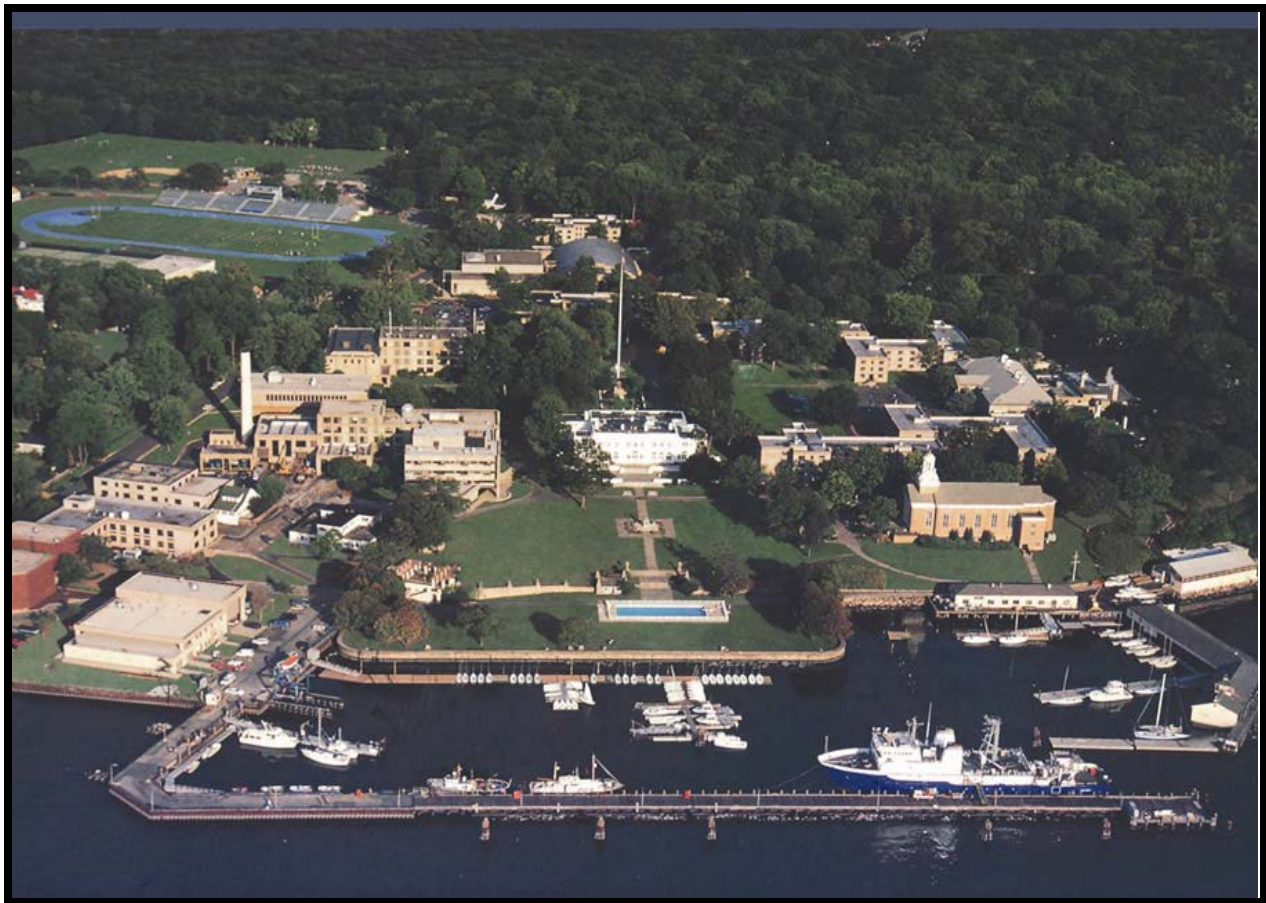




MARITIME ADMINISTRATION
UNITED STATES
MERCHANT MARINE ACADEMY



CAPITAL IMPROVEMENT PROGRAM
FY 2013 ANNUAL REPORT AND FY 2014-2018 PLAN



APRIL 1, 2013

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Executive Summary

This report provides information on the current status of: (1) the active Capital Improvements program (CIP) projects; (2) the completed CIP projects; (3) a CIP appropriation history; and (4) CIP five year plan.

Background

The U.S. Merchant Marine Academy (USMMA) is one of the five federal service academies. Authorized by Congress in 1936, the Kings Point, New York campus was opened in 1943. The USMMA annually graduates approximately 200 Midshipmen with a Bachelor of Science degree, a U.S. Coast Guard mariner's license, and a commission in the U.S. military. Graduates are obligated to serve a minimum of five 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) uniformed service, or in Federal civil service within a national security program. The mariner license earned at graduation must be maintained in active status at least six years.

