



**US Army Corps
of Engineers** ®
Savannah District

DEPARTMENT OF THE ARMY
FACILITIES STANDARDIZATION
PROGRAM

**COMPANY OPERATIONS
FACILITY (COF)**

**Standard
Design**

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PART 1

GENERAL DESIGN REQUIREMENTS

COMPANY OPERATIONS FACILITY STANDARD DESIGN (COF)

GENERAL DESIGN REQUIREMENTS

1.0 GENERAL AND SPECIFIC CRITERIA

1.1 GENERAL

1.1.1 **STANDARDIZATION.** The Center of Standardization (COS) for Company Operations Facilities is the U. S. Army Corps of Engineers, Savannah District (CESAS). This standard consists of two parts. Part 1 provides guidance to facilities planners and USACE districts. Part 2 is a Request for Proposal (RFP) Statement of Work. In accordance with ER 1110-3-113, the COS maintains lessons learned and CADD files of completed designs. The COS should be consulted when starting a new project.

1.1.2 **APPLICABILITY.** The criteria contained in this Standard Design applies to all Tables of Organization and Equipment (TOE) company, troop, battery, or detachment level organizations to meet basic command and control, unit supply operations, soldier and unit issued equipment storage, soldier equipment maintenance and inspection, deployment preparation, and high technology/dollar items equipment storage activities in a unitized single structure.

This Standard Design does not apply to Company Admin and Supply (CO A&S) facilities that do not incorporate a Readiness Module, or for aviation line companies within an aviation line battalion (e.g., Assault Helicopter, Attack Helicopter, Air Cavalry Squadron, General Support Aviation Battalion, Aerial Exploitation Battalion), or training base companies. However, standardized criteria building blocks found in this Standard Design should be used to the maximum extent possible before creating or developing new or different criteria to serve the same basic function, task, or purpose.

1.1.3 **PROVISIONS FOR PHYSICALLY HANDICAPPED INDIVIDUALS.** COFs are intended for use by able-bodied military personnel only; therefore, they are not required to meet handicapped accessible requirements.

1.1.4 **SUSTAINABLE DEVELOPMENT AND DESIGN REQUIREMENTS.** COFs shall be designed to meet the current sustainable development and design criteria as established by the Department of the Army. For the two types of COFs that exist, those in which the Admin Module and the Readiness Module are integrated and those where the two buildings are detached, for LEED purposes, the two buildings shall be treated as a single facility.

2.0 SITE FUNCTIONAL REQUIREMENTS

2.1 GENERAL

2.1.1 **SITE PLANNING.** The project site selected for a COF shall be able to accommodate the required 80-foot deep service yard that runs the length of the covered hardstand. Also, a 28-foot wide entrance from an adjacent road is required at each end of the service yard. See paragraph 3.3 of Section 2 of this Standard for additional information. Whenever a COF and a Tactical Equipment Maintenance Facility (TEMF) are sited back to back and parallel to each other, the minimum distance between the edge of the covered hardstand of the COF and the edge of the TEMF shall be 125 feet.

2.1.2 **EXTERIOR SITE AMENITIES.** Desired exterior amenities include boot/gear wash facilities and PT area with exercise equipment (i.e., accommodations for push-ups, sit-ups, and chin-ups for each

company adjacent to its COF). There should be one boot/gear washing station per company. Each wash station shall include four freeze proof hose bibb and drying rack (handrail).

2.1.3 PRIVATELY OWNED VEHICLE (POV) PARKING. POV parking shall be provided at the rate of one space for every two people for the maximum design capacity of all Company Operations Facilities. No POV parking is to occur in the service yard.

2.2. COVERED HARDSTAND

2.2.1 GENERAL. The covered hardstand can be attached to the Readiness Module, or it can be detached. The default configuration shown in the Standard Design is detached. The choice is solely that of the User/DPW/Installation. If, however, the choice is made to attach the structure to the Readiness Module, the area under the canopy must be protected with a sprinkler system.

2.2.2 SURFACE PROTECTION. For maximum functionality, the area under the covered hardstand needs to be kept as dry as possible. Accordingly, roof drainage from the COF should not be allowed to freely drain across the hardstand surface under the canopy. Instead, all vertical downspouts should be tied into the storm drainage system.

3.0 BUILDING FUNCTIONAL REQUIREMENTS

3.1 GENERAL REQUIREMENTS

3.1.1 SPACE PLANNING CRITERIA. Table 1 in Part 2 of this Standard Design provides the space criteria for the main areas within the COF. The areas listed are the net minimum required areas. Requirements for areas such as corridors, stairs, and mechanical rooms are typically left to the discretion of the Offeror or the Designer. Also, some spaces within a COF are calculated as half space or are excluded from the gross area calculations. These areas are identified in paragraph 3.1.4 of Part 2 of this Standard Design. In no case shall the maximum gross area limits as defined in the RFP or the 1391 be exceeded.

3.1.2 STANDARD DESIGN PROGRAM AREAS. The table below provides the program areas for COFs based on the number of companies in the Admin Module or the size of the respective company for the Readiness Module or the covered hardstand. This table also provides the total requirement for typical BCT complexes.

STANDARD DESIGN PROGRAM AREAS FOR COMPANY OPERATIONS FACILITIES					
COMPONENT	CATEGORY CODE	PROGRAM AREA (GSF)	HBCT (GSF)	IBCT (GSF)	SBCT (GSF)
Admin Module	14185				
1 Company		5300			
2 Companies		8800			
3-7 Companies (Integrated Admin Module)		16,100			
3-7 Companies (Detached Admin Module)		16,600			
Admin Module Subtotal			99,600	99,600	116,200
Readiness Module (area per company)	14185				
Up to 100 PN		6700			
101 to 150 PN		9600			
151 to 200 PN		12,400			
201 to 250 PN		15,300			
251 to 300 PN		18,400			
Readiness Module Subtotal			290,100	266,223	306,988
Covered Hardstand (area per company)	14179				
Up to 100 PN		1680			
101 to 150 PN		2330			
151 to 200 PN		2990			
201 to 250 PN		3650			
251 to 300 PN		4300			
Covered Hardstand Subtotal			70,670	65,932	75,256

3.2 SPECIFIC REQUIREMENTS

3.2.1 GENERAL. The drawings in Part 2 indicate the Army Standard Design functional layout and adjacency requirements for COFs in schematic form. The layout drawing for the detached Admin Module depicts several possible configurations in the key plan. These layouts have been provided as examples of possible configurations aimed at providing flexibility based on site constraints or User preference.

3.2.2 ADMIN MODULE. The Admin Module consists of the offices, admin support space and conference rooms to provide for administrative functions. The Standard Design provides private offices for the Commander, First Sergeant, Executive Officer and the Training Room. Shared office space is provided for platoon leaders and platoon sergeants. One closet is provided for each command suite and each platoon suite to house a printer/fax machine. The Army Standard for COFs mandates a single set of shower/latrine facilities for each COF to be situated in the Admin Module. Additionally, for the detached Admin Module, limited restroom facilities have been provided on the second floor for administrative personnel. See Part 2 of this Standard Design for specific requirements pertaining to the various rooms in the Admin Module.

3.2.3 READINESS MODULE. The Readiness Module provides operational space considerations in

addition to supply space. It includes deployment preparation and staging space considerations and increased unit mission equipment storage (robotic and sensor technology, Warrior ensemble, etc). Specialized Soldier and unit mission equipment maintenance and repair activities are consolidated with vehicle maintenance skill sets located in the Tactical Equipment Maintenance Facility (TEMF), requiring close proximity between the COF Readiness Module and the associated TEMF. The Readiness Module is required for all TOE units. See Part 2 of this Standard Design for specific requirements pertaining to the various rooms in the Readiness Module.

3.2.4 OPTION FOR TROOP AID STATION. The COF Standard Design provides an option to incorporate a Troop Aid Station (TAS) within the COF. The TAS is normally provided in the COF where the Medical Company of the Brigade Support Battalion (BSB) resides. When this option is exercised, the TAS is to be located in the Admin module, resulting in two platoon suites being displaced from the Admin module to the expansion space in the Readiness Module. Per coordination with MEDCOM, no additional aid stations are to be provided in COFs at individual company levels. At the company level, activity of the assigned company medics is to be limited to vetting sick calls, deciding whether or not the soldier warrants a trip to the Troop Aid Station, and prescribing non-prescription meds and limited prescription meds as authorized. Aid stations at the company level are not to be provided for these medic-related activities.

4.0 DESIGN DOCUMENTS AVAILABLE

4.1 ADAPT-BUIILD MODELS. Several Adapt-Build Models for COFs are available for downloading at the following site:

<http://mrsi.usace.army.mil/cos/savannah/SitePages/cof.aspx>.

Each model contains a fully developed design, including a Building Information Model (BIM), 2-D CADD files, and specifications. These models are provided as guides that exemplify technically suitable products and incorporate mandatory functional/operational requirements for a similar (although perhaps not an exact) facility to be constructed under a new solicitation. As new Adapt-Build Models become available, they will be posted on the site. The goal is to assemble a library of Adapt-Build Models for the various climatic regions. See Part 2 of this Standard Design for additional guidance on the intended use of Adapt-Build Models.

4.2 COF LEGACY FACILITIES RENOVATION STUDY. Under the leadership of the U.S. Army Corps of Engineers, Savannah District Center of Standardization, and in coordination with HQ IMCOM and other Army Facility Design Team (FDT) members, a COF Legacy Facilities Renovation Study has been completed and can be downloaded at the following location:

<http://mrsi.usace.army.mil/cos/savannah/SitePages/cof.aspx>.

The study serves as a guide for renovating legacy facilities in order to bring them into conformance with the requirements documented in this Standard Design. The study includes a prioritized list of functional/operational requirements predicated on the standardized features documented in this Standard Design. Tier 1 functions have been identified in the study as the minimum functional/operational requirements a renovated COF must satisfy in order for users to be able to meet mission requirements. The study also includes, in order of preference, all remaining requirements as documented in this Standard Design and indicates their priority for incorporation. Notional floor plans are also included in the study.

5.0 REFERENCES (Part 1)

5.1 ER 1110-3-113, Department of the Army Facilities Standardization Program, 27 September 1993.

PART II

STATEMENT OF WORK

1.0 PROJECT OBJECTIVES. The project objective is to design and construct facilities for the military that are consistent with the design and construction practices used for civilian sector projects that perform similar functions to the military projects. For example, a Company Operations Facility has the similar function as an office/warehouse in the civilian sector; therefore the design and construction practices should be consistent with the design and construction of an office/warehouse.

