

# STAFF RECOMMENDATION



Weil

NCPC File No. 7096

## FORT BELVOIR – NORTH POST POST EXCHANGE (PX) SHOPPING CENTER

Fairfax County, Virginia

Submitted by United States Department of the Army

June 24, 2010

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### Abstract

The Department of the Army proposes to replace two existing retail buildings (a 69,200 sf garden center and a 10,419 sf military clothing store) with a new single-story, 265,856 sf building on the North Post, intended to serve as a destination Post Exchange (PX) for a planned future town center. The proposed shopping center will house an Army & Air Force Exchange Service (AAFES) store, a food court, and approximately 15 smaller stores in an arcade section of the building. The new shopping center will be served by two surface parking lots with a total of 1,058 spaces.

### Commission Action Requested by Applicant

Approval of comments on concept design, pursuant to 40 U.S.C. § 8722(b)(1)).

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### Executive Director's Recommendation

The Commission:

**Provides the following comments** on the proposed design concept for the new Fort Belvoir Post Exchange (PX) Shopping Center, as shown on NCPC Map File No. 2204.10(38.00)43043.

- **Recommends** that new parking be provided using multi-level garages or surface lots that are constructed with pervious paving material(s) to minimize the amount of new impervious surface on-site. In addition, all new surface parking lots should be designed to maximize the amount of landscaping such as through the use of landscaped islands and perimeter landscaping, and utilize appropriate low impact development (LID) stormwater practices;

- **Recommends** that the 1,085 parking spaces proposed as part of this project be utilized for the entire planned future North Post Town Center to include the new PX shopping center, new commissary building, and all other new retail and residential buildings constructed as part of the full town center development;
- **Recommends** that the new PX shopping center be constructed as a multi-level building rather than a single-level building as proposed, or as a single-level building with a “green” roof to minimize the amount of new impervious surface on-site;
- **Recommends** that all new construction related to the project be limited to areas that minimize tree loss to the maximum extent possible;
- **Recommends** that the Army closely coordinate with the Commonwealth of Virginia and Fairfax County as the design of this project and all future projects are developed and finalized.

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## PROJECT DESCRIPTION

### Site

Fort Belvoir is located approximately 12 miles south of Washington, DC, in south-eastern Fairfax County, Virginia, as shown in the following vicinity map.



*Vicinity Map*

The Fort is divided into two geographically separate areas; The “North Area” (formerly known as the Engineering Proving Ground) is located on the west-side of I-95, to the northwest of the larger, “Main Post” section. The Main Post is located on the east-side of I-95, directly adjacent to the south-side of Telegraph Road (Route 613). Route 1 divides the Main Post area into “North Post” and “South Post” sections, with North Post bordered by Route 1 on the south and Telegraph Road on the north-west, as shown in the following map.



*Fort Belvoir Map*

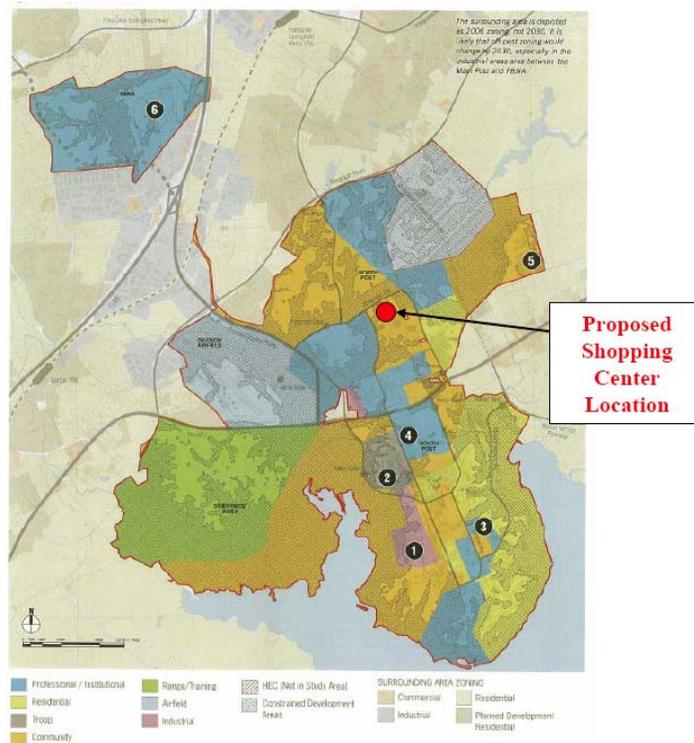
The project site is located in the north-central section of a parcel of land bounded by John J Kingman Road on the north; Gunston Road on the west; Gorgas Road on the south; and Woodlawn Road (Route 618) on the east, as shown in the following areal photograph.



