

## 1.0 PROJECT DESCRIPTION

*The period of performance for this contract is 6 months. This includes design and construction.*

The design/build team will design and construct renovations for this project. The work involves repairs and renovation for miscellaneous modernization improvements to the interior of the existing storage space in Building 4246 NAS Fort Worth JRB, Fort Worth, Texas. The major goal of this project is to create a space for the Marine Meteorology & Oceanography (METOC) unit operations, office spaces, and classroom area in existing Building 4246 warehouse storage area. Building 4246 is a 4,800 square feet bunker, and divided in halves by a block wall. The Southwest corner of the bunker, approximately 1,250 SF (58'x21.5'), will be utilized for the METOC operations and administrative workspace/offices space. The remaining space will continue to be utilized for METOC storage.

Interior finish of the operations and administrative office areas shall be painted gypsum wallboard with insulated metal stud construction. Ceiling shall be suspended acoustical ceiling system with one layer of insulation above. Flooring shall be vinyl composition tile (VCT) and directly installed on existing concrete floor. The existing mechanical system will remain. Provide a new HVAC system for the METOC operations and administrative workspace/office area for year round use. Utility and communication services are currently provided to the building and will be renovated in this project for METOC operations. The renovated area requires a code-compliant fire alarm system. Life Safety systems shall be upgraded where required to comply with the requirements of the latest edition of the Life Safety Code for existing facilities.

Provide electrical power and lighting for audio-visual systems, conduit for cable runs for NIPRNET, telephone and future communications capability, electrical panel renovations with surge protection, and power and communication plug-in units will be provided at the exterior wall of the METOC area for the mobile equipment to be set up within 50 feet of the end of the building on the existing pavement. METMF(R) NEXGEN requires two (2) CAT-6 data connections and one (1) dedicated DSN capable phone line with outside commercial access.

The METMF(R) NEXGEN operating area (7,500 square feet) is located on the west side of the METOC Building 4246. The concrete area outside Building 4246 shall be the location to set up the METMF(R) NEXGEN equipment (min. space req. is 30 X 40 feet). Existing electrical system components, which include backup generators, already established for Air Traffic Control (ATC) mobile equipment/facilities can be utilized for the METMF(R) NEXGEN. Tie down and grounding points will need to be installed.

The Design/Build Contractor shall be responsible for the entire design including providing basis of design, calculations, equipment selections, specifications, and drawings for this project. The facility will be designed and constructed in accordance with *Unified Facilities Criteria, (UFC) 1-200-01 Design: General Building Requirements*, and all other applicable Unified Facilities Criteria (UFC) in Whole Building Design Guide [http://www.wbdg.org/ccb/browse\\_cat.php?o=29&c=4](http://www.wbdg.org/ccb/browse_cat.php?o=29&c=4). The replacement materials shall be the same or matching the existing materials that had been installed.

## 2.0 PROJECT OBJECTIVES

### 2.1 Mission Statement

The mission of this facility is to provide a space for administration, operations, training, and conference for the U.S. Marine METOC personnel to be assigned at NAS Fort Worth JRB. The AN/TMQ-56 is commonly called The Meteorological Mobile Facility (Replacement) Next Generation (METMF(R) NEXGEN). This is

a program of record managed by Program Executive Office, Command, Control, Communications, and Computers (PEO C4I) Program Management Warfare (PMW) 120. MACG-48 is in the process of consolidating the three Meteorological and Oceanographic (METOC) Detachments in the Marine Wing Support Squadron's (MWSS) into a single METOC Det under Air Traffic Control Detachment (ATC Det) A, MACS-24 located at NAS Fort Worth JRB, Texas.

## **2.2 Facility Function**

The METMF(R) NEXGEN, as an incremental replacement for the METMF(R), AN/TMQ-44(A)V1, is a highly mobile, fully integrated, forcenet compliant USMC Tactical Meteorological Support System. It is designed to deliver relevant, timely METOC products and mission impact assessments via "publish and subscribe" means to the Marine Air-Ground Task Force (MAGTF) and Joint Forces. It also provides data collection, atmospheric analysis, and value added production and dissemination. This facility must provide spaces for METOC administration and operations activities, education, training, general storage, and miscellaneous support functions. The primary objective of the work under this project is restoration and modernization of the existing facilities for improved efficiency and morale.

## **2.3 Project Specific Priorities**

This package of technical requirements includes three sources of information. The sources include this project program, the performance technical specifications, and reference material such as drawings. In order to provide a complete proposal, compliance with all parts of this package is required. The reference drawings are intended as a general guide to existing conditions. The contractor shall be responsible for comprehensive investigation, design development, working drawings, demolition and new construction required for a complete, functional and finished project.

### **2.3.1 Sustainable Design**

The project includes design and construction of one enclosed structure office room for two working stations (OIC SNCOIC office), four cubicle office spaces, and one open multi-use space. Integrate sustainable strategies and features into the design to minimize the energy consumption of the facilities; conserve resources, minimize adverse effects to the environment, and improve occupant productivity, health, and comfort to reduce the total cost of ownership of the project using a whole building, life-cycle approach. The facility and all site features shall be designed and constructed in accordance with Engineering & Construction Bulletin 2008-01 and other directives. The design and construction shall incorporate sustainable design strategies and features to the fullest extent possible that are consistent with the mission, budget and client requirements.

### **2.3.2 Storm Water Management (Low Impact Development)**

Provide low impact development strategies for compliance with DoD Policy on Implementing Section 438 of the Energy Independence and Security Act (EISA), dated 19 January, 2010 and Penn Memo/NAVY Low Impact Development (LID) Policy, dated 16 November, 2007. Comply with UFC 3-210-10, "LOW IMPACT DEVELOPMENT". These policies are in addition to State or Local storm water management program permit requirements. The DOR shall balance all requirements, Federal, State, Local, and the above stated policies, and acquire required regulatory permits when managing storm water generated.

### 2.3.2 Energy Conservation

All new mechanical equipment and lighting shall meet the minimum standards as required by the prevailing energy code for the locale. Generally, this is ASHRAE 90.1, but the contractor shall meet all required energy conservation goals required by governing Code and direction from applicable UFCs.

### 2.3.3 Building Commissioning

Building commissioning is not required. The new systems install shall have performance verification and acceptance testing by an appropriate contractor hired by the general contractor.

### 2.3.4 Accessibility Requirements

This building is an able-body personnel building and per the DOD policy memorandum, under the waiver section, and accordingly, able-body personnel buildings are not required to meet DOD standard requirements.

## 2.4 Appropriate Design

The design for this facility shall comply with the most current editions of the IBC, NFPA, and applicable state and local codes. The levels of quality and durability specified shall be responsive to the function, mission effectiveness, and economics of a high use facility that is expected to perform for 30 years or longer. New construction and finishes shall be modern, but not trendy. The materials and equipment used in the new construction shall be safe, durable, match the existing, and easy to clean and maintain. Finishes selected shall contribute to a bright and pleasing appearance.

## 2.5 Workflow Process

The work on the interior of the building can be performed at any time during the project provided the construction activities do not interfere with the continued operations and work activities of the building. The design/build contractor shall coordinate construction activity with the normal operating hours of the base. Contractor shall work with Contracting Officer to determine material lay down area. This area shall be in existing building or parking lot and shall be placed in an area as to use the least amount of space or parking stalls and shall be out of the way of movement through the spaces. The occupants will vacate designated work areas and the contractor shall allow time for the occupants to move to and from these areas.

### 2.5.1 Hours of Operation

The normal hours of operation are 0730 to 1600, Monday through Friday. The design shall address specific issues related to the work and the hours of operation of the facility. Interruptions to utilities, traffic flow, and facility operations, as a result of the work, shall be addressed in the design.

### 2.5.2 Staffing/Occupancy

Type of Occupancy	No. of Persons	Description of Activity
Marine	4	Full-time Active

Marine	13	Reserves
Occupancy		

## 2.6 Special Design Challenges

The design shall address the issues related to minimizing interruptions to utilities. The work sequencing within an occupied facility is a special design challenge that must be addressed in the design.

## 3.0 SITE ANALYSIS

### 3.1 Existing Site Conditions

The Military Equipment Parking lot is located at the west of the Building 4246 and it comprised of concrete pavement. The Building 4246 is located in NAS FORT WORTH JRB. The facility is accessed with one vehicle entrance from Cuttsway. The Building 4246 was constructed in 1994.

### 3.2 Site Development Requirements

The contractor shall protect all adjacent infrastructures during the duration of the contract. Any damage incurred by the contractors' presence shall be repaired at no cost to the government.