Comparison of Military Facilities to Civilian Facilities

Military Facility	Civilian Facility
Company Operations Facility (COF)	Office/Warehouse

A. It is the Army's objective that these buildings will have a 25-year useful life before needing any major renovation, repair, or replacement. Therefore, the design and construction should provide an appropriate level of quality to ensure the continued use of the facility over that time period with the application of reasonable preventive maintenance and repairs that would be industry-acceptable to a major civilian sector project OWNER. The site infrastructure will have at least a 50-year life expectancy with industry-accepted maintenance and repair cycles.

B. The government is required by Public Law 102-486, Executive Order 12902, and Federal Regulations 10 CFR 435 to design and construct facilities in an energy-conserving manner while considering life cycle cost over the life of the facilities.

C. The project site should be developed for efficiency and to convey a sense of unity or connectivity with the adjacent buildings and with the Installation as a whole.

D. Requirements stated in this RFP are minimums. Innovative, creative, and life cycle cost effective solutions, which meet or exceed these requirements are encouraged. Further, the OFFEROR is encouraged to seek solutions that will expedite construction (panelization, pre-engineered, etc.) and shorten the schedule. **The intent of the Government is to emphasize the placement of funds into functional/operational requirements. Materials and methods should reflect this by choosing the lowest Type of Construction allowed by code for this occupancy/project allowing the funding to be reflected in the quality of interior/exterior finishes and systems selected.**

2.0 SCOPE

2.1 COMPANY OPERATIONS FACILITY (COF)

A. Provide Company Operations Facilities (COF). This project type is to house Company administrative operations and store and move supplies. It is intended to be similar to office and warehouse type buildings in the private sector community.

B. The project will include Company Operations Facilities for [_____] Companies. The number of unified companies (UNICOF) per battalion and number of personnel per company for this project is as follows:

- 1) [UNICOF/Unit Identifier]
- 2) Company [COF_CO_LETTER] = [COF_CO_PERSONNEL] Personnel, male/female ratio [COF_CO_RATIO]
- 3) The maximum allowable gross area for the Admin Module is [_____] square feet.
- 4) The maximum allowable gross area for the Readiness Module is [_____] square feet.
- 5) The maximum allowable gross exterior covered hardstand area is [_____] square feet.
- 6) A Troop Aid Station to support the Brigade [is] [is not] required [and will be included in the [_____] UNICOF].
- 7) The preferred design approach for this complex is the [UNICOF with detached two-story admin] [UNICOF with integrated admin] layout scheme.

2.2 SITE. Provide all site design and construction within the COF limits of construction necessary to support the new building facilities. Supporting facilities include, but are not limited to, utilities, electric service, exterior and security lighting, fire protection and alarm systems, security fencing and gates, water, gas, sewer, oil water separators, storm drainage and site improvements. Antiterrorism/Force Protection measures shall also be included in the facility design in accordance with applicable criteria.

The Contractor shall be responsible for maintaining the construction site and haul route. Damages to existing sidewalks, pavements, curb and gutter, utilities, and/or landscaping within the construction limit, adjacent to the construction site, and along the Contractor's haul route resulting from the Contractor's construction activities shall be repair/replace by the Contractor at no additional cost to the Government. Prior to construction activities, the Contractor and Contracting Officer Representative shall perform an existing condition survey. At the completion of the Task Order, the Contractor and Contracting Officer Representative shall perform a final condition survey to determine repair/replacement requirements.

Approximate area available for [this facility] [these facilities] is shown on the drawings.

2.3 GOVERNMENT- FURNISHED, GOVERNMENT- INSTALLED EQUIPMENT (GFGI). Coordinate with Government on GFGI item requirements and provide suitable structural support and/or brackets for projectors/VCRs/TVs/arms racks, all utility connections and space with required clearances for all GFGI items. All computers and related hardware, copiers, faxes, printers, video projectors, VCRs and TVs are GFGI.

2.4 FURNITURE REQUIREMENTS. Provide furniture design for all spaces, including existing furniture and equipment to be re-used. Coordinate with the user to define requirements for furniture systems, movable furniture, equipment, existing items to be re-used, storage systems, etc. Early coordination of furniture schedule is required so the facility is complete and usable at turnover. Furniture procurement is not included in this contract.

3.0 FUNCTIONAL AND AREA REQUIREMENTS FOR COMPANY OPERATIONS FACILITY (COF)

3.1 GENERAL REQUIREMENTS

3.1.1 FACILITY DESCRIPTION. COFs provide administrative and supply facilities for unit personnel functions and storage of their equipment. These facilities serve as the primary staging, training, and deployment center for personnel and their individualized gear.

3.1.2 FACILITY RELATIONSHIPS

A. GENERAL. COFs are typically located within an operations complex along with Tactical Equipment Maintenance Facilities (motor pools) and Battalion/Brigade HQ. The facilities within this complex shall be oriented to support deployment and daily operations.

B. TRAVEL DISTANCES. COFs should be located within walking distance of associated community facilities such as barracks and dining facilities.

3.1.3 ACCESSIBILITY REQUIREMENTS. COFs are intended for use by able-bodied military personnel only, therefore, are not required to meet handicapped accessible requirements.

3.1.4 BUILDING AREAS:

A. GENERAL. <REV> Gross area calculations shall be computed in accordance with UFC 3-101-01, Section 2-2, Building Area Calculations. However, for clarification, the exterior covered hardstand area is computed as full scope even though it is a covered but not enclosed space. The rationale is the canopy is a structure in its own right as opposed to an auxiliary appendage to the COF and, therefore, is programmed and accounted for as full scope. Maximum gross area limits indicated in Paragraph 2.0, SCOPE, may not be exceeded for any of the structures. A smaller overall gross area is permissible if all established net program requirements are met.

B. NET AREA. Net area requirements for functional spaces are included in the space criteria table (Table 1). If net area requirements are not specified herein, the space shall be sized to accommodate the required function, comply with code requirements, comply with overall gross area limitations and other requirements of the RFP (for example, area requirements for corridors, stairs, and mechanical rooms will typically be left to the discretion of the designer-of-record). </REV>

3.1.5 ADAPT-BUILD MODEL. An Adapt-Build Model for a COF, which contains a fully developed design, including a Building Information Model (BIM), 2-D CADD files, and specifications, can be downloaded from the following site: <http://mrsi.usace.army.mil/cos/savannah/SitePages/cof.aspx>. This design is provided as a guide that exemplifies a technically suitable product and incorporates mandatory functional/operational requirements for a similar (although perhaps not an exact) facility to be constructed under this solicitation. It will be left to the offerors' discretion if, and how, they will use the sample design provided to satisfy the requirements of this Request for Proposal. This model is not intended to modify or over-ride specific requirements of this RFP and, under all circumstances, it will be incumbent upon the successful offeror to adhere to the site specific scope and functional/operational requirements specified within the RFP. Neither this statement of work, nor the adapt-build model, are intended to diminish the offeror's responsibilities under the clauses titled "Responsibility of the Contractor for Design," "Warranty of Design," and "Construction Role During Design." The successful offeror shall be the designer-of-record and shall be responsible for the final design and construction product, including but not limited to, adherence to the installation architectural theme, building code compliance and suitability of the

engineering systems provided. The government assumes no liability for the model design provided and, to the extent it is used by an offeror, the offeror will be responsible for all aspects of the design as designer-of-record.

3.2 FUNCTIONAL AND OPERATIONAL REQUIREMENTS

3.2.1 FUNCTIONAL SPACES

A. GENERAL. COF functional layout and adjacency requirements are as indicated on the enclosed drawings. The extent to which the drawings represent required or preferred layouts and the allowable latitude for changes to them is as noted on the drawings. COFs should be easily adaptable to accommodate variations in size and number of companies in the Army's future force. The design objective of the basic battalion level COF complex is to provide a flexible facility suitable to a mix of battalions of varying composition while utilizing a modular approach.

B. PRIMARY SPACES. The COF is comprised of three vertical construction components consisting of an Administrative Module, Readiness Module, and exterior covered hardstand. In conjunction with this, each site-specific project shall include necessary site amenities, such as vehicle service yards, access drives, equipment wash stations, and exterior utilities. These components are more fully described below.

1) **Administrative Module**. Space shall be provided for the following administration and support functions:

- a) Private offices for the Commander, First Sergeant, Executive Officer and Training Room
- b) Space for printer and fax machines, waste and paper recycling receptacles, and supply closet for storage
- c) Shared office space for platoon leaders and platoon sergeants
- d) Conference space for meetings and/or training
- e) Showers, locker room, and latrines to serve both the administrative personnel assigned to the company and for off post personnel – a place for commuters to shower and change after PT
- f) Consolidated utility spaces to serve the entire facility including a mechanical room, electrical room, telecommunication rooms (including SIPRNet), janitor's closet, vending area to also accommodate recycling receptacles and recycling storage closet. Accommodation for Secure Internet Protocol Routing Network (SIPRNet) shall be constructed in accordance with AR 380-5, Chapter 7.

2) **Readiness Module**. Space will be provided for the following operational and supply functions:

- a) Readiness Bays to provide accommodation for individual combat equipment (TA-50) lockers (CFCI) for all unit personnel, plus co-located area for equipment maintenance, training, and pre-deployment preparations. Interior equipment maintenance area will be nominally sized so that up to 50 percent of the unit personnel can layout TA-50 gear simultaneously, based on providing 40 square feet (5-foot by 8-foot plus a circulation factor) for each layout space. Each company area shall accommodate forklift access from the readiness bay to the exterior loading areas. Interior mud wash utility sinks shall be provided in the Readiness Areas. Sinks shall be allocated on the basis of one utility sink for every 50 soldiers in the company.

- b) Supply Bays to provide storage space for company supplies and equipment - Tables of Equipment (TOE) and Common Tables of Allowance (CTA), weapons, and consumable supplies (including items awaiting issue, turn-in, or repair). Also, it provides accommodation for the supply sergeant, supply clerk(s) and the armorer in performing shipping and receiving functions. Specific storage areas included in the supply bay include:
 - (1) Weapons vault for storage of arms, ammunition, and explosives (AA&E)
 - (2) Secure storage room for non-sensitive items (high value items, other than AA&E, for which accountability is a concern)
 - (3) Nuclear, biological, and chemical (NBC) equipment storage
 - (4) Communications equipment storage
 - (5) Consumable unit storage
- c) Accommodation for overflow/expansion from either admin or storage spaces. This provision shall be accomplished by the utilization of a mezzanine over the entire open area of the Readiness Module, within the area limitations of IBC and NFPA 101. The drawings indicate preferred overflow/expansion arrangements that meet user operability requirements. The expansion space indicated on the drawings shall be provided at the time of initial project construction.

