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The Villages at Belvoir—U.S. Army Garrison Fort Belvoir

Fort Belvoir, Virginia

Project Type: **Military Housing and Town Center**

Volume **38** Number **07**

April–June 2008

Case Number: **C038007**

PROJECT TYPE

The Villages at Belvoir consists of a new urbanist mixed-use town center and three residential neighborhoods on the U.S. Army Garrison Fort Belvoir military installation in Fairfax County, Virginia. The project is the result of a public/private venture (PPV) between the army, Clark Realty Capital, and Pinnacle, known as Fort Belvoir Residential Communities LLC. Together, the three villages and town center contain 415 dwellings and 13,613 square feet (1,265 sq m) of retail space on 74 acres (30 ha). The development is the first phase of a 50-year plan to replace 1,900 homes and renovate 170 more on the 8,656-acre (3,503-ha) post. Located within one of the three villages, the town center is a pedestrian-scale street lined with 25 residences over stores. One of the first projects to come out of the army's Residential Communities Initiative, the Villages at Belvoir is setting a new standard for future housing developments at army posts.

LOCATION

Outer Suburban

SITE SIZE

97 acres/39.3 hectares

LAND USES

Planned Community—Large Scale, Town Center, Mixed-Income Housing,



Townhouses, Single-Family Detached Residential, Playground, Nature Preserve

KEYWORDS/SPECIAL FEATURES

- Town Center
- Main Street Design
- Pedestrian-Friendly Design
- Military Installation Redevelopment
- Public/Private Partnership
- Traditional Neighborhood Development
- Infill Development



ADDRESS

The Villages at Belvoir
Fort Belvoir, Virginia

Village Commons
5994 12th Street
Fort Belvoir, Virginia



WEB SITE

www.belvoirfamilyhousing.com

DEVELOPER

Clark Realty Capital, LLC
Arlington, Virginia
703-294-4500
www.clarkrealty.com

ARCHITECT AND PLANNER

Torti Gallas and Partners
Silver Spring, Maryland
301-588-4800
www.tortigallas.com

PROPERTY MANAGER

Pinnacle
Seattle, Washington
206-215-9700
www.pinnacle Realty.com

GENERAL CONTRACTOR

Clark Builders Group
Arlington, Virginia

703-294-4500
www.clarkrealty.com

RETAIL MANAGER

Army and Air Force Exchange Service (AAFES)
Dallas, Texas
214-312-2011
www.aafes.com

GENERAL DESCRIPTION

The villages of Herryford, Vernondale, and Cedar Grove make up the first completed phase of a large-scale plan for new and renovated military housing at Fort Belvoir in Fairfax County, Virginia. The villages and town center comprise 415 housing units and 13,613 square feet (1,265 sq m) of retail space on 74 acres (30 ha). The long-term 50-year base plan covers a 576-acre (233-ha) parcel and calls for the replacement or renovation of all of the installation's 2,070 residences; the completed project will include renovations of 170 historically significant homes and the demolition and replacement of 1,900 dwellings. Like the previous community plan, the new plan will group most of the residences into 12 "villages." Family housing takes up less than 10 percent of the post's total land area and development is limited to 576 acres (233 ha).

One of the first projects to benefit from the army's Residential Communities Initiative (RCI), the Villages was developed by the private sector through a public/private venture (PPV) among private firms Clark Realty Capital and Pinnacle, and the Department of the Army (DoA). Given the success of the early phases of the project, the Villages serves as a model for the Department of Defense on how to foster privately developed military housing that incorporates traditional neighborhood design.

The three villages' 415 new housing units come in a variety of traditional colonial styles, including units above retail, freestanding and attached single-family dwellings, duplexes, and townhouses. They average 1,850 square feet (171.9 sq m) in size with a minimum of three bedrooms and a range of floor plans. Increased storage space and extra-wide doorways and stairwells are designed to accommodate the frequent relocation needs of military families. The town center—Village Commons at Fort Belvoir—contains 25 residences above 13,613 square feet (1,265 sq m) of storefront retail space and community support services that include ten stores and a 5,000-square-foot (464.5-sq-m) welcome center.

