



POST FACILITIES MASTER PLAN UPDATE



JANUARY 2022

**Virginia Military Institute
Post Facilities Master Plan Update
January 2022**

**Prepared by the
Deputy Superintendent for Finance, Administration and Support
and the
Institute Planning Office**

**Approved by the
VMI Board of Visitors**

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Master Planning Themes and Concepts

Established themes and concepts have been used as overarching guides in the development of the Post Facilities Master Plan. These have been used to guide placement of new facilities, the attitudes toward preservation, attention to VMI's history, energy and sustainability, and development and renovation with the Cadet daily schedule as a core element.

Development of new facilities and renovations of existing facilities have been guided by these five themes and concepts.

1. **Concentric Circles and the Cadet Daily Schedule.** The VMI Post is defined by the level of activity at designated times of the day and corresponding activities as indicated in General Order 1, Operating Rules of the Institute Schedule. The Concentric Circles defined areas of activity and their distance from the center of activity – the Barracks. This gives definition to North Post, Main Post, and South Post.

Levels of activity during designated times of the day are concentrated.

- The Main Post provides high levels of activity and proximity to support the academic duty day. Space along academic row during the academic duty day and evening study phases of each day are to be focused on the academic program.
 - North Post and South Post provide high levels of diverse activity. These spaces support athletic, club, and military and leadership training during the athletic and military duty phases of each day. These areas have high concentrations of competition and training fields and facilities.
 - McKethan Park/Chessie Nature Trail provides a remote training area for field training exercises, selected club sports, and academic field sites (Biology and Astronomy).
 - Lackey Park provides close in physical plant and parking support to the Main Post activities.
2. **Security.** Vehicular roads, foot paths, parking areas, lighting, emergency lights and phones, and signage are to be considered in a manner that enhance security. The addition of new security technologies are to be adopted with attention to aesthetics and historical facilities.
 - a. **Vehicle Traffic.** Vehicular circulation paths provide access to facilities and parking areas. Circulation paths, speed limits, signage, hourly and daily parking areas, on Post Cadet parking areas, residential parking, visitor and event parking, utilization of shuttle services are to consider the Cadet daily schedule and concentric circles and related activities. High levels of Cadet activity, training schedules, formations, parades, and other ceremonies require significant safety considerations.
 3. **History and Preservation.** Institute traditions add significant value to the Cadet experience and provide long-term connection between Cadets and Alumni. These traditions include the Post architecture and facilities. Essential experiences with Barracks, the parade ground, field training exercises, academic classrooms and faculty offices, and interaction with monuments and plaques, which emphasize history, tradition, and the VMI heritage. Through the VMI Museum System preservation also includes the New Market Battlefield State Historical Park and the Jackson House. The VMI Board of Visitors Commemorations and Memorials Naming and Review Committee ensures the VMI landscape is “inspirational and inviting.”
 4. **Energy and Sustainability.** All facility construction and renovation are to integrate energy and sustainability best practices to ensure VMI is a good steward of financial resources and to the environment.

5. **Green and Open Space.** Maintenance and preservation of green and open spaces are to be considered essential elements of the Post.
6. **Other Key Aspects.** A good, regular facility maintenance program, minor renovations, technology upgrade insertions, and Post beautification actions are considered essential to the foundation of this plan.

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SUMMARY of UPDATES

The *Post Facilities Master Plan* is updated, published and provided to the Board of Visitors for approval on an annual basis. Comprehensive updates to the *Post Facilities Master Plan* are provided to the Board of Visitors at the January meeting for approval.

The Institute Government Relations Team and the Projects Team consider the political and fiscal climate in development of VMI's planned improvements and renovations (both capital and non-capital). The 2022 Post Facilities Master Plan update includes changes based on recent Board of Visitors recommendations and directives. Key activities that influence the composition of the Post Facilities Master Plan include the State Budget, the VMI Operating Budget and the Capital Improvement Plan that is formally submitted to the State.

A key purpose of the *Post Facilities Master Plan* is to document the alignment of the Capital Improvement Plan (CIP) with the capital project priorities established by the Institute and approved by the Board of Visitors. Revisions and updates to the *Post Facilities Master Plan* include:

Updates to the Operational Unit Space Requirements

As the programmatic needs for each operational unit, change new space requirements are identified. The space needs are addressed through office relocations, changing the use of an existing facility, modifying existing space, building renovation or new construction. Updated space requirements have been identified.

Updates to the Capital Improvement Plan

VMI's Capital Improvement Plan (CIP) is used to identify and prioritize capital project needs. Updates to the CIP reflect the ongoing commitment to meeting the initiatives identified in *Vision 2039*. The 2018 General Assembly approved the Corps Physical Training Center Phase III (Aquatic Center) for Detailed Planning using VMI funds. They also approved a project to Renovate the Turman House, a project to Renovate 412 Parade, Superintendents Quarters and a project to Renovate Crozet Hall. The 2019 General Assembly authorized funding (in addition to private funding) for the construction of the Corps Physical Training Facility Phase III (Aquatic Center). The 2020 General Assembly authorized funding for the construction of the Improvements to Post Wide Safety and Security, the Renovation and Expansion of the Engineering and Laboratory Facilities and the detailed design of the Leadership Development Facility using VMI funds. The 2021 General Assembly approved the use of the detailed design of the Leadership Development Facility using State funding.

Additional capital project priorities are identified for the next six years and are presented in the Capital Improvement Plan.



INTRODUCTION

Virginia Military Institute became the nation's first State-supported military college on November 11, 1839. The initial class of 24 Cadets has grown to an average enrollment of over 1700 young men and women in a four-year undergraduate program combining a full college curriculum within a framework of military discipline that emphasizes the qualities of honor, integrity and responsibility.

Vision 2039, an imaginative Institute development plan created by the VMI Superintendent and the VMI Board of Visitors, identifies four major focus areas: Academics, Military, Athletics, and Physical and Cultural Environment.

During the spring and summer of 2004, committees including faculty, staff, Cadets, and alumni developed recommendations for improvements within the four focus areas. In March 2005, the BOV endorsed the Superintendent's plan to operationalize *Vision 2039* through a series of initiatives that originated within the four focus groups. See also the *Institute Strategic Plan* (Section III) for additional detail on the comprehensive involvement of stakeholders in the development of *Vision 2039*.

The *Post Facilities Master Plan* has been approved by the Board of Visitors annually since May 2004. The *Post Facilities Master Plan* includes the current Six Year Capital Improvement Plan (CIP) and is updated annually for approval of the BOV at its January meeting.

VISION STATEMENT

To be the premier small college in the nation, unequalled in producing educated and honorable citizen-leaders, with an international reputation for academic excellence supported by a unique commitment to character development, self-discipline and physical challenge, conducted in a military environment.

MISSION STATEMENT

The Virginia Military Institute believes that the measure of a college lies in the quality and performance of its graduates and their contributions to society. Therefore, it is the mission of the Virginia Military Institute to produce educated, honorable men and women, prepared for the varied work of civil life, imbued with love of learning, confident in the functions and attitudes of leadership, possessing a high sense of public service, advocates of the American Democracy and free enterprise system, and ready as citizen-soldiers to defend their country in time of national peril.

To accomplish this result, the Virginia Military Institute shall provide to qualified young men and women undergraduate education of highest quality -- embracing engineering, science, and the arts -- conducted in, and facilitated by, the unique VMI system of military discipline.

STRATEGIC FOCUS AREAS

Academics. VMI will continue to build upon its academic reputation: a) with balance in academic majors among engineering, science and liberal arts; b) by hiring the very best professors possible; c) by maintaining small class size with exceptional instruction; d) by continuing to enhance undergraduate research programs; e) by assessing the productivity of the majors and minors offered, while keeping in mind what is best for VMI and the nation; f) by maintaining establishing partnerships with selected graduate schools; g) by reinforcing the focus on science, technology, engineering and mathematics and h) by improving publicity on significant achievements and successes of VMI's academic programs.

Military. VMI aligns commissioning programs in all four branches of service (Army, Air Force, Navy and Marines) and promotes service in the Guard and Reserve.

Athletics. Every athlete is a Cadet and every Cadet is an athlete in terms of sportsmanship, competition, and fitness. This concept increases the number of Cadets who have leadership experience through athletic team endeavors. This effort expanded club sports offerings and has also modestly expanded NCAA athletic programs.

The Cultural Environment. This concept demands a comprehensive renovation, construction and maintenance plan that emphasizes leadership development while enhancing the history and traditions of the Institute.

In their daily activities, Cadets are constantly reminded of their heritage and their responsibilities to continue VMI's citizen-soldier tradition.

LEADERSHIP DEVELOPMENT

VMI successfully develops leaders – leaders for military, leaders for industry, leaders for government, and leaders for all walks of life. The four years of a cadetship have a proven record of transforming young Cadets with promise into leaders ready to serve their fellow citizens and country during times of crisis while also pursuing successful careers.

Vision 2039, the Superintendent's vision outlined in the *Institute Strategic Plan*, is reinforced by *The VMI Leader Journey* that describes VMI's leader development process, a developmental program within a framework of military discipline that emphasizes qualities of honor, integrity and responsibility.

VMI is committed to ensuring that the long tradition of leadership and service continues into the future. The *Post Facilities Master Plan* provides the framework for accomplishing the improvement and development of physical facilities consistent with goals and strategies outlined in the *Institute Strategic Plan*.

The *Institute Strategic Plan* directs the *Post Facilities Master Plan* in support of academic (including ROTC); Center for Leadership and Ethics; co-curricular; intercollegiate athletics; finance, administration and support; information technology; diversity, equity and inclusion; and departments under the direction of VMI Headquarters (Admissions, Financial Aid, Communications and Marketing and Protocol).

Renovations and expansion to Academic Row and buildings in support of Cadet life are key components in achieving the *Institute Strategic Plan*. The Corps of Cadets will be provided with facilities that are "state-of-the-art" that provides an environment of excellence for academics and Cadet life. The funded construction project for the Postwide Safety and Security, Corps Physical Training Facility Phase III (Aquatic Center), the future Renovation and Expansion of the Nichols Engineering Building Engineering and Laboratory Facilities, and the future construction of the Center for Leadership Phase 2 (Leadership Development Facility) will support both the academic and intercollegiate programs of the Institute.

ORGANIZATION OF THE POST

The VMI Post is organized into a series of zones that provide better definition of function and service to the Cadets, administrative functions and visitors to VMI. The zones are the Cadet Support Zone, Administrative Zone, Corps Fitness and Training Zone and the Post Housing Zone. These zones are important considerations in the master plan to ensure that future improvements support the Cadet daily schedule. Accordingly, some offices and departments on the VMI Post may be relocated into more appropriate zones across the Post to provide better functional support to the Cadets, administration, faculty/staff and visitors to the VMI Post.

Cadet Support Zone: The Cadet Support Zone is comprised of all areas across the VMI Post designated as primary areas of use by the Corps of Cadets. The buildings included in this zone are all academic buildings as well as Barracks, Crozet Hall, Marshall Hall - Center for Leadership and Ethics, Preston Library, VMI Health Center, Richardson Hall and the Richardson Hall Infill building.

The Military and Leadership Field Training Grounds located on North Post, McKethan Training Area and the Chessie Nature Trail all provide training areas for the Cadets.

Located in New Market, Virginia the New Market Battlefield State Historical Park (NMBSHP) is located on 300 acres that include the Virginia Museum of the Civil War and the 19th Century Bushong Farm. The Shirley House, owned and operated by VMI, is located adjacent to the NMBSHP.

The Jackson House, a public historic house museum and administrative offices, located in downtown Lexington includes the Jackson House, Davidson-Tucker House and adjoining land.

Administrative Zone: The Administrative Zone is comprised of functions across the VMI Post that provides administrative support to the VMI business functions. These areas may also provide service to Cadets but are not designated as critical regarding Cadet access. The administrative zone may be increased over time as Post Housing is converted into offices to support administrative functions.

The administrative zone includes the buildings and functions supported in the 301 Letcher (VMI Police Department and VMI Office of Emergency Management); 303 Letcher (Protocol Office, and Diversity, Equity and Inclusion Office), Neikirk Hall (VMI Agencies Office), Letcher House at 305 Letcher (Human Resources Office), Cabell or Archer House (housing), Pendleton-Coles House at 309 Letcher Avenue (Admissions Office), 307 Letcher Avenue (Admissions Office, Communications and Marketing Office, and Office of Financial Aid), Smith Hall, Moody Hall (VMI Agencies), 304 Main Street (housing), 306 Main Street (housing), Freeland House (Construction Office and Physical Plant Custodial Services), Shell Hall (Registrar's Office and Auxiliary Services Office), and Kilbourne Hall Annex (Auxiliary Services). Improvements to these facilities will strive to incorporate the recommendations of the *Post Preservation Master Plan* (dated January 2007).

Located off the main Post is the Physical Plant located in Hinty Hall on VMI's 79-acre Lackey Park.

Corps Fitness and Training Zone: The Corps Fitness and Training Zone is comprised of those areas that support athletic events for NCAA competition, Physical Education, or areas used by Cadets for general physical training and conditioning.

This area includes Cormack Hall, Cocke Hall, Clarkson-McKenna and adjacent Fiorini Turf Field, Foster Stadium, Alumni Memorial Field, Cameron Hall, King Hall and the Corps Physical Training Facility. Additionally, this area includes Patchin Field, Gray-Minor Stadium, Paulette Hall and the Military and Leadership Field Training Grounds on North Post.

Post Housing Zones: The Post Housing Zones will be concentrated on the quarters along Officers Row to include 416 Parade (currently occupied by the Commandant), 412 Parade (Superintendent's Quarters), 410

Parade (currently occupied by the Dean), 408 Parade (currently occupied by the Chief of Staff), 406 Parade (currently occupied by the Deputy Superintendent for Finance, Administration, and Support), and, the duplex housing 404 Parade (currently occupied by the Corps and Institute Sergeant Major) and 402 Parade (currently used as VIP Quarters).

Faculty and staff housing is provided on Anderson Drive on North Post in four housing units, 501 and 503 Brooke Lane, 304 and 306 Main Street Apartments, and 306 Letcher Avenue (Cabell or Archer House). Protocol VIP Quarters are provided at 303 Letcher Avenue collocated with the Protocol Office.

The Turman House (Stono) is located on the eastern tip of the VMI ridge overlooking the Maury River. Included as part of the Turman House are the Main House (VIP Quarters and housing), Office (housing), Icehouse and Summer Kitchen (housing).

450 Stono Lane is currently occupied by the Chaplain to the Corps of Cadets. Its proximity to the Barracks and hospitable atmosphere support both formal and casual gatherings of Cadets as well as personal meetings with the Chaplain.

FACILITY IMPROVEMENTS AND RELOCATIONS

Admissions Office (Pendleton-Coles 309 Letcher Avenue and 307 Letcher Avenue)

Built by the Post Surgeon in 1867, this historic facility was moved from its original location to allow for the construction of Maury-Brooke Hall. The Admissions Office will continue to be located in this facility and includes a portion of the adjacent offices located at 307 Letcher.

The lower level of 307 Letcher is occupied by Communications and Marketing publications staff members. The second floor provides office space for the Admissions Office. The upper level is occupied by the Office of Financial Aid.

Renovations to 307 Letcher Avenue have been completed to the entire facility. Improvements completed in 2019 changed the use of the facility from housing apartments to office space. Appropriate life safety, electrical and technological improvements were included. Previously, this building's roof was replaced and the exterior facade painted with historically accurate colors.

Replacement of the patterned slate roof on 309 Letcher Avenue was completed in January 2016. The exterior board and batten exterior has been repainted with historically accurate colors in early 2015.

American Legion Facility (211 North Main Street)

The American Legion Facility on South Post was constructed in 1926 of rock-faced concrete block. The facility was built after demolition of the Lexington Steam and Laundry building. The property was eventually sold to the Johnson David American Legion Post #291 in 1977. VMI acquired the property from the American Legion in 2005.

The facility was relocated from its original site at 319-321 Main Street to the western most portion of land owned by the Institute. The American Legion Facility was relocated as part of the Corps Physical Training Facilities Phase I (Indoor Training Facility) construction project.

The facility was mothballed according to the Department of Interior Standards after its relocation in August 2014. The facility is being converted to office space as part of the Corps Physical Training Facilities Phase III (Aquatic Center) project.

Barracks (418 Parade Avenue)

Planning funds for the Barracks expansion were provided by the 2005 General Assembly Session, and design began during the summer of 2005. The expansion and renovation of Barracks was essential to relieve overcrowding and to provide space for expansion of the Corps of Cadets.

Actual construction began in late 2006 after receiving construction funding from the 2006 General Assembly Session. The Third Barracks is physically connected to the existing structures and is built on the west side of the existing New Barracks. The structure includes a courtyard and the traditional four-stoop structure. The functions of Lejeune Hall are integrated into the new Visitors Center in Third Barracks. The Visitor's Center is named Lejeune Hall and serves as the central welcome center for visitors to the VMI Post. The Third Barracks was formally dedicated on Founders Day, 11 November 2008. The project included the angled parking adjacent to the north side of Parade Ground (completed in the spring of 2007).

The renovation of New Barracks was completed in the summer of 2009 and ready for occupancy upon the return of the Corps of Cadets for academic year 2009-2010. The improvements included increased restroom facilities, addition of fan coil units for Cadet rooms and air handling units for common and public spaces, abatement of asbestos materials, improved lighting and modern safety and security features. Similar improvements to Old Barracks began in the summer of 2009. The entire expansion and renovation of the Barracks was completed in August 2010.

Improvements to Lejeune Hall Food Storage Room were completed in 2012 which improved the climate control for this space.

Future enhancements to Old and New Barracks include energy projects which will improve the windows and doors in New and Old Barracks. A window survey was completed in 2014. A select number of "the worst first" windows were renovated in the summer of 2014, 2015, 2016, 2017 and 2018 in Old Barracks. A larger more comprehensive project is required to properly maintain the barracks windows – a National Historic Landmark - to the required Department of Interior Standards. A capital project has been created and included in the 2022 Six Year Capital Project Budget Request.

Repairs to the parapets on the Barracks are also being completed in phases. A study was completed that provided an evaluation of current conditions and recommendations for repair. Initial first phase repairs were completed to the north side of Old Barracks in the summer of 2013. A second phase was completed on the east side of Old Barracks in the summer of 2014 and the third phase on the south side in the summer of 2015. A fourth phase was completed in the summer of 2016 to the west side of Old Barracks. During summer 2017, the Arch parapets were repaired. Parapets that run west of Marshall Arch to the corner of 3rd Barracks were completed in the summer of 2018. Parapets over the New Barracks Marshall Arch were completed in the summer of 2019. Repairs to the New Barracks Parapets West of Marshall Arch are on hold for funding.

The Barracks stoops in selected areas also remain in need of regular maintenance. The first of a multi-phased strategy to complete necessary repairs was completed in the summer of 2013. Second, third, and fourth phases of improvements were completed in the summer of 2014, 2015, and 2016. A fifth phase of improvements were completed in 2019. A sixth phase of improvements were completed in 2020.

The Barracks domestic hot water system is inconsistent in the delivery of adequate hot water to the shower facilities throughout Barracks. In 2019 an engineering study was completed that made seven recommendations to include operational changes, re-piping of existing plumbing to improve recirculation, and installation of new water heaters for 3rd Barracks. Some initial changes were accomplished by the Physical Plant. A project for the remaining work was completed in 2021.

In 2020 a project was initiated to center the flag poles on the front of Barracks. A concept study was completed and the design effort was initiated. Construction was completed in 2021.

The Barracks Armory is at capacity. ROTC stored weapons has grown in numbers and an opportunity exists to obtain additional cadet weapons. In 2019 a study was conducted to recommend ways of expanding the capacity of the Armory. Several concepts were reviewed. The project is on hold pending further review of program needs

The 3rd Barracks shower floors were found to be leaking causing ceiling failures in the spaces below. In the summer of 2019 repairs were made to the men's showers located on the 3rd and 4th stoops. Repairs to the men's showers located on the concourse 1st and 2nd stoops were completed in 2020. Repair to the 3rd Barracks ADA accessible showers were completed in 2021.

The Barracks study room is heavily used to support both the academic year and the summer programs. Existing furnishings, finishes and infrastructure are suffering from the constant use. The project to effect repairs is in design.

A project to remove the New Barracks courtyard pavers for cleaning and to address leakage issues was completed in 2020. Replacement of the membrane below the pavers will need to be replaced in the future.

A study on improvements to Daniels Courtyard was initiated in 2020. Some in-house repairs were completed in 2020. Results of the study are being considered by senior leadership and work is scheduled to begin in 2022.

Improvements to Cadet Safety and Security can be completed by upgrading the Cadet Room door locks from key locks to electronic locks. This will allow more ability to centrally manage individual access and will enhance the ability to quickly lock down the facility in emergency situations. Additionally, upgrade and expansion of the building wide CCTV system is required. Replacement of the existing doors and replacing the building IT infrastructure is required to support the overall security enhancements and meet increased bandwidth requirements.

Building 46 (539 North Main Street)

This facility is used by Auxiliary Services for storage. A project to replace the roof is underway and expected to be completed in 2022.

Cameron Hall (401 North Main Street)

This facility is VMI's multi-purpose auditorium that accommodates the entire Corps of Cadets. It is used for a variety of activities including matriculation, graduation, guest speakers, conferences, and other co-curricular activities including the home of VMI Basketball. Seating for 5,029 is provided in Cameron Hall.

Cameron Hall also serves as a State Managed Shelter for the Commonwealth of Virginia. VMI received grant funding from the Virginia Department of Social Services to complete upgrades to the electrical switchgear in the facility enabling a portable backup generator to power the facility. This project was completed in February 2012.

The men and women's Track/Cross Country coaches and programs relocated to the new Corps Physical Training Facility in December 2016 after facility completion. In 2019 the Athletic Director moved from Cameron Hall to the Corps Physical Training Facility.

Sports Information has relocated from Smith Hall to Cameron Hall. A production studio to support the ESPN3 has been established, however, the equipment to support ESPN3 streaming is mobile.

ADA accessibility, electrical and audiovisual systems improvements are needed.

The HVAC system received upgraded controls to 70% of the facility in 2010 that increased climatic control and the efficiency of the facility. The remaining pneumatic controls need to be replaced with state-of-the-art direct digital controls.

The replacement of the roof, and, installation of scuppers, lightning protection and fall protection was completed in the summer of 2017.

The repair and painting of the concourse and foyer ceilings was completed in 2018. Additionally, repairs to the chiller were completed.

In 2019 a project was completed to replace the Class of 1958 marquee positioned in front of Cameron Hall

A project to replace the building HVAC control system was initiated in 2019 and be completed in 2021. Additionally, a project to replace upholstery on all yellow seats was initiated in 2019 and all work was completed in 2020.

A project to construct a film room is in design and scheduled to be completed in 2022.

The complete renovation of Cameron Hall is included in the Six Year Capital Project Budget Requests.

Carroll Hall (508 Letcher Avenue)

Modifications to the 400 level were completed in the summer of 2008 to accommodate growth in faculty positions for the Department of Psychology. A storage room has been converted to an office; one large office has been divided to create two offices; a lab/observation room has been constructed.

Carroll Hall underwent modifications and upgrades to the HVAC system in the summer of 2010 to address the high space humidity.

Modification and space allocation to the interior spaces were completed in the summer of 2011. The Registrar's Office has been relocated to the 300 Level of Shell Hall. Additional classroom, office and laboratory space for the Psychology Department in Carroll Hall allowing the department to occupy both the 300 and 400 Levels of Carroll Hall. Additional space allocation has addressed office space needs for Athletic Academic Advising, Writing Center, and the Miller Academic Center. To better accommodate its operational space requirements the Math Education Resource Center (MERC) was relocated to Preston Library in 2012.

Career Services will remain on the 300 Level of Carroll Hall. In the summer of 2017 Carroll Hall Classroom 303 was converted to a computer lab. A suite of four Department of Psychology Offices were converted into a classroom replacing Classroom 303. Financial Aid was relocated to 307 Letcher in 2019. Also, in 2019 the space vacated by Financial Aid was renovated into Department of Psychology office space, replacing the offices that were converted into a classroom.