3) **Exterior Covered Hardstand.** Outside sheltered space for equipment maintenance, weapons cleaning, and pre-deployment preparation. This area shall be sized in accordance with Paragraph 2.0 SCOPE. The preference is to provide a column free interior to the greatest extent possible to allow for the greatest flexibility in use. The minimum canopy height shall be 14'-0" or such height as required to allow for operational truck access. The minimum clear depth shall be 30'-0".

C. COF ARMY STANDARD REQUIREMENTS. The following items are the Army mandatory features for the COFs.

- 1) **Battalion Centric Design.** Design that consolidates COFs for an entire battalion in a single building. The design standard is intended to create a facility that consolidates between three and eight companies of a battalion in a single building. This single building can be reconfigured internally without changing the footprint of the building if the battalion structure changes.
- 2) **Open, Flexible Design for Admin and Readiness Modules.** Open, flexible design for both admin and readiness modules, easy to reconfigure in response to changes in force structure, equipment, and doctrine. Consistent with the battalion centric focus, both the admin and the readiness (supply) modules will employ design features that are durable but reconfigurable without altering the structural design of the building. The goal is to allow ready adaptability in response to changes in force structure, equipment, and doctrine. The addition of internal load bearing structures that limit design flexibility will not be permitted.
- 3) **TA-50 Lockers.** Individual combat equipment (TA-50) lockers in sufficient quantity to meet the upper limit of the design capacity of the facility (100 percent of maximum personnel in each company). Provide permanently installed, individual steel lockable lockers sized 42" (w) x 24" (d) x 78" (h) to allow each soldier to securely store current TA-50 as well as future Soldier Systems equipment.
- 4) **Interior Operations and Maintenance Area.** The interior space of the readiness module is intended to provide space for equipment maintenance and pre/post-

deployment checks, as well as other unit preparatory and training requirements. The space includes the provision for individual TA-50 and other equipment storage, and future fielding of Soldier Systems equipment. The space is to be nominally sized to provide 40 SF layout areas for 50 percent of the upper limit of the design capacity of the facility (50 percent of the maximum personnel). Variations to the locker arrangement shown in the drawings are permitted, but may result in a reduced number of layout spaces. Revised configurations that reduce the available layout area to less than 25 percent of the design capacity of the readiness module will not be permitted. The readiness module will be designed to accommodate the use of forklifts. In addition to the above, wire mesh cage storage shall be provided for unit supply, NBC, and communications equipment located at the supply bay area.

- 5) **Exterior Covered Hardstand.** Exterior covered hardstand adjacent to the Readiness Module will be provided for each company to accommodate outside equipment maintenance, weapons cleaning, pre/post-deployment preparation, vehicle loading, close formation, etc. This space is to be nominally sized to provide 40 SF layout areas for 25 percent of the upper limit of the design capacity of the facility (25 percent of the maximum personnel). Water, lighting, and electrical connections shall be provided.
- 6) **Arms Vaults.** Arms vaults to accommodate storage of arms, ammunition and explosives (AA&E) shall be provided for each company. These vaults shall be designed in accordance with physical security requirements contained in AR 190-11, Appendix G. An option exists for use of prefabricated, modular vaults conforming to Fed. Spec. AA-V-2737 requirements. Provide a GSA approved Class 5 Armory vault door with lock in accordance with Fed. Spec. AA-D-600D and a Dutch style day gate with issue port.
- 7) **Non-Sensitive Secure Storage (other than AA&E).** Intent is to provide secure storage of items with a high dollar value or items for which command accountability is required. The room shall be constructed of material to prevent forcible entry. The minimum acceptable construction is expanded steel fabric behind impact resistant gypsum board at both walls and ceiling. The door should provide an equivalent degree of security, and as a minimum, should be constructed of sheet metal material not less than 16 gauge in thickness and be equipped with a hasp to accommodate a high security padlock.
- 8) **Consolidated Showers and Latrines.** A single set of shower/latrine facilities will be provided for each combined COF (UNICOF). The design layout shall allow adjustment for the ratio of males and females in any unit by repositioning the dividing wall between their facilities at the time of initial construction. The facilities will have [both] [interior] [exterior] access to these facilities. Lockers with benches will be provided on a 3:1 ratio of lockers/shower. Minimum locker size shall be 12"(w)x18"(d)x36"(h).
- 9) **Economy of Construction to Suit Function.** Designers shall consider economy of construction to suit the function, i.e. warehouse or light industrial type facilities.
- 10) **Operational Site Orientation.** Operational facility relationships require locating COFs within a complex with direct access to the unit motor pool or other corresponding work areas. The intent is to provide a single battalion centric complex containing facilities to support company operations and vehicle maintenance in a single fenced compound. When site conditions do not permit this configuration, COFs should be placed adjacent to the vehicle maintenance complex to facilitate the movement of personnel and equipment between the two facilities.

D. SPACE CRITERIA TABLE. The following table establishes the minimum net areas for the various rooms. The gross square footage of the building may be less than the programmed square footage of the building as long as all minimum net areas are met.

Table 1: Space Criteria for Company Operations Facilities

ADMIN MODULE MINIMUM REQUIRED NET AREAS (REQUIRED PER SPACE)	ADMIN (TYPICAL)			
<u>ADMIN MODULE</u>				
Office Areas				
Command/Platoon Storage	40			
XO	150			
1SG	150			
CO	150			
Training Room	150			
Conference Room	310			
Platoon Offices	150			
READINESS MODULE VARIANTS - MINIMUM REQUIRED NET AREAS (BASED ON PERSONNEL PER COMPANY)	100 PN	150 PN	200 PN	ADD'L 50 PN
<u>READINESS MODULE</u>				
Supply Bay				
Secure Storage for Non-Sensitive Items	166	306	504	169
Vault	400	500	600	100
NBC Storage	94	152	198	52
Communications Storage	94	152	198	52
Unit Storage	367	595	764	199
Readiness Bay				
TA-50 Lockers/Equipment Layout Area	3,672	5,292	6,912	1,620
Overflow / Expansion Space	1,290	1,833	2,383	547
<u>EXTERIOR COVERED HARDSTAND</u>				
Equipment Maintenance/Layout Space/Weapons Cleaning	1,680	2,330	2,990	660

3.3 SITE FUNCTIONAL REQUIREMENTS:

A. EXTERIOR COVERED HARDSTAND. Provide an exterior covered hardstand adjacent to the readiness module. Provide weatherproof lighting and weatherproof general purposes receptacles with ground fault protection. Lighting control shall be provided with local switches with photocell override. Provide one duplex receptacle for every two columns. The concrete pavement under the Covered Hardstand shall have a slope of no more than 2%.

B. SERVICE YARD. Provide a rigid concrete pavement for the service yard from the Readiness Module/Exterior Covered Hardstand (depending on site layout) to the project demarcation line. The service yard shall be a minimum of 80' deep in order to accommodate up to a 35-foot long vehicle with a 45-foot turning radius along the entire length of the Readiness Module/Exterior Covered Hardstand. The service yard shall be sloped to drain away from the Readiness Module/Exterior Covered Hardstand area with a slope of no more than 2%.

C. ENTRANCE DRIVE INTO SERVICE YARD. Provide two 28-foot wide rigid concrete pavement entrance drives from the Service Yard to an adjacent roadway. Service drives shall be located on opposite sides of the service yard.

D. PRIVATELY OWNED VEHICLE (POV) PARKING. [POV parking to be provided by others.][POV parking shall be provided at the ratio of one space for every two people for the maximum design capacity of all Company Operations Facilities.]

3.4 SITE AND LANDSCAPE REQUIREMENTS:

A. GENERAL. Site features include utilities, physical training area, gear cleaning stations, and general site improvements.

B. GEAR CLEANING STATIONS. Provide accommodation for boot/TA-50 gear washing, drainage, and grit removal in the Service Yard. Provide one boot/TA-50 gear washing station per company. Each wash station shall include four freeze proof hose bibb and drying rack (handrail).

C. PHYSICAL FITNESS AREAS. Provide accommodation for push-ups, sit-ups, and chin-ups for each company adjacent to their COF and/or service yard.

D. BOLLARDS. Provide 6-inch diameter by 5-foot high, concrete-filled, schedule 80 galvanized steel pipe bollards, 5-foot O.C. spacing, painted safety yellow for each column of the exterior covered hardstand located adjacent to the service yard where frequent vehicle movement increases the risk of damage by vehicle impact. Also, provide bollards 5 feet from the edge of electrical and mechanical equipment, and to protect the corners of Admin/Readiness buildings. Bollard footings shall be designed to withstand vehicular impact.

3.5 ARCHITECTURAL REQUIREMENTS:

A. ARCHITECTURAL THEME. Interior and exterior architectural features of the building shall be designed in accordance with the established Installation architectural theme.

B. OFFICE ADMINISTRATIVE AREAS. The preference is to provide maximum flexibility for future change within office and administration areas. The command section offices shall be constructed to provide privacy and sound control in accordance with ACOUSTICAL REQUIREMENTS paragraph

below. The intent for these areas is to minimize load-bearing walls to the greatest extent possible so as to accommodate future reconfiguration of spaces. This same construction requirement is also applicable to walls between companies in the readiness areas.

C. READINESS MODULE. The Readiness Module shall be constructed to meet the requirements of a Risk Level II analysis in accordance with AR 190-51 and AR 190-13. In conjunction with this, it has been determined that a minimum exterior wall construction consisting of 26 gauge metal wall panels with insulation and an interior metal liner panel extended to a height 8' above the finished floor will satisfy the minimum Risk Level II requirements of AR 190-51, Appendix B-2, paragraph c. The minimum interior wall construction for devising walls between company readiness areas shall consist of a stud wall with impact resistant gypsum wall board each side. The Readiness Module shall be designed to minimize the interior volume to the greatest extent possible to reduce energy consumption, while at the same time ensuring that the mezzanine and potential future platoon offices can be accommodated.

D. NATURAL LIGHTING. Provide windows for natural lighting and ventilation in all office areas wherever possible. All operable windows provided shall have locks and insect screens. Preference is for natural lighting to be provided at Readiness Areas to the greatest extent possible.

