



Executive Director's Recommendation

Commission Meeting: July 9, 2015

PROJECT

Quantico Middle / High School

Marine Corp Base Quantico
Quantico, Virginia

NCPC FILE NUMBER

7597

NCPC MAP FILE NUMBER

2402.10(38.00)44172

SUBMITTED BY

Department of the Navy

APPLICANT'S REQUEST

Final approval of site and building plans

REVIEW AUTHORITY

Advisory
40 U.S.C. § 8722(b)(1)

PROPOSED ACTION

Approve as requested

ACTION ITEM TYPE

Consent Calendar

PROJECT SUMMARY

The United States Department of the Navy proposes to construct a new Quantico Middle High School at Marine Corps Base Quantico. Construction of the new school will occur on the site of an existing elementary school that is scheduled to be demolished. The new building will have approximately 116,000 gross square feet of interior space on two levels. The project is designed for a projected student enrollment of 350 and a total of 75 employees, including aids, service personnel, and faculty. The project includes site improvements such as wayfinding and regulatory signage, fencing, service access paving, landscaping, walkways, exterior lighting, utilities, and athletic fields with field-house facilities. A parking area of 124 spaces is also included in the project. The existing Quantico Middle School High School, located near the project site, will be demolished following construction of the proposed new structure. The new building is designed to comply with existing Anti-Terrorism/Force Protection requirements, installation design guidelines, and attain a Leadership in Energy and Environmental Design (LEED) Silver rating, utilizing solar-heated water, natural gas, and a rainwater harvesting system.

KEY INFORMATION

- The project is situated on a previously developed site in a central location at Marine Corps Base Quantico. The site is an existing Department of Defense Education Activity Education school site and is in alignment with the installation master plan.
 - The project is situated adjacent to a new elementary school (under construction; reviewed by NCPC April 4, 2013; see NCPC File No: 7462) and will contribute to the creation of a campus to serve the educational needs of independent children of active duty personnel at Marine Corps Base Quantico.
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RECOMMENDATION

The Commission:

Approves the final site and building plans for the new Quantico Middle High School at Marine Corps Base Quantico, in Prince William County, Virginia.

Notes that the Navy provided the additional information as requested by the Commission as part of the Preliminary project approval on October 2, 2014.

PROJECT REVIEW TIMELINE

Previous actions	October, 2014 - Preliminary approval of site and building plans.
Remaining actions (anticipated)	None.

Prepared by M. Weil
July 2, 2015

I. PROJECT DESCRIPTION

Site

Marine Corp Base Quantico (MCBQ) is located approximately 30 miles south of Washington, DC, and is the primary base for the U.S. Marine Corps in the National Capital Region. The installation is approximately 87 square miles in area and is bifurcated by Interstate 95 (I-95), occupying portions of three Virginia counties: Prince William, Stafford, and Fauquier. The area of MCBQ to the west of I-95 is known as “West Side” and the area to the east of I-95 is known as “Main Side.” Figure 1 shows the location of the proposed project within MCBQ Main Side, as well as surrounding context. The project site includes the existing Quantico Middle High School and Russell Elementary School, both of which will be demolished as part of the project. A new elementary school is under construction immediately north of the location for the new Quantico Middle High School. A child development center, and multiple residential neighborhoods, surround the site.



Figure 1: Project location within MCBQ

Background

The project will replace the existing Quantico Middle High School with a new Quantico Middle High School that addresses the many physical and operational deficiencies of the existing structure.

Per the Environmental Assessment associated with the project, the existing Quantico Middle High School was constructed in 1960 for use as a school for military dependent children living on MCBQ. The existing facility is approximately 82,000 square feet. The building currently has a failing condition rating. The existing classroom and education spaces are undersized and have inadequate infrastructure to meet the standards of the Department of Defense Education Activity Education (DoDEA) specifications. Aging utility infrastructure systems within the structure have exceeded their useful life and have resulted in increased maintenance costs. In addition, the roof system of the structure is failing, and there are numerous leaks that cause damage to the interior of the facility.

The existing Quantico Middle High School also has numerous National Fire Protection Association (NFPA) Life Safety and Americans with Disabilities Act (ADA) code deficiencies, and has no fire suppression systems and poor indoor air quality. Further, the school's facilities do not meet construction standards for energy efficiency. In addition, the existing facilities do not meet many of the Anti - Terrorism/Force Protection (AT/FP) requirements.

