

SECTION 01 10 00

STATEMENT OF WORK

NOTES:

There should not be a table of contents for this specification. The ToC should be generated at the beginning of the overall document.

PART 1 GENERAL

1.0.1 ADVANCED INDIVIDUAL TRAINING COMPLEX

1.0.1.1 <AITCOF_NO>NOT USED</AITCOF_NO><AITCOF>BARRACKS/COMPANY OPERATIONS FACILITY

Provide «AITCOF_NUMBER» standard B/COFs. This facility type is to house single trainee soldiers and company administrative, training and command operations.

Maximum number of single personnel to be housed is 600 per B/COF. Each B/COF will be five stories high and will house 120 soldiers per floor.

The maximum gross area for each B/COF is 176,000 square feet.

The floor plans for the B/COF are provided in Appendix J. These floor plans indicate functional and operational arrangements that meet the user's requirements. The Design/Build (D/B) Contractor is required to follow these mandatory designs. Minor plan alterations (not more than eight inches) are permitted only when necessary to accommodate building system requirements; however, the minimum area requirements identified in Paragraph 2 will not be reduced in order to accommodate building system requirements. Office locations shown on the floor plan will not be altered or relocated as they meet the mandatory adjacency requirements.</AITCOF>

1.0.1.2 <AITBN_NO>NOT USED</AITBN_NO><AITBN>BATTALION HEADQUARTERS

Provide one standard BNHQ. This facility type is to house administrative and command operations. Assume 20 percent of personnel are female, unless otherwise indicated.

The maximum gross area for the BNHQ is 10,900 square feet.

The floor plan for the BNHQ is provided in Appendix J. The floor plan indicates functional and operational arrangements that meet the user's requirements. The Design/Build (D/B) Contractor is required to follow these mandatory designs. Minor plan alterations (not more than eight inches) are permitted only when necessary to accommodate building system requirements; however, the minimum area requirements identified in Paragraph 2 will not be reduced in order to accommodate building system requirements. Office locations shown on the floor plan will not be altered or relocated as they meet the mandatory adjacency requirements.</AITBN>

1.0.1.3 <AITBDE_NO>NOT USED</AITBDE_NO><AITBDE>BRIGADE HEADQUARTERS

Provide one standard BDEHQ. This facility type is to house administrative and command operations. Assume 20 percent of personnel are female, unless otherwise indicated.

The maximum gross area for the BDEHQ is 9,450 square feet.

The floor plan for the BDEHQ is provided in Appendix J. The floor plan indicates functional and operational arrangements that meet the user's requirements. The Design/Build (D/B) Contractor is required to follow these mandatory designs. Minor plan alterations (not more than eight inches) are permitted only when necessary to accommodate building system requirements; however, the minimum area requirements identified in Paragraph 2 will not be reduced in order to accommodate building system requirements. Office locations shown on the floor plan will not be altered or relocated as they meet the mandatory adjacency requirements.</AITBDE>

1.0.1.4 <AITLEB_NO>NOT USED</AITLEB_NO><AITLEB>LAWN EQUIPMENT BUILDING

Provide one LEB. This facility type is to store lawn maintenance equipment. There is no fuel storage.

The maximum gross area for the LEB is «AITLEB_MAX_GROSS» square feet.</AITLEB>

1.0.2 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 for a company operations facility should be consistent with the design and construction of an office/warehouse building.

Comparison of Military Facilities to Civilian Facilities

<u>Military Facility</u>	<u>Civilian Facility</u>
Barracks/Company Operations Facility (B/COF)	Dormitory / Office Building
Battalion Headquarters (BNHQ)	Office Building
Brigade Headquarters (BDEHQ)	Office Building
Dining Facility (DFAC)	Cafeteria
Lawn Equipment Building (LEB)	Storage Shed

1.0.3. It is the Army's objective that these buildings will have a 50-year useful life. 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 facility design should consider that the Army may repurpose the use of the facility over the 50-year life. The Army's intent is to install products and materials of good quality that meet industry standard average life that corresponds with the period of performance expected before a major renovation or repurpose. The design should be flexible and adaptable to possible future uses different than the current to the extent practical while still meeting the operational and functional requirements defined within. Flexibility is achieved through design of more flexible structural load-bearing wall and column system arrangements. The site infrastructure will have at least a 50-year life expectancy with industry-accepted maintenance and repair cycles. Develop the project site for efficiency and to convey a sense of unity or connectivity with the adjacent buildings and with the Installation as a whole.

1.0.4 Requirements stated in this contract 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 most economical 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 PART 2 PRODUCTS - FACILITY REQUIREMENTS - ADVANCED INDIVIDUAL TRAINING COMPLEX (AIT)

2.1 GENERAL REQUIREMENTS:

2.1.1 FACILITY DESCRIPTION: The design must comply with the Army Standard for the facility. Army Standard for the AIT Complex provided in attachment A. This project consists of the facilities listed and described below. Advanced Individual Training (AIT) complexes are required by the Army to encompass living, dining, training, and administrative/command operations. AIT Complexes are comprised of Barracks/Company Operations Facilities (B/COF), Dining Facility (DFAC), Battalion Headquarters (BNHQ), and Lawn Equipment Storage Buildings (LEB). These facilities, with outdoor training areas and any additional support facilities are arranged on the site as a unit to allow the battalion to live, eat, train, and work together. When multiple battalions are organized under a brigade, a Brigade Headquarters (BDE HQ) may also be programmed in the AIT Complex. B/COF is comprised of living quarters, toilets, multi-purpose rooms, storage, company operations and other support spaces. DFAC is comprised of delivery, storage, food preparation, cleaning, serving, and seated dining; field feeding components must be evaluated at the 1391 Charrette to determine if they will be a requirement for the proposed DFAC. BNHQ is comprised of administration, special functions, storage, and multi-purpose room components for personnel assigned to work in those facilities. BDE HQ is comprised of administrative and special function components for personnel assigned to work in those facilities. LEB provides storage

for maintenance equipment and materials. The site includes a running track, physical training (PT) pits, vehicular and service access drives, and parking areas. Standard Designs are site adapted as required for construction at each individual complex. Industry standards apply except where military standards are required to meet specific operational needs. Use appropriate methods and materials for occupancy to achieve economy while not sacrificing durability.

- 2.1.1.1 B/COF: <AITCOF_NO>Not used</AITCOF_NO><AITCOF> A B/COF is comprised of sleeping units, toilets, computer learning centers, multipurpose space, storage, laundry areas, day rooms, and company operations components.</AITCOF>
- 2.1.1.2 BNHQ: <AITBN_NO>Not used</AITBN_NO><AITBN>A BNHQ is comprised of administration, command operations, special functions, storage and classroom components.</AITBN>
- 2.1.1.3 BDE HQ: <AITBDE_NO>Not used</AITBDE_NO><AITBDE>A BDE HQ is comprised of administration, command operations, and special functions.</AITBDE>
- 2.1.1.4 DFAC: <AITDF_NO>Not used</AITDF_NO><AITDF>A Dining Facility is part of the complex but is not procured in this contract.<AITDF_AITCCP> Energy loads for the dining facility are not part of the CCP loads.</AITDF_AITCCP> Refer to Dining Facility RFP.</AITDF>
- 2.1.1.5 LEB: <AITLEB_NO>Not used</AITLEB_NO><AITLEB>A LEB is a storage building for lawn maintenance equipment.</AITLEB>
- 2.1.2 FACILITY RELATIONSHIPS: (NOT USED)
- 2.1.3 ACCESSIBILITY REQUIREMENTS:
- 2.1.3.1 FACILITY DESIGN AND CONSTRUCTION
- 2.1.3.1.1 The B/COF, LEB and CCP facilities are intended for occupancy and use by able-bodied military personnel only. In accordance with paragraph 3(a) of the Deputy Secretary of Defense Memorandum dated 31 October 2008: DOD Access for People with Disabilities, facilities for able-bodied personnel are exempt from accessibility requirements.
- 2.1.3.1.2 Headquarters buildings must comply with the Architectural Barriers Act (ABA) Accessibility Standard for DOD facilities as currently amended.
- 2.1.4 BUILDING AREAS:
- GENERAL: Calculate building areas in accordance with 011000-Par 2-GENERAL TECHNICAL section 2.4.4 COMPUTATIONS OF AREAS. Overall building gross area and gross square feet per occupant must be in accordance with the Army Standard and with section 2.2.1 FUNCTIONAL SPACES below.
- 2.1.5 ADAPT BUILD MODEL: (NOT USED)

2.2 FUNCTIONAL AND OPERATIONAL REQUIREMENTS:<AITCOF>

2.2.1 FUNCTIONAL SPACES - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.2.1.1 PRIMARY SPACES

2.2.1.1.1 Company Operations (First Floor):

2.2.1.1.1.1 Offices

2.2.1.1.1.1.1 Company Supply: Provide one company supply room for each company for storage of general equipment and consumable supplies. The minimum area of each company supply room will be 280 NSF. Shipping and receiving functions are performed from company supply area. Provide a pair of exterior doors with removable stanchion - in company supply room.

2.2.1.1.1.1.2 Caged Storage: In the company supply area, provide one a lockable caged storage area for each company supply to provide a minimum of 100 NSF of storage for securing higher-valued equipment. The caged storage area must be separated from the company supply area with a fixed partition and accessible through the company supply room only.

2.2.1.1.1.1.3 Arms Vault: Provide a separate arms vault at 200 NSF minimum for each company. The Arms Vault must be designed in accordance with AR 190-11 Arms door must incorporate a steel Dutch-door style day-gate with a steel issue shelf built into the lower leaf of the day-gate.

2.2.1.1.1.1.4 Covered Training /Assembly Area: Provide 1,750 NSF of covered training/assembly area near the rear building entrances for each company. Outside, sheltered spaces may be used for equipment maintenance, weapons cleaning, PT during inclement weather and pre/post-training preparation and clean-up.

2.2.1.1.2 Barracks (Upper Floors):

2.2.1.1.2.1 Living Quarters: A total of 50% of the living quarters must be designed with two person sleeping areas at 90 NSF per person or a minimum of 180 NSF for the room. The remaining 50% of the living quarters must be designed to accommodate the peak design capacity of the building, accommodating three persons per sleeping area at 72 NSF per person or a minimum of 216 NSF for the room.

2.2.1.1.2.1.1 Bedroom: Non-surge sleeping units must have one, two person bedroom. Bedrooms must be of equal size and able to accommodate two of each of the following: beds, nightstands, desks and chairs with adequate circulation. Surge sleeping units must have one, three person bedroom. Bedrooms must be of equal size and able to accommodate three of each of the following; beds, nightstands, desks and chairs with adequate circulation. Provide and mount one full length wall mirror at the end of plumbing chase in each sleeping unit.
<AIT_FAN_YES>Provide a ceiling fan for each sleeping unit.
</AIT_FAN_YES>

- 2.2.1.1.2.1.2 Bathroom: Each sleeping unit must include one bathroom with water closet and shower. Exterior to the bathroom must be a lavatory/vanity with a solid surface vanity countertop, mirror and recessed medicine cabinet. Provide each vanity with storage cabinets below and a towel bar.
- 2.2.1.1.2.1.3 Entry: Each sleeping unit entry area must have three lockable built-in closets. Provide each built-in closet with interior dimensions of 36 inches wide by 25 inches deep with solid wood or steel shelf with clothes rod.
- 2.2.1.1.2.1.4 Utility Closet: Provide one utility closet per sleeping unit to house the HVAC fan cooling/heating unit. Provide utility closet access from the corridor with a 42 inch minimum width door. Filter changes and preventative maintenance must be performed without requiring access to the bedrooms.
- 2.2.1.1.2.2 Platoon Sergeant (PS) Offices must be located on each floor of the facility. Each office must be designed to include: two standard 6' x 6' Workstations (cubicles), Private Toilet Room with Shower. Individual office areas, excluding the Toilet Rooms, must be a minimum of 160 NSF with the total minimum aggregate area for offices of 960 NSF.
- 2.2.1.2 COMMON AREAS
 - 2.2.1.2.1 Lobby: Provide an entry lobby with a minimum width of 10 feet. Provide space to accommodate guest chairs with adequate circulation.
 - 2.2.1.2.2 Charge of Quarters (CQ) Station: Provide one Charge of Quarters (CQ) Station centrally located in the lobby on the first floor at the building's main entrance. Q Station must be positioned to provide maximum visibility to the main entrance, main stairs, service elevator and main company housed in the B/COF and must be designed to accommodate the installation of an 'optional' or 'future' camera-assisted visual surveillance system. Provide the CQ station with modesty screening for occupant, a minimum of two lockable file drawers and securable compartments for the computer monitor, keyboard, and CPU.
- 2.2.1.3 Common Toilet Rooms:
 - 2.2.1.3.1 Command Toilet Rooms: Provide single occupant, Men's and Women's Toilet Rooms with a shower adjacent to the Command Suite(s) for the use of administrative personnel and authorized visitors only.
 - 2.2.1.3.2 Trainee Toilet Rooms: Provide Men's and Women's Toilet Rooms adjacent to the Multi-purpose Room for the common use of trainees and other building occupants.
- 2.2.1.4 Vestibule: Provide an enclosed transition space between the exterior and interior of the building at the lobby and rear entrances. Provide a minimum of 7 feet between doors and match width of adjacent lobby and corridor.
- 2.2.1.5 Corridors: Provide 6 feet minimum width corridors.