Providing support and oversight to renew and better manage USMMA campus infrastructure is a Maritime Administration (MARAD) management imperative and a priority of U.S. Transportation Secretary LaHood. After taking office in 2009, Secretary Ray LaHood directed MARAD to convene an independent "Blue Ribbon" advisory panel to study USMMA's infrastructure needs and to make recommendations on CIP priorities. In March 2010, the panel presented their findings to MARAD and Secretary LaHood.

Since that time, MARAD has completed a comprehensive Building Evaluation Report (BER) detailing the condition of each campus building. The plan is to incorporate the BER findings into the CIP and to identify efficiencies by reducing maintenance and repair work to buildings scheduled for renovation. The BER enables prioritization of CIP projects and facilitates identification of building problem areas that can be targeted for long-term repair.

The CIP and the BER provide MARAD and USMMA with two very powerful tools to help reverse the long-term decline of the campus infrastructure. The 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, Secretary LaHood established a USMMA CIP Senior Advisory Council to ensure progress on the current USMMA CIP projects. The Council is 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 MARAD Administrator. The work of the Senior Advisory Council 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's

CIP projects. A tracking system was developed for all ongoing projects funded with FY 2013 and prior funds. The CIP Working Group meets together bi-weekly 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 stay on track.

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. It is expected to positively impact all 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 funding of CIP projects is focused on improving the quality of life for Midshipmen, enhancing the academic services, and finally, bolstering the support structure to the campus and non-academic functions.

The initial CIP focus was, and remains to be, the renovation of all of the dormitories on campus. Safe and modern living accommodations assist Midshipmen to excel in their education and encourage potential students to consider the Academy for higher education.

The second area of focus for the CIP on campus is the academic areas including classrooms, laboratories, lecture halls, and faculty spaces. In order to meet the goal to educate the future leaders of the maritime industry, the Academy requires updated and technologically advanced classroom and lab spaces.

The third area of CIP focus is the supporting non-academic structures on campus such as student services, warehouses, and staff spaces. Attention to these areas will improve student morale and maximize space utilization for both students and staff.

Interspersed throughout the plan are various infrastructure projects that are needed to upgrade the most basic of Academy campus services, such as the water main, sewer system and electrical grid. Modernization of these systems helps eliminate 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 costs when a service disruption occurs.

Section I
Capital Improvement Program (CIP)
Active Projects
Description and Status as of April 3, 2013

CIP PROJECT #1: WATER MAIN REPLACEMENT (DESIGN/CONSTRUCTION)

Status: The USMMA has completed the water main upgrade in conjunction with the Great Neck Water Authority. This upgrade increased the size of the water main to the Academy and has met all of the requirements set forth by the Water Authority. The water vault and meter have also been upgraded to provide the Academy with increased pressure and flow throughout the distribution system. Currently, a contract has been awarded and work is underway for an Academy-wide flow/pressure test of the distribution system. A majority of the areas have been tested. The results showed a need to conduct further testing of the mains and hydrants North of Steamboat Road and some located on public roads in order to gather the full picture of the increase in water pressure throughout the Academy. However, the results showed no indication of severe problem areas. The additional testing modification was recently awarded and we are working with the contractor to schedule a date to conduct the testing.

General Description:

The USMMA water main, vault, and meters were outdated and undersized for the current and projected water demands on the system, including the fire suppression systems. This project is correcting these issues by replacing the existing undersized 4-inch water main with a larger 8-inch main and upgrading the water vault. These improvements will increase the 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 was installed by the Great Neck Water Authority, and was completed in August of 2012.

Phase 2 of this project was completed by USMMA, and includes the upgrade of the existing water vault. Previously, the water main entering the vault was restricted before it continued onto the distribution system. This severely limited the flow and pressure of the water main 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, which will be determined by results of water flow testing. Now that the water main and vault are upgraded, pressure and flow tests are being conducted throughout the campus to determine if there are any locations that may need additional improvements. This phase is currently underway.



**CIP PROJECT #1: WATER MAIN REPLACEMENT (DESIGN/CONSTRUCTION)
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 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 student 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 3)

Construction Start Date: June 2012 for Water Main (Phase 1)
September 2012 for Water Vault (Phase 2)
February 2013 for Distribution System Testing (Phase 3)

Completion Date: August 2012 for Water Main (Phase 1)
January 2013 for Water Vault (Phase 2)
March 2013 for Distribution System Primary Testing (Phase 3)

Estimated Completion Date: May 2013 for Distribution System Additional Testing (Phase 3)

Funding Status: Project Budget: \$700,000
Project Obligations: \$638,464 (as of April 1, 2013)

CIP PROJECT #2: MALLORY PIER REPLACEMENT (DESIGN/CONSTRUCTION)

Status: The contractor and construction management firms are on site and work is underway. Seven concrete test piles were driven in February 2013, and the 59 remaining production piles were delivered to the site in March 2013. Pile driving began at the end of March and is scheduled to continue until the end of May 2013. After the piles are driven, the remainder of the wooden pier will be demolished. The concrete deck panels will be installed in September and October, 2013. The cast-in-place concrete work will be performed in October and November, 2013. The remaining work is expected to be completed by mid-April 2014.