*Proposed Project Site Aerial Photograph*

**Background**

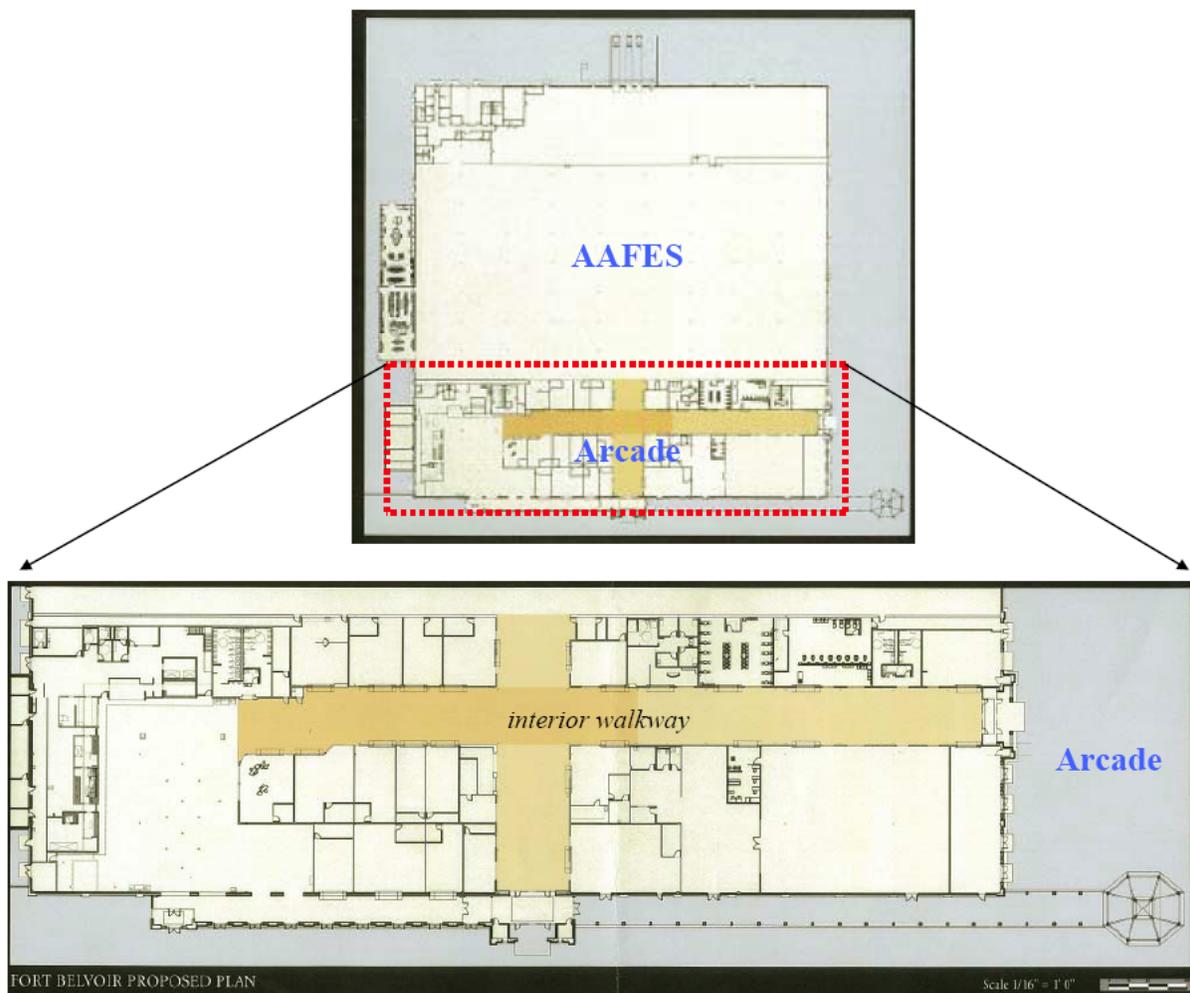
The proposed Fort Belvoir Post Exchange Shopping Center is a programmed project, as shown in the following draft master plan map.



*Draft Master Plan - Proposed Land Use Pan Map*

### Proposal

The proposal is to demolish two existing retail buildings (a 69,200 sf garden center and a 10,419 sf military clothing store) to construct a single-story, 265,856 sf PX shopping center on the same North Post site. The military clothing and garden center businesses will be re-located into the new shopping center. The new building will house a large Army & Air Force Exchange Service (AAFES) store, a food court, and an “arcade” section, with approximately 15 smaller retail stores. The AAFES store will occupy most of the center’s interior space as shown in the following floor plan.

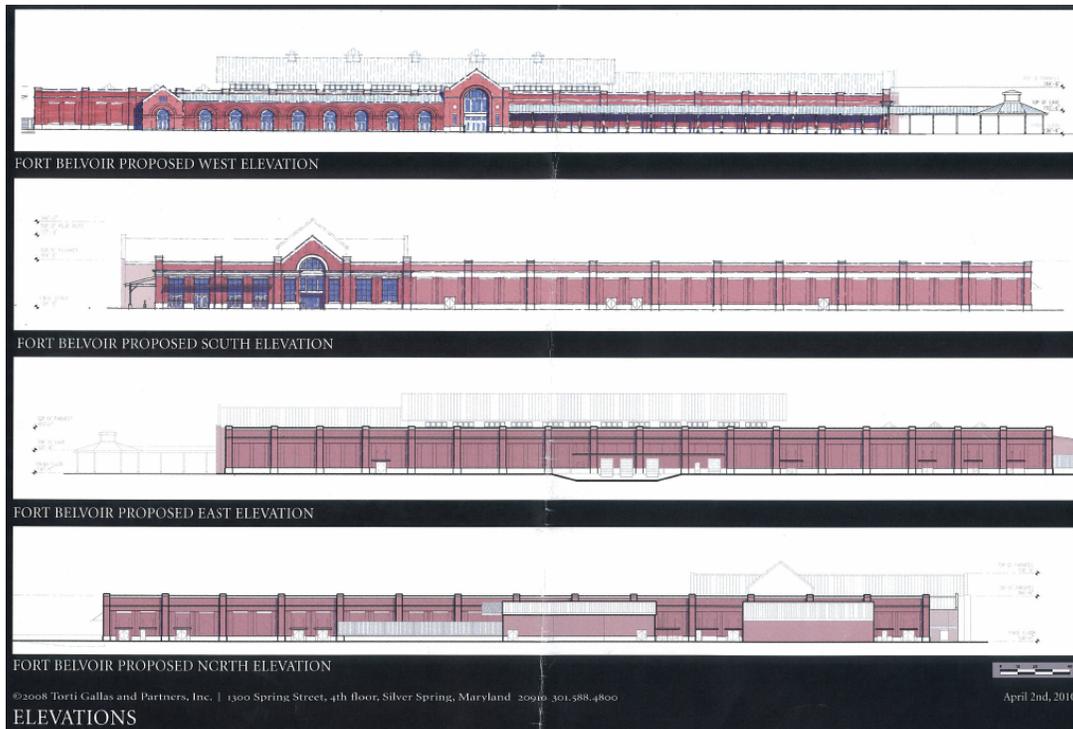


*Proposed PX Shopping Center Floorplan*

The shopping center’s arcade section will be located along a roughly north-south axis in the western part of the center. Interior access to the AAFES and smaller stores will be provided by an east-west, interior, “spine” walkway. The walkway will be illuminated with natural light via a