THE SITE

Fort Belvoir is located in northern Virginia on a plateau overlooking the Potomac River, just off Interstate 95, about 40 minutes south of Washington, D.C. The welcome center at the Village Commons lies about five miles (8 km) from the main entry at Tulley Gate. Route 1 divides Fort Belvoir into what are commonly referred to as the north and the south installations. The post functions like a small city with a mix of civic, administrative, residential, and retail uses, amid the more traditional components of the military parade grounds and associated facilities. Residential villages, scattered throughout the 8,656-acre (3,503-ha) installation, are located mainly along upland plateaus and defined by steep slopes and drainage ways.

At buildout, the plan calls for 2,070 housing units in 12 neighborhood villages, five neighborhood centers, and the Village Commons town center, and significant acreage devoted to conservation areas, parks, and play areas. Infill construction consists of the Villages of Belvoir—as of June 2008 only Herryford, Vernondale, and Cedar Grove have been built—clustered around the town center, creating a central core for the installation. This 74-acre (30-ha) infill site reflects smart growth principles, incorporating features of mixed-use design and traditional neighborhood

development. The Village Commons recently won a Congress of the New Urbanism award for integrated site planning and design.

Occupancy is not anticipated to be an issue. The housing is of high quality and the Defense Department's Base Realignment and Closure (BRAC) program will be adding 15,000 to 20,000 workers—3,000 to 4,000 of whom will be army personnel—within a 20-mile (32-km) radius of Fort Belvoir.

The development plan for the installation avoids environmentally sensitive areas and preserves habitat for native and at-risk wildlife and plant species. Natural and cultural resources are safeguarded through the Comprehensive Land Management Plan (CLMP), which was designed to protect unique assets and ensure responsible stewardship. A 1,300-acre (526.1-ha) wildlife sanctuary is located in the southwestern section of Fort Belvoir, and a 150-acre (60.7-ha) wetlands refuge protects nontidal wetlands and forest along Dogue Creek. Both provide miles of walking trails, including a one-mile (1.6-km) handicapped-accessible trail. An arborist ensures that existing trees will be maintained, and that at least one new tree will be planted for every tree removed. Only native species are incorporated in new landscaping.

DEVELOPMENT PROCESS

An assessment of military installations conducted during the mid-1990s concluded that 70 percent of all on-post housing needed rehabilitation or renewal. In an effort to improve the quality of housing for military families, Congress enacted the Military Housing Privatization Initiative (MHPI) as part of the 1996 National Defense Authorization Act. The MHPI program was created to address the poor condition of Department of Defense-owned housing and the shortage of affordable private housing of adequate quality. This provision creates alternative authorities for the improvement and construction of military family housing, and enables the military to obtain private sector funding to satisfy family housing requirements. By leveraging public funding, the army can obtain private partner expertise and capital for construction, renovation, maintenance, and management of family housing and related support facilities for military families such as a youth center, an education center, and a library. The army's implementation of the MHPI is known as the Residential Communities Initiative (RCI), which is built on partnerships with private sector developers.

Responsibility for making improvements at Fort Belvoir was transferred in a 50-year ground lease to the Clark Pinnacle Family Communities LLC, a partnership between Clark Realty Capital, LLC, of Arlington, Virginia, and Pinnacle of Seattle. The land reverts back to the army after 50 years, unless a 25-year option is exercised. In turn, a PPV was formed to include the Department of the Army (DoA) and Clark Pinnacle. The partnership crafted a community development and management plan (CDMP) to define a housing development plan and the terms of the developer's long-term relationship with the army. The CDMP outlines the development plan, financial and transactional agreements, and requirements for operations and property management. If, in the future, Fort Belvoir is affected by a BRAC determination, then the LLC has right of first refusal and can sell residences on the open market. An environmental assessment required by Fairfax County preceded implementation of the CDMP. The Virginia State Historic Preservation Office is a key stakeholder in development at Fort Belvoir. One large historic district has been designated and encompasses five neighborhoods where 170 historically significant homes are being renovated.