General Description: Mallory Pier is the USMMA's main waterfront pier for the berthing of training ships as well as mooring other vessels, floating docks, as well as providing waterfront infrastructure within the boat basin. The pier's pilings are over 60-years old and are decomposing and unsafe. The existing deck of the pier is constructed from wood, is 32-years old and deteriorating. The northern 390-foot section was replaced in approximately 1970, and repairs were made in 2001. Fire suppression and waste removal is currently being provided with hoses running from the previously replaced section of the pier.

The USMMA previously contracted with the Naval Facilities Engineering Command (NAVFAC) to develop the initial architectural and engineering design and planned to use them for the construction of the concrete replacement pier. NAVFAC had designed the pier to DOD specification standards, which are more extensive than USMMA's requirements for a commercial-equivalent pier. The USMMA engineers recommended a re-design of the pier to commercial pier standards based on the magnitude of projected cost savings.

The USMMA's agreement with NAVFAC ended on May 31, 2012. In its place, MARAD initiated a solicitation that used a negotiated procurement strategy for acquiring the construction services. The negotiated procurement approach allowed for negotiation of specific design requirements, evaluation of design-construction team capabilities and multiple design options, and contract award on the basis of best value. Through this process MARAD was able to procure Russell Marine, LLC, as contractor for the project. MARAD also procured Whitman, Reardon and Associates, LLC, as a construction manager to provide oversight of construction and to work with USMMA staff as needed. MARAD's Office of Ship Operations staff assisted with the development of the acquisition strategy and are performing Contracting Officer Representative duties as a result of their previous pier construction experience in New Orleans and at the Beaumont Reserve Fleet site.

CIP PROJECT #2: MALLORY PIER REPLACEMENT CONTINUED:

Project Goals: The current wooden pier will be replaced with a new concrete pier including new electrical and mechanical utilities such as sewage system, potable water, lighting, and electrical facilities.

Benefits to be Achieved: The Mallory Pier replacement will replace an unsafe and deteriorating pier, and will allow berthing of training ships and other vessels used at USMMA. This will enhance safety and provide a modern platform for instructional, competitive and recreational waterfront activities for the Midshipmen.



Contract Award Date: September 13, 2012

Construction Start Date: January 7, 2013

Estimated Completion Date: April 2014

Funding Status:

Original Project Budget: \$16,300,000 (design
\$2.3M and \$14M construction)

Current Project Budget: \$14,358,000 (design
\$1.2M and \$13.2M construction)

Project Obligations: \$1,088,002 (design)

Project Obligations: \$12,524,366 (construction)



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

Status: The new streamlined design was delivered by the design firm Fletcher Thompson in early June 2012. The actual construction began November 2012. The USMMA has already completed several smaller projects associated with the larger renovation effort, including fully refurbishing Delano Hall bathrooms to contemporary standards; refurbishing the refrigerator/freezer; upgrading the water system, including installation of a new cooling tower; and connecting the refrigerator units to the new water cooling system. Currently, the serving line phase of construction is underway. The new hood system over the cooking area has been installed and will provide the required fire suppression and venting for the kitchen. Tiling of the new serving area is also underway.

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. The Hall has adequate space and is situated in a good location on campus, but suffered from dated food preparation and storage equipment, ventilation issues, and outdated electrical and plumbing infrastructure that requires costly and frequent maintenance.

Previous designs to upgrade Delano Hall included relocating the food preparation and kitchen area to the basement of the building, and repositioning the walk-in-storage areas currently in the basement to the main level. This design would have interrupted food service in Delano Hall and would have required constructing a temporary dining area at a cost of \$2 million. In light of the costs, and after consultation with the food service officer and staff, the CIP Team determined that a simpler and more efficient design would best address Delano Hall's needs. The new design focuses on upgrading the facility and using the same general layout as is currently in place. The renovation is being accomplished while keeping the dining facility open and available for use by the Midshipmen.



**CIP PROJECT #3: DELANO HALL RENOVATION (DESIGN/CONSTRUCTION)
CONTINUED:**

Project Goals: Renovation of the galley will upgrade all appliances, finishes and infrastructure as well as ensure new equipment is fully functional within current space requirements. Electrical and plumbing upgrades will be included to support the modern facilities.

Benefits to be Achieved: The Delano Hall renovation will increase energy efficiency, enhance safe food preparation, and promote the overall well-being of students and staff.

