



MARITIME ADMINISTRATION

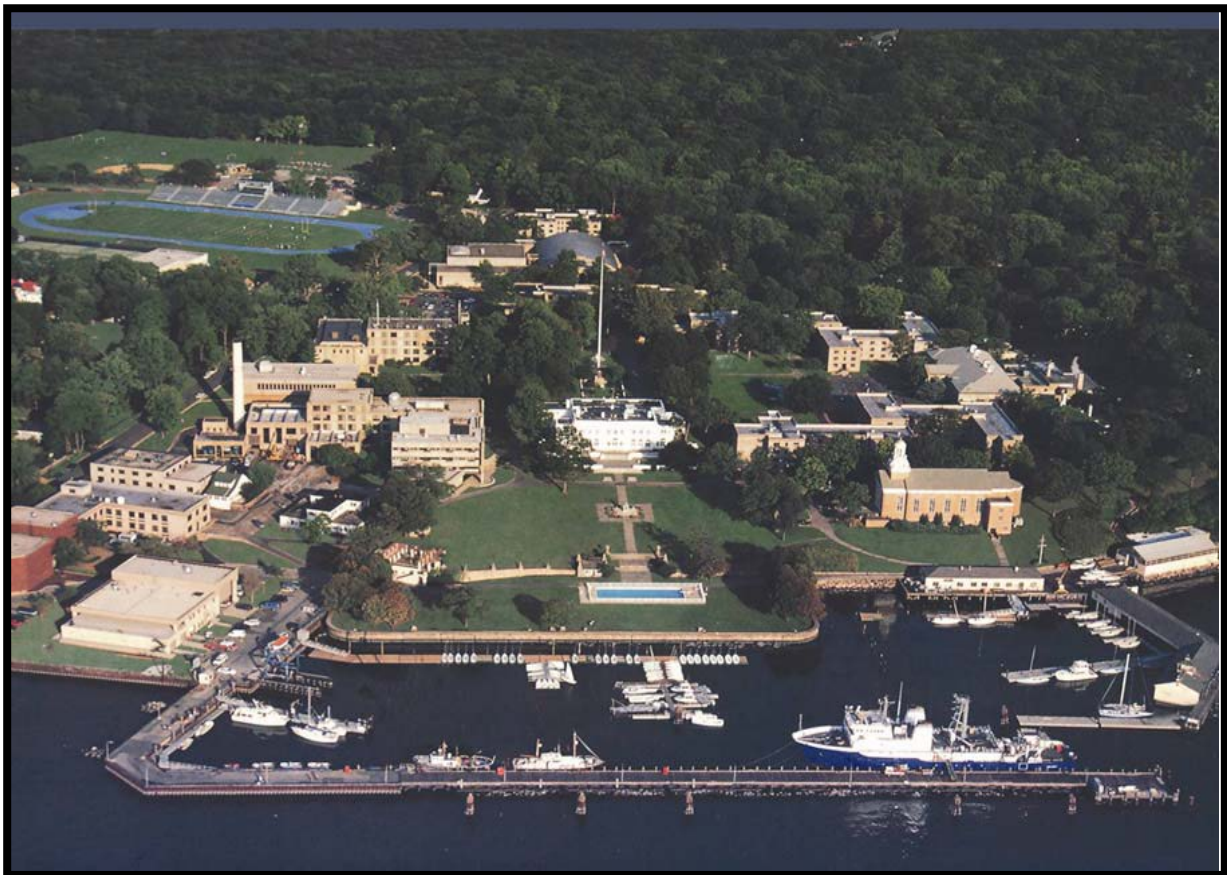
UNITED STATES

MERCHANT MARINE ACADEMY



CAPITAL IMPROVEMENT PROGRAM

FY 2015 ANNUAL REPORT AND FY 2016-2020 PLAN



MARCH 31, 2015

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Executive Summary

This annual capital improvement plan has the five sections which provide information about (1) the Capital Improvement Program (CIP) Active Projects Description and Status; (2) the Active Capital Improvement Program (CIP) projects; (3) the Completed CIP projects; (4) the CIP appropriation history; and (5) the Five-Year Capital Improvement Program Projects Plan. All requests for funding for the projects listed in FY 2016 and beyond must be included in the President's Budget proposal and require enacted appropriations.

Background

The U.S. Merchant Marine Academy (USMMA) is one of five Federal service academies. Authorized by Congress in 1936, the Kings Point, New York campus opened in 1943. The USMMA graduates approximately 200 Midshipmen annually who have earned a Bachelor of Science degree, a U.S. Coast Guard mariner's license and a commission in the U.S. Armed Forces. Graduates are obligated to serve a minimum of six years in the U.S. Merchant Marine while concurrently serving for five years in a reserve component of the U.S. Armed Forces. Alternatively, Midshipmen may serve five years in an active duty status with the U.S. Armed Forces, the National Oceanic and Atmospheric Administration (NOAA) or the U.S. Public Health Service or in maritime-related Federal civil service which serves the national security interest of the United States. The Merchant Mariner license earned at graduation must be maintained in active status for at least six years.

In 2013, MARAD completed a comprehensive Building Evaluation Report (BER) detailing the condition of each campus building. The CIP incorporates the BER findings and enables prioritization of CIP projects and facilitates identification of building problem areas that can be targeted for long-term repair. Facility managers can also efficiently assign renovations or repairs to either the CIP program or the Department of Public Works.

Currently, the USMMA is conducting a Space Utilization Study, which is expected to be completed by June 2015. The study examines the current purpose and space requirements of USMMA buildings to determine if there is a better way to utilize the buildings and their space. The study will inform USMMA management on the best utilization of its available space and may help to more clearly define the use of academic buildings with possible adjustments to their CIP project order.

The CIP, BER and Space Utilization Study provide MARAD and the USMMA with three powerful planning tools to help modernize campus infrastructure and to set a course for the future of USMMA facilities. Our goal is to ensure that USMMA facilities provide a safe and productive environment that enhances the quality of education for the Midshipmen, both now and in the future.

Establishment of USMMA CIP Senior Advisory Council and Working Group

In February 2012, then-Secretary LaHood established a USMMA CIP Senior Advisory Council to monitor progress on the current USMMA CIP projects. The Council comprised of the USMMA Superintendent; the DOT Assistant Secretary for Administration; the DOT Assistant Secretary for Budget and Programs and Chief Financial Officer; and the Maritime Administrator. The work of the Senior Advisory Council continues and is supported by the CIP Working Group, which brings together MARAD and USMMA staff, along with staff from the budget, legal and management offices in the Office of the Secretary, to regularly discuss and monitor the progress of USMMA CIP projects. An internal tracking system was developed for ongoing projects and the CIP Working Group meets monthly to review the status and current issues affecting all CIP projects.

The work of the USMMA CIP Senior Advisory Council and the CIP Working Group has helped to ensure that USMMA CIP projects remain on schedule and that any delays are minimal and reasonable.

CIP Five Year Plan Goals

The CIP five-year plan was established to make the Midshipmen educational experience more productive by providing improvements and enhancements to the facilities where Midshipmen learn, live, eat, and study. The positive impact of newly renovated buildings cannot be underestimated in evaluating USMMA performance measures for Midshipmen academic performance, retention, and recruitment.