E. ACOUSTICAL REQUIREMENTS. Provide sound insulation in all administration areas to meet a minimum rating of STC 45 at walls and floor/ceiling assemblies, and a rating of STC 33 for doors, which are to be solid core wood in a metal frame. In addition to the sound insulation required, conference areas shall meet a Noise Criteria (NC) 30 rating in accordance with ASHRAE Fundamentals Handbook.

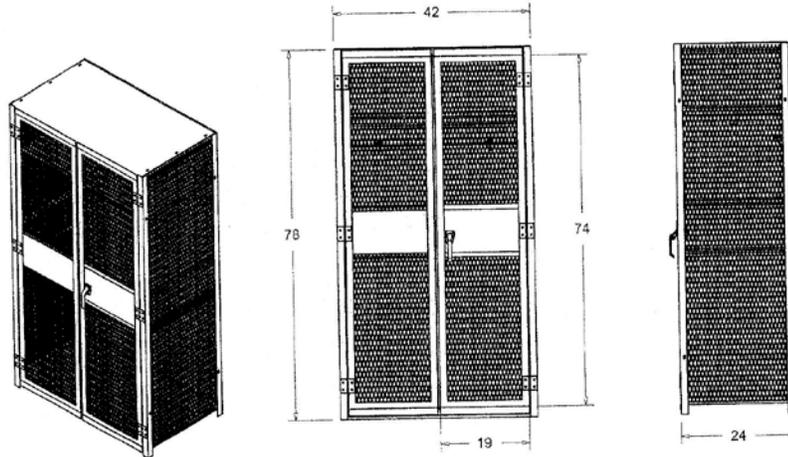
3.5.1 FINISHES AND INTERIOR SPECIALTIES

A. FINISHES. Select interior and exterior materials that are commensurate with office/warehouse type construction, and that are attractive, economical, durable, and low maintenance.

B. INTERIOR SPECIALTIES:

- 1) **TA-50 Storage Lockers**. Lockers shall be provided as indicated in Paragraph 3.2.1C(3), with size and appearance similar to that shown below. TA-50 lockers shall be single tier, heavy duty, all welded ventilated type and meet the following minimum requirements:
 - a) All tops, bottoms and shelves shall be constructed of minimum 16 gauge thick cold rolled sheet steel. All sides, intermediate partitions and backs shall be constructed of minimum 14 gauge flattened expanded metal or perforated metal with a minimum free area of 50%, welded to angle iron frames. Frames shall be constructed of minimum 1" X 1" X 1/8" angle iron steel. Thickness of metal and details of assembly and supports shall provide strength and stiffness.
 - b) Double doors shall have a three-point three-sided cremone latch and shall be padlockable. Doors shall be hinged with minimum five knuckle heavy duty steel pin butt hinges welded to both door and locker frame – provide three hinges per single tier door.

- c) Each locker shall include: one aluminum number plate (numbered in sequential order), one full width shelf located 12" from the top with clothes hangar rod and three locker hooks mounted below.
- d) Lockers shall be galvanized and coated with a high quality durable finish with color to be manufacturer's standard tan or gray.
- e) Locker shall be anchored to concrete floor in accordance with manufacturer's recommendations.



2) **Fire Extinguisher Cabinets and Brackets.** Fire Extinguisher cabinets and brackets shall be provided when fire extinguishers are required by UFC 3-600-01 and NFPA 101. Placement of cabinets and brackets shall be in accordance with NFPA 10. Semi-recessed cabinets shall be provided in finished areas and brackets shall be provided in non-finished areas (such as utility rooms, storage rooms, shops, and vehicle bays). Fire extinguishers shall not be provided in this contract.

3.6 **STRUCTURAL REQUIREMENTS.** The bay floor shall be capable of supporting forklift movement throughout the area. Slab shall be designed for forklift truck maximum axle load of 5 kips and maximum load capacity of 2 kips.

3.7 **THERMAL PERFORMANCE – Not Used**

3.8 **PLUMBING REQUIREMENTS:**

A. EXTERIOR WALL HYDRANTS. In addition to wall hydrants provided around perimeter of building(s), one additional freeze-proof exterior wall hydrant or wall faucet per company shall be provided at the hardstand.

B. DOMESTIC HOT WATER SYSTEM. The main water heating equipment shall be located within a mechanical room, and also located on the ground floor level only. Instantaneous water heaters are not allowed to be used for hot water serving all COF areas except Readiness Area. System storage and

recovery shall be sized to deliver sufficient capacity for all showers, for a continuous duration of ninety (90) minutes. Usage diversity factor for the showers shall be one. Minimum system total storage of water heater(s) shall be 400 gallons for 1- and 2-company COFs, and 600 gallons for 3-company and larger COFs.

C. PROTECTION OF EXPOSED PIPING. Plumbing piping installed in the Readiness Module but not concealed within walls shall be protected from physical damage by recessing the piping in the wall, concealing the piping with wall furring, or by metallic jacketing.

3.9 **COMMUNICATIONS AND SECURITY SYSTEMS:**

A. TELECOMMUNICATION SYSTEMS. Telecommunications Rooms shall be provided for voice and data as shown on the standard design layouts. The telecommunications rooms shall be designed in accordance with the I3A Criteria.

1) **Telecommunications Outlets**. Telecommunications outlets shall be provided per the I3A Technical criteria based on functional purpose of the various spaces with the facility as modified by user special operational requirements. All COF workstations \desks shall have voice and data connection capability. All conference rooms shall have voice and data connection capability (minimum six outlets). A wall telephone outlet with a single jack shall be provided in each mechanical room, electrical room, arms vault and communications room and entrances/exits in the Readiness Modules. Provide a duplex (voice/data) outlet at the desk in each of the Storage Rooms and Arms Vault in the Readiness Module. Provide a duplex outlet (voice/data) for a network printer/copier in the vending area and in the storage room adjacent to each suite. Telecommunications infrastructure shall meet the Installation Information Infrastructure Architecture (I3A) criteria and ANSI/TIA/EIA requirements.

2) **Cable Trays**. Provide cable tray pathways through-out the facility (Admin and Readiness Modules) to support the systems required for the construction of the facility as well as user's computer networks, video integration system, telecommunication systems and other specialized electronic systems.

3) **Communication Room for Detached Readiness Building**. Provide a separate communication room on the mezzanine as shown with the integrated Admin Option of the floor plans. The telecommunications rooms shall be designed in accordance with the I3A criteria and ANSI/EIA/TIA-569-B. Where copper cable runs exceed 295 feet, provide additional telecommunication rooms on the mezzanine as required. The incoming telephone service (voice and data) shall be from the nearest manhole or from the main telephone communication room in the Admin Module, size the cables and conduits as per I3A criteria.

4) **Copper Cabling Leaving One Building to Go to Another**. All such cabling shall be treated as OSP cable and follow OSP cable requirements as stated in section 3.5.4 of the I3A and I3MP Grounding and Bonding Guide; this includes use of protector blocks and other grounding requirements as necessary to avoid lightning issues resulting in damaging of IT equipment.

5) **Fiber Cable**. Option to use fiber cable via OSP cable is authorized from the main TR and will be terminated inside the next building on a fiber distribution panel, rack, or cabinet as required, with a minimum of 6-strands.

6) **Cable Television.** CATV shall be provided in all offices, conference rooms (minimum two outlets), and one in each of the readiness areas. The cable television system shall consist of cabling, pathways, and outlets. All building CATV systems shall conform to APPLICABLE CRITERIA, including I3A Technical criteria.

B. AUDIO/VISUAL SYSTEMS. Provisions (consisting of a power receptacle and conduit for signal wiring) for a Government-furnished Government-installed projector shall be provided in each conference room.

C. SIPRNET FOR EXPLOSIVE ORDNANCE DISPOSAL (EOD) AND MILITARY INTELLIGENCE (MI) COFS. The SIPRNET room and infrastructure shall be designed and constructed in accordance with the Technical Guide for the Integration of SIPRNET (Secret Internet Protocol Router Network) and I3A Criteria. The SIPRNET building infrastructure design and installation shall be coordinated with the local NEC. As an option, the Communication Room and the SIPRNET Room can be combined into a single room if a SIPRNET safe/container can be used. Coordinate this option with the local NEC.

1) In the NSTISSI 7003 and the Technical Guide for Integration of SIPRNET, paragraph "Protective Distribution System", the word "shall" shall be substituted for the word "should" or "will" in this paragraph.

2) Install one SIPRNET outlet with one drop in the office of each Company Commander (CO CDR), Executive Officer (XO), and 1st Sergeant (1SG). Install one SIPRNET outlet with two drops in each Platoon Office and one outlet and two drops in each conference room. The SIPRNET building infrastructure shall use Category 6 UTP copper cables with red cable jacket and red outlet modules unless otherwise directed by the local NEC. Cables shall be terminated in the SIPRNET room and at the outlet in accordance with the I3A Technical criteria for data cables.

3) SIPRNET draft specifications are located in the SIPRNET Technical Implementation Criteria, version 6, dated October 2010. The surface mounted raceway shall be used instead of the surface mounted conduit unless otherwise indicated by the local NEC.

D. SIPRNET FOR ALL OTHER COFS. Only a SIPRNET Room shall be provided for future SIPRNET connectivity. The SIPRNET room shall be designed and constructed in accordance with the Technical Guide for the Integration of SIPRNET (Secret Internet Protocol Router Network) and I3A Criteria. Connection to the main telecommunications room from the SIPRNET room shall be via a 2-inch trade size steel conduit. Provide a communications signal ground bus bar connected to the main communications room signal bus bar via a properly sized ground wire (see MIL-HDBK-419-A). Provide one dedicated standard 20-amp duplex receptacle for a future SIPRNET rack in addition to convenience receptacles in the SIPRNET room.

E. INTRUSION DETECTION SYSTEM. Contractor shall install the necessary conduit, electrical power, and wiring, to support installation of an ICIDS system in each of the Arms Room and SIPRNET Room. The Government normally installs the signal devices and equipment necessary to activate the system. Contact the Physical Security Office for guidance. If a SIPRNET safe/container is used, ICIDS may not be required for this room. Contact the Physical Security Office for guidance.

F. FIRE DETECTION AND ALARM. A fire alarm and detection system shall be provided for this facility. It shall comply with the requirements of UFC 3-600-01 and NFPA 72. The system shall be addressable and fully compatible with and integrated with the local Installation wide Fire Alarm System.

1) All initiating devices shall be connected, Class A, Style 6, to signal line circuits (SLC). All alarm appliances shall be connected to notification appliance circuits (NAC), Class A. A looped

conduit system shall be provided so that if the conduit and all conductors within are severed at any point, all NAC and SLC shall remain functional.

