referral of the draft EIS for comment, on October 18, 2012 the Montgomery County Planning Board reviewed these documents. The Planning Board's official comments are forthcoming and are expected to be received on October 29, 2012.