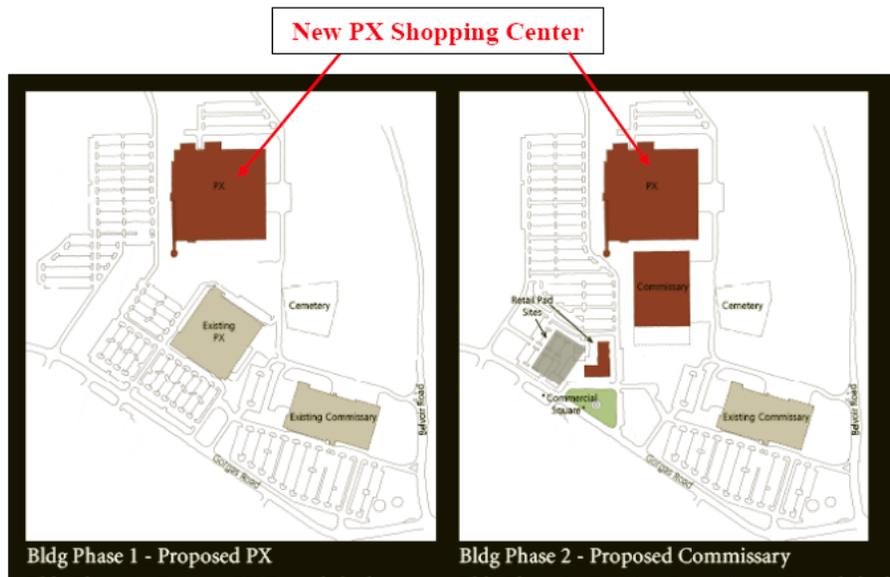
full length, overhead, glass cupola that extends its entire length. The new building is designed to attain a Leadership in Energy and Environmental Design (LEED) rating of Silver.

The project submission states that the proposed PX center is “intended to be a signature building for Fort Belvoir, as well as a model store for AAFES, augmenting their typical prototype store with enhancements uniquely suited to its siting at Fort Belvoir.” The building is intended to reflect Fort Belvoir’s traditional red-brick “colonial” style of architecture, as shown in the following building elevations.

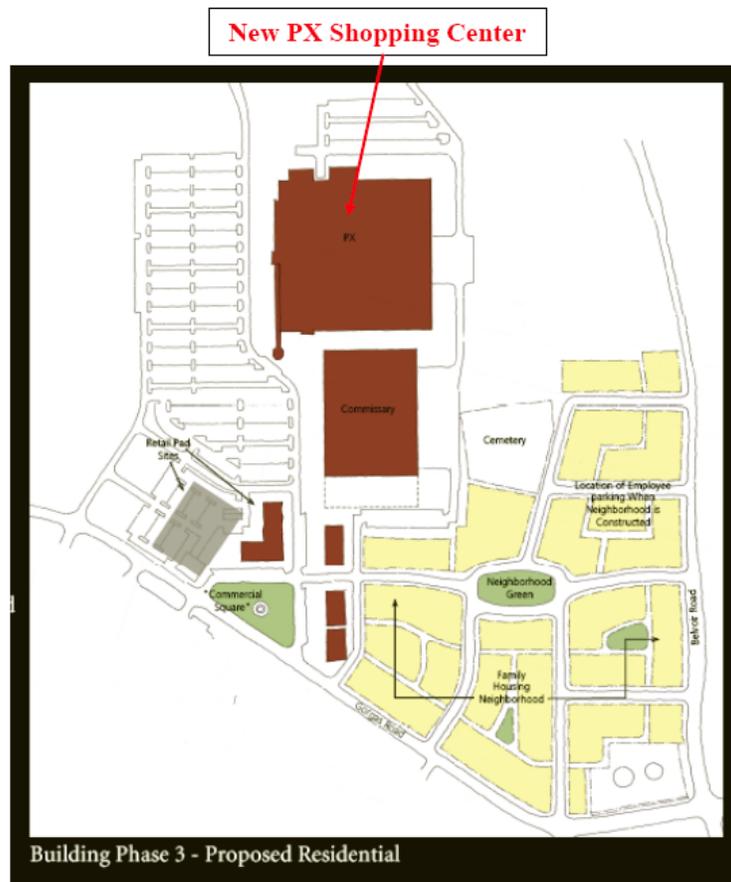


*Proposed PX Shopping Center Elevations*

The new PX center is intended to serve as a “one stop” shopping destination and community focal point on the North Post, where people will be able to park once and shop in multiple stores, rather than making multiple trips to multiple retail establishments to fulfill their needs. The shopping center is the first phase of a new larger planned mixed-use development, known as North Post Town Center, to be constructed in three phases as shown in the following diagrams.



*Future North Post Town Center Phase 1 & 2 Diagrams*



*New Future North Post Town Center Phase 3 Diagram*

The plan for the new completed town center development shows a new commissary building, several “stand-alone” retail-use buildings, several apartment/condominium residential buildings, a neighborhood green, and a commercial “square”. The development is included in the new master plan update, which is currently undergoing development by the Army.

Parking will be provided by two surface lots with a total of 1,085 spaces. One lot will be located along the north side of the building and provide 199 spaces for employees. A second lot will be located along the west side of the building and provide 859 spaces for customers. Per Americans with Disabilities Act (ADA) and LEED requirements, 21 spaces will be ADA-accessible, and 105 spaces will be reserved for low-emitting and fuel efficient vehicles, between the two lots. The lots will provide shared parking between the new PX center and new commissary building, to be constructed in the future.

The existing 35-acre project site is currently wooded, and includes the space needed for a future new commissary building; the contract limit line of the new PX shopping center project encompasses approximately 21.5 acres. Existing employment on the site is between 100 and 125 personnel, and the project will increase employment to between 220 and 270 personnel.

## PROJECT ANALYSIS

Staff has reviewed the proposed project and finds that as the Army moves forward with the design and the National Environmental Policy Act (NEPA) review process it should evaluate the parking, building form, materials, and ways to minimize the amount of tree loss.