Future capital renovations of Carroll Hall will address the old and deteriorating building systems that are responsible for a number of building condition problems. Most windows are in need of glazing, caulking, repointing and repainting. The elevator, while serviceable, is in poor condition and should be replaced soon. The accommodations for accessibility should also be brought up to current regulations, codes and standards. Improvements to the facility will include adding a fire alarm and sprinkler system plus emergency lighting.

The design for replacing the roof on Carroll Hall, the Infill and Richardson Hall was initiated in 2019. Construction was completed in 2021.

The complete renovation of Carroll Hall has been included in the Six Year Capital Project Budget Requests.

Cocke Hall (LEED Silver) (501 Letcher Avenue)

The renovation of Cocke Hall was included in the Corps Physical Training Facilities Phase II capital project. Space utilization has been improved and modernized throughout the facility. The indoor track and court space was resurfaced. Cardio and exercise rooms are adjacent to the indoor track. Selected support space is dual programmed for storage and catering support space. Locker room facilities and offices are expanded and modernized to support the Corps, athletic teams and faculty/staff. The existing weight room is modernized. Space currently supporting wrestling has been repurposed to support the VMI Wellness Program and other support uses. Restrooms are modernized and accessible. A service elevator was integrated into the facility. The security and fire systems were upgraded. The renovation was completed in September 2016.

At the completion of the Corps Physical Training Facility Phase 3 (Aquatic Center) the Swimming and Water Polo Coaches Office will be relocated from Cocke Hall to the new facility

In 2020 an infiltration study was initiated to identify the sources of several water leaks penetrating the building envelope. Repair work is estimated to be completed in 2022.

Cocke Hall Pool (501 Letcher Avenue)

Constructed in 1969, the 8 lane, 25-yard pool and diving well supports Cadet physical education classes, military training as well as the NCAA Men's and Women's Swimming and Diving program and most recently the NCAA Women's Water Polo program.

Since 2004, capital investments to replace the water filtration system and upgrade the electrical system were accomplished. Repeated attempts to locate and repair the pool surface to eliminate a longstanding pool leak have been unsuccessful. In summer 2017, a non-capital project resurfaced the pool with a PVC liner, replaced existing gutters with stainless steel gutters, and installed a balancing tank to improve water levels and surface quality during competition. In 2018 the diving board platforms were raised to ensure compliance with NCAA requirements.

With the completion of the Corps Physical Training Facility Phase 3 (Aquatic Center) Physical Education swim classes and the NCAA Swimming, Diving and Water Polo programs will be relocated to the new facility. The existing Cocke Hall Pool space will be demolished as part of the capital project to Renovate and Expand the Engineering and Laboratory Facilities.

Cormack Hall (LEED Silver) (541 North Main Street)

Cormack Hall is a long, one-and-a half story building constructed on concrete block covered in painted stucco and has cast stone trim. The roof is a half-barrel shape and supported on an exposed metal truss system. A roof monitor runs almost the entire length of the facility. Windows are fixed steel frames with inset, four-light pivot-hinged sash. The interior is lit by the clerestory windows in the roof monitor.

Cormack Hall was originally constructed as a horse-riding arena for the Corps of Cadets. Subsequent uses included basketball, tennis and indoor track. Cormack was used as an indoor track from 1952 until May of 2013 when the facility began renovations.

The Corps Physical Training Facilities Phase II was completed in August 2015 and renovated the facility to support the Department of Physical Education (DPE) and the VMI NCAA Wrestling program. The renovated space provides offices, classrooms, exercise science laboratory, wrestling training area, weight training space and modernization of the facility to current building codes. The facility is the 'Thunder Dome' for the VMI Wrestling program.

The wooden entrance doors were replaced with new fiberglass doors in 2021.

Crozet Hall (520 Letcher Avenue)

Crozet Hall is a masonry structure supported on a local limestone foundation and clad in painted stucco with cast stone trim. The original Gothic Revival two-story building is rectangular in plan and measures thirteen bays long and seven bays deep. The flat roof has crenellated parapet walls and drains through internal downspouts. The main façade faces west towards the central Post. The north, south, and central bays project slightly; each has its own entrance. The central bay has a rectangular parapet wall with flanking, wide, octagonal turrets. Decorative buttresses stand between each window bay.

Renovation and expansion of Crozet Hall was completed in the fall of 2006 resulting in 1100 seats in the main dining area and an additional 430 seats in two rooms on the second floor. The addition provided a new kitchen, food storage area and space to support catering operations.

As the Corps of Cadets has grown and refinements are made in the Cadet Daily Schedule, the utilization of Crozet Hall is more defined. Room # 1, located on the Stono Lane or South side of the second floor provides 210 seats for the Corps and is used for faculty advising lunches. Room # 2, located on the Burma Road or North side of the second floor is utilized for Cadet organizational meeting lunches and language immersion (International Studies Department) and provides 220 seats. The two upper dining rooms also provide space to support breakfast food service and seating for supper. The main dining area also has the capability to support larger formal Institute events. The Crozet Hall Superintendent's Reception Room (formerly the "Sub's Mess") located below the main dining hall is utilized for special occasions (promotion ceremonies, smaller alumni class gatherings/reunions) and is appropriately appointed with furniture, flags, and pictures.

A solids pulper was installed in the summer of 2008 facilitating more efficient management of the solid food waste. An additional pulper was installed in 2017. A new grease trap was designed and installed in 2009.

Improved ventilation was added to the Audio-Visual Closet. The Cart Washroom was resealed in 2010. Repairs to the sidewalk and curb on the north side of Crozet Hall were completed in the Post Wide Paving Improvements completed in the summer of 2010.

In 2011 a second boiler was installed increasing capacity and backup capability. Water softeners were installed which will prolong the life of the kitchen equipment by reducing the hard water minerals which calcify under high temperatures in baking and cleaning equipment.

In 2012 repairs to the dining hall floor were completed. Floor tiles were removed from selected areas providing a temporary replacement while minor modifications were completed to support a more efficient foot traffic pattern to access and egress the servery. Egress patterns were also enhanced with installation of a new landing and stairs added on the north side of Crozet Hall. On the exterior, a new trash compactor cement pad was added closer to the facility to increase safety for employees and enhance VMI's recycling efforts.

Grant funding through the Virginia Department of Social Services supported improvements to the electrical system in the facility enabling external generators to provide power to the entire facility in 2012. This project supports VMI as a designated State Managed Shelter.

The tray accumulator was replaced in December 2014 which improved the capacity and functionality.

To mitigate water infiltration into the facility walls the capstones on the front façade were repaired in the summer of 2015 and 2016. A project to repair of the remaining capstones was initiated in 2019 and completed in 2020.

A study of the Crozet Hall dining area was completed in 2015. Several potential work items were identified including Wall treatments (cleaning and painting, acoustical paneling, wood paneling, tile wainscot restoration and heraldry); Architectural elements (vestibules, balconies and mezzanines); Mechanical grille replacement;

Upgraded lighting; Window replacement; Ceiling treatments (acoustical paneling, wood veneering, and coffered ceiling); Furniture; and Audio Visual Equipment. The Replace Crozet Hall Floor capital project was approved by the General Assembly Session 2015 and the construction was completed in summer 2017.

The 2018 Special Session of the Virginia General Assembly approved \$1,650,000 in general operating funds for a project to Renovate Crozet Hall. The description of work included replacement of the windows and lighting systems within the designing spaces, wall treatments, ceiling finishes, vestibules, balconies, and mezzanines.

Complete replacement of the built-in audiovisual system and dining furnishings is required.

Additional future improvements to Crozet Hall may add food service capabilities to rooms #1 and #2 in support of daily meals for the Corps.

In 2019 a study of the Crozet domestic hot water system was performed to determine the cause of heat exchanger failures. Untreated hard water, and improper piping and control of the heater system was determined to be the cause of the heat exchanger failures. A project to implement repairs was initiated, designed and procured. Work was completed in 2020.

Replacement of the condenser and evaporator units on the two Crozet Hall freezers was completed in 2020. The new units are plumbed to provide redundancy in the event of a compressor or condenser failure.

The chiller at Crozet, to include BACnet compatibility, was replaced in 2020. The Air Handling Unit heating coil was also replaced in 2020.

An engineering study was performed on the Crozet electrical system in January 2016. Although minor improvements have been made the building electrical system is at maximum capacity. Design and construction of the recommended repairs were completed in 2021.

Freeland House (320 Institute Hill)

Constructed in 1899, the house was designed by VMI engineering professor R. A. Marr and was home to Mrs. Freeland, who became a mother figure to the VMI Cadets for her untiring attention to the Corps. She was named the matron of VMI. The facility is a significant example of the Queen Anne style. It is a wood frame house on a masonry foundation of local limestone and brick and clad in horizontal wood siding. The building is roughly square in plan with a circular tower at the center of the east façade.

The roof is slate and standing seam metal and is reaching the end of its useful life. There is evidence of chronic water damage in the attic areas. The facility was converted from residential to office space in the summer of 2006 to provide swing space for ongoing construction projects. Departments who utilized this facility as swing space include the Department of Mathematics and Computer Science, and Air Force ROTC.

The upper levels of the facility are currently occupied by the Construction Office. The basement offices, with a separate entrance, have been designated for use by selected Physical Plant personnel.

Facility landscaping and exterior painting was completed in the spring of 2013. The color palette included historically accurate colors. The metal roof was repainted. In 2019 the rear exit stairs were replaced.

Health Center (Post Hospital) (430 Stono Lane)

The VMI Health Center, previously called the Post Hospital, houses the VMI Infirmary, Cadet Counseling, and Office of Disability Services. The name of the facility was changed in 2013 to more accurately reflect the current use of the facility and the growing health support services provided to the Cadets.

The facility was constructed circa 1850 and purchased by VMI in 1870. This facility is a contributing resource to the VMI Historic District. The Post Hospital was constructed in the Greek Revival style by John Jordan as

a residence for his son Samuel, and later converted into a hospital. It is a two-story, five-bay, double pile brick structure with a hipped roof covered in standing-seam metal. The house has received two major additions to house patient wards, one to the east and one to the west. The two-story west wing was constructed in 1909. A later 1960's one-story addition is located on the north elevation of this addition. A second bay on the east wing was constructed in the 1950's.

Renovation to the facility began in December 2011 and was completed in the fall of 2012. Upgrades completed include modifications to support the growth of the Corps to over 1,500, making the building accessible to the disabled, replacing windows and doors, upgrading finishes, replacing the roof and downspouts, re-pointing mortar where needed, replacing HVAC and electrical systems, and reconfiguring the building space to better address VMI's programmatic needs for this facility. The renovations employed many of the best practices of a LEED-Certified building

The building continues to provide a medical clinic and patient residence facility for sick or injured members of the Corps of Cadets. Minimal support for illness outbreaks can also be provided.

The chiller at the Post Hospital was replaced in 2020. Upgrades to the Building Automation System (BAS) were completed in 2021.

Heating Plant (450 Burma Road)

Originally constructed in 1909, the VMI heat plant provides steam to numerous facilities on Post, including most academic facilities and a hot water conversion system that provides heat to all Cadet rooms. The heat plant supports an industrial laundry and pressing operation as well as the Post dining operations located in Crozet Hall.

Upgrades to the boiler burner controls were completed in 2008 and have increased the overall efficiency of the heat plant and provided an automated monitoring capability.

Additional improvements to the Heat Plant were completed as part of the Post Infrastructure Improvements project. Efficiency improvements include replacing the older 400-BHP boiler with a new 600-BHP boiler and refurbishing the newer 800-BHP and 400-BHP boilers. The deaerator, feedwater system, chemical treatment system, and hot well condensate tank and pumps were replaced/upgraded as part of the project. All existing piping within the heat plant and each of the existing pressure reducing stations were removed and replaced. New steam, condensate and feedwater flow meters were installed for energy monitoring and improved operations. These improvements support the Governors Executive Order #19 (2010) and General Order #41 (See also *Annex N: Energy Conservation and Sustainability Statement*).

Improvements to the hot water system supporting Barracks and Cocke Hall were completed in the fall of 2014. Two new water heaters and two new storage tanks were added. Existing pumps and distribution piping were improved. These improvements increase the reliability of domestic hot water in these facilities. A study of the domestic hot water system recommended some additional improvements to the system. The improvements were made in 2020.

The Post Infrastructure project completed repairs or replacements to the majority of the steam and condensate system from the heat plant to all facilities being served by the steam distribution system. All the electric powered condensate pumps located across Post were replaced with steam pressure powered condensate return pumps to provide more reliability and ensure condensate water is not lost during power outages.

Hinty Hall (101 Hines Lane)

Completed in 2007 and located at Lackey Park, Hinty Hall provides space for the Director of Physical Plant, Engineering Office, Maintenance and Operations teams, Fire and Safety Office, Customer Service, supply warehouse, motor pool, and the ROTC storage shed.

In 2018 the ROTC shed concrete pad was extended to provide additional uncovered storage space.

In 2019 a CCTV system was installed for added security.

Future expansion of the supply warehouse will be required to meet consolidation of surplus property and increased centralization of supply functions. A project to construct an Addition to Hinty Hall is included in the Six Year Capital Project Budget Requests.

Kilbourne Hall (535 North Main Street)

This building houses the Army, Air Force, and Navy/Marine Corps ROTC programs at VMI, and provides uniform storage for Auxiliary Services. New construction of an infill building, expansion into adjacent Building 45, and complete renovation of the existing Kilbourne Hall was completed in the summer of 2008. This expansion and renovation addressed the overcrowding and increased program requirements.

Improvements to the elevated front entrance plaza were completed in 2012 to mitigate the impact from freezing rain and snow. The improvements include adding slope to improve drainage on a recoated plaza, resetting capstones and adding drains to the plaza and planters. Repairing and resurfacing the slab has been identified as a future maintenance requirement.

The Army ROTC detachment enrollment significantly increased, resulting in demand for additional office spaces to support growing staff requirements. Existing spaces were modified in the summer of 2013 to provide the needed additional office spaces.

The Naval ROTC detachment increased their staff in AY 2019-2020. A project to renovate space was completed in 2019.

In 2018 the Navy completed an Off-Installation Anti-Terrorism/Force Protection Upgrade (OIAT/FPU) on the Naval ROTC Department located in Kilbourne Hall. Several recommendations were made. It is the Navy's intention to implement these changes. Some of the recommendation (for example installation of additional sensors and alarms) would install systems that partially duplicate existing VMI systems. A VMI project has been initiated to review the recommendations and expand the existing VMI systems where appropriate to meet identified requirements.

A project to replace the existing HVAC controllers was completed in 2020.

The indoor rifle range located in the basement received modest enhancements to address fire safety improvements in 2013. Improvements to the indoor rifle range completed the phased addition of state-of-the-art automation for scoring and operation and removal of hazardous materials.

The indoor rifle range is in need of substantial upgrade or replacement. While a small area has been provided for the VMI NCAA Rifle Team there is inadequate space to properly support shooting meets. Visiting teams are staged in the hallways. Spectator view of the matches is less than optimal. Improvements to the shooting stations are required to optimize performance. The existing bullet traps are of an older design that deflects the bullet and do provide adequate safety. However, they do not incorporate the latest technology to 'de-energize' the bullets and keep them whole so as to minimize the spread of lead contamination. The facility requires new mechanical systems that flow air down range moving lead dust from the weapon muzzles down range and away from the shooters. More current range controls and audio systems are available that increase range officer control and overall range safety.

The HVAC controls were upgraded in 2021.

Kilbourne Hall Annex (539 North Main Street)

The Kilbourne Hall Annex` located behind Kilbourne Hall underwent improvements to the heating and lighting systems as part of the Kilbourne Hall Renovation project. Auxiliary Services used the facility to store military uniforms and other emergency supplies.

A project to replace the roof is underway and construction is scheduled to be completed in 2022.

The complete renovation of the Kilbourne Hall Annex is included in the Six Year Capital Project Budget Requests.

King Hall (501 Letcher Avenue)

King Hall was constructed in 2006 and houses the Corps boxing rooms. A women's track/cross country locker room was also included. This facility was dedicated as King Hall in December 2007 and is physically connected to the Cocke Hall Swimming Pool.

In 2018 the chiller was rebuilt. The new Indoor Training Facility includes locker room space for the women's track/cross country team. The previous women's track/cross-country locker-room space in King Hall has been re-purposed as laboratories in support of the academic program and completed in 2019.

Letcher House (305 Letcher Avenue)

Built in 1875 by Samuel Letcher, son of a former Virginia governor John Letcher, the facility currently serves as offices for Human Resources. The facility downspouts and roof repairs were completed in the fall of 2012. Exterior painting was completed in the spring of 2013. This facility contributes to VMI's Historic District.

Several improvements to the building envelope, office spaces and HVAC system were started in 2020 and completed in 2021.

Future renovation of the facility will be required to replace and or repair the aging infrastructure and finishes. The renovation of 305 Letcher Avenue is included in the Six Year Capital Project Budget Requests as part of the project "Improvements to Post Infrastructure, Phase 4".

Mallory Hall (409 Letcher Avenue)

A complete renovation of Mallory Hall, which houses the Departments of Applied Mathematics, Computer and Information Sciences, and Physics and Astronomy, was completed in the July 2007.

VMI created the Computer and Information Systems (CIS) major which officially began in academic year 2013-14. Existing classroom space on the 300 level was converted to a CIS Laboratory and research space. The modifications were completed with modular walls retaining future flexibility as the department matures.

Additional modifications were completed in 2017 to support the full build out and development of department and faculty offices for CIS. The scope was to create a strong identity for the Computer Information Science (CIS) Department. Two existing classrooms were demolished to make room for a new office suite. Also included is a new Cyber Security Lab, Cyber Post, and IT Computer Lab spaces. Minor modifications to the Large Lecture Hall (LLH) seating were made to make the space more suited to large classes. Future work may be completed as the development of full department capabilities matures.

In 2018 electronic locks were installed on the Lecture Hall.

Conversion of Mallory Hall Room 207 Conference Room into two offices for full time faculty members was completed for use in the spring semester of AY 2018-2019.

A new HVAC ductless split system was added to create a new server room and replacement of the HVAC heating and cooling coils were completed in 2021.

A study of the Mallory Hall space utilization was completed in 2021 and recommended several projects to improve facility usage. Implementation of the recommended facility improvements will begin in 2022.

Marshall Hall (*Center for Leadership and Ethics*) (500 Anderson Drive)

Marshall Hall provides state-of-the-art facilities for a variety of conferences and serves to enhance and support the Institute's leadership and character development systems. The facility was dedicated in January 2009. Marshall Hall includes the 500-seat Mr. Leslie Gillis '29 Theater with current appointments in audio-visual, information technology, and theater seating. The theater's design allows multi-functional use as an arts theater for Cadet and community performances, as well as a venue for large lectures and other major presentations. These facilities are complemented by current appointments in audio-visual and multi-functional seating configurations as well as a variety of well-appointed and technologically advanced breakout rooms of flexible design.

In addition, Marshall Hall provides a catering and dining capability that will serve up to 700, and adequate space for holding rooms, break out rooms, media/press rooms, and office space for the center's program director and staff. The Conference Office, integral to the Center for Leadership and Ethics, is located in Marshall Hall.

Surface parking is located adjacent to the center, providing public parking spaces, including ADA spaces. Maiden Lane has been realigned and paved to give the appearance of a pedestrian walkway leading to Marshall Hall from Letcher Avenue. It will be used only for access to parking behind Neikirk Hall, selected access to Moody Hall, and Cabell House Parking.

The fire sprinkler system was enhanced in the Rehearsal Hall and allows for Theater storage. These modifications were completed in the fall of 2011. In addition, balcony level railing in the Gillis Theater at the balcony level was modified to add additional height for fall protection. Emergency lighting was added in the main theater area.

Modifications were completed in 2012 which adjusted the layout of the basement area, catering kitchen sink and cabinets to support major events where food is served. The HVAC modifications completed in 2013 include converting the system to permit variable volume air flows and pressure controls, replacement of vibration isolators, and changes to air volume units programming in the Hall of Valor.

Future HVAC modifications include integrating the chilled water pump package into the building automation system, conversion of constant volume units in the Gillis Theater to variable air volume units, provide reheat coils to units in Hall of Valor and Gillis Theater and update and integrate pressurization controls from all new variable air volume units.

During December 2014 and January 2015, Marshall Hall received an extensive audio-visual upgrade to replace outdated equipment and improve digital data transmission throughout the facility. The upgrade included re-wiring the building with fiber optic cables, replacement of analog systems with High-Definition projection and camera equipment, improved videoconferencing (VTC) capabilities, improved touch-panel controls, and a service plan.

In 2019 a project was initiated to re-commission the building HVAC system. Some changes were implemented in 2020. The remaining work was completed in 2021.

In 2020 the failing wooden exterior doors from the courtyard to the pre-function space were replaced.

Improvements planned for 2020 including repair and painting of walls and trim throughout the upper and lower levels were put in hold due to COVID. This work is being re-scheduled for completion in 2021. A project to replace the carpet and wood floors will be re-scheduled to a future year.

The Center for Leadership and Ethics activities and programs hosted in Marshall Hall has growing need for space to support the programs. A need for expanded staff space and for training space exists. Temporary office space is being leased in the Marshall Library Facility until the construction of the Center for Leadership and Ethics Phase II (Leadership Development Facility) is completed. The 2020 General Assembly authorized funding the detailed planning of the Leadership Development Facility using VMI funds. The 2021 General Assembly approved detailed planning of the Leadership Development Facility using State funding.

Maury-Brooke Hall (401 Letcher Avenue)

Built in 1988, a complete renovation of Maury-Brooke Hall, which houses the Departments of Biology and Chemistry, began in 2011 and was completed in the fall of 2013. Funding for renovation of the facility was authorized in General Assembly Session 2011. The renovation included a new main entry exhibit space featuring the Monitor Merrimac painting, a statue of Matthew Fountain Maury, and other artifacts related to biology and chemistry. The facility was re-dedicated after a complex six phase renovation on Founders Day 2013.

State of the art laboratories, research space and classrooms are provided in the facility. Designated study space for Cadets in the facility is also provided.

With the growth of the Biology Department there is a need for additional office, teaching and laboratory space.

Ice machines replaced in 2021 are supported throughout the facility to support the laboratory spaces.

Memorial Hall (415 Letcher Avenue)

The Memorial Hall renovation to expand the VMI Museum to two floors and upgrade the entire building was completed in August 2006. The VMI Museum features increased exhibit space and an enlarged museum store which increased display of artifacts and revenue support for the museum operations.

State-of-the-art storage facilities for the research collection are located on the 100 level. An elevator brings guests to the museum located on the 200 level of the building. The 200 Level of the Museum, a 3,000 square foot exhibit gallery, features *The VMI Heritage*, among other exhibits. This exhibit was completed and made available to the public in the fall of 2013. The museum has also completed an expansion into the 100 level, providing sufficient space to increase the exhibit offerings including the world-renowned Henry Stewart Antique Firearm Collection and an exhibit on the important role VMI alumni have played in American history. Installation of new display cases was completed on the 200 level in 2008. The installation of the 100 Level display cases was completed in 2009 and opened to the public in October 2010, displaying for the first time, the Henry Stewart Antique Firearm Collection.

An existing tunnel connected the 100 level of JM Hall (firearms collection level) to the 300 level of Cocke Hall. During the renovation of Cocke Hall this tunnel was removed, and the east façade was repaired. Egress paths and signs were modified supporting this change. In 2017 the exterior stucco on the south façade was repaired and the monumental features were cleaned. Exterior stucco repairs on the west façade were completed in 2018.

Relocation of the VMI Museum is included in the proposed Center for Leadership and Ethics Phase II (Leadership Development Facility). The 2020 General Assembly authorized funding for the detailed design of the Leadership Development Facility using VMI funds. The 2021 General Assembly approved detailed design of the Leadership Development Facility using State funding. The relocation of the Museum to the new facility improves the Museum's support to the academic program. The new location will provide an opportunity to

expand the relationship with the academic program as the Museum fully develops as a “teaching museum”. Once the VMI Museum is relocated the Chaplain’s Office may be relocated to Memorial Hall.