## 4.0 PROJECT REQUIREMENTS

This is a renovation project and there will be little change to the functional layout of the building. The size of the existing spaces will largely remain as they are currently. All work is related to constructing office spaces and classroom at the south west corner of existing Building 4246, and providing miscellaneous facility repairs. Reference drawings are provided in Part 6 to illustrate the existing construction. Where possible, quantities of the work have been estimated and listed for guidance. The contractor is responsible for site verification of existing conditions, the extent of work, quantities to be provided and additional work required to provide complete, operable and finished facilities. For all renovation of spaces, HVAC, fire protection, ceiling, lights, electrical, data, phone etc. will need to be verified unless otherwise noted in this Project Requirements.

UFC 2-000-05N provides guidance for the space requirements of office and administrative workspace. Per the occupancy counts mentioned in Staffing/Occupancy, there are 4 full-time staff and 13 reservists in this METOC administrative area. The design/build team shall reference the UFC for calculation of required space, and shall verify the final counts with the government during design.

### **METOC operations and administrative workspace/offices (58'x21.5')**

- A. Provide an enclosed office with one metal door that will provide approximate 250 net square feet office space. Provide two work stations in this office room with office furniture, fixtures, and equipment (FF&E) package. The ceiling height in this office shall be minimum 9 feet. Provide 1 phone and 1 data per workstation.
- B. Provide four (4) cubicle office spaces with minimum 7 feet high partition wall. Each cubicle office shall provide approximate 64 net square feet office space. Provide office furniture, fixtures, and equipment (FF&E) package for these 4 workstations. The ceiling height in this area shall be minimum 9 feet. Provide 1 phone and 1 data per workstation, provide power to workstations via furniture base feed.

- C. Provide a break room area and install upper and lower cabinets with space for refrigerator, coffee maker and microwave. Provide power for all appliances, coordinate with interior designer.
- D. Design and provide a printer room area near by the cubicle offices and provide supply cabinets for printer and fax/copier machine. Provide power, data and phone to support printing.
- E. Provide a multi-use space for 17 personnel use as a training classroom or conference. Provide classroom furniture, fixture, and equipment (FF&E) package for this open room. The ceiling height in this area shall be minimum 9 feet. Provide a door between this space and the METOC storage room.
- F. Provide a locker room area and 12 gym style lockers.
- G. Provide construction that complies with all life safety and fire protection code requirements for all these rooms. Modify the existing life safety and fire alarm systems of the entire building for new designed space.
- H. Provide an electrical power distribution system and communications system for the new spaces and classroom consisting of power and lighting distribution panels, circuit breakers, conduit, feeder and branch circuit wiring, energy efficient fluorescent light fixtures, switches, outlets, occupancy sensors, emergency lights, and exit signs.
- I. Provide a ducted heating and cooling system for the new Marine Meteorology & Oceanography (METOC) unit operation offices and classroom spaces. Perform load calculations to determine the heating and cooling requirements for each space based on the occupancy and use of the space. Determine the quantity of outside air required for each space based on the current ASHRAE Standard 62.1. Perform testing, adjusting, and balancing (TAB) of the new heating and cooling system.
- J. Provide interior construction including walls, partitions, doors, floor and wall finishes, suspended acoustical ceiling systems, insulation, and painting.
- K. Equip classroom with two dry marker boards, bulletin board, and a smart board with a ceiling or wall mounted projector.
- M. Replace the existing metal door and door frame between the new office area and existing hallway to meet the life safety code. Replace the weather stripping of the existing exterior door in the new classroom area and repaint the existing metal door and door frame.
- N. Provide structural elements required for support of new walls and ceiling.

### **METOC storage area**

- A. Provide new wall paint finish and wall base on the new wall between the METOC storage and administrative area.
- B. Relocate and anchor existing storage shelving on the concrete floor as requested by ATC Det A, MACS-24.
- C. Demolish all 9 MH high bay light fixtures and install fluorescent T5HO high bay light fixtures as required for proper lighting levels.
- D. Reuse the existing ventilation system and electric unit heaters to provide ventilation and heat for the METOC storage area. Relocate existing electric unit heater from the new office side to the storage area as required. Perform testing, adjusting, and balancing (TAB) of the existing ventilation system.

### **NEXGEN Operating area**

- A. Provide one Point of Presence (POP – a single station for power and comm connections) at the west end of the METMF(R) NEXGEN operating area on the existing concrete pavement. Existing electrical connection system, which includes backup generators, already established for Air Traffic Control (ATC) mobile equipment/facilities can be utilized for the METMF(R) NEXGEN.
- B. The POP shall be dedicated to the NEXGEN equipment and consist of the following
  - 1. 120/208V, 60Hz, 60A power supply with a main disconnect switch,
  - 2. An enclosure with a 5 lug terminal panel for connecting mobile equipment,
  - 3. Two 20A maintenance receptacles,
  - 4. Two Cat-6 data drops.
  - 5. One dedicated DSN capable phone line with outside commercial access.
  - 6. Mount all equipment on a weatherproof pole mounted backboard.
  - 7. All equipment shall be weatherproof NEMA 4X rated.

## **5.0 ROOM REQUIREMENTS**

No new buildings or additions are to be provided under the scope of work for this project. All work is related to the renovation and construction of existing spaces and facilities. Provide new rooms as specified.

## METOC OIC SNCOIC Office Room

### Space Characteristics

**Function/adjacencies:** Two (2) private office workstations in this office room

**Special Dimensions:**

Ideal Plan Dimensions: 250 net SF (combined)  
 Minimum Ceiling Height: 9'-0"

**Acoustics:** Provide a minimum sound isolation of Sound Transmission Class (STC) 42 for all paths through new walls.

**Access:** Provide new interior door from new interior corridor.

**Number of Occupants:** 2 in this office room.

**Other/Special Requirements:** 2 new office spaces.

Uniformat Section	Description	Qty	Size	Specific Requirements
C10	Fixed Partitions			GWB over steel studs
C10	Standard Interior Doors	1		Hollow metal door and frame
C102007	Interior Door Hardware	1		Door shall be lockable
C103004	Identifying Devices	2		Wall mounted 60" high to top of sign
C103005	Lockers	2	36x24x72"	Wardrobe lockers
C3010	Wall Finishes			GWB to receive latex primer and two coats of acrylic latex paint.
C3020	Floor Finishes			Solid vinyl tile with rubber wall base
C3030	Ceiling Finishes		2x2	Acoustical Ceiling Tiles
D30	Heating and Ventilation			Provide full time HVAC.
D40	Fire Protection			Provide new and or relocate existing fire alarm equipment and devices.
D40	Life Safety			Upgrade Life Safety systems where required to comply with the requirements of the Life Safety Code for existing facilities.
D50	Electrical Distribution			Provide electrical outlets per code. Provide (1) 20A duplex receptacle per workstation.
D5020	Lighting and Branch Wiring			Provide new lighting, manual and automatic controls.
D503001	Telecommunications Systems	2		Provide telephone and data (NMCI)

## METOC OIC SNCOIC Office Room

### Space Characteristics

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**Special Dimensions:**

Ideal Plan Dimensions: 250 net SF (combined)

Minimum Ceiling Height: 9'-0"

**Acoustics:** Provide a minimum sound isolation of Sound Transmission Class (STC) 42 for all paths through new walls.

**Access:** Provide new interior door from new interior corridor.

**Number of Occupants:** 2 in this office room.

**Other/Special Requirements:** 2 new office spaces.

Uniformat Section	Description	Qty	Size	Specific Requirements
E202003	Freestanding Furniture	2		Desks, ergonomic task chairs, file cabinets, bookcases, guest seating(2),
E202090	Other movable furnishings	2		Trash cans, clock(1),

## METOC Cubicle Offices (4)

### Space Characteristics

**Function/adjacencies:** Shall have 4 cubicle partition offices.

**Special Dimensions:**

Ideal Plan Dimensions: 64 net SF each cubicle

Minimum Ceiling Height: 9'-0"

**Acoustics:** Open office. Provide a minimum sound isolation of Sound Transmission Class (STC) 42 for all new GWB walls.