- 2.2.1.6 Janitor and Custodial Supply Closets: Provide one janitor closet and one custodial supply closet per floor per Company. Each janitor and custodial closet will be a minimum of 20 NSF. Each janitor closet must include a floor drain and a built-in mop sink (either wall-hung with appropriate support or floor mounted). two janitor closets per floor each must have a mop sink, mop rack, storage shelving and space for buckets and vacuum.
- 2.2.1.7 Stairs: Provide 4 feet 6-inch minimum width stairs.
- 2.2.1.8 Mechanical and Electrical: Size mechanical rooms to accommodate equipment maintenance and repair access without having to remove other equipment. First floor exterior access is required for centralized mechanical room.
- 2.2.1.9 Telecommunications: Provide a 100 NSF minimum secured communications room to accommodate facility telecommunications equipment. Telecommunications rooms must be conditioned space.
- 2.2.1.10 Vending Area: Locate a vending area in corridor immediately adjacent to the day room. Provide a 45 NSF minimum open space to accommodate three vending machines (beverage, snack, and ice) that allows access from the Lobby Corridor. Include floor drains and plumbing as appropriate.
- 2.2.1.11 Recyclables Storage: Provide a 35 NSF minimum recycling room for storage of full and excess collection bins. The room must include an oversized 4'-0" door for ease of access.
- 2.2.1.12 <AIT_BOOTWASH>Boot wash: Provide two boot wash stations - one at the building's primary main entrance and two, one each located at the building' secondary entrances near the covered training/assembly area. Boot wash stations must be either wet or dry per the installations functional requirements. an outdoor area for soldiers to rinse mud from field gear, boots and clothing at main entrances.</AIT_BOOTWASH><AIT_BOOTSCRAPER> Boot Scraper/Brush Station: Provide cast iron dry boot scraper stations at main entrances. </AIT_BOOTSCRAPER>
- 2.2.1.13 Scrub Room/ Weapons Cleaning: Provide a Scrub Room/Weapons Cleaning Room for each Company. The room(s) must be a minimum of 240 NSF per company and must be designed to accommodate the cleaning of field equipment and gear. This space must be situated to provide direct access from the outdoors prior to entering the primary building spaces. Room must include standing work height, built-in countertops with storage below. Cabinet storage must have lockable doors with internal shelving. The room(s) must also include floor mounted (or appropriately braced scrub sinks in the room's center. Provide ten rinsing stations in an indoor area for soldiers to rinse mud from field gear, boots and clothing.
- 2.2.1.14 Platoon Classroom: Provide a room divided into three equal spaces with operable partitions and adequate space for training of 30 persons in a three classroom arrangement or 100 persons with the partitions retracted. Each partitioned space must have a separate exit, marker boards, one projection screen, projector mounting

system and VTC flat panel screen. Provide each storage room with lockable double doors.

- 2.2.1.15 Computer Learning Center (with Storage): Computer Learning Centers must be provided as Labs with one on each floor for each company. Each computer learning lab must be a minimum of 250 NSF and is to be used to facilitate self-paced, computer-based learning and study. Each Learning Lab must include a printer station and a lockable storage area or storage closet for miscellaneous technology items. Computer Learning Labs must be sized space to accommodate twenty-four computer carrels and task chairs with adequate circulation. Storage areas must be a minimum of 250 NSF with a total minimum aggregate area for Learning Labs of 1,500 NSF.
- 2.2.1.16 Day Room: Day Rooms must be provided for the recreational use of trainees on each floor of the building. Individual Day Rooms with a minimum of 540 NSF for a 5-story, Two Company B/COF and 900 NSF for a 3-story, One Company B/COF, with the total minimum aggregate area for Day Rooms of 2,700 NSF for both the 5-story B/COF and the 3-StoryB/COF. Day room functions as a soldier's lounge and includes a lockable storage room. First Floor Day Room must be able to accommodate one sofa, two love seats, two side tables, one table with chairs, and entertainment center and either one table tennis or pool table with adequate circulation.
- 2.2.1.17 Multi-Purpose Rooms: Provide a Multi-Purpose Room for each Company centrally located at the back of the building. Each Multi-Purpose Room must be designed to accommodate 150 trainees seated in chairs equipped with folding tablet-arms and 300 trainees for a standing muster. The Room must be divisible by the use of operable wall partitions to provide three Instructional areas, each accommodating 50 trainees in chairs equipped with folding tablet-arms plus presentation space for the instructor(s). The total minimum area for each Instructional Area must be 770 NSF with a minimum aggregate area of 2,310 NSF. Each Multi-Purpose Room(s) and Instructional Areas must be designed to accommodate Classroom XXI, Level 1 Technology configurations. Provide Storage Room(s) and Audio/Visual (AV) Rooms to accommodate each Instructional Area.
- 2.2.1.18 Laundry: Provide designated laundry rooms for each company. (Rooms must not be shared between companies.) Company laundry spaces must be divided among each occupied floor according to the population of each floor. Rooms must be sized to accommodate large capacity washers at a ratio of 8:1 and stackable dryers at a ratio of 6:1. Ratios must be calculated per floor occupancy and based on maximum surge capacity. Each laundry room must accommodate spaces for dryers, washers, clothes folding/hanging tables, laundry supplies vending machines, three outlets accessible to trainees and a utility sink. Designers are encouraged to design laundry rooms that are identical from floor to floor.
- 2.2.1.19 Luggage Storage: Provide secure storage for four luggage rooms. Each room must be a minimum 90 NSF and capable to store soldier's suitcases. Central luggage storage must be lockable and partitioned into four separate and equal storage rooms. Each storage room must be accessible from the central core of the central luggage storage area and must have a lockable door.

2.2.1.20 Profile Recovery: Provide a minimum 270 NSF Profile Recovery room for each company. This is an exercise area for injured trainees and must be designed to accommodate fitness equipment and promote aerobic conditioning for injured trainees. Space must be sized and oriented to allow installation of treadmills, stationary bikes, or similar equipment designed to improve a trainee's recovery from minor physical injuries. This space must not serve as a company weight-room. It must not be used for physical therapy nor must it duplicate services that are provided at fitness centers or elsewhere on-post .

</AITCOF><AITBN>

2.2.1 FUNCTIONAL SPACES - BATTALIAN HEADQUARTERS (BNHQ)

2.2.1.1 PRIMARY SPACES:

2.2.1.1.1 Private and Semi-private Offices:

2.2.1.1.1.1 Private Command Suite: Battalion Commander (150 NSF); Executive Officer (110 NSF); Sergeant Major (110 NSF); S-1 (100 NSF); S-3 (100 NSF); S-4 (100 NSF). Note: An S-2 office is not authorized in training battalions Private Chaplain Suite: Chaplain (130 NSF); and Chaplain Assistant (120 NSF). Note: The Chaplain Suite must have a separate exterior entrance located away from the primary facility entrance and must not be immediately adjacent to the Command Suite

2.2.1.1.1.2 General Office Space. Provide semi-private offices with Cubicle work areas accommodating seven standard 6'x6' workstations for S-1 personnel, one receptionist- workstation in the S-1 work area, nine standard 6'x6' workstations for S-3 personnel, and two standard 6'x6' workstations for S-4 personnel. Cubicle work area must be open plan to allow maximum flexibility for adjustments based on future TDA assignments.

2.2.1.1.1.3 Conference Room: Conference room must have seating for approximately 20 persons, one projection screen, projector mounting system and VTC flat panel screen. Provide a 490 NSF minimum Conference Room capable of accommodating at least 16 chairs around a central conference table, twelve additional chairs along the Conference Room walls, and equipped to provide video teleconferencing capability.

2.2.1.1.1.4 Multipurpose Room: Provide one multi-purpose room at 2100 NSF minimum and capable of accommodating 300 PN using standard tablet desks. Multi-purpose room must accommodate Classroom XXI Level 1 technology configurations.

2.2.1.1.1.5 Intelligence Workspaces: Provide an open administrative office for multiple personnel.

2.2.1.1.1.6 Training and Operations Workspaces: Provide an open administrative office for multiple personnel.

- 2.2.1.2 COMMON AREAS: Secret Internet Protocol Router Network (SIPRNET) is not authorized for training facilities. Requests for inclusion of SIPRNET must be made, in writing, to the G-3/5/7. Written approval must be obtained as preliminary documentation for request of an Army Standard Waiver for this criterion. Conduit in support of SIPRNET must not be installed.
- 2.2.1.2.1 Lobby: Provide a handicapped accessible entry lobby with a vestibule.
- 2.2.1.2.2 Drinking Fountains: Provide at least one "high" and one "low" drinking fountain in the primary corridor near the multi-purpose room.
- 2.2.1.2.3 Multi-Purpose Room: Provide one multi-purpose room at 2100 NSF minimum and capable of accommodating 300 PN using standard tablet desks. Multi-purpose room must accommodate Classroom XXI Level 1 technology configurations.
- 2.2.1.2.4 Toilet Rooms:
- 2.2.1.2.4.1 Staff Toilet Rooms: Staff Toilet Rooms: Provide separate male and female toilet rooms. Toilet Rooms must be located adjacent to the Command Suites(s) for the use of the administrative personnel and authorized visitors only. Each toilet room must have at least one shower.
- 2.2.1.2.4.2 Women's Toilet Room/Shower Provide one shower stall and toilet facilities to serve the administrative personnel assigned to battalion. Provide a dressing area with a built-in wooden bench adjacent to the shower stall must include a separate room to accommodate nursing mother lactation with a compact refrigerator, power outlet, countertop, sink and seating for one person. Door must be lockable from the interior with an occupancy indicator. When facility staffing does not warrant use as lactation room, space may be repurposed for facility storage.
- 2.2.1.2.4.3 Trainee Toilet Rooms: Provide separate male and female toilet rooms. Toilet Rooms must be located adjacent to the Multi-purpose room for trainee use.
- 2.2.1.2.5 Vestibule: Provide a 45 NSF minimum open space to accommodate three vending machines (beverage, snack, and ice) that allows access from the Lobby Corridor. Include floor drains and plumbing as appropriate.
- 2.2.1.2.6 Corridors: Provide 6-foot minimum width corridors.
- 2.2.1.2.7 Janitor Closet: Provide a minimum of 45 NSF janitor closet and include a floor drain and a built-in mop sink (either wall-hung or floor mounted).
- 2.2.1.2.8 Mechanical and Electrical Rooms: Size mechanical rooms to accommodate equipment maintenance and repair access without having to remove other equipment. First floor exterior access is required for centralized mechanical room.

- 2.2.1.2.9 Telecommunications Room: Provide a 100 NSF minimum secured communications room to accommodate facility telecommunications equipment. Telecommunications rooms must be conditioned space.
- 2.2.1.2.10 Vending Area: Provide a 45 NSF minimum open space to accommodate three vending machines (beverage, snack, and ice) that allows access from the Lobby Corridor. Include floor drains and plumbing as appropriate.
- 2.2.1.2.11 Recycling Room: Provide a 35 NSF minimum recycling room for storage of full and excess collection bins. The room must include an oversized 4'-0" door for ease of access.
- 2.2.1.2.12 Storage:
 - 2.2.1.2.12.1 Supply Storage: Provide a 100 NSF minimum storage room located along the Command Suite corridor.
 - 2.2.1.2.12.2 Multi-Purpose Audio / Video Storage: Provide a total 20 NSF via a storage closet located adjacent to the Multi-Purpose Room.
 - 2.2.1.2.13 Staff Duty: Provide a 110 NSF minimum Staff Duty station adjacent to the Lobby Corridor. Additional shelving and storage must be built-in to accommodate holding of pre- screened packages and letters.

</AITBN><AITBDE>

2.2.1 FUNCTIONAL SPACES - BRIGADE HEADQUARTERS (BDE HQ)

2.2.1.1 PRIMARY SPACE:

2.2.1.1.1 Private Offices:

- 2.2.1.1.1.1 Command Suite: Brigade Commander (220 NSF); Executive Officer (150 NSF); Sergeant Major (150 NSF); S-1 (100 NSF); S-2 (100 NSF); S-3 (100 NSF); S-4 (100 NSF).
- 2.2.1.1.1.2 Chaplain Suite: Chaplain (130 NSF); and Chaplain Assistant (120 NSF). Note: The Chaplain Suite must have a separate exterior entrance located away from the primary facility entrance and must not be immediately adjacent to the Command Suite.
- 2.2.1.1.1.3 Brigade Support: SHARP (100 NSF); Equal Opportunity (90 NSF); Re-Enlistment (90 NSF). Note: Brigade Support offices must be discreetly located and not be immediately adjacent to view from the Command Suite.
- 2.2.1.1.1.4 Brigade Legal Suite: Brigade Legal Suite - Provide a 300 NSF Brigade Legal Suite capable of accommodating four (4) persons in standard 6'x6' cubicles.
- 2.2.1.1.1.5 Conference Room: Provide a 490 NSF minimum Conference Room capable of accommodating at least 16 chairs around a T-Shaped central conference table, twelve additional chairs along the Conference Room walls, and equipped to provide video teleconferencing capability. Conference Room must serve dual

purpose of Legal Conference Room for hearings and legal proceedings as required after regular work hours.