Contract Award Date: September 2012 (for Construction)

Construction Start Date: November 2012

Estimated Completion Date: October 2013

| | | |
|------------------------|--------------------------|--------------|
| <u>Funding Status:</u> | Original Project Budget: | \$23,000,000 |
| | Amount Allotted: | \$14,000,000 |
| | Current Project Budget: | \$ 9,000,000 |
| | Project Obligations: | \$ 7,382,634 |

CIP PROJECT #4: ROGERS HALL RENOVATION (DESIGN/CONSTRUCTION)

Status: The design and specifications for Rogers and Cleveland Halls were completed in May 2012. The construction for Rogers Hall is on-going and expected to be complete in July 2013. A majority of the plumbing, electric and mechanical work has been completed on decks one through three. Drywall has been hung on the third and second deck, and the first deck is being framed for drywalling. The roof installation is also underway.

General Description: Rogers Hall is one of six barracks, or dormitory facilities, located at the USMMA. These six barracks house the entire on-campus regiment of approximately 750 Midshipmen in single, double and sometimes triple-bunked rooms. Rogers Hall was constructed in 1943 in an 18-month period and is approximately 42,000 square feet. This is the fifth barracks building renovation, leaving only Cleveland Hall to be renovated.

The architectural and engineering renovation design for both Rogers and Cleveland Hall was completed for \$325,000. The update to the current barracks design includes all the lessons learned from the past four renovations. Rogers Hall is being renovated prior to Cleveland Hall because the majority of the infrastructure and utilities are housed in Rogers Hall. The Rogers Hall renovation is estimated to cost no more than \$12.8 million, and includes:



new furniture layouts for two-person dormitory rooms using USMMA standard metal furniture, floor-mounted heat pump air conditioning and heating, wall partitions with reduced sound transmission, and impact-resistant gypsum board. New toilet partitions, all new plumbing fixtures and accessories with new ceramic tiles and wall finishes will be installed in the community restrooms. A new fire protection system will be installed throughout the building to include smoke and carbon monoxide detectors. Repair/replacement of the roof will be completed and updates to the remaining areas of the facility will bring it in compliance with all New York State building codes.

Project Goals: For the health and welfare of the Midshipmen, the USMMA requires dormitory facilities that adequately meet the needs of the Midshipmen during the course of their education, and provides the best possible work environment necessary to be successful.

Benefits to be Achieved: The Rogers Hall renovation will improve energy efficiency through the use of new technology and modern fixtures and will promote the overall well-being of the Midshipmen.

**CIP PROJECT #4: ROGERS HALL RENOVATION (DESIGN/CONSTRUCTION)
CONTINUED:**

Contract Award Date: September 2012

Construction Start Date: September 2012

Estimated Completion Date: July 2013

Funding Status: Original Project Budget: \$18,000,000 (design \$3M and \$15M Construction)
Current Project Budget: \$12,825,000 (design \$0.3M, \$12M Construction,
\$0.5M Furniture)
Project Obligations: \$325,000 (design) (as of April 1, 2013)
Project Obligations: \$10,551,736 (construction) (as of April 1, 2013)

CIP PROJECT #5: ELECTRIC GRID/POWER SUPPLY IMPROVEMENT (INVENTORY/DESIGN/CONSTRUCTION)

Status: This is a multi-phased project covering inventory, design and replacement/construction. Phase 1 is an inventory and map of the existing electric grid equipment and locations. This phase will allow for a design to be properly solicited in order to address the existing conditions, develop a valid estimate for construction, and to solicit more reasonable and accurate bids from construction contractors. The Academy is currently reviewing the Phase I report to identify if any adjustments are necessary. Phase 2 is the design, which will provide a plan to replace any outdated components and upgrade the grid as a whole. Phase 3 will be the construction.

General Description: The USMMA's electric grid is a compilation of multiple electric components from various properties that were acquired since the founding of USMMA. The electric equipment and wiring in some buildings is from the original 1943 construction, and some of the present staff housing, Melville Hall, student center, and museum are all older than the Academy and still use their original electric equipment. As a result of the condition and demands placed upon of the current grid and outdated equipment, frequent electrical outages occur. The existing electrical system and grid require an evaluation and a replacement is overdue. The campus is composed of several properties that are presently serviced from multiple feeders and these main electric feeders have never been properly evaluated for balancing the load and redundancy. The transformers and switch gear, the main components of the electric distribution system, are in desperate need of replacement as they have 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.

Project Goals: The project includes completion of an inventory of all existing electric equipment, mapping out the entire electric grid, preparing a plan for a phased improvement, repair, and replacement project, and executing a construction program to complete the improvement to the electric grid.