2) Breakglass manual fire alarm stations shall not be used.

3) Over-voltage and surge protection shall be provided at the input power of all panels.

4) Fire alarm and mass notification strobes shall be provided in employee work areas, and public and common use areas as defined in the Architectural Barriers Act (ABA). Spacing and locations shall be in accordance with NFPA 72. This requirement is applicable to all DoD facilities with fire alarm evacuation systems, including those facilities only intended for able-bodied military personnel (UFC 3-600-01, Feb 2013, paragraph 5-3.2.9).

G. MASS NOTIFICATION SYSTEM. A mass notification system shall be provided for each facility and throughout the complex in accordance with UFC 4-010-01. The system shall be fully compatible with and integrated with the local Installation wide Mass Notification System.

3.10 **ELECTRICAL REQUIREMENTS:**

A. GENERAL. See Paragraph 6 of the project SOW for installation specific clarifications and additional requirements for the electrical and communication systems.

B. GROUNDING. The ground counterpoise shall be provided around the building perimeter and shall be utilized for grounding incoming service, building steel, telephone service, piping, lightning protection, and internal grounding requirements. Ground straps shall be provided where required by function and will be connected to the building grounding system. Additional grounding may be provided based on project requirements. Systems shall conform to NFPA 70 National Electrical Code, NFPA 780 Lightning Protection Code, local codes, and the US Army I3A criteria.

C. INTERIOR ELECTRICAL.

1) **Characteristics.** Select electrical characteristics of the power system to provide a safe, efficient, and economical distribution of power, based upon the size and types of loads to be served. Use distribution and utilization voltages of the highest level that is practical for the load to be served.

2) **Nonlinear Loads.** The effect of nonlinear loads such as computers and other electronic devices shall be considered and accommodated as necessary. These loads generate harmonics, which can overload conventionally sized conductors or equipment and thereby cause safety hazards and premature failures. Circuits serving such devices shall be equipped with a separate neutral conductor not shared with other circuits. Panelboards and any dry type transformers shall be rated accordingly.

3) **Lightning Protection System and Transient Voltage Surge Protection.** Design shall be in accordance with NFPA 780 and other referenced criteria. Provide transient voltage surge protection.

4) **Receptacles.** Power receptacles shall be provided per NFPA 70 and in conjunction with the proposed equipment and furniture layouts. Provide power connectivity to each workstation.

Power poles shall not be used. Provide duplex receptacles adjacent to each duplex (voice/data) outlet and CATV outlet.

5) **Future Soldier Land Warrior System.** Provide a disconnect switch (208/120V, 3 phase, 4 wire) in each of the Secure Non-Sensitive Storage Room in the Readiness Module. Size the disconnect switch(s) and the circuit breaker(s), conductors and conduit(s) from a 208 volt, 3 phase, 4 wire distribution panel to the disconnect switch(s) based on a 200 VA continuous demand load for 100 percent of the maximum personnel in each Company Readiness Area (i.e. 150 man Readiness module x 200 VA= 30,000 VA.)

D. **LIGHTING.** Lighting and lighting controls shall comply with the recommendations of the Illumination Engineering Society of North America (IESNA) and the requirements of ASHRAE 90.1. Interior ambient illumination shall provide a generally glare free, high quality lighting environment and conform to IESNA RP-1-04.

3.11 HEATING, VENTILATION AND AIR-CONDITIONING (HVAC)

A. **ADMINISTRATIVE AREAS.** See Paragraph 5 of the RFP SOW for heating and cooling of administrative areas. The admin building's HVAC system design should include flexibility in zoning to where it can address future changes in occupant densities (e.g., a platoon office suite converted to a conference room). Administrative areas shall be temperature-controlled by the DDC system. Temperature setpoint adjustment shall be accomplished via DDC System by authorized personnel.

B. **COMMUNICATIONS AND SIPRNET ROOMS.** Provide an independent and dedicated air-handling system. Air handling unit system(s) shall not be floor-space mounted within the actual space served. Rooms shall be maintained at 72 degrees F and 50 percent relative humidity year-round. Assume 1775 BTU per hour for the equipment heat dissipation. Contractor shall verify this load during the design stage.

C. **READINESS AREAS.** The readiness module shall be [mechanically ventilated and] heated [and air conditioned]. Separate air side equipment (heating, ventilation and air conditioning units) shall be provided for each readiness module. Indoor design temperature for heating shall be 55 degrees F, and for cooling [the indoor design conditions shall be 80 degrees F dry bulb with a maximum 60 percent relative humidity. Whenever the indoor dry bulb temperature and/or the maximum relative humidity is exceeded, the air conditioning unit shall run, and shall continue to run until the design dry bulb temperature and the relative humidity requirements are satisfied.] [shall be 10 degrees F above outdoor 1 percent dry bulb design temperature.] The [air conditioning unit] [ventilation unit] serving the readiness area shall be capable of providing outside air quantities, in accordance with ASHRAE 62.1, for the design people load of the readiness area. Independent and dedicated packaged A/C units shall be provided for the Arms Vaults [and Non-Sensitive Secure Storage Areas.] Arms Vaults shall have humidity control to maintain the relative humidity at 50+/-5% at 78 degrees F. Supply air to the Arms Vaults shall be exhausted at the rate of 100%. Ventilation for Arms Vaults shall be provided in accordance with ASHRAE 62.1 requirements for storage rooms. Communication rooms located in Readiness Buildings will be served by an independent and dedicated air-handling system and shall be conditioned per Administrative Areas paragraph requirements. Administrative-type areas located within the Readiness Building shall be conditioned per Paragraph 5 requirements.

D. **HVAC CONTROLS.** HVAC Controls shall be in accordance with paragraph 5.8.3. See Appendix for HVAC Controls for typical control system points schedules. These schedules identify as a minimum points to be monitored and controlled by the building automation system (BAS). See paragraph 6 for

any additional installation specific points. The points schedule drawings convey a great deal of information critical to the design, installation, and subsequent performance of the control system. It includes hardware input/output information, device ranges and settings, ANSI 709.1 communication protocol data, and information about data that is to be used at the operator workstation by the Monitoring and Control software. These schedules are available as an excel spread sheet and as AutoCAD drawings on the Engineering Knowledge Online (EKO) website <https://eko.usace.army.mil/fa/bas/>. Point schedule of system types not addressed in the appendix shall be developed by the Contractor, and shall be sufficiently detailed to a level consistent to a similar listed system in the appendix. It is recommended that all of the guidance and instruction documents be reviewed prior to using any of the info, as the documents provide necessary and critical information to the use of the website drawings and other information.

3.12 **ENERGY CONSERVATION REQUIREMENTS.**

A. GENERAL. Energy conservation shall be in accordance with Paragraph 5, GENERAL TECHNICAL REQUIREMENTS, of the RFP Statement of Work (SOW), subparagraph ENERGY CONSERVATION. An energy efficiency and sustainability study, jointly conducted by the U.S. Army Corps of Engineers and the Department of Energy, was recently completed and the summary report is available at http://mrsi.usace.army.mil/sustain/Documents/2011_EISA_Study.pdf. Designers are encouraged to make use of the summary report as a reference tool to aid in meeting energy conservation mandates and targets. Any measures that exceed the requirements of ASHRAE 189.1 must be justified by a life cycle cost analysis.

B. SCHEDULES. The following facility load schedules shall be used in energy simulations for purposes of documenting compliance with energy performance requirements.

Facility Load Schedule—Table 2

Schedule	Day of Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ALWAYS_ON	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ALWAYS_OFF	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLDG_LIGHT	WD, SDD	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.3	0.3	0.2	0.2	0.1	0.05
	Sat, Sun, WDD, Hol	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
BLDG_EQUIP	WD, SDD	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.5	0.3	0.3	0.3	0.3	0.3	0.3
	WDD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sat, Sun, Hol	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
BLDG_OCC	WD	0	0	0	0	0	0	0	0.2	0.9	0.9	0.9	0.9	0.5	0.9	0.9	0.9	0.9	0.3	0	0	0	0	0	0
	SDD	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Sat, Sun, WDD, Hol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ReadiBay_OCC	WD	0	0	0	0	0	0	0	0	0.1	0.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
	SDD	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	Sat, Sun, WDD, Hol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVACOperation	WD, SDD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Sat, WDD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Sun, Hol	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ExhFan	WD, SDD	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	WDD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sat, Sun, Hol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACTIVITY	All	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
WORK_EFF	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AIR_VELO	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CLOTHING	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	All	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
INFIL	WD, SDD	1	1	1	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	1
	WDD	1	1	1	1	1	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	1	1	1	1
	Sat, Sun, Hol	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
PlantOn	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
FAN	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
BLDG_HTGSETP	WD, WDD	13	13	13	13	13	13	22	22	22	22	22	22	22	22	22	22	22	22	22	22	13	13	13	13
	SDD	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Sat	13	13	13	13	13	13	22	22	22	22	22	22	22	13	13	13	13	13	13	13	13	13	13	13
	Sun, Hol	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
BLDG_CLGSETP	WD, SDD	32	32	32	32	32	32	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	Sat	32	32	32	32	32	32	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	WDD	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
	Sun, Hol	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
ReadiBay_HTGSETP	WD,	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13

Facility Load Schedule—Table 2 (Continued)

	WDD																								
	SDD	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Sat	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Sun, Hol	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
ReadiBay_CLGSETP	WD, SDD	32	32	32	32	32	32	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	32	32	
	Sat	32	32	32	32	32	32	28	28	28	28	28	28	28	28	28	28	28	28	32	32	32	32	32	
	WDD	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
	Sun, Hol	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
Humidity Setpoint	WD, SDD	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
	Sat, WDD	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
	Sun, Hol	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
MinOA	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Dual Zone Control Type	All	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
BLDG_SHW	WD, SDD	0	0	0	0	0	0	0	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0	0	0	0	0	
	Sat, WDD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sun, Hol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SHW Latent fract	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SHW Sensible fract	All	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
SHW Temp	All	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	
SHW Supply Temp	All	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	
Lockers sub cat Latent fract	All	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Lockers sub cat Sensible fract	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lockers sub cat Temp	All	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
Lockers sub cat Hot Supply Temp	All	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	
SHWSys1-Loop-Temp	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SHWSys1 Water Heater Setpoint	All	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
SHWSys1 Water Heater Ambient	All	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	

3.13 FIRE PROTECTION REQUIREMENTS:

A. STANDARDS AND CODES. All fire protection and life safety features shall be in accordance with UFC 3-600-01 and the criteria referenced therein. COFs shall be classified as mission essential and shall be provided with sprinkler protection.