In 2020 investigation into water infiltration problems identified several broken storm water pipes and other areas of failure, immediate repairs were completed in 2021 and a more comprehensive repair project is planned.

Military and Leadership Field Training Grounds on North Post

The construction of the Military and Leadership Field Training Grounds located on North Post provided the Corps of Cadets a premier training area which includes a fully baffled firing range, modernized obstacle courses, running trails, four tennis courts, three drill fields (which will also support NCAA competition) and parking. The Woods Creek Trail passes through the training grounds providing connectivity to all training areas.

The Timber Framers Guild completed the installation of a pavilion adjacent to the firing range in the spring of 2012. This facility provides a covered area for Cadet orientation prior to range use.

The development of a Leadership Reaction Course and new Physical Plant Facility that supports the Grounds Shop at North Post were funded by both private and VMI auxiliary funds. These improvements were completed in the fall of 2015. Replacement of the grounds shop heat system was completed in 2018.

In 2019, the City of Lexington in cooperation with the Virginia Department of Game and Inland Fisheries removed the Jordan’s Point Dam. This negatively impacted the water related cadet training obstacles. The high-water entry obstacle and the zip line drop into the river obstacles had to be removed. The build-a-boat obstacle remained but became more difficult with an estimated ten-foot reduction in water levels.

In 2019 the number of lanes was increased from four to eight on the cliff rappelling obstacle. Larger RAT Challenge group sizes necessitated the change to meet the requirements of the cadet daily schedule.

In 2019 a new shed was placed near the existing high ropes courses shed. The new shed is for storage of mats used throughout the North Post Military and Leadership Field Training Grounds.

Moody Hall (308 Letcher Avenue)

Constructed in 1969, Moody Hall supports academic, Cadet, and alumni activities. These activities include lectures, presentations, and conference support. It is also used for staff training and meetings and provides office space for Academic Support and Alumni functions. The building requires asbestos tile abatement, repairs to exterior structure and facade deterioration.

Upgrades to the heating and cooling system were completed in 2006.

A feasibility/preplanning study was completed in the fall of 2012. It defined the programming, cost and scope of renovating the facility to meet current programming and life safety standards and better serve VMI and the Alumni Agencies.

In the summer of 2014 Exterior Repairs to Moody Hall were completed. The repair work addressed through wall flashing at the roof parapet level; exterior stone repair (select replacement); replacement of a section of the north side exterior stairs; additional guardrails; repair of existing railings; replacement of the existing balcony waterproofing system, including new pavers; and repair of both the upper and lower levels of the existing terrace pavers, including retaining walls.

The donor recognition, New Market Award and Distinguished Service Award recognition plaques were completely redesigned and replaced for Founder’s Day 2017. Portions of the ceiling, wall finishes, and as lighting were upgraded.

The chiller and HVAC controls in Moody Hall are beyond their useful life. A project is being planned to replace the multiple chiller units with a single unit, and replace the existing pneumatic controls system with a direct digital control system. Work is scheduled to be started in 2021 and completed in 2022.

The boiler was replaced in 2021.

Water-infiltration continues to cause damage to the facility and affect facility operations. A study was completed in 2020 to identify sources of water infiltration in the building envelope and recommend repair. Repair work is scheduled to be completed in 2022.

A concept to construct a new facility to replace Moody Hall was completed in 2021. The proposed new facility will demolish the existing structure, as well as Cabell House and Neikirk Hall.

The complete replacement of Moody Hall is included in the Six Year Capital Project Budget Requests.

Morgan Hall (403 Engineering Drive)

Originally an annex added to the south facade of Nichols Engineering Building circa 1960 it was renamed Morgan Hall and dedicated in February 2007 in honor of Maj. Gen. James M. Morgan Jr. '45, a former Dean of the Faculty. The 2020 General Assembly authorized funding for the construction of the Renovation and Expansion of the Engineering and Laboratory Facilities which includes Morgan Hall.

Nichols Engineering Building (413 Letcher Avenue)

NEB was constructed in 1931. Two annexes were added to the west and south facades of the original building circa 1960. The interior of these facilities underwent a major renovation which was completed in 2006. The South Annex was re-named Morgan Hall in 2007. Both facilities entrances have been enhanced with plaques placed by the Post Preservation Officer that explain the significance of the person for whom the buildings are named.

New laboratory equipment purchased through Jackson-Hope Grant Funds required modifications to laboratories 210 and 356. Laboratory 356 was enhanced to support a laser including a cooling compressor for the unit. Laboratory items from 356 were relocated to 210. Electrical upgrades were required to support the relocated equipment. These modifications were completed in the fall of 2012.

In 2013, the Civil and Environmental Engineering Department developed a "Built Environment Assessment and Modeling" (BEAM) Lab in NEB 205. This space utilized existing structural features unique to this space in NEB. The existing Aircraft/Flight Lab was relocated from NEB 205 to NEB 322. NEB 322 was divided with screen partitions to support both the Mechanical Engineering Manufacturing Lab and the Aircraft/Flight Lab.

The corps of cadets has grown from 1,300 to 1,700 and the number of STEM majors is in line with the Vision 2039 objective of 50% STEM growing from 39% in 2003 to 61% in 2019. Additional classroom, laboratory and support space is required to meet this growing demand and existing spaces require renovation to stay current with evolving programs.

In 2018 room 204 was converted to engineering lab space and a new concrete sump was installed in room 108.

In 2019 space within King Hall was re-purposed to accommodate 1,000 SF of additional lab space. As the planning and construction for the new CPTF PH III Aquatic Center progresses it will allow the closure of the Cocke Hall Pool.

A complete evaluation of the engineering lab and space requirements was completed in 2019 and a concept to expand and renovate the engineering laboratory facilities was completed.

The 2020 General Assembly authorized funding for the construction of the Renovation and Expansion of the Engineering and Laboratory Facilities which includes Nichols Engineering Building.

In 2020 corrections were made to the pavers outside the front entrance. Also in 2020, the HVAC electronic controls were upgraded.

Neikirk Hall (Neikirk or Blair House- 304 Letcher Avenue)

This facility was built in 1872 as a private residence for VMI faculty member Colonel William Blair. It was purchased by VMI in 1920. A large addition to the back of the building was constructed in 1998 which adjoins the original residence with a connecting corridor. The facility provides office space for the VMI Agencies. Exterior door access controls were added in 2015 to all exterior doors to improve safety and security.

Painting to the existing standing seam metal roof is required.

This facility may be removed as part of a larger Moody Hall construction project.

Old Hospital (510 Letcher Avenue)

Constructed circa 1849 the Old Hospital is the oldest remaining building at VMI and is the only building to survive from the Lexington Arsenal period. The Old Hospital served as the VMI hospital until 1870. A major renovation was undertaken in 1974. The Old Hospital provides offices for International Programs and the Institute Chaplain. Repairs to the building envelope are required to address water infiltration issues. The addition of a central HVAC system will also be required.

Exterior painting of the facility was completed in the summer of 2013 and the roof was repainted in 2015.

The Office of the Institute Chaplain may relocate to Memorial Hall upon relocation of the VMI Museum to the Center for Leadership and Ethics Phase II (Leadership Development Facility).

A complete building assessment is required to define the scope for future improvements to the facility. The complete renovation of the Old Hospital is included in the Six Year Capital Project Budget Requests which will house the expanding International Programs offices.

Post Housing

In 2020 the houses on Parade Avenue were tested for radon. Radon mitigation systems were installed in 2021.

302, 304, 306 and 308 Anderson Drive Faculty Quarters

Located on Anderson Drive these four units provide housing for faculty. Improvements to the landscaping were completed in 2009 which mitigated impacts of erosion from storm water runoff.

In 2015 302 Anderson received a new roof and exterior painting. The remaining Anderson houses need a similar project to replace roofs and paint the exterior.

304 North Main Street

This house is a two-story wood-frame structure built over a full brick basement. The facility is divided into two faculty and staff apartments. The basement is divided into three rooms with concrete floors. An internal stair connecting the basement with the second level has been removed. The second and third levels of the dwelling have been converted into a single apartment, consisting of five rooms. The internal stair that once rose through the entire structure now only connects the second and third levels. The house is part of the Lexington Historic District as well as the VMI Historic District. The dwelling was built upon land once occupied by the house of John G. Letcher, Civil War Governor of Virginia. Improvements to the drainage system are needed.

The exterior was painted in the summer of 2012 with a historically appropriate color palette. Repairs to the exterior porches were also completed.

A consultant's review in 2019 recommended removal and replacement of the addition on the rear of the facility, replacement of the roof and gutters, upgrades to the windows and building and complete replacement of the mechanical and electrical systems.

The complete renovation of 304 North Main Street is included in the Six Year Capital Project Budget Requests in the project Renovate North Main Street Apartments.

306 North Main Street

This facility is a two-story wood-frame structure built over a full stone basement. A three-story wood-frame porch dominates the Main Street elevation of the dwelling. The structure is set into a steep slope, so that on the Main Street elevation, the basement is fully exposed; on the rear, the basement is fully covered, and the structure is entered there on the second level.

The facility has been divided into three faculty and staff apartments. The basement is divided into four rooms; the internal stair connecting the basement with the second floor has been severed. The second level of the dwelling has been converted into a four-room apartment, as has the third level. The internal stairs that once rose through the entire structure has been severed between all levels.

The exterior was painted in the summer of 2012 with a historically appropriate color palette. Repairs to the exterior porches were also completed.

A consultant's review in 2019 recommended removal and replacement of the addition on the rear of the facility, replacement of the roof and gutters, upgrades to the windows and building and complete replacement of the mechanical and electrical systems.

The complete renovation of 306 North Main Street is included in the Six Year Capital Project Budget Requests in the project Renovate North Main Street Apartments.

306 Letcher Avenue (Cabell House – occupied by the Athletic Director)

The Cabell House is currently utilized as Post Housing and is located between Neikirk Hall and Moody Hall. Interior and exterior renovations were completed in the summer of 2014. Improvements included foundation work to address settling of the structure. Electrical and HVAC systems were upgraded. All interior spaces were upgraded and modernized.

An additional sound/landscape barrier is needed to mitigate the noise and visibility of activities at the Moody Hall delivery dock.

This facility may be removed as part of a larger Moody Hall construction project.

402-404 VMI Parade (VIP Quarters, and the Corps and Institute Sergeant Major)

The interior and exterior of both 402 and 404 (a duplex) have remained in their original form since construction in 1927. A general renovation of this facility will greatly enhance the historical elements which have been preserved in the quarters. Corrections to drainage, repairs to exterior stucco cracks, repairs to the windows, and repairs to the interior plaster ceilings and walls will need to be completed with the addition of central heating and air conditioning. These quarters harmonize with the adjacent residences and are historically consistent. In 2019 a project to renovate the quarters at 404 Parade while they were vacant was completed. Work included new plumbing, electrical, HVAC and interior finishes

to meet current codes and standards. The quarters at 402 Parade were vacated in summer 2020. Renovation of the quarters (similar to the work done in 404 Parade) was completed in 2020.

406 VMI Parade (occupied by the Deputy Superintendent for Finance, Administration and Support)

The quarters at 406 Parade are listed as a contributing historical building to the VMI Historic District, having been listed on the National Register in 1974, and made a National Historic Landmark in the same year.

This residence features original wood casement windows, main entrance door, interior wood floors, wood trim, fireplace surrounds, stairwells, doors and door hardware. In 2016 a project was completed to replace kitchen counters and appliances, replace carpeting, repair flooring, and paint interior walls throughout.

408 VMI Parade (occupied by the Chief of Staff)

The quarters at 408 Parade is listed as a contributing historical building to the VMI Historic District, having been listed on the National Register in 1974. The building was constructed in 1915 and serves as a faculty residence.

The quarters will benefit from a renovation to upgrade drainage systems while preserving the historical elements and increase the efficiency of the quarters. This will also include restoration work to windows and doors, both inside and outside to removing layers of paint and locations where paint is beginning to deteriorate. Based on age roof replacement should also be planned for

Stucco failure has begun with evidence of hairline cracking. The chimney shows advanced signs of failure as the underlying metal lath has corroded. The brick paved patio exhibits signs of reinforcing bar corrosion and efflorescence. Water is moving through the concrete accelerating the corrosion. Original features include wood casement sash, main entrance door, interior wood floors, wood trim, and fireplace surrounds. Most interior finishes have been retained.

A consultant's review in 2019 recommended a complete renovation including roofing, exterior finishes, flooring, bathroom remodeling, kitchen remodeling, HVAC replacement, plumbing upgrades and electrical upgrades.

In 2021 design was initiated for a project to renovate the quarters at 408 Parade while they were vacant. All work is scheduled to be completed in 2022.

410 VMI Parade (occupied by the Deputy Superintendent and Dean of the Faculty)

The defining interior spaces, such as the main central halls and wide, open staircase have been preserved in these quarters. Original features include wood casement windows and interior screens, exterior glazed wood doors, interior wood doors, wood trim, and fireplace surrounds. The light fixture over the main entrance is also believed to be original. The interior of the quarters was improved in the spring of 2014. All interior spaces were renovated and upgraded with modern fixtures and appliances. Paint was applied throughout.

412 VMI Parade (Superintendent's Quarters)

Completed in 1862, the quarters' original location was approximately in the center of the current Parade Ground and is one of the few buildings on the VMI Post not destroyed in Major General Hunter's raid on the Institute in 1864. It was moved to its current location in 1914 to enlarge the size of the parade ground. Despite small alterations, a majority of the character-defining features have been retained in the quarters.

The Superintendent's Quarters contribute to the VMI Historic District and has been listed as both a National Register property and a National Historic Landmark since 1974. The residence is significant for its role in historical events, for its association with noteworthy persons, and for its role in the architecture and planning of VMI. More details of the significance of this structure are available in the Post Preservation Master Plan.

Upgrades to the natural gas lines were completed in 2009 to support the operational requirements of the facilities boiler which provides heat to the quarters. A study was completed in 2018 to identify potential work items, and plan for a future comprehensive house renovation project. The 2018 General Assembly approved a project to renovate the house. Construction began in 2021 and is scheduled to be completed in 2022.

416 VMI Parade (Maury House - occupied by the Commandant of Cadets)

The Maury House was completed in 1853 and was subsequently burned during Major General Hunter's Raid in 1864, requiring significant rebuilding. The results of a detailed feasibility study (completed in January 2008) confirm that the home was disassembled, relocated from the center of the Parade Ground and reconstructed at its current location in 1914.

The quarters were vacated prior to beginning the Barracks Expansion construction (in 2006) and the quarters remained vacant until 2010. Prior to being reoccupied the quarters were renovated, adding state of the art HVAC, security, plumbing and electrical systems. In addition, the north side of the facility was expanded increasing the functionality of the quarters for modern use. The kitchen, bathrooms, bedrooms and laundry were also upgraded to modern standards. The basement was significantly upgraded and is now functional for occupants. Important historic architectural elements of the quarters were properly preserved including the restoration of an internal staircase that had been previously closed.

The Maury House contributes to the VMI Historic District, having been listed as both a National Register property and a National Historic Landmark since 1974. The residence is significant due to its association with important historical persons, namely Mathew Fountain Maury – the "Pathfinder of the Seas", as well as for its importance to the architecture and planning of the VMI Post.

More details of the significance of this structure are available in the Post Preservation Master Plan. The collection of Matthew Fontaine Maury Papers is available at the VMI Archives online.

In 2021 a project to spruce up the quarters at 416 Parade was completed while vacant.

450 Stono Lane (occupied by the Chaplain).

The Queen Anne style residence is located to the east of the Post Hospital on Stono Lane. The house was designed by Lexington architect William G. McDowell and constructed in 1903. The two and a half story residence is in square plan with a rear one-and-a-half-story ell at the northeast corner. The residence is a brick structure on a local limestone foundation with patterned wood shingles.

Complete renovation of the residence was completed in 2018.

452 Burma Road (Turman House Apartment)

At some point prior to 1883, a two-story, two-bay addition was added to the west end of the Turman House. A one and half story ell was constructed circa 1883 to connect the Main House with the one-story brick outbuilding. This space has been renovated into a small apartment with modern finishes.

In 2020 the heat pump serving the Turman House was replaced.

460 Burma Road (Turman House Office)

The Turman House Office is a one-story building with full basement sited to the south of the main house. The building is constructed of brick on a local limestone foundation. The interior has been renovated as a small apartment with modern finishes.

501 Brooke Lane (occupied by the Head Basketball Coach)

The exterior of these quarters was repainted in the summer of 2009 in colors and patterns that complement the houses Victorian architecture utilizing colors and patterns used historically in 1880.

503 Brooke Lane (occupied by the Head Football Coach)

The quarters underwent porch and roof repairs in the summer of 2008. In accordance with VMI's Historical Preservation Plan, the exterior was painted in colors and patterns that would complement the houses Victorian architecture and be similar to the same colors and patterns used historically in 1880.

268 Sky Farm Lane (Sky Farm House)

Upgrades to the life safety features of the facility, mechanical, electrical, roof and exterior painted were completed in 2012.

In 2018 replacement of the windows and other improvements were completed.

Preston Library (345 Letcher Avenue)

Originally constructed in 1939 Preston Library has served as VMI's main library since its original construction. An addition was built against the south façade circa 1970. The entire facility underwent a major renovation completed in 1996.

The granite pavers at the front entrance of Preston Library were replaced in the summer of 2011. The replacement addressed the uneven pavers which created a tripping hazard and ponding. In addition, new handrails and a trench drain were installed to improve drainage of the plaza. The exterior front doors were removed, refinished and reinstalled. Landscaping improvements included removal of trees in decline. New trees, plants and sod in selected areas have been installed.

The roof was replaced in 2011 including the removal, cleaning and reinstallation of all capstones, installation of new through wall flashing, and a new EPDM roof with a 30-year warranty. The mass notification system speakers were reinstalled on the roof and miscellaneous conduit wiring and abandoned penetrations were removed or rerouted.

The VMI archive office space and 500 level reading room suffered water damage from a failed water valve in 2011. The archive office space was improved with new ceiling tiles and flooring. The 500 level reading room was improved with new flooring to replace the existing carpet. Asbestos containing tiles were removed during the improvements to the reading room.

The 700 level of Preston Library was improved with increased technological infrastructure and furnishings in the summer of 2012 to support the Math Education Resource Center (MERC). The MERC was relocated from Carroll Hall to meet the growing demand for services provided.

Significant archiving/reorganization of periodicals in 2014 on the 300 level allowed librarians to eliminate several rows of stacks (shelving) and create space for additional study/work spaces. Tables, chairs, and mobile white boards have been set up for Cadet use.

The 2016 Session of the General Assembly authorized the VMI Renovate Preston Library project for construction. The project scope included a total renovation of the existing facility. The exterior stucco was

repaired/replaced as required. The windows were replaced. Inside, the elevator was modified to provide ADA access to all levels. The archive area was expanded, separated from the overall building HVAC system, and a new fire suppression system was installed. Within the library, the office spaces were re-organized for improved efficiency and the student study spaces were re-programmed to provide more group study areas. Work was completed in 2020.

Installation of electronic door locks and card readers were completed in 2021.

Physical Plant Grounds Shop (107 Leadership Reaction Avenue)

In 2018 improvements were made to the Physical Plant Grounds Shop Heat System.

Protocol Office (303 Letcher Avenue)

A duplex dwelling located on the south side of Letcher the VMI Protocol Office is located on the main level. The Protocol Office VIP Quarters is located on the basement level.

This facility will continue to be used to support its current functions. This facility contributes to the VMI Historic District.

The standing seam metal roof was replaced in the fall of 2012. Exterior painting was completed in the spring of 2013 with a historically appropriate color palette.

In 2018 a project was completed replacing the aging mechanical, electrical and plumbing systems. A project to repair the failing Letcher Avenue retaining wall on which the porch rests, modify the building foundation and convert the existing second floor apartment to office space. The project is scheduled for completion in 2021.

A project to renovate the entire facility and convert the top level from a housing apartment to office space for the Office of Diversity, Equity and Inclusion is underway and scheduled to be completed in 2022.

Future improvement may include interior decorating with VMI historical items on display and modernization of the guest quarters.

Richardson Hall (500 Burma Road)

Richardson Hall is located along Burma Road adjacent to VMI's Heat Plant. Built in 1903, it houses the Post Laundry facilities on the 100 and 200 levels, and the Tailor Shop and Military Store on the 300 level.

Originally designed for chemistry labs, Richardson Hall was completed in 1935. It was connected to Shell Hall which was then the Chemistry Building. In 1997 Richardson Hall was converted to support the Military Store and Tailor Shop. Richardson Hall is a contributing resource to the VMI Historic District.

The operations of the Mail Room and Barbershop were relocated from Richardson Hall to the New Barracks Concourse as part of the Barracks Expansion and Renovation Project. The vacated spaces have been improved and are now utilized by the QMD for uniform storage. The existing mailboxes were removed as part of the Shell Hall Interior Improvements project completed in 2011.

Improvements to the water quality supporting the laundry operations were completed in 2012 with the addition of an oxidizer. This system supports removing minerals from the water which had been causing stains to Cadet uniforms.

VMI completed a feasibility study to upgrade the electrical systems and the HVAC systems. The existing evaporative swamp cooler and ventilation systems were replaced on the 100 and 200 levels with more modern cooling/dehumidification systems during summer 2016. The electrical improvements project improved lighting improved the emergency egress lighting, and installed fire alarm notification devices to provide

adequate coverage in accordance with NFPA. Installation of a new HVAC system for the Dry-Cleaning Shop was completed in December 2017.

Replacement of the stormwater pipe at the Laundry facility was completed in 2021.

The design for replacing the roof on Carroll Hall, the Infill and Richardson Hall was initiated in 2019. Construction was completed in 2021.

Scott Shipp Hall (503 Letcher Avenue)

Scott Shipp Hall houses numerous academic departments such as English, Rhetoric and Humanistic Studies; History; Modern Languages; International Studies; and Economics and Business. It was constructed in 1919 and is located to the southeast of the Old Barracks. A major addition located to the east of the original building was completed in 1955. The facility was completely renovated in 2002 as part of the Commonwealths General Obligation Bond program.

To support additional faculty positions a new office was added on the 300 level in the summer of 2013 to support Modern Languages. This resulted in the modification of an existing storage space. Classrooms were repainted, and new furnishings installed.

The English, Rhetoric and Humanistic Studies Department departmental secretary space was modified in 2013 with an additional access door to improve access to printers and supplies.

The 2016 Session of the General Assembly authorized the VMI Renovate Scott Shipp Hall project. The project scope includes a total renovation of the existing facility and a 28,000 SF addition. The interior space is being totally re-programmed to meet current requirements. All mechanical, electrical and plumbing systems are being replaced. Fire alarm, sprinkler, security systems, etc. are being completely upgraded to meet current code. A new entrance is included so the facility better fits within the Post's historic architecture and current pedestrian and traffic patterns. The construction started in 2019 and was completed in 2021.

Scott Shipp Hall is a contributing resource to the VMI Historic District.

Shell Hall (506 Letcher Avenue)

Constructed in 1909 as the Chemistry Building and later connected to Richardson Hall in 1935, Shell Hall is named in honor of VMI's ninth Superintendent who served from July 1, 1960 until June 30, 1971. The structure is four stories on the north side and three stories on the south side. In 1958, an addition was constructed that connected the building to Richardson Hall while also creating a plaza space and exterior corridors. Shell Hall underwent a major renovation completed in 1995 to accommodate its current use for Cadet support.

A structural analysis was completed in the fall of 2009 to guide future programming of the facility to support the Registrar's Office. In the summer of 2010 the Registrar's Office was relocated to Shell Hall. Upgrades to the information technology infrastructure were also completed in the summer of 2010.

In the summer of 2011 minor interior renovations were completed which included space programming for the band/glee club on the 200 level and QMD support functions on the 100 level. The 300 level old 'dark room' which supported *The Bomb* and *The Cadet* (the cadet yearbook and newspaper respectively) was converted to a storage and break room for the Registrar's Office. The 400 level, which supports the operations of the Honor Court, was improved in the summer of 2009, including the replacement of carpet, VCT tile, furniture upgrades, and painting. Additional cosmetic improvements were conducted on the other levels of the facility in preparation for re-dedication and re-naming of the building as Shell Hall in 2012.