Benefits to be Achieved: The electric grid and power supply improvements will improve the reliability of the electric service across the campus, improve energy efficiency which should reduce utility costs, enhance student safety through the replacement of antiquated equipment, and promote the overall well-being of Midshipmen and staff by allowing a reliably continuous supply of electric power for support systems. The project increases the lifespan of the electric distribution systems and sensitive electronic equipment.

| | |
|--|--|
| <u>Contract Award Date:</u> | November 2012 for Survey |
| <u>Construction Start Date:</u> | December 2012 for Survey |
| <u>Estimated Completion Date:</u> | February 2013 for Survey (Phase 1) TBD for Design (Phase 2) TBD for Construction (Phase 3) |
| <u>Funding Status:</u> | Project Budget: \$4,000,000 ¹ Project Obligations: \$ 61,000(as of April 1, 2013) |

¹ Amount currently allotted is \$4 million (\$1 million FY 2012 CIP, \$1 million from prior years CIP, \$2 million FY 2012 Facilities, Maintenance, Repair and Equipment funds).

CIP PROJECT #6: CLEVELAND HALL RENOVATION

Status: The design and specifications for Cleveland Hall was completed in May 2012. The construction for Cleveland Hall is currently awaiting the completion of Rogers Hall, and is expected to begin in August 2013.

General Description: Cleveland Hall is one of six barracks located at USMMA. These six barracks house the entire on-campus regiment of Midshipmen in single, double, and sometimes triple-bunked rooms. Cleveland Hall is 53,000 square feet and was built in 1942, and it is the final building to be renovated in the USMMA dormitory renovation plan. The refurbishment of Cleveland Hall will include the 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. Also, the outdated electrical service will be upgraded, including the installation of modern fire alarm/suppression/sprinkler systems and all corridor lighting. With this renovation, the flooring, ceiling and signage will be replaced and improved. Interior spaces will be modernized and exterior wall insulation will also be replaced.

Project Goals: The USMMA requires dormitory facilities that adequately meet the needs of the Midshipmen during the course of their education, and provides the best possible work environment necessary to be successful.

Benefits to be Achieved: The Cleveland Hall renovation will improve energy efficiency through the use of new technology and modern fixtures and will promote the overall well-being of the Midshipmen.

Contract Award Date: July 2013

Construction Start Date: July 2013

Estimated Completion Date: TBD

Funding Status: Original Project Budget: \$15,000,000
Project Obligations: \$ 0 (as of April 1, 2013)



CIP PROJECT #7: ZERO DECK A/E DESIGN

Status: The design and specifications for Zero Deck is expected to begin in July 2013.

General Description: Zero Deck is the interconnected below-grade level (basement) to all six USMMA barracks and Delano Hall, as well as underground connecting hallways between the buildings, encompassing approximately 90,000 square feet. 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. Apart from these connecting halls, Zero Deck also contains a number of support offices, including the Post Office and mail room, the Navy Exchange store, credit union, and sports equipment storage. The first step in this renovation is to complete an architectural and engineering design. This design will include a plan for the reconfiguration and renovation of the basement area of each of the barracks. This design will also include a complete set of drawings as well as cost estimates and other bid package documents.

Project Goals: The USMMA requires support facilities for the Midshipmen that adequately meet the needs of the Midshipmen during the course of their education, and provides the best possible working and living environment necessary to be successful.

Benefits to be Achieved: The Zero Deck A/E allows the Academy to pursue the construction of new spaces that will improve energy efficiency through the use of new technology and modern fixtures and will promote the overall well-being of the Midshipmen.

Contract Award Date: TBD

Construction Start Date: July 2013

Estimated Completion Date: October 2013

Funding Status: Original Project Budget: \$300,000
Project Obligations: \$ 0 (as of April 1, 2013)

CIP PROJECT #8: MUSEUM BATHROOMS

Status: The project is expected to begin in September 2013.

General Description: The American Merchant Marine Museum serves as a repository for 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, our Nation's merchant marine. 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 is part of a larger ongoing renovation of this historic building. The museum bathrooms, 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 bathrooms will be American with Disabilities Act (ADA) compliant and provide adequate services for all visitors.

Project Goals: The museum bathrooms are in need of a renovation, to include upgraded piping and fixtures in order to ensure the safety of the items housed within the museum. This will provide new plumbing to replace the equipment and infrastructure that is currently beyond its useful life.

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

Contract Award Date: September 2013

Construction Start Date: TBD

Estimated Completion Date: TBD

Funding Status: Original Project Budget: \$150,000
Project Obligations: \$ 0 (as of April 1, 2013)

CIP PROJECT #9: CROWNINSHIELD PIER (DESIGN/CONSTRUCTION)

Status: Environmental consultants were hired to assist in engaging with the New York State Office of Environment and Conservation in order to determine if an Environmental Impact Study (EIS) is required, and to assist in the development of the EIS if required. The contract award and construction start date will be based on the level of permit required. The completed acquisition strategy for Mallory Pier will also provide lessons learned that will assist with this project. The permitting process is currently underway. The two permits that are required are the Nationwide US Army Corp of Engineers permit, and a New York State Department of Environmental Conservation permit.