**Access:** Opening from new interior corridor.

**Number of Occupants:** 1 each

**Other/Special Requirements:** 4 open work stations.

Uniformat Section	Description	Qty	Size	Specific Requirements
C10	Partitions			7 feet high Interior cubicle office partitions.
C103004	Identifying Devices	4		Wall mounted 60" high to top of sign
C3020	Floor Finishes			Solid vinyl tile with rubber wall base
C3010	Wall Finishes			GWB to receive latex primer and two coats of acrylic latex paint.
C3030	Ceiling Finishes		2x2	Acoustical Ceiling Tiles
D30	Heating and Ventilation			Provide full-time HVAC.
D40	Fire Protection			Provide new or relocate existing fire alarm equipment and devices
D40	Life Safety			Upgrade Life Safety systems where required to comply with the requirements of the Life Safety Code for existing facilities.
D50	Electrical Distribution			Provide receptacles on each partition wall per code. Provide (1) 20A duplex receptacle per workstation.
D5020	Lighting and Branch Wiring			Provide new ceiling lighting, manual and automatic controls.
D503001	Telecommunications Systems	4		Provide telephone and data (NMCI)
E202003	Freestanding Furniture	4		Wardrobe lockers, desks, ergonomic task chairs, file cabinets, bookcases, task lights, 3x4 white board
E202090	Other Movable Furnishings	4		Trash cans, recycle cans,

## Training Classroom

### Space Characteristics

**Function/adjacencies:** Provides a space to meet training needs, in a classroom setting.

**Special Dimensions:**

Ideal Plan Dimensions: approximately 450 SF  
 Minimum Ceiling Height: 9'-0"

**Acoustics:** Open space

**Access:** One interior door access to/from storage area, open to new interior corridor.

**Number of Occupants:** 17

**Other/Special Requirements:** Multi-use space for training, classroom and conference.

Uniformat Section	Description	Qty	Size	Specific Requirements
C1010	Fixed Partitions			GWB over steel studs
C102001	Interior Door	1		Hollow metal door and door frame
C102007	Interior Door Hardware	1		Door shall be lockable
C103003	Marker Boards and Tack Boards	2 MB 1 TB	8x4' MB 4x4' TB	Mount on the wall with lectern side. Mount second marker board on opposite wall
C103004	Identifying Devices	1		Wall mounted 60" high to top of sign
C3010	Wall Finishes			GWB to receive latex primer and two coats of acrylic latex paint.
C3020	Floor Finishes			Solid vinyl tile with rubber wall base
C3030	Ceiling Finishes		2x2	Acoustical Ceiling Tiles
D30	Heating and Ventilation			Provide full time HVAC.
D40	Fire Protection			Provide new or relocate existing fire alarm equipment and devices
D40	Life Safety			Upgrade Life Safety systems where required to comply with the requirements of the Life Safety Code for existing facilities.
D50	Electrical Distribution			Provide electrical outlets per code. Provide power to projector and new lighting layout for classroom with manual and automatic controls.
D503001	Telecommunications Systems			Provide data in conduit to projector and training table.

## Training Classroom

### Space Characteristics

**Function/adjacencies:** Provides a space to meet training needs, in a classroom setting.

**Special Dimensions:**

Ideal Plan Dimensions: approximately 450 SF  
 Minimum Ceiling Height: 9'-0"

**Acoustics:** Open space

**Access:** One interior door access to/from storage area, open to new interior corridor.

**Number of Occupants:** 17

**Other/Special Requirements:** Multi-use space for training, classroom and conference.

Uniformat Section	Description	Qty	Size	Specific Requirements
E102009	Audio Visual Equipment	1		Provide one projector and one smartboard. (Projector and smartboard are part of FF&E). Projector must be able to be controlled from the lectern location.
E202003	Freestanding Furniture			Nesting training tables, nesting seating on casters, and lectern on casters to accommodate 16 Marines + 1 trainer. Computer desk (1), file cabinet, ergonomic task chair (1).
E202090	Other movable furnishings	1		Trash can, recycle can, clock

## Break Area

### Space Characteristics

**Function/adjacencies:** Shared open space

**Special Dimensions:**

Ideal Plan Dimensions: approximately 40 SF  
 Minimum Ceiling Height: 9'-0"

**Acoustics:** N/A

**Access:** Open from new interior corridor.

**Number of Occupants:**

**Other/Special Requirements:**

Uniformat Section	Description	Qty	Size	Specific Requirements
C3010	Wall Finishes			GWB to receive latex primer and two coats of acrylic latex paint.
C3020	Floor Finishes			Solid vinyl tile with rubber wall base
C3030	Ceiling Finishes		2x2	Acoustical Ceiling Tiles
D30	Heating and Ventilation			Provide full time HVAC.
D40	Fire Protection			Provide new and or relocate existing fire alarm equipment and devices.
D40	Life Safety			Upgrade Life Safety systems where required to comply with the requirements of the Life Safety Code for existing facilities.
D50	Electrical Distribution			Provide electrical outlets per code. Provide a separate dedicated circuit for the refrigerator.
D5020	Lighting and Branch Wiring			Provide new lighting, manual and automatic controls.
E202003	Freestanding Furniture			Provide upper and lower cabinets, and counter top.
E202090	Other movable furnishings	1		Microwave, refrigerator, trash cans,

## Printer/Copier Area

### Space Characteristics

**Function/adjacencies:** Shared open space for office supply

**Special Dimensions:**

Ideal Plan Dimensions: approximately 40 SF  
 Minimum Ceiling Height: 9'-0"

**Acoustics:** N/A

**Access:** Open from new interior corridor.

**Number of Occupants:**

**Other/Special Requirements:**

Uniformat Section	Description	Qty	Size	Specific Requirements
C3010	Wall Finishes			GWB to receive latex primer and two coats of acrylic latex paint.
C3020	Floor Finishes			Solid vinyl tile with rubber wall base
C3030	Ceiling Finishes		2x2	Acoustical Ceiling Tiles
D30	Heating and Ventilation			Provide full time HVAC.
D40	Fire Protection			Provide new and or relocate existing fire alarm equipment and devices.
D40	Life Safety			Upgrade Life Safety systems where required to comply with the requirements of the Life Safety Code for existing facilities.
D50	Electrical Distribution			Provide electrical outlets per code. Provide a separate dedicated circuit for the refrigerator.
D5020	Lighting and Branch Wiring			Provide new lighting, manual and automatic controls.
D503001	Telecommunications Systems			Provide NMCI Drop for printer
E202003	Freestanding Furniture			Provide office supply storage cabinets, and counter top.
E202090	Other movable furnishings	1		Recycle can, trash can

## Lock Room Area

### Space Characteristics

**Function/adjacencies:** Shared open space

**Special Dimensions:**

Ideal Plan Dimensions: approximately 60 SF  
 Minimum Ceiling Height: 9'-0"

**Acoustics:** N/A

**Access:** Open from new interior corridor.

**Number of Occupants:**

**Other/Special Requirements:**

Uniformat Section	Description	Qty	Size	Specific Requirements
C103005	Lockers	12	15x24x36"	Provide double tier lockers.
C3010	Wall Finishes			GWB to receive latex primer and two coats of acrylic latex paint.
C3020	Floor Finishes			Solid vinyl tile with rubber wall base
C3030	Ceiling Finishes		2x2	Acoustical Ceiling Tiles
D30	Heating and Ventilation			Provide full time HVAC.
D40	Fire Protection			Provide new and or relocate existing fire alarm equipment and devices.
D40	Life Safety			Upgrade Life Safety systems where required to comply with the requirements of the Life Safety Code for existing facilities.
D50	Electrical Distribution			Provide electrical outlets per code.
D5020	Lighting and Branch Wiring			Provide new lighting, manual and automatic controls.

## **6.0 ENGINEERING SYSTEM REQUIREMENTS**

### **C10 INTERIOR CONSTRUCTION SYSTEM DESCRIPTION**

Interior construction includes interior partitions, interior doors, and fittings.

Provide durable construction appropriate for the building function. Acoustic properties of materials, as well as durability, shall be considered during material selection.

#### **C1010 PARTITIONS**

All interior fixed partitions shall be metal studs and acoustical blanket with gypsum board on each side.

##### **C101001 FIXED PARTITIONS**

Provide fixed interior partitions 6 inch above the ceiling height or full height (floor to deck) based on the code requirements.

#### **C1020 INTERIOR DOORS**

##### **C102001 STANDARD INTERIOR DOORS**

All interior doors shall be flush to match the appearance of the existing doors. All interior doors and frames shall be hollow metal or match the existing.

##### **C102002 GLAZED INTERIOR DOORS**

Provide vision glazing in doors where it is required or it is deemed advantageous to be able to see through the door, either for safety of pedestrian traffic, or other functional reason.

##### **C102003 FIRE DOORS**

Provide interior fire doors as required.

##### **C102007 INTERIOR DOOR HARDWARE**

Provide special door hardware, such as combination locks to match the existing.

Door hardware finish shall be chrome-plated brass or stainless steel to match the existing.

#### **C1030 SPECIALTIES**

##### **C103003 MARKER BOARDS AND TACK BOARDS**

Provide two minimum 8' x4' marker boards and a minimum 4'x4' tack board as indicated in this RFP. Marker boards and tack boards are funded as part of the construction contract. Provide porcelain enamel steel marker boards and ¼" thick cork tack surfaces with self-healing backing and aluminum frames. Marker board and tack board are funded as part of the construction contract.

## **C103004 IDENTIFYING DEVICES**

All necessary interior signage shall be incorporated as part of the architectural drawings. Interior signage is not collateral equipment. Interior signage shall demonstrate complete coordination with the facility design, SID and FF&E submittals. Provide interior directional signage as required for facility wayfinding. Provide an identifying device at each interior door. Signs must meet ADA requirements.

