National Security Agency
FY 2014 Military Construction, Defense-Wide
($ in Thousands)

State/Installation/Project	Authorization Request	Approp Request	New/ Current Mission	Page No.
Maryland				
Fort Meade				
High Performance Computing Capacity Increment 3	-	431,000	C	184
NSAW Recapitalization Building #1/ Site M Increment 2	-	58,000	C	187
Total	**-**	**489,000**		

1. COMPONENT	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. DATE
NSA/CSS DEFENSE		March 2013

3. INSTALLATION AND LOCATION	4. COMMAND	5. AREA CONSTRUCTION COST INDEX
FT. George G. Meade, Maryland	NSA/CSS	1.00

6. PERSONNEL STRENGTH	PERMANENT			STUDENTS			SUPPORTED			TOTAL
IC Community Installation	OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV	
a. AS OF				x						
b. END FY				CLASS	IFIED					

7. INVENTORY DATA ($000)

A. TOTAL ACREAGE	917
B. INVENTORY TOTAL AS OF DEC 2012	917
C. AUTHORIZED NOT YET IN INVENTORY	0
D. APPROPRIATION REQUESTED IN THIS PROGRAM	489,000
E. APPROPRIATION INCLUDED IN FOLLOWING PROGRAM	80,867
F. PLANNED IN NEXT THREE YEARS	855,373
G. PLANNING AND DESIGN COST	0
H. REMAINING DEFICIENCY	0
I. GRAND TOTAL	1,425,240

8. PROJECTS REQUESTED IN THIS PROGRAM:

CATEGORY CODE	PROJECT NUMBER	PROJECT TITLE	COST ($000)	DESIGN START	STATUS COMPLETE
14162	24649	HIGH PERFORMANCE COMPUTING CENTER 2 (FY14)	$431,000	Dec 2010	July 2012
14162	26170	NSAW Recapitalize Building # 1/Site M (FY14)	$58,000	May 2011	Mar 2013

9. FUTURE PROJECTS:

a. INCLUDED IN FOLLOWING PROGRAM

CATEGORY CODE	PROJECT NUMBER	PROJECT TITLE	COST ($000)
14162	26170	NSAW Recapitalize Building #1/Site M (FY15)	$45,600
81242	27532	NSAW Campus Building Feeders (FY15)	$35,267

b. PLANNED IN NEXT THREE YEARS

CATEGORY CODE	PROJECT NUMBER	PROJECT TITLE	COST ($000)
81242	27532	North Campus Building Feeders (FY16)	$16,000
73074	TBD	NSAW Vehicle Control Points (VCP) (FY16)	23,500
61050	24892	Cooper Avenue Facility/SWM (FY16)	$5,000
89121	21099	NSAW Boiler Plant (FY16)	$26,500
14162	27565	NSAW Recapitalization #2 (FY17)	$300,000
81242	27532	NSAW Campus Feeders (FY17)	$31,700
73074	25081	NSAW Vehicle Control Inspection Facility (FY18)	$15,803
14162	27565	NSAW Recapitalization #2 (FY18)	$400,000
73074	TBD	NSAW VCPs (FY18)	$36,870

10. MISSION OR MAJOR FUNCTION

Agency activities are classified.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

A.	AIR POLLUTION	TBD
B.	WATER POLLUTION	TBD
C.	OCCUPATIONAL SAFETY AND HEALTH	TBD

DD Form 1390, DEC 7

1. COMPONENT NSA/CSS DEFENSE	FY 2014 MILITARY CONSTRUCTION PROJECT DATA	2. Date March 2013

3. Installation and Location	4. Project Title
FT. George G. Meade, Maryland	HIGH PERFORMANCE COMPUTING CENTER (HPCC), INCREMENT 3

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	14162	24649	FY14 $431,000

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITY				523,418
Data Hall	LS			(92,393)
Mechanical Systems	LS			(160,189)
Electrical Systems	LS			(229,752)
Generator Plant	LS			(11,473)
Chiller Plant	LS			(23,210)
Commissioning	LS			(6,401)
SUPPORTING FACILITIES				152,008
Primary Electrical Service	LS			(34,071)
Site Infrastructure/Utilities/Demo	LS			(91,887)
Site Security Perimeter Control (Anti-Terrorism/Force Protection)	LS			(15,550)
Construction Security	LS			(10,500)
TOTAL CONTRUCTION COST				675,426
Contingency (~5%)				33,771
SUBTOTAL				709,197
SIOH (5.70%)				40,424
Design/build - Design Cost				42,552
Total Project Request				792,173
TOTAL PROJECT COST (ROUNDED)				**792,200**
Equipment / Furniture / IT & Security Fit-up Provided From Other Appropriations				(40,000)