The roof received minimal patching to address roof leaks and capstones were replaced on the east side connector between Shell Hall and Richardson Hall. A new ramp was added to the exterior steps between Shell and Richardson Halls on the east side of Shell Hall which will facilitate VMI QMD operations and ADA access into Daniels Courtyard. Interior walls were painted and acoustical ceiling tiles replaced. Interior stair lighting was modernized and stair treads replaced. The main entry foyer/lobby was upgraded and now includes a display case with artifacts from Lt. Gen. Shell, a plaque and quote.

In August 2011 an eight-inch water main line routed under Shell and Richardson Halls burst. Repairs to the water main included re-routing the water line to the south side of Shell Hall (down Letcher Avenue) and reconnecting between Shell and Carroll Halls. Improvements to the landscaping, sidewalks and the addition of bollards were included in the repairs.

A consultant's review in 2019 recommended building code updates, new finishes, rest room remodeling, roof replacement, elevator modernization, HVAC replacement, electrical distribution and lighting replacement.

The complete renovation of Shell Hall is included in the Six Year Capital Project Budget Requests.

Smith Hall (330 VMI Parade Avenue)

Constructed in 1965, Smith Hall serves as VMI administration building. The building is named after General Francis H. Smith, VMI's first superintendent who served from 1839 to 1889. The facility houses the key administrative offices for the Superintendent, Chief of Staff, Deputy Superintendents and other supporting offices. The structure is four stories with a basement and a penthouse. The structure is concrete with a masonry exterior.

A project was completed in 2018 to perform stucco repair and waterproofing to four small sections of the front of Smith Hall; Turret repairs to alleviate the leaks occurring in the closets of the board room; Front elevation planter beds to repair previous years of patchwork; Front entry around main door to repair previous years of patchwork; and Front right upper elevation wall to repair leaks observed in FAS offices. Additionally, in 2018 improvements were made to the Smith Hall HVAC controls, and upgrades were completed to the first floor copy room.

A project was started in 2019 and completed in 2020 to renovate, repair, and replace finishes in public spaces to include ceiling tile, floor tile, baseboards, and doors. Lighting is being upgraded to LED fixtures. Additionally, both 400 level conference rooms received similar improvements.

In 2020 a new audio booth was constructed in Communications and Marketing Office. Additionally, in 2020 an emergency generator was installed via the Capital Project Improve Post Infrastructure.

Upgrades to the Superintendent's Office were completed in 2021.

A consultant's review in 2019 recommended improvements to include a new stair and elevator tower addition, new ADA accessible restrooms, reconfigured office spaces, new roofing, new windows and doors, and new finishes. Recommended exterior work included drainage improvements, correction of settlement issues and site improvement for rear access.

The complete renovation of Smith Hall is included in the Six Year Capital Project Budget Requests.

Stadiums

Clarkson-McKenna (508 Brooke Lane)

Clarkson McKenna was constructed in 1987. The two top floors above the stadium house the Ferebee Lounge and the Press Box.

In 2019 a project was completed that expanded the top two floors. The expansion provided for instant replay capabilities, provided additional space for the Press Box, and additional space for visiting team coaches and increased space in the Ferebee Lounge.

Future work may include an expansion of the facility to provide a 'front door' to the football program, an expansion of the equipment storage area, an expansion of the weight room, an update to the sports medicine area and a renovation of the office areas to make them more efficient.

Corps Physical Training Facility Phase 1 (LEED Gold) (329 North Main Street)

Construction of the 205,000 SF Corps Physical Training Facility was completed in October 2016. The facility includes an indoor obstacle training course, leadership reaction course elements, weight and cardio training rooms, a climbing wall, a running track, drill areas, and support spaces. The American Legion facility was relocated to accommodate the construction of the new facility.

Corps Physical Training Facility (CPTF) Phase III – Aquatic Center (North Main Street)

Constructed in 1969, the existing pool was designed to support a Cadet Corps of 1,000 Cadets. It no longer adequately supports a Corps that now numbers more than 1,700 Cadets. Every Cadet is required to complete a basic swimming and survival class conducted by the Physical Education Department. There are additional swimming classes provided by the department including beginning swimming, lifesaving, and advanced swimming and survival.

Additionally, there are advanced military training programs available to the Cadets through the ROTC programs. Once selected for an advanced military program, the Cadets enter a rigorous training regimen to better prepare them for success.

With the addition of women to the Corps of Cadets in the 1990s, new intercollegiate sports were added for women's swimming and diving, and for women's water polo.

A study was completed for the new CPTF Phase III - Aquatic Center. This facility will replace the Cocke Hall Pool and is programmed to meet the requirements of current and future academic, military and Corps aquatic education and training. South Post was selected as the location for this facility based on ease of access for daily Cadet use. The plan includes constructing a new a 50-meter swimming pool, diving well and support spaces. With movable bulkheads, the larger pool can be subdivided allowing for multiple swim classes, military training, or intercollegiate athletic practices to be conducted simultaneously.

The development of this facility is a priority in *Vision 2039* and will update and improve Cadet physical education, ROTC programs and fitness training programs while also providing a state-of-the-art NCAA competition facility. The CPTF Phase 1 - Indoor Training Facility, and the CPTF Phase 2 – Renovation of Cormack and Cocke Halls were the first two phases and are complete.

The 2018 General Assembly approved the Corps Physical Training Center Phase III (Aquatic Center) for detailed planning using VMI funds. The 2019 General Assembly approved the Corps Physical Training Center Phase III (Aquatic Center) for full design and construction using a combination of VMI and State funds. The design was completed in 2020 and construction began in 2021. Construction is scheduled to be complete in 2022.

Foster Stadium (North Main Street)

Alumni Memorial Field was constructed in 1925 and is a memorial to World War I Alumni. Foster Stadium, built in 1962, was modernized in 2006 with new home and visiting team locker rooms, landscaping, public address system, parking improvements, fencing, and improvements to Fiorini Field (formerly Delaney Field). A concession concourse was developed along the present walkway system

beneath the grandstand. Clarkson-McKenna Hall was expanded to add additional lockers and a weight training room. Public restrooms, handicap access, and cosmetic improvements were included in the renovation. The modernized stadium was dedicated in the fall of 2006 and named P. Wesley Foster Jr. '56 Stadium. Foster stadium seats 10,000.

The addition of a javelin throw area adjacent to Fiorini Field and repairs to the track were completed in the spring of 2011 to prepare for hosting the Big South Tournament for Track and Field.

The rock slope between Foster Stadium and Cameron Hall was stabilized with a state of the art wire mesh and anchor system in the summer of 2013. The slope between the stadium and Kilbourne Hall was stabilized in the summer of 2014 along with improvements to the storm drainage system for the Clarkson-McKenna parking lot. Future improvements may include replacement of the drop inlets in front of the south side of the stadium with trench drains.

In 2018 a study of the water infiltration and associated repairs was completed for the game day locker rooms. In 2019 minor repairs were completed to reduce the water infiltration and repair the most heavily damaged areas.

In 2019 the artificial turf fabric on Fiorini Field was replaced. Additionally, two sheds were added replacing a single shed that was removed. One shed will be used for Athletic Department Equipment. The second shed will be used for ROTC equipment.

The H.M. "Son" Read '16 Memorial Track is nearing the end of its useful life and will require upgrades/replacement. The track dates back to an outdoor cinder track that was completed in 1922 (on the general site of VMI's current outdoor track). In the 1960's the track was converted to its present form. In 1986, the outdoor track was converted from 6 to 8 lanes and from 440 yards to 400 meters.

A project to replace bench style seating to individual seats with backs around the Superintendent's Area was initiated in 2019. The design effort was completed in 2020. The project was put on hold for funding impacts caused by the pandemic.

A consultant's review in 2019 recommended complete removal and replacement of the visitor stands as differential settlement has created maintenance and safety concerns. The track has also encountered differential settlement. Grading and drainage improvements are recommended to bring the facility to proper standards. Once the grading is complete a new track should be installed and installation of a new natural turf field with irrigation should be considered. Other recommended upgrades include replacement of the game day locker rooms, and repair of the concession and restroom facilities.

The electronic portion of the Foster Stadium scoreboard was completely replaced in 2021.

Future work may include replacement of the natural turf with artificial turf, removal of the track related jump pits, reduction in the size of or complete removal of the running track, and complete replacement of the game day, official and visitor locker rooms.

The complete renovation of Foster Stadium and the H.M. "Son" '16 Memorial Track is included in the Six Year Capital Project Budget Requests.

Gray-Minor Stadium (450 Anderson Drive)

The baseball stadium was improved with concession stands, press box, dugouts, fencing, lighting and scoreboard in 2007. Total capacity seating for 1,300 spectators made VMI eligible, and attractive, for hosting the Big South Conference baseball tournament in May 2011. The stadium was dedicated and named Gray-Minor Stadium.

VMI hosted the Big South Baseball Tournament in 2011. Minor improvements to the facility completed in preparation for the tournament included the addition of a pad for a ticket booth on the south side of the stadium, exterior night lights on the east side of the stadium, and improved safety padding on fencing.

The extension of fiber connectivity to the stadium which facilitates the broadcasting of events at the stadium and fire panel control was completed in 2012.

The replacement of the video scoreboard is scheduled for 2023.

Future work may include replacement of the natural turf with artificial turf, expansion of the dugouts, replacement of the stadium seating, paving the areas below the stands, expansion of the press box area, construction of rest rooms below the stands for athletes, installation of VIP areas below the stands, renovation of the baseball equipment storage facility, and enhancements to the facility entrance. Expanding and closing in the batting cage and construction of a pitching practice/film area should also be considered.

Patchin Field

Proposed improvements to Patchin Field to create a Lacrosse and Soccer Facility include correction of the existing drainage issues, the installation of artificial turf with drainage on the playing surface, the installation of field lighting, replacement of the scoreboard with a video board, and construction of a dedicated press box, dedicated restrooms for athletes and spectators, and team support areas for equipment storage. Improved access through Gray-Minor Stadium is required for Patchin Field athletes and spectators.

Paulette Hall

The Paulette Locker Room, adjacent to Gray-Minor Stadium, was dedicated in connection with Gray-Minor Stadium. Expansion and improvements to this facility were completed in 2004 which now accommodates soccer, baseball and lacrosse locker room facilities, a storage room, and training room that features two whirlpools, a taping station and four treatment tables. The building is equipped with visiting locker room and audio/visual capabilities.

Proposed improvements to Paulette Hall constructing separate areas for baseball, lacrosse, and men's and women's soccer. Each area to have coach's offices, locker rooms, team rooms, video rooms, equipment storage areas, etc. Centralized sports medicine area is acceptable but additional space is required to treat the number of athletes represented by the four teams.

Turman House (also known as Stono)

The Turman House consists of the Main House (454 Burma Road), the Main House Apartment (452 Burma Road), the Office or Gate House (460 Burma Road), the Summer Kitchen and the Icehouse (456 Burma Road). The Main House was constructed in 1818 by prominent local builders John Jordan and Samuel Darst. An addition (The Main House Apartment) was added to the Main House in 1883. In 1969 it was documented by the Historic American Building Survey and was individually listed as a National Historic Landmark in 1974. It is architecturally significant as one of the earliest neoclassical style buildings built west of the Blue Ridge Mountains.

The Main House serves as VIP Quarters to the Post. The Main House Apartment, and the Office are utilized as housing, while the Icehouse and Summer Kitchen provide storage.

In 2014 a condition survey was completed that identified and prioritized necessary repair work.

In 2016 repairs to the Main House included painting the existing standing seam metal roof, repairing and painting the exterior trim, replacing the exterior flashing, installing new gutters and down spouts, restoring the front porch, repairing the rear porch, and repairing the structure in the basement including floor framing and flooring. In the Apartment repairs were made to the kitchen floor and walls. In the Ice House repairs were made to the interior structure and a new roof was installed.

In 2017 new flooring was installed in the kitchen and living areas of the Turman House apartment, and new appliances were installed in the kitchen.

The 2018 Special Session of the Virginia General Assembly approved a project to Renovate the Turman House. In 2020 the development of construction documents was completed. The project was put on hold as the facility is temporarily being used to isolate Cadets during the COVID-19 Pandemic. The project is expected to re-start when response to the pandemic is over.

The Turman House heat pump was replaced in 2021.

VMI Police Department (301 Letcher Avenue)

Originally, the facility was the Bachelor Officer Quarters (BOQ) providing housing for bachelor faculty and staff members. Over time, the BOQ was converted to the VMI Police facility. The Post Infrastructure Improvements Project replaced the VMI Police facility. The existing facility was demolished in 2019 and construction of a new facility was completed in 2020.

ROADS, INFRASTRUCTURE, PARKING and TRAFFIC

A *Parking and Transportation Study* was completed in June 2008. This study addressed parking and transportation conditions with ongoing and future planned construction activities.

Construction on North Post associated with the Military and Leadership Field Training Grounds eliminated the old gravel North Post Cadet Parking Lot. Currently, a “Hybrid Option” has been developed which permits Cadet vehicles to park on Post in the Marshall Parking Lot, the new MLFTG Parking Lot and the Clarkson-McKenna Parking Lot. The remaining Cadet vehicles park in the Lackey Parking Lot completed in 2021 and at the East Lexington Chessie Trail Parking Lot.

Construction was completed in 2012 on a new surface parking lot sited behind Mallory Hall and Maury-Brooke with access from both Main Street (US Highway 11) and Letcher Avenue. This lot is named the South Institute Hill Parking Lot. A stoplight at the intersection of Main and Diamond Street was also installed in the summer of 2011 by the City of Lexington and coordinated with VMI. The new SIH Parking Lot provides 87 parking spaces.

Improved directional and informational signage across the Post has been partially integrated, increasing uniformity. New signage was installed in the summer of 2011 supporting directional signage on the Main Post and access to North Post. In 2019 the informational signs across Post were updated. A comprehensive Post wide wayfinding/signage study is required to provide updated graphics and uniformity.

Bollards were installed in 2010 at strategic points in front of Barracks and at parade ground entrances to facilitate traffic control and increase safety. Bollards were added between Shell and Carroll Hall in 2011. With the addition of the South Institute Hill Parking Lot an improved traffic pattern was implemented directing egress traffic to the new stop light located at Main and Diamond Street. Bollards were added to Maiden Lane in support of the new traffic pattern.

Vehicle traffic behind Neikirk Hall and Moody Hall has been reduced and limited primarily to vehicle parking and service deliveries to Moody Hall only.

The Virginia Department of Transportation (VDOT) repaved several roads on the VMI Post in the summer of 2010. Prior to the repaving significant work was completed to upgrade portions of existing pavement, curb, gutter, storm drains, and adjustment of utility and man hole covers. Portions of the VMI Post which had recently been repaved as part of a capital project were not included in the project. VDOT traditionally includes this major paving effort in its budget every 10 years. The Treasurer's Office is updating the VDOT database to include all on-post roads.

In 2020 the Post Infrastructure Improvements project replaced the single vehicle lane Anderson Drive Bridge across Woods Creek with a two vehicles lane bridge and pedestrian sidewalk. Anderson Drive was realigned and widened to improve vehicle safety.

Improvements to Burma Road may be planned to improve aesthetics and flow of pedestrian traffic behind Crozet Hall. The flow of traffic along Burma Road behind Barracks has been reduced to official business only and controlled vehicle access security gates are included in the Capital Project for Postwide Safety and Security Improvements.

The Lexington City Council in December 2012 approved the elimination of overnight parking on North Main Street. This was a successful effort to eliminate long term parking on North Main. City Council also approved the institution of a residential parking district on Diamond and Randolph Streets. The new parking regulation was effective on 1 January 2013.

The City of Lexington received a grant from VDOT to install bicycle lanes on both sides of North Main Street. When completed this project will eliminate all on-street vehicle parking. VDOT has initiated the design with construction funded to begin in 2023 and be complete in 2024.

A concept recommended enhancements along the section of Letcher Avenue beginning at Limits Gates to intersection of Parade Avenue. The concept recommended all parking on Letcher Avenue be removed and relocated handicap parking to Parade Avenue. The project design was completed in 2019 and construction was completed in 2020.

The 2020 General Assembly authorized capital project funding for the construction of the Improvements to Post Wide Safety and Security. The project includes new security barriers to better control evening traffic on Letcher Avenue, Burma Road and around Crozet Hall are included in the Capital Project for Improvements to the Postwide Safety and Security. Identified as the 'Inner Ring' these gates are proposed to be located near the intersection of Letcher Avenue and Parade Avenue; On Letcher Avenue below Crozet Hall; on Stono Road near Crozet Hall; on Burma Road near Crozet Hall; on both lanes of Burma Road near the intersection of Anderson Drive, and on both lanes of Parade Avenue near the intersection of Anderson Drive. Planning for the 'Outer Ring Gates' is also included in the project and will allow complete closure of the Main Post. Construction on the project is scheduled to be completed in March 2024.

A parking study was completed in 2021. Based on building occupancy it identified areas of the Main Post that were significantly short of parking spaces to meet the demand. Additionally, it estimated the parking needs required to support mid-sized events held on Post.

Expansion of the North Institute Hill Parking Lot is included in the Capital Project to Renovate and Expand Scott Shipp Hall. The work was incorporated late in the project as a change order and work is scheduled to completed in 2022.

A concept for a 425-parking structure was developed as part of the concept developed for the Center for Leadership and Ethics Phase II (Leadership Development Facility. The parking garage would be constructed on the hillside below the current Marshall Parking Lot. It would be sized to replace the current Marshall Parking

Lot needs for daily parking. It would also handle small and midsize events reducing use of the Parade Ground to meet event parking needs.

OPERATIONAL UNIT SPACE REQUIREMENTS

As the programmatic needs change for each operational unit, new space requirements develop. The space needs are addressed through office relocations, changing the use of an existing facility, modifying existing space, building renovations or new construction.

Each unit on Post provides specific space requirements for consideration. Various options usually exist for addressing these needs. Addressing the space requirements will be aligned with priorities, feasibility, available financial resources (if needed), and the academic calendar.

The following is a list of identified space needs listed alphabetically:

Academic Success Programs

The Miller Academic Center (MAC), the Writing Center (WC), the Mathematics Education and Resource Center (MERC) and Athletic Academic Advising provide similar academic support services to cadets and can benefit synergistically by being co-located in one central location. These programs were co-located in Carroll Hall (CR) in the 11-12 AY, but the rapid growth of the MERC due to cadet demand necessitated its relocation to Preston Library. While a proposed plan to relocate all Academic Success Programs to Preston Library was determined to not be feasible due to the high cost, all three programs remain strongly in support of a long-term arrangement that would co-locate all academic success programs in one central location for the benefit of cadets as soon as a solution becomes available. In the interim, the following space needs are identified:

- ***Institute Writing Center.*** A larger space would allow the Writing Center to serve more cadets and to serve them in different ways. The Center currently includes two consultant offices, a meeting room, and a supply room. Two professional consultants and one cadet consultant often work at the same time. If the meeting room is in use, one of the consultants does not have a place to work with cadets. That has often been the case, so we have set up a temporary third consultation space in the supply room. Ideally, the center would include three consultant offices and a larger meeting room that could serve as a “flexible space” for workshops, class visits, and group study sessions. As well, the Writing Center is formalizing and extending services to assist Cadets with speeches and presentations. A larger space would be best for allowing Cadets to practice Speeches, sideshow presentations, and other oral projects.
- ***Miller Academic Center (MAC).*** The MAC has a requirement for a single, dedicated classroom to support MAC programming. The space to support this request is available within the MAC office suite. Two adjoining small conference rooms have sufficient space to provide a single classroom that could seat approximately 20 cadets. If the adjoining wall could be removed, the two spaces could be converted to provide the needed classroom. In addition, appropriate furniture would need to be purchased.

Information Technology

The current data center (server room) housed in 314 Nichols Engineering Building (NEB) was constructed in 2004. The Liebert air conditioning units are nearing the end of their life cycle and require maintenance on a more frequent basis. Replacing the units requires disassembly for removal one unit at a time. Experience has proven one unit is not sufficient to cool the room even for a short period of time. Fire suppression water pipes and sprinkler heads are present in the room posing a disastrous potential. The need to move the room to a location without sprinkler heads and new air conditioning units is preferable and would ideally be included in the Nichols renovation project discussed previously in this document. Relocating the room would

allow the installation of new air conditioning units and a fire suppression system prior to relocating the network equipment.

Marshall Hall / Center for Leadership & Ethics

Personnel staffing of the Center for Leadership and Ethics has expanded to ten full time employees, out growing existing office space capacity in Marshall Hall. Long-term the re-purposing of the existing Marshall Hall theater support space to provide additional office space is included in the Capital Project for the Center for Leadership and Ethics Phase II (Leadership Development Facility). A project is underway to lease space for a short term in Marshall Library.

Center for Leadership and Ethics Phase II (Leadership Development Facility)

The Institute's Strategic Plan to be renowned for leadership in a decade has been largely accomplished through the implementation of the VMI Leader Development Program. This program integrates a four-year set of intellectual, military, physical and moral-ethical experiences that develops the specific attributes and characteristics needed for graduates to serve as leaders of character who serve the common defense as citizen-soldiers. The Leadership Development Facility will provide dedicated space to support the academic courses associated with VMI's Leader Development Program. Leader Development Training for faculty and staff will also be conducted in this facility. Collocation of these programs with the VMI Museum supports the incorporation of museum artifacts into the Leadership Development curriculum. The 2020 General Assembly Special Session approved the project for detailed planning.

Military and Leadership Field Training Grounds

- Drill Field #1. Installation of artificial turf and field lighting will increase the times of the year and the times of the day when the field will be available for use.
- Drill Field #2. The field currently serves as the home for VMI Lacrosse. A filming platform/facility is required to support game day operations.

Moody Hall

With the increase of the Corps of Cadets to 1700 Cadets and the growth in size of the matriculating class to 500 Cadets the support required from the Alumni Agencies has grown significant. Cadet related activities and events have grown in number and size. Helping Cadets meet financial needs requires more and larger fund-raising activities. Additionally, the staff required to support these events has grown proportionally. There are no facilities off Post in the City of Lexington or Rockbridge County area that can meet these needs.

Office of Assessment and Institutional Research

Existing office spaces located in the basement of Smith Hall are not adequately sized for the five full-time employees and required support space. Additional space is required or relocation to another facility on Post. A project is underway which will lease space long term in Marshall Library.

Office of Career Services

The Office of Career Services (OCS) has need for two additional employer interview rooms. There is space for renovation to accomplish this within the current OCS footprint.

STEM Laboratory and Research Space

A number of factors have combined to create a need for additional laboratory and research/work space in the Science, Technology, Engineering and Mathematics (STEM) departments. As the Corps of Cadets has increased to an average enrollment of approximately 1,700, combined with the Vision 2039 goal of producing 50% of VMI's graduates in the STEM majors, there has been – and will continue to be – growth in these departments. As a result, more cadets are taking laboratory courses, more cadets and faculty are performing research projects, and available space in NEB, MH, and MA is not keeping pace with demand. Additionally,

as laboratory and research/workspace is increased, storage space for supplies and materials will also need to be increased.

- Engineering (Civil, Electrical and Mechanical). The Corps of Cadets has grown from 1,300 to 1,700 with primary enrollment growth occurring in STEM majors. Enrollment in STEM majors has grown from 39% in 2003 to 61% in 2019. Additional engineering classroom, laboratory and support space is required to meet this growing demand and existing spaces require renovation to stay current with programming.

The approved Capital Project for the Nichols Engineering Laboratory Expansion and Renovation will construct a new 33,029 Gross Square Foot (GSF) expansion to the teaching and laboratory space available to the existing VMI engineering and other laboratory programs. The new facility will be constructed adjacent to the existing engineering facilities with the demolition of the existing Cocke Hall Annex Swimming Pool. The facility will have laboratories, maker space for construction and storage of Cadet Capstone and Undergraduate Research Projects, classrooms, storage, offices and support spaces. This proposed project will include renovating 63,133 GSF of existing spaces located in Nichols Engineering Building, Morgan Hall and Cocke Hall.