- 2.2.1.1.1.6 Team Room: Provide a 240 NSF minimum Team Room located near the Brigade Legal Suite. The Team Room must be sized to accommodate at least ten chairs around a central table. Team Room must serve dual purpose of a Legal Conference Room for attorney/client meetings and depositions as required during regular work hours.
- 2.2.1.1.2 Semi-Private Offices: Provide semi-private offices with cubicle work areas accommodating five standard 6'x6' workstations for S-1 personnel, one receptionist-type workstation in the Command Suite, four (4) standard 6'x6' workstations for S-2 personnel, ten standard 6'x6' workstations for S-3 personnel, and seven standard 6'x6' workstations for S-4 personnel. Cubicle work area must be open- plan to allow maximum flexibility for adjustments based on future TDA assignments.
- 2.2.1.1.3 Document Storage: Provide a storage room.
- 2.2.1.2 COMMON AREAS: Secret Internet Protocol Router Network (SIPRNET) is not authorized for training facilities. Requests for inclusion of SIPRNET must be made, in writing, to the G-3/5/7. Written approval must be obtained as preliminary documentation for request of an Army Standard Waiver for this criterion. Conduit in support of SIPRNET must not be installed.
- 2.2.1.2.1 Lobby: Provide a handicapped accessible entry lobby with a vestibule.
- 2.2.1.2.2 Staff Toilet Rooms Provide separate male and female staff toilet rooms. Toilet Rooms must be located near the Lobby Corridor for visitors and building occupant use. Each toilet room must have at least one shower. A separate room, near the women's toilet room, must be provided to accommodate nursing mother lactation with a compact refrigerator, power outlet, countertop, sink and seating for one person. Door must be lockable from the interior with an occupancy indicator. When facility staffing does not warrant use as lactation room, space may be repurposed for facility storage.
- 2.2.1.2.3 Vestibule: Provide a minimum of 7 feet between doors and match width of adjacent lobby and corridor.
- 2.2.1.2.4 Corridors: Provide 6-foot minimum width corridors.
- 2.2.1.2.5 Janitor Closet: Provide a minimum of 20 NSF janitor closet and include a floor drain and a built- in mop sink (either wall-hung or floor mounted)., mop rack, storage shelving and space for buckets and vacuum.
- 2.2.1.2.6 Mechanical and Electrical, Rooms: Size mechanical rooms to accommodate equipment maintenance and repair access without having to remove other equipment. First floor exterior access is required for centralized mechanical room.

- 2.2.1.2.7 Telecommunications Room: Provide an 85 NSF minimum secured communications room to accommodate facility telecommunications equipment. Telecommunications rooms must be conditioned space.
- 2.2.1.2.8 Break Room, Vending and Recycling Area: Provide a 270 NSF minimum combined Break Room and Vending area located off of primary corridor. Break Room must include a sink, countertop, upper and lower storage cabinets, space for a refrigerator, and seating for at least six persons. Integrated space must accommodate three vending machines (beverage, snack, and ice) that allow access from Lobby Corridor. Include floor drains and plumbing as appropriate.
- 2.2.1.2.9 Storage: Provide a 55 NSF minimum Supply Storage room.
- 2.2.1.2.10 Staff Duty: Provide a security office for building surveillance and a message center for distributing mail and directives. Staff Duty Station must be 115 NSF minimum located adjacent to the Lobby Corridor. Additional shelving and storage must be built-in to accommodate holding of pre- screened packages and letters.

</AITBDE><AITLEB>

2.2.1 FUNCTIONAL SPACES - LAWN EQUIPMENT BUILDING (LEB)

- 2.2.1.1 GENERAL: Provide 1,000 gross square feet lawn maintenance equipment storage building. Divide LEB with partitions into four equal spaces, to provide an individually securable storage space with separate access for each B/COF. Provide access to each individual storage space through an overhead coiling door.</AITLEB>

2.3 SITE FUNCTIONAL REQUIREMENTS

2.3.1 PARKING:

- 2.3.1.1 Privately Owned Vehicle (POV) Parking: <AIT_POV_NO>POV parking details within the designated AIT Complex are provided below for information only; as parking will not be procured under this contract. </AIT_POV_NO><AIT_POV_YES>Design and construct POV parking, within the designated AIT Complex construction area as identified below. Base the location and design of the POV parking area(s) on the Installation's site constraints. Parking can either be consolidated or spread out along the perimeter of the complex. Ensure that the location of parking complies with UFC 4-010-01. See paragraph 1.2.3 VEHICLE PAVEMENTS for additional information. POV parking must be as follows: </AIT_POV_YES><AITCOF>
- 2.3.1.1.1 B/COF: Provide 18 spaces per 300 man B/COF. </AITCOF><AITBN>
- 2.3.1.1.2 BNHQ: Provide 23 total spaces of which includes two accessible and three visitor spaces. </AITBN><AITBDE>
- 2.3.1.1.3 BDE HQ: Provide 50 total spaces of which includes two accessible and five visitor spaces. </AITBDE><AITDF>
- 2.3.1.1.4 DFAC - Provide 65 total spaces of which include three accessible spaces. </AITDF>

2.3.2 ACCESS DRIVES AND LANES:

2.3.2.1 Access Drives: Provide access drives to each building and locate in accordance with UFC 4-010-01. Restrict access to the drives, as required by UFC 4-010-01. Design the pavements as required by paragraph 1.2.3 VEHICLE PAVEMENTS. Minimum access drive width must be 24 feet. Provide drives with curb and gutter and a minimum turning radius as required for emergency vehicle access.

2.3.3 TROOP FORMATION/ASSEMBLY AREA: <AITCOF_NO>Not Used</AITCOF_NO><AITCOF>Construct pavements for Troop formation/assembly areas, such as the pavement beneath the outdoor "Covered Training Areas" of Portland cement concrete having a minimum nominal thickness of 4 inches. Troop formation areas that are designed to also support emergency and service vehicle traffic must be designed as roadway pavements. See Roadway Pavements of Paragraph 2.4 Site and Landscape Requirements for design requirements.</AITCOF>

2.4 SITE AND LANDSCAPE REQUIREMENTS

2.4.1 SITE STRUCTURES

2.4.1.1 Dumpster Enclosure Area: Locate, design and construct dumpster enclosure area(s) and screening. Locate dumpster enclosures outside of restricted areas to allow for servicing activities and in accordance with UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings. Dumpsters are GFGI. Size dumpster pads to accommodate<AIT_TRASH_DUMP> trash dumpsters only. No recycling dumpsters are required.</AIT_TRASH_DUMP><AIT_RECYC_DUMP> both trash and recycling dumpsters.</AIT_RECYC_DUMP> Dumpster screening must be aesthetically and architecturally compatible with the building it serves and must be designed in accordance with the Installations guidelines.

2.4.2 LANDSCAPING/HARDSCAPING

2.4.2.1 Non-Vehicular Walks: Construct non-vehicular pedestrian and troop formation sidewalks of Portland cement concrete having a minimum nominal thickness of 4 inches. Design uniform and symmetrical joint patterns in accordance with AASHTO standards. The length to width ratio must not exceed 1.25 for non-reinforced pavements. Locate walks paralleling buildings beyond the eave drip line and at least 5 feet from the foundation.

2.4.2.1.1 Pedestrian Sidewalks: Provide pedestrian walks within the designated construction area and connect to existing sidewalks. Sidewalks must be a minimum of 6 feet wide.

2.4.2.1.2 Troop Formation Sidewalks: Troop formation sidewalks must be a minimum of 15 feet wide. Troop formation sidewalks that are also designed to support emergency and service vehicle traffic must be a minimum of 20 feet wide and be considered roadway pavements.

2.4.2.2 Roadway Pavement: Troop formation areas and sidewalks designed to support emergency and service vehicle traffic must meet AASHTO standards for roadway pavements. Construct vehicular supported walks of Portland cement concrete having a minimum nominal thickness

of 7 inches. Design uniform and symmetrical joint patterns in accordance with AASHTO standards. The length to width ratio must not exceed 1.25 for non-reinforced pavements.

2.4.2.3 Physical Training Areas: <AIT_PT_NO>Physical training areas are an integral component of the AIT Complex. However, the details below are for information only; as PT areas will not be procured under this contract.</AIT_PT_NO><AIT_PT_YES>The design and construction of physical training areas is required.</AIT_PT_YES>Locate outdoor training areas, particularly those that are needed for physical fitness, to the interior areas of the AIT Complex. The minimum mandatory exterior training areas for the complex include one running track per Battalion, one physical training (PT) pit per B/COF and four 4-station climbing bar sets per B/COF.

2.4.2.3.1 Running Track: If required by RFP, provide one closed, oval or round shaped, 1/4 mile running track per BN. The track must be a separate stand-alone feature, not incorporated into other site features, such as roads or walks. The entire track must be observable from one central location to allow minimal drill instructor oversight. Construct the track of a synthetic sports surface material, as specified in Specification Section 02 83 30 Synthetic Sports Surface of Appendix J. Track width must be 15 feet. Running lanes are not required. Design surface and subsurface drainage for the track. Standing water is not permitted on the track.

2.4.2.3.2 PT Pits: If required by RFP, provide one PT Pit and four 4-station climbing bar sets for each B/COF. Refer to Appendix J, drawings for physical training equipment. Each pit must be a minimum of 11,250 square feet. Square pits are desired, but pit configurations may be adjusted to accommodate site conditions. Locate the pits to the rear of each facility as either be stand-alone facilities or located within the interior of the track. Separation of PT pits located within the track must be visibly defined. PT pits must be used for hand to hand combat drills, as well as calisthenics. Construct the PT pit of Slit-film fiber artificial turf with crosshatching for infill fly-out reduction. Design surface and subsurface drainage for the PT pits. Standing is not permitted on the PT pits. Providing canopy coverings over the PT pits or fencing around the pits is not permitted.

2.5 ARCHITECTURAL REQUIREMENTS

2.5.1 GENERAL: Provide durable and easily maintainable materials. Do not use exterior materials that require periodic repainting or similar refinishing processes. Material exposed to weather must be factory pre-finished, integrally colored or provided with intrinsic weathering finish.

2.5.2 WALLS:

2.5.2.1 Exterior Walls: Where Exterior Insulation and Finish Systems (EIFS), or any other material except CMU or other Masonry material is used as exterior finish material, it must be in conjunction with a CMU wainscot. EIFS must be "high-impact" and "drainable".

- 2.5.3 MOLD AND MILDEW: The Designer of Record must provide details in the design analysis and design showing steps taken to mitigate the potential growth of mold and mildew in the facility. Gypsum board must achieve a score of 10, the highest level of performance for mold resistance under the ASTM D 3273 test method. Gypsum board must be transported, handled, stored and installed in accordance with the GYPSUM ASSOCIATION - Guidelines for Prevention of Mold Growth on Gypsum Board (GA-238-03).
- 2.5.4 ROOF SYSTEMS: For membrane roof systems provide a minimum slope of 1/4 inch per foot and roof crickets with a minimum ½ inch per foot slope. Membrane roof systems must be fully adhered. Provide pitched roof systems with a minimum slope of 3 inches per foot. Roof pitch must also comply with Area Design Guideline and Installation Design Guideline if conflict exists design roof in accordance with most stringent slope. Structural standing seam metal roofs must comply with the requirements of ASTM E 1592. Roof system must be Underwriters Laboratory (UL 580 Class 90) rated or Factory Mutual Global (FM) I-90 rated and comply with criteria for fire rating.
- 2.5.4.1 Roof Mounted Equipment: For roof mounted equipment, provide permanent access walkways and platforms to protect roof. Roof mounted equipment on pitched roof systems is unacceptable. Roof mounted equipment on membrane roof systems must be completely screened by the roof parapet.
- 2.5.4.2 Roof Access: Roof access from building exterior is prohibited.
- 2.5.4.3 Trim and Flashing: Gutters, downspouts, and fascia must be factory pre-finished metal and must comply with SMACNA Architectural Sheet Metal Manual.
- 2.5.5 OPENINGS
- 2.5.5.1 Storefronts/Curtain Walls & Entrances:
- 2.5.5.1.1 Storefronts (Main Entrance Doors): Provide aluminum storefront doors and frames with Architectural Class 1 anodized finish, fully glazed, with medium or wide stile for entry into lobbies or corridors. Provide doors complete with frames, framing members, subframes, transoms, sidelights, trim, applied muntin, and accessories. Provide framing with thermal-break design. Storefront systems must comply with wind-load requirements of codes and criteria including UFC 4-010-01.
- 2.5.5.1.2 Curtain Wall Systems: Curtain wall systems must be capable of withstanding area wind loads, thermal and structural movement required by location and project requirements, and must comply with codes and criteria including UFC 4-010-01.
- 2.5.5.2 Windows:
- 2.5.5.2.1 Exterior Windows: Provide insulated, high efficiency window systems, with thermally broken frames complying with codes and criteria including UFC 4-010-01. Design windowsills to discourage bird nesting.