## **C103005 LOCKERS**

Provide 2 wardrobe lockers in OIC SNCOIC office and 4 wardrobe lockers in cubicle office area as specify (minimum size 36x24x72" each). Provide 12 wardrobe lockers in the locker room area (minimum size 15x24x36" each, double tier). Lockers shall be metal construction (diamond perforated or louvered) and enamel finish. Lockers in locker room area are funded as part of the construction contract. Lockers in office area are funded as part of the FF&E Package.

## **C103007 FIRE EXTINGUISHER CABINETS**

Provide fire extinguisher cabinets in renovated areas where existing spacing does not meet the requirements of NFPA 10 for travel distance and area of coverage. Cabinet shall be semi-recessed in new construction and surface-mounted in new mechanical/electrical spaces and existing wall construction. Cabinets shall be coordinated with interior finishes.

## **C103008 COUNTERS**

Provide solid acrylic counter tops and back splashes in Break Area and Printer/Copier Area.

## **C103009 CABINETS**

Provide cabinetry and millwork items with associated accessories Break Area. Cabinetry shall be AWI custom grade and have concealed hinges with adjustable standards for shelves. All exposed surfaces will be covered with high pressure plastic laminate clad.

Provide metal cabinets in the Printer/Copier Area for storage of office supply. Metal cabinets shall match the new office cabinets. Each Cabinet minimum size is 24" w x 24" d x 30" h and must be sized large enough to accommodate all the office supply and documentation.

Provide specific cabinetry as shown on the Project Requirements.

## **C103012 FIRESTOPPING PENETRATIONS**

Provide all sleeves, caulking, and flashing for firestopping penetrations.

## **C103090 OTHER INTERIOR SPECIALTIES**

Provide ceiling or wall mounted projector as approved by client.

## **C30 INTERIOR FINISHES**

### **SYSTEM DESCRIPTION**

Interior finishes include wall finishes, floor finishes, wall base finishes, and ceiling finishes.

Provide aesthetically pleasing, functional, durable finishes appropriate to the buildings function. Acoustic properties of materials, as well as durability and ease of maintenance, shall be considered during material selection. Maximize the use of sustainable materials.

Color selections require the use of wall and floor finish material accents to enhance the color and appearance of the interior design. Provide a wall and floor color design that includes a minimum of two different accents colors throughout the facility. Submit pattern drawings of the accents design with the interior design submittal.

## GENERAL SYSTEMS REQUIREMENTS

See Project Requirements and UFC 4-171-06N March 2009 Chapter 4 pages 19 through 60 for specific requirements on interior finishes.

### C3010 WALL FINISHES

All interior wall finish materials shall be gypsum board and paint. Gypsum board to receive latex primer and two coats of acrylic latex, lead-free paint.

All primer and paint systems shall be the manufacturer's highest premium quality professional grade. All materials shall be moisture and mildew resistant and scrubbable. Do not use lead or lead-based paint.

Provide full and adequate protection systems for interior finishes. Commercial, premium grade vinyl corner guards shall be used on all outside corners as appropriate. Provide wall-mounted doorstops for all interior doors that do not have automatic closure mechanisms with travel limit adjustment.

### C3020 FLOOR FINISHES

Provide floor finish materials to meet the following requirements;

a. Resilient Tile Flooring

Provide resilient vinyl composition tile (VCT) flooring in areas as indicated requiring flooring with moderate durability high maintenance and low cost VCT shall be commercial grade, with pattern through thickness of tile VCT with biobased materials or recycled content shall be used where practical. Provide new wall base for all new VCT flooring.

Thresholds of non-ferrous metals shall be used where flooring materials change.

b. Base

Wall base shall be 4" rubber wall base unless otherwise indicated.

Conceptual Floor Finish Schedule  
SPACE

#### MINIMUM FINISH REQUIREMENT

All spaces in this project

VCT and rubber wall base to match the existing office in the other buildings.

### C3030 CEILING FINISHES

Finished surface of ceiling tiles shall be selected to address acoustical, maintenance, moisture or impact resistance requirements of the room.

Primary ceiling finish shall be 24 inch by 24 by 5/8 inch minimum thickness suspended acoustical panel ceiling system. Acoustical panels shall have a tegular edge. Provide fine fissured panel surface.

### C3040 INTERIOR COATINGS AND SPECIAL FINISHES

Paint or repaint all interior exposed surfaces in the new office and classroom area including metal items, such as access panels and panel boxes. Provide special high performance architectural coatings in all the spaces.

### D30 HVAC

Refer to Part 4 Section D30 for performance requirements of the building elements included in the HVAC system.

### SYSTEM DESCRIPTION

Provide a fan coil unit and air-to-air heat pump heating, ventilating and air conditioning (HVAC) system for the new Marine Meteorology & Oceanography (METOC) unit's office and classroom spaces. Provide a HVAC system that attains the following objectives: Occupant comfort, Indoor air quality, Acceptable noise levels, Energy efficiency, Reliable operation, and Ease of maintenance. Design and installation shall be in accordance with IMC and UFC 3-401-01, Mechanical Engineering. Refer to the Project Program for building occupancy levels. Economizers shall not be used.

Reuse existing ventilation system for the METOC storage area.

### GENERAL SYSTEM REQUIREMENTS

Provide working space around all equipment. Provide all required fittings, connections and accessories required for a complete and usable system. All equipment shall be installed per the criteria in PTS Section D30 and the manufacturer's recommendations. Where the word "should" is used in manufacturer's instructions, substitute the word "shall".

Provide air conditioning and heating for spaces as indicated and for the following Design conditions:

#### Outside Conditions

Summer	99	Degrees F dry bulb	Winter	26	Degrees F
	75	Degrees F wet bulb			

#### Inside Conditions

Summer	75	Degrees F dry bulb	Winter	68	Degrees F
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	50	%RH			

Provide Ventilation rates and systems per the latest edition of ASHRAE Standard 62.1, *Ventilation for Acceptable Indoor Air Quality*.

Provide minimum 4-inch thick concrete pads and neoprene pads under equipment mounted outdoors on grade. Provide bollards to protect equipment mounted outdoors.

All mechanical equipment shall have painted finishes that pass a salt-spray test conducted per ASTM B117 for duration of at least 500 hours.

All outside mechanical equipment HVAC condenser coils shall be provided with hail guards.

## **D3030 COOLING GENERATING SYSTEMS**

### **D303002 DIRECT EXPANSION SYSTEMS**

Provide an air-to-air heat pump unit with ducted air distribution and controls to serve the heating and cooling requirements of the facility. Install vibration isolators on heat pumps. Provide heat pumps with supplemental electric heaters as required.

## **D3040 DISTRIBUTION SYSTEMS**

### **D304001 AIR DISTRIBUTION, HEATING & COOLING**

Provide insulated, galvanized steel ductwork constructed, braced, reinforced, installed, supported, and sealed per the IMC and SMACNA standards.

Provide grilles, registers, and diffusers.

## **D3050 TERMINAL & PACKAGE UNITS**

### **D305003 FAN COIL UNITS**

Provide a fan coil unit and controls to serve the heating and cooling requirements of the office and classroom area of the facility. Provide a horizontal fan coil unit with means for maintenance of the unit through lockable access panels. Provide supplemental electric heaters for the fan coil unit as required. Provide auxiliary drain pans below the unit, valves, and appurtenances to prevent condensate from damaging ceilings.

### **D305005 ELECTRIC HEATING**

Reuse the existing electric unit heaters for the storage area of the facility.

## **D3060 CONTROLS AND INSTRUMENTATION**

### **D306001 HVAC CONTROLS**

## **D306001 1.2 ELECTRONIC CONTROLS**

Provide electronic controls for the HVAC systems and equipment.

## **D3070 SYSTEMS TESTING AND BALANCING**

Provide complete Testing and Balancing (TAB) of all air distribution systems and HVAC equipment.

## **D3090 OTHER HVAC SYSTEMS AND EQUIPMENT**

### **D309001 GENERAL CONSTRUCTION ITEMS**

Comply with the Force Protection Criteria. Provide an emergency air distribution shutoff switch to immediately shut down all air distribution systems and close low leakage dampers. Locate the bottom of air intakes at least 10 feet above the ground.

## **D40 FIRE PROTECTION**

Refer to Part 4 Section D40 for performance requirements of the building elements included in the fire protection systems.

### **SYSTEM DESCRIPTION**

Provide integrated fire alarm system capable of notifying building occupants in the new Marine Meteorology & Oceanography (METOC) unit's office and classroom spaces.

Upgrade Life Safety systems in the new METOC area.

### **GENERAL SYSTEM REQUIREMENTS**

Provide working space around all equipment. Provide concrete pads under all equipment. Provide all required fittings, connections and accessories required for a complete and usable system. All equipment shall be installed per the criteria of PTS section D40 and the manufacturer's recommendations. Where the word "should" is used in the manufacturer's recommendations, substitute the word "shall".