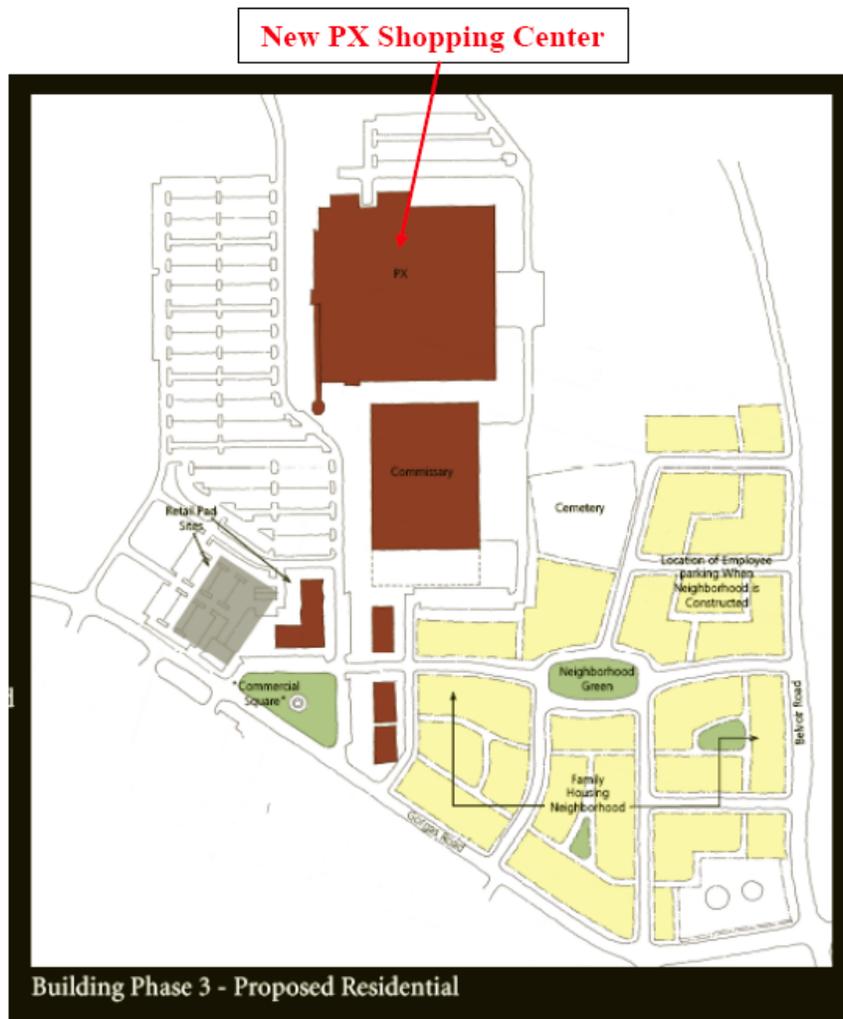
The basic form of the proposed shopping center, with its single-level and large surface parking lot, is suburban in nature, and appears to be inconsistent with the intent of the planned future mixed-use North Post Town Center. The shopping center will be located in close proximity to other future retail and higher density residential uses, constructed as part of the future town center development. However, the concept of the project, with a single-level and located adjacent to a large expanse of surface parking, is inconsistent with a true “town center” form.

Therefore staff recommends **the provision of the following comments** on the proposed design concept for the new Fort Belvoir Post Exchange (PX) Shopping Center, as follows:

- **Recommends** that new parking be provided using multi-level garages or surface lots that are constructed with pervious paving material(s) to minimize the amount of new impervious surface on-site. In addition, all new surface parking lots should be designed to maximize the amount of landscaping such as through the use of landscaped islands and perimeter landscaping, and utilize appropriate low impact development (LID) stormwater practices;
- **Recommends** that the 1,085 parking spaces proposed as part of this project be utilized for the entire planned future North Post Town Center to include the new PX shopping center,

new commissary building, and all other new retail and residential buildings constructed as part of the full town center development;

- **Recommends** that the new PX shopping center be constructed as a multi-level building rather than a single-level building as proposed, or as a single-level building with a “green” roof to minimize the amount of new impervious surface on-site;
- **Recommends** that all new construction related to the project be limited to areas that minimize tree loss to the maximum extent possible;
- **Recommends** that the Army closely coordinate with the Commonwealth of Virginia and Fairfax County as the design of this project and all future projects are developed and finalized.



*Future North Post Town Center Phase 3 Diagram*

## CONFORMANCE

### Comprehensive Plan for the National Capital

Staff has determined that the proposed project is not consistent with the following *Comprehensive Plan for the National Capital: Federal Elements, Parking, Parks & Open Space*, and Federal Environment policies:

- Place parking in structures, preferably below ground, in the interest of efficient land use and good urban design;
- Preserve open space that is crucial to the long-term quality of life of a neighborhood or the region;
- Conserve and maintain the essential open space character of areas in the region with significant park, open space, cultural, or natural qualities that contribute to the setting of the National Capital Region;
- Conserve portions of military reservations that add significantly to the inventory of park, open space, and natural areas and should, to the extent practicable, be used by the public for recreation. Examples include Andrews Air Force Base, Fort Belvoir, U.S. Soldiers' and Airmen's Home, Fort Meade, and Marine Corps Base Quantico;
- Maintain large tree preserves and forests as part of future development in the region;
- 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;
- Use pervious surfaces and retention ponds to reduce storm water runoff and impacts on off-site water quality;
- Preserve existing vegetation, especially large stands of trees.

The preliminary and final project design should be modified to adhere to these policies as much as possible.

### Federal Capital Improvements Plan

The PX shopping center replacement project is contained in the Federal Capital Improvements Plan for FY2010-FY2015, with funding identified for FY2010.

### Relevant Federal Facility Master Plan

The current master plan was approved in 1990, and the project is consistent with the land use of the area as designated by the draft Master Plan update being completed for Fort Belvoir. The draft Long Range Component of the Fort Belvoir Master Plan proposes "community" land use in this area. NCPC staff has reviewed the Long Range Component of the draft Fort Belvoir Master Plan and provided early comments to the Army on the master plan. The Army anticipates starting National Environmental Policy Act review of the master plan in July 2010, with formal submission of the master plan to the Commission in the fall of 2010.

Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance

Executive Order (E.O.) 13514 was given by the Obama Administration on October 5<sup>th</sup>, 2009, and staff notes that the PX shopping center project is somewhat inconsistent with the following language (highlighted) from the E.O.'s Section 1 policy statement, which reads as follows:

“In order to create a clean energy economy that will increase our Nation’s prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment, the Federal Government must lead by example. It is therefore the policy of the United States that Federal agencies shall increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; **design, construct, maintain, and operate high performance sustainable buildings in sustainable locations**; strengthen the vitality and livability of the communities in which Federal facilities are located; and inform Federal employees about and involve them in the achievement of these goals.”