B. FIRE PROTECTION AND LIFE SAFETY ANALYSIS. A fire protection and life safety design analysis shall be provided for all buildings in the project. The analysis shall be submitted with the interim design submittal. The analysis shall include classification of occupancy (both per the IBC and NFPA 101); type of construction; height and area limitations (include calculations for allowable area increases); life safety provisions (exit travel distances, common path distances, dead end distances, exit unit width required and provided); building separation or exposure protection; specific compliance with NFPA codes and the IBC; requirements for fire-rated walls, doors, fire dampers, etc.; analysis of automatic suppression systems and protected areas; water supplies; smoke control systems; fire alarm system, including connection to the base-wide system; fire detection system; standpipe systems; fire extinguishers; interior finish ratings; and other pertinent fire protection data. The submittal shall include a life safety floor plan for all buildings in the project showing occupant loading, occupancy classifications and construction type, egress travel distances, exit capacities, areas with sprinkler protection, fire extinguisher locations, ratings of fire-resistive assemblies, and other data necessary to exhibit compliance with life safety code requirements.

C. SPRINKLER SYSTEM. Provide complete sprinkler protection for Company Operations Facilities, including both Administrative Modules and Readiness Modules, designed in accordance with UFC 3-600-01 and NFPA 13. Wet pipe sprinkler systems shall be provided in areas that are heated and dry pipe sprinkler systems shall be provided in areas subject to freezing. The Covered Hardstand, if separated by adequate distance per the IBC, Table 602, shall be considered a separate structure and shall not require sprinkler protection. The Covered Hardstand, if not separated by adequate distance per the IBC, Table 602, shall be considered to be part of the COF facility and shall require sprinkler protection. The sprinkler system design shall be in accordance with UFC 3-600-01 and NFPA 13. The sprinkler hazard classifications shall be in accordance with UFC 3-600-01, NFPA 13, and other applicable criteria. Design densities, design areas and exterior hose streams shall be in accordance with UFC 3-600-01. The sprinkler systems shall be designed and all piping sized with computer generated hydraulic calculations. The exterior hose stream demand shall be included in the hydraulic calculations. A complete sprinkler system design, including sprinklers, branch lines, floor mains and risers, shall be shown on the drawings. The sprinkler system plans shall include node and pipe identification used in the hydraulic calculations. All sprinkler system drains, including main drains, test drains, and auxiliary drains, shall be routed to a 2-foot by 2-foot splash block at exterior grade.

1) **Sprinkler Service Main and Riser.** The sprinkler service main shall be a dedicated line from the distribution main. Sprinkler service and domestic service shall not be combined. The sprinkler service main shall be provided with an exterior post indicator valve with tamper switch reporting to the fire alarm control panel (FACP). The ground floor entry penetration shall be sleeved per NFPA 13 requirements for seismic protection. The sprinkler entry riser shall include a double check backflow preventer, a fire department connection, and a wall hydrant for testing of backflow preventer. The sprinkler system shall include an indicating control valve for each sprinkler system riser, a flow switch reporting to the FACP, and an exterior alarm bell. All control valves shall be OS&Y gate type and shall be provided with tamper switches connected to the FACP. Facilities with multiple floors shall be provided with floor control valves for each floor. The floor control valve assembly shall be in accordance with UFC 3-600-01, Figure 4-1.

2) **Exterior Hose Stream.** Exterior hose stream demand shall be in accordance with UFC 3-600-01. Exterior hose stream demand shall be included in the sprinkler system hydraulic calculations.

3) **Backflow Preventer.** A double check backflow preventer shall be provided on the fire water main serving each building. This shall be located within the building. An exterior wall hydrant with dual hose connections with OS&Y valve shall be provided to allow testing of backflow preventer at design flow as required by NFPA 13.

4) **Fire Department Connection.** A fire department connection shall be provided for each building with sprinkler protection. These shall be located to be directly accessible to the fire department.

D. SYSTEM COMPONENTS AND HARDWARE. Materials for the sprinkler system, fire pump system, and hose standpipe system shall be in accordance with NFPA 13 and NFPA 20.

E. PROTECTION OF PIPING AGAINST EARTHQUAKE DAMAGE. Sprinkler and fire pump piping systems shall be protected against damage from earthquakes. Seismic protection shall include flexible and rigid couplings, sway bracing, seismic separation assemblies where piping crosses building seismic separation joints, and other features as required by NFPA 13 for protection of piping against damage from earthquakes.

F. FIRE WATER SUPPLY. Fire flow test data is provided in appendix D.

G. FIRE DETECTION AND ALARM. See paragraph 3.7.F of this section for requirements.

H. BUILDING CONSTRUCTION. Construction shall comply with requirements of UFC 3-600-01, the International Building Code and NFPA 101. Interior wall and ceiling finishes and movable partitions shall conform to the requirements of UFC 3-600-01 and NFPA 101.

3.14 **SUSTAINABLE DESIGN** - Not Used

3.15 **ENVIRONMENTAL** - Not Used

3.16 **PERMITS** - Not Used

3.17 **DEMOLITION** - Not Used

3.18 **ADDITIONAL FACILITIES** - Not Used

3.19 **EQUIPMENT AND FURNITURE REQUIREMENTS.** The following criterion describes the furnishing requirements for all room types. Furnishings, other than installed equipment, are to be Government-furnished and Government-installed (GFGI) unless otherwise specified in this document. The following furnishings charts a provided for coordination of room and office layouts to ensure suitability for their intended function.

3.19.1 FURNISHINGS.

A. FURNITURE LIST/CHARTS:

Table 3: Room Size and Furnishings Chart

Room	Description	NSF	Comments	Furniture Required
CO	Commander	150	PRIVATE OFFICE	U-shaped executive 36" D wood desk unit consisting of: single pedestal desk w/ one box, box, file pedestal ; bridge unit; hutch w/ doors and task light; credenza unit with two drawer lateral file; two wood side chairs; one ergonomic executive task chair. Note: one cable grommet per work surface.
XO	Executive Officer	150	PRIVATE OFFICE	L-shaped 30" D wood desk unit consisting of: single pedestal desk w/one box, box, file pedestal; return w/file, file pedestal; hutch w/doors and task light; one 4-drawer lateral file, two wood guest chairs, one ergonomic task chair. Note: one cable grommet per work surface.
1SG	1 st Sergeant	150	PRIVATE OFFICE	L-shaped 30" D wood desk unit consisting of: single pedestal desk w/one box, box, file pedestal; return w/file, file pedestal; hutch w/doors and task light; one 4-drawer lateral file, two wood guest chairs, one ergonomic executive task chair. Note: one cable grommet per work surface.
TRAINING	Training Room	150	PRIVATE OFFICE	Two L-shaped metal desk units consisting of: double pedestal desk w/ two pedestals, one box, box, file and one file, file configuration; overhead storage unit w/ doors and task light, two 5-drawer lateral files, two guest chairs, one ergonomic task chair. Note; one grommet per work surface
PLATOON	Platoon Offices	150x4	SEMI-PRIVATE OFFICES	For each 150 SF office, 2 single pedestal metal desks with overhead storage unit with doors; 2 ergonomic task chairs, 2 bookcases for manuals, two 5-drawer file cabinets. Note: one grommet on work surface.

CONF. ROOM	Conference Room	Varies	CONFERENCE ROOM	Conference Table to accommodate ten persons; 10 conference chairs w/casters ; and 6 side chairs with arms.
ARMS VAULT	Arms Vault	Varies	CONSTRUCTED IN ACCORDANCE WITH AR 190-11, APP G.	1 desk unit consisting of: double pedestal metal desk w/ box, box, file pedestal and file/file pedestal; 1 ergonomic task chair; 1 three shelf bookcase for manuals; one 5-drawer file cabinet, and 1 work bench.
UNIT STOR.	Unit Storage	Varies	STORAGE ROOM	1 desk unit consisting of: double pedestal metal desk w/ box, box, file pedestal and file/file pedestal; 1 ergonomic task chair, 1 three shelf bookcase for manuals, 4 lockable metal cabinets with shelves, two 5-drawer lateral file cabinets.
COMM. STOR.	Communications Storage	Varies	STORAGE ROOM	1 desk unit consisting of: double pedestal metal desk w/ box, box, file pedestal and file/file pedestal; 1 ergonomic task chair, 1 three shelf bookcase for manuals, 4 lockable metal cabinets with shelves, two 5-drawer lateral file cabinets.
NBC STOR.	NBC Storage	Varies	STORAGE ROOM	1 desk unit consisting of: double pedestal metal desk w/ box, box, file pedestal and file/file pedestal; 1 ergonomic task chair, one 5-drawer lateral file; and 4 lockable metal cabinets with shelves.
SECURE STOR.	Secure Storage	Varies	STORAGE ROOM	4 lockable metal cabinets with shelves and industrial shelving approximately 5'wx4'dx6'h each - 2 for 1 st 100PN, 1 additional for every 50PN thereafter.

Table 4: Room Size and Furnishings Chart for Troop Aid Station (TAS)

Room	Description	NSF	Comments	Furniture Required
Waiting Room	Waiting room	480	Public area	Seating to accommodate 15 people, magazine rack, brochure rack and end tables.
ADMIN. / MED RECORDS	Reception, administrative and records storage	152	Reception/check in, private and secure room for safe keeping of medical records. Visual control of waiting room.	2 - Countertops, 2 - ergonomic task chairs, 2 - sitting height base cabinets (pullboard above two drawers and file drawer), 3 - two drawer lateral files.
SCREENING ROOM	Screening rooms	89 x 2	Private room adjacent to waiting room.	48" work surface with wall mounted overhead cabinet, 1 - mobile general storage cart (42"H x 32"W x 22"D), 1 - task chair, 1 - guest chair.
EXAM ROOM	Exam rooms	115 x 4	Private room	1 - Cubicle curtain with surface mounted track, 1 - 48" work surface with wall mounted overhead cabinet, 1 - mobile general storage cart (42"H x 32"W x 22"D), 1 - task chair, 1 - guest chair, 1 - self adjusting stool, 1 - examination / treatment table with cabinet.
PHAR. /STOR./OPT. EXAM ROOM	Medicine and equipment storage – Optional exam for surge situations.	115	Private and secure room, preferably on the interior, with no windows.	1 -Cubicle curtain with surface mounted track, 1 - 48" work surface with wall mounted overhead cabinet, 1 - mobile general storage cart (42"H x 32"W x 22"D), 1 - task chair, 1 - guest chair, 1 - self adjusting stool, 1 - examination / treatment table with cabinet.