Consistent with the recommendations of the Blue Ribbon Panel Report, the USMMA is taking a comprehensive approach to capital planning. As such, the sequential order for funding CIP projects was established to improve the quality of life for Midshipmen first, then to enhance academic services, and finally to bolster the support structure of campus administrative services.

The initial CIP focus in FY 2012 was the renovations of the dining facility and of all of the dormitories on campus. Delano Hall was completed in November 2014 and provides the Academy with updated food service facilities. New appliances, upgraded electrical wiring, and modern plumbing support a facility where safe food preparation and increased energy efficiencies have helped to promote the overall well-being of students and staff. This project was executed in a phased approach to allow for continued operation of the facility during renovation, and this method also resulted in significant cost savings.

To date, the USMMA has successfully completed the renovation of all six dormitories, also known as barracks. Contractors began renovation of the sixth and last dormitory, Cleveland Hall, in August 2013, and it was completed in October 2014. Safe and modern living accommodations are advantageous for Midshipmen studies. Modern barracks arrangements further serve to encourage potential students to consider an appointment to the USMMA for higher education. The renovation of USMMA's barracks should enable the Academy to meet all current and future Midshipmen housing needs in a safe, secure, and modern environment.

Another major milestone is the completion of Mallory Pier in April 2014. The Mallory Pier project replaced an unsafe and deteriorating pier, and allows berthing of training ships and other vessels used at the USMMA. The Mallory Pier replacement enhances the waterfront safety and provides a modern platform for instructional, competitive, and recreational Midshipmen waterfront activities.

As an adjunct to the barracks renovation project, the USMMA will renovate the Zero Deck. This is a 90,000 square foot area that is a below-grade, or at basement level, that interconnects all six barracks and Delano Hall. The architecture and engineering (A&E) design phase is underway for this project and will be followed by the construction phase.

The next CIP priorities are the academic areas including classrooms, laboratories, lecture halls and faculty spaces on campus. In order to meet its goal of educating the future leaders of the maritime industry, the USMMA requires updated and technologically advanced classrooms and lab spaces. Samuels Hall will be the first of four academic buildings to be renovated. The design will include the repurposing of Samuels Hall for use as computer simulator labs and Marine Transportation Department classroom and office space. The facility design will include full renovations and upgrades and will incorporate facility needs required by the academic department. The A&E design phase is scheduled for contract award in September 2015 following the completion of the Space Utilization Study which is expected to be completed in June 2015.

The third area of focus is the supporting non-academic structures on campus, including student services, warehouses, and staff spaces. Attention to these areas will improve student and staff safety and morale. In addition, there are various infrastructure projects needed to upgrade the most basic of campus services, such as water main, the sewer system, electrical grid and power supply. Modernization of these systems helps provide a safe environment and eliminates service disruptions to living accommodations and academic facilities, enabling Midshipmen to focus on regimental duties and studies. A modern suite of basic infrastructure services provides the foundation for any successful renovation plan and saves resources in the long run by reducing the need for emergency labor and material costs when a service disruption occurs.

To date, progress is also being achieved on these infrastructure improvements. Phases 1 and 2 of the water main replacement project are complete and Phase 3 is underway. The installation of the new 8-inch water main was completed in August 2012 and upgrade of the existing water vault was completed in January 2013. Phase 3 upgrades the water distribution system throughout the campus and is scheduled for completion in May 2015. Additionally, the survey phase of the electric grid upgrade project was completed in February 2013 and the design phase is scheduled for completion in 2015.

Section I

Capital Improvement Program (CIP)

Active Projects During April 1, 2014 – January 31, 2015

Description and Fund Status as of January 31, 2015

CIP PROJECT #1: CLEVELAND HALL RENOVATION

Status: The A&E design and a specifications study for Cleveland Hall were completed in May 2012 and the renovation was completed in 2014. The renovation of Cleveland Hall concludes the six dormitory renovations.

General Description: Cleveland Hall is one of six barracks (dormitories) located at the USMMA. These six barracks house the entire on-campus regiment of approximately 750 Midshipmen in single, double, or triple-bunked rooms. Cleveland Hall was built in 1942 and is the final building renovated in the USMMA dormitory renovation plan. The refurbishment of Cleveland Hall included replacement of the roof and parapet, upgrade of the mechanical room, installation of central heating and air conditioning systems, and replacement of the sanitary piping and fixtures. The outdated electrical service system was upgraded, modern fire alarm/suppression/sprinkler systems were installed and all corridor lighting was replaced. The flooring, ceiling and signage were improved and replaced. Interior spaces were modernized and exterior wall insulation was replaced.

Project Goals: The USMMA requires dormitory facilities that meet all safety and security requirements and provide Midshipmen with the best possible living environment necessary to be successful during the course of their education at the USMMA. This project included the installation of sprinkler systems, smoke detectors and carbon monoxide detectors for increased safety for the students.

Benefits Achieved: The Cleveland Hall dormitory renovation provides Midshipmen with a safe living environment as well as a modern facility. The renovated facility improves energy efficiency through the use of new technology and modern fixtures and promotes the overall well-being of the Midshipmen. This project completes the renovation of all six dormitories on campus and meets all current and future housing requirements for the Regiment.

Construction Contract Award Date: August 2013

Construction Start Date: August 2013

Completion Date: October 2014

Funding Status:

Project Budget: \$ 15,000,000

Project Obligations: \$ 12,608,148



Cleveland After



Cleveland Before

CIP PROJECT #2: DELANO HALL RENOVATION (DESIGN/CONSTRUCTION)

Status: The A&E design and a specifications study for the Delano Hall dining facility were completed in June 2012 and the construction renovation project was completed in 2014.

General Description: Delano Hall is the USMMA's dining facility and is the center of many Midshipman activities given its proximity to the barracks. It is a 50,000 square foot building, built in approximately 1942, that includes a food preparation center, a food storage center and a dining area for Midshipmen that serves more than 2,000 meals a day. Delano Hall has adequate space and is situated in a good location on campus, but suffered from outdated food preparation areas and storage equipment, ventilation issues, and electrical and plumbing infrastructure that required costly and frequent maintenance.



Delano After

Previous designs to upgrade Delano Hall relocated the food preparation and kitchen areas to the basement of the building, and repositioned the walk-in-storage areas currently in the basement to the main level at an initial estimate of \$23 million. This design would have interrupted the continuity of food service and would have required constructing a temporary dining area at a cost of \$2 million.

In light of the significant costs and after consultation with the food service officer and staff, the CIP team determined that a less complex and more efficient design would best address Delano Hall's needs.

CIP PROJECT #2: DELANO HALL RENOVATION (CONTINUED):

The new design focused on upgrading the facility and using the same general layout currently in place with an estimated budget of \$9 million. The project was completed at lower cost while keeping the dining facility open and available for use by the Midshipmen during the renovation.

Project Goals: Renovation of the galley included upgrades of all appliances, infrastructure, and finish work as well as ensuring new equipment was fully functional within current space requirements. Electrical and plumbing upgrades were included to support the modern facilities. This project was executed in a phased approach to allow for continued operation of the facility during renovation and also resulted in significant cost savings.

Benefits Achieved: The Delano Hall renovation increases energy efficiency, enhances safe food preparation and promotes the overall well-being of Midshipmen and staff.