All Design Documents, (i.e. Building Code/Life Safety Analysis, plans, specifications, and calculations) developed for Section D40 shall be prepared by, or under the supervision of the design/build contractor's Qualified Fire Protection Engineer, the Fire Protection Designer of Record (FPDOR).

Installation drawings, shop drawings or working plans, calculations, other required pre-construction documentation and as-built drawings shall be prepared by, or under the direct supervision of a NICET engineering technician. The NICET engineering technicians shall hold a current certification as an engineering technician in the field of Fire Protection Engineering Technology with minimum Level II certification in the appropriate subfield.

Provide training for the active systems consisting of two (2) four (4)-hour sessions to accommodate all shifts of the base fire department and allow for rescheduling for unforeseen fire department responses.

All work shall be completed in strict compliance with UFC and NFPA standards.

All work to be performed under a supervision of a qualified fire protection engineer.

In occupied facilities all fire protection systems including automatic sprinkler system, fire alarm system, and mass notification system shall to be fully operational at the end of each workday.

## **D4010 FIRE ALARM AND DETECTION SYSTEMS**

Extend the existing fire alarm system in the METOC area to provide a complete system that is compliant with the UFC 3-600-01, Fire Protection Engineering for Facilities, 26 September 2006, Change 3, 1 Mar 2013 and UFC 3-600-10N, Fire Protection Engineering, (Final Draft) July 2006, and the latest version of NFPA codes.

The fire alarm system shall be capable of notifying building occupants inside the METOC area. Provide a complete, electrically supervised, manual and automatic, annunciated fire alarm and detection system throughout the new METOC area and tie into the existing fire alarm system. The fire alarm system shall include manual stations, system smoke detectors (if required) in all areas with the exception of heat detectors in areas that are unconditioned or dirty, duct smoke detectors where required, and audio/visual alarms.

Manual pull stations shall be flush or surface mounted. Use of existing conduit acceptable, however, the position of the new pull station will be required to be 48 inches AFF. If necessary provide finished extender arms or panels to locate pull stations at a compliant height.

Existing conduit may be used for installation of fire alarm system however, it will be considered new as it pertains to function, use and installation. Use of existing conduit in the METOC will be subject to the requirements for new conduit according to NFPA 70 and NFPA 72.

Prime and paint conduit in all exposed areas a similar color as the surrounding surface in the Office and classroom areas. Conduit in unexposed areas, i.e. above dropped ceilings and within walls does not have to be painted, but junction box covers shall be painted red with a black plastic tag glued to the cover with the words "FA Sys" in white and one-half inch letters. Conduit in the Storage area does not have to be painted.

Demolition shall include removal of the existing fire alarm devices, wire and any unused exposed conduit. In the METOC area surfaces shall be repaired and painted to match adjacent surfaces following removal of the old devices. Patch and repair all holes and repair all destructive measures taken in both construction of new and demolition of the existing fire alarm system in the METOC area. Patch and repair all existing and new penetrations within the interior walls and the floor/ceiling.

## **D4020 OTHER FIRE PROTECTION SYSTEMS**

Life Safety systems shall be upgraded where required to comply with the requirements of the latest version of NFPA 101 (Life Safety Code) for existing facilities.

## **D50 ELECTRICAL**

### **SYSTEM DESCRIPTION**

Demolish existing electrical and lighting equipment within Building 4246 as necessary to accommodate the Marine METOC office space/storage area renovations. Demolish all 9 MH high bay light fixtures and replace with fluorescent T5HO high bay lighting as required.

Utility and communication services are currently provided to building 4246 and will be accessed for this project. Provide an interior electrical system for the new METOC office space/storage area consisting of Distribution and Lighting Panelboards, Dry Type Transformers, Conduits, Feeder and Branch Circuits, Motor Controls for mechanical equipment, Lighting and Branch Wiring, Communications and Security, Emergency Lighting, Grounding, including accessories and devices as necessary and required for a complete and usable system. This section covers installations out to the building 5 foot (1.5 meter) line.

The interior distribution system shall consist of insulated conductors in conduit.

## **GENERAL SYSTEM REQUIREMENTS**

Provide an Electrical System complete in place, tested and approved, as specified throughout this RFP, as needed for a complete, usable and proper installation. All equipment shall be installed per the criteria of PTS Section D50 and the manufacturer's recommendations. Where the word "should" is used in the manufacturer's recommendations, substitute the word "shall".

## **D5010 ELECTRICAL SERVICE AND DISTRIBUTION**

### **D501001 MAIN TRANSFORMERS**

Main transformer(s) are defined in Section G40, *Site Electrical Utilities*.

### **D501003 INTERIOR DISTRIBUTION TRANSFORMERS**

Provide dry type transformers as required to step down secondary voltages for general purpose outlets and other low voltage equipment.

### **D501004 PANELBOARDS**

Provide distribution and branch circuit panelboards to serve loads as required.

### **D501006 MOTOR CONTROL CENTERS**

Provide individual motor starters with disconnect switches for motor controls as required by mechanical equipment.

### **D501090 OTHER SERVICE AND DISTRIBUTION**

Busway shall be copper.

## **D5020 LIGHTING AND BRANCH WIRING**

Provide electrical connections for all systems requiring electrical service.

Provide lighting and general purpose receptacles throughout all spaces as required. Provide ceiling mounted receptacle in Multi-use space for projector. Provide dedicated receptacle for printer/copier.

Provide power to modular furniture as required.

### **D502001 BRANCH WIRING**

All branch wiring shall be insulated conductors in conduit.

## **D502002 LIGHTING EQUIPMENT**

Provide a complete lighting system consisting of exit and emergency lighting, space, and area lighting consisting of fluorescent lighting including switches and automatic controls including occupancy sensors.

## **D5030 COMMUNICATIONS AND SECURITY**

The Project Requirements Section identifies locations for communications and security systems and equipment, unless noted otherwise in the following sub-elements.

### **D503001 TELECOMMUNICATIONS SYSTEMS**

Provide a complete unclassified building entrance facility, backbone distribution system, and horizontal distribution system including, but not necessarily limited to, all wiring, pathway systems, grounding, backboards, connector blocks, patch panels, outlet boxes, telephone jacks, data jacks, and cover plates. Provide one data drop and one telephone drop for each workstation. Provide a data drop for the printer/copier and one for a computer in the multi-use space to use in conjunction with a ceiling mounted project. Provide AV outlet boxes and empty conduit with pull strings for ceiling mounted project to computer in Multi-use space.

Provide Category 6 Unshielded Twisted Pair (UTP) copper cable for horizontal voice and data cables.

### **D503090 OTHER COMMUNICATIONS AND ALARM SYSTEMS**

### **D5090 OTHER ELECTRICAL SERVICES**

#### **D509001 GENERAL CONSTRUCTION ITEMS (ELECTRICAL)**

Provide General Construction Items (Electrical) including, but not necessarily limited to, all connections, fittings, boxes and associated equipment needed by this and other sections of this RFP as required for a complete and usable system.

Conduits, cable trays and busways that penetrate fire-rated walls, fire-rated partitions, or fire-rated floors shall be firestopped in accordance with Section C10, Interior Construction.

#### **D509002 EMERGENCY LIGHTING AND POWER**

Provide power and wiring for emergency lights and exit lights throughout the facility.

Provide an automatic transfer switch for the METOC space that will utilize the existing back-up power generator if the power is lost.

#### **D509003 GROUNDING SYSTEMS**

Provide a complete grounding system for the facility electrical and telecommunications systems.

#### **D509005 ELECTRIC HEATING**

Provide power wiring and connections as required for all electric heating systems and equipment.

## **E10 EQUIPMENT**

### **GENERAL SYSTEMS REQUIREMENTS**

#### **E1010 COMMERCIAL EQUIPMENT**

The contractor shall obtain the services of equipment specialists to specify audiovisual or other specialty equipment. Equipment specialists shall not have any affiliation with the product specified.

All specialty equipment will be installed by qualified installers regularly engaged in installing the specialty equipment.

#### **E1020 INSTITUTIONAL EQUIPMENT**

##### **E102009 AUDIOVISUAL EQUIPMENT**

Under the construction contract, the general contractor shall be responsible for coordinating design requirements with the end user/Command IT personnel, providing equipment specifications, and procurement and installation of the Audiovisual (AV) equipment. As required, the contractor shall obtain services of an audiovisual equipment specialist to design and specify the audiovisual equipment. AV specialist shall have no affiliation with specified products.

AV Equipment including electronics potentially connected to data/IT, shall be coordinated with design and construction but planned for and funded by the user. AV equipment shall include, but is not limited to: smartboard and projector.

AV equipment will be funded as part of the FF&E Package.

#### **E1040 GOVERNMENT FURNISHED EQUIPMENT**

Rough-in and provide connections for Government-furnished equipment such that equipment will operate as intended, including providing miscellaneous items such as plugs, receptacles, wire, cable, conduit, flexible conduit and outlet boxes or fittings.