- Psychology Department. In 2017, the Psychology department discontinued its B.A. degree option and has since offered only the B.S. degree firmly establishing Psychology as a STEM department. Since that time, Psychology major enrollment has increased by approximately 26% and is regularly at, or more than, its target 150 majors. Additional space is required to meet this current and projected growth. Although the construction of a teaching lab for the Psychology Department was completed in 2016-17 AY, a second lab is needed primarily to support research. The Department needs a dedicated seminar room in which to teach upper-level electives. An open area in Carroll Hall equipped with tables, chairs, and white boards is requested so that Psychology majors could work on research projects and assignments in close proximity to their faculty advisors.
- Biology Department. The Biology Department recently expanded to nine full-time faculty positions. In addition, the Department typically employs 5-7 part-time faculty who also require office space to prepare class materials, grade coursework, and meet with cadets. The Department is currently assigned ten offices for its full- and part-time faculty. An additional two offices would enable all full-time faculty to be assigned to private offices and part-time faculty to share the remaining three offices.
- Computer and Information Sciences Department. To support the CIS Department's growth in curricular offerings, faculty and majors, as well as the needs of the Department of Defense Cyber Defense (CyDef) Lab, the following additional/modified spaces/facilities are required:
 - Modification and expansion of MH 123 to be used as the CIS Department server room;
 - Modification of MH 316 and 323 for use as staff and faculty offices respectively;
 - Two additional faculty offices to support CyDef-funded staff positions/part-time faculty; A space for dual use as the CyDef server/equipment room and laboratory; An additional, dual-function classroom-laboratory space;
 - An open-space drone cage.
 - A storage room for equipment and for Cadet capstone projects.
- Applied Mathematics Classroom Space. Applied Mathematics requires at least one additional classroom with a capacity of at least 24 students in order to meet the scheduling requirements. With the introduction of the MA 101/102 course sequence, which has a pedagogical requirement for smaller enrollments than the courses it replaces, additional sections must be offered to meet cadet demand. Applied Mathematics is short of required classroom space in Mallory Hall. Spaces outside

of Mallory Hall are often not properly configured to support Applied Mathematics courses.

- Physics Department

- The department has a need for space to teach a new “How Things Work” course PY170. This course is a science elective for non-STEM majors. The space should be a combination of classroom and laboratory.
- A combined classroom and laboratory is needed to support the new Quantum Initiative proposed in a 2021 Jackson Hope New Directions in Teaching and Research submission. The proposal supports a broader national effort, the National Quantum Initiative Act signed into law in 2018. The space is needed to house new state of the art equipment to run experiments for the quantum initiative.
- Observatory Dome. The current state of the Observatory Dome is over 50 years old and is in need of replacement. It is beginning to fail in its operation because the mechanical parts have deteriorated over time. The decay has reached the point that the environment is now encroaching into the dome; rain, dust, and small animals can now enter and are affecting the expensive optical and computer equipment. The structure has deteriorated beyond the point where maintenance is effective, and full replacement of the dome now appears to be the only option. This structure is critical to the needs of the Astronomy program and the research conducted using the 20-in reflecting telescope housed inside the dome.

Stadiums

- **Cameron Hall.** VIP guests who frequently come to address the VMI Corps of Cadets and support other Corps programs require a Green Room. A temporary space has been improvised and is in use. A permanent green room is desired to increase safety and security for important and high visibility guests when attending functions in Cameron Hall. A permanent green room may be developed in future modifications now that selected athletic offices have been relocated to the Corps Physical Training Facility. Additional space for upgraded and expanded locker rooms, a conference room, and a production studio to support the ESPN3 network is required. This building requires a renovation to include improved coach’s offices, sports medicine facilities, meeting spaces, locker room renovations and overall repurposing to meet the current and future needs of the intercollegiate program.
- **Clarkson-McKenna.** Provide a ‘front door’ to the football program, an expansion of the equipment storage area, an expansion of the weight room, an update to the sports medicine area and a renovation of the office areas to make them more efficient. Space for VMI’s Athletic Director, a visiting Athletic Director suite and other game day operations facilities are also required.
- **Foster Stadium.** Priority stadium seating in selected areas is to be installed to support an improved spectator experience. Replacement of the natural turf with artificial turf, removal of the track related jump pits, reduction in the size of or complete removal of the running track, and complete replacement of the game day, official and visitor locker rooms.
- **Gray-Minor Stadium.** Replacement of the natural turf with artificial turf, expansion of the dugouts, replacement of the stadium seating, paving the areas below the stands, expansion of the press box area, construction of rest rooms below the stands for athletes, installation of VIP areas below the stands, renovation of the baseball equipment storage facility, and enhancements to the facility entrance. Permanent filming locations on top of the press area and along the first and third base lines are required. Expanding and closing in the batting cage and construction of a pitching practice/film area should also be considered.
- **Patchin Field.** Improvements to the playing surface to a synthetic turf will support practice and competition of two teams. The scoreboard also needs to be upgraded to include statistical information.

Lighting will allow for a higher number of home games and permit evening competition maximizing classroom time for Cadet athletes. Permanent spaces to support ESPN2 and ESPN+ broadcast requirements and event operations are needed. Construction of a dual lacrosse/soccer stadium facility is needed.

- **Paulette Hall.** Separate areas for baseball, lacrosse, and men's and women's soccer. Each area to have coach's offices, locker rooms, team rooms, video rooms, equipment storage areas, etc. Centralized sports medicine area is acceptable but additional space is required to treat the number of athletes represented by the four teams.

PROPERTY ACQUISITIONS, GIFTS, CONVEYANCES, EASEMENTS and DEMOLITIONS

Main Post

In 2020 the property line between WLU and VMI was surveyed. The survey plat, signed by VMI and WLU, was recorded. In 2021 the property line between VMI and the City of Lexington (Jordans Point) was surveyed. The survey plat, signed by VMI and the City of Lexington, was recorded.

A small parcel of property will need to be acquired from Washington and Lee University to support the future Marshall Hall Parking Garage. Initial conversations with representatives from WLU indicate support for the proposed acquisition. The request for authorization to acquire the property was included in the Capital Project request for the Parking Structure.

The George C. Marshall Foundation (GCMF) is revising their Strategic Plan. VMI has held several meetings with the GCMF to discuss the future operation of the GCMF facility. Options being discussed include the possible VMI leasing of space within the GCMF facility, and / or the possible transfer of the facility from GCMF to VMI. A long-term lease for the Office of Institutional Research and a short-term lease for the Center for Leadership and Ethics are in process. Discussions of other facility related issues continue.

Borgus Property

Future improvements of access to, and parking at, the football stadium require the acquisition of one privately owned property adjacent to Clarkson-McKenna Hall. This property is commonly referred to as the Borgus Property.

Chessie Nature Trail

In 2010 VMI signed an agreement with the City of Lexington and Rockbridge County to improve the connection between the Woods Creek Trail, which terminates at Jordan's Point Park, and the Chessie Nature Trail. The City of Lexington led the project. The project was stalled for years over environmental issues. The project scope was being simplified and the City of Lexington used the remaining funds to complete the connection improvements.

In East Lexington there are six parcels of property across which the trail passes that are privately owned. In 2017, two of these property owners either blocked or placed restrictions on the use of the trail where it crossed their property. An off-street parking area has been created beyond the blocked portions of the trail to facilitate trail use, and VMI Police support is used for Cadet formations to use the road to by-pass the blocked portions of the trail. Efforts are underway to establish permanent easement for the trail across these privately owned parcels. Survey work and appraisals for permanent easements were completed. Offers were made to the landowners in an effort to procure permanent easements. Easements were recorded for two of the properties. Negotiations for easements are on-going for two additional properties. The remaining two properties are owned by a single landowner. This property owner has indicated no interest in providing an easement and the trail crossing these parcels remains blocked.

The original railroad trestle bridge over a tributary to the Maury, the South River, was converted into a pedestrian bridge as part of the development of the Chessie Nature Trail in the 1970's. The trestle bridge

washed off its piers when the South River flooded during Hurricane Isabel in 2003. In November 2016, VMI submitted an Eastern Federal Land Access Program (EFLAP) Grant Project Application requesting federal funding with a promised match (VMI Non-General Funds and Local Regional Development Authority). In 2017 VMI received a letter from the U.S. Department of Transportation (DOT) indicating the requested project had been recommended for programming in FY18 (Federal FY18 starts 1 Oct 2017). The Governor signed a decision brief approving the project. An agreement with the U. S. Department of Transportation was completed. In 2020 the design was completed and construction was initiated. Construction was completed in 2021.

Lackey Park

To support the future expansion of the VaARNG facility a small parcel of property must be transferred from VMI to the VaARNG. The property is currently under agreement to Rockbridge County Public Schools (RCPS). In meetings RCPS was in agreement with the property transfer. The VaARNG is contracting for the survey of the parcel. When the survey is complete the Virginia Department of Real Estate Services will assist the VaARNG complete the property transfer.

McKethan Park

The development of the Military and Leadership Field Training Grounds at McKethan Training Area provides 210 acres of land to be used to provide tactical training to VMI's Cadets. Located on the property is the Hardbarger Farm House, Sky Farm House, the Guest Farm House and adjoining barns. In 2019 the Hardbarger Farm was razed. Demolition of the guest house and barn was completed in 2021. Installation of Emergency phones at each of the pavilions and at the skeet range was also completed in 2021.

New Market Battlefield State Historical Park

The Shenandoah Valley Battlefields Foundation (SVBF) holds title to several adjacent lands to VMI's New Market Battlefield. The SVBF may transfer some or all of these land holdings to VMI. These properties are adjacent to or proximate to existing VMI property and would be added to the overall interpretive space of the New Market Battlefield.

The Virginia Military Institute Alumni Agencies (VMIAA) accepted a private donation of 21 acres of property that adjoins VMI New Market Battlefield State Historical Park property. The intent is for the VMIAA to transfer this property to VMI. Authority to accept the gifting of this property was requested in the 2021 Capital Budget Request.

South Post Property – City of Lexington

Several parcels of land, now known as South Post, were authorized by the Governor of Virginia in 1978 for acquisition for the expansion of the VMI Post. Since that time, VMI has purchased properties as they became available for sale. In 2018 the demolition of the 307 North Main Street (Glass House) was completed.

Parcels located at 8, 10 and 12 Massie Street were acquired by the Virginia Military Institute Alumni Agencies (VMIAA). These parcels may be transferred to VMI in the future.

The properties located at 707 and 709 Stono Lane are owned by the Virginia Military Institute Alumni Agencies (VMIAA). These properties each have a structure which are currently being rented. These properties may be transferred to VMI in the future.

The properties located at 614 and 710 North Main Street was acquired by the Virginia Military Institute Alumni Agencies (VMIAA). The structure on 710 North Main Street has been demolished and a gravel parking lot was constructed. The gravel lot is currently rented to the adjoining property of off-street parking. These properties may be transferred to VMI in the future.

An additional property located at 502 Maury Street would complete the acquisition of parcels around the Clarkson-McKenna parking lot and adjacent to Fiorini Field. This property may be transferred to VMI in the future.

The site on which the new Corps Physical Training Facility was built was acquired over a period of forty years. At the time most of these lots were acquired, the State did not require title insurance policies. During a title search of the property, the title company discovered an alley for which ownership was not conveyed to VMI when acquired years ago. VMI worked with outside legal counsel and filed a petition for condemnation. Final order of condemnation was granted and recorded in July 2018.

Within the footprint of the Corps Physical Training Facility Phase 3 (Aquatic Center) is a rectangular parcel for which ownership cannot be determined. VMI owns the parcels surrounding this piece with the exception of the Columbia Gas transmission facility. VMI, with the approval of the Board of Visitors, worked with legal counsel and filed a petition for condemnation. Final order of condemnation was granted and recorded in July 2019.

The transmission facility operated by Columbia Gas is located on a 20' x 20' parcel within the footprint of the Corps Physical Training Facility Phase 3 (Aquatic Center). The facility was removed in 2020 and VMI staff worked with Columbia Gas to acquire this parcel of land.

PROPERTY CHANGE OF USE

303 Letcher Avenue second floor is being converted to office space. The design effort was initiated in 2019 and the construction work is scheduled to be complete in 2022.

307 Letcher Avenue was fully converted to office space in 2019 necessitating a change of use as the residential components of the facility were eliminated.

CAPITAL IMPROVEMENT PLAN

INTRODUCTION

VMI's Capital Improvement Plan (CIP) is a Six Year Plan to address improvements to the VMI Post. Projects include improvements to academic and administration buildings, public safety and security, Post housing, parking, historic preservation, comprehensive stormwater drainage improvements, athletic facilities, utilities, energy conservation, infrastructure, and other major, nonrecurring projects with a multi-year useful life.

The CIP is forward looking and fluid in nature, with projects reviewed and updated annually to integrate changing priorities.

The CIP shows the methods proposed to finance the capital projects. The CIP is a framework for identifying and prioritizing capital improvement projects; identifying the impact on the operating budget; and scheduling projects to synchronize with the Institute calendar.

FINANCE AND ADMINISTRATION STANDARDS - RESTRUCTURING ACT

The Higher Education Restructuring Act has established new Finance and Administration Standards which offer greater autonomy in Procurement and Information Technology. The existing Finance and Administrative Standards related to audits, reporting standards, receivable and payable standards, and the BOV approved debt policy will remain.

The new standards set forth in the Restructuring Act have a direct impact on capital projects. Effective 1 July 2007, the new standards require that capital projects costing more than \$1M must be completed within: 1) the budget originally approved by the BOV or 2) the budget set out in the Appropriations Act. Any changes to the project budget are submitted to the Department of Planning and Budget for approval. Changes to the project budget include an increase in private funds available for the project, unforeseen conditions, errors and omissions, market conditions and user requirements.

CAPITAL BUDGET FUNDING

Capital projects at VMI are funded through three sources: 1) State funds, 2) gifts from one or more of the VMI Alumni Agencies (private funds), and 3) VMI funds. On occasion, multiple sources of funding are used to support capital projects. VMI also requests Federal funding for eligible projects.

State Funds. The State of Virginia funds projects for VMI using State General Funds, tax-exempt bonds issued by the State Treasury, the Virginia College Building Authority (VCBA), or as General Obligation Bonds (GOB) which require voter approval. State-funded projects are limited to projects supporting the Educational and General Program.

Over the last 15 years VMI's State-funded projects include Kilbourne Hall Expansion and Renovation (including the new Physical Plant facility at Lackey Park and stormwater improvements along Rt. 11), Barracks Expansion/Renovations, Renovation of the Health Center, the Military and Leadership Field Training Grounds Phase I, Science Building Renovation (Maury-Brooke Hall), and the Corps Physical Training Facilities Phase I (Corps Physical Training Facility) and Phase II (Renovations to Cormack and Cocke Halls). The 2015 and 2016 General Assembly approved projects included Post Infrastructure Improvements Phase I, II and III, Renovation and Addition to Scott Shipp Hall, and the Preston Library Renovation. The 2019 session of the General Assembly approved the Corps Physical Training Facility Phase 3 (Aquatic Center) for construction using a combination of State and private funds. The 2020 session of the General Assembly approved projects included Improvements to Postwide Safety and Security, Phase 1, and Renovate and Expand Engineering and Laboratory Facilities. The 2020 General Assembly authorized funding the detailed design of the Leadership Development Facility using VMI funds. The 2021 General Assembly approved the use of the detailed design

of the Leadership Development Facility using State funding. The Nichols Engineering Building Renovation (including renovation of Memorial Hall and construction of King Hall), Mallory Hall and the Renovation of the Post Hospital (Health Center) projects were General Obligation Bond projects that were funded using State General Funds and VCBA funds, or a combination of these funds.

Private Funds. The VMI Foundation and the VMI Development Board provide funding to VMI for capital projects by 1) issuing tax-exempt debt (usually through the local Industrial Development Authorities) and gifting the proceeds to VMI to fund construction, or 2) providing gift funds or other income directly to VMI to help it fund debt service on a project. Any debt issued by the VMI Alumni Agencies or by VMI must comply with debt policies and guidelines approved by the governing board of each entity.

VMI's privately funded capital projects have included Memorial Hall, the Stadiums project (football and baseball), the Center for Leadership and Ethics, and parking projects. Memorial Hall is the only capital project that is also currently supported by VMI debt issued through the VCBA (see below); VMI funds the debt service from the VMI Foundation unrestricted income. Portions of the MLFTG Phase I and Phase II projects were enhanced with the use of a private donation. A private grant from the Mary Morton Parsons Foundation supported the improvements to the Jackson House and Turman House. Some improvements to the Turman House were completed in 2017 with major renovation still a requirement; the improvements to the Jackson House were completed in 2019. The 2019 General Assembly approved the Corps Physical Training Facility Phase 3 (Aquatic Center) for construction with a mix of State and private funds.

The VMI Foundation refinanced the \$45 million debt, which has been utilized to support capital projects. Moody's bond rating for The VMI Foundation received in 2010 and reaffirmed in 2013 is Aa2.

VMI Funds. VMI funds capital projects by issuing tax-exempt debt through the State Treasury (9c debt) or through the State's Pooled Bond Program administered by the VCBA (9d debt). The General Assembly must approve all debt issued by VMI. To qualify as 9c debt, the project must be revenue producing (such as dining halls) and VMI must demonstrate that its Cadets can support the debt through fees and that VMI has the debt capacity based on State guidelines. This debt is secured by the revenue stream, and also by the State, and will generally carry a lower interest rate than 9d debt. Debt that does not qualify as 9c debt will usually qualify as 9d debt, which does not require an associated revenue stream. The 9d debt has an associated offsetting higher interest rate to account for increased risk.

Past VMI funded projects include Crozet Hall (9c debt), Cocke Hall Annex (King Hall) (9d debt) and the South Institute Hill Parking capital project (9d debt). Barracks Stoop Improvements and Parapet Repairs, Cocke Hall Annex Improvements, Foster Stadium Slope Stabilization Projects, Moody Hall Exterior Repairs, McKethan Park Improvements, Barracks Security Gates, Barracks Shower Ceiling Repairs, Barracks Windows Repairs, Cabell House Improvements, Heat Plant Hot Water Distribution System Improvements, Crozet Hall Turret Repairs, the New Market Battlefield Waste Water Treatment Improvements, Moody Hall Exterior Repairs, Postwide CCTV Installation, Cameron Hall Roof Replacement, Renovation for Carroll Hall Psych Labs, and Richard Hall HVAC and Electric Renovations were also funded through 9d debt. Projects completed in 2019 include New Market Phase 1 (Main/Guest House), 307 Letcher Renovations, portions of the Carroll Hall Psychology Offices, and New Market Gift Shop HVAC Replacement. These projects have been funded through three \$4M 9d debt issues.

The 2018 General Assembly approved the Corps Physical Training Center Phase III (Aquatic Center) for detailed planning using VMI funds. They also approved a project to Renovate the Turman House, a project to Renovate 412 Parade, Superintendents Quarters, and a project to Renovate Crozet Hall.

The 2020 General Assembly authorized funding the detailed design of the Leadership Development Facility using VMI funds. The 2021 General Assembly approved the use of the detailed design of the Leadership

Development Facility using State funding. The State funding was rescinded in a legislative special session during the pandemic resulting in authorization to use VMI funds.

VMI Debt Policy. The Debt Management Guidelines and Procedures of the Institute and the VMI Foundation govern cases where debt is used to finance capital projects.

The guidelines and procedures of the Institute stipulate:

- Only capital projects that directly benefit the Institute should be financed by the Institute;
- All capital projects to be financed must be part of the Institute's approved Master Development Plan;
- Capital projects funded with revenues of the Institute (tuition and fees, unrestricted gifts, investment income, as well as existing assets) should be funded with long-term obligations;
- Capital projects funded with restricted gifts and/or pledges should be considered for funding with comparable term obligations;
- Working capital needs should not be financed except where economic conditions exist that provide unique benefits to the Institute from the execution of interim financing;
- Capital projects delivered through alternative financing guidelines such as the Public/Private Educational Facilities and Infrastructure Program should satisfy conditions in the Debt Management Guidelines and Procedures for the Institute if the Institute is issuing long-term debt or executing a long-term capital financing lease; and,
- All debt issuances should be coordinated with the Institute's capital planning process.

If the proposed funding source is derived from future gifts from the Alumni Agencies or other individual donors, then the Chief Financial Officer shall ensure:

- At least 70% of the gifts shall have been pledged at the time of the debt issuance. These pledges should have a high degree of confidence for collection and an appropriate amount provided as uncollectible;
- At least 20% of the amount of the pledged gifts shall have been received at the time of issuance; and
- An alternative funding source shall be identified to fund the applicable debt service should the gifts not be received as scheduled.

Specific guidelines and procedures as it relates to Terms and Structure, Refinancing Obligations, Synthetic Products and Reporting Requirements are included in the policy. All Debt Obligations and Synthetic Products undertaken by the Institute are to be approved by the Chief Financial Officer and the Board of Visitors. VMI also must certify annually to the State Secretary of Finance that the Institute has met its debt policy.

NON-CAPITAL PROJECTS

The implementation of non-capital projects on Post includes projects funded through VMI Funds and through State Maintenance Reserve Funds.

These projects are implemented to extend the useful life of an existing facility or to make improvements or modifications to space. The Deputy Superintendent – FAS, Director of Physical Plant (Post Engineer), Institute Planning Officer, Director of Construction, Post Preservation Officer, Comptroller, Director of Procurement Services, Treasurer and Management Analyst collectively triage requests for non-capital projects and provide to the Superintendent for approval.

SIX YEAR CAPITAL PROJECT BUDGET REQUESTS 2022-2028

The updated Capital Improvement Plan (CIP) has been developed in preparation for the State's Capital Budget Requests in 2021. VMI's CIP is a Six Year Plan to address the needs to improve the VMI Post. Projects include improvements to academic and administration buildings, Post infrastructure, Post housing, parking, historic preservation, athletic facilities, utilities, energy conservation, and other major nonrecurring projects with a multi-year useful life.

Provided in this report is the six year plan utilized to establish future capital project priorities. A narrative is also included describing how the completed and proposed capital projects support *Vision 2039*.

Virginia Military Institute
Six Year Capital Budget Requests
2022 - 2024

<u>Project Title</u>	<u>State Funded</u>	<u>Private Funded</u>	<u>VMI Funded</u>	<u>Total</u>	<u>Notes</u>
1 Cadet Safety and Security	\$ 8,675,000			\$ 8,675,000	Request authority for design and construction.
2 Construct Center for Leadership and Ethics, Phase 2 (Leadership Development Facility) and Parking Structure	\$ 64,973,567	\$ 20,000,000	\$ 4,880,237	\$ 89,853,804	Requested previous Detailed Planning authorization for CLE Phase 2 (LDF) to be revised to include the Parking Structure.
3 Construct Moody Hall	\$ 54,039,214			\$ 54,039,214	Concept Developed. Requested Detailed Planning authorization.
4 Repair Barracks Windows and Doors (Old and New Barracks)	\$ 32,300,000			\$ 32,300,000	Requested Detailed Planning authorization.
5 Turnman House Renovation			\$ 2,500,000	\$ 2,500,000	Authorized. Design is complete. Awaiting funding.
6 Improvements to Post Infrastructure, Phase 4	\$ 36,059,447			\$ 36,059,447	
7 Construct Addition to Hinty Hall	\$ 4,503,173			\$ 4,503,173	
8 Improvements to Postwide Safety and Security, Phase 2	\$ 7,154,461			\$ 7,154,461	
Total 2022 - 2024	\$ 199,029,862	\$ 20,000,000	\$ 7,380,237	\$ 226,410,099	

Virginia Military Institute
Six Year Capital Budget Requests
2024 - 2026

<u>Project Title</u>	<u>State Funded</u>	<u>Private Funded</u>	<u>VMI Funded</u>	<u>Total</u>	<u>Notes</u>
9 Renovate and Construct Addition to Virginia Museum of the Civil War			\$ 18,593,247	\$ 18,593,247	
10 Renovate Old Hospital	\$ 3,513,909			\$ 3,513,909	
11 Renovate Carroll Hall	\$ 11,025,874			\$ 11,025,874	
12 Renovate Shell Hall	\$ 12,415,898			\$ 12,415,898	
13 Renovate Foster Stadium and Outdoor Running Track			\$ 16,154,647	\$ 16,154,647	
14 Renovate North Main Street Apartments			\$ 7,140,297	\$ 7,140,297	
Total 2024 - 2026	\$ 26,955,681	\$ -	\$ 41,888,191	\$ 68,843,872	

Virginia Military Institute
Six Year Capital Budget Requests
2026 - 2028

<u>Project Title</u>	<u>State Funded</u>	<u>Private Funded</u>	<u>VMI Funded</u>	<u>Total</u>	<u>Notes</u>
15 Renovate Cameron Hall	\$ 19,162,196		\$ 19,162,196	\$ 38,324,392	
16 Renovate Kilbourne Hall Annex	\$ 4,326,264			\$ 4,326,264	
17 Renovate Smith Hall	\$ 16,743,138			\$ 16,743,138	
18 Improve Drill Field #1	\$ 5,757,928			\$ 5,757,928	
Total 2026 - 2028	\$ 45,989,526	\$ -	\$ 19,162,196	\$ 65,151,722	

CAPITAL IMPROVEMENT PLAN SUPPORTS VISION 2039

Supporting *Vision 2039* is a series of strategic initiatives and strategies divided into fourteen main focus areas. Some of these initiatives and strategies include capital projects. A summary of the main focus areas and the capital projects which support the specific strategic initiative or strategy is provided as an indication of the progress in support of *Vision 2039*.