Construction Contract Award Date: September 2012

Construction Start Date: November 2012

Completion Date: November 2014

Construction Funding Status:

Project Budget: \$ 9,000,000

Project Obligations: \$ 8,679,921



Delano After



Delano After



Delano Before

CIP PROJECT #3: SAMUELS HALL RENOVATION (DESIGN/CONSTRUCTION)

Status: Samuels Hall is the academic building that currently supports the Humanities/English Department. This is the first of four academic buildings to be renovated. The design will include the repurposing of Samuels Hall for use as computer simulator labs and Marine Transportation Department classroom and office space. The design will also include one side of the facility to house the Computer Aided Operations Research Facility (CAORF), which will accommodate the increased requirement for computer lab spaces. The design for Bowditch Hall has been removed from this project due to the increased scope for Samuels Hall and will be addressed at a later date. The estimated dates have changed due to a requirement for a new non-CIP funded project not on the five-year plan to be completed prior to renovating the academic facilities. This Space Utilization project was initiated due to USMMA leadership repurposing Samuels from a Humanities facility. The contract for the A&E design is expected to be awarded in September 2015 after the Academy Space Utilization Study is completed in June 2015.

General Description: Samuels Hall is the first of four academic buildings to be renovated in an effort to improve the academic environment on the USMMA campus. The A&E design phase will be comprised of a complete bid package for the facility. The package will include a complete set of drawings as well as a cost estimate, statement of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs required by the academic department. Additionally, the USMMA will repurpose Samuels Hall as a facility to house computer simulators and simulation equipment. The renovation will include the replacement of the roof and parapet and upgrade of the mechanical room. The heating and cooling systems, along with the electrical and plumbing services will also be modernized. All classrooms will receive improvements to technology capabilities and updated interior finish work, and throughout Samuels Hall the lighting, flooring, ceiling and furniture will be modernized and improved.

Project Goals: The design of the repurposing of Samuels Hall will accommodate computer simulator labs, which are a critical learning component essential to performing the USMMA's mission. Repurposing of the facility will include upgrades of all infrastructures and finish work as well as ensuring that new technology is incorporated. Electrical and plumbing upgrades will be included to support the modern facility.



Samuels Before



Samuels Before

CIP PROJECT #3: SAMUELS HALL RENOVATION (CONTINUED):

Benefits to be Achieved: The USMMA will provide the Regiment with an up to date academic facility that meets all fire and safety codes and houses state-of-the-art computer simulators. This will allow the Midshipmen to receive the best education available in a safe environment with a modernized facility comparable to civilian college campuses.

Design Estimated Contract Date:	June 2015
Construction Estimated Contract Date:	March 2016

Design Estimated Completion Date:	December 2015
Construction Estimated Completion Date:	March 2017

Design Funding Status:	
Project Budget:	\$ 1,000,000
Project Obligations:	\$ 0

Construction Funding Status:	
Project Budget:	\$ 6,000,000
Project Obligations:	\$ 0

CIP PROJECT #4: ELECTRIC GRID/POWER SUPPLY IMPROVEMENT (INVENTORY/DESIGN/CONSTRUCTION)

Status: This is a multi-phased project covering survey and inventory, design, replacement and construction of the USMMA electric grid and power supply improvements for all buildings on campus. The project was initially out for bid in FY 2014 to an 8A company. The government and the initial contractor could not agree on a fair and reasonable cost for the project which required the project to be rebid. However, it could not be rebid before the end of the fiscal year 2014. The project is now with procurement to reissue the Request for Proposals (RFP) with a projected award by September 2015.

General Description: The electric grid is a compilation of multiple electric components from various properties that have been acquired by the U.S. government since the founding of USMMA. The electrical equipment and wiring in some buildings is from the original 1943 construction. Melville Hall (student event center), some staff housing, and the museum building are all older than the rest of the USMMA's campus buildings, and yet they still utilize their original electrical equipment. As a result of the antiquated condition of the equipment and the high demand placed upon the current grid, frequent electrical outages occur. The existing electrical system and grid require an evaluation to determine the extent of deterioration and the need for replacement of worn components. The consolidated properties that make up the campus are presently serviced from multiple feeders and these main electric feeders have never been properly evaluated for balancing the load and providing redundancy. The transformers and switch gear, which are the main components of the electric distribution system, are in desperate need of replacement because they have far exceeded their original design life. The major underground electric distribution cables all need to be replaced, which may require extensive excavation and relocation of other underground utilities. The electric grid and power supply improvement project is a multi-phased project covering inventory, design, replacement, and construction.

Phase 1 of this project was the survey, inventory and mapping of the existing electric grid equipment and its locations. This phase solicited a design for upgrading the grid and ancillary equipment and to develop a valid estimate for construction so as to establish a baseline cost. The expectation was for more reasonable and accurate bids from contractors when measured against a baseline cost. Phase 1 was completed in February 2013.

Phase 2 of this project, which is in current pre-solicitation, is a design and specification phase to provide a plan for replacing outdated components and upgrading the grid as a whole. The estimated completion of Phase 2 is mid-2016. Phase 3 is the replacement and construction phase. The estimated completion date of Phase 3 is not yet determined and dependent on the results of Phase 2.

Project Goals: The project will provide a modern electrical grid and power supply across the Academy campus. This will replace antiquated electrical devices, eliminate potential for electrical failures and provide greater reliability of the electrical supply throughout the campus.

CIP PROJECT #4: ELECTRIC GRID/POWER SUPPLY IMPROVEMENTS (CONTINUED):

Benefits to be Achieved: The USMMA will have a modern electrical grid and electrical supply distribution system throughout the campus. This improvement will result in increased reliability of the electric service across the campus, improved energy efficiency and reduced utility costs. Midshipmen and staff also benefit by having a reliable, continuous supply of electric power for support systems. The project will increase the lifespan of the electric distribution systems and sensitive electronic equipment.



Electrical Before

Contract Award Date:	November 2012 for Survey (Phase 1) September 2015 for Design (Phase 2)
Start Date:	December 2012 for Survey (Phase 1) October 2015 for Design (Phase 2)
Completion Date:	February 2013 for Survey (Phase 1)
Estimated Completion Date:	April 2016 for Design (Phase 2) TBD for Replacement/Construction (Phase 3)
Funding Status:	
Project Budget:	\$ 6,800,000 ¹
Project Obligations:	\$ 62,110 (Phase 1)

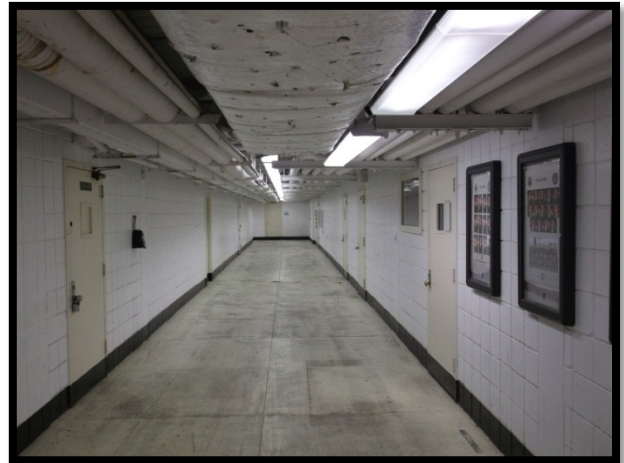
¹ The project budget amount of \$6.8 million is the total CIP funds. Facilities, Maintenance, Repair and Equipment funds of \$2 million are also allocated to the project. The total project amount is \$8.8 million.