2.5.5.3 Doors and Frames:

2.5.5.3.1 Exterior Insulated Hollow Metal Doors & Frames: Provide galvanized insulated hollow metal doors and frames opening to spaces other than corridors or lobbies compliant with ANSI A250.8/SDI 100. Doors must be heavy duty (grade 2) insulated with 18-gage steel cladding; top edge closed flush; A60 galvanized. Frames must be 12-gauge, with continuously welded mitered corners and seamless face joints. Construct doors and frames of hot dipped zinc coated steel sheet, complying with ASTM A653, Commercial Steel, Type B, minimum A40 coating weight; factory primed. Fire-rated openings must comply with codes, and the requirements of the labeling authority. Door and frame installation must comply with codes and criteria including UFC 4-010-01.

2.5.5.3.2 Interior Insulated Metal Doors: Insulated hollow metal doors must comply with ANSI A250.8/SDI 100. Doors must be minimum Level 2, physical performance Level B, Model 2; factory primed. Provide insulated hollow metal doors for utility rooms, storage rooms and toilets.

2.5.5.3.3 Solid Core Wood Doors: Doors must be wood doors except noted otherwise Provide flush solid core wood doors in accordance with WDMA I.S.-1A. Stile edges must be non-finger jointed hardwood compatible with face veneer. Provide Architectural Woodwork Institute (AWI) Grade A hardwood face veneer for transparent finished doors.

2.5.5.3.4 Interior Hollow Metal Frames: Hollow metal frames must comply with ANSI A250.8/SDI 100. Frames must be minimum Level 2, 16 gauge, with continuously welded mitered corners and seamless face joints; factory primed.

<AITCOF>

2.5.5.3.5 Arms Vault: Arms vault door must incorporate a steel Dutch-door day-gate with a steel issue shelf built into the lower leaf of the day-gate and must comply with Appendix G of AR 190-11.

</AITCOF>

<AITLEB>

2.5.5.3.6 Doors and Frames: Each overhead coiling door must be lockable and a minimum of eight feet wide by seven feet high for access.

<AITLEB>

2.5.5.4 Hardware:

2.5.5.4.1 Door Hardware: Provide closers for exterior doors, doors opening to corridors and as required by codes. Install exit devices on building egress doors. Provide other hardware as necessary for a complete installation.

2.5.5.4.1.1 Finish Hardware (Master Keying System/Cores): Hardware must be consistent and must conform to ANSI/BMHA standards for Grade 1. Coordinate requirements for hardware with the Contracting Officer. Hardware finish must conform to ANSI/BHMA A156 18; finish must be Code # «AIT_HARDWARE_FINISH_CODE». Provide extension of the existing Installation's keying system. Installation keying system is «AIT_KEYING_SYSTEM». Cores for locksets other than those for mechanical, electrical, and telecommunications rooms must be manufactured by

«AIT_KEY_MANUFACTURER» . Locksets must have interchangeable cores with no less than seven pins. Provide key-removable cylinder cores that allow core removal from the lockset without disassembly of knob or lockset. Locksets for mechanical, electrical and telecommunications rooms only must be keyed to the existing Installation Master Keying System. Provide HVAC terminal units that are accessed from a central corridor with a deadbolt and fixed pull to minimize protrusion into corridor. Plastic cores are unacceptable. Door hardware and security requirements must be coordinated with the functional requirements, the room-by-room criteria, and the electrical security/fire alarm system requirements of this document.

2.5.5.4.1.2 Fire and Exit Door Labeling: Install hardware for fire doors in accordance with the requirements of codes. Exit devices installed on fire doors must have a visible label bearing the marking "Fire Exit Hardware". Other hardware installed on fire doors, such as locksets, closers, and hinges must have a visible label or stamp indicating that the hardware items have been approved by an approved testing agency for installation on fire-rated doors. Hardware for smoke-control door assemblies must be installed in accordance with codes.

2.5.5.4.1.3 Door Stops: Provide wall or floor stops for exterior doors that do not have overhead holder/stops.

2.5.5.4.2 Auxiliary Hardware:

2.5.5.4.2.1 Clothes/Robe Hooks

2.5.5.4.2.1.1 Toilets/Showers: Provide double robe hook adjacent to shower enclosure entry.
<AITCOF>

2.5.5.4.2.1.2 PS Toilet/Shower: Provide one robe hook in the shower dressing area.

2.5.5.4.2.2 Door Latches: Provide each sleeping unit entry closet door with a Function (F75), Grade 1 closet latch, and with padlock eyes so the occupant can provide his/her own padlock. One padlock eye must be mortised into and screw attached flush with door edge on the latch side of the door and the second padlock eye must be mortised and welded flush into the inside face of the door frame jamb. Fabricate padlock eye to accommodate padlock shackle up to 1/4" diameter. Padlock eye color must match door frame color. Locate padlock eye at between 4'-6" and 5'-6" AFF at the same height in modules.

2.5.5.4.2.3 Sleeping Unit: Provide a full-length wall mirror measuring at least 16 to 24 inches wide by 72 inches long in bedroom.

</AITCOF>

2.5.5.4.3 Non-Destructive Emergency Access System (KNOX Box):

<AIT_LOCKBOX_NO>Not Used</AIT_LOCKBOX_NO><AIT_LOCKBOX>Fire Department Secure Lockbox: «AIT_LOCKBOX_DESCRIPTION»</AIT_LOCKBOX>

2.5.5.5 Exterior: Provide exterior louvers with bird, bug or both screens designed to exclude wind-driven rain constructed to withstand wind

loads in accordance with the codes. Wall louvers must bear the Air Movement & Control Association (AMCA) International certified ratings program seal for air performance and water penetration in accordance with AMCA 500-D and AMCA 511. Louver finish must be factory applied.

2.5.6 EXTERIOR SPECIALTIES:

2.5.6.1 Bird Habitat Mitigation: Provide details in the design necessary to eliminate the congregating and nesting of birds at, on, and in the facility.

2.5.7 ACOUSTICAL REQUIREMENTS:

2.5.7.1 Design exterior walls and roof/floor/ceiling assemblies, doors, windows and interior partitions to provide for attenuation of external noise sources such as airfields in accordance with criteria.

2.5.7.2 Sound conditions and levels for interior spaces, due to the operation of mechanical and electrical systems and devices, must not exceed levels as recommended by ASHRAE handbook criteria.

<AITBDE>

2.5.7.3 BDE HQ Areas: At BDE HQ areas provide sound insulation to meet a minimum rating at doors, walls and floor/ceiling assemblies of STC 50.

</AITBDE>

2.5.8 THERMAL REQUIREMENTS: See Section 3.12 Energy Conservation Requirements.

<AITCOF>

2.5.9 VAULT REQUIREMENTS: Arms Vault must comply with Appendix G of AR 190-11, Physical Security of Arms, Ammunition, and Explosives. Vendors must be DAQ Level 3, Level 1 Certified.

</AITCOF>

2.6 FINISHES AND INTERIOR SPECIALTIES

2.6.1 GENERAL: Provide durable materials and furnishings that are easily maintained and replaced. Maximize use of daylighting. Provide interior surfaces that are easy to clean and light in color.

2.6.2 FINISHES:

2.6.2.1 Minimum Finish Requirements: Designers are not limited to finishes listed in the following INTERIOR FINISHES table(s) and are encouraged to offer higher quality finishes. Wall, ceiling and floor finishes and movable partitions must conform to the requirements of the IBC, NFPA and UFC 3-600-01 Fire Protection Engineering for Facilities. Where code requirements conflict, the most stringent code requirement must apply.

2.6.2.1.1 Walls: Wall finish must be minimum 5/8" painted gypsum board, except where stated otherwise. Use impact resistant gypsum board in corridors, storage rooms, stairwells and activity rooms and

centralized laundries (if centralized laundries are required by RFP). Provide a Level 4 Finish in accordance with USG Handbook, latest edition.

- 2.6.2.1.2 Ceilings: Ceiling finishes must be minimum 5/8" painted gypsum board, except where stated otherwise. Provide a Level 4 Finish in accordance with USG Handbook, latest edition.
- 2.6.2.1.2.1 Acoustical Ceiling Tiles (ACT): Must be 24"x 24" Acoustical tile panels of 5/8 inch minimum thickness. Type as indicated, Class A. Light reflectance must exceed 75 percent, color, texture and finish must be as indicated. When not indicated provide white, fissured texture acoustical panels with a beveled tegular edge. NRC not less than 0.60, CAC not less than 35.
- 2.6.2.1.2.2 Ceiling Grid: Provide a 9/16" suspension system - Type as indicated. Color, texture and finish must be as indicated. When not indicated provide white, hot-dipped galvanized steel, exposed tee grid with hold down clips for ceiling tiles.
- 2.6.2.1.3 Floors: Resilient Flooring must be minimum 1/8 inch thick, in accordance with ASTM F 1066, Class 2, through pattern tile, Composition 1, asbestos free, with color and pattern uniformly distributed throughout the thickness of the tile.
- 2.6.2.1.4 Countertops: Provide solid surfacing of either Solid Polymer or Solid Polyester Resin Composition to be used for countertops and backsplashes, 1/2-inch minimum thickness. Must meet ANSI/NEMA LD 3 and ASTM E 84. High-Pressure Laminate must not be allowed for countertops in restroom, toilet room, kitchen or break room applications. Provide countertops with waterfall front edge and integral coved backsplash, minimum 4" high.
- 2.6.2.1.5 Window Stools: Provide solid surfacing of either Solid Polymer or Solid Polyester Resin Composition 1/2-inch minimum thickness. Must meet ANSI/NEMA LD 3 and ASTM E 84."
- 2.6.2.2 Minimum Paint Finish Requirements: Paints used must be listed on the "Approved product list" of the Master Painters Institute, (MPI). Follow application criteria recommended by MPI guide specifications for the substrate to be painted and the environmental conditions existing at the project site. Except factory pre-finished material, provide surfaces receiving paint with a minimum of one prime coat and two finish coats. Paints having a lead content over 0.06 percent by weight of nonvolatile content are unacceptable. Paints containing zinc-chromate, strontium-chromate, mercury or mercury compounds, confirmed or suspected human carcinogens must not be used on this project.
- 2.6.2.2.1 Exterior Surfaces: Exterior paints and coating products must be classified as containing low volatile organic compounds (VOCs) in accordance with MPI criteria. Application criteria must be as recommended by MPI guide specifications. Provide an MPI Gloss Level 5 Finish (semi-gloss), unless otherwise specified.
- 2.6.2.2.2 Interior Surfaces: Interior paints and coating products must contain a maximum level of 150 grams per liter (g/l) of VOCs for

non-flat coatings and 50 g/l of VOCs for flat coatings. Provide an MPI Gloss Level 5 Finish (semi-gloss) in wet areas and a flat finish in other areas.

2.6.3 INTERIOR SPECIALTIES:

2.6.3.1 Visual Display Units/Cases:

2.6.3.1.1 Bulletin Boards: Where required, bulletin boards must be 4 feet high and 6 feet wide with a header panel and lockable glazed doors.

2.6.3.2 Toilet Accessories: Provide the items listed below and other toilet accessories necessary for a complete and usable facility. Toilet accessories must be Type 304 stainless steel with satin finish. Toilet accessories must include the following:

2.6.3.2.1 Toilet/Shower(s):

2.6.3.2.1.1 Glass Mirror/Shelf - 18 inch by 24 inch glass mirror on stainless steel frame with shelf at each lavatory.

2.6.3.2.1.2 Hands free liquid soap dispenser - at each lavatory.

2.6.3.2.1.3 Hands free paper towel dispenser - adjacent to lavatory, one for every two.

2.6.3.2.1.4 Waste receptacle - recessed mounted at each lavatory/toilet area.

2.6.3.2.1.5 Sanitary napkin disposal - at each female toilet.

2.6.3.2.1.6 Toilet paper dispenser - lockable multiple roll at each toilet.

2.6.3.2.1.7 Sanitary toilet seat cover dispenser - at each toilet.

2.6.3.2.1.8 Shower curtain rod, extra heavy duty - at each shower.

2.6.3.2.1.9 Shower curtain, white anti-bacterial nylon/vinyl fabric shower curtain - at each shower.

2.6.3.2.1.10 Soap dish - in shower.

2.6.3.2.1.11 Grab bars - as required by ABA.

2.6.3.3 Wall Protection:

2.6.3.3.1 Chair Rail: Install chair rails in areas prone to hi-impact use, such as corridors and lobby seating areas.

2.6.3.3.2 Corner Guards: Provide surface mounted, high impact resistant, integral color, mechanically attached resilient corner guards, extending from floor to ceiling for wall and column outside corners in high traffic areas. Provide factory fabricated end closure for top and bottom of surface mounted corner guards.