The proposed building and parking lot will be located in an area that is currently forested, requiring the removal of over 2,000 trees. In addition, the project’s large surface lot and large building area could create a significant amount of on-site impervious surface and potential stormwater run-off. Although the building will be designed to attain a LEED Silver certification, the building’s siting, single-level design, and accompanying surface lot are inconsistent with the sustainable-oriented spirit of the Executive Order.

National Environmental Policy Act (NEPA)

NEPA documentation is not required for this submission. The Army is currently reviewing the project for NEPA through an Environmental Assessment (EA) study, to be submitted for Commission review, in conjunction with the project’s submission for Preliminary and Final design review in September, 2010. For federal projects in the environs, NCPC does not have independent NEPA responsibility.

National Historic Preservation Act (NHPA)

A Virginia State Historic Preservation Office (VA SHPO) review of the project is not required for this submission. However, the applicant anticipates that by siting the new PX shopping center outside the boundaries of an existing historic cemetery located on-site, the project will have “no adverse effect” to any nearby historical or cultural resources. For federal projects in the environs, NCPC does not have independent Section 106 responsibility.

## CONSULTATION

### Referral to relevant state, regional, and local planning agencies

NCPC staff has met with the Army on several occasions to discuss the development of the master plan update, and hosted a consultation meeting on March 31<sup>st</sup>, 2010, to specifically discuss the PX shopping center project. In accordance with the Commission's Procedures for Intergovernmental Cooperation in Federal Planning in the National Capital Region, NCPC staff referred the proposed project to: Fairfax County; the Virginia Department of Transportation; the Virginia Department of Environmental Quality; the Washington Metropolitan Council of Governments; the Northern Virginia Regional Commission; and the Northern Virginia Transportation Commission. The comments received from Fairfax County are attached.



## County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

June 2, 2010

David W. Levy  
 Director, Urban Design and Plan Review  
 National Capital Planning Commission  
 401 9<sup>th</sup> Street, NW  
 North Lobby, Suite 500  
 Washington, DC 20004

Dear Mr. Levy:

In collaboration with the Department of Public Works and Environmental Services (DPWES), Fairfax County Department of Transportation and the Fairfax County Park Authority staff, the Department of Planning and Zoning has reviewed project plans that have been submitted for the following four projects at Fort Belvoir: The National Museum of the United States Army (NCPC File Number 7094), the Arts and Crafts Center (NCPC File Number 7095), the Post Exchange Shopping Center (NCPC File Number 7096) and the Flight Control Tower (NCPC File Number 7097). Our comments on each of these projects are attached. Our comments do not address the set of documents that has been submitted as part of Fort Belvoir's Real Property Master Plan; comments on that set of documents are being submitted under separate cover.

Please note that these comments reflect the views of county staff and have not been reviewed by the Fairfax County Board of Supervisors. Please also note that these comments focus primarily on building and site design issues, as opposed to analyses of alternatives.

The review packages have been presented as preliminary and/or final submission packages. While we do not have major concerns about either the Flight Control Tower or Arts and Crafts Center, we do have more substantial concerns about both the Army Museum project and the Post Exchange Shopping Center project and feel that NEPA documentation is necessary for the consideration of both of these projects before they proceed to either the preliminary or final review stage. This essential NEPA documentation was not available for review along with the project plans. NCPC's "Environmental and Historic Preservation Policies and Procedures" states:

"In requesting preliminary plan approval, the submitting agency shall submit an environmental document as specified at Sections 8, 9, or 10 of these procedures [an Environmental Assessment, Environmental Impact Statement or a Categorical Exclusion determination]. In a submission requiring either an Environmental Assessment or an Environmental Impact statement, the final determination resulting from the document *must* be completed and signed by the responsible federal lead agency *prior* to the submission of the proposal to the Commission for review."

**Excellence \* Innovation \* Stewardship**  
**Integrity \* Teamwork \* Public Service**

**Department of Planning and Zoning**  
 Director's Office  
 12055 Government Center Parkway, Suite 755  
 Fairfax, Virginia 22035-5509  
 Phone 703-324-1380  
 Fax 703-324-3056  
[www.fairfaxcounty.gov/dpz/](http://www.fairfaxcounty.gov/dpz/)



David W. Levy

June 2, 2010

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Therefore, we are providing these comments with the understanding that, on July 1, preliminary and final plan approvals by NCPC will only be considered for the Flight Control Tower and Arts and Crafts Center projects and that any NCPC reviews of the Army Museum and Post Exchange Shopping Center projects will be concept-level reviews, resulting in NCPC comments to Fort Belvoir without any consideration of approval. We feel that such concept reviews would be helpful to all parties and we therefore encourage NCPC to move forward in this manner, recognizing that there will be a need for a future NCPC approval process that will incorporate a consideration of appropriate NEPA documentation and that will include another opportunity for county review. We also wish to stress that our review of these two projects cannot be considered to be complete until we are able to review NEPA documentation in concert with the development plans.

Please note that we do not have major concerns in regard to either the Arts and Crafts Center or the proposed flight tower; we therefore do not object to NCPC's consideration of preliminary and final plan reviews of these projects at this time.

NCPC should also be made aware that information presented in two of the project-specific submissions conflicts with information that has been presented in broader master planning documents, as follows:

- The Area Development Plan for the Community Support Area identifies structured parking adjacent to a proposed shopping center building. The project plans for the Post Exchange shopping center identify surface parking instead.
- The Area Development Plan for the Airfield Area identifies two possible locations for a new air traffic control tower—one would be near the southwestern property boundary (and a tower in this location would have adverse impacts on the adjacent residential area) while the other would be more centrally located on the parcel. The project submission, however, indicates that neither of these sites has been selected for this facility.

The planning documents should be consistent with one another.

Our primary concern with the Army Museum project relates to the proposal to provide access to the site from an at-grade intersection with the Fairfax County Parkway and through an Environmental Quality Corridor within the western portion of the site. This proposal generates concerns about impacts to traffic flow along the Parkway, adverse impacts to the natural environment within the EQC, the potential for conflicts with a possible future rail transit alignment as a result of a proposed at-grade crossing, and potential adverse impacts to the Mount Air historic site. The NEPA documentation for this project should evaluate alternative approaches to the provision of access to this site.