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 conversion of the pier into a breakwater is under consideration.



Project Goals: The pier is in need of full replacement. The replacement pier will provide for smaller pier/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 continue to have Hague Basin protected by a structurally sound and safe breakwater. The USMMA will remove a severely deteriorated facility that is no longer used.

Contract Award Date: TBD
Construction Start Date: TBD
Estimated Completion Date: TBD
Funding Status: Original Project Budget: \$1,500,000
Project Obligations: \$ 0
(as of April 1, 2013)



CIP PROJECT #10: SAFETY ISSUES BARRACKS/FACILITIES

Status: The Safety and Environmental Protection Office is currently assessing the conditions of the facilities and evaluating the Building Evaluation Report (BER). Based on this assessment the USMMA will prioritize the major repairs and address those that are an immediate concern to the safety of the Midshipmen.

General Description: These funds are intended to provide for safety issues and major repair items as they are identified for the barracks and other USMMA facilities. Funding will enable the USMMA to immediately conduct any major necessary repairs. These funds will allow projects such as the replacement of the fire suppression system in Murphy Hall and installation of hard-wired carbon monoxide detectors in the barracks when the new detector heads that are compatible with the installed alarm system have completed industry safety testing.

Project Goals: This project will ensure the safety of the Midshipmen in the barracks by facilitating immediate repairs to any area that is a hazard to the living facilities. Other less urgent or immediate safety issues will be incorporated into future CIP projects for the structure.

Benefits to be Achieved: This project will improve the safety of the Midshipmen who rely on the government to offer safe and reliable housing during their academic career at the USMMA. This project is intended to address immediate or urgent issues that are critical to Midshipmen safety and can be classified as a capital improvement on the structure.

Contract Award Date: TBD

Construction Start Date: June 2013

Estimated Completion Date: August 2013

Funding Status: Project Budget: \$968,623
Project Obligations: \$ 0 (as of April 1, 2013)

CIP PROJECT #11: ROAD AND SIDEWALK REPAIR (CONSTRUCTION)

Status: An assessment of the most severely deteriorated areas throughout USMMA had determined that the initial estimated amount of the project at \$129,497; however, additional funding may be provided based on the review of the road and sidewalk assessment. The Statement of Work will be refined to address these areas.

General Description: The condition of existing asphalt roadways and concrete sidewalks throughout the campus have deteriorated and in some instances may cause 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 and may cause unsafe conditions throughout the Academy such as catch basins in need of replacement, broken sidewalks, curbs and asphalt road deficiencies. All of these conditions are caused by age and harsh winter conditions, and are in immediate need of repair. Work would include concrete curbing, and repair/replacement of concrete sidewalk and asphalt road.



Project Goals: The most severely deteriorated areas will be the initial focus of this project as part of an ongoing effort of preventative maintenance and upkeep.

Benefits to be Achieved: The condition of some of the roads, pathways and sidewalks is deemed a potential safety issue and will be addressed with this project. The repair and replacement of the damaged roads and sidewalks will also add to the infrastructure improvement and appearance of the campus.

Contract Award Date: May 2013

Construction Start Date: May 2013

Estimated Completion Date: May 2013

Funding Status:

Original Project Budget: \$129,497

Current Project Budget: \$129,497

Project Obligations: \$ 0

(as of April 1, 2013)



**Section II: Active Capital Improvement Program (CIP) Projects
As of April 01,2013 (\$000)**

| Project | Original Project Budget | Amount Allotted | ¹Project Budget Reported 2012 | Current Project Budget 2013 | Change from original project budget² | Project Obligation | Project Expended | Estimated Completion Date |
|--|--------------------------------|------------------------|---|------------------------------------|--|---------------------------|-------------------------|----------------------------------|
| 1. Water Main Replacement | 700 | 700 | 700 | 700 | 0 | 638 | 614 | May 2013 |
| 2A. Mallory Pier - Design | 2,300 | 1,178 | 1,178 | 1,178 | -1,122 | 1,088 | 1,040 | May 2012 Completed |
| 2B. Mallory Pier – Construction | 14,000 | 14,000 | 10,000 | 13,180 | -820 | 12,524 | 1,203 | April 2014 |
| 3. Delano Hall Renovation | 23,000 | 14,000 | 11,000 | 9,000 | -14,000 | 7,383 | 2,577 | October 2013 |
| 4A. Rogers/ Cleveland Hall Design | 3,000 | 325 | 325 | 325 | -2,675 | 325 | 250 | May 2012 Completed |
| 4B. Rogers Hall Renovation | 15,000 | 15,000 | 12,000 | 12,500 | -2,500 | 10,552 | 3,318 | July 2013 |
| 5. ³ Electric Grid/Power Supply Improvement | 4,000 | 2,000 | 2,000 | 2,000 | -2,000 | 61 | 18 | TBD |
| 6. Cleveland Hall Renovation | 15,000 | 15,000 | 0 | 15,000 | 0 | 0 | 0 | TBD |
| 7. Zero Deck Design | 300 | 300 | 0 | 300 | 0 | 0 | 0 | TBD |
| 8. Museum Bathroom | 150 | 0 | 0 | 150 | 0 | 0 | 0 | TBD |
| 9. Crowninshield Pier | 1,500 | 1,500 | 1,500 | 1,500 | 0 | 0 | 0 | TBD |
| 10. ⁴ Safety Issues Barracks/Facilities | 2,000 | 969 | 969 | 969 | -1301 | 0 | 0 | TBD |
| 11. ⁵ Road and Sidewalk Repair | 129 | 129 | 129 | 129 | 0 | 0 | 0 | TBD |
| Totals | \$81,079 | \$65,101 | \$39,801 | \$56,931 | \$-24,481 | \$32,571 | \$9,020 | |