2.6.3.4 Storage Shelving:

2.6.3.4.1 Janitor Closet: Provide each janitor closet with a four holder mop rack and two 18 inch deep by 48 inch long heavy duty stainless steel shelves for storage of cleaning supplies.

2.6.3.5 Fire Extinguishers, Cabinets & Mounting Brackets: Provide a list of installed fire extinguisher cabinets and mounting brackets (including location, size and type) to the Contracting Office Representative. Provide a list of required portable fire extinguishers, with descriptions (such as location, size, type,) and total number. See also Section 01 33 16, Attachment D, "SAMPLE FIRE PROTECTION AND LIFE SAFETY CODE REVIEW", paragraph 1.14.

<AITCOF>

2.6.4 FINISHES AND INTERIOR SPECIALTIES - BARRACKS/COMPANY OPERATIONS FACILITIES

2.6.4.1 GENERAL: Design B/COF barracks area with a residential ambience. Design B/COF company operations area with an office ambience.

2.6.4.2 FINISHES:

2.6.4.2.1 Excluded Finishes:

2.6.4.2.1.1 Floors: Carpet must not be used as a floor finish in the B/COF.

2.6.4.2.2 Finish Table:

BCOF MINIMUM INTERIOR FINISHES																
	FLOORS					BASE			WALLS				CEILING			REMARKS
	RESILIENT FLOORING	PORCELAIN OR QUARRY TILE	CERAMIC TILE	RECESSED ENTRY MAT	SEALED CONCRETE	RESILIENT BASE	PORCELAIN OR QUARRY BASE	CERAMIC BASE	GYPSON WALL BOARD - PAINT	REINFORCED, FULLY GROUTED CMU OR CONCRETE	CERAMIC TILE	INSULATED STORE FRONT SYSTEM, LAMINATED GLASS	GYPSON WALLBOARD	ACOUSTICAL CEILING TILE (2 x 2)	REINFORCED CONCRETE	
SLEEPING UNIT																
BEDROOM	•					•			•							
BATHROOM			•					•	•							NOTES 1 & 4
ENTRY	•					•			•						8' - 0"	
UTILITY ROOM					•	•			•						8' - 0"	
LOBBY AND VESTIBULES		•		•					•		•					
STAIR	•				•	•			•							NOTE 8
CORRIDORS		•							•							
PS OFFICE	•					•			•					•		
PS TOILET			•						•							NOTES 1 & 4
CQ STATION		•							•					•		

BCOF MINIMUM INTERIOR FINISHES																
	FLOORS					BASE			WALLS				CEILING			REMARKS
	RESILIENT FLOORING	PORCELAIN OR QUARRY TILE	CERAMIC TILE	RECESSED ENTRY MAT	SEALED CONCRETE	RESILIENT BASE	PORCELAIN OR QUARRY BASE	CERAMIC BASE	GYPSUM WALL BOARD - PAINT	REINFORCED, FULLY GROUTED CMU OR CONCRETE	CERAMIC TILE	INSULATED STORE FRONT SYSTEM, LAMINATED GLASS	GYPSUM WALLBOARD	ACOUSTICAL CEILING TILE (2 x 2)	REINFORCED CONCRETE	
COMPUTER LEARNING CENTER	•					•			•				•			NOTE 3 & 9
DAY ROOM	•					•			•				•			NOTE 3 & 5
CENTRALIZED LAUNDRY		•					•		•				•			NOTES 4
LUGGAGE STORAGE	•					•			•				•			
GENERAL STORAGE	•					•			•				•			
JANITOR CLOSET			•				•		•		•					NOTE 2
MECHANICAL					•	•			•				•			NOTES 7
TELECOM	•					•			•				•		10'-0"	NOTE 9
ELECTRICAL					•	•			•				•			
CO	•					•			•				•			NOTE 6
XO	•					•			•				•			
WAITING AREA		•				•			•				•			
OPS SGT	•					•			•				•			
1ST SGT	•					•			•				•			
MEN'S TOILET			•				•		•		•					NOTES 1
WOMEN'S TOILET			•				•		•		•					NOTES 1
MULTI PURPOSE SPACE	•					•			•				•			NOTE 3
SCRUB ROOM					•	•			•				•			
WEAPONS CLEANING					•	•			•				•			
ARMS VAULT					•	•			•	•				•		
COMPANY SUPPLY	•					•			•				•			
CAGED STORAGE	•					•			•				•			
PROFILE RECOVERY	•					•			•				•			NOTE 3
COVERED ASSEMBLY AREA					•											
1. WET WALLS IN TOILET ROOMS MUST HAVE A 4' HIGH CERAMIC TILE WAINSCOT. SHOWERS MUST HAVE FULL HEIGHT TILE WALLS EXTENDING TO CEILING.																
2. WALLS ADJACENT TO JANITOR SINK MUST HAVE A 4' 0" HIGH CERAMIC WAINSCOT.																
3. USE SAME FINISHES IN ADJACENT CLOSET OR STORAGE ROOM.																
4. COUNTERS MUST HAVE A MINIMUM OF 4" HIGH BACKSPLASH.																
5. IN VENDING OR RECYCLABLES STORAGE AREA, MATCH FLOORING, WALL, AND CEILING FINISHES TO THOSE OF ADJACENT AREA.																
6. EXTEND PARTITIONS TO FLOOR.																
7. CEILING MAY BE PAINTED EXPOSED STRUCTURE IF ALLOWED BY CODE.																
8. RISERS MUST BE PAINTED STEEL. STAIR LANDINGS AND TREADS MUST HAVE RESILIENT FLOORING OR SEALED CONCRETE. PROVIDE TREADS WITH SLIP RESISTANT NOSING.																
9. STATIC-DISSIPATIVE TILE MUST BE USED																

2.6.4.3 INTERIOR SPECIALTIES:

2.6.4.3.1 Signage & Directories: Signage must be mechanically attached.

- 2.6.4.3.1.1 Room Signage: At each sleeping unit, provide two room number and changeable two-line message strip signs, one on each side of entry door. Changeable message strip signs must be of same construction as standard room signs to include a clear sleeve that must accept a paper or plastic insert with identifying changeable text. The insert must be prepared typeset message photographically enlarged to size and mounted on paper card stock.
- 2.6.4.3.2 Visual Display Units/Cases:
 - 2.6.4.3.2.1 Bulletin Boards: In each B/COF provide one centrally located bulletin board per floor.
 - 2.6.4.3.2.2 Marker Boards: Provide the Platoon classroom with 48 inch high dry-eraser marker boards along entire length of front and side walls.
- 2.6.4.3.3 Toilet Accessories:
 - 2.6.4.3.3.1 Sleeping Unit Bathroom: Accessories must include the following items:
 - 2.6.4.3.3.1.1 Two heavy duty towel bars minimum 24 in wide each - one at vanity and one at Shower area.
 - 2.6.4.3.3.1.2 Recessed Mirrored medicine cabinet min 18 x 24 inches - at each lavatory.
 - 2.6.4.3.3.1.3 Soap dish - in each shower.
 - 2.6.4.3.3.1.4 Combination soap dish/toothbrush holder - at each lavatory.
 - 2.6.4.3.3.1.5 Toilet paper holder - at each toilet.
 - 2.6.4.3.3.1.6 Shower curtain rod extra heavy duty - at each shower.
 - 2.6.4.3.3.1.7 Shower curtain - white anti-bacterial nylon/vinyl fabric at each shower.
 - 2.6.4.3.3.2 Drill Instructor Toilet/Shower: Accessories must include the following items:
 - 2.6.4.3.3.2.1 Glass mirrors on stainless steel frame and shelf min 18 x 24 in - at each lavatory.
 - 2.6.4.3.3.2.2 Hands free liquid soap dispenser - at each lavatory.
 - 2.6.4.3.3.2.3 Hands free paper towel dispenser - at each lavatory/toilet area.
 - 2.6.4.3.3.2.4 Waste receptacle recessed mounted - at each lavatory/toilet area.
 - 2.6.4.3.3.2.5 Toilet paper dispenser - lockable multiple roll at each toilet.

- 2.6.4.3.3.2.6 Shower curtain rod extra heavy duty - at each shower.
- 2.6.4.3.3.2.7 Shower curtain - white anti-bacterial nylon/vinyl fabric shower curtain.
- 2.6.4.3.3.2.8 Soap dish - in each shower.
- 2.6.4.3.4 Wall Protection: Provide 8 foot (8') high wall guard panels with trimmings and a finish color that complements the interior finishes in the supply room and corridor adjacent to the supply room.
- 2.6.4.3.4.1 Partitions:
 - 2.6.4.3.4.1.1 Platoon Classroom: Provide ceiling hung operable partitions.
 - 2.6.4.3.4.1.2 Caged Storage: Install a fixed, full height, security wire mesh partition with padlocked wire door.
- 2.6.4.3.4.2 Storage Shelving:
 - 2.6.4.3.4.2.1 Sleeping Unit Closet: Provide in each entry closet two 36 inch wide by 18 inch deep shelves set at 18 inches and 30 inches vertically above closet floor and capable of supporting a minimum of 15 pounds per linear foot.
 - 2.6.4.3.4.2.2 Computer Learning Center Storage: Provide a minimum of six, 18 inch deep storage shelves, spaced at 12 inches on center vertically and capable of supporting a minimum of 20 pounds per linear foot. Total linear footage of storage shelves must be three times the perimeter of the storage room.
 - 2.6.4.3.4.2.3 Day Room Storage: Provide a minimum of six, 18 inch deep storage shelves, spaced at 12 inches on center vertically and capable of supporting a minimum of 20 pounds per linear foot. Total linear footage of storage shelves must be three times the perimeter of the storage room.
 - 2.6.4.3.4.2.4 Caged Storage: Install a minimum of six, 18 inch wide storage shelves, spaced at 15 inches on center vertically and capable of supporting a minimum of 20 pounds per linear foot. Permanently affix to slab. Total linear footage of storage shelves must be three times the perimeter of the storage room.

</AITCOF>
<AITBN>

2.6.4 FINISHES AND INTERIOR SPECIALTIES - BATTALION HEADQUARTERS (BNHQ)

2.6.4.1 GENERAL: Design headquarters building with an office ambience.

2.6.4.2 FINISHES:

2.6.4.2.1 Minimum Finish Requirements:

2.6.4.2.1.1 Floors: Carpet must be minimum of 2 yarn ply, modular tile in accordance with ISO 2551, ASTM D 418, ASTM D 5793, ASTM D 5848,

solution dyed, tufted, cut and loop pile, commercial 100% branded (federally registered trademark) nylon continuous filament.

2.6.4.2.1.2 Finish Table:

BNHQ MINIMUM INTERIOR FINISHES															
	FLOORS					BASE			WALLS		CEILING		REMARKS		
	RESILIENT FLOORING	PORCELAIN OR QUARRY TILE	CERAMIC TILE	RECESSED ENTRY MAT	SEALED CONCRETE	CARPET	RESILIENT BASE	PORCELAIN OR QUARRY BASE	CERAMIC BASE	GYPSUM WALLBOARD - PAINT	CERAMIC	INSULATED STORE FRONT SYSTEM, LAMINATED GLASS		GYPSUM WALLBOARD	ACOUSTICAL CEILING TILE (2 x 2)
MECHANICAL					•		•			•			•		
ELECTRICAL					•		•			•			•		
TELECOMM					•		•			•			•	10'-0"	NOTE 4
JANITOR'S CLOSET			•					•	•	•			•		NOTE 2
CLASSROOMS	•						•		•				•		
INSTRUCTOR WORKSPACE	•						•		•				•		
MEN'S TOILET			•					•	•	•			•		NOTE 2
WOMEN'S TOILET			•					•	•	•			•		NOTE 2
VENDING	•						•		•				•		NOTES 1 & 3
CHAPLAIN						•	•		•				•		
CHAPLAIN ASSISTANT	•						•		•				•		
LOBBY		•						•	•				•		
VESTIBULE		•		•				•	•		•		•		
CORRIDOR		•					•		•				•		
STAFF DUTY/MESSAGE	•						•		•				•		
S-2 OFFICE	•						•		•				•		
INTELLIGENCE WORKSPACES	•						•		•				•		
CLASSIFIED DOCUMENT STORAGE	•						•		•				•		
S-3 OFFICE	•						•		•				•		
TRAINING AND OPERATIONS WORKSPACES	•						•		•				•		
S-4 OFFICE	•						•		•				•		
SUPPLY AND LOGISTICS WORKSPACES	•						•		•				•		
PERSONNEL AND ADMINISTRATIVE WORKSPACES	•						•		•				•		
S-1 OFFICE	•						•		•				•		
BN XO						•	•		•				•		
SGT MJR						•	•		•				•		
BN CO						•	•		•				•		NOTE 3
SUPPLY STORAGE						•	•		•				•		
COFFEE BAR	•						•		•				•		
CONFERENCE ROOM	•						•		•				•		NOTE 3
1. IN VENDING OR RECYCLABLES STORAGE AREA, MATCH FLOORING, WALL, AND CEILING FINISHES TO THOSE OF ADJACENT AREA.															
2. WET WALLS MUST HAVE A 4'-0" HIGH CERAMIC TILE WAINSCOT OR FULL HEIGHT TILE WALLS															