Our primary concern with the Post Exchange shopping center project relates to the intensity of the proposed development from a land consumption standpoint. There would be extensive clearing of trees and a considerable addition of impervious cover resulting from the proposed action. Alternative site design approaches that would not necessitate this extent of clearing and impervious cover (e.g., multi-story commercial buildings; structured parking) should be considered. We also feel that additional analysis is needed in regard to transportation concerns.

David W. Levy  
June 2, 2010  
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There are other issues associated with each of these projects; details are provided within the attached sets of comments.

If you have questions about comments on any of the four projects, please feel free to coordinate with the contact person identified at the top of the respective set of comments. If you have questions about the broader set of concerns noted above, please contact Noel Kaplan at [Noel.Kaplan@fairfaxcounty.gov](mailto:Noel.Kaplan@fairfaxcounty.gov) or at 703-324-1369.

Sincerely,

James P. Zook, Director  
Department of Planning and Zoning

JPZ: NHK

Attachments: As Stated

cc: Board of Supervisors

Anthony H. Griffin, County Executive  
Robert A. Stalzer, Deputy County Executive  
Katharine D. Ichter, Director, Fairfax County Department of Transportation  
Fred R. Selden, Planning Division Director, DPZ  
Mark G. Canale, Fairfax County BRAC Coordinator, FCDOT  
Fred Rose, Chief, Watershed Planning & Assessment Branch, Stormwater Planning Division  
Sandra Stallman, Manager, Park Planning Branch, Fairfax County Park Authority  
Pamela G. Nee, Chief, Environment and Development Review Branch, DPZ  
Noel H. Kaplan, Senior Environmental Planner, EDRB, DPZ  
John Bell, Senior Environmental Planner, EDRB, DPZ  
Maya Dhavale, Environmental Planner, EDRB, DPZ  
Mary Ann Welton, Environmental Planner, EDRB, DPZ  
Cheryl L. Kelly, Urban Planner, National Capital Planning Commission

**Fort Belvoir Post Exchange (PX) Shopping Center  
NCPC Project Plans—Preliminary and Final Submission  
NCPC File Number 7096—April 2, 2010**

**Comments from Fairfax County Staff, May 2010**

**Staff Contact: Maya Dhavale, [Maya.Dhavale@fairfaxcounty.gov](mailto:Maya.Dhavale@fairfaxcounty.gov); 703-324-1355**

The Fort Belvoir PX Shopping Center project would include the demolition of the existing PX and Commissary and the construction of a new 265,856 square foot PX facility as well as a smaller Commissary. Additional structures offsite would also be demolished and relocated to the new PX. In addition to the construction of the PX and Commissary, two main parking lots would be constructed, providing a total of 1,058 parking spaces. The site is 35 acres, with a total of 21.5 acres to be disturbed during the construction. The site is currently developed with the existing PX and Commissary, although a substantial portion of the northern area of the site is undeveloped. The new PX building is proposed to be constructed entirely in this undeveloped and wooded portion of the site.

### **Documentation**

There is confusion regarding the status of the review of this project. A March 31, 2010 letter from Fort Belvoir to NCPC references a “Preliminary and Final Review Submission,” while the package itself is presented as a “Final Submission.” In either case, however, essential documentation required under the National Environmental Policy Act (NEPA) should have been made available for review along with the project plans. NCPC’s “Environmental and Historic Preservation Policies and Procedures” states that, even for preliminary submissions, “the submitting agency shall submit an environmental document as specified at Sections 8, 9, or 10 of these procedures [an Environmental Assessment, Environmental Impact Statement or a Categorical Exclusion determination]. In a submission requiring either an Environmental Assessment or an Environmental Impact statement, the final determination resulting from the document *must* be completed and signed by the responsible federal lead agency *prior* to the submission of the proposal to the Commission for review.” Therefore, it would be inappropriate to proceed with NCPC approval at this time. However, we do feel that a concept proposal review (resulting in NCPC comments to Fort Belvoir without any consideration of approval) would be helpful to all parties and we therefore encourage NCPC to move forward with such a review, recognizing that there will be a need for a future NCPC approval process that will incorporate a consideration of appropriate NEPA documentation and that will include another opportunity for county review.

The NEPA documentation that is prepared for this project should evaluate environmental impacts associated with various project alternatives, particularly in regard to internal design (e.g., multi-level shopping and parking structures as opposed to a one or two level structure with surface parking). Absent such documentation, the comments provided herein should be considered to be preliminary and incomplete.

### **Land disturbance and impervious cover**

The proposed shopping center would consist of a 265,856 square foot single story building with a 1,058 space surface parking lot. There would be considerable loss of tree cover and a considerable increase in impervious cover as a result of this development concept, with associated increases in stormwater runoff volumes. It is noted that stormwater runoff from the site would be conveyed into an already-degraded system and has the potential to exacerbate this degradation. It is not clear that this extent of impact is needed in order to provide for the proposed uses on the site.

In order to minimize clearing and impervious cover, efforts should be taken to minimize building and facility footprints to the extent possible. A structured parking concept should be considered, as should be the accommodation of retail square footage in multiple story structures. The draft Community Support Area Development Plan states: "Structured parking is a critical aspect in the ability to optimize the developable portions of the site to build new buildings without disturbing environmentally sensitive areas." Why is this concept not being pursued? Can the extensive surface parking areas that already exist be redeveloped such that the new retail and parking areas could be located within the existing developed footprint? Can commercial facilities be designed as compact, multiple-story structures rather than as sprawling, one (or even two) story structures? The site would seem to offer opportunities for such redevelopment.

### **Tree cover/habitat**

No information is provided regarding whether any streams and/or wetlands would be impacted by this development. We request that the NEPA documentation provide this guidance.