The redevelopment plan and design were refined through focus groups, charrettes, and public hearings—all of which included families living on post and local army personnel. Particular focus was directed to environmental issues, such as maintaining views. Area residents opposed the original plan—which advocated increasing the total number of dwellings to 3,000—due to existing traffic congestion along Route 1. As a result, the PPV chose to maintain the existing number of units at 2,070. Consensus called for neighborhood redevelopment at existing housing sites with new building only on infill parcels, as illustrated by the Villages at Belvoir and Village Commons.

Involving no public funds, the Fort Belvoir project is 100 percent privately financed. The DoA provides the land at no cost. The Army and Air Force Exchange Service (AAFES) is a partner in the retail portion of Village Commons. Clark Realty Capital, LLC, is the developer, with Clark Builders Group acting as general contractor.

Clark Realty is a national real estate development and construction company offering a broad base of services related to development, capital markets, construction, investment management, and real estate strategies. Founded in 1906, the Arlington, Virginia-based organization is affiliated with one of the largest privately held general building contractors in the country. The army, navy, and marines are currently leveraging Clark Realty's expertise at ten U.S. military installations. Upon completion of these projects, including Fort Belvoir, the company will have built or renovated nearly 34,000 homes with a development value in excess of \$4.2 billion. Clark acts as developer, general contractor, and asset manager for development at Fort Belvoir. Pinnacle, an American Management Services Company, is an international real estate investment management firm headquartered in Seattle and serving as property manager for this project. The company manages more than 140,000 residential units nationwide. Clark Pinnacle Family Communities LLC (Clark Pinnacle) represents the partnership between Clark Realty Capital, LLC, and Pinnacle operating at Fort Belvoir. Pinnacle is reimbursed quarterly for its management services at Fort Belvoir.

AAFES, a participant in the development's retail program, provides merchandise and services to active duty, guard and reserve members, and military retirees and their families at low prices. AAFES is a self-supporting DoD agency with no appropriated funding and operates over 3,100 facilities around the world. It holds a 15-year sublease for retail space at the town center with options to extend services to the end of the 50-year ground lease, and is the master retail developer for the installation. AAFES has a lessee relationship with Clark Pinnacle and is responsible for outfitting interior spaces and managing tenant leases. Current retail tenants include Starbucks, a day spa, and an AAFES Shoppette. The leasing fee reimburses the housing project for the cost of construction incurred to build the space that AAFES occupies, resulting in a cost-neutral approach.

FINANCING

Clark's financing plan included third-party debt, guaranteed investment contracts, net operating income, private partner equity, and a project refinancing in 2005. The cost of housing developed by the partnership for military residents is covered by their basic allowance for housing (BAH), meaning residents pay zero out-of-pocket expenses. Utility usage may result in credits or charges, according to how household use compares to an estimated average. Because the DoD provides Clark Realty with land at no cost, the company is better able to provide affordable, high-quality housing.

The project has an overall budget of \$700 million and a development budget of \$465 million. The partnership raised more than \$430 million in AA-rated bonds sold upfront to cover immediate capital expenditures. There is no government equity in the project, though the BAH covers debt (if there is a gap) and helps fund development costs. Other funding sources include money from debt financing, earned interest income, net operating income (BAH less expenses and less debts), and partner equity. If there is a shortfall, the scope of the project is revised. If excess funds remain, they are reinvested in the project. The key to the investment strategy is to raise debt upfront from the cash flow stream of rental properties, with the equity contribution providing extra cash flow. Refinancing in 2005 generated an additional \$20 million, shared between Fort Belvoir and Fort Irwin—another Clark Realty development project—to finance development plans.