BNHQ MINIMUM INTERIOR FINISHES							
	FLOORS			BASE	WALLS	CEILING	REMARKS
		RESILIENT FLOORING	PORCELAIN OR QUARRY TILE	CERAMIC TILE	RECESSED ENTRY MAT	SEALED CONCRETE	
				RESILIENT BASE	PORCELAIN OR QUARRY BASE	CERAMIC BASE	
					GYPSUM WALLBOARD - PAINT	CERAMIC	
					INSULATED STORE FRONT SYSTEM, LAMINATED GLASS	GYPSUM WALLBOARD	
					ACOUSTICAL CEILING TILE (2 x	MINIMUM HEIGHT 9' - 0" UNLESS STATED OTHERWISE	
3. EXTEND PARTITIONS TO FLOOR.							
4. STATIC-DISSIPATIVE TILE MUST BE USED							

2.6.4.3 INTERIOR SPECIALTIES:

2.6.4.3.1 Visual Display Units/Cases:

2.6.4.3.1.1 Bulletin Boards: Provide one bulletin board near the main entrance.

</AITBN>

<AITBDE>

2.6.4 FINISHES AND INTERIOR SPECIALTIES - BRIGADE HEADQUARTERS (BDE HQ)

2.6.4.1 GENERAL: Design headquarters building with an office ambience.

2.6.4.2 FINISHES:

2.6.4.2.1 Minimum Finish Requirements:

2.6.4.2.1.1 Floors: Carpet must be minimum of 2 yarn ply, modular tile in accordance with ISO 2551, ASTM D 418, ASTM D 5793, ASTM D 5848, solution dyed, tufted, cut and loop pile, commercial 100% branded (federally registered trademark) nylon continuous filament.

2.6.4.2.2 Finish Table:

BDE HQ INTERIOR FINISHES																
	FLOORS						BASE			WALLS			CEILING		REMARKS	
	RESILIENT FLOORING	PORCELAIN OR QUARRY TILE	CERAMIC TILE	RECESSED ENTRY MAT	SEALED CONCRETE	CARPET	RESILIENT BASE	PORCELAIN OR QUARRY BASE	CERAMIC BASE	GYPSUM WALL BOARD-PAINT	CERAMIC TILE	INSULATED STORE FRONT SYSTEM, LAMINATED GLASS	GYPSUM WALL BOARD-PAINT	ACOUSTICAL CEILING TILE (2)		MINIMUM HEIGHT 9' -0" UNLESS STATED OTHERWISE
S-1 OFFICE	•						•			•			•			
PERSONNEL & ADMINISTRATIVE WORKSPACES	•						•			•			•			
STAFF DUTY/MESSAGE	•						•			•			•			NOTE 4
BDE XO/DEPUTY						•	•			•			•			
CMD SGT MAJ						•	•			•			•			
BDE CO						•	•			•			•			NOTES 3 & 6
COMMAND TOILET			•						•	•			•			NOTE 1
COFFEE BAR	•						•			•			•			NOTE 4
CONFERENCE ROOM						•	•			•			•			NOTE 6
SUPPLY STORAGE	•						•			•			•			
S-2 OFFICE	•						•			•			•			
INTELLIGENCE WORKSPACES	•						•			•			•			
DOCUMENT STORAGE	•						•			•			•			
CHAPLAIN						•	•			•			•			NOTE 6
CHAPLAIN ASSISTANT	•						•			•			•			NOTE 6
S-3 OFFICE	•						•			•			•			
TRAINING & OPERATIONS WORKSPACES	•						•			•			•			
S-4 OFFICE	•						•			•			•			
SUPPLY & LOGISTICS WORKSPACES	•						•			•			•			
LOBBY		•							•	•			•			
VESTIBULES		•		•					•	•		•				
CORRIDORS		•							•	•			•			NOTE 5
MEN'S TOILET			•						•	•	•		•			NOTES 1 & 4
WOMEN'S TOILET			•						•	•	•		•			NOTES 1 & 4
JANITOR CLOSET			•						•	•	•		•			NOTE 2
MECHANICAL					•		•			•			•			NOTE 7
ELECTRICAL					•		•			•			•			
TELECOMM					•		•			•			•			NOTE 8
1. WET WALLS IN TOILET ROOMS MUST HAVE A 4' HIGH CERAMIC TILE WAINSCOT. SHOWERS MUST HAVE FULL HEIGHT TILE WALLS EXTENDING TO CEILING.																
2. WALLS ADJACENT TO JANITOR SINK MUST HAVE A 4'-0" HIGH CERAMIC TILE WAINSCOT.																
3. USE SAME FINISHES IN ADJACENT CLOSET OR STORAGE ROOM.																
4. COUNTERS MUST HAVE A MINIMUM OF 4" HIGH BACKSPLASH.																
5. IN VENDING OR RECYCLABLES STORAGE, MATCH FLOORING, WALL, AND CEILING FINISHES TO THOSE OF ADJACENT AREA.																
6. EXTEND PARTITIONS TO FLOOR.																
7. CEILING MAY BE PAINTED EXPOSED STRUCTURE IF ALLOWED BY CODE.																
8. STATIC-DISSIPATIVE TILE MUST BE USED																

2.6.4.3 INTERIOR SPECIALTIES:

2.6.4.3.1 Visual Display Units/Cases:

2.6.4.3.1.1 Bulletin Boards: In the headquarters building provide one bulletin board near the main entrance.

</AITBDE>

<AITLEB>

2.6.4 FINISHES AND INTERIOR SPECIALTIES - LAWN EQUIPMENT BUILDING (LEB)

2.6.4.1 FINISHES:

2.6.4.1.1 Minimum Finish Requirements:

2.6.4.1.1.1 Walls: Walls must be painted impact resistant gypsum wallboard.

2.6.4.1.1.2 Floors: Floors must be sealed concrete with a resilient base.

</AITLEB>

2.7 STRUCTURAL REQUIREMENTS

2.7.1 GENERAL: Design and construct as a complete system in accordance with APPLICABLE CRITERIA.

2.7.2 DESIGN LOADS: Note that the minimum live loads indicated do not include partition loads.

2.7.2.1 Live Loads: Design live loads must be in accordance with the IBC but not less than the following minimums.

2.7.2.1.1 Elevated slabs 60 pounds per square foot (psf)

2.7.2.1.2 Slab on grade 150 psf

2.7.2.1.3 Centralized Laundry 150 psf, but not less than actual equipment loads.

2.7.2.1.4 Partitions: Partition live loads of 15 pounds per square foot (psf) must be added to areas with a live load of 80 psf or less.

2.8 PLUMBING REQUIREMENTS

2.8.1 FIXTURE FLOW RATES:

2.8.1.1 Janitor Closet's: Sinks must have a maximum flow rate of 2.0 gpm.

2.8.1.2 Water closets: Water Closets must be flush valve providing 0.8 gallons per flush or dual flush with an equivalent average flush volume of 0.8 gallons per flush.

2.8.1.3 Showers: Showers must have a maximum flow rate of 1.5 gpm.

2.8.1.4 Bathroom sinks: Bathroom sinks must have a maximum flow rate of .25 gpm.

2.8.2 DRAINS, INTERCEPTORS, SEPARATORS & CLEANOUTS:

2.8.2.1 Toilets/Showers: Provide flow drain in dressing area outside of shower.

2.8.3 PLUMBING FIXTURES:

2.8.3.1 Commercial Plumbing Fixtures:

2.8.3.1.1 Mop Sinks: Provide a 10 inch deep floor mounted stainless steel mop sink, with hot and cold service faucet in each janitor closet.
<AITCOF>

2.8 PLUMBING REQUIREMENTS - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.8.1 DOMESTIC WATER:

2.8.1.1 Heating System: Size domestic water heating system based on 20 gallons of 110 deg F hot water consumption per occupant during morning peak period. Peak period duration must be 30 minutes (10 minute duration for shower and lavatory use per occupant per sleeping unit plus a 10 minute transition period). Base hot water storage capacity on 75% usable storage and a storage temperature of 140 deg F.

2.8.1.2 Pipe Sizing: Base domestic hot water pipe sizing on showers flowing simultaneously at a rate of 2.0 gpm per shower. Size waste stacks, building waste drains, and lift stations with consideration of the increased flow rates as well. Domestic hot water distribution must be at 120 deg F from a central system mixing valve. Design domestic hot water distribution piping to handle up to 180 deg F water temperatures.

2.8.2 DRAINS, INTERCEPTORS, SEPARATORS & CLEANOUTS:

2.8.2.1 Interceptors:

2.8.2.1.1 Sand Interceptors: Provide Scrub Room and Boot wash drains with easily maintainable sand interceptors.

2.8.2.1.2 Solids Interceptors: Laundry facilities must be considered commercial laundries with respect to the International Plumbing Code (IPC) and must be provided with easily maintainable solids interceptor(s) in accordance with the IPC.

2.8.2.2 Cleanouts: If dryer vents are manifolded to a common exhaust, provide an easily accessible means of cleanout.

2.8.2.3 Drains:

2.8.2.3.1 Boot wash: Provide each Boot wash station with a grated drain assembly.

2.8.2.3.2 Vending Area: Provide water connections and floor drain for ice machine.

2.8.2.3.3 Centralized Laundry: Provide water and drain connections for washers.

2.8.2.3.4 Scrub Room: Provide each Scrub Room with easily maintainable drains.

2.8.3 PLUMBING FIXTURES:

2.8.3.1 Commercial Plumbing Fixtures:

2.8.3.1.1 Shower Heads: Provide tamper resistant showerhead at an elevation of 6'-6" A.F.F. in Sleeping Unit Bathroom.

2.8.3.1.2 Utility Sink: Contractor to provide a stainless steel utility sink in each Centralized Laundry Room.

2.8.3.1.3 Boot wash: Each boot wash station must consist of two freeze-proof hydrants located adjacent to drain. Provide two spray nozzles on flexible hoses per hydrant.

2.8.3.1.4 Scrub Room: Each rinsing station must include a combination laundry tray and deep laundry sink with hot and cold water, spray nozzle on flexible hose.

2.8.4 GAS PIPING: Provide natural gas connection, where gas is available to site, in centralized laundry rooms.

</AITCOF>

2.9 COMMUNICATIONS AND SECURITY SYSTEMS

2.9.1 TELECOMMUNICATION SYSTEMS: Provide telecommunication outlets in accordance with the criteria based on functional purpose of the space within the building and in accordance with other provisions of this RFP.

2.9.1.1 Cabling, Patch Panels & Connectors: Provide voice and data connection capability to workstations.

2.9.1.2 CATV: CATV outlet boxes, connectors, cabling, and cabinets must conform to the Technical Criteria for I3A unless noted otherwise. Horizontal cabling must be homerun from the CATV outlet to the nearest telecommunications room. See paragraph 3.0 PROJECT SPECIFIC REQUIREMENTS for possible additional requirements.

2.9.2 SECURITY INFRASTRUCTURE/SYSTEMS:

2.9.2.1 Intrusion Detection Systems (IDS): IDS infrastructure must consist of conduit, pull wire and outlet boxes. Outlet boxes are required for a control panel, balanced magnetic switch, motion sensor, and duress switch unless specified otherwise in paragraph 3.10. Coordinate system requirements with the Installation.

2.9.2.2 Arms Vault: Provide infrastructure for an IDS for each Arms Vault. DOD ICIDS III is required for each arms vault.

2.9.3 MASS NOTIFICATION SYSTEMS: Provide Mass notification system in accordance with UFC 4-021-01.

<AITCOF>

2.9 COMMUNICATIONS AND SECURITY SYSTEMS - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.9.1 TELECOMMUNICATION SYSTEMS:

2.9.1.1 Cabling, Patch Panels & Connectors:

2.9.1.1.1 Computer Learning Center: The required connection capability in computer learning centers is a minimum of one voice outlet per room and one data outlet per occupant.

2.9.1.1.2 Sleeping Unit: Provide each bedroom with three 8-pin modular jacks in separate outlets.

2.9.1.1.3 Platoon Classroom: Provide a dual (voice and data) 8-pin modular jack outlet at the front of each partitioned area in each multipurpose room.

2.9.1.1.4 Covered Training Area: Provide cabling/outlets for 3 telephones.

2.9.1.2 CATV: Provide CATV connectivity in multipurpose spaces, day rooms, computer learning centers and private offices.

2.9.2 AUDIO/VISUAL SYSTEMS & INFRASTRUCTURE:

2.9.2.1 Video Teleconferencing (VTC):

2.9.2.1.1 Platoon Classroom: Provide a dual (fiber optic and 8-pin modular) jack outlet for video teleconferencing connectivity in each partitioned area of the multipurpose room.