¹ These are estimates that may change as a result of final contract negotiations.

² Original Project Budget column minus Current Project Budget 2013 column equals this column.

³ Amount currently allotted is \$4 million (\$1 million FY 2012 CIP, \$1 million prior year CIP, \$2 million FY 2012 Facilities, Maintenance, Repair and Equipment funds).

⁴ The current project budget is \$2 million. Currently allotted is \$969K. As recoveries are realized, additional funds could be moved to this project.

⁵ Amount of \$129K is currently allotted. However, additional funding may need to be requested based on the road and sidewalk assessment.

Section III: Completed Capital Improvement Program (CIP) Projects

May 01, 2012 – February 15, 2013

| Project | Description | Completed Project Amount (\$000) |
|----------------------------|--|---|
| CAORF Emergency Generators | Included an installation of two emergency generators to provide back-up power for the Academy's IT servers in the event of an electrical power outage. | 624 |
| Land Hall | Renovation of the Land Hall Student Center included an interior mold removal effort and room renovation to include walls replaced to historic appearance, removal of carpets and paint on the second deck. Also included were asbestos abatement and removal and repair/replacement of the roof. | 834 |
| TOTAL | | \$ 1,458 |

Section IV: Capital Improvement Program Appropriation History

(\$000)

| Fiscal Year | Funded ¹ |
|--------------------|------------------------------|
| 2001 | 13,000 |
| 2002 | 13,000 |
| 2003 | 12,855 |
| Subtotal | <u>\$38,855²</u> |
| 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 |
| Subtotal | <u>\$140,711³</u> |
| GRAND TOTAL | \$179,566 |

¹ Funded amount reflects the total after rescission.

² Per "Addendum to the Ten-Year Improvement Plan for the United States Merchant Marine Academy - June 2005 Report to Congress," FY 2001-FY 2003 \$39 million spent to complete:

- \$2.2 million for design of 6 barracks renovation including geothermal heating and air conditioning system, asbestos and lead abatement, replacement of all potable water lines and utility conduits, for sprinklers, fire protection alarm system and insulation of the exterior walls
- \$400,000 for Jones Hall furniture
- \$2.9 million exterior waterproofing and roof replacement for Jones and Barry Barracks
- \$12.5 million renovation of Jones Hall
- \$3.7 million for OSHA, EPA, ADA and fire protection deficiencies
- \$7.2 m backlogged physical plant maintenance and structural projects to upgrade academic and administrative buildings (\$1.9 million for maintenance and dry docking of Kings Pointer)
- \$5.2 million to replace waterfront seawall and replacement of SOLAS lifeboat
- \$3 million for chapel renovation/repairs and ADA compliance

³ Total for active projects ----- \$ 65,101
 Total for completed projects FY 2004 – FY 2013 --- \$ 75,610
 \$140,711

Section V: Five Year Planned Capital Improvement Program Projects

FY 2014 – FY 2018

The following lists all major projects currently planned for fiscal years 2014 through 2018. All requests for funding for the projects listed in FY 2014 and beyond are subject to Office of Management and Budget and Congressional review, as well as legislative enactment.

FY 2014 Major CIP Projects Planned¹ (\$16.5M)

Zero Deck Renovation- Construction (\$8 million): The Zero Deck renovation will provide upgrades to the major mechanical rooms and installation of modern heating and cooling systems where necessary. Additionally, the replacement of sanitary piping throughout and upgrade of electrical service and fire alarm suppression and sprinklers will complete the final phase of infrastructure replacement in multiple dormitories (including Jones and Barry Halls). As part of this renovation, Zero Deck will be upgraded. This upgrade will include all corridor lighting, flooring, ceiling, signage and interior finishes (lighting fixtures, furniture, all office/club/storage spaces where necessary). (Note: \$5.5 million will be funded by FY 2014 funds. Prior year balances derived from project savings and recoveries will be used to fully fund this project at the \$8 million total estimate.)