I. A Military Institute and a Military Environment...Delivering a unique education

II. Academic Reputation – The Premier Undergraduate College in America

III. Renowned Honor System - #1 in the Nation

IV. 25 Partnerships with the Best USA Graduate Schools

V. Balance of Arts, Sciences, and Engineering with greater than 50% in hard science and engineering

In support of this initiative, Nichols Engineering Hall, which houses the Departments of Civil and Environmental, Electrical and Computer, and Mechanical Engineering, has been renovated. This renovation was completed in 2006.

Mallory Hall also completed renovation in the fall of 2007. Contained in Mallory Hall are the Department of Mathematics and Computer Science, Department of Physics and Astronomy, and office and classroom space in support of the Department of Biology.

Maury-Brooke Hall received modest changes to faculty office spaces to fulfill new requirements in the Core Curriculum. Additionally, laboratory spaces for teaching and research were enhanced to support the growing undergraduate research initiative. Construction was completed in the fall of 2013.

Improvements to Mallory Hall for the Computer and Information Science Department were completed in 2017 to support this new department. Additional requirements are being reviewed and prioritized for future construction.

The 2015 Session of the General Assembly authorized the VMI Renovate Preston Library project and work was completed in 2020. The project included a total renovation of the existing facility. The exterior stucco was repaired/replaced as required. The windows were replaced. Inside, the elevator was extended to provide ADA access to all levels. The archive area was expanded, separated from the overall building HVAC system, and a new fire suppression system was installed. Within the library, the office spaces were better organized for improved efficiency and the student study spaces were re-programmed to provide more group study areas.

The 2016 Session of the General Assembly authorized the VMI Renovate Scott Shipp Hall project. The project scope included a total renovation of the existing facility in addition to a 28,000 SF addition. The interior space was totally re-programmed to meet current requirements. All mechanical, electrical, and plumbing systems were replaced. Fire alarm, sprinkler, security systems, etc. were completely upgraded to meet current code. A new entrance was constructed so the facility better fit within the Post's historic architecture and current pedestrian and traffic patterns. Construction was completed in 2021.

The 2020 General Assembly Special Session approved the project Renovate and Expand Engineering and Laboratory Facilities. The 2020 General Assembly Special Session also approved the Construct Center for Leadership and Ethics Phase 2 (Leadership Development Facility) for detailed planning using VMI funds. The 2021 General Assembly approved detailed planning of the Leadership Development Facility using State funding.

VI. Corps of 1500 with 200 Female Cadets

To support the increase in the size of the Corps of Cadets, a Third Barracks and modernization of the current Barracks has been completed. Future improvements will include replacement of windows, repairs to exterior stucco at windows and provision of a new membrane protective coating to reduce costs associated with heating. Increased space for uniform storage with the expansion and renovation of Kilbourne Hall has been completed. Improvements in Shell Hall included designation of additional space for uniforms in the old barbershop and mailroom.

The Post Hospital Renovation (Health Center) project has increased the capability and service provided to the Cadets in the Infirmary and Cadet Counseling. The project was general fund supported with construction completed in the fall of 2012.

VII. Greater than 55% Virginia Cadets

VIII. 70% Corps Commissioning

To support the commissioning levels, expanded and improved facilities in Kilbourne Hall were necessary. This project, renovating and connecting Kilbourne Hall to Building 45, began in the fall of 2006 and was completed in the fall of 2008.

The Military and Leadership Field Training Grounds (MLFTG) Phase I on North Post provides significant support to this focus area with enhanced and modernized training capabilities. This project was completed in 2011.

The Corps Physical Training Facilities (CPTF) projects will increase training capabilities. Construction on Phase I (Indoor Training Facility) and Phase II (Renovation of Cormack and Cocke Halls) are complete. Phase I was complete in November 2016. CPTF Phase II Cormack Hall Renovation was completed in August 2015 and CPTF Phase II Cocke Hall Renovation was completed in September 2016. A study to establish requirements for CPTF PH III (Aquatic Center) was completed in 2017. Authority to proceed with Preliminary Design was approved in the 2018 Legislative Session, and authorization for full construction was approved in the 2019 Legislative Session. Design was completed in 2020 and construction is scheduled to be completed in 2022.

Improvements to the McKethan Training Area were completed in the summer of 2013 which included a realignment of the main entrance to enhance safety. Preliminary work for a second patrol base (pavilion) was initiated. In the summer of 2014 the patrol base was completed. These improvements were completed as part of the Innovation Readiness Training program of the Virginia National Guard.

The Military and Leadership Field Training Grounds Phase II project included the construction of a new Leadership Reaction Course to support leadership and ROTC training. This course replicates the training course provided by the active duty military. The project began in 2014 and was completed in 2015.

The Naval ROTC detachment increased their staff in AY 2019-2020. A project to renovate space was completed in 2019.

In 2019 a shed was placed a Fiorini Field for storage of Army ROTC equipment used to conduct the new Army fitness test.

IX. Every Cadet an Athlete – Winning Sports Teams – the VMI way

A massive improvement to all athletic facilities across the Post to support NCAA, club sports, and intramurals is planned. Improvements to the football and baseball stadiums have been completed and additional planned improvements on North and South Post will focus support on club sports.

Modernization of Foster Stadium, Gray-Minor Stadium, and Paulette Locker Room have been completed.

Within the Cocke Hall and South Post improvements, additional weight, cardio, and nautilus room facilities are available for all NCAA athletes and the remainder of the Corps, faculty, and staff.

Improvements to the track at Foster Stadium were completed in 2011 to support the Big South Conference Championships hosted by VMI. A new javelin throwing lane was added at Fiorini Field. The javelin field was modified to decrease the slope.

VMI hosted the Mid-Atlantic Rifle Conference Championships in February 2013. Improvements to the target system and abatement of hazardous materials were completed in support of the event.

The Corps Physical Training Facility Phase 1 (Indoor Training Facility) sited in the South Post provide training and competition space for the VMI Track and Field teams.

The Cocke Hall Pool electrical system was replaced in the summer of 2013. The project scope also included addressing leaks in the pool and enhancements to the facility lighting. In 2017 a new liner was installed in the pool to eliminate water leakage.

The Corps Physical Training Facility Phase III (Aquatic Center) sited in the South Post will provide training and competition space for the NCAA Swimming and Water Polo teams, and club sports programs.

Installation of a scoreboard to the North Post Drill Fields #2 and #3 was installed in the summer of 2014. The scoreboard will support both NCAA and club sports programs.

The Southern Conference issued a requirement that all conference members have instant replay capabilities for football. A 2017 study to analyze this issue determined that the existing Clarkson-McKenna Press Box did not have room for the required replay booth. Additionally, the existing Ferebee Lounge is also undersized to meet current needs. The study proposed construction of 2 - two story additions (900 sq. ft. total), one on either side of the existing Press Box, to provide the additional space required. Construction was completed in 2019.

X. Leadership Development System – Program unsurpassed

The construction of a Leadership and Ethics Center that supports the best leadership programs, seminars and symposia was completed in 2009.

The Center for Leadership and Ethics, Phase 2, (Leadership Development Facility) will provide academic support to support the evolving Leadership Development Program and Civics Courses. This facility will provide training for cadets, faculty and staff to ensure consistency across all levels of VMI leadership. Relocation of the VMI Museum to this new facility provides an opportunity for the expansion of the Museum's on-going support to the leadership and academic programs. The 2020 General Assembly Special Session authorized the project for detailed design using VMI funds. The 2021 General Assembly approved detailed planning of the Leadership Development Facility using State funding.

XI. Physical Plant – Beautiful, modern, technologically enhanced, and historic

In 2006 construction of a new Physical Plant facility was completed at Lackey Park.

VMI is implementing an effective preventive maintenance program throughout the Post under the direction of the Post Engineer.

Energy Maintenance projects have been successful in maximizing the operating efficiency of the Post.

The Virginia Department of Transportation re-paved the VMI Post in the summer of 2010. Continued efforts to repair sidewalks and roadways are executed through the non-capital projects program. The capital project Post Infrastructure Improvements provided a more extensive infusion of fixes to infrastructure problems across the Post (roads, sidewalks, fences, street lighting, utilities, etc.).

The plan for historic upgrades (inside academic and administrative facilities, and on the Post) is being implemented through the Policy for Historic Preservation of the Architecture and Landscape of VMI.

Erecting War Memorials on Post recognizing VMI alumni killed in action and those who have served in the armed forces in wartime is overseen by the Memorials Planning Committee.

Capital construction requires construction project manager(s) and inspectors to ensure timeliness and excellence. The construction office staffing currently includes a Director, Deputy Director, and a Virginia Contracting Associate (VCA). Additional project managers and inspectors are contracted as needed to meet workload demands.

Post public safety and security improvements will be made consistent with State guidelines, the Post history and architecture. The addition of CCTV systems on the Post are being studied in advance of installation Post wide. A CCTV system has been installed on the exterior and interior of Barracks. CCTV systems were included in the CPTF Phase I and Phase II projects. A CCTV system has been installed at Hinty Hall. Additional systems will be included in future projects as appropriate.

The 2020 General Assembly Special Session approved a project for making improvements to the Postwide safety and security systems. A project for a second phase of improvements is included in the Six Year Capital Project Budget Requests.

The North Institute Hill Parking Lot was completed in 2007. The South Institute Hill Parking Lot construction was completed in 2012. The Lackey Parking Lot was completed in 2021. Expansion of the South Institute Hill Parking Lot will be completed in 2022.

The renovation of the Maury House was completed in July 2010 which included a complete restoration of the quarters.

The Military and Leadership Field Training Grounds Phase II project included the construction of a physical plant grounds maintenance facility at North Post. This facility provides a support area to the Physical Plant operations on Post. The project was completed in 2015 and funded with combined private and VMI funds.

Two phases of slope stabilization at Foster Stadium were completed over the summer of 2013 and 2014. This enhances the safety and beautification of the stadium. Stormwater runoff improvements to the Clarkson-McKenna Parking Lot were also completed in 2014.

Renovations to the Cabell House and 410 VMI Parade were completed in the summer of 2014. Renovations to kitchens, bathrooms, HVAC and electrical systems were completed.

The 2020 General Assembly Special Session approved the project Improvements to Postwide Safety and Security, Phase 1.

XII. Organizationally streamlined, efficient and communicative.

XIII. Proud, Disciplined, Civil Cadets.....and Graduates

XIV. One Cohesive Team – Alumni, Agencies, BOV, the Institute, Parents and Friends

ANNEXES

DEVELOPMENT PLANS and STATEMENTS ANNEX

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ANNEX A: CHESSIE NATURE TRAIL DEVELOPMENT PLAN

The Chessie Nature Trail (the Trail) is located in Rockbridge County and extends from East Lexington to Buena Vista, VA over 7.2 miles.

The Trail provides public access to historical sites along the Maury River including four lock and dam complexes. The Trail also provides access to a natural environment to view wildlife, plants, geology, and aquatic life. The Virginia Department of Game and Inland Fisheries designated the Trail as part of the Virginia Birding and Wildlife Trail, and the Virginia Canals & Navigation Society designated it a Virginia Canal Park.

The Trail is popular and regularly used but shows signs of wear and tear and needs improvements to safely serve all users. Safe, convenient parking and access to trailheads is needed, as well as clear, consistent signage along the length of the trail. Gates and footbridge decks need replacement to serve a broader set of Trail users. Trail surfaces need continuous repair of wash outs and exposed roots to maintain a level surface for compliance with ADA standards.

The Trail provides strategic foot access for training for the Corps of Cadets to VMI's McKethan Training Area property which is located adjacent to the Trail but remotely from the VMI Post. This connection from the VMI Post to the McKethan Park training area is an important training element to the Post.

The full length of the trail is utilized by the Institute and the public. In addition to the on-going maintenance, several efforts are on-going to improve trail access and usability:

- In 2010 VMI signed an agreement with the City of Lexington and Rockbridge County to improve the connection between the Woods Creek Trail, which terminates at Jordan's Point Park, and the Chessie Nature Trail. The project was completed by providing sidewalks to connect the Woods Creek Trail to the Veterans Memorial Bridge to the Chessie Nature Trail.

In East Lexington that are six parcels of property that are privately owned. In 2017, two of these property owners either blocked or placed restrictions on the use of the trail where it crossed their property. An off-street parking area has been created beyond the blocked portions of the trail to facilitate trail use, and Post Police support is used for Cadet formations to use the road to by-pass the blocked portions of the trail. Efforts are underway to establish permanent easement for the trail across these privately owned parcels. Survey work and appraisals for permanent easements were completed. Offers were made to the landowners in an effort to procure permanent easements. Easements were recorded for two of the properties. Negotiations for easements are on-going for two additional properties. The remaining two properties are owned by a single landowner. This property owner has indicated no interest in providing an easement and the trail crossing these parcels remains blocked.

- The original railroad trestle bridge over a tributary to the Maury, the South River, was converted into a pedestrian bridge as part of the development of the Chessie Nature Trail in the 1970's. The trestle bridge washed off its piers when the South River flooded during Hurricane Isabel in 2003. In November 2016, VMI submitted an Eastern Federal Land Access Program (EFLAP) Grant Project Application requesting federal funding with a VMI match. The design was completed in 2020. Construction was completed in 2021.



CHESIE NATURE TRAIL SITE PLAN



ANNEX B: LACKEY PARK DEVELOPMENT PLAN

The Lackey Park property is located approximately one half mile north of Lexington with the eastern border of the property along Route 11 north. The property was donated to VMI by Mr. I.F. and Mrs. Mamie Lackey on 19 April 1948. The original 105-acre tract was changed in 1967 and then again in 1986 as a result of agreements with the Rockbridge County School Board when VMI donated acreage from the Lackey tract to meet local school needs. The Virginia Military Institute entered into an agreement with the Virginia Department of Military Affairs on 3 August 1985 conveying six acres of the Lackey Park for the construction of a National Guard Armory for a period of twenty five years (until 2010). The current VMI Lackey Park tract size is approximately 79 acres. It is centrally located along the expanding Route 11 commercial corridor just north of the VMI Post and the City of Lexington.

The VMI Physical Plant and the ROTC Motor Pool are located at Lackey Park adjacent to the Virginia National Guard Armory.

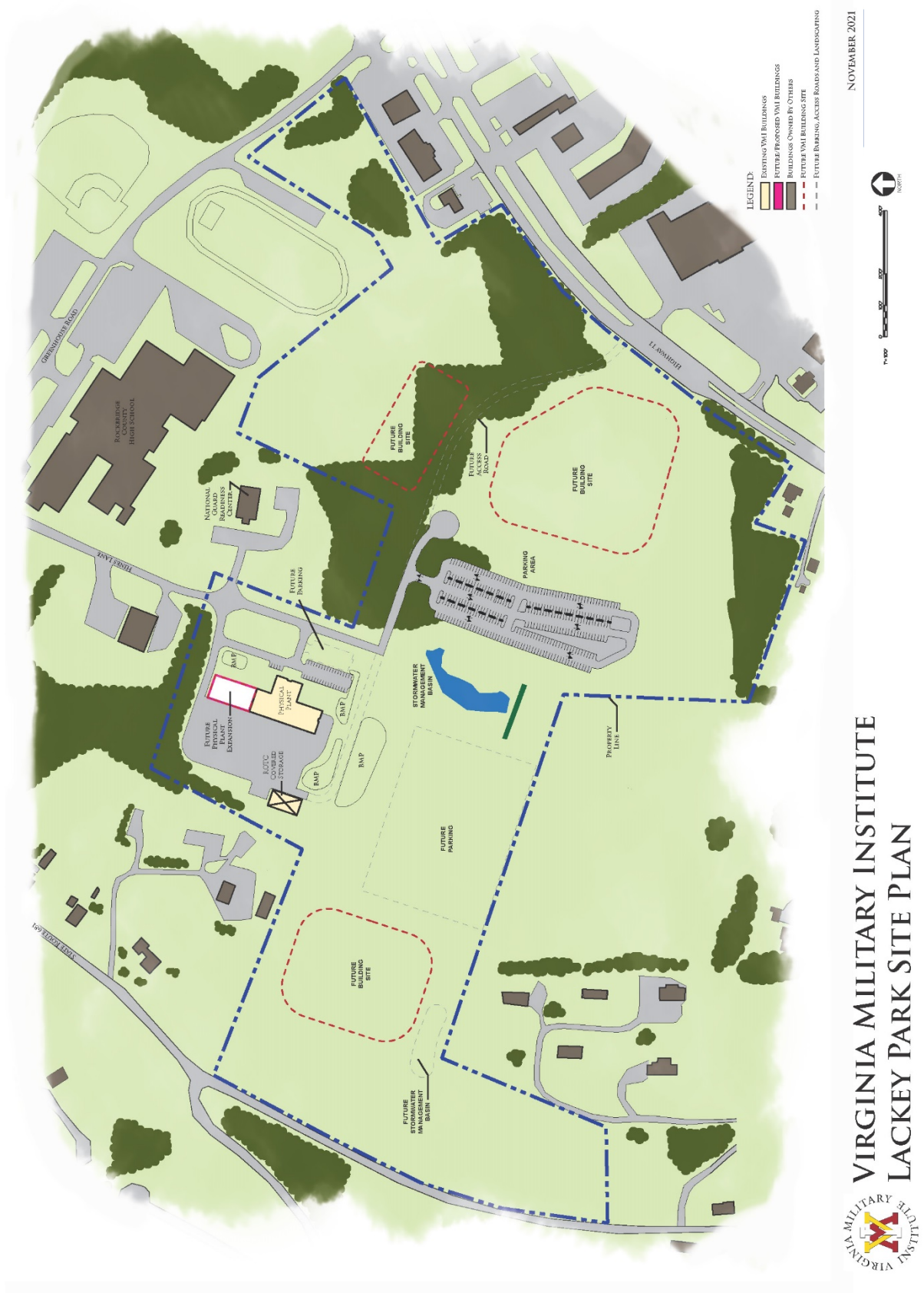
On 15 January 1990 the VMI Board of Visitors and the Rockbridge County Public Schools (RCPS) School Board signed an agreement allowing use of a portion of Lackey Park for high school sports practice fields. The agreement is in effect until 30 June 2040. In a 24 August 2017 letter Dr. Phillip Thompson, Superintendent of RCPS shared information from a concept study they commissioned. His letter briefly discusses the growing needs of the Rockbridge County High School, and the Career and Technical Center. For the most part, he is requesting use of the property already in use by the high school. The main difference in usage will be the construction of buildings, parking lots and a connecting road. The recommended response is that VMI would be supportive of updating the 15 January 1990 agreement to include the proposed facilities, parking and construction once the RCPS School Board has approved the project for planning.

In February 2018 VMI received a letter from the Virginia Army National Guard (VaARNG) indicating their Readiness Center Transformation Master Plan outlines a long range plan for consolidating individual Readiness Centers into regional hubs. They indicated that the Lexington location is vital for quick response to the state's central-mountain area and is among those identified for expansion in the future. Preliminary planning shows some additional property requirements to support additional facility construction, parking and force protection set back requirements. Based on the most recent discussions the requirement for additional space may be resolved with a small property transfer between the VaARNG and VMI, and a Memorandum of Understanding between VMI, the VaARNG and the Rockbridge County Public Schools.

A feasibility study for the development of the Lackey Park surface parking lots was completed in 2008. The study identified two surface parking areas that can be built separately. One lot is designed to provide parking for Cadet cars with approximately 336 spaces (Part A). The second surface parking lot may hold approximately 643 spaces (Part B) and be used as remote parking or shuttle parking lot for events held on Post, eliminating the need to utilize portions of the Parade Ground for parking. Stormwater management and security lighting and fencing will be included in the parking lot design. The 2008 and 2011 Sessions of the Virginia General Assembly authorized the parking lot project. The development of cadet parking in the Part A area was funded in FY19. Construction was completed in 2021.

In 2020 the Virginia Department of Forestry completed a *Virginia State-Owned Lands Management Plan* for Lackey Park. The plan is intended to help guide VMI in the active management of the natural resources based on the objectives VMI identified as being important for the property. The recommendations made are for consideration only.

Other future development may also support VMI academic and operational support needs, and local community needs.



ANNEX C: NEW MARKET BATTLEFIELD STATE PARK DEVELOPMENT PLAN

The mission of the New Market Battlefield State Historical Park (NMBSHP) is to perpetuate the battle site as a memorial to the valor of the Virginia Military Institute Cadets in the Battle of New Market and to preserve and interpret the military and social history of the Shenandoah Valley, ca. 1858-1868.

George R. Collins, VMI Class of 1911, bequeathed 171 acres and an operating endowment to VMI in 1964. The NMBSHP was dedicated and opened to public in 1967. The Virginia Museum of the Civil War (VMCW) (previously the Hall of Valor Civil War Museum) opened in 1970. The Bushong House opened during summer seasons as an historic 1860s farmhouse in 1967. Farm outbuildings were reconstructed 1972-1974. An additional 100 acres of original battlefield was acquired in 1985. The Shirley House was acquired in 2001. Total land holdings, as of March 2005, are approximately 300 acres.

Today there are a number of Heritage tourists, particularly those interested in the period of the Civil War, from throughout the United States and foreign countries that comprise a significant portion of visitation. Local audiences include school groups, VMI Cadets, families, and alumni.

Recent Improvements: Historically accurate fence was recreated at the Bushong Farm in 2000; the Virginia Museum of the Civil War theater was upgraded in 2007 with new projection equipment and orientation film, produced in cooperation with the Harrisonburg, Virginia Public Broadcast Station; the historic Shirley House was acquired in 2001 and served as the headquarters of the Shenandoah Valley Battlefield Foundation until 2013. The Shirley House currently serves as a single-family dwelling for park staff. A restroom structure was constructed adjacent to the VMCW in 2005; new entry patio and lighting into the Virginia Museum of the Civil War and new gateway entrance into the park completed in 2006. Significant upgrades to the exhibit installation in the Bushong House were completed in 2006. In 2018 a comprehensive painting and carpentry project was completed in the 1825 Bushong farmhouse. In 2019 the house underwent electrical and HVAC upgrades as well as chimney re-pointing. The smaller 1818 farmhouse also received new exterior weatherboards, guttering, and paint.

A comprehensive wayfinding master plan was developed in 2012 to improve access to NMBSHP. This effort was completed in 2013. Attendance reports indicate the improvements have been effective in increasing visitation. The Park connected its waste water system into the Broadway / Timberville Regional Waste Water Facility system in 2016. The on-site wastewater treatment was abandoned at that time.

During December 2014 to January 2015 a well-worn 40-year-old carpet was replaced. This enhancement greatly improved the appearance of the public exhibit areas and reduced trip hazards created by the torn and loose old carpet.