</AITCOF><AITBN>

2.9 COMMUNICATIONS AND SECURITY SYSTEMS - BATTALION HEADQUARTERS (BNHQ)

2.9.1 TELECOMMUNICATION SYSTEMS:

2.9.1.1 Cabling, Patch Panels & Connectors:

2.9.1.1.1 Classrooms: Provide a dual (voice and data) 8-pin modular jack outlet at the front of each partitioned area in each classroom.

2.9.1.2 CATV: Provide CATV connectivity in conference rooms and private offices.

2.9.2 AUDIO/VISUAL SYSTEMS & INFRASTRUCTURE:

2.9.2.1 Projectors: Provide an empty 1" conduit (with pull wire) above the ceiling from each GFGI ceiling mounted projector location to a wall mounted outlet box at the front of each classroom and conference room.

2.9.2.2 PA Systems: Provide a zoned paging system throughout the facility and integrate with the telephone system. System may utilize mass notification amplifiers and speakers, but must be overridden by the mass notification system if mass notification system is activated while the paging system is being utilized. System must have a

minimum capacity of eight zones. Zone facility in accordance with user requirements.

2.9.2.3 Video Teleconferencing (VTC):

2.9.2.3.1 Conference Room: Provide a dual (fiber optic and 8-pin modular) jack outlet for video teleconferencing connectivity in each conference room.

2.9.2.3.2 Classrooms: Provide a dual (fiber optic and 8-pin modular) jack outlet for video teleconferencing connectivity in each classroom.

2.9.3 SECURITY INFRASTRUCTURE/SYSTEMS:

2.9.3.1 Security Observation System Infrastructure: Install infrastructure to support Government furnished equipment including cameras, door alarms, and motion sensors. These devices must be utilized at exterior entrances with the exception of utility room entrances. Infrastructure must consist of conduit, pull wire and outlet boxes in accordance with user requirements. Conduits must be homerun from outlet boxes for equipment connection to duty officer room. (Security Equipment Not in Contract)

</AITBN><AITBDE>

2.9 COMMUNICATIONS AND SECURITY SYSTEMS - BRIGADE HEADQUARTERS (BDE HQ)

2.9.1 TELECOMMUNICATION SYSTEMS:

2.9.1.1 CATV: Provide CATV connectivity in conference rooms and private offices.

2.9.2 AUDIO/VISUAL SYSTEMS & INFRASTRUCTURE:

2.9.2.1 Projectors: Provide an empty 1" conduit (with pull wire) above the ceiling from each GFGI ceiling mounted projector location to a wall mounted outlet box at the front of each conference room.

2.9.2.2 PA Systems: Provide a zoned paging system throughout the facility and integrate with the telephone system. System may utilize mass notification amplifiers and speakers, but must be overridden by the mass notification system if mass notification system is activated while the paging system is being utilized. System must have a minimum capacity of eight zones. Zone facility in accordance with user requirements.

2.9.2.3 Video Teleconferencing (VTC): Provide a dual (fiber optic and 8-pin modular) jack outlet for video teleconferencing connectivity in each conference room.

2.9.3 SECURITY INFRASTRUCTURE/SYSTEMS:

2.9.3.1 Security Observation System Infrastructure: Install infrastructure to support Government furnished equipment including cameras, door alarms, and motion sensors. These devices must be utilized at exterior entrances with the exception of utility room entrances. Infrastructure must consist of conduit, pull wire and outlet boxes

in accordance with user requirements. Conduits must be homerun from outlet boxes for equipment connection to duty officer room.
(Security Equipment Not in Contract)

</AITBDE>

2.10 ELECTRICAL REQUIREMENTS

2.10.1 GENERAL: 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. Consider the effect of nonlinear loads such as computers, other electronic equipment and electronic ballasts and accommodate as necessary. Provide transient voltage surge protection for B/COF, BNHQ and BDE HQ.

2.10.2 POWER: Provide power for installed equipment including government furnished contractor installed and GFGI equipment. Power poles are not allowed.

2.10.2.1 Outlets:

2.10.2.1.1 Provide 125-volt duplex receptacles in accordance with NFPA 70 in conjunction with the proposed equipment and furniture layouts, and as in accordance with other stated requirements elsewhere in the RFP.

2.10.2.1.2 In addition to receptacles required elsewhere in the RFP provide one 125-volt duplex receptacle per wall in normally occupied spaces.

2.10.2.1.3 For housekeeping purposes provide a minimum of one 125-volt, duplex receptacle per corridor and a minimum of one 125-volt duplex receptacle on each wall within the lobby. No point along bottom of corridor or lobby walls must be more than 25 feet from a receptacle.

2.10.2.1.4 Provide 125-volt duplex receptacles mounted adjacent to lavatories. Provide a minimum of one for every two adjacent lavatories. Each single lavatory must also be provided a receptacle.

2.10.2.1.5 Provide a minimum of two 125-volt, duplex receptacles in each mechanical room in addition to NFPA 70 requirements. Provide a minimum of one 125-duplex receptacle in each electrical room.

2.10.2.1.6 Vending Area: Provide power receptacles for vending and ice machines.

2.10.3 LIGHTING LEVELS, FIXTURES & CONTROLS:

2.10.3.1 Provide interior lighting controls in accordance with ASHRAE 90.1.

2.10.3.2 Local manual controls must supplement automatic controls in offices, large open workspaces, and specialized areas such as, conference rooms, computer learning centers, multipurpose spaces and covered assembly areas.

- 2.10.3.3 Electronic ballasts for linear fluorescent lamps must be the high efficiency programmed start style. Provide lighting levels within +/- 10% of required lighting levels
- 2.10.3.4 Illuminate mechanical and electrical to a level of 30 foot-candles.
- 2.10.3.5 Physical Training Areas: If PT areas are required by the RFP, PT Running Track and Pit must be illuminated to a minimum level of three foot-candles and must be switch operated.
- 2.10.4 GROUNDING: Provide grounding in accordance with NFPA 70 and the Technical Criteria for I3A. In addition, raised flooring must be grounded to the building's primary grounding electrode.

<AITCOF>

2.10 ELECTRICAL REQUIREMENTS - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.10.1 POWER:

2.10.1.1 Outlets:

2.10.1.1.1 Reception/CQ Station: Provide a 125-volt quadraplex receptacle on a dedicated circuit for the CQ station.

2.10.1.1.2 Centralized Laundry:

2.10.1.1.2.1 Provide power receptacles for washers, dryers and vending machines.

2.10.1.1.2.2 In each B/COF, consider washers and dryers to be continuous loads and size branch circuits, feeders and distribution equipment accordingly. Provide each appliance its own dedicated branch circuit. The use of demand factors at any point in the distribution system for sizing conductors and distribution equipment for these appliances is prohibited.

2.10.1.1.2.3 Provide electrical service dryers regardless of whether or not electric dryers are to be used.

2.10.2 LIGHTING LEVELS, FIXTURES & CONTROLS:

2.10.2.1 Arms Vault: Provide an un-switched vandal resistant fixture with emergency ballast at each arms vault entrance.

2.10.2.2 Covered Assembly Areas: Illuminate covered training areas to a level of 15 foot-candles.

2.10.2.3 Sleeping Unit: Illuminate bedrooms to a level of 15 foot-candles.

2.10.2.4 Lobby: Illuminate lobby to a level of 10 foot-candles.

2.10.2.4.1 Reception/CQ Station: Illuminate CQ station within the first floor lobby to 30 foot-candles.

2.10.2.5 Illuminate arms vault, computer learning center, multipurpose space, company supply, day room, weapons cleaning to a level of 30 foot-candles.

</AITCOF><AITBN>

2.10 ELECTRICAL REQUIREMENTS - BATTALION HEADQUARTERS (BNHQ)

2.10.1 LIGHTING LEVELS, FIXTURES & CONTROLS:

2.10.1.1 Supply Rooms: Illuminate supply to a level of 30 foot-candles.

2.10.1.2 Lobby: Illuminate lobby to a level of 20 foot-candles.

2.10.1.3 Provide lighting compatible with security cameras and security requirements.

</AITBN><AITBDE>

2.10 ELECTRICAL REQUIREMENTS - BRIGADE HEADQUARTERS (BDE HQ)

2.10.1 LIGHTING LEVELS, FIXTURES & CONTROLS:

2.10.1.1 Supply Rooms: Illuminate supply rooms to a level of 30 foot-candles.

2.10.1.2 Lobby: Illuminate lobby to a level of 20 foot-candles.

2.10.1.3 Provide lighting compatible with security cameras and security requirements.

</AITBDE>

2.11 HEATING VENTILATING AND AIR CONDITIONING (HVAC) REQUIREMENTS

<AITCOF>

2.11 HEATING, VENTILATING AND AIR-CONDITIONING (HVAC) REQUIREMENTS - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.11.1 HVAC DESIGN CRITERIA:

2.11.1.1 Unit Location and Access: Locate sleeping unit HVAC in utility closets accessible only through a corridor access door. Access for maintenance must not require entry into the sleeping unit. Locate air filters in duct mounted filter boxes within the utility closet. Sleeping unit HVAC units must have piping and duct connections that allow quick and easy removal and replacement of individual units.

2.11.1.2 Ventilation:

2.11.1.2.1 Sleeping Units: Positively ventilate each sleeping unit using dedicated outdoor air units. Dedicated outdoor air units (DOAUs) must continuously supply dehumidified, tempered air ducted directly to each sleeping unit from DOAU. Supply air conditions from DOAU must be between 68 and 75 degree F dry bulb and no greater than 48 degree F dew point. Supply quantity must be 40 cfm per sleeping

unit. (Note: This exceeds ASHRAE 62.1 but provides compliance with IMC chapter 4 and maintains slight building positive pressurization with respect to dwelling unit exhaust rate of 25 cfm). DOAU unit must be direct expansion (DX) type and cooling/dehumidification must be available 24/7/365. DOAU units must be minimum 14 SEER (3.52 COP) and equipped with hot gas reheat and auxiliary heat/ reheat coil. Refer to chapter 6 for site specific constraints. The number of exhaust fans and DOAUs must be the same, and exhaust fans and DOAUs must be arranged for and must include exhaust air energy recovery. Provide exhaust and DOAU systems with variable frequency drives (VFDs) and with a control logic that provides reduced ventilation rates during periods of low interior humidity and still meet minimum ASHRAE 62.1 requirements.

2.11.1.2.2 Corridors: Ventilate B/COF corridors in accordance with ASHRAE 62.1 by supply from the dedicated outdoor air unit(s).

2.11.1.3 Exhaust:

2.11.1.3.1 Sleeping Units: Sleeping unit exhaust must be 25 cfm continuous through a bathroom exhaust.

2.11.1.3.2 Centralized Laundry: Provide vent connections for dryers and exhaust to the exterior. Vent dryers according to criteria and manufacturer's installation instructions.

2.11.2 TEMPERATURE CONTROLS:

2.11.2.1 Sleeping Units: Control sleeping unit room temperature through the direct digital control (DDC) system. Each sleeping unit must have a heating/cooling unit. Occupant control must include on/off fan selection and an occupant temperature setpoint adjustment mechanism that allows +/- 2 degrees F of adjustment from the DDC programmed set points of 70 degrees F heating and 75 degrees F cooling. Additionally, the DDC controls must monitor each sleeping unit for sub-cooling. The DDC system must record an alarm event if the space temperature drops below 71 degrees F (adjustable) when the outside air is greater than 85 degrees F (adjustable). Occupant control must also include ability to select heating or cooling mode. HVAC system must be able to provide for year round heating or cooling in individual sleeping units as selected by the occupants. Occupant controller must not have any provisions for occupant adjustment beyond that stated in this paragraph. Any further adjustments beyond as described must be by authorized personnel only.

</AITCOF><AITBN>

2.11 HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC) REQUIREMENTS - BATTALION HEADQUARTERS (BNHQ)

2.11.1 HVAC DESIGN CRITERIA:

2.11.1.1 HVAC must be designed in accordance with the latest UFC 3-410-01 Heating, Ventilating, and Air Conditioning System standard.

2.11.1.2 Unit Location and Access: Locate HVAC air handling units in mechanical equipment rooms accessible through equipment room doors.