10. DESCRIPTION OF PROPOSED CONSTRUCTION: The FY14 appropriation amount represents the third increment of the High Performance Computing Center totaling 60 MW of technical load. The effort includes building shell and core or modular structural components; finished flooring (both raised and administrative); ceiling; associated air pollution control as required; and electrical, mechanical, back-up generation to support critical processes and fire suppression systems. Building utilities will include building electrical service, chilled water equipment and comfort cooling systems, communications backbone, fire alarm and protection systems and plumbing. Site infrastructure will include primary electrical service to the site, stormwater management to mitigate environmental impact, domestic water, reclaimed water, sewer and as required all connection fees. Security measures include, but are not limited to, an interim and permanent perimeter security with fencing, access control facilities and internal security systems. Physical and Technical security of the construction site will be assured. The requirement includes, but is not limited to, substations, roadways, requisite parking, potable water, reclaimed water, waste water management and any other requirements resulting from design and or mission developments and final site(s) determination. This project will be designed in accordance with the Uniform Federal Accessibility Standards (UFAS) Americans with Disabilities Act (ADA) Accessibility Guidelines and Antiterrorism Force Protection (ATFP) standards. Unified Facilities Criteria (UFC) will be an integral part of design consideration. This project is to be compliant with the current version of the Maryland Procurement Office (MPO), Facilities Engineering Design Standards (FEDS).

DD Form 1391, DEC 76

1. Component NSA/CSS DEFENSE	FY 2014 MILITARY CONSTRUCTION PROJECT DATA		2. Date March 2013
3. Installation and Location FT. George G. Meade, Maryland		4. Project Title HIGH PERFORMANCE COMPUTING CENTER (HPCC), INCREMENT 3	
5. Program Element	6. Category Code 14162	7. Project Number 24649	8. Project Cost ($000) FY14 $431,000

11. REQUIREMENT: ~60 MW Tech Load ADEQUATE: None SUBSTANDARD: None

PROJECT: Construct ~60 MW HIGH PERFORMANCE COMPUTING CENTER

REQUIREMENT: This project is required to provide approximately 60MW of technical load High Performance Computing Center support to mission operations. The project will include but will not be limited to the following and any other requirements resulting from design and or mission developments:

(1) Site Planning/Project Management
- a) Mechanical and Electrical plants designed to prevent/reduce transfer of noise and vibrations to the computer areas.
- b) Adequate management facilities for U.S. Government and local services will be provided including interim and permanent parking, roads and project management trailers plus any other requirements resulting from design and or mission developments.

(2) Facilities
- a) Computing center technical load of 60 MW distributed across raised floor is a design parameter for the facility.
- b) The infrastructure support area and administrative areas will be designed to support state-of-the-art high-performance computing devices and associated hardware architecture.
- c) Enhancements to the building for IT and security include construction as a Sensitive Compartmented Information Facility (SCIF), as well as, requirements related to Anti-terrorism/Force Protection (AT/FP).

(3) Structural
- a) Technical load will be distributed across the computing areas.
- b) Seismic considerations are to be made in the facility design.
- c) Computing center areas are to have depressed slab construction with a floor load rating of approximately 600 PSF.
- d) Facility will be designed and constructed in accordance with the Unified Facilities Criteria (UFC).
- e) Facility will have loading docks with vehicle bays, which will be equipped with dock levelers sized to handle tractor trailers and any other requirements resulting from design and or mission developments.

(4) Electrical
- a) Design technical load capacity is 60 MW with loads distributed across the computing center areas.
- b) Supervisory Control and Data Acquisition (SCADA) to either PDU level or distribution panel level and EMCS, as required.
- c) Concurrent maintainability / reliability and any other requirements resulting from design and or mission developments will be an integral part of design consideration.