Due to the condition of the existing Quantico Middle School High School it was determined that a new school should be constructed to meet today's needs and comply with modern building codes and requirements.

Proposal

The project site is located along Purvis Road at MCBQ. The majority of the project site is located on the southern side of Purvis Road in the location of the current Russell Elementary School and softball fields to the east of the elementary school. In addition, the project includes the site of the existing Quantico Middle High School, north of Purvis Road, which will be used for a new baseball field following demolition of existing school structure. The entire project site, including the area for the new baseball field to the north of Purvis Road, is 15 acres. The existing Russell Elementary School is to be demolished following completion of a new Quantico Consolidated Elementary School north of Purvis Road next spring (the new elementary school was approved by NCPC in April of 2013; see NCPC File No: 7462). The demolition of Russell Elementary School is currently scheduled to begin in the spring of 2015 and construction of the new Quantico Middle High School will then follow this demolition.

The new Quantico Middle High School will have approximately 116,000 gross square feet of interior space on two levels. The project is designed for a projected student enrollment of 350, within grades six through twelve. A total of 75 full and part-time employees, including aids, service personnel, and faculty, will be at the facility.

The new school structure includes general purpose classrooms, lab spaces, an information center, a gymnasium, a cafeteria, a library, supply areas, specialist rooms, an art room, a learning impaired room, teacher work rooms, counseling areas, storage, administrative offices, and other required areas for a fully functioning middle/high school.

The school building will be modern in style and composed of standard foundations, insulated concrete form walls and a structural steel frame. The exterior facades include brick, cast stone, metal panels, and an aluminum and glass curtain wall/window system. The roof will be a membrane system. The building will be designed in accordance with DoDEA specifications, AT/FP standards, Americans with Disabilities Act Accessibility Guidelines, National Fire Protection Association Life Safety Code, and Standards of Seismic Safety for Federally Owned Buildings. The Project is designed to achieve a Leadership in Energy and Environmental Design (LEED) Silver Certification utilizing the U.S. Green Building Council (USGBC) LEED for Schools standards.



Figure 2: Proposed new school building rendering – front-side



Figure 3: Ground level floor plan



Figure 4: Upper level floor plan



Figure 6: Site Plan

To prevent the loss or movement of soils from the disturbed areas, erosion and sediment control measures would be implemented during construction. Approximately 15 acres of land will be disturbed to construct the project.

Construction is planned to begin in the summer of 2015 with occupancy of the new Quantico Middle High School planned for the fall of 2016. The total estimated cost of the project is \$40,586,000 and the project is fully funded. The scope of the project includes the demolition of the existing Quantico Middle High School facilities and related site improvements.

II. PROJECT ANALYSIS/CONFORMANCE

Analysis

The project will replace an older, dilapidated middle high school at Marine Corps Base Quantico with a new, state-of-the art building, which will allow for a more efficient use of military resources. The existing Quantico Middle High School has 75 employees (including aides, service personnel, and faculty). Student enrollment fluctuates and is currently approximately 316. The new school is planned to accommodate 350 Students and the existing 75 employees. The project is also generally consistent with the existing 2002 MCBQ installation master plan, and the Navy has submitted additional parking and stormwater management information as requested by the Commission at its Preliminary review on October 2, 2014. Therefore, NCPC staff recommends that the Commission **approve the final site and building plans for the new Quantico Middle High School at MCBQ**. Furthermore, staff recommends that the Commission **note that the Navy provided the additional information as requested by the Commission as part of the Preliminary project approval on October 2, 2014**. The follow-up information is described in greater detail in the following sections.

Parking

As noted above, the existing Quantico Middle High School has 75 employees (including aides, service personnel, and faculty). Student enrollment fluctuates and is currently approximately 316. The existing school has 107 parking spaces that has proven inadequate to serve the school's current needs. The new school is planned to accommodate 350 Students and the existing 75 employees, and has been authorized to provide 89 spaces plus 35 visitor spaces for a total of 124 spaces. These spaces will be allocated per the breakdown below:

- 20 spaces for students (grades 11 & 12)
- 47 spaces for faculty & staff
- 35 spaces for visitors
- 22 spaces for service personnel

(The faculty and staff parking requirement for the new school is 1-to-1; visitor parking is 10 percent of enrollment; and student parking is 20 percent of the enrollment of grades 11 & 12.)