CIP PROJECT #5: ZERO DECK (DESIGN/CONSTRUCTION)

Status: The design process is currently in progress with expected completion in the Spring of 2015. Construction will begin immediately following the completion of the design. The estimated dates have changed due to delays in receiving additional CIP funding.

General Description: Zero Deck is an approximately 90,000 square foot below-grade basement level that interconnects all six USMMA barracks and Delano Hall. These are highly trafficked areas, particularly in poor weather conditions, as the hallways allow for Midshipmen and staff to travel across a large portion of campus and remain indoors. Zero Deck also contains a number of support offices, including the Post Office and mail room, Navy Exchange store, credit union and sports equipment storage. The A&E design will include a plan for the reconfiguration and renovation of the basement area of each of the barracks. The renovation will provide upgrades to the major mechanical rooms and installation of modern heating and cooling systems where necessary. Additionally, sanitary piping will be replaced throughout and electrical service, fire alarm suppression and sprinklers will be upgraded. This upgrade will include all corridor lighting, flooring, ceiling, signage and interior finish work (lighting fixtures, furniture, and all office/club/storage spaces where necessary).

Project Goals: Zero Deck will continue to provide Midshipmen and staff with an avenue for traversing the entire below-grade level (basement) of all six barracks and Delano Hall in a safe and secure environment, especially in the event of inclement weather. Zero Deck is intended as a facility which will meet all Midshipmen personal services needs along with providing the recreation and music activity rooms. Renovation of Zero Deck will enhance the collegiate experience for Midshipmen, create a viable safe shelter and attract the attention of possible students, much in the same way that the renovated barracks do.



Zero Deck Before



Zero Deck Before

CIP PROJECT #5: ZERO DECK (CONTINUED):

Benefits to be Achieved: The Zero Deck renovation will provide updated facilities and infrastructure to enhance the safety and overall well-being of the Midshipmen. The renovation will also provide energy efficiency through the use of new technology and modern fixtures.

Design Contract Award Date: June 2014

Construction Estimated Contract Date: June 2015

Design Start Date: October 2014

Construction Estimated Start Date: July 2015

Design Estimated Completion Date: April 2015

Construction Estimated Completion Date: July 2016

Design Funding Status:

Project Budget: \$ 600,000

Project Obligation: \$ 495,000

Construction Funding Status:

Project Budget: \$ 8,000,000²

Project Obligation: \$ 0

² The construction project budget of \$8 million includes \$5 million of FY 2014 Capital Improvement Funds. The remaining \$3 million was allocated from other projects and prior year funds.

CIP PROJECT #6: CROWNINSHIELD PIER (DESIGN/CONSTRUCTION)

Status: The USMMA considered three different styles of breakwaters (pile and wave screen, steel sheet pile bulkhead and a stone jetty) to replace Crowninshield Pier. Surveys, design narratives and cost estimates for each breakwater option were completed, with costs for construction ranging from \$1.3 million to \$4.8 million. The \$1.3 million option, a pile and wave screen, was chosen to continue with the preliminary permitting process. This cost estimate does not include demolition of the existing pier, detailed design for the pile and wave screen, or any directed actions as a result of the permitting process. The estimated total cost of the project is \$3 million. The RFP for this project was issued in FY2014 but there were no responsive bidders and a contract was unable to be completed prior to the end of the fiscal year. The project is now with procurement to reissue the RFP. A pre-solicitation (in accordance with the Brooks Act) was issued as a small business set aside for qualified A&E firms.



Crowninshield Before

General Description: The southern boundary of Hague Basin is enclosed by Crowninshield Pier, which is a 355-foot long, two-level timber structure with a roof covering for storage of life boats and work area for the waterfront. The entire understructure is compromised and requires replacement due to severe deterioration with many of the piles splintering. The pier itself is not utilized by the waterfront and the most efficient means of protecting the boat basin is a breakwater.



Crowninshield Before

Project Goals: The pier will be replaced with a breakwater with floating docks for small vessels which will better meet the needs of the Midshipmen and waterfront programs.

Benefits to be Achieved: The project will enable the USMMA to demolish a severely deteriorated and potentially hazardous structure and replace it with a structurally sound and safe breakwater with floating piers. This cost-effective approach will also better meet the needs of waterfront personnel for instructing Midshipmen.

CIP PROJECT #6: CROWNINSHIELD PIER (CONTINUED):

Design Estimated Contract Award Date:	July 2015
Construction Contract Award Date:	TBD
Design Estimated Start Date:	August 2015
Construction Start Date:	TBD
Design Estimated Completion Date:	December 2015
Construction Estimated Completion Date:	TBD
Funding Status:	
Project Budget:	\$ 3,000,000
Project Obligations:	\$ 48,001 ³



³ Obligation amount includes permitting that has begun and the costs associated with the process of conceptual design to address the permit requirements.

CIP PROJECT #7: WATER MAIN REPLACEMENT (DESIGN/CONSTRUCTION)

Status: Phase 3 of this project includes modernization of the USMMA's individual water distribution lines as well as installation of water meters throughout the USMMA to accurately track water usage. Currently, the contractor is reviewing information from Phases 1 and 2 and began testing the integrity of questionable water distribution lines in March 2015. The main water line to the campus was increased in diameter during Phase 1 and the vault where the water line enters the campus was improved with new valves in Phase 2. These changes would influence the course of action for Phase 3.

In Phases 1 and 2, the USMMA, with the assistance of the Great Neck Water Authority, increased the size of the water main feeding the campus. This new installation met all compliance requirements set forth by the Water Authority. The water vault and meter were also upgraded to provide the USMMA with increased pressure and flow throughout the distribution system. The estimated completion date of March 2015 for Phase 3B was changed to May 2015 due to funding being made available later than expected and delays in procuring a contractor.

General Description: The USMMA water main, vault and meters are outdated and undersized for the current and projected water demands on the system, including the fire suppression systems. This project corrects these issues by replacing the existing undersized 4-inch water main with a larger 8-inch main and upgrading the water vault. These improvements increase overall water pressure across the campus and correct water distribution and capacity problems caused by the limitations of the old water supply system.

Phase 1 of this project included the upgrade of the water main running underneath Steamboat Road. The new 8-inch water main installed by the Great Neck Water Authority was completed in August 2012.



Existing Water Main

Phase 2 of this project was completed by the USMMA and included the upgrade of the existing water vault. Previously, the larger water main entering the smaller vault caused the water to be restricted before it continued onto the distribution system. This severely limited the flow and pressure of the water and prevented adequate water distribution for the entire campus. This phase was completed in January 2013.

Phase 3 of this project is the upgrade of the water distribution system throughout the campus and consists of two distinct parts. Phase 3A measured the water pressure and volume throughout the campus to determine what changes the work completed during Phases 1 and 2 actually achieved. Phase 3A was completed in March 2013. Phase 3B is the installation of new water distribution piping throughout the campus to the buildings, structures and hydrants that require additional water pressure or volume as determined from Phase 3A. The current estimated construction cost for Phase 3B installation of the new water distribution system throughout the campus is \$760,000. This will maximize water flow to buildings and fire hydrants throughout the campus and is estimated to be completed by May 2015.