(5) Mechanical
- a) Chilled water system will be designed to support both air and water-cooled equipment, with SCADA and EMCS as required.
- b) Each computer center area will have air and water-cooled equipment with Computer Room Air Handlers (CRAHs) and Air Conditioners (CRACs) located external to the raised floor area. The piping headers / systems are to be designed to accommodate full electrical heat load.
- c) Back-up capability for mechanical equipment and air distribution.
- d) Cooling towers, Reclaimed water, and Water Treatment systems.
- e) Fire protection - Double interlocked pre-action fire protection system for all electrical and mechanical support spaces.
- f) Wet pipe for administrative and raised floor areas per DOD standards. Machine Rooms will be provided with a clean agent fire suppression system.
- g) Concurrent maintainability / reliability and any other requirements resulting from design and or mission developments will be an integral part of design consideration.

(6) Security Systems
- a) Video surveillance, Intrusion detection and interim and permanent perimeter security with fencing.
- b) Card access control system and any other requirements resulting from design and or mission developments.

DD Form 1391, DEC 76

1. Component	FY 2014 MILITARY CONSTRUCTION PROJECT DATA		2. Date
NSA/CSS DEFENSE			March 2013
3. Installation and Location		**4. Project Title**	
FT. George G. Meade, Maryland		HIGH PERFORMANCE COMPUTING CENTER (HPCC), INCREMENT 3	
5. Program Element	**6. Category Code** 14162	**7. Project Number** 24649	**8. Project Cost ($000** **FY14 $431,000**

Facility will be designed and certified to the highest LEED certification attainable within available resources with a target of LEED-NC Silver and will include: sustainable site characteristics, water and energy efficiency, materials and resources criteria, and indoor environmental quality.

CURRENT SITUATION:
No current data processing capability exists at the planned location to meet anticipated mission requirements.

IMPACT IF NOT PROVIDED:
Current and anticipated mission requirements will not be met without completion in the specified time frame.

ADDITIONAL:
a) The project will be coordinated with the installation physical security plan, and all physical security measures are included.
b) All required environmental and AT/FP measures are included.
c) An economic analysis has been prepared and used in evaluating this project. This project is the most cost effective method to satisfy the requirement.
d) This project will provide government support facilities, including but not limited to trailers or other suitable office space, communications equipment and services, furniture and other support as required managing the design and construction phases of the project and any other requirements resulting from design and or mission developments.

12. SUPPLEMENTAL DATA:

a) Status	
(i) Date Design Started	Dec 2010
(ii) Percent Completed as of May 2012	35%
(iii) Date Design - Build RFP Completed	July 2012
(iv) Parametric Estimates have been used to develop project cost	Yes
(v) Type of Design Contract	Design/Build
b) Basis	
(i) Standard or Definitive Design:	Yes
(ii) Date Design was Most Recently Used:	N/A
(iii) Percentage of Design Utilizing Standard Design	N/A
c) Total Design Cost (Total $000)	
(i) Production of Plans and Specs	
Design-Build RFP - P&D	$11,000
Design-Build Design - MILCON	$42,552
(ii) Total Design Cost (iii)=(i)+(ii) or (iv)+(v)	$53,552
(iv) Contract	
Design-Build RFP	$11,000
Design-Build Design	$42,552
(v) In House	
d) Construction Contract Award	Oct 2012
e) Construction Start	Dec 2012
f) Construction Complete - Project	Jan 2015

DD Form 1391, DEC 76

1. Component	FY 2014 MILITARY CONSTRUCTION PROJECT DATA	2. Date
NSA/CSS DEFENSE		March 2013

3. Installation and Location	4. Project Title
FT. George G. Meade, Maryland	NSAW RECAPITALIZE BUILDING #1/SITE M, INCREMENT 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	14162	26170	FY14 $58,000

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITY				86,980
NSAW Recapitalization Building #1	SF	148,500	$541.50	(80,413)
Leadership in Energy and Environmental Design (LEED)	LS			(1,818)
Sustainable Design and Development (SSD) and Energy Policy ACT Anti-terrorism/Force Protection (AT/FP)	LS			(4,749)
SUPPORTING FACILITIES (To include general utilities and infrastructure, site work, replacement of existing facilities, parking structure)				28,818
TOTAL CONSTRUCTION COST				115,798
CONTINGENCY (5.00%)				5,790
SUBTOTAL				121,588
SIOH (5.70%)				6,930
TOTAL PROJECT COST				128,518
TOTAL PROJECT COST (ROUNDED)				**128,600**
Installed Equipment Provided from Other Appropriations				(57,881)

10. DESCRIPTION OF PROPOSED CONSTRUCTION: NSAW Recapitalization Building #1 represents the initiation of a long term development plan to replace existing facilities and infrastructure that are unable to support the increasingly intense technological requirements of evolving missions. Recapitalization Building #1 begins to address a growing shortfall of state of the art workspace for some the Agency's most critical mission elements. The FY14 appropriation amount represents the second increment of a three part funding profile.