NOTES:

1. All furniture items identified in Table 4 above are provided for initial coordination of TAS room layouts to ensure suitability for their intended function. These items are described in detail and located at Appendix entitled TROOP AID STATION FURNISHINGS.
2. Examination/treatment table with cabinet is a hospital equipment item that is specified, purchased and installed by others, i.e. Government Furnished Government (GFGI).
3. Countertops, base cabinets, and cubicle curtain and track are Contractor Furnished Contractor Installed (CFCI) items.
4. Troop Aid Station Furnishings Attachment further clarifies what is: (1) Contractor Furnished Contractor Installed (CFCI); (2) Hospital Equipment (Hosp Equip) – specified, purchased and installed by others, i.e.

Government Furnished Government Installed (GFGI): and (3) Furniture, Fixtures and Equipment (FF&E) – designed by AE but purchased and installed by others, i.e. Government Furnished Government Installed (GFGI).

5. Go to <http://usahfpa.amedd.army.mil>, HFPA Construction and Planning References, Criteria, Space Planning and Guideplates, Military Handbook 1691 for additional information on the joint schedule numbers (JSN), category of logistical responsibility (LOG CAT), and utility requirements (Utl).

3.20 Facility Specific References

A. Applicable Military Criteria:

1) Army Regulations:

- a) Army Regulation 190-11 Physical Security of Arms, Ammunition and Explosives
- b) Army Regulation 190–13 The Army Physical Security Program
- c) Army Regulation 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive)
- d) Army Regulation 380–5 Information Security Program
- e) Army Regulation 380–19 Information Systems Security

2) Fed Spec AA-V-2737, Modular Vault Systems

**COMPANY OPERATIONS FACILITY
(COF)**

**TROOP AID STATION
FURNISHINGS APPENDIX**

Project Rooms (User Contents Only)

Page 1

Room Code: EXRG1 Room Qty: 4 Room Area: 115.00 Room Description: EXAM ROOM ARMY

JSN	NOMENCLATURE	Qty	UNIT	LOG	RESPONSIBLE	Utl	Utl	Utl	Utl	Utl	Utl
			ISSUE	CAT	PARTY	1	2	3	4	5	6
Equipment per Room:											
A1066	Mirror, Float Glass, With SS Frame, 36X18	1	EA	A	CFCI	.	.	.	.	.	.
A1132	Rail, Accessory Mounting, Length As Required	2	LF	C	CFCI	.	.	.	.	.	.
A5075	Dispenser, Soap, Disposable	1	EA	C	Hosp Equip	.	.	.	.	.	.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	1	EA	A	CFCI	.	.	.	.	.	.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	1	EA	C	Hosp Equip	.	.	.	.	.	.
A5145	Hook, Garment, Double, SS, Surface Mounted	2	EA	A	CFCI	.	.	.	.	.	.
A5180	Track, Cubicle, Surface Mounted, With Curtain	1	FT	A	CFCI	.	.	.	.	.	.
E0210	Worksurface, w/Overhead Cab, Wall Mtd, 48" W	1	EA	C	FF&E	.	A	.	.	.	.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"	1	EA	C	FF&E	.	.	.	.	.	.
F0205	Chair, Side With Arms	1	EA	C	FF&E	.	.	.	.	.	.
F0280	Chair, Swivel, Low Back	1	EA	C	FF&E	.	.	.	.	.	.
F0340	Stool, Self Adjusting	1	EA	C	FF&E	.	.	.	.	.	.

F2000	Basket, Wastepaper, Round, Metal, 18 H x 16 Dia.	2	EA	C	FF&E	.	.	.	.	.	.
F3200	Clock, Battery, 12" Diameter	1	EA	C	Hosp Equip	.	.	.	.	.	.
M1620	Holder, Chart, Patient, Wall or Door Mounted	1	EA	A	FF&E	.	.	.	.	.	.
M1800	Computer, Microprocessing, w/CRT Monitor	1	EA	C	Hosp Equip	.	A	.	.	.	.
M3072	Frame, Infectious Waste Bag w/Lid	1	EA	C	Hosp Equip	.	.	.	.	.	.
M4100	Sphygmomanometer, Aneroid, Wall Mounted	1	EA	C	Hosp Equip	.	.	.	.	.	.
M4200	Otoscope/Ophthalmoscope, Wall Mounted	1	EA	C	Hosp Equip	.	A	.	.	.	.
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	1	EA	.	Hosp Equip	.	A	.	.	.	.
M9025	Table, Examination/Treatment, With Cabinet	1	EA	C	Hosp Equip	.	A	.	.	.	.
P3100	Lavatory, Vitreous China, Slab Type	1	EA	A	CFCI	D	.	.	.	.	.
X3930	Illuminator, Film, Double, Wall Mounted, 20x29x6	1	EA	C	Hosp Equip	.	A	.	.	.	.
		== == ==									
	GRAND TOTAL	26									

Reference Paragraph 3.3.8 Furniture Systems, Table 1.1, Note 5 for additional information.

Project Rooms (User Contents Only)

Room Code: EXRG4 Room Qty: 2 Room Area: 89.00 Room Description: EXAM, SCREENING

JSN	NOMENCLATURE	Qty	UNIT	LOG	RESPONSIBLE	Utl	Utl	Utl	Utl
			ISSUE	CAT	PARTY	1	2	3	4
Equipment per Room:									
A1066	Mirror, Float Glass, With SS Frame, 36X18	1	EA	A	CFCI	.	.	.	.
A1132	Rail, Accessory Mounting, Length As Required	1	LF	C	CFCI				
A5075	Dispenser, Soap, Disposable	1	EA	C	HOSP EQUIP	.	.	.	.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	1	EA	A	CFCI	.	.	.	.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	1	EA	C	HOSP EQUIP	.	.	.	.
A5145	Hook, Garment, Double, SS, Surface Mounted	1	EA	A	CFCI	.	.	.	.
E0210	Worksurface, w/Overhead Cab, Wall Mtd, 48" W	1	EA	C	FF&E	.	A	.	.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"	1	EA	C	FF&E	.	.	.	.
F0205	Chair, Side With Arms	1	EA	C	FF&E	.	.	.	.
F0300	Chair, Typist, Swivel	1	EA	C	FF&E		..	.	.
F2000	Basket, Wastepaper, Round, Metal, 18 H x 16 Dia.	1	EA	C	FF&E	.	.	.	.
F3200	Clock, Battery, 12" Diameter	1	EA	C	HOSP EQUIP	.	.	.	.
M1620	Holder, Chart, Patient, Wall or Door Mounted	1	EA	A	FF&E	.	.	.	.
M1800	Computer, Microprocessing, w/CRT Monitor	1	EA	C	HOSP EQUIP	.	A	.	.

M4040	Scale, Weighing, 300 Pound Capacity	1	EA	C	HOSP EQUIP	.	.	.	.
M4100	Sphygmomanometer, Aneroid, Wall Mounted	1	EA	C	HOSP EQUIP	.	.	.	.
M4116	Monitor, Vital Signs	1	EA	C	HOSP EQUIP	.	A	.	.
M4200	Otoscope/Ophthalmoscope, Wall Mounted	1	EA	C	HOSP EQUIP	.	A	.	.
P3100	Lavatory, Vitreous China, Slab Type	1	EA	A	CFCI	D	.	.	.
		=====							
	***GRAND TOTAL ***	19							

Reference Paragraph 3.3.8 Furniture Systems, Table 1.1, Note 5 for additional information.

Project Rooms (User Contents Only)

Room Code: RECP1 Room Qty: 1 Room Area: 152.00 Room Description: RECEPTION

JSN	NOMENCLATURE	Qty	UNIT	LOG	RESPONSIBLE	Utl	Utl	Utl	Utl	Utl	Utl
			ISSUE	CAT	PARTY	1	2	3	4	5	6
Equipment per Room:											
C0037	Rail, Apron, 4x36x1	1	EA	A	CFCI	.	.	.	.	.	.
C0039	Rail, Apron, 4x48x1	2	EA	A	CFCI	.	.	.	.	.	.
C0045	Frame, Apron, 1 Drawer, 4x36x22	1	EA	A	CFCI	.	.	.	.	.	.
C0046	Frame, Apron, 2 Drawer, 4x48x22	2	EA	A	CFCI	.	.	.	.	.	.
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	2	EA	A	CFCI	.	.	.	.	.	.
CT030	Countertop, High Pressure Laminate	2	LF	A	CFCI	.	.	.	.	.	.
F0280	Chair, Swivel, Low Back	2	EA	C	FF&E	.	.	.	.	.	.
F0420	Cabinet, Filing, Lateral, Half Height	3	EA	C	FF&E	.	.	.	.	.	.
F2000	Basket, Wastepaper, Round, Metal, 18 H x 16 Dia.	2	EA	C	FF&E	.	.	.	.	.	.
F3200	Clock, Battery, 12" Diameter	1	EA	C	HOSP EQUIP	.	.	.	.	.	.
M1605	Holder, Chart, 20 Each	1	EA	C	FF&E	.	.	.	.	.	.
M1800	Computer, Microprocessing, w/CRT Monitor	2	EA	C	HOSP EQUIP	.	A	.	.	.	.
M1820	Imprinter, Data Record, Electric	1	EA	C	HOSP EQUIP	.	A	.	.	.	.