- Access for maintenance must not require entry into the sleeping bays or classrooms. Locate air filters in duct or unit mounted filter boxes within the mechanical room. HVAC system selection must be in accordance with ASHRAE 90.1. Chillers and cooling towers must be located exterior to building in mechanical yard with AT/FP requirements.
- 2.11.1.3 Loads:
- 2.11.1.3.1 Heating, mechanical ventilation and air-conditioning must be in accordance with ASHRAE Standard 62; design supply air volumes in occupied spaces must be not less than 0.8 cubic feet/minute/square foot (cfm/sq. ft). Heating and cooling load calculations must allow for a minimum of 0.3 air changes per hour from incidental infiltration for building spaces. For severe winter climatic areas incorporation of low intensity, gas-fired infrared heating systems may be considered for adjoining covered training or assembly areas.
- 2.11.1.3.2 HVAC design loads must include plug loads of 4 watts/sf in classrooms and 1.5 watts/sf in sleeping bays. HVAC design loads must also account for surge population in sleeping bays and classrooms.
- 2.11.1.4 Ventilation: The HVAC system must provide continuous outside air ventilation to each space and centralized exhaust systems with heat recovery between exhaust and the incoming outside air.
- 2.11.1.4.1 Storage & Electrical spaces: Storage and electrical spaces must be ventilated to limit summer interior temperatures and minimally heated (45 deg F). Communications spaces require separate cooling (24 hour cooling if required by the Installation Directorate of Information Management (DOIM) or similar organization).
- 2.11.1.4.2 Laundry rooms: Laundry rooms must be provided with sufficient tempered makeup air either from transfer air via the air handling systems serving the sleeping bays or their own air handling systems.
- 2.11.1.4.3 Continuous ventilation air must be provided throughout each building for indoor air quality, building pressurization, and makeup of exhausted air. The overall building must be positively pressurized by approximately 10% to exclude unplanned infiltration. Provide ventilation air using one or more dedicated outdoor air units. Dedicated outdoor air units must continuously supply dehumidified, tempered air to the building. Supply air conditions from the dedicated outdoor air unit(s) must be between 70 and 75 degrees F dry bulb and no greater than 48 degrees F dew point. DOAU unit must be direct expansion (DX) and cooling/dehumidification must be available 24/7/365. DOAU units must be minimum 14 SEER (3.52 COP) and equipped with hot gas reheat and auxiliary heat/ reheat coil.
- 2.11.1.5 Exhaust: Provide exhaust airflows and people ventilation as required by ASHRAE Standard 62. Exhaust calculations must include dryers on at same time (200 cubic feet/min./dryer) and exhaust for shower, drying areas and toilet exhaust,

2.11.1.5.1 In sleeping areas, provide either 15 cubic feet/min./person or 10% of supply airflow for building pressurization plus makeup air for exhausts, whichever is greater.

2.11.1.5.2 Exhausted dryers to the exterior. Do not manifold dryer exhaust vents. Dryer vent material must be hard ducted.

2.11.1.6 Ductwork:

2.11.1.6.1 For purposes of prevention of respiratory illness, supply and return air in sleeping bays must be arranged to prevent air movement across multiple bunks. Supply and return air must be ducted to air distribution devices located between every other bunk.

2.11.1.6.2 Design ductwork in sleeping bays to prevent placement or concealment of contraband. Round ductwork is recommended.

2.11.2 TEMPERATURE CONTROLS:

2.11.2.1 Due to possible fluctuations in trainee populations, HVAC controls must incorporate controls software and hardware to facilitate building or space shutdown or reduced utilization at various times during the year. During unoccupied times buildings or spaces must continue to be minimally heated (55 deg F), cooled (85 deg F dry bulb, 55 deg dew point) and ventilated (0.06 cfm/sf) to conserve energy, preclude molding problems.

2.11.2.2 Sleeping Bay: Provide two separate controls in each sleeping bay such that a longitudinal privacy partition is to be installed to divide the bay.

2.11.3 ZONING:

2.11.3.1 Sleeping Bay: Design ductwork and controls to provide two separate zones within each sleeping bay such that a longitudinal privacy partition is installed to divide the bay.

2.11.3.2 Storage and Laundry: Storage and laundry spaces may be served by single zone heating and ventilating fan coil or forced air systems, respectively.

</BTCOF><BTBN>

2.11 HEATING, VENTILATING & AIR-CONDITIONING - BATTALION HEADQUARTERS (BNHQ)

2.11.1 HVAC DESIGN CRITERIA: Air handling units must run continuously during occupied hours.

2.11.1.1 Unit Location and Access: Locate air handling units in mechanical rooms accessible only through an exterior door. Locate air filters in the mechanical room.

2.11.1.2 Ventilation: Similarly, outdoor ventilation air required by ASHRAE 62.1 must be continuous during occupied hours.

2.11.2 ZONING: Zone each conference room and classroom separately. Other space zoning must be based on exterior envelope exposures. Where VAV systems are used, limit individual zones to a maximum of 2,500 cfm.

2.12 </BTBN>

2.12 ENERGY CONSERVATION REQUIREMENTS - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.12.1 LOAD & SET-POINT SCHEDULES: The following facility schedules must be used in facility energy simulations for purposes of documenting compliance with energy performance requirement. The peak values indicated for each schedule must be used for the baseline energy calculation. The hourly peak fraction values for various load components for each schedule must be used for both the baseline and proposed design energy calculations.

2.12.1.1 AIT B/COF Common Area Internal Load Schedules

Hr	Occupancy			Lighting			Washer/Dryer Use			Washer SHW		
	Wk	Sat	Sun	Wk	Sat	Sun	Wk	Sat	Sun	Wk	Sat	Sun
1-6	0.00	0.00	0.00	0.30	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00
7-10	0.20	0.20	0.20	0.30	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00
11-18	0.00	0.00	0.00	0.30	0.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00
20-21	0.20	0.20	0.20	0.80	0.80	0.80	0.50	0.50	0.50	0.50	0.50	0.50
22-23	0.40	0.40	0.40	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00
24	0.20	0.20	0.20	0.80	0.80	0.80	0.50	0.50	0.50	0.50	0.50	0.50
Peak	57 occ			1.0 W/ft ²			147 kW			1140 gal/hr @ 110 (°F)		
(Peak values are total for common areas combined per 300 person company)												

2.12.1.2 AIT B/COF Sleeping Unit Internal Load Schedules

Hr	Occupancy			Lighting			Plug Loads			Service Hot Water		
	Wk	Sat	Sun	Wk	Sat	Sun	Wk	Sat	Sun	Wk	Sat	Sun
1-5	0.80	0.75	0.75	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.00	0.00
6	0.70	0.65	0.75	0.40	0.30	0.20	0.20	0.20	0.20	0.10	0.10	0.10
7	0.60	0.60	0.70	0.70	0.50	0.30	0.40	0.35	0.20	0.40	0.40	0.40
8	0.50	0.50	1.00	0.50	0.50	0.50	0.40	0.40	0.40	0.20	0.20	0.20
9	0.25	0.25	0.00	0.20	0.20	0.20	0.30	0.40	0.40	0.00	0.00	0.00
10-17	0.20	0.20	0.20	0.20	0.20	0.20	0.30	0.30	0.30	0.00	0.00	0.00
18	0.30	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.10	0.10	0.10
19	0.50	0.30	0.30	0.70	0.70	0.70	0.50	0.50	0.50	0.10	0.10	0.10
20	0.50	0.50	0.50	0.70	0.70	0.70	0.60	0.50	0.50	0.10	0.10	0.10
21	0.70	0.50	0.50	0.70	0.70	0.70	0.60	0.50	0.50	0.00	0.00	0.00
22	0.70	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.00	0.00	0.00
23	0.80	0.75	0.75	0.40	0.40	0.40	0.40	0.50	0.50	0.00	0.00	0.00
24	0.80	0.75	0.75	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.00	0.00

Hr	Occupancy	Lighting	Plug Loads	Service Hot Water
Peak	3 occ/unit	1.1 W/ft ²	1.7 W/ft ²	40 gal/hr

2.12.1.3 AIT B/COF Sleeping Unit Thermostat Set-Point Schedules

Hr	Heating (°F)			Cooling (°F)		
	Wk	Sat	Sun	Wk	Sat	Sun
1-24	68	68	68	75	75	75

2.12.1.4 AIT B/COF Unoccupied Zones (i.e. stairwells, mechanical rooms) Thermostat Set-Point Schedules

Hr	Heating (°F)		
>	Wk	Sat	Sun
1-24	55	55	55

</AITCOF>

2.13 FIRE PROTECTION REQUIREMENTS

2.13.1 FIRE DETECTION AND ALARM SYSTEMS: The fire alarm system installation must be supervised by a National Institute for Certification of Engineering Technologies (NICET) 3 (minimum) technician.

2.13.1.1 Software: Software, software locks, special tools and any other proprietary equipment required to maintain, add devices to or delete devices from the system, or test the Fire Alarm system must become property of the Government and must be furnished to the Contracting Officer's Representative prior to final inspection of the system.

2.13.2 FIRE SUPPRESSION SYSTEMS: Design fire suppression in accordance with the latest edition of UFC 3-600-01.

<AITCOF>

2.13 FIRE PROTECTION REQUIREMENTS - BARRACKS/COMPANY OPERATIONS FACILITIES

2.13.1 FIRE SUPPRESSION SYSTEMS:

2.13.1.1 Fire Sprinkler Systems: The B/COF must be classified as mission essential and must be provided with sprinkler protection regardless of other criteria or code provisions. Protect the facility throughout by a complete automatic sprinkler system.

2.13.2 FIRE DETECTION AND ALARM SYSTEMS: Fire alarm systems must be addressable style with addressable devices. Coordinate the type, function and location of the fire alarm annunciator with the local authority having jurisdiction.

2.13.2.1 Smoke Detectors: Proved smoke detectors in bedrooms. <AIT_SMOKE1> Smoke detectors in bedrooms must be monitored. Tampering with a smoke detector must send a trouble signal. Trouble signals must be transmitted to the fire department.</AIT_SMOKE1><AIT_SMOKE2> Smoke alarm signals must not be transmitted to the fire department.</AIT_SMOKE2><AIT_SMOKE3> Smoke alarm signals must be transmitted as a supervisory signal to the fire department.</AIT_SMOKE3><AIT_SMOKE4> Smoke alarm signals must be transmitted as an alarm signal to the fire department.</AIT_SMOKE4>

</AITCOF>

2.14 SUSTAINABLE DESIGN

2.14.1 Sustainable design: The facility will be designed and constructed in consideration of mandated High Performance Sustainable Building guidance to systems and material selection.

2.15 EQUIPMENT AND FURNITURE REQUIREMENTS

2.15.1 FURNISHINGS

2.15.1.1 FURNITURE LIST/CHARTS:

2.15.1.1.1 Furniture List:

2.15.1.1.1.1 Toilet/Shower: Provide one built-in 18 inch deep by 36 inch long teak wooden bench adjacent to the shower stall. Mount benches on powder-coated steel pedestals permanently anchored to the floor.

2.15.1.1.1.2 Recyclables Storage: Provide the necessary number of bins for metal/plastic/glass/paper/ cardboard items. Items may be combined to reduce the number of bins if approved by the installation and user. If the installation has a single stream recycling system, provide a minimum of two bins to cover items.

2.15.1.1.1.3 All furnishings: Sustainably sourced furniture and furnishings must be provided to improve indoor environmental quality.

2.15.1.2 CASEWORK: Provide cabinets complying with Architectural Woodwork Institute Quality Standards.

2.15.1.3 WINDOW TREATMENTS: Provide horizontal mini blinds at all exterior windows. Maintain uniformity of window covering color and material to the maximum extent possible throughout each building.

<AITCOF>

2.15.1 FURNISHINGS - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.15.1.1 FURNITURE LIST/CHARTS:

2.15.1.1.1 Furniture Chart:

B/COF FURNITURE CHART		
Description	Comments	Furniture Required
Commander (CO)	Private Office	U-shaped executive desk with two pedestals, hutch, one 4-drawer lateral file, two guest chairs, one executive chair
Executive Officer (XO)	Private Office	L-shaped double pedestal desk unit, hutch, one 4-drawer lateral file, two guest chairs, one task chair
Office 1 (1 ST SGT)	Private Office	L-shaped double pedestal desk unit, hutch, two 4-drawer lateral files, two guest chairs, one executive chair
Office 2 (OPS SGT)	Private Office	L-shaped double pedestal desk unit, hutch, two 4-drawer lateral files, two guest chairs, one task chair
PS Office	48 NSF Open Workstations, Waiting Area	Three systems furniture workstations with work surfaces, file pedestals, and overhead storage, three task chairs, four guest chairs
Waiting Area	48 NSF Open Workstations, Waiting Area	Two systems furniture workstations with work surfaces, file pedestals, and overhead storage, two task chairs, two guest chairs, three waiting area chairs, one side table
Computer Learning Center	Classroom	24 computer carrels, one storage cabinet, 24 task chairs
Multi-Purpose	Classroom	100 tablet-armchair desks,
Company Supply	Storage	One task chair, 19 heavy-duty shelving units, one 36 x 72 table
Lobby-1st floor	CQ and Building Reception Area	One task chair & six guest chairs
Profile Recovery	Exercise Room	Exercise equipment
Day Room		7-seat upholstered arrangement with side tables, 36" round table with four guest chairs, entertainment system storage, pool table or table tennis
Lobby - 2nd/3rd floor	Waiting Area	7-seat upholstered arrangement with side tables
Sleeping Module	Dormitory Room	Two beds, two nightstands, two desks with hutch, two desk chairs, two lamps

2.15.1.2 CASEWORK: None

2.