Samuels Hall Renovation – Construction (\$6 million): The Samuels Hall renovation will be the first construction portion of the renovations to the academic halls. This will include the replacement of roof and parapet and upgrade of 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 finishes, and throughout Samuels Hall the lighting, flooring, ceiling and furniture will be modernized and improved.

Samuels/Bowditch Hall Renovation Architectural and Engineering Designs (\$2 million): Samuels and Bowditch Halls are academic buildings that house the Humanities/English department, and the Marine Transportation/Nautical Science and Navigation departments respectively. These are the first of four academic buildings that will be renovated to improve the academic environment on the USMMA campus. The architecture and engineering design phase will be comprised of complete and separate bid packages for each facility. These packages will include a complete set of drawings for each building as well as cost estimates, statements of work and specifications. These two facility designs will include full renovations and upgrades and will incorporate facility needs as indicated by the specific academic divisions who utilize these areas.

Seawall Repairs (\$500,000): This is one phase of an ongoing multi-year and multi-phased approach for this project and will work on repairing the most critical areas of the seawall in order for the entire wall to regain its structural integrity while also maintaining other areas as a preventative measure to avoid further erosion. This phase will concentrate on the gunite-coated

¹ Projects in FY 2014 and onward may be reevaluated based on the findings in the Building Evaluation Report.

portion of the seawall (specialized mortar) as it has the most severe deterioration. The seawall provides protection for the USMMA waterfront and campus from the tides and waves from Long Island Sound. Beginning at the far southern corner near the Prosser Boat House and extending along the waterfront area to the end of the property line is the gunite-coated seawall, which is a total of 1,000 feet in length. In some cases the 6” gunite coating has been completely displaced exposing the original concrete seawall. Several of the reinforcing bars are exposed and rusting and need to be replaced, while some of the seawall areas are currently at a point of complete failure.

FY 2015 Major CIP Projects Planned (\$15.8M)

Bowditch Hall Renovation – Construction (\$13 million): The Bowditch Hall renovation will replace or repair the roof and parapet, and upgrade and install the heating and cooling systems on all floors, including the installation of improved cooling systems for the top floor where major navigation simulators are housed. (There are numerous servers and computer systems which must remain in a controlled temperature environment). Plumbing and electrical systems will be replaced and upgraded and corridor lighting improved. All finishes, flooring, ceilings, lighting fixtures and new furniture will be modernized as appropriate for the needs of the Marine Transportation Department.

Elevator Repairs (\$380,000): This project will fund a repair and/or a replacement of the elevators across the USMMA. This will include full replacement of hydraulics and possible cab replacement for the most seriously degraded elevator as well as provide replacement of parts for elevators throughout the Academy. This work is part of an ongoing effort of preventive maintenance and reinvestment in the USMMA physical plant, and is necessary for the continued safe operation of the USMMA elevators.

Roof Replacement (Bldg. TBD) (\$400,000): This project will fund continued roof repair and replacements. Several of the roofing systems at USMMA are approaching the end of their expected useful lives and will need to be replaced or substantially repaired. This project allows for the most severely degraded roofs to be replaced with a new system and will help maintain USMMA physical plant as part of ongoing effort to prevent further deterioration to USMMA structures.

Gibbs Hall Architecture and Engineering Design (\$2 million): Gibbs Hall is the third of four Academic Halls scheduled for modernization and renovation. Gibbs Hall houses the Departments of Math and Science and requires specialized spaces for Physics Labs and other scientific areas. This design will incorporate input from the Math and Science Departments 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.

FY 2016 Major CIP Projects Planned (\$17.0M)

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 the salt air from deteriorating them. The electrical system will be upgraded to include enough power for the loads of an academic building with more technology in use. All interior finishes, 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 that will 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 (\$14.65M)

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 heating and air conditioning, 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 finishes, lighting, and furniture will be modernized and replaced.

Road/Sidewalk Repairs (\$150,000): Roads and sidewalks at the USMMA will be repaired or replaced as part of an ongoing effort of preventive maintenance and upkeep of the USMMA physical plant. This project will address the areas with the most need and will replace any asphalt or concrete areas throughout USMMA that are deteriorated or degraded to the end of their useful life.

Seawall Repairs (\$500,000): These funds continue the phased approach to maintaining and restoring the seawall as part of the ongoing effort to improve the USMMA physical plant. With these funds the most critical areas will be repaired while 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 central receiving 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 heating and air conditioning, 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 finishes, lighting, and furniture will be modernized and replaced.

Patton Hall Renovation Architectural and Engineering Designs (\$1.5 million): Patton Hall is the student health clinic. The architecture and engineering design will be comprised of 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 student 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 study will allow the USMMA to better understand exactly how the current system operates and at what capacity it is currently operating. This will also give the USMMA a clearer understanding of how to proceed with upgrades to the system overall to better follow current guidelines.