CIP PROJECT #7: WATER MAIN REPLACEMENT (CONTINUED):

Project Goals: To ensure that the USMMA has adequate water flow and pressure for all facilities and fire suppression systems throughout the campus. Increasing the water main from an undersized 4-inch main to an 8-inch main will allow the flow and water pressure to meet or exceed the minimum requirements.

Benefits to be Achieved: The water main upgrade will enhance safety and promote the overall well-being of Midshipmen and staff by ensuring all facilities have adequate water pressure and flow to all fire suppression systems throughout the campus.

Contract Award Date:	December 2011 for Water Main Design (Phase 1) June 2012 for Water Main Construction (Phase 1) September 2012 for Water Vault Construction (Phase 2) January 2013 for Distribution System Testing (Phase 3A) September 2014 for Water System Upgrade (Phase 3B)
Construction Start Date:	June 2012 for Water Main (Phase 1) September 2012 for Water Vault (Phase 2) February 2013 for Distribution System Testing (Phase 3A) October 2014 for Water System Upgrade (Phase 3B)
Completion Date:	August 2012 for Water Main (Phase 1 - \$143,554) January 2013 for Water Vault (Phase 2 - \$421,378) March 2013 for Distribution System Testing (Phase 3A - \$42,900)

Estimated Completion Date: May 2015 for Water System Upgrade (Phase 3B - \$538,418)

Funding Status:	
Project Budget:	\$ 1,500,000
Project Obligations:	\$ 1,146,250

CIP PROJECT #8: SAFETY ISSUES BARRACKS/FACILITIES

Status: The USMMA continues to identify and prioritize safety concerns that can be resolved with CIP funding. The Safety and Environmental Protection Office is continually assessing the condition of facilities and evaluating the BER with the goal of rectifying any safety concerns.

The most recent project completed was the installation of hard-wired carbon monoxide/smoke detectors in each dormitory room of the four older barracks. A Honeywell Building Integrator was installed to support the new combination carbon monoxide/smoke detection system. Existing main fire alarm panels in the dormitories were replaced and integrated with individual updated detectors in each room. Additionally, the entire system was interconnected to the updated 24 hour monitoring system at the Security Office station and the local police and fire department. A project delay occurred due to Honeywell's review and analysis of the compatibility of software to the existing wiring and systems and the need for Honeywell's engineers to devise a compatible plan. This part of the project was completed in August 2014. Work has begun on the Security Office's system to upgrade the Excel Building Supervisor Integrated (XBSi) to Enterprise Building Integrator (EBI) Fire Alarm system platform and Frame Alignment Signal (FAS) Network Synchronization.

General Description: These funds are intended to address safety issues when identified in the barracks and other USMMA facilities.

Project Goals: The goal of this project is to ensure the safety of the Midshipmen, faculty and staff in the barracks, academic buildings and administrative facilities. The funds available through this project can be used to address emergent safety concerns. Other less urgent safety issues will be incorporated into future CIP projects.

Benefits to be Achieved: This project will be enhance the safety of Midshipmen, faculty and staff who use USMMA facilities, either through the immediate correction of existing safety deficiencies or through investment in improved safety technologies and equipment. This project is intended to address immediate or urgent issues that are critical to Midshipmen, faculty and staff and can be classified as a capital improvement of the facility, building or structure.

Contract Award Date: September 2013

Construction Start Date: December 2013

Estimated Completion Date: August 2015

Funding Status:	Project Budget:	\$ 968,821
	Project Obligations:	\$ 481,870

CIP PROJECT #9: SEAWALL REPLACEMENT

Status: This project has been recently reinitiated after being deferred by USMMA leadership to consider investment in an alternate capital project. This is the first of four sections of the seawall replacement. The first section to be replaced will be the concrete or specialized mortar section because this is currently in the worst condition. An assessment will be completed to determine the section of wall to be replaced following new guidance from Executive Order 13690. Investigation on the impact of additional permitting requirements caused by the new Executive Order is underway.

General Description: The seawall provides protection for the USMMA waterfront and campus from the tides and waves from the Long Island Sound. The seawall is comprised of four different types of material sections. These sections are a (1) gunite-coated (specialized mortar) section, (2) a stone section, (3) a steel sheet Z-pile shaped section, and (4) a wood fencing section totaling approximately 3,000 feet. All four sections are in various states of deterioration with some minor repairs having occurred in the past. This project will replace the most severely damaged sections of seawall. The first section to be replaced will be the concrete or specialized mortar section because this is currently in the worst condition. The portions of the wall selected for the second, third, and fourth sections will depend on the condition of each type of wall and the type in the worst condition will be chosen. An assessment will be made to determine the most severely damaged section as well as the most cost-effective section to replace. The project as a whole is planned as a phased approach, until the entirety of the wall is stable and replaced. The second section is planned for FY 2017 with the remaining sections to be determined.

Project Goals: The goal of the project is to restore the seawall to full structural integrity. This will be done in a phased approach, with the most critically deteriorated areas replaced first and less critically deteriorated areas patched as necessary until those areas can be scheduled for full replacement.

Benefits to be Achieved: The project will prevent waterside erosion of campus property. Seawall replacement will provide the campus with required protection from the tidal and wave forces. The first section to be replaced will be the concrete or specialized mortar section because this is currently in the worst condition.

Contract Award Date: March 2016

Construction Start Date: April 2016

Estimated Completion Date: July 2016

Funding Status:

Project Budget: \$ 500,000

Project Obligations: \$ 0



Seawall Before

CIP PROJECT #10: GRENWOLDE LOOP PROJECT

Status: The Great Neck Water Pollution Control District (GNWPCD) has requested that the USMMA initiate a project to stop USMMA sanitary sewage from flowing off campus to its sewage treatment plant and to block off non-Academy sanitary sewage from flowing through the USMMA sewage pumping station. The procurement for a topographical survey of the existing lines is currently underway. The outcome of this survey will determine the available options to redirect sewage flow on campus. The estimated dates have been changed following several meetings with the GNWPCD, which is required to take the additional customer's waste disposal after this project is completed. The GNWPCD was required to develop a plan for disposing of the additional waste. Their funding is now in place, enabling the USMMA to proceed with this joint project.

General Description: An estimated 11 private residences discharge their sanitary sewage through the USMMA sewage plant en route to disposal at the GNWPCD treatment plant. The pipes from these houses discharge their sanitary sewage directly into the U.S. Government owned sewage pumping station. An estimated five USMMA structures bypass the campus sewage system and discharge sanitary sewage into a commercial waste facility via pipes that direct the sewage off campus. This situation is a vestige of the USMMA being built in the 1940s from a consolidation of various separate properties located in a residential neighborhood.

Project Goals: The goal is to have all campus structures divert sewage to the USMMA pumping facility and to have all off campus structures divert sewage to the GNWPCD.

Benefits to be Achieved: The cost of treating sanitary effluent from off campus houses will no longer be billed to the U.S. Government. All sanitary discharge from the USMMA pumping station will have come from U.S. Government activities and associated costs will be properly attributable to the taxpayer. The local utility will be able to bill off-campus homeowners directly for the use of their services.