The majority of the proposed construction is planned for a largely wooded area. The draft Installation Design Guide for Fort Belvoir includes the following site planning objective: "Preserve natural site features such as topography, hydrology, vegetation, tree cover, and historically significant landscape elements." The document also includes the following landscape objective: "Preserve and enhance urban trees, forest lands, and detailed planting features, such as shrubs and groundcovers." According to the tree survey, there are 4,725 trees within the limits of clearing and grading. The construction as it is currently proposed would make tree and habitat conservation difficult if not impossible to achieve--the new PX would require the clearing of approximately 24 acres of forest and the permanent conversion of forest cover to built landscape with no potential for future recovery. Clarification is needed as to why a more compact development footprint that would better achieve these objectives cannot be pursued.

There are no known sensitive natural resources on this land bay other than those aquatic resources referenced by the Army. However, a 1953 aerial image of the site shows that much of the disturbance footprint has remained largely unchanged for the last 60 years, and the forest stand that would be disturbed is about 60 years old. The combination of stand age and limited extent of disturbance leaves it highly possible that the forest stand has relatively good species diversity and abundance with low incidence of non-native invasive species; the older portions of the targeted forest stand may well be a high-quality, late early to mid succession forest that could

provide ideal habitat for a number of sensitive species. We feel that inventory work should be done on site in order to evaluate this potential and that the results of such an effort should be reported in NEPA documentation.

The plans provided do not include the additional future residential development in the vicinity of the existing commissary that would require additional clearing and forest loss on this land bay.

While the Army is not obligated to comply with Fairfax County's Tree Conservation Ordinance, staff encourages design efforts that would, at a minimum, be consistent with this ordinance. Goal 1 of the Integrated Natural Resources Management Plan, as noted in the draft Real Property Master Plan Digest, is to "ensure compliance of installation actions with federal, state, regional and local statutes, regulations, and policies applicable to natural resources." We recommend a redesign of the proposed development in a manner that would better promote conservation of the natural resources and trees on the site, thereby better supporting this goal. Disturbed areas should, where possible, be replanted with native, non-invasive species.

Given the significant forest and soil impacts of the project, the Army should provide a plan to provide reforestation of a corresponding acreage of an area that was previously impacted so that the restoration could provide soil recovery and reforestation that may help to offset some of the impacts of the proposed project. The Partners in Flight (PIF) program survey conducted at Ft. Belvoir in 2005 identified suitable habitat for neotropical migratory birds. Compensatory restoration may not only help offset some of the vegetative community impacts of the project, but also help offset habitat impacts for migratory and resident bird species as well as other faunal groups that depend on such resources.

The Army should mitigate the impacts of the land disturbance for the proposed project (in part) by revegetating disturbed areas with native plant species to include trees, shrubs and wet-tolerant species in drainage ways. In addition, the 2005 report by the USDA Forest Service summarizing bird research at Ft. Belvoir as part of the PIF Program cites great species richness and recommends establishment and management of warm season grass dominant early succession field habitats where possible. Areas cleared for grading and temporary construction as well as stormwater features associated with road improvements should be stabilized and maintained for native warm season grass habitat for wildlife as well as water quality benefits wherever reforestation is not planned. Native warm season grass mixes should also be applied in areas intended for reforestation since young trees will not provide closed-canopy conditions for many years, and the warm season grasses are a critical part of old-field systems providing soil stabilization, critical habitat and stable native plant communities that can resist non-native plant invasions.

All project plans should include provisions to control non-native invasive plant species during stabilization/restoration and in long-term maintenance. Such species as *Ailanthus altissima* and *Microstegium vimineum* as well as aggressive vines and ground covers should be identified and controlled to the greatest extent possible to minimize the effect of introducing damaging invasive species into wildlife areas. Ideally the Army should require at least a two year warranty period with strong monitoring and maintenance requirements on the project that would include

provisions to control non-native invasive plant species as well as ensure the survival of native plant species used in restoration.

Besides human land disturbance and non-native invasive species, the greatest threat to terrestrial biological communities in our region is the over population of white-tailed deer and the subsequent heavy browse. The planning and construction of the new Post Exchange at Ft. Belvoir should ensure that features and activities allow for the continuance of the effective deer hunting program that has helped keep deer populations in check on Ft. Belvoir for many years.

### **Stormwater management and watershed planning**

There is no information in the plan regarding what will happen to the area within which structures would be demolished. Would the impervious surfaces be removed from this area or would a new structure be built in this location?

In addition to reducing the proposed extent of impervious cover on the site, we encourage the Army to pursue a variety of low impact development (LID) stormwater practices in order to minimize the stormwater runoff-related impacts of impervious cover. For example, if a multi-level parking garage is not possible, permeable pavers/pavement could be provided, as could be various best management practice/LID structures throughout the parking area such as Filterra boxes, curb cuts into parking islands and infiltration trenches. Bioretention facilities could be incorporated within parking lot landscaping areas, and vegetated roofs could be incorporated into building designs.

As any new construction by the Army will be built to the LEED Silver standard, we encourage the Army to pursue stormwater management and water quality controls that exceed minimum requirements. Attainment of the two LEED stormwater design credits is recommended.

Stormwater runoff from the proposed development would drain to an already degraded stream system. The addition of stormwater runoff as a result of additional impervious cover could exacerbate this impact. Per the Virginia Erosion and Sediment Control Regulations (4VAESO.30-40.19) and Stormwater Management Regulations (AVAC3.30.81), Fort Belvoir should, at a minimum, ensure that downstream channels and properties would be protected from erosion and damage due to increases in volume, velocity and peak flow. Restoration efforts should be pursued for any incised channels that the shopping center would drain to.

The project is proposed in a location along the watershed divide between the Accotink Creek and Dogue Creek watersheds; it appears that most of the development would occur in the Accotink Creek watershed, though some of the runoff would be directed into Dogue Creek. The PX Shopping Center falls within the "Mainstem 8" Watershed Management Area. The stormwater runoff would flow into Mason Run. The streams in this watershed are substantially degraded and exhibit poor habitat, poor biological conditions and a lack of fish diversity. Benthic macroinvertebrate community health is also poor throughout the watershed. The entire Accotink Creek watershed is categorized as Watershed Restoration Level II by Fairfax County. The primary goal for Restoration Level II watersheds is to prevent further degradation and to

implement measures to improve water quality. A Watershed Management Plan is currently under development for Accotink Creek and Dogue Creek.