NCPC staff note that a triangular parking lot adjacent to the existing Quantico Middle High School will remain following demolition of that structure and understand that the lot is planned to provide parking for the new baseball field, which is planned to be constructed on the site of the existing school. NCPC staff also note that the triangular parking lot could also be used for additional parking for the new elementary school currently under construction. NCPC's April 4, 2013 review and approval of the new elementary school included 144 parking spaces to service the school (see NCPC File No: 7462).

Although NCPC staff previously had concern that the addition of another 124 parking spaces could

be over-parked, the recent submission of the draft 2015 MCBQ Master Plan Update shows that the overall Main Side parking ratio will improve from a 1:1.47 to a 1:1.52 by 2018. As such, NCPC staff is comfortable with the amount of proposed parking due to the site's relative remoteness from the more developed areas on the installation, and the fact that Main Side parking is projected to meet the minimum 1:1.5 NCPC parking ratio goal within the next few years.

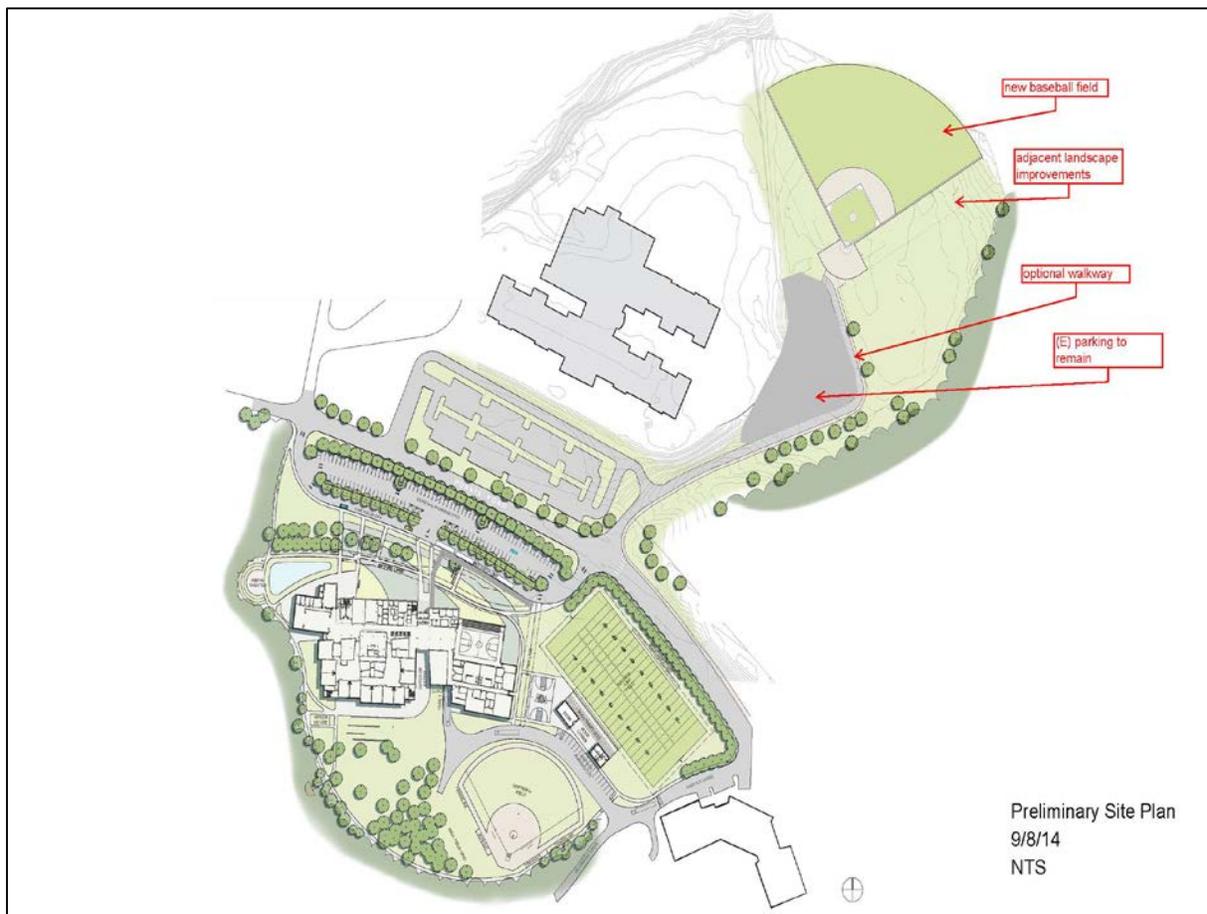


Figure 7: Overall site plan

The new *Quantico Middle High School* and associated site improvements are shown to the south; the new elementary school and associated parking area are in the center of the site. A new baseball field is shown in the location where the existing *Quantico Middle High School* exists and will be demolished. The existing triangular-shaped parking area to the east of the new elementary school that currently serves the existing *Quantico Middle High School* will remain following demolition of the other school facilities.