Contract Estimated Award Date: March 2015

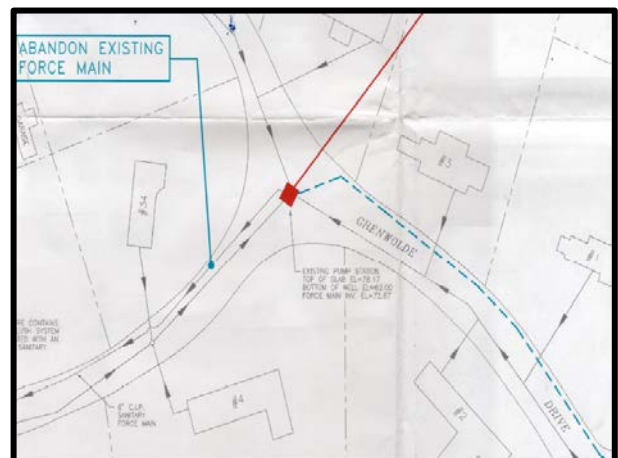
Construction Estimated Start Date: July 2015

Estimated Completion Date: October 2015

Funding Status:

Project Budget: \$ 350,000

Project Obligations: \$ 0



Grenwolde Loop Infrastructure

CIP PROJECT #11: MUSEUM RESTROOMS

Status: The project has been awarded and is in the design phase. The contractor is developing a design for the restrooms in order to update them to the Americans with Disabilities Act (ADA) standards while minimizing the impact on the surrounding architecture. The original budget funded the renovation and modification of the first floor restroom to make it ADA compliant. The project currently includes funding for renovation of three additional restrooms within the existing space to prevent potential plumbing failures that may damage historical artifacts. Once the design is completed, the design plans will need to be forwarded to the State Historical Preservation Office for evaluation, as the museum is listed on the National Historic Register.

General Description: The American Merchant Marine Museum serves as a repository for the USMMA's extensive and valuable collection of marine art, ship models and nautical artifacts. It is intended to educate and inform visitors (both the Regiment and the public) about the American Merchant Marine and promote public interest in, and understanding of, the nation's maritime service. The museum is housed in an original 1910 Arts & Crafts building built by electrical engineer and inventor William S. Barstow. While previous repairs and renovations have been completed in some parts of the museum, this project is part of a larger ongoing renovation of this historic building. The museum restrooms, which currently remain in their original footprint, finishes, and fixtures will be completely upgraded with modern piping, fixtures, lighting, flooring and partitions that will (in most cases) remain true to the period of the house. The first floor main restroom will be ADA compliant and provide adequate services for all visitors.

Project Goals: The first floor restroom will be renovated to meet ADA standards since the museum is frequently visited by the public. There are approximately 12,000 visitors per year to the museum, comprised of approximately 6,500 visitors and 5,500 from USMMA student classes, external class field trips, and events. The renovations will provide new plumbing to replace equipment and infrastructure that are currently beyond useful life. Upgraded piping and fixtures will also ensure the safety of the items housed within the museum.

Benefits to be Achieved: The museum restroom renovation will update the current restrooms and allow appropriate ADA-compliant access. It will also help ensure the safety of the items housed within the museum from water damage.

Contract Award Date:	June 2014
Construction Estimated Start Date:	April 2015
Estimated Completion Date:	December 2015
Funding Status:	
Project Budget:	\$ 300,000
Project Obligations:	\$ 207,475



Museum Restroom

CIP PROJECT #12: ROAD AND SIDEWALK REPLACEMENT (CONSTRUCTION)

Status: An initial assessment to identify unsafe and hazardous sidewalk, curb and road conditions has been completed. Several water catch basins have collapsed or heaved, causing significant safety issues. A statement of work and an independent government cost estimate were developed to address replacement of these catch basins. Bids received that significantly exceeded the independent government cost estimate (GCE) and adverse weather conditions caused delays in the project award. The project has been resubmitted to procurement for action and rebidding. Further review of the road and sidewalk conditions and deterioration will be completed this spring and used to identify the next phase of this project.

General Description: Existing asphalt roadways and concrete sidewalks throughout the campus have deteriorated and in some instances present safety issues. Many of the roads and sidewalks throughout the USMMA have reached the end of their useful life and are in need of replacement. Existing safety issues include catch basins deterioration, cracked sidewalks and broken curbs and pitted asphalt roads that require replacement. These problems are caused by age and harsh winter conditions, and USMMA roads and sidewalks are good candidates for a phased replacement program.

Project Goals: This project will replace deteriorating roadways, curbs and sidewalks. The initial focus of the project is on the most severely deteriorated paved areas.

Benefits to be Achieved: Replacement of roads, pathways, curbs and sidewalks improves safety for both pedestrians and vehicles and adds to the overall aesthetic appearance of the campus.

Contract Award Date: TBD

Construction Start Date: TBD

Estimated Completion Date: TBD

Funding Status:

Project Budget: \$ 129,497

Project Obligations: \$ 0



Roads and Sidewalks Before



Roads and Sidewalks Before

CIP PROJECT # 13: BOWDITCH HALL RENOVATION

Status: Bowditch Hall is the academic building that currently houses the Marine Transportation Department. This will be the second of four academic buildings to be renovated. The design will include the repurposing of Bowditch Hall for use as new offices, classrooms and laboratories for the Math and Science Department. The contract for the A&E design is expected to be awarded in September 2015 after the Academy Space Utilization Study is completed in June 2015.

General Description: Bowditch Hall is the second of four academic buildings that will be renovated to improve the academic environment on the USMMA campus. The A&E design phase will be comprised of a complete bid package for the facility. The package will include a complete set of drawings as well as a cost estimate, statement of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs required by the academic department. Additionally, the USMMA will repurpose Bowditch Hall as a facility to house the Math and Science Department. The renovation will include the replacement of roof and parapet and upgrade of the mechanical room. The heating and cooling systems, along with the electrical and plumbing services will also be modernized. All classrooms will receive improvements to technological capabilities and updated interior finishes, and throughout Bowditch Hall the lighting, flooring, ceiling, and furniture will be modernized and improved.

Project Goals: Bowditch Hall will be repurposed into new office, classroom, and laboratory space for the Math and Science Department. Repurposing of the facility will include upgrades of all infrastructure and finish work as well as ensuring new technology is incorporated. Electrical and plumbing upgrades will be included to support the modern facility.



Bowditch Before

Benefit to be Achieved: Bowditch Hall will be a modern academic facility meeting all fire and safety codes. This will allow Midshipmen to receive the best education available in a safe modern facility comparable with civilian college campuses.

Design Estimated Contract Award Date: September 2015
Construction Estimated Contract Date: June 2016

Design Estimated Completion Date: March 2016
Construction Estimated Completion Date: June 2017

Design Funding Status:
Project Budget: \$ 1,000,000⁴
Project Obligations: \$ 0

CIP PROJECT # 13: BOWDITCH HALL RENOVATION (CONTINUED):

Construction Funding Status:

Project Budget: \$ 13,000,000⁴

Project Obligations: \$ 0



Bowditch Before

⁴ The construction project budget of \$13 million includes \$12 million of FY 2015 Capital Improvement Funds. The remaining \$1 million for construction and \$1 million for design will be offset with cost savings from other projects and prior year funds.

CIP PROJECT #14: SEWER PUMPING STATION

Status: The project is currently under construction and includes demolition of the existing generator (completed), installation of new conduits to a modern outdoor electrical enclosure, refurbishment or replacement of existing pumps, restoration of the exhaust system with new fans, and installation of a new generator. Additionally, the pump station interior will be repaired to ensure a minimal amount of effluent intrusion and that the pump station performs as designed.