## **E20 FURNISHINGS**

### **SYSTEM DESCRIPTION**

Furnishings shall include fixed furnishings as part of the Structural Interior Design (SID) and the design and documentation of the movable furnishings, the Furniture, Fixtures, and Equipment (FF&E) Package.

The design and documentation of both shall be funded as part of the construction contract. The purchase and installation of the FF&E Package shall be funded separately as part of Collateral Equipment.

The movable furniture and furnishings (FF&E) for this facility may include, but are not limited to movable furniture systems, freestanding furniture, area/accent rugs, artwork, appliances, flat screen TVs (not connected to data), accessories, shop equipment, specialty equipment (specified by the Activity) and other miscellaneous items to support facility functions.

FF&E is estimated in the following amount: \$57,500. This estimate does not include the contractor's Handling and Administration Rate (HAR).

Fixed furnishings (items that are fixed to the structure), such as specialty equipment, drying cages, weapon racks, lockers, motorized projection screens, blinds/shades are part of the construction contract.

The Audio Visual (AV) Equipment will be funded as part of the FF&E Package. The A/V Equipment Package will be identified as a separate line item, and priced separately from the FF&E. Refer to Part 3 Section E10 of this RFP.

## **GENERAL SYSTEMS REQUIREMENTS**

Design and provide fixed and movable furnishings for all areas as developed during Activity programming and as indicated in the Project Requirements (refer to Part 3 of this RFP). Design a complete FF&E package and prepare supporting plans and procurement data. FF&E items identified in this RFP are to be used as a guideline to assist in establishing the minimum facility requirements and do not relieve the Contractor's Interior Designer from developing a complete design package that incorporates ALL of the Activities FF&E requirements. Design per specific UFC (i.e. Youth center, BEQ, etc) and in conjunction with UFC 03-120-10, Interior Design.

The contractor shall have an Interior Designer with a minimum of one of the following credentials: National Council for Interior Design Qualification (NCIDQ) certification, or state and/or jurisdiction Interior Design Certification, Registration, or License. This Interior Designer must prepare both the SID and the FF&E Package and participate in all design charrettes and review meetings to develop the building design and floor plan. When Audio Visual (A/V), shop or specialty equipment is required in the project, the contractor shall obtain the services of equipment specialists to specify the A/V, shop, or specialty equipment. The Contractor's Interior Designer and any Specialists shall not have any affiliation with the products specified. The NAVFAC Interior Designer reserves the right to approve/disapprove the qualifications of the Contractor's Interior Designer.

All fixed and movable furnishings selections shall be closely coordinated with Parts 3 and 4 Sections C10, Interior Construction, and C30 and E10 of this RFP. The FF&E package shall be fully integrated with the building systems and finishes.

The Contractor's Interior Designer shall be responsible for designing and providing specifications for procurement of all FF&E, to include delivery and installation, for the facilities built under this contract as directed by the NAVFAC Interior Designer. FF&E specifications shall be based on NAVSUP Blanket Purchase Agreements (BPA's), GSA schedules, and other Federal contracts and complying with priorities found in FAR Part 8.404. A list of current BPA contract holders is located in Part 6 of this RFP.

The FF&E package shall be fully integrated into the design and construction schedule for the building.

## **INTERIOR DESIGN SUBMITTAL AND MEETING REQUIREMENTS**

### **STRUCTURAL INTERIOR DESIGN (SID)**

The SID submittal process shall begin following the award of the RFP. The SID submittal shall include Interior Design programming documents, FF&E Floor Plans, and interior finish/color and material samples. Refer to this RFP Part 4 Section Z10 General Performance Technical Specifications and Part 2 UFGS Section 01 33 10.05 20, Design Submittal Procedures. Provide the following SID meetings and submittals;

- a. Concept Design Workshop (CDW) (10%-15%) or Initial Design Meeting: The Contractor's Interior Designer shall meet with the Activity to develop the Interior Design

SID programming documents, which will include a preliminary Furniture and Equipment Plan and the FF&E Summary List. The Contractor's Interior Designer shall provide in-depth room by room interviews to confirm Activity requirements for the new facility(s). These interviews shall occur at the Activity's current location, if possible, to include building walk-thru(s). Minutes of this meeting shall be submitted to the NAVFAC Interior Designer within 7 days

- b. Design Development (35%-50%) Submittal: The Contractor's Interior Designer shall provide a conceptual Finish Schedule, proposing finish materials to be used in all spaces. The Furniture and Equipment Plan and FF&E Summary List should be further developed and included in this submittal.
- c. SID "Over the Shoulder" Review: Prior to the Prefinal (100%) Submittal, the Contractor's Interior Designer shall meet with the NAVFAC Interior Designer for an "over-the-shoulder" review meeting to present a minimum of (2) options for the interior building finishes/colors/materials. Finishes shall display manufacturer's label/specifications and be presented in a "loose" format for preliminary approval prior to the presentation with the Activity. The over-the-shoulder review meeting is to be held at NAVFAC SE.
- d. Prefinal (100%) Submittal: The Contractor's Interior Designer shall present a minimum of two (2) NAVFAC-approved interior building finishes/color/material options, to the Activity for approval. In addition, the submittal shall include an updated Furniture and Equipment Plan, Finish Schedule, Floor Finish Plan, and Finish Legend for review and approval.
- e. Final Submittal: The Contractor's Interior Designer shall incorporate the final approved Furniture and Equipment Plan, Finish Schedule, Floor Finish Plan and Finish Legend into the Contractor's final drawing set. These drawings and all approved finishes shall be submitted in 8-1/2" x 11" binder format, using heavy duty plastic sheet protectors. Three (3) sets of the Final SID Submittal shall be distributed one each to the NAVFAC Project Manager, NAVFAC Interior designer, and the Activity.

#### **SID CONSTRUCTION SUBMITTALS**

No substitutions shall be made to the SID finishes once they have been approved by NAVFAC during the design phase. In the event that revisions may be required due to unforeseen conditions such as discontinued product, such revisions must be submitted via the FEAD/ROICC for approval by the NAVFAC Interior Designer before substitutions can be made.

### **FIXTURES, FURNISHINGS AND EQUIPMENT (FF&E)**

The FF&E process shall begin approximately with the 50% design submittal. The submittals shall include fixtures, furnishings, and equipment specifications in accordance with the Activity requirements to produce an optimally functional facility. FF&E are all items that are not fixed to the structure, but are fully integrated with the building systems and finishes. Refer to RFP Part 4 Section Z10 General Performance Technical Specification and Part 2 UFGS Section 01 33 1-.05 20, Design Submittal Procedures.

Develop design as described and in accordance with the Activity requirements. Include in the design all loose furnishings required to produce an optimum functional facility, consistent with quality commercial design. This project also includes the preparation of specific detailed information for each selected item. Each submittal shall demonstrate interaction thoroughly with the Activity

requirements and complete coordination with the facility design and the SID. Three (3) submittals will be required; (1) each for the NAVFAC Project Manager, NAVFAC ID, and the Activity.

For all projects, including fast track projects, the contractor shall be responsible for sufficiently scheduling all SID/FF&E submittals early enough to obtain the required government approvals, and meet all ordering and installation lead times to complete the project by the contract completion date.

These are minimum requirements and the Contractor shall be prepared to provide any/all additional meetings and submittals that may be necessary to support the Interior Design effort/FF&E coordination.

Provide the following FF&E meetings and submittals;

- a. FF&E Requirements (Interior Design Orientation) Meeting: This meeting shall occur upon completion of Design Development (or approximately 50%), at NAVFAC SE prior to the development of the FF&E package. The NAVFAC Interior Designer will provide the Contractor's Interior Designer a sample format of the FF&E submittal, review the Best Value Determination (BVD) process, and discuss Blanket Purchase Agreement (BPAs), GSA or other mandatory sources to consider. Minutes of this meeting shall be submitted to the NAVFAC Interior Designer within 7 business days.
- b. FF&E "Over the Shoulder" Review: Prior to the Preliminary FF&E Submittal the Contractor's Interior Designer shall meet with the NAVFAC Interior Designer for an "over-the-shoulder" review to present preliminary FF&E options. These can be presented in a "loose" format for preliminary approval prior to the Activity presentation. The "over-the-shoulder" review meeting is to be held at NAVFAC SE.
- c. FF&E Concept Presentation: The Contractor's Interior Designer shall present the NAVFAC approved preliminary FF&E package to the Activity for approval. This presentation shall include loose format samples and catalog cuts. Sample boards are not required.
- d. Best Value Analysis (BVA), "Over the Shoulder Review": Prior to issuing the BVA, the Contractor's Interior Designer shall meet with the NAVFAC Interior Designer for an "over-the-shoulder" review of the solicitation package. BVA Solicitation to include the following:
  1. Copy of the BVA cover letter.
  2. BVA Solicitation form & Questionnaire
  3. Technical Specification to establish minimum acceptable FF&E requirements
  4. Room layouts and furniture typical
  5. Furniture Plans with Legends (PDF format)
- e. Preliminary BVA Submittal - The Contractor's Interior Designer shall submit one (1) copy of the Preliminary BVA package to the NAVFAC Interior Designer. This submittal shall be in binder format and will include the following:
  1. Cover Title Page (project name, project #, submittal date, submittal title)