Construct NSAW Recapitalization Building #1 with associated site work and environmental measures. The facility will be built on Fort George G. Meade. The primary facility will include core and shell structure and foundations; electrical/mechanical service and distribution components and systems; fire protection, alarm, and suppression; information technology, communications, and security systems support infrastructure; exterior finishes and weatherproofing. Interior build out will provide structural raised access floor systems, ceiling, recessed lighting, and fire-rated interior partitions. Project requires comprehensive interior design. The Supporting facilities include a parking structure, site preparation and infrastructure improvements, utility services, and distribution systems, loading dock and perimeter security measures. Site preparation work will include standard clearing, grubbing, cut, fill, and grading, storm water management and environmental protection structures. Additional site work will provide for curb and gutter, walkways and patios, roads and parking, and storm water management facilities. Utility site construction will provide emergency backup power generation, heating and cooling equipment. Perimeter security construction will extend perimeter fence line and surveillance capabilities, and provide for increased vehicle control capacity. Supporting Facilities exceed 25% of Primary Facilities due to construction of a parking structure. This project will be designed in accordance with the Uniformed Federal Accessibility Standards (UFAS)/Americans with Disabilities Act (ADA)/Architectural Barriers Act (ABA) accessibility guidelines, Antiterrorism/Force Protection (AT/FP) standards and Unified Facilities Criteria (UFC) design standards. Utility systems capacity and reliability will support mission critical loads to mandated standards commensurate with the facility mission criticality rating. Information assurance requirements will be incorporated into the design. The facility will include sustainability features that can be cost effectively integrated to meet, at minimum, a Leadership in Energy and Environmental Design (LEED) Green Building Council Silver-certified rating.

1. Component NSA/CSS DEFENSE	FY 2014 MILITARY CONSTRUCTION PROJECT DATA		2. Date March 2013
3. Installation and Location FT. George G. Meade, Maryland		4. Project Title NSAW RECAPITALIZE BUILDING #1/SITE M, INCREMENT 2	
5. Program Element	6. Category Code 14162	7. Project Number 26170	8. Project Cost ($000 **FY14 $58,000**

11. REQUIREMENT: 148,432 SF ADEQUATE: NONE SUBSTANDARD: NONE

PROJECT: Construct multi-story mission support facility and structured parking facility. (Current Mission).

REQUIREMENT: This building will provide NSA with a flexible and scalable building that can accommodate the modern infrastructure necessary to support both current and future technological requirements. This facility is required to provide the type of technologically advanced space required to accommodate the high power and cooling demands necessitated by the equipment requirements of developing mission sets. The building provides the opportunity for physically demanding customers to migrate to a workspace that offers the modern and reliable infrastructure required for efficient operations. This facility represents the beginning of the NSAW recapitalization plan, where aging facilities and infrastructure are replaced through an efficient and affordable long term phased development.

CURRENT SITUATION: Currently, the existing facilities on the NSAW campus are undersized to provide the swing space necessary to accommodate changing mission requirements. Furthermore, the aging infrastructure of many of the existing facilities on NSAW is unable to keep pace with the growing power, space, and cooling demands of modern technology, thereby limiting the efficient use of the current space inventory.

IMPACT IF NOT PROVIDED: If this facility is not funded, NSA will continue to overburden existing facilities and infrastructure impeding the ability to effectively operate and meet its mission.

ADDITIONAL: This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Executive Order 13423, 10 USC 2802(c), and other applicable laws and Executive Orders.

This project has been considered for joint use potential. The facility will support other components.

NATO SECURITY INVESTMENT: This project is not within a common NATO Infrastructure category, nor is it expected to become eligible.

12. SUPPLEMENTAL DATA:

1. Status
   - (a) Design Start: Dec 2011
   - (b) Design Complete: Mar 2013
   - (c) Construction Award: Apr 2013
   - (d) Construction Complete: Sep 2015
   - (e) Type of Contract: Design/Bid/Build

2. Total Cost
   - Construction: $128,600

DD FORM 1391, DEC 76