As the region faces increasing standards to improve surface waters within the Chesapeake Bay watershed, and since many of the stream reaches within Ft. Belvoir are in fair to poor condition, the Army should consider improving the condition of the outfall channels draining this project site. Such improvements could include natural channel design, providing periodic grade controls that would not only prevent further degradation and incision, but would likely cause aggradation, raise the stream invert, and reconnect the streams to their floodplains. This would serve to slow down storm flows, recharge groundwater aquifers, and improve downstream channel conditions. It would also likely improve the overall condition of bottomland habitat and restore wetland functions to areas with remaining hydric soils and/or create new wetlands over time.

The watershed plans being developed for this area will propose improvements to repair degraded streams; there will be opportunities for the Army to collaborate with the County on needed downstream improvements, especially where proposed developments are expected to have increased impacts. The Stormwater Planning Division of the Department of Public Works and Environmental Services is available to work with Fort Belvoir to develop detailed plans to address downstream issues. For information on the Accotink Creek and Dogue Creek Watershed Management Plans, visit the Fairfax County Watershed Planning Web site at <http://www.fairfaxcounty.gov/dpwes/watersheds.htm>. For additional information, contact Danielle Wynne at [danielle.wynne@fairfaxcounty.gov](mailto:danielle.wynne@fairfaxcounty.gov) or 703-324-5616.

### **Transportation**

Due to the lack of an Environmental Assessment or Environmental Impact Statement, it is impossible to do a complete review and provide comprehensive comments for the proposed project at this time. However, until such time as a complete review may be conducted, the following preliminary comments are provided for development issues related to transportation:

- 1) The NEPA documentation should identify and include all planned, proposed, and programmed improvements for intersections that involve the following roads adjacent to the proposed Post Exchange, including parking lot entrances, for Stonewall Jackson, Beulah, Kingman, Gunston, Belvoir and Gorgas.
- 2) New roads or intersections constructed with the proposed Access Control Point (ACP) entrance from Route 1 at Belvoir Road should be included for complete transportation and circulation analysis. These connections and any newly proposed intersections with the existing or programmed regional road network should identify all multi-modal facilities, to include (at a minimum) road and intersection geometry, signal levels of service, pedestrian, bicycle routes, transit and ADA infrastructure, and volume/capacity ratios and related traffic volume information.
- 3) Transit and public transportation routes and connections to existing WMATA, Fairfax Connector, and REX bus routes currently operating on Route 1 should be identified. Internal post shuttle connections (existing and/or proposed) should be identified and accommodated in design of the road network and internal circulation patterns, road and parking lot striping. Curb-sidewalk cuts and pull-outs should be included.

- 4) The proposed phasing of the new facilities should be coordinated with construction of the new North Post ACP, so as to reduce increased volumes on other existing Main Post entrances/gates.
- 5) Since the existing Home and Garden Center (Building 1188) and Clothing Store (Building 1189) would be relocated to the new PX from the South Post (almost totaling 80,000 GSF), would this relocation impact the surrounding street network (Route 1/Gunston Road) in terms of weekend peak traffic volumes and delays, particularly during the holiday season? Has a traffic study been furnished to address the proposed installation? Traffic analysis should account for the proposed doubling of employment at the new facility and commensurate increase in anticipated patron counts. This analysis should address increased peak period volumes and weekend traffic impacts.
- 6) The General Site Plan schematic does not show any pedestrian infrastructure improvements such as sidewalks, crosswalks, appropriate signage and ADA compliant handicap ramps. The site plan lacks a safe pedestrian passage from the surface parking lot to the shopping center.
- 7) Is the traffic circulation pattern in both surface parking lots one-way or two-way?
- 8) Cupola extension of a covered walkway, as mentioned in the narrative, is not clearly identified on the plan.
- 9) The structure going through existing parking lot and PX shopping center needs clarification.
- 10) The PX was only mentioned briefly in the Transportation Management Plan (TMP) as a redevelopment initiative. Are the Transportation Demand Management (TDM) goals in the TMP not applicable to the PX, with it being retail? The parking capacity proposed for the PX does not appear consistent with those goals.
  - a. There are 199 parking spaces proposed in the employee parking lot, with a projected total of 220 to 270 employees. This equates to 1:1.10 to 1:1.36 parking space to employee ratios. The TMP cites an existing ratio of 1:1.12 and an ultimate goal of 1:1.5 (Page 3-15), consistent with NCPC guidance. The Fort Belvoir Real Property Master Plan (RPMP) goes even further to state a long term TDM goal of parking for 60% of paid employees, which equates to a ratio of 1:1.67. The 199 parking spaces clearly would not meet these goals and, depending on the ultimate number of employees, may eventually be worse than the existing on-post ratio of 1:1.12.
  - b. There are 859 additional parking spaces proposed for consumers, totaling 1,058 spaces for the PX. This exceeds the number of spaces needed to meet the parking requirement of 4.0 spaces/1,000 square feet (at 95% gross floor area). This proposed parking capacity seems excessive and certainly does not reflect levels consistent with Smart Growth.
- 11) The Fort Belvoir RPMP references existing and planned bicycle and pedestrian facilities on-post. The site plan for the PX should show these connections. Similarly, planned transit options, including internal shuttle service, should also be shown, perhaps with potential transit stops. An effort should be made to show support for the TDM goals reflected in the RPMP and TMP through these site plans.
- 12) Add bicycle parking, preferably within 100 feet of the main entrance. The number of racks should be determined based on square footage.

- 13) Are there plans to widen the narrow segment of John Kingman Highway? If not, utilities should be located in their ultimate locations.
- 14) A more complete review and additional comments will be forthcoming upon receipt of a complete development proposal that includes appropriate environmental impact analysis and documentation.

### **Other comments**

Staff is pleased to note the commitment to attaining the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver certification for the PX building in accordance with the General Service Administration policy requiring LEED Silver certification. In addition, Fairfax County has a strong interest in promoting green building in the County. The Fairfax County Comprehensive Plan, Policy Plan, 2007 Edition, Environment section has a policy regarding the construction of private-sector green buildings using the LEED rating system or an equivalent, and the County has a policy requiring LEED Silver certification for public buildings greater than 10,000 square feet. Staff strongly recommends integrating some of the previously discussed concerns about stormwater management/impervious surface and tree conservation to aid in the attainment of LEED certification.