2. Table of Contents
  3. Point of Contact List
  4. Narrative of Interior Designer Objectives
  5. Copy of all information sent to bidders and documentation that all required sources were contacted.
  6. BVA Spreadsheet
  7. Solicitation Forms submitted by each bidder (cut sheets/highlighted pricing sheets/technical specifications, pricing, dealer and manufacturer qualification for each product showing that products meets all requirements.)
  8. Response from UNICOR
- f. Preliminary FF&E Submittal: The Preliminary FF&E submittal shall be due at pre-final (100%). It shall be presented to the Activity and NAVFAC Interior Designer. Submit the following in a 3-ring binder (with the exception of the 16x20 color boards) for both Activity and NAVFAC Interior Designer review and approval:
1. Cover Title Page (project name, project #, submittal date, submittal title)
  2. FF&E list (Cost Summary)
  3. Furniture placement plans coded to the FF& list and furnishings specifications
  4. Specifications for furniture, furnishings, etc.
  5. Catalog cuts and finish samples for all specified items
  6. 16x20 inch color boards of furniture/furnishings and finishes specified for Activity presentation to indicate overall design intent
- g. Final FF&E Submittal: The Contractor's Interior Designer shall submit the Final FF&E Package within 30 calendar days following the receipt of review comments on the preliminary FF&E submittal. The Final submittal shall incorporate the following:
1. Cover Title Page (project name, project #, submittal date, submittal title)
  2. Table of Contents
  3. Manufacturer Contact List
  4. Procurement Data Sheets for each product indicating final finish and fabric selections
  5. Copy of Final Quote on Letterhead from the vendor determined to be the Best Value.
  6. Best Value Determination Guideline sheets (completed and signed by the Contactor's Interior Designer)
  7. CD copy of the final FF&E binder.
  8. Final Finish Selections and Memo Samples for the FF&E submitted in 8x10 binder

format, using heavy-duty plastic sheet protectors

## **FF&E CONSTRUCTION SUBMITTALS**

Submit any revisions or deviations caused by discontinued items to the Contracting Officer for approval by the NAVFAC Interior Designer.

SD-10 Operation and Maintenance Data

List Operation and Maintenance Manuals for seating, systems furniture and keyboard trays.

## **E2010 FIXED FURNISHINGS (SID)**

Fixed furnishings (SID) are funded as part of the construction project and are not funded as part of FF&E Each submittal must demonstrate complete coordination with the facility design and with the package for movable furnishings.

Develop design as described herein and provide storage shelving, equipment racks, and window treatments. Cross reference C10 Interior Construction, and C30 Interior Finishes, for performance requirements. Each submittal must demonstrate complete coordination with the facility design and with the package for movable furnishings.

## **E2020 MOVABLE FURNISHINGS**

The design of the FF&E package is funded as part of the construction contract base bid. The purchase and installation coordination of FF&E is a planned modification to the contract and funded separately as part of Collateral Equipment. The specific process is outlined in PTS E20 in Part 4 of this RFP. If a Collateral Equipment list is provided within this RFP, the costs associated with the purchase and installation of these items are NOT to be included in the base bid. The estimated Collateral Equipment cost is provided for information purposes only. The Contractor only needs to propose the Handling and Administrative Rate (HAR)

Design and provide a FF&E package in accordance with UFC 03-120-10, *Interior Design*, and other portions of this RFP for all areas as developed during Activity programming to provide a fully usable and complete facility. FF&E may also include specialty items specified by the Activity and the Contractor's Interior Designer is responsible for incorporating these into the FF&E package.

The FF&E Package must include shipping, freight, handling, and professional installation, project management, HAR, applicable sales tax. A Best Value Determination shall be performed on a minimum of three manufacturers for orders exceeding a total procurement of \$3000 from an individual manufacturer. Documentation shall be provided to the Government with the final FF&E package. Specific Documentation is indicated in Part 4 of the RFP. The BVD Statement shall be completed and signed by the contractor's interior designer. A sample BVD form and instructions will be provided during the FF&E Procurement Requirements Meeting.

The Contractor, as a planned modification, shall be authorized by the Government Contracting Officer to procure all furniture/furnishings in the approved final FF&E package using predominately negotiated Federal contracts as directed by the Contracting Officer and the NAVFAC Interior Designer. When the modification for turnkey furniture procurement is exercised, the Contractor's proposed Handling and Administrative Rate (HAR) shall not exceed 5% of the total cost of the FF&E, shipping, freight, handling, and installation. The HAR includes all of the prime contractor's effort related to the storage, coordination, handling and administration of subcontractors, and all other associated costs and profit for the procurement of FF&E. No other charges, fees, or markups will be authorized. The contractor shall establish and submit a fixed percentage figure, for the administration effort of this modification (HAR), with the initial project proposal as part of the

contractor's Pricing Schedule.

## **E202002 MODULAR PREFABRICATED FURNITURE**

Provide Workstation systems product or modular freestanding workstations as required. Provide at a minimum, an articulating keyboard tray with left or right handed mouse extension for each computer location.

## **E202003 FREESTANDING FURNITURE AND FILES**

Provide ergonomic task seating, lounge, reception and guest seating, storage and filing, tables, as required.

## **E202004 RUGS & ACCESSORIES**

Provide area rugs, lamps, soft window treatments (drapery and hardware) interior landscaping, and other decorative items as required.

## **E202090 OTHER MOVABLE FURNISHINGS**

Provide waste receptacles, recycling containers, fire extinguishers, clocks, literature racks, microwaves, refrigerators, and other appliances as required.

## **F20 SELECTIVE BUILDING DEMOLITION**

### **GENERAL SYSTEMS REQUIREMENTS**

Perform all off-site work necessary to meet the requirements of the project, local codes, reference standards, technical specifications and performance criteria.

Identify and obtain all permits to comply with all federal, state, and local regulatory requirements associated with this work. The contractor shall submit complete the "Permits Record of Decision" (PROD) form with the first design submittal package. A blank PROD form is in the UFC 3-200-10N, *Civil Engineering*. Contractor shall determine correct permit fees and pay said fees. Copies of all permits, permit applications, and the completed PROD form shall be forwarded to the EFD Environmental Reviewer.

Coordinate and obtain approval from the Contracting Officer for proposed haul route(s), work site access point(s), employee parking location(s) and material laydown and storage area(s).

### **F2010 BUILDING ELEMENTS DEMOLITION**

This project includes the demolition of the existing facilities and equipments of the existing storage for new office and classroom construction.

#### **F2010 1.1 GENERAL DEMOLITION**

Remove indicated existing equipment for new spaces construction.

#### **F2010 1.2 UTILITIES**

Utility demolition or removal must be coordinated with on-site personnel for planned outages.

## **F2010 1.3 DUST CONTROL**

Prevent the spread of dust and debris to occupied portions of the building and avoid the creation of a nuisance or hazard in the surrounding area.

## **F2020 HAZARDOUS COMPONENT ABATEMENT**

Contractor must minimize land disturbance during construction. All saw cutting must be done so that dust is not released into the air. Any runoff from these activities and any other activities associated with this project must be routed so that all sediment is removed before the reaching any drains to the storm water system.

During construction if Contractor encounters materials presumed to contain lead or asbestos. Contractor must stop work in this area immediately. Contractor can only re-commence work once material has been determined (through testing) to be lead and asbestos free.

## **F2020 1.3 ASBESTOS**

This project may not involve removal and clean up of asbestos, since the existing building was built in 1994. All federal, state and local regulations regarding asbestos related work must be followed if contractor encounters any materials contain asbestos, and perform asbestos work in accordance with AHERA regulations.

## **F2020 1.5 PAINT RELATED WORK**

The work may not require disturbance of paint containing lead.

## **F2020 1.6 MERCURY & LLR COMPONENTS**

Remove all mercury vapor containing fluorescent light tubes and LLR components as discovered.

## **F2020 1.7 PCB'S**

Remove all noted: light ballasts, transformers, capacitors, without markings regarding PCB content ("NO PCB", "NON PCB") as PCB containing.

## **F2020 1.11 DISPOSAL**

All waste materials shall become the property of the Contractor and shall be transported, disposed of and recycled in accordance with Federal, State and local laws.

## **G10 SITE PREPARATION**

### **SYSTEM DESCRIPTION**

The site preparation system consists of site clearing, demolition, salvage, relocation, earthwork, and hazardous waste remediation necessary to ready the site for other work associated with the project.

### **GENERAL SYSTEM REQUIREMENTS**

Develop the project site and perform all off-site work necessary to meet the requirements of the project, antiterrorism criteria, local codes, reference standards, technical specifications and performance criteria.