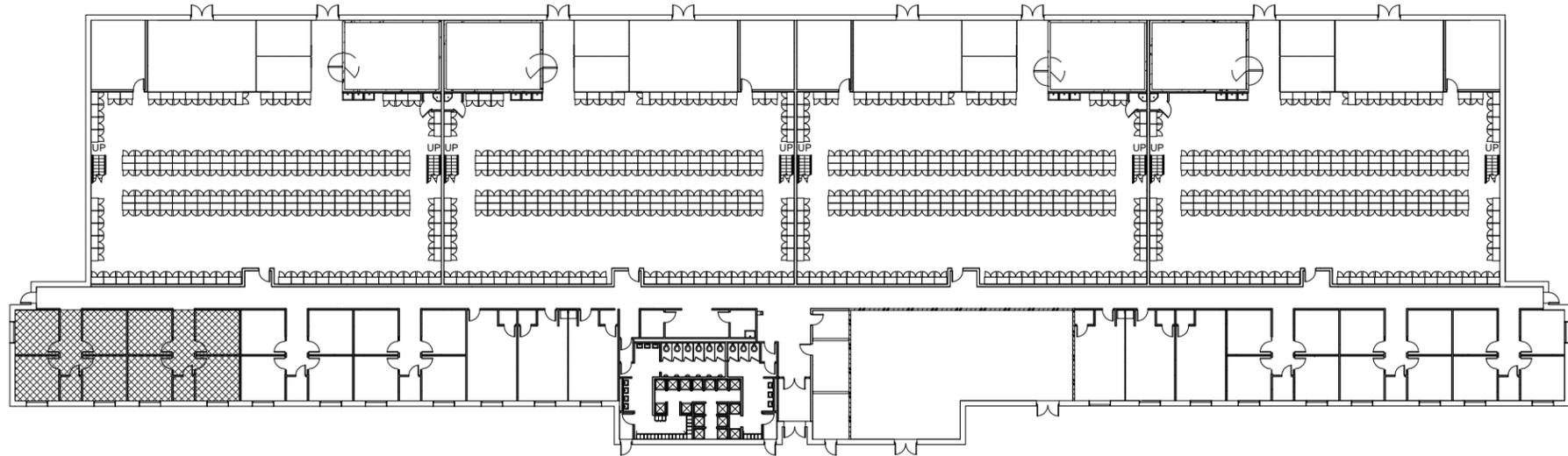
M1825	Printer, Computer	1	EA	C	HOSP EQUIP	.	A	.	.	.	.
M1850	Typewriter, Electric	1	EA	C	HOSP EQUIP	.	A	.	.	.	.
M1855	Facsimile Machine	1	EA	C	HOSP EQUIP	.	A	.	.	.	.
		=====									
	GRAND TOTAL	25									

Reference Paragraph 3.3.8 Furniture Systems, Table 1.1, Note 5 for additional information.

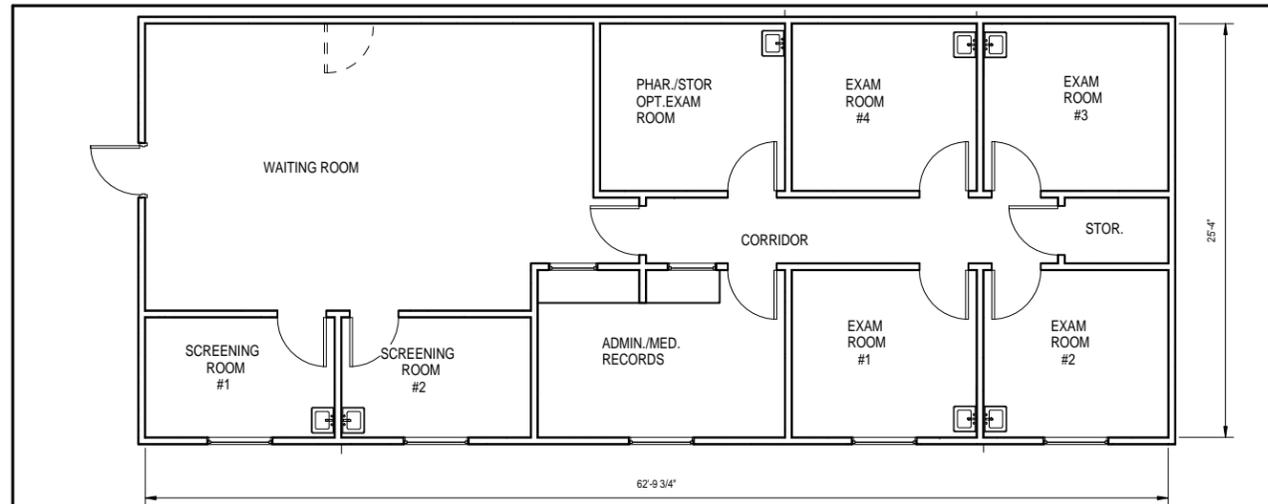


MARK	DESCRIPTION	DATE	APPROVED

PLATOON OFFICES ARE DISPLACED TO READINESS MODULE MEZZANINE WHEN THE ADMIN MODULE IS CONFIGURED TO ACCOMODATE A TROOP AID STATION.



TYPICAL 3-7 COMPANY TROOP AID LOCATION



WHEN REQUIRED, THE TROOP AID STATION SHALL BE IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:

WAITING AREA:

A WAITING AREA SHALL BE PROVIDED TO ACCOMMODATE SEATING FOR A MINIMUM OF 15 PEOPLE.

SCREENING ROOMS:

SCREENING ROOMS SHALL BE PROVIDED ADJACENT TO THE WAITING AREA, MINIMUM NUMBER OF ROOMS SHALL BE TWO.

MINIMUM ROOM SIZE SHALL BE 65 SQUARE FEET. EACH ROOM SHALL HAVE A WALL MOUNTED SINK.

EXAM ROOMS:

A MINIMUM OF FOUR EXAM ROOMS SHALL BE PROVIDED. MINIMUM ROOM SIZE SHALL BE 115 SQUARE FEET. EACH ROOM SHALL HAVE A WALL MOUNTED SINK.

PHARMACY / MEDICAL STORAGE:

THIS AREA IS USED FOR STORAGE OF MEDICINE AND OTHER MEDICAL EQUIPMENT. IT SHALL BE SECURED TO PREVENT BREAK-INS. CONSEQUENTLY, IT IS PREFERRED THAT THIS ROOM BE LOCATED IN THE INTERIOR WITH NO WINDOWS. THIS ROOM CAN ALSO BE USED AS AN ADDITIONAL EXAM ROOM FOR SURGE SITUATIONS. IF ORIGINALLY PLANNED FOR THIS USE, A WALL MOUNTED SINK SHALL BE PROVIDED.

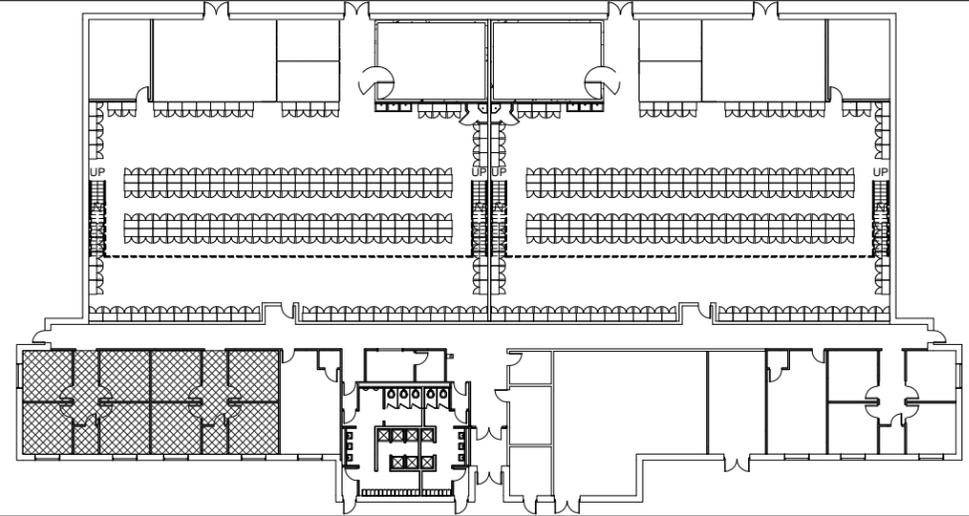
GENERAL STORAGE:

THIS ROOM IS USED FOR STORAGE OF GENERAL ITEMS SUCH AS OFFICE AND CLEANING SUPPLIES.

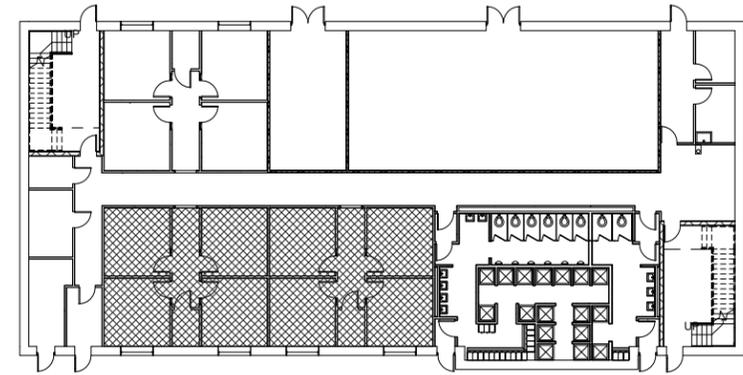
ADMINISTRATION / MEDICAL RECORDS:

THIS AREA SHALL BE LOCATED ADJACENT TO BOTH THE WAITING AREA FOR CHECK-INS AND THE PRIVATE AREA FOR CHECK-OUTS AND OTHER ADMINISTRATIVE PURPOSES. THIS AREA SHALL BE SECURED FOR SAFE KEEPING OF MEDICAL RECORDS.

TYPICAL DETACHED 3-7 COMPANY TROOP AID LOCATION



TYPICAL 2 COMPANY TROOP AID LOCATION



TYPICAL DETACHED 3-7 COMPANY TROOP AID LOCATION

KEY LEGEND	
TROOP AID STATION LOCATION (REF. ENLARGED PLAN)	

The floor plans indicate the Army Standard Design in schematic form. The designer-of-record (D-O-R) is allowed to make adjustments for the exterior façade/architecture theme, and/or to accommodate specific building engineering systems (structural, mechanical, electrical, fire protection, sustainable design, etc.). These adjustments will be evaluated by the Center of Standardization (CoS) during its compliance review.

The overall building dimensions and the values for the gross building areas indicated are for the standard layouts shown and are predicated on an assumed exterior wall thickness of 18" (20" for the first floor of the Detached Admin. Bldg.) It is understood that the actual gross building area will vary depending on the wall system / material selected for a specific project. A reduced overall gross area is permissible if all net program requirements and adjacencies are satisfied, but in no case may the maximum gross area for the facility be exceeded.

DESIGN BY: Designer	DATE:	SOLICITATION NO.:
DRAWN BY: Designer	DATE:	CONTRACT NO.:
CHECKED BY: Designer	DATE:	FILE NUMBER:
APPROVED BY: Designer	DATE:	FILE NAME:
DATE:	DATE:	DATE:
DATE:	DATE:	DATE:

US ARMY CORPS OF ENGINEERS
Savannah District

PROJECT NAME:
TROOP AID STATION

SHEET IDENTIFICATION
A-102F
SHEET OF 0