Development at Fort Belvoir is financed by capitalizing the BAH, which is the market-based rental rate for residents. The BAH increases an average of 2.5 percent per year, which results in an annual update of the pro forma. The Residential Communities Liaison Office (RCLO) helps to determine BAH rates by sampling housing costs throughout the Washington, D.C., metropolitan area. Housing allowances are the same for all military branches within the region. The 2008 BAH rates range from \$1,718 to \$2,799 per month for soldiers with dependents.

PLANNING AND DESIGN

Torti Gallas and Partners serves as the consultant to the PPV for design and planning of the initial development phases. The firm has overseen new construction, demolition, and rebuilding as well as the renovation of housing units in ten of the 12 existing villages. This includes responsibility for infill planning and design of Village Commons

and the Villages at Belvoir. Their goal was to create a “place” and strengthen the identity of the core of the installation.

Torti Gallas was given broad discretion in design and planning since approvals are managed by the developer and not subject to a public review process. The developer controlled the budget, number of units, base line boundaries, certain environmental issues, and construction techniques. Since military families can use the BAH for on- or off-post housing, privatization is meant to provide quality housing and a sense of community not often available or affordable off base. Unlike at other military housing developments, military families at Fort Belvoir can choose residential unit types regardless of rank.

In the villages, public space and connectivity are emphasized to establish a sense of community. Social interaction is promoted with pedestrian-friendly streets and paths, village greens, community facilities, and front porches. Special features such as village centers, street furniture, picnic shelters, and communal mailbox structures are all designed to bring people together and establish a sense of community. Street trees planted in a continuous strip form a canopy and serve as a traffic-calming device along the narrow streets.

Fifty-two percent of the 74-acre (30-ha) infill development is designated for buildings, streets, and parking (including 828 garage spaces) with a density of 5.6 units per acre (13.8 units per ha); 48 percent of land is set aside for landscaping and open space. The town center is located in Herryford Village, which contains 171 residential units and two tot lots. Vernondale Village comprises 162 housing units, a picnic shelter, tennis courts, two tot lots, and a 4,200-square-foot (390.2-sq-m) neighborhood center available for use by residents of all three villages. A picnic shelter and three tot lots serve the residents of the 82 dwellings at Cedar Grove Village. Each village has a central green square with pedestrian and bicycle trails connecting to the wider network of trails throughout the installation. Each of these greens is located within a five-minute walk of every home in the respective neighborhood. Smaller greens provide playing fields, exercise paths, and open space. Large trees six to eight inches (15 to 20 cm) in diameter were transplanted so that landscaping would be consistent with that of the older neighborhoods. The development team estimates that two to three trees were planted for each tree lost.

Residences come in 26 variations designed in Colonial Revival and Italianate architectural styles. (The Villages of Belvoir and Village Commons are Colonial Revival.) This was intended to create a coordinated ensemble of housing while minimizing construction costs. Distinctions among units—different elevations, building materials, architectural details, and colors—bring variety to the streets. The shallow frontyards, designed to bring activity closer to the street, make architectural detailing particularly important. Colors such as dark green, camel, blue, and dark red are used on the exterior of about a third of the dwellings to complement the more neutral tones of most facades. Vinyl siding is the primary building material; however, 30 percent of the units have brick facades that wrap around each building edge to blend with vinyl siding on side and rear elevations. A color consultant was hired to create color palettes for siding and architectural details.