Minimize the impact of construction activity on operations and neighboring facilities.

Identify and obtain all permits to comply with all federal, state, and local regulatory requirements associated with this work. Submit a complete "Permits Record of Decision" (PROD) form with the first design submittal package. A blank PROD form can be obtained at the Download Tab of Part 6 of the NAVFAC Design-Build website at the following link [http://www.wbdg.org/ndbm/Download/Down\\_Additional.html?Section=AdditionalInfo](http://www.wbdg.org/ndbm/Download/Down_Additional.html?Section=AdditionalInfo) . Determine correct permit fees and pay said fees. Forward copies of all permits, permit applications, and the completed PROD form to the Government's Civil Reviewer and Environmental Reviewer. Perform work in accordance with the obtained permits.

Coordinate and obtain the Contracting Officer approval for proposed haul route(s), work site access point(s), employee parking location(s) and material laydown and storage area(s).

## **G101006 DEBRIS DISPOSAL**

Dispose of all grubbing and clearing residue, demolished material, rubbish and debris generated by this project shall be hauled off-site and off station by the Contractor.

## **G102005 UTILITY RELOCATION**

Comply with the requirements of the utility provider concerning the utility relocation.

## **G103001 GRADING**

Provide grading, finish floor elevations for new facilities and elevations for mechanical/electrical equipment pads in accordance with UFC 1-200-01, *General Building Requirements* and UFC 3-201-01, *Civil Engineering*.

## **G1040 HAZARDOUS WASTE REMEDIATION**

A contaminated soil/groundwater report is not provided to support this project.

Prior to starting work, conduct any additional testing that may be needed to provide a final design and comply with all applicable federal, regional, state and local regulations. Refer to UFC 3-800-10N, *Environmental Engineering for Facility Construction*, for additional requirements and criteria.

### **G1040 1.1 EXCAVATION**

Perform excavation of contaminated material in accordance with Federal, State and Local laws and regulation.

Where excavation extends into groundwater levels, employ dewatering methods on a localized basis to facilitate excavation operations. Collect water generated by dewatering during excavation and test it in accordance with Federal, State and Local laws and regulation.

Non-contaminated water may be disposed of on-site.

### **G1040 1.3 CLEAN FILL**

Backfill soils that are determined as clean fill via testing and compact in accordance with the requirements listed in this section.

## **G1040 1.4 SPILLS**

In the event of a spill or release of hazardous substances, pollutant, contaminant or oil, notify the Contracting Officer immediately. Take containment/control actions immediately to minimize the effect of any spill or leak. Perform clean up at the Contractor's expense in accordance with Federal, State and Local laws and regulation.

## **G20 SITE IMPROVEMENTS**

### **SYSTEM DESCRIPTION**

The site improvements system consists of pavements and pavement related features, landscaping and other exterior site development work related to this project. Pavement design shall be performed by a licensed Professional Engineer familiar with conditions local to the project site.

### **GENERAL SYSTEMS REQUIREMENTS**

Provide site improvements as required to make a useable facility that meets functional and operational requirements, incorporates all applicable anti-terrorism, force protection and physical security requirements and blends into the existing environment.

Provide accessibility in conformance with applicable requirements of [UFC 1-200-01](#) , *General Building Requirements*.

Identify and obtain all permits to comply with all federal, state, and local regulatory requirements associated with this work. The contractor shall complete the "Permits Record of Decision" (PROD) form with the first design submittal package. A blank PROD form can be obtained at the Download Tab of Part 6 of the NAVFAC Design-Build website at the following link [http://www.wbdg.org/ndbm/Download/Down\\_Additional.html?Section=AdditionalInfo](http://www.wbdg.org/ndbm/Download/Down_Additional.html?Section=AdditionalInfo) . Contractor shall determine correct permit fees and pay said fees. Copies of all permits, permit applications, and the completed PROD form shall be forwarded to the Government's Civil Reviewer.

Minimize the impact of construction activity on operations and neighboring facilities.

Refer to Site Analysis and Project Requirements Sections for additional site improvement functional program information.

## **G201003 PAVED SURFACES**

Provide portland cement concrete with a minimum design flexural strength of 650 to 700 psi (4.48 to 4.83 MPa) in not more than 28 days.

## **G201004 MARKING & SIGNAGE**

Provide pavement markings to match existing.

## **G201005 GUARDRAILS & BARRIERS**

Provide bollards around the new installed equipment in the parking lot in accordance with the UFC 3-201-01, *Civil Engineering*.

## **G2020 PARKING LOTS**

Repair existing concrete parking lots to match the existing if cut and demolish by this project.

## **G2050 LANDSCAPING**

Provide complete landscaping replacement to match the existing for any disturbed or destroyed during construction. Guarantee all replacement landscaping for a period of one year after final acceptance of the project.

## **G205001 FINE GRADING AND SOIL PREPARATION**

Provide 4" of topsoil for all grass areas and other pervious areas disturbed by Contractor operations.

## **G205002 EROSION CONTROL MEASURES**

Prevent erosion from occurring by providing erosion control measures as required by city, state and federal requirements.

## **G205004 SEEDING SPRIGGING AND SODDING**

Area disturbed during construction shall be seeded.

## **G40 SITE ELECTRICAL UTILITIES**

### **SYSTEM DESCRIPTION**

Provide one Point of Presence (POP – a single station for power and communication connections) at the west end of the METMF(R) NEXGEN operating area on the existing pavement. Existing electrical connection system, which includes backup generators, already established for Air Traffic Control (ATC) mobile equipment/facilities can be utilized for the METMF(R) NEXGEN. The POP shall be dedicated to the NEXGEN equipment and consist a 120/208V, 60Hz, 60A power supply with a main disconnect switch, an enclosure with a 5 lug terminal panel for connecting mobile equipment, two 20A maintenance receptacles, two Cat-6 data drops and one dedicated DSN capable phone line with outside commercial access. Mount all equipment on a weatherproof pole mounted backboard. All equipment shall be weatherproof NEMA 4X rated.

The site electrical utility system consists of all power and telecommunications and fiber optic cabling from the existing distribution system point of connection including all connections, accessories and devices as necessary and required for a complete and usable system. This section covers installations up to within 5 feet (1.5 meters) of existing building location.

### **GENERAL SYSTEM REQUIREMENTS**

Provide an Electrical System complete in place, tested and approved, as specified throughout this RFP, as needed for a complete, usable and proper installation. All equipment shall be installed per the criteria of PTS Section G40 and the manufacturer's recommendations. Where the word "should" is used in the manufacturer's recommendations, substitute the word "shall".

## **G4010 ELECTRICAL DISTRIBUTION**

Connect to the existing electrical power system. The connection point shall be underground and

extended to the project site underground in ductbank to a Pad Mounted Transformer.

The available fault current at the point of connection shall be assumed to be an infinite bus.

## **G401006 UNDERGROUND ELECTRIC CONDUCTORS**

Provide medium voltage and 600 volt secondary underground electrical power distribution systems to meet the connection requirements as indicated in paragraph G4010 "Electrical Distribution".

## **G401007 DUCTBANKS, MANHOLES, HANDHOLES AND RACEWAYS**

Provide a system of concrete encased ductbanks, handholes and manholes for all underground power wiring.

## **G401008 GROUNDING SYSTEMS**

Provide a complete grounding system for the electrical power distribution system.

## **G401009 METERING**

Provide a separate Kilowatt Demand Meter for each Pad Mounted Transformer.

## **G401010 CATHODIC PROTECTION SYSTEMS**

Provide cathodic protection.

## **G401011 EQUIPMENT REQUIREMENTS FOR COASTAL AND HIGH HUMIDITY AREAS**

Provide exterior equipment designed for coastal and high humidity areas.

## **G4020 SITE LIGHTING**

Provide site lighting for exterior, including underground distribution, handholes, grounding, poles, fixtures and controls as required for a complete and usable system.

## **G4030 SITE COMMUNICATION AND SECURITY**

Provide a site communication and security system including, but not necessarily limited to, Voice and Data Telecommunications Systems, including all conduit and wiring, underground structures, termination equipment, poles and structures, and grounding systems as required for a complete and usable system.

## **G403001 TELECOMMUNICATIONS SYSTEMS**

The connection point for the site telecommunications systems shall be underground and extended to the project site underground in a system of manholes and ductbank to the Point of Presence.

Provide 4 pair copper cable between the connection point and Point of Presence.

## **G403003 CABLES AND WIRING**

Cables and wiring for site telecommunications and security systems shall be as indicated in their respective categories.

### **G403004 DUCTBANKS, MANHOLES AND HANDHOLES**

Provide a system of ductbanks, manholes, and handholes for site telecommunications and security.

### **G403009 GROUNDING SYSTEMS**

Provide a complete grounding system for all site communications and security systems.

-- End of Section --