Five Year Development Plan includes: increasing interpretive programming on-site and through outreach to area schools; undertaking a comprehensive restoration of 1818 and 1825 Bushong farmhouses; ensuring a continued maintenance of physical facilities to an excellent degree; developing a new visitor orientation center, programs, and facilities to support increased visitation; increasing visitation to a sustainable level of 50,000 visitors annually; increased accessibility to NMBSHP grounds and buildings for persons with disabilities; and diversify and increase financial support of the NMBSHP.

In 2017, a review of the facilities resulted in a series of projects to maintain improve New Market's historical facilities. For efficiency four projects were identified that combined efforts on a number of facilities:

New Market Project #1 –The scope of work includes Bushong Guest House exterior repairs, painting and roof replacement; and Bushong House new electrical panel upgrades and mechanical upgrades. The design for this work was initiated in 2018 and construction work was completed in 2019.

New Market Project #2 – Construction of a new grounds maintenance facility.

New Market Package #3 – Upgrades to the Shirley House Annex for museum storage. The work was completed in 2018 and included HVAC replacement and repairs, door replacement, interior painting and installation of additional shelving.

New Market Project #4 – Bushong House roof replacement and shutter replacement; and Shirley House Exterior shutter replacement, trim painting, Porch/Deck replacement and outbuilding demolition.

Improvements to the Virginia Museum of the Civil War (Hall of Valor), and the construction of a storage and maintenance building are included in the Six Year Capital Project Budget Requests.

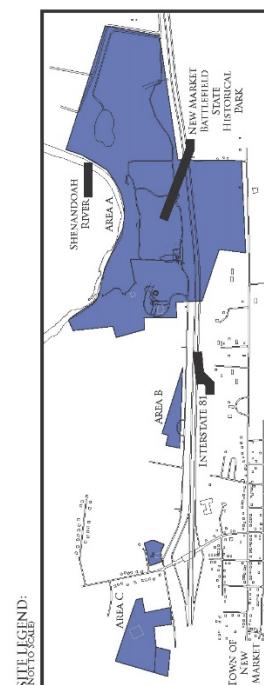
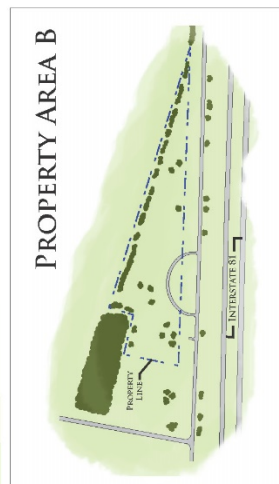
In 2018 exterior renovations to the Bushong House were completed. Design for the replacement of the heating, ventilating and air conditioning (HVAC) system in the Hall of Valor gift shop was also completed in 2018 and construction work was completed in 2020.

A master plan to assess current conditions (including building systems) and vision for further park development is recommended. This plan would include, but not be limited to, vehicular access and a wayside shelter on top of Shirley's Hill, and enhanced parking solutions for the 54th Penn. Infantry monument along US Route 11.

In 2020 the Virginia Department of Forestry started a Virginia State-Owned Lands Management Plan for New Market Battlefield State Historical Park. The plan is intended to help guide VMI in the active management of the natural resources based on the objectives VMI identified as being important for the property. The recommendations being made are for consideration only. The plan is scheduled to be completed in 2021.

The Board of Visitors directed that the Stonewall Jackson statue be relocated to the New Market Battlefield State Historical Park. In 2020 the statue was removed from the VMI Post. It was re-erected at the New Market Battlefield State Historical Park in 2021.

In 2021 the Virginia Department of Forestry completed a Virginia State-Owned Lands Management Plan for the New Market Battlefield State Park. The plan is intended to help guide VMI in the active management of the natural resources based on the objectives VMI identified as being important for the property. The recommendations made are for consideration only.



NEW MARKET BATTLEFIELD STATE
HISTORICAL PARK SITE PLAN
VIRGINIA MUSEUM OF THE CIVIL WAR



ANNEX D: SHIRLEY HOUSE PROPERTY DEVELOPMENT PLAN (NMBSHP)

Located at the entrance to the New Market Battlefield Historic State Park on Collins Parkway is the Shirley House which is located on 2.6 acres with three outbuildings. The home is named for its builder, Christian Shirley, a physician and Confederate veteran in the Shenandoah Valley.

Constructed in 1875, the house consists of a two-story brick structure of approximately 3,108 square feet. The Shirley property also includes a gravel parking area, three outbuildings that include a smokehouse, icehouse, washhouse and an out-of-service cistern. The property is served by local water, sewer and electric utilities. (See historic structures report dated May 24, 2002.) In front of the main house is a historically important creek remnant called locally “The Branch”, or New Market Creek. This would have been an obstacle for the cadets to cross when they came down Shirley’s Hill on May 15, 1864. Staff are maintaining the clearing to the creek.

Following the death of William Christian Shirley (the builder’s grandson) in 1967, the house and outbuildings were sold in 1990 to Peter and Jane Comtois. They constructed the Museum of American Cavalry as an extension to the brick house in 1992. These two structures are physically attached. Three wooden outbuildings are also extant on the site. VMI purchased and rehabilitated the property according to the National Park Service *Secretary of the Interior’s Standards for the Treatment of Historic Properties* in 2001. The Shirley House is now included in the New Market Battlefield State Historical Park.

In 2007, the rear double porch foundation was elevated and the foundation stabilized. The original slate roof of the home and the standing-seam metal roofs on two small porches were replaced in 2010. The project also included the re-installation of historically appropriate copper half round gutters and downspouts.

This facility had been modified and utilized to support commercial enterprises by leasing the facility as office space. The Shirley House was retrofit back to its original use as a residence for the Battlefield Director in 2015. The retrofit to the kitchen and bathroom will not alter the historic character of the property as these spaces will be returned to their original use types. A dividing wall will be added (a 30” pocket door) to separate the master bath from the master closet.

These modifications are in keeping with the original 1960’s plan to have a ‘director’s house’ on the property to provide the benefit of local staff presence and increased security. In 2017, a new security system was installed.

Upgrades to the Shirley House Annex for museum storage were completed in 2018 and included HVAC replacement and repairs, door replacement, interior painting, installation of additional shelving and an alarm system.



NEW MARKET BATTLEFIELD STATE HISTORICAL PARK SITE PLAN

SHIRLEY HOUSE



ANNEX E: THE JACKSON HOUSE DEVELOPMENT PLAN

The Jackson House and the neighboring Davidson-Tucker house are located in downtown Lexington, within the Virginia Landmarks Register and National Register Lexington Historic District. VMI obtained possession of these facilities in 2011 when the facilities and collection were transferred to VMI from the Jackson Foundation.

A master plan and feasibility study for improvements to the facilities was commissioned and completed in 2012 recommended the relocation of the Museum Shop from the lower level of the Jackson House to the first floor of the Davidson-Tucker house is recommended. This relocation will provide additional exhibit space in the Jackson House and modify the visitor sequence by shifting ticketing and the main entrance to the Davidson-Tucker House. To accommodate the change, an addition would be added to the rear of the Davidson-Tucker House to create a gathering place that can accommodate visitors waiting for tours to begin. The addition includes a porch which would allow large bus groups to be provided a protected space to wait for tours to begin. An additional accessible restroom would be added for public use and lockers to secure valuables during the tour. The space provided in the proposed addition and under the porch overhang would facilitate a much needed opportunity for rotating exhibits. The relocation of the Museum Shop to the Davidson-Tucker House is recommended to restrict occupancy of the Jackson House to ticketed visitors.

Grant funding from the Mary Morton Parson's Foundation to assist in executing the recommended improvements was received. The VMI Foundation was an important partner in identifying and assisting the Institute with raising the required matching funds for the grant. The construction project was completed 2019.

In spring 2014 design for removal and replacement of the existing retaining wall and fencing parallel to the Jackson House gardens, alley entrance and VMI's property line was completed. Construction was completed in the summer of 2014. Both the retaining wall and the fencing on the north side were replaced in their entirety. Work included creating temporary planting beds on the Davidson-Tucker house site for the relocation of key historic plantings.

A private gift has made it possible to move forward with the installation of a closed-circuit security camera system inside the historic house, the Davidson-Tucker House and the exterior of the Jackson House Compound. The system will consist of approximately 9 cameras, a controller, recording computer, and software. The system will be integrated into the existing VMI security camera monitoring system. The system is being designed in January/February 2022 with installation to follow later in the year.



ANNEX F: WHITE'S FARM DEVELOPMENT PLAN

VMI owns a tract of land near Lackey Park totaling 31 acres. This tract of land is bounded on the west by the Maury River and on the north by I-64. Private property on the south and east side result in this track of land being 'land locked'.

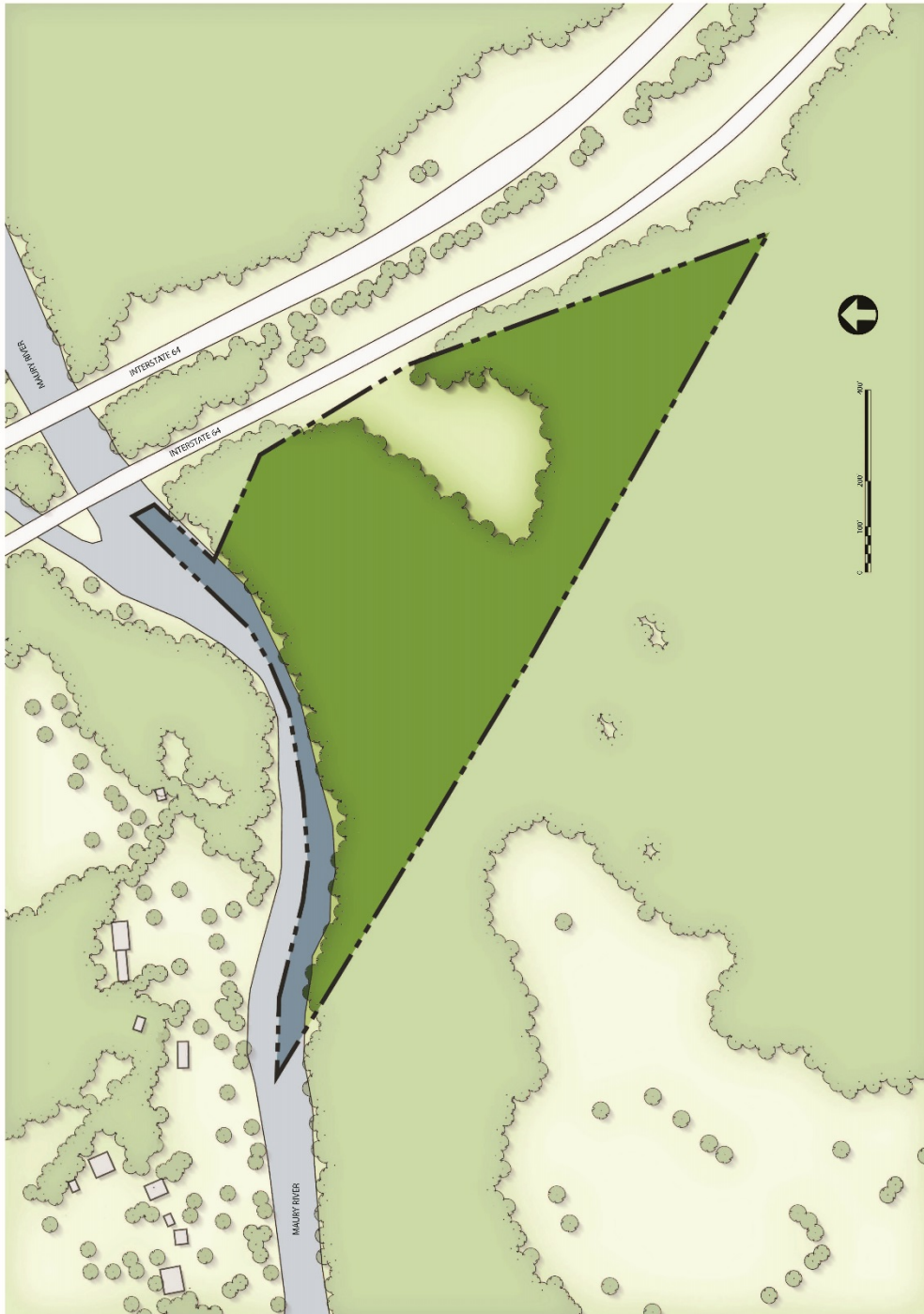
This land has had various uses through the years and had previously been part of a much large tract of land used for training. The current Virginia Horse Center development resides on the greater portion of the original White's Farm tract of land.

The development of I-64 resulted in these 31 acres being isolated from the rest of the tract and land locked. The land is accessible by vehicle with permission of adjacent landowners. The land is utilized to support outdoor academic research space.

Records indicate that timber was harvested from this property in the 1980's under the Department of Forestry's State-Owned Lands Program.

Future uses of the land may be expanded as farm lands are developed providing infrastructure improvements to the site. The land is heavily forested with hard woods and may be ideally used as an additional training area.

In 2021 the Virginia Department of Forestry completed a *Virginia State-Owned Lands Management Plan* for the White's Farm property. The plan is intended to help guide VMI in the active management of the natural resources based on the objectives VMI identified as being important for the property. The recommendations made are for consideration only.



WHITE'S FARM SITE PLAN
VIRGINIA MILITARY INSTITUTE



ANNEX G: CORPS PHYSICAL TRAINING FACILITIES DEVELOPMENT PLAN

The purpose of this plan is to identify facility requirements to support the comprehensive physical fitness and training required of all Cadets.

The construction of the Corps Physical Training Facility Phase I (Indoor Training Facility) was completed in 2016 and included an indoor obstacle training course (IOTC), leadership reaction course elements, weight and cardio training rooms, a climbing wall, a running track, drill areas, and support spaces. The existing American Legion facility was relocated on the existing site to accommodate the new facility.

The Corps Physical Training Facility Phase II (Renovation of Cormack Hall and Cocke Hall) was completed in 2016 and included a complete modernization of the facilities to meet current building and safety codes. The renovated Cormack Hall is the new location for the Physical Education Department to include faculty offices, facilities to support “specific” academic courses, classrooms, weight training, exercise science laboratory, combatives and a wrestling area. The wrestling area will also support NCAA wrestling locker rooms, practice and competition space and support spaces. The renovation of Cocke Hall included improvements to the existing physical training areas, weight and cardio training rooms, restrooms, Cadet activity spaces, and support spaces are included.

Next in this series of projects designed to update and improve Cadet physical fitness and training programs is the Corps Physical Training Facility (CPTF) Phase III (Aquatic Center). This requirement cannot be met by the aging Cocke Hall pool today. A study identified the South Post as the best location for this facility based on ease of access for daily Cadet use and economics of other existing support facilities in proximity to the site. The 2018 General Assembly approved the Corps Physical Training Center Phase III (Aquatic Center) for detailed planning using VMI funds. The 2019 General Assembly approved the Corps Physical Training Center Phase III (Aquatic Center) for full design and construction using a combination of VMI and State funds. The design was completed in 2020. Construction is underway and scheduled to be completed in 2022.

ANNEX H: MILITARY AND LEADERSHIP FIELD TRAINING GROUNDS DEVELOPMENT PLAN

The Military and Leadership Field Training Grounds are located at both North Post and the McKethan Training Areas. These two military training areas support military and training programs offered through the Department of Physical Education, ROTC and the Commandant's Office. The training grounds provide outdoor leadership, military, and physical training facilities for Cadets.

The project provides training that is varied and rigorous leading to the development of stamina, physical and mental toughness and self-esteem in Cadets.

North Post Training Area

Improvements began in October of 2009 at the North Post Training Area. Improvements included three drill fields (one with artificial turf and lighting), challenge courses, obstacle courses, repelling stations, high ropes courses, a fully baffled 30-point firing range, parking and restrooms. Four tennis courts were located on the east end of North Post which complement the spectrum of lifelong fitness through physical fitness courses stressed at the Institute. Improvements to the Anderson Drive vehicle bridge have been completed, plus a new prefabricated fiberglass pedestrian bridge was installed across Woods Creek behind Barracks for Cadet access.

The High Ropes/High training element was improved and upgraded to meet modern safety standards. Training includes high water entry, rappelling, high ropes and rock climbing.

The obstacle courses have been constructed to meet Army Conditioning Obstacle Course and Association of Challenge Course Technology (ACCT) criteria and replace the existing courses.

To improve traffic circulation safety and support field training, the transportation infrastructure was enhanced. At the Jordan's Point entrance, improvements included widening the existing road, an entry gate, cannon display, realignment of the Woods Creek Trail and landscaping. Saunders Drive provides access to North Post from Jordan's Point.

Environmental improvements included integrating Stormwater Management Facilities to control the quantity and improve the quality of the water entering Woods Creek.

Drill fields #2 and #3 have been equipped with a new two-sided scoreboard to support rugby and lacrosse. A flagpole to support the drill field's area has been installed. A filming platform/facility for drill field #2 will be required to support game day operations and announcers. A need to remove spectator seating from the playing level exists to improve safety. The previous concept to construct stadium seating into the hillside should be reconsidered.

A new Leadership Reaction Course (LRC) and Physical Plant support facility were completed in 2015.

Drill Field #1. Installation of artificial turf and field lighting will increase the times of the year and the times of the day when the field will be available for use.

McKethan Training Area

The McKethan Training Area is three miles from VMI's Main Post. Pedestrian access to the McKethan Training Area is by way of a three-mile section of the Chessie Trail that parallels the Maury River. Vehicle access to the site is on State maintained roads. The McKethan Training Area provides 210 acres of open terrain for field training exercises for the Cadets and is part of the Military and Leadership Field Training Grounds. The McKethan Training Area is utilized for the Cadets to increase confidence in their abilities and reinforce skills learned in the classroom. Training exercises at the McKethan Training Area have proven to be excellent

environments for simulating combat conditions and to train under specified conditions and standards. This results in better development, evaluation, and sustainment of training.

The master plan for the McKethan Training area includes several proposed improvements:

A third structure that serves as a patrol base is required. The existing roads within the McKethan Training Area need repair and improvement to support training requirements. The existing gravel vehicle parking and equipment storage area needs to be improved.

To enhance the Land Navigation Training, improved mapping will allow for more realistic training to accurately represent elevations, hydrographic objects, vegetation, transportation routes, utilities, and infrastructure. Updated mapping will increase the training options for Land Navigation.

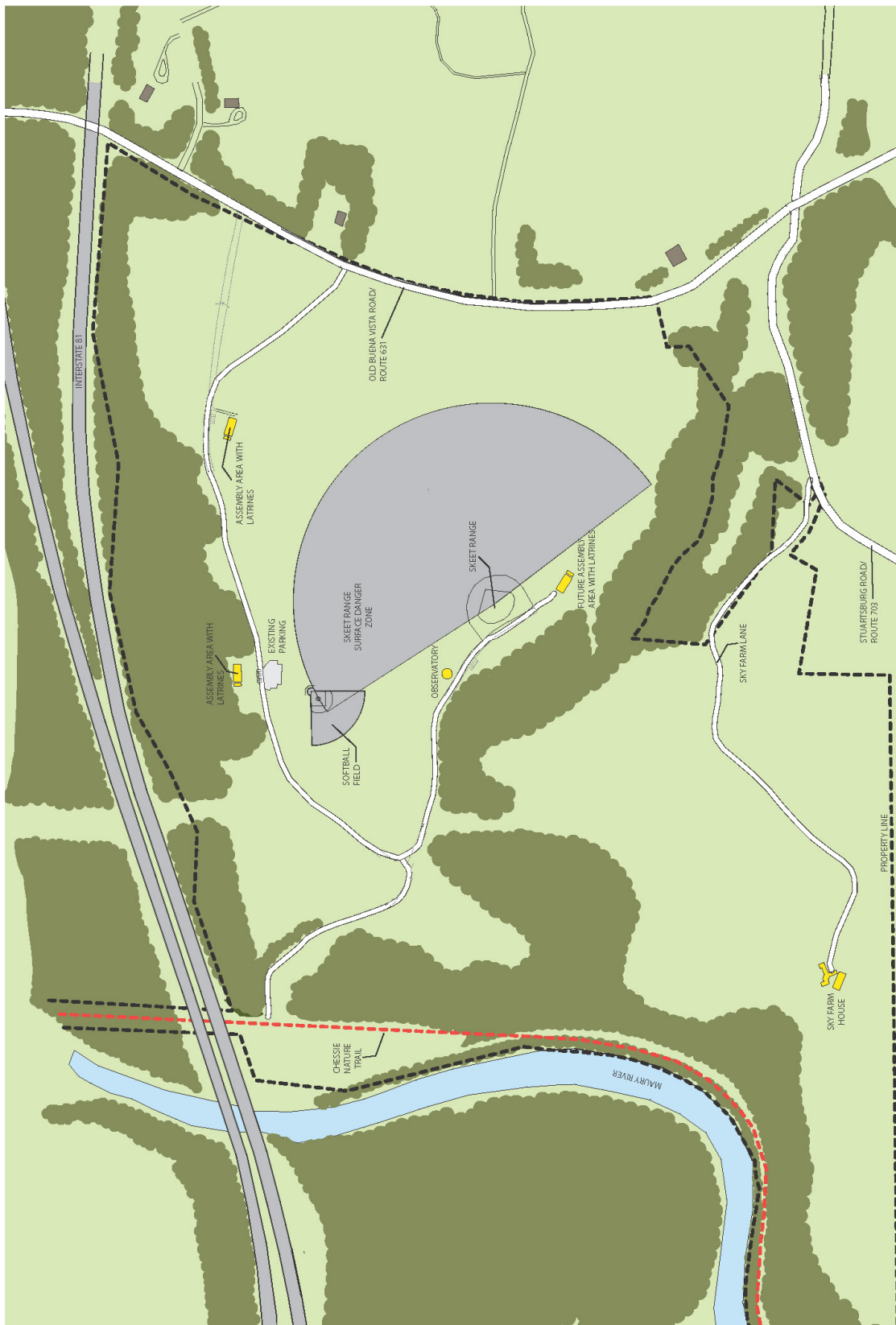
Existing utilities providing power, water, and sanitary systems need to be improved to ensure that the infrastructure continues to support the training area. Installation of Emergency phones at each of the pavilions and at the skeet range was also completed in 2021 for safety of all users of the McKethan Training Area. Environmental improvements need to be incorporated to mitigate negative impacts to the environment from stormwater runoff.

A partnership with VaARNG included engineering units providing improvements as part of their Innovation Readiness Training (IRT) in the summer of 2013 and 2014. Improvements completed include enhancing the main entrance to increase safety for vehicles entering and exiting the training area and construction of a new patrol base (pavilion).

The Sky Farm House, located at the McKethan Training Area received upgrades to the life safety features of the facility, mechanical, electrical, roof and exterior painted were completed in 2012. In 2018 replacement of the windows and other improvements were completed.

Demolition of the original Hardbarger Farm House was completed in 2019. Demolition of the guest house and barn was completed in 2021.

In 2021 the Virginia Department of Forestry completed a *Virginia State-Owned Lands Management Plan* for McKethan Training Area. The plan is intended to help guide VMI in the active management of the natural resources based on the objectives VMI identified as being important for the property. The recommendations made are for consideration only.



MCKETHAN PARK SITE PLAN



ANNEX I: MEMORIALS AND MONUMENT DEVELOPMENT PLAN

Every year thousands of visitors from around the world arrive on the VMI Post for no other reason than the knowledge of the Institute's reputation as the educator of some of America's best-known Citizen-Soldiers. They walk past academic halls, some old, some new; they stand before The Barracks. They pause at monuments and statues that recognize events and individuals significant to Institute and national history. They visit the VMI Museum and Memorial Gardens. Perhaps they will have a conversation with a random cadet; a young person who, in varying ways, represents the landscape the visitor is exploring.

Over the history of the Institute, that landscape has been formed with the cadet in mind. The buildings, monuments, and statues are subtle and silent teachers; reminders of the values and character expected of a VMI cadet. The architectural palate was chosen after great deliberation by Superintendent Francis H. Smith and eminent architect Alexander J. Davis. Statues and monuments followed, all intended to recognize service, achievement and, sometimes, sacrifice. All of it, buildings, statues, monuments and grounds, together creating the environment in which young men and women pursue their advancement of intellect and development of character.

This unique environment is recognized by the Commonwealth of Virginia and the nation by the establishment of the VMI Historic District. Many of the statues and monuments are contributing resources to the district. At the center of the district is The Barracks, which is singularly recognized as a National Historic Landmark. This distinction was awarded by the Department of Interior based on the architectural and cultural merits of its structure.

As current stewards, we must ensure that the intention of the VMI founders to create a landscape reflecting the aspirations of the Citizen-Soldier education is preserved. Much in the same manner that the curriculum is continually reviewed for relevance and academic integrity, we must ensure that the lessons offered by the landscape address the needs of the current and future Corps of Cadets.

At the same time, we recognize our obligation of stewardship, so also must we balance and recognize the sensibilities, cultural responses, and emotions over the memorialization of people, places, and events associated with difficult times in our nation's history. We acknowledge our responsibility to reconcile the landscape with these important issues for the benefit of the Corps of Cadets and the state.

Society, even a small college society, will not find absolute agreement in what, who, or how to recognize its greatest achievements or create public models of emulation. The debate and acceptance of varying positions will assure the continued health and positive evolution of that society.

Citizen-Soldier Monument: VMI recognizes a need to create a suitable monument commemorating the service of the VMI Citizen-Soldier. This monument would be comprehensive; that is, it would serve to recognize those who have served and acknowledge those called in the future to similar sacrifice. The purpose of the monument is to focus on the significant contribution of the VMI-educated Citizen-Soldier during times of war. The monument will not be limited to honoring those who have made the supreme sacrifice, but rather will commemorate the selfless duty of VMI-educated soldiers. The scale and scope of the proposed monument may consist of an architectural feature with appropriate landscaping and a bronze statue. The sloping hill between limits gates and Center for Leadership and Ethics may offer this opportunity.

War Memorials: A review of existing war monuments and memorials reveals that the Institute has recognized alumni service in all major armed conflicts since the Civil War. In the fall of 2011 two plaques were dedicated on Post in the Third Barracks Arch. One plaque pays tribute to the 43 alumni who died in Vietnam. The plaque contains the name, class year, rank and service of the VMI dead. A second plaque was installed for the alumni who died in the First Persian Gulf War and in the first ten years of the Global War on Terrorism.

Crozet Point: The headstone and remains of Col. Claudius Crozet are in front of Crozet Hall at a memorial designated as “Crozet Point”. A memorial and dedication ceremony commemorating the accomplishments of Crozet, a key figure in the founding of VMI, and his contributions to the Institute was held on Founders Day 2011 at Crozet Point. This memorial includes a small plaza, landscaping and bronze bas-relief likeness of Crozet. This memorial was completed in the spring of 2011 and dedicated later that year. In 2020 the capital project to Renovate Scott Shipp Hall modified the memorial to better accommodate pedestrian traffic to and from the building.

Jordan’s Point Entrance: A cannon and limber were added to the North Post Jordan’s Point entrance to Post as part of the Military and Leadership Field Training Grounds project. The presence of the cannon is consistent with other VMI entrances. Lighting and signage were also installed in November 2011.

Additional Opportunities: Locations include but are not limited to the Third Barracks courtyard arch, the Letcher Avenue entrance to Main Post, and the expanded courtyard near the Center for Leadership and Ethics (CLE).

Stonewall Jackson Statue: The Board of Visitors directed that the Stonewall Jackson statue be relocated to the New Market Battlefield State Historical Park. In 2020 the statue was removed from the VMI Post. Re-erection of the statue at the New Market Battlefield State Historical Park was completed in 2021.

Daniels Memorial: The Institute has undertaken an initiative to study opportunities to enhance the existing Johnathan Daniels Courtyard and to explore designs to elevate the recognition of Daniels at VMI. A design firm has been retained to work with an internal committee to review locations and concepts for a new monument and to consider enhancements to the existing Daniels Courtyard area. Recommendations will be submitted to the Superintendent and Board of Visitors in Spring, 2022, with selection and construction to follow later in the year.

ANNEX J: GREEN AND OPEN SPACE PRESERVATION PLAN

A separate resolution adopted by the Board of Visitors at the January 2016 meeting mandated that the Board of Visitors approved modifications to the existing greenspace.

The VMI Post continues to transform and modernize to meet the current academic, athletic, co-curricular and ROTC needs. The availability of state-of-the-art facilities are required to continue to promulgate the traditions of the Institute and maintain excellence.

An extra level of care and consideration regarding open and green spaces is required to ensure that the development of Post does not overtake appropriate green and open spaces which contribute significantly to the Post. The following is a listing of identified green and open spaces which should be safeguarded and not developed without serious consideration for the impact on the openness and beauty of the Post. These spaces as a rule should be preserved.

Courtyard between Nichols and Preston

The individual buildings along academic row should continue to maintain their own identity. This open space should not be considered for future infill.

Space between Letcher Avenue Historic Houses at VMI Main Entrance

These facilities are utilized as office space. The residential appearance has been maintained and these structures are key contributing structures to the VMI Historic District.

Space between Memorial Hall and Nichols Engineering Building

Consideration should be given to adding to the existing landscaping and replacing existing plantings.

Marshall Hall (Center for Leadership and Ethics) and Letcher Avenue

This space was developed as an open green space during the construction of Marshall Hall. At present, it is reserved for development as memorial space. It is the only viable open area available for development at VMI's main entrance. Based upon VMI's need for a more prominent main entrance, this space should be considered as part of new main gate area. Redesigning this area should either consider the existing stone retaining wall as part of a new design or propose removal and replacement.

Memorial Gardens

This space should remain preserved. In recent years, the removal of a large tree at the west end of the garden created an improvement by way of elimination. Tree removal has allowed more sunlight in the gardens which has facilitated improvements in the lawn and the jasmine in the existing retaining wall planters. The CPTF Phase II project completed renovations in the gardens including landscaping and memorials.

Open space between Scott Shipp Hall and Crozet Point

This area creates an attractive open space balance amongst Crozet Point, Crozet Hall, Scott Shipp Hall, and Carroll Hall that should be maintained.

Parade Ground

The parade ground should remain in its current size. As the Corps of Cadets has grown the utilization of the grounds has greatly increased. While its primary purpose supports the parades for the Corps of Cadets any permanent changes should not negatively impact the parade sequence or drill space.

Barracks Courtyards

The courtyards in the Old, New and Third Barracks are an integral part of VMI's leadership laboratory and should never be developed.

Superintendents Garden and open spaces along Parade Avenue residences

The Superintendents gardens should remain, improved and be maintained. They should be natural rather than formal in nature. The gardens and open areas along Parade Avenue help create an important soft contrast to the buildings directly across the Parade Ground along Academic Row.

Smith Hall, Marshall Hall & Marshall Library

Open areas provide important pedestrian traffic patterns to and from Marshall Hall. In addition, the courtyard between Smith Hall and Marshall Hall has quickly become an important space for functions, like Memorial Gardens. Any further development in this area would diminish the visual impact and prestige of Marshall Hall.

Crozet Hall (450 Institute Hill and the Turman House)

The historical nature and relative geographic remoteness of this area of Post has open green spaces which should be preserved.

Preston Library and Main Street

The space between Preston Library and Main Street should remain open and undeveloped. This space is directly across the street from Cameron Hall and is one of the few areas with grass and mature trees along the interface between VMI and Main Street.

A separate resolution adopted by the Board of Visitors at the January 2016 meeting mandated that the Board of Visitors approve modifications to the existing greenspace.

ANNEX K: POST BEAUTIFICATION AND LANDSCAPING DEVELOPMENT PLAN

In 2009 the Superintendent initiated a comprehensive program to proactively beautify the VMI Post. An internal survey on the Post was completed in which many beautification items or projects were identified. The beautification plan is reviewed annually with refinements and adaptation following documentation of completed projects and identification of new projects.

The plan is organized around multiple areas of the Post.

Letcher Avenue: Limits Gates to Parade Avenue

A major area of emphasis for beautification is the improvement of the main entry to VMI on Letcher Avenue at Limits Gates.

Completed projects include the installation of an entry corner plaza, sidewalk repairs and leveling of pavers on the north side of Letcher Avenue; additional tree plantings; removal of bushes and trees in decline; relocation and reduction of traffic signs; roof and downspouts on selected quarters on the south side of Letcher Avenue have been replaced; the speed limit sign has been relocated closer to the VMI Post; temporary directional signs have been added to the intersection of Letcher and Parade Avenue.

The buildings on Letcher Avenue at the main entrance have all been repainted and or reroofed with historically correct colors.

Washington and Lee University (W&L) added a new access road, Generals Way, along the property boundary of VMI and W&L. The project resulted in the removal of overhead utilities behind the Center for Leadership and Ethics.

In 2020 completed improvements to the VMI entrance included:

- a. A brick paver threshold to identify the entrance.
- b. Improvements to the VMI Police Department facility and landscaping.
- c. For safety a pedestrian sidewalk and lighting on Maiden Lane.
- d. Improvements to overall beautification with landscaping and signage around the Limits Gates.

These improvements enhance the delineation between W&L and VMI.

Smith Hall

The sidewalks and curbs in the front of the building were repaired and / or replaced in 2016. A project completed in 2018 performed stucco repair and waterproofing to four small sections of the front of Smith Hall; Turret repairs to alleviate the leaks occurring in the closets of the board room; Front elevation planter beds to repair years of patchwork; Front entry around main door to repair previous years of patchwork; and Front right upper elevation wall to repair leaks observed in FAS offices. A separate project completed in 2020 renovated, repaired, and replaced finishes in public spaces to include ceiling tile, floor tile, baseboards, and doors. Painting and lighting upgrades to LED fixtures were also performed. Additionally, both 400 level conference rooms received similar renovations.

A new golf cart storage area will be constructed directly behind Smith Hall. The storage area will be located adjacent to HVAC equipment and will be screened by architectural fencing to minimize visual impact seen from Marshall Hall and the lawn.

Future beautification in this area may include a new walkway or pavers to access the Francis H. Smith Statue.

Marshall Hall

The addition of an irrigation system to support the courtyard has been identified as a future beautification project. Additional landscape screening may also be provided to shield the Smith Hall HVAC exterior compressor unit.

Parade Avenue – Officers Row

Existing grass turf around the quarters consists of multiple species and the establishment of a single species is desired. The addition of irrigation systems will also enhance the landscaping and turf. Landscaping improvements to the Maury House and the Superintendents Garden have been identified. Exterior access stairs on the west side of the Maury House are to be replaced.

Additional trees have been planted in the island between the quarters and the parade ground. The existing stormwater filterra© units have been improved with new plantings suitable to pedestrian walkways. Fire hydrants have been repainted. A plaque on Matthew Fontaine Maury has been added at the Maury House.

Lejeune Hall, Parade Ground to Burma Road

Additional benches are to be added at the entrance to Lejeune Hall at the Visitors Center and Bookstore entrances. Pots with plantings have been added to the exterior of Lejeune Hall.

Letcher Avenue/Parade Ground

Aging sidewalks adjacent to the parade ground are damaged from ice control measures and impacts from tree roots. Replacement of trees and landscaping features is ongoing. A project was completed in 2019 that removed and replaced the non-skid decorative bricks in the sidewalk from Lejeune Hall to Anderson Drive. VMI paid for the brick mold to be created and now has a source for non-skid decorative bricks to meet future needs. An overall review of the pedestrian and vehicular pathways may be included in future landscaping and financial feasibility studies for this area. A continuous sidewalk connection between Memorial Hall and Scott Shipp Hall is desired. The addition of a permanent parade review grandstand has been considered.

The standing seam metal roof of Memorial Hall has been recoated. This roof is visible from the ground in many areas. Reduction of “one way” traffic signs has been completed and additional trash receptacles provided. New trees have been planted in front of academic buildings. New tree plantings have been completed on the north side of Letcher Avenue.

Virginia Mourning Her Dead

The Nichols Engineering Building (NEB) doors were replaced. Headstone lettering for the Cadet grave markers have been repaired. Landscaping has been added to the exterior of NEB. Attention is needed to address the foot traffic damage to the sodded area to the north to the main entrance.

Parapet and Memorial Gardens

This area has been utilized for numerous functions for many years and has high historical significance. As part of the Corps Physical Training Facility (CPTF) PH II – Cocke Hall Renovation project significant improvements were made to Memorial Gardens. The sidewalks were replaced, a rainwater collection and irrigation system was installed, new grass was planted throughout, the plantings around ‘The Spirit of Youth’ statue and across the front of Cocke Hall were replaced, a ‘remembrance’ area was constructed to recognize members of the faculty and staff who have died while actively employed at VMI (this memorial will also be used for other ceremonies), and, lighting was installed across the front of Cocke Hall and across the front of Memorial Wall. At the same time Physical Plant removed some trees and made improvements at the top of Memorial Wall. Future improvements would be to widen the sidewalk at the top of Memorial Wall continuing the wide sidewalk in front of Memorial Hall. The project to Renovate of Scott Shipp Hall will continue to make pedestrian, parking and traffic improvements down Letcher Avenue. Improvements on the Barracks side of Letcher Avenue are also being contemplated to reduce the conflict between pedestrian and vehicular traffic, and, to minimize parking up against the Barracks around Washington Arch.

Crozet Monument

The mortal remains and tombstone for Colonel Claudius Crozet have been relocated from the front of Preston Library to a point in front of Crozet Hall. This area was improved with a memorial area and landscaping.

South Post / Main Street

The *Cameron Hall* message board lighting controls were replaced. Stairs accessing the tunnel under Route 11 have been resurfaced. VMI housing adjacent to Maiden Lane and face Main Street have new roofs, have been repainted, and repairs to the porches completed. The SIH Parking project included several landscaping enhancements to the area. An existing stair landing that was a remnant of front porch to a demolished structure has been removed.

The removal and relocation of existing structures on South Post has been completed as part of the Corps *Physical Training Facilities Phase I* project which will provide several beautification features. The placement of overhead utilities underground has been completed.

Foster Stadium

Pedestrian walkways behind Clarkson-McKenna and Cameron Hall need improvements. Replacement of handrails and chain link fencing to match Foster Stadium is required. Landscaping along Randolph Street, which provides access to Foster Stadium, needs to be improved including the removal/replacement of fencing.

North Post

The existing slope between Burma Road and Saunders Drive is covered in natural vegetation and rip rap where a slope failure had previously occurred. Trees growing in the riprap have been removed to avoid compromising the stability of the slope. Existing pipes which run over the riprap have been painted to match the natural colors and blend. Removal of alien species of trees was completed in the MLFTG Phase I project.

Stono Lane

The rock wall along the south of Crozet Hall is constructed of two different stone types that should be replaced to provide a uniform appearance. Landscaping in the Scott Shipp Hall parking lot was improved in the Corps *Physical Training Facilities Phase II* (Cocke Hall Renovation) project.

Miscellaneous

There is a prohibition of posting signs to exterior and interior doors. The use of pedestal signs and sandwich board signs are used instead.

Enhancing the wayfinding to the VMI Post has included upgrading the signage from I-81, I-64, Route 60 and Route 11. These signs enhance the visitors experience to VMI events and attractions (museums). While located off the main Post these signs will need to be reviewed on a regular basis for repair and maintenance.

Exterior wood doors are a key architectural element to most VMI buildings. They require maintenance and refinishing on a regular basis to maintain the beauty of VMI facilities. A rotating maintenance plan is being followed; however, a re-study of the door program is required. Developing a standard for differing door materials based on location is required to reduce the magnitude of the maintenance required. Also, identifying alternate sources/methods for door maintenance may be beneficial to ensure appropriate levels of beauty and serviceability.

A committee on the placement of Memorials has been established which reviews proposals for the addition of memorials on Post. See *Memorials and Monument Development Planning* in this document

ANNEX L: POST SAFETY AND SECURITY DEVELOPMENT PLAN

In 2017 a Post-Wide Safety and Security Study was performed that identified potential threats and evaluated risks. As listed below the study recommended a 3-phase implementation plan to improve operations, and, identified potential projects to help reduce overall risk.

Phase 1 Program Summary

- Burma and West Burma Road Entrance – Bollards
- Crozet Hill (below Crozet Hall) – Bollards
- Letcher Access (in front of Maury Brooke) – Bollards
- Control Door Propping – Post-wide

Phase 2 Program Summary

- Access Control Upgrade – Barracks Gates
- Post-wide Lockdown – Various Workstations/Devices
- Implement/Deploy Video Data Analysis Software to Workstations

Phase 3 Program Summary

- Letcher Access (in front of VMI Police) – Bollards
- WLU/VMI Transition (CLE Parking Lot) – Bollards
- Jordan's Point Entrance - Gate Upgrade

The 2020 General Assembly authorized capital project funding for the construction of the Improvements to Post Wide Safety and Security. The project includes new security barriers to better control evening traffic on Letcher Avenue, Burma Road and around Crozet Hall are included in the Capital Project for Improvements to the Postwide Safety and Security. Identified as the 'Inner Ring' these gates are proposed to be located near the intersection of Letcher Avenue and Parade Avenue; On Letcher Avenue below Crozet Hall; on Stono Road near Crozet Hall; on Burma Road near Crozet Hall; on both lanes of Burma Road near the intersection of Anderson Drive, and on both lanes of Parade Avenue near the intersection of Anderson Drive. Planning for the 'Outer Ring Gates' is also included in the project and will allow complete closure of the Main Post. Construction on the project is scheduled to be completed in March 2024.

A project for Cadet Safety and Security is included in the Capital Improvement Plan. The project scope includes replacing exterior doors in Barracks rooms and other administrative and support spaces as needed. Installing new electronic door hardware, replacing existing with new and expanded CCTV cameras, and, upgrading the information technology systems to support electronic locks and security cameras. VMI requested full project funding in the FY 2022 caboose bill.

A second phase of work is included in the Capital Improvement Plan. Phase 2 will include the remainder of the access control projects at the athletic venues, a complete roll-out of video surveillance across Post, improvements to lighting in several parking lots and walkways, full implementation of Mass Notification through fire alarm systems, increasing the number of "blue light" call boxes, and security related modifications to the sports venues including the football stadium, basketball arena, and baseball stadium.

ANNEX M: HISTORIC PRESERVATION STATEMENT

As steward of a national historical site, the Institute recognizes its responsibility to preserve, maintain, and enhance the many significant historical features of the Post.

Founded in 1845, the VMI Museum is the oldest public museum in Virginia. In 1971, the VMI Museum became one of the first in the Nation to be professionally accredited by the American Alliance of Museums.

VMI requires a major museum to house its artifacts and reach to the future to describe its growth and history by the decades. The Center for Leadership and Ethics Phase 2 (Leadership Development Facility) will provide to support the academic courses associated with VMI's Leader Development Program and dedicated space for the VMI Museum. Collocation of the Leadership Development Program with the VMI Museum supports the incorporation of museum artifacts into the Leadership Development curriculum. The 2020 General Assembly Special Session approved the project for detailed planning.

VMI maintains a *Post Preservation Master Plan* which was completed in January 2007. This document provides a holistic view of the Post, identifying the historic character and integrity of the Institute. The *Post Preservation Master Plan* includes design guidelines for buildings, landscapes, and new construction. The guidelines are a tool to assist the Institute in the management, maintenance, and treatment of its historic buildings and landscapes.

The *Post Preservation Master Plan* in its entirety is to be consulted in all facility planning and development. The Post Preservation Officer is responsible for updates and maintenance of the *Post Preservation Master Plan*.

ANNEX N: ENERGY CONSERVATION AND SUSTAINABILITY STATEMENT

The Institute recognizes its responsibility as stewards of the natural resources of the Commonwealth of Virginia. Facility renovations and new construction are being planned and constructed consistent with the performance standards outlined in DEB Notice #121510 Virginia Energy Conservation & Environmental Standards. Sustainability practices have been incorporated in recently completed and current ongoing projects.

VMI's Energy Manager is responsible for the implementation and compliance with any legislative requirements and Executive Orders, such as the Governors Executive Order 31 (EO-31) Conserving Energy and Reducing Consumption in the Commonwealth of Virginia (2014) and for the development and implementation of VMI's General Order 41 which addresses environmental management, waste, recycling and green procurement practices. VMI entered into a memorandum of understanding with Energy Solutions Group (ESG) to produce a Technical Energy Audit and plan of action to comply with EO-31. The Energy Manager is implementing energy conservation projects identified in the ESG plan of action with available funding to meet the goals of EO-31.

In 2013, VMI executed a sub-metering project that identified opportunities for operational energy conservation. A full time HVAC Building Controls Manager has been added to the Physical Plant staff to ensure the continuity of operational efficiency improvements.

In 2020, the Postwide Infrastructure Improvements Project integrated all Post building environmental control systems into a single user-interface and energy sub-metering system increasing opportunities for operational energy conservation.

VMI has continued to implement building automation and efficiency projects which build on the foundation established by the Postwide Infrastructure Improvements Project. The centralized control and monitoring of systems by the Postwide BAS have allowed for optimization of environmental control and equipment operation across Post.

- In 2021 LED lighting upgrades were completed in portions of Nichols Engineering, Crozet Hall, Mallory Hall, Maury Brooke Hall, and Clarkson-McKenna. Future projects are planned for the Corps Physical Training Facility and Richardson Hall Laundry.
- Building automation system upgrades were completed for Cameron Hall and Paulette Hall to both modernize controls hardware and increase efficiency. Future projects are planned for Cocke Hall, Cormack Hall, Crozet Hall, Marshall Hall Center for Leadership & Ethics, Maury-Brooke Hall, and Moody Hall.

Recycling

The Physical Plant custodial staff coordinate VMI's recycling program. VMI had a robust paper, plastic, and cardboard collection program. However, the City of Lexington put on hold all paper, cardboard, aluminum, and plastic recycling. As the City of Lexington restarts the programs VMI will re-institute the on-Post collection. VMI is still executing a smaller general metal collection program.

Executive Order 77

On March 23, 2021, the Governor signed Executive Order 77, aimed at reducing Virginia's reliance on single-use plastics and reducing waste sent to landfills. The order puts the Commonwealth on a path to eliminate most single-use plastics at state agencies, colleges and universities, imposing a near-term ban on several common, but unnecessary disposable plastics and requiring the phase out of other items by 2025.

In response VMI organized an Executive Order 77 Tiger Team.

- Immediate actions were taken to discontinue buying, selling, or distributing disposable plastic bags, single-use plastic and polystyrene food service containers, plastic straws and cutlery, and single use plastic water bottles that are not for medical, public health, or public safety use.
- In August 2021 VMI submitted to the Virginia Department of Environmental Quality a Plastic Pollution Reduction Plan to eliminate the buying, selling, or distribution of all nonmedical single-use plastic and expanded polystyrene objects.

ANNEX O: SUPPLIER DIVERSITY STATEMENT

Small, Women and Minority (SWaM)

All agencies of the Commonwealth and state supported colleges and universities were required to set annual Small, Women and Minority (SWaM) goals with the expectation of meeting or exceeding 42% of their discretionary spend and 50% of capital construction dollars as mandated in Executive Order 35.

For FY 2021 VMI submitted the following goals to the Secretaries of Administration and Education:

SMALL		WOMAN-OWNED		MINORITY-OWNED		TOTAL SWaM	
GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL
35.0%	38.25%	4.5%	3.01%	2.5%	3.26%	42%	44.52%

Anticipated percentages of Discretionary Expenditures for Small, Women-Owned and Minority-Owned businesses submitted for FY 2022 in accordance with Executive Order 35:

FISCAL YEAR	SMALL	WOMEN-OWNED	MINORITY-OWNED	TOTAL SWaM
2022	36.0%	3.0%	3.0%	42.0%

VMI has analyzed all possibilities in order to provide realistic goals and are confident that SWaM spend may be increased with current capital construction projects. Because of its size and budget constraints, VMI has no personnel solely dedicated to the SWaM effort. These duties, rather, are divvied up among the Procurement Services staff.

eVA

All agencies of the Commonwealth including state supported colleges and universities are required to process 75% of their procurements through the Commonwealth's procurement system, Electronic Virginia (eVA). In FY 2021, VMI processed 99.9% of all procurement transactions in eVA with 100% of those dollars spent with eVA registered vendors also surpassing the mandated goal of 75%.