Stormwater Management

Stormwater management practices and policies are planned to be followed at the site as outlined in Low Impact Development policies followed by the Navy and the Energy Independence and

Security Act (EISA) Section 438. Although adequate information was not provided as part of the Preliminary project submission, the Final submission includes a detailed analysis that demonstrates the project's compliance with federal and State stormwater management requirements. In addition, in response to staff's inquiry regarding Little Creek water quality management measures, the project submission states that there is a planned future stabilization project for Little Creek, and that MCBQ continues to develop additional potential measures beside underground athletic field storage. In follow-up, NCPC staff will continue to monitor the Little Creek improvement project to ensure that stream restoration efforts proceed and are implemented as planned.

Comprehensive Plan for the National Capital

The *Comprehensive Plan for the National Capital* provides goals and policies that guide the Commission in evaluating and acting on plans and projects in the National Capital Region. Staff has determined that the proposed project is generally consistent with the Comprehensive Plan and in particular, consistent with the following policies from the Federal Workplace, Transportation, and Federal Environment Elements.

1. Use innovative energy conserving techniques in the design and construction, operation, location, and orientation of federal workplaces.
2. Implement methods to reduce consumption of non-renewable energy resources and to reduce the consumption of energy through energy efficient techniques as soon as practicable at all federal workplaces or when planning these facilities.
3. Minimize development of open space by selecting disturbed land or brownfields for new federal workplaces or by reusing existing buildings or sites.
4. Provide parking for disabled persons in accordance with federal law.
5. Minimizing power generation requirements, such as by utilizing best available "green" building systems and technologies.
6. Utilizing non-polluting sources of energy (e.g., solar energy).
7. Encouraging the development and use of alternative energy sources to reduce the reliance on fossil fuels.
8. Indoor air quality should be promoted by using environmentally friendly ("green") building materials, construction methods, and building designs.
9. Minimize tree cutting and other vegetation removal to reduce soil disturbance and erosion, particularly in the vicinity of waterways. When tree removal is necessary, trees should be replaced to prevent a net tree loss. Trees should be replaced to prevent a net tree loss.

Relevant Federal Facility Master Plan

The land use designation for the project site in the 2002 MCBQ master plan (the current master plan) is “Community”, and the proposed Quantico Middle High School is consistent with the designation. The Community use is defined as “Land use that encourages a mix of uses. Facilities allowed include religious, family support, personnel services, professional services, medical, community, housing, commercial and recreational services. Users live both on- and off-post and may include soldiers, dependents, retirees, and other civilian personnel.” In addition, an updated draft master plan/TMP has been submitted for NCPC review at its July, 2015 meeting, which includes the new middle-high school project.

National Environmental Policy Act (NEPA)

In compliance with the NEPA, the Navy studied the proposed Quantico Middle High School's impact to the natural environment through an Environmental Assessment. The MCBQ Commander issued a Finding of No Significant Impact (FONSI) on April 1, 2014 to complete the Navy's NEPA review responsibility for the project. For federal projects in the environs, NCPC does not have independent NEPA responsibility.

National Historic Preservation Act (NHPA)

In compliance with NHPA, the Navy determined that the project will not affect any historic resources and therefore, did not initiate Section 106 consultation with the VA SHPO. For federal projects in the environs, NCPC does not have independent Section 106 responsibility.

III. CONSULTATION

Coordination with local agencies

In accordance with the Commission's Procedures for Intergovernmental Cooperation in Federal Planning in the National Capital Region, project plans for the proposed Quantico Middle High School were referred by NCPC to the Virginia Department of Transportation (VDOT), Virginia Department of Environmental Quality (DEQ), Northern Virginia Transportation Commission, Northern Virginia Regional Commission (NVRC), Prince William County Office of Planning, and Prince William County Department of Transportation.

On July 28, 2014 DEQ provided comments reminding the new school's project manager of required compliance with construction debris disposal, air quality, and stormwater regulations.

On August 18, 2014 VDOT provided comments stating that staff has no objections to the approval of the project as it is located on post; will replace other similar facilities; and will not likely have any significant impact on state maintained roadways.