General Description: The sewer pumping station is the main point of connection for all wastewater removal for the USMMA. This is connected to the Great Neck Water Pollution Control Districts (GNWPD) wastewater line as a force main. The station is currently housed in a small, one story building situated over a pit for waste removal. The most recent rehabilitation of the station was completed in 1987. Since then, it has seen a steady decline in upkeep and it is currently not working to design specifications.



Sewer Pumping Station Before

Project Goals: Rehabilitation and repair of the sewer pumping station will be completed, to include plumbing fixtures, electrical components and interior renovation. The pumping station will operate as intended originally, with pumps activating in a staged process. Currently, only one pump activates regardless of sewage and wastewater flow.

Benefits to be Achieved: There are three pumps to eject the sewage and currently only one operates. The renovation will result in all three pumps functioning. They will activate sequentially each time there is a call to eject sewage which would result in an improved maintenance situation. A single pump could be taken offline for repair and pumps should require less frequent servicing. Benefits include efficient and unabated removal of USMMA sewage and wastewater from campus and sewage equipment that works to design specifications.



Sewer Pumping Station Before

Contract Award Date: September 2014

Construction Start Date: December 2014

Estimated Completion Date: June 2015

Funding Status:

Project Budget: \$ 500,000

Project Obligations: \$ 447,235

Section II: Active Capital Improvement Program (CIP) Projects
Active Projects During April 1, 2014 – January 31, 2015
Fund Status as of January 31, 2015 (\$000)

Project	Original Project Budget	Project Budget Reported 2014	Project Budget Reported 2015	Change from FY 2015 Project Budget	Project Obligation	Estimated Completion Date
1. Cleveland Hall Renovation	15,000	15,000	15,000	0	12,608	October 2014 Completed
2. Delano Hall Renovation	23,000	9,000	9,000	0	8,680	November 2014 Completed
3A. Samuels Hall Design	1,000	1,000	1,000	0	0	December 2015
3B. Samuels Hall Renovation	6,000	6,000	6,000	0	0	March 2017
4. Electric Grid/Power Supply Improvement	4,000	6,800	6,800 ¹	0	62	Phase 1 Completed Feb 2013 Phase 2 Nov 2015 Phase 3 – TBD
5A. Zero Deck Design	300	600	600	0	495	April 2015
5B. Zero Deck Construction	8,000	8,000	8,000 ²	0	0	July 2016
6. Crowninshield Pier	1,500	3,000	3,000	0	48	TBD
7. Water Main Replacement	700	1,500	1,500	0	1,146	Phase 1,2,3A Completed Phase 3B May 2015
8. Safety Issues Barracks/Facilities	2,000	969	969	0	482	August 2015
9. Seawall Replacement	500	500	500	0	0	Phase 1 July 2016
10. Grenwolde Loop Project	350	350	350	0	0	October 2015
11. Museum Restrooms	150	300	300	0	207	December 2015
12. Road and Sidewalk Replacement	129	129	129	0	0	June 2015
13A. Bowditch Hall Design	1,000	0	1,000 ³	0	0	March 2016
13B. Bowditch Hall Construction	13,000	0	13,000 ³	12,000	0	June 2017
14. Sewer Pump Replacement	500	0	500	500	447	June 2015
Totals	\$77,129	\$53,148	67,648	\$12,500	\$24,175	

¹ The project budget amount of \$6.8 million is the total CIP funds. Facilities, Maintenance, Repair and Equipment funds of \$2 million are also allocated to the project. The total project amount is \$8.8 million.

² The construction project budget of \$8 million includes \$5 million of FY 2014 Capital Improvement Funds. The remaining \$3 million was allocated from other projects and prior year funds.

³ The construction project budget of \$13 million includes \$12 million of FY 2015 Capital Improvement Funds. The remaining \$1 million for construction and \$1 million for design will be offset with cost savings from other projects and prior year funds.

Section III:

Completed Capital Improvement Program (CIP) Projects February 1, 2014 – January 31, 2015

Project	Description	Completed Project Amount (\$000)
Cleveland Hall Renovation	Renovation of Cleveland Hall dormitory was completed in October 2014 on schedule and within budget. Cleveland Hall is the final barracks to be renovated. The renovation included installation of a new geothermal loop system and HVAC in every dorm room, new electrical and plumbing and new finishes throughout the building.	12,608
Delano Hall Renovation	Renovation of Delano Hall was completed in November 2014 within budget. The renovation included relocation of equipment for improved flow, new kitchen equipment, new finishes, new hood/duct system with integrated fire suppression as well as a new loading dock and trash area.	8,680
Mallory Pier – Construction	Construction of Mallory Pier was completed in April 2014. The original pier was replaced with a new concrete pier including new electrical and mechanical utilities, such as sewage system, potable water, lighting, and electrical facilities. The replacement will enhance safety and provide a modern platform for instructional, competitive, and recreational waterfront activities for the Midshipmen. Project budget amount totaled \$13,180,000 and the project was completed for \$13,102,000.	13,102
Water Main Replacement Phase 1 - Water Main Phase 2 - Water Vault Phase 3A - Distribution System Testing	The undersized water main for the USMMA was replaced in conjunction with the Great Neck Water Authority. Further, the USMMA replaced the vault where the main transitions to the distribution system for the campus. Finally, testing throughout the USMMA for the distribution system was completed in and the information gathered is being utilized for distribution system upgrades across the USMMA. Completion Dates: August 2012 for Water Main (Phase 1) January 2013 for Water Vault (Phase 2) March 2013 for Distribution System Testing (Phase 3A)	1,146
Electrical Grid/Power Supply Improvements Phase 1 - Survey	An extensive survey was completed in February 2013 USMMA wide in order to allow for a design to be properly solicited to address the existing conditions, develop a valid estimate for construction, and to solicit more reasonable and accurate bids from construction contractors.	62
TOTAL		\$35,598

Section IV: Capital Improvement Program Appropriation History

(\$000)

Fiscal Year	Funded ¹
2001	13,000
2002	13,000
2003	12,855
2004	13,419
2005	13,033
2006	14,850
2007	14,850
2008	14,139
2009	8,150
2010	15,000
2011	14,970
2012	17,000
2013	16,111
2014	12,000
2015	12,000
GRAND TOTAL	\$204,377

¹ Funded amount reflects the total after rescission

Section V: Five-Year Capital Improvement Program Projects Plan

FY 2016 – FY 2020

The following lists all major projects identified for fiscal years 2016 through 2020. All requests for funding for the projects listed in FY 2016 and beyond must be included in the President's Budget proposal and require enacted appropriations. Additionally, projects in FY 2016 and later may be reevaluated based upon available information as well as the findings in the Space Utilization Study.

FY 2016 Major CIP Projects Planned (\$20.0M)

Gibbs and Melville Halls Architecture and Engineering Design (\$3 million): Gibbs Hall is the third of four academic halls scheduled for modernization and renovation. Gibbs Hall will be repurposed from Math and Science Department offices, classrooms, and laboratories into offices and classrooms for Humanities Department. This design will incorporate input from the Humanities Department faculty in order to ensure that their needs are fully addressed and the key requirements are considered before final design is complete. The design will include a complete set of drawings, cost estimates, statements of work and specifications. This facilities design will include full renovation and upgrades. Melville Hall is a former visiting officer's quarters (condemned due to fire code violations) and community club (student event center). Renovation is intended to restore the visitor's quarters to full service to accommodate visitors from MARAD/DOT and VIPs. Included in the renovation will be restoration of the ground floor kitchen, large dining room, sitting room, and beverage area as well as the entire basement supporting infrastructure. The restored Melville Hall will provide facilities that Land Hall and Delano Hall cannot; a formal dining area for Midshipmen to celebrate holidays, hold sponsor dinners, conduct meetings and visiting lecture series. In addition, Melville Hall will serve the staff and faculty by providing a place for conferences, department social activities and special lunches/dinners. These activities promote camaraderie and support Midshipmen and employee morale.