The mixed-use town center, Village Commons, is located at the intersection of 12th Street and Gunston Road—two major arterials—in Herryford Village on a site that provides good visibility to the drivers of the 24,000 or so vehicles entering one of Fort Belvoir’s main gates each day. Locating the town center along 12th Street at the edge of Herryford Village has helped reduce the traffic impact within the adjacent residential areas. Because it has good pedestrian and vehicular access, many people walk to the center. For those who drive, there is parking behind the storefronts and parallel parking in front along 12th Street. A number of existing social and medical services in the vicinity supplement new offerings at the Village Commons and add to the concentration of services. Services include Barden Education Center, Child and Youth Center, DeWitt Army Hospital, Body Shop Fitness Center, Belvoir Chapel, Fort Belvoir Library, Fort Belvoir Credit Union, and Logan Dental Clinic. The design adheres to new urbanist principles by incorporating housing, retail services, civic uses, and community open space within interconnected streets and paths to create pedestrian-friendly neighborhoods.

Torti Gallas and Partners’ plan for the entire facility resulted from coordination among the fields of design, environmental planning, civil engineering, and construction. Villages throughout the installation are clearly defined by natural boundaries, and linked to community facilities, other neighborhoods, and conservation areas by a system of parks and greenways. The design reflects the topography of the site and protects views of Dogue Creek

and the Potomac River. The design balanced the need for density and connectivity surrounding the town center with a respect for the site's topography. In the outlying villages where housing was demolished and rebuilt, the biggest constraint in some cases was working with the existing infrastructure.

CONSTRUCTION AND SUSTAINABILITY

When the project started, the army estimated that 70 percent of the residential units at Fort Belvoir were in need of improvements and base utility systems required updating. Through the privatization program, the military sought to redevelop housing and promote the use of sustainable design features for all construction.

The army requires RCI projects to achieve the Sustainable Project Rating Tool (SPiRiT) Gold Level. SPiRiT is the evaluation system the army uses to rate the sustainability of new and existing facilities, based in part on the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) green building rating system. The Village Commons has also been selected by the USGBC for the LEED-Neighborhood Development pilot program. SPiRiT is a feature-oriented system in which credits are earned for satisfying specific criteria. Fort Belvoir achieves the SPiRiT Gold Level based on a combination of environmental categories including sustainable and compact development practices, Energy Star-certified homes, construction waste recycling, and water efficiency practices.

Many of the building practices employed at Fort Belvoir comply with requirements of the rating system. The plans dictate that future development will occur on previously disturbed land and will utilize existing infrastructure. Communities are clustered to support the use of public transportation. Stormwater will be managed to reduce contamination of local waterways. During construction, at least 50 percent of construction waste will be recycled and specified materials are available locally and contain recycled content. Residential units are designed to maximize daylight and minimize sound. An indoor air quality plan protects building materials from moisture damage and requires use of adhesives, sealants, carpets, and paints that contain low levels of volatile organic compounds.

Every new home at Fort Belvoir is Energy Star qualified, which helps reduce greenhouse gas emissions and protect the environment. The Energy Star Homes program provides an estimated 30 percent improvement in energy efficiency. Environmental issues such as sustainability and energy conservation are reflected in the design and construction process through the use of effective R-value insulation, high-performance windows, tight construction and ducts, efficient heating and cooling equipment, and energy-saving appliances. Pinnacle is currently surveying residents to gauge interest in establishing a car-sharing program to enhance travel options while decreasing greenhouse gas emissions.

An interdisciplinary team created a holistic construction plan that identified goals and sustainability strategies for each construction phase. Materials and equipment were selected based on life-cycle costs and their impact on indoor air quality. The expected life spans of housing and other building systems and components were identified to forecast the need for system replacement.

The Villages at Belvoir features all new utilities according to the privatization plan. More money was required upfront to provide the infrastructure, which includes underground electric lines and telecom (fiber optics). There is a one-year construction warranty for the area within the ground lease. The new utilities are connected to the existing infrastructure system, and in other areas of the post, new and renovated housing is tied directly into the existing infrastructure.

TENANTS, MARKETING, AND MANAGEMENT

Developers of military housing can rely on a far higher occupancy rate for military families than is possible on the open market. An estimated 15 to 20 percent of military families choose to live on base at Fort Belvoir; nationwide,

20 to 30 percent of residential needs are met on installations. This percentage is expected to increase as the quality of housing improves through the RCI program.

A “waterfall” system is used to determine tenant priority. Under a high-occupancy scenario, the project would have 100 percent military families. Military families always receive top priority, but if they cannot be found to occupy the housing, the PPV can “open the waterfall” and lease to other categories of tenants. To fill vacant housing, units may then be leased to single soldiers, DoD civilians with families, military retirees, and ultimately the public. If a BRAC determination affects the project (decreasing demand by military families), or the older dwellings prove difficult to lease, then housing can be made available to the general public at market-rate rents. It is important to note that the project may not charge military families more than BAH for rent, even if the market rent is higher. In addition, military families always get first right of refusal for available housing.

The goal of marketing is to eliminate vacancies by providing affordable, high-quality products to compete with those offered by the private market. If a 100 percent occupancy rate is reached, any extra cash flow is reinvested in the PPV. By 2012, when all housing will have been privatized and upgraded, any excess cash will go toward addressing new needs. The army conducts a residential market analysis every three years to assess general housing conditions. To date, it has proven easy to fill new residential units but more challenging to fill the existing military inventory managed by the PPV. Marketing efforts therefore focus on the less desirable dwellings by offering customization, such as upgrades and incentives, and by emphasizing existing amenities for use by all village residents. Landscaping and exterior maintenance are provided, together with trash and recycling pickup, and 24-hour emergency maintenance service.

Villages include residential units predesignated by rank. Depending on availability, soldiers usually have a few choices within their rank band. Household size and compensation generally determine unit size. BAH is tied to rank and number of dependents. All housing at Fort Belvoir is family housing; singles live off-post.

Pinnacle arranges community events and collaborates with support services. Promotional programs include quarterly newsletters, town hall meetings, and organized community events. A mayoral program trains volunteers to serve as liaisons between residents and the army, providing information about services and activities and promoting residents’ interests. Mayors represent their villages and attend monthly meetings.

When it comes to retail marketing and management, AAFES determines the tenant mix for the town center to complement what is offered at the post exchange, a general store found on army installations all over the world that offers a military discount. The Village Commons benefits from good visibility to attract both tenants and customers, and there is flexibility in space planning to accommodate a diverse tenant mix. Existing storefront retail is anchored on the east by the AAFES Shoppette and on the west by a day spa. Other businesses include Starbucks, a housewares store, a GNC, a barber shop, a cigar shop, a watch and clock shop, a dry cleaner, and a Rent-A-Center. The largest space measures 4,400 square feet (408.8 sq m) and there are no spaces large enough for a sit-down restaurant. The army’s Morale, Welfare, and Recreation Command (MWR) provides the existing restaurant amenity on base. As retail trends and tenants change, AAFES is responsible for re-leasing.

EXPERIENCE GAINED

Decentralizing housing management services improved the quality of service for military families. The RCLC helps these families through the transition and effectively competes with off-base housing by offering “one-stop shopping” for all on-base housing needs. In addition to Fort Belvoir, the Clark Pinnacle partnership offers similar services at other installations.

The developer faced challenges related to the transition to privatization. Conducting a housing evaluation prior to transition would have been helpful in assessing the extent of deferred maintenance. Once privatization is imminent, investment in the housing stock is limited, and it can take more than a year to handle the backlog. The

PPV brings expertise and innovation to the development process but does not necessarily know the full extent of immediate needs. Nevertheless, the army’s flexibility was a key to development success.

RCI resident assessment surveys are done every quarter to ensure that on-post housing needs are being met. Soldiers pay the same BAH regardless of whether they reside in new or existing housing, resulting in obvious concerns about fairness. Success creates expectations that need to be managed since not all families can live in new units; but all can use the new facilities and services. Prior to privatization, BAH payments went directly to the DoA, not to the specific installation. Now, the installation can rely on the BAH to help set a budget to manage housing development.

Regarding retail services at Village Commons, AAFES finds that parking could have been more conveniently located with better visibility and easier access. The original roadway providing access from 12th Street to parking in the rear was closed for safety reasons and is now a pedestrian space. More parking in front along this street would have provided greater convenience for shoppers. Planned directional signage should be helpful but may not be as effective as reopening the access road. However, it is common for parking to be located behind storefronts in traditional neighborhood design. Similarly, parking garages are situated behind housing units. Nevertheless, with only 500 families within walking distance, it is important to provide convenient parking to attract additional visitors to support the retail services. Because this is the first army installation to provide mixed-use development, it is an instructional experience for the PPV to consider how best to orient these services.

Privatization brings private sector design and market forces to the military post. Fort Belvoir is the first installation to integrate unit types and rank levels, and the first to provide various kinds of green spaces, including fenced backyards. A variety of residential types offers individuality that may become a model for other military installations. Providing new choices is a significant benefit of privatized housing.

However, even with 26 unit types, it is hard to provide variety for the higher-ranking military families. Designs for the larger homes specified a high percentage of brick facades (30 percent), but including additional porches might have had a greater impact on livability. Designers found that the quality of details in vinyl was better than anticipated and might have saved money that could have been put toward other amenities. Having two architectural styles for all housing (Colonial Revival and Italianate) works well to create a strong core given the repetition of elements, but other architectural styles could have been introduced in outlying neighborhoods. Historic Park Village is the only Arts and Crafts bungalow-style neighborhood and is highly sought for its unique style. Greater variety in architectural styles might have been incorporated at all levels—neighborhood, block, and community facilities—while still resulting in a strong sense of place.

PROJECT DATA	
SITE AREA	
Site	Area (Acres/Hectares)
Village Commons	23/9.3
The Villages at Belvoir	74/30
Total size of U.S. Army Garrison Fort Belvior	8,656/3,530
LAND USE PLAN	
U.S. Garrison Fort Belvoir	
Use	Area (Acres/Hectares)
Family housing	576/233
Undeveloped land, support services, and other facilities	8,080/3,270
The Villages at Belvoir	
Percentage of land reserved for housing and infrastructure: 52	
Percentage of open space: 48	

RETAIL GROSS BUILDING AREA

The Village Commons at the Villages of Belvoir

Total GBA (square feet/square meters): 13,613/1,264.7
AAFES Shoppette convenience store (square feet/square meters): 2,230/207.2
Starbucks (square feet/square meters): 2,168/201.4
Rent-A-Center (square feet/square meters): 1,430/132.8
Laundry/dry cleaner (square feet/square meters): 1,424/132.3
Barber shop (square feet/square meters): 735/68.3
GNC (square feet/square meters): 661/61.5
Cigar shop (square feet/square meters): 730/67.8
Country Classics Gifts (square feet/square meters): 715/66.4
Day spa (square feet/square meters): 2,194/203.8
Vacant (square feet/square meters): 1,326/123.2

Percentage of gross leasable area (GLA) occupied: 89.7 percent
Average length of lease: 5 years, except for AAFES direct operations that include Starbucks and the Shoppette

OFFICE GROSS BUILDING AREA

Total GBA devoted to the welcome center (square feet/square meters): 5,000/464.5
Percentage of gross leasable area occupied: 100

RESIDENTIAL

Total number of units at U.S. Army Garrison Fort Belvoir: 2,070
Number of replacement units including the 415 units at the Villages of Belvoir: 1,630
Number of renovated historic homes: 170
Number of replacement homes: 1,900

HERRYFORD VILLAGE

Housing Type	Number of Units
Single-family (including 25 units at the Village Commons)	26
Single-family (handicapped accessible)	3
Duplex	69
Townhouses	73
Herryford Village total	171

Average home size (square feet/square meters per unit): 1,647/153
Average basic allowance for housing (BAH) per unit: \$1,889

VERNONDALE VILLAGE

Housing Type	Number of Units
Single-family	56
Single-family (handicapped accessible)	8
Duplex	84
Townhouses	14
Vernondale Village total	162

Average home size (square feet/square meters per unit): 1,913/177
Average BAH per unit: \$2,134

CEDAR GROVE VILLAGE

Housing Type	Number of Units
Single-family	25

Single-family (handicapped accessible)	6
Duplex	42
Townhouses	9
Cedar Grove Village total	82

Average home size (square feet/square meters per unit): 2,275/211
Average BAH per unit: \$2,620

RESIDENTIAL UNIT TOTALS

Unit Type	Number of Units	Size of Units (Square Feet/Square Meters)	Rent per Month
Single-family	107	1,461-2,786/135-258	\$1,718-\$2,744
Single-family (handicapped accessible)	17	2,287-3,306/212-307	\$1,718-\$2,744
Duplex	195	1,466-2,714/136-252	\$1,718-\$2,744
Townhouses	96	1,466-2,927/136-272	\$1,718-\$2,744
Total	415		

DEVELOPMENT COST INFORMATION

Site Acquisition: \$0

Hard Costs: \$74,635,000
Construction (residential): \$52,885,000
Construction (retail): \$1,000,000
Streetscape, site work, landscaping, amenities: \$20,750,000

Soft Costs (costs spread over total of 2,070 homes): \$24,900,000

Total Development Cost: \$99,535,000

DEVELOPMENT SCHEDULE

Planning started: August 2002
Site purchased (closing): December 2003
Construction started: January 2004
Sales/leasing started: September 2005
Phase I (Herryford) completed: October 2005
Phase II (Vernondale) completed: December 2005
Phase III (Cedar Grove) completed: January 2007
Expected project completed: 2011

DRIVING DIRECTIONS

From Ronald Reagan Washington National Airport: Exit the airport; take ramp to George Washington Memorial Parkway North; take exit for I-395 South toward Richmond; continue on I-95 South to Exit 166A Fairfax County Parkway/Backlick Road (7100 South) toward Fort Belvoir; stay on Fairfax County Parkway to its end at Richmond Highway (Route 1) and turn left; take the first right into Fort Belvoir at Tulley Gate; proceed through two traffic lights; the town center is on your left. Note that visitors must show driver's license, registration, and vehicle insurance at the gate.

Driving time: 37 minutes in nonpeak traffic (22.2 miles/35.5 km).

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The \$99 million Villages at Belvoir comprises 13,613 square feet (1,265 sq m) of retail space in a pedestrian-oriented town center and 415 family housing units for military personnel stationed at U.S. Army Garrison Fort Belvoir.



The Villages are part of a 50-year plan to replace 1,900 homes on the base (one of which is pictured here) and renovate 170 more.



Courtesy of Clare Realty Capital, LLC

The heart of the Villages at Belvoir is the “main street” in Herryford Village, which contains 25 single-family units for military families above ten retail stores, including a convenience store, day spa, barber shop, dry cleaner, and coffee shop.



Courtesy of Clair Realty Capital, LLC

Each village contains a central green square and pedestrian and bicycle trails. Vernondale Village (picture here) features 162 housing units, a picnic shelter, tennis courts, two tot lots, and a community center.



Courtesy of Clair Realty Capital, LLC

Unique to Fort Belvoir, all military families, regardless of rank, can choose from among single-family homes, duplexes, and townhouses, combined in different configurations. Project architect and planner Torti Gallas and Partners designed 26 unit types in Colonial Revival and Italianate architectural styles.



Courtesy of Clark Realty Capital, LLC

The housing units have an average size of 1,850 square feet (171.9 sq m), a minimum of three bedrooms, and a range of floor plans. Units include increased storage space and extra-wide doorways and stairwells to accommodate the frequent relocation needs of military families.



Courtesy of Clark Realty Capital, LLC

Herryford Village site plan.