Gibbs Hall Renovation – Construction (\$15 million): Upgrades throughout the building will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the heating and air conditioning systems, complete interior and exterior painting, and upgrading the classroom technology systems. Additionally, the complete renovation of the classroom sections of the building will provide new flooring, ceiling replacement and exterior paint. The chillers will also be replaced with corrosion controlled units to prevent salt air deterioration. The electrical system will be upgraded to include enough power for the loads of an academic building with more technology in use. All interior finish work, lighting and furniture will be modernized and replaced.

Fulton Hall Architecture and Engineering (\$2 million): Fulton Hall is the main hall for the Department of Marine Engineering and the final of four academic buildings to be restored as part of the academic renovation plan. This design will incorporate feedback from the Engineering Department to help determine the needs and requirements of the classrooms, laboratories, offices and simulator spaces. The final design will include a full set of drawings, cost estimates, statements of work and other required specifications.

FY 2017 Major CIP Projects Planned (\$18.65M)

Melville Hall Renovation – Construction (\$4 million): Upgrades will bring the building into compliance with all fire, environmental and building codes and improve domestic water piping, the steam heating system, drainage systems, electrical systems and heating, ventilation and air conditioning (HVAC) systems. The second floor requires an electrical upgrade with new lighting, switching controls and new electrical devices. The existing walls, moldings and doors will be replaced and modified, new electronic locking systems will be installed and carpet, window treatments and wall finishes will be installed in order to create a modern four room lodging facility. Renovation of the kitchen and basement areas will be in line with that necessary to perform catering and restaurant functions, with all new commercial kitchen appliances and supporting infrastructure to include upgraded electrical capacity, new potable water and drainage piping, and improved exhaust systems. The basement area will also require refurbishment of food storage areas. Additional first floor renovations will include modernization of the building manager's office, living room and beverage area, as well as replacement of all interior finish work, lighting and furniture in those areas and the dining room.

Fulton Hall Renovation- Construction (\$13 million): Fulton Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the HVAC system, complete interior and exterior painting, and upgrading the classroom technology systems. Additionally, the complete renovation of the classroom sections of the building will provide new flooring, ceiling replacement and exterior paint. The electrical system will be upgraded to include enough power for the loads of an academic building with more technology in use. All interior finish work, lighting and furniture will be modernized and replaced.

Road/Sidewalk Replacement (\$150,000): Existing asphalt roadways and concrete sidewalks throughout the campus have deteriorated and have reached the end of their useful life. They are good candidates for a phased replacement program and in some instances present safety issues. This project will replace the areas with the most deteriorated or degraded condition.

Seawall Repairs (\$500,000): These funds continue the phased approach to restoring the seawall as part of the ongoing effort to improve the USMMA physical plant. With these funds the next section will be replaced according to Executive Order 13690 while deteriorating areas needing preventive maintenance attention will continue to be restored in order to avoid further deterioration.

Fitch Hall Architectural and Engineering (\$1 million): Fitch Hall houses several administrative offices, mechanical and storage spaces, and serves as a central receiving facility for the entire campus. From here all deliveries are received, sorted, and sent out to the designated building or office of the 42 buildings on campus. This design will upgrade the delivery receiving area and renovate the office and administrative spaces. It will include a complete bid package, and will comprise a complete set of drawings, cost estimates, statements of work, and other specifications.

FY 2018 Major CIP Projects Planned (\$12.0M)

Fitch Hall Renovation- Construction (\$10 million): Fitch Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the HVAC systems, complete interior and exterior painting, reconfiguration of administrative spaces, and modernization of the campus central warehousing facility. Additionally, the complete renovation of the administrative sections of the building will provide new flooring, ceiling replacement and paint. The electrical system will be upgraded to include enough power for the loads of the new space assignments. All interior finish work, lighting and furniture will be modernized and replaced.

Patten Hall Renovation Architectural and Engineering Designs (\$1.5 million): Patton Hall is the Midshipman health clinic. The A&E design will comprise a complete bid package for the facility. The package will include a complete set of drawings for the building as well as cost estimates, statements of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs as indicated by the specific requirements for Midshipman health services, the Joint Commission. and the facility director.

Wastewater Infrastructure Study (\$500,000): The wastewater system that services the USMMA campus is a compilation of multiple systems. Although the current condition of the wastewater system is adequate, it is old and the equipment and piping may not be compatible with updates made to other environmental systems on campus. This design will allow the USMMA to proceed with an upgrade to the system that will allow all current guidelines to be followed. This will also provide the USMMA with a clear path for the use of newer technology that will help improve the wastewater infrastructure system. Additionally, this will enable the USMMA to determine and construct, under current standards, the correct sizes for all of the infrastructure and equipment throughout the wastewater system.

FY 2019 Major CIP Projects Planned (\$14.5M)

Patten Hall Renovation- Construction (\$11 million): Patton Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the HVAC systems, complete interior and exterior painting, reconfiguration of administrative spaces and modernization of the health services areas in accordance with current health standards and requirements. Additionally, the complete renovation of the administrative sections of the building will provide new flooring, ceiling replacement and paint. The electrical system will be upgraded to include enough power for the loads of the new space assignments. All interior finish work, lighting and furniture will be modernized and replaced.

Furuseth Hall Renovation Architectural and Engineering Designs (\$1.5 million): Furuseth Hall is the main USMMA administration building. The A&E design will comprise a complete bid package for the facility. The package will include a complete set of drawings for the building as well as cost estimates, statements of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs as indicated by the specific requirements for each individual area located within the facility.

Wastewater Infrastructure Upgrade (\$2 million): The wastewater system that services the USMMA campus is a compilation of multiple systems. Although the current condition of the

wastewater system is adequate, it is old and the equipment and piping may not be compatible with updates made to other environmental systems on campus. This upgrade will allow the USMMA to improve upon the current system and replace some of the components have reached the end of their life cycle.

FY 2020 Major CIP Projects Planned (\$13.5M)

Furusetth Hall Renovation- Construction (\$12 million): Furusetth Hall upgrades will improve the fire protection system including installation of a new sprinkler and standpipe system, replacement of the HVAC systems, complete interior and exterior painting, reconfiguration of administrative spaces, and modernization of the building systems current standards and requirements. Additionally, the complete renovation of the administrative sections of the building will provide new flooring, ceiling replacement and paint. The electrical system will be upgraded to include enough power for the loads of the new space assignments. All interior finish work, lighting and furniture will be modernized and replaced.

O'Hara Hall Architectural and Engineering Designs (\$1.5 million): O'Hara Hall is the main USMMA athletics building. The A&E design will comprise a complete bid package for the facility. The package will include a complete set of drawings for the building as well as cost estimates, statements of work and specifications. The facility design will include full renovations and upgrades and will incorporate facility needs as indicated by the specific requirements for each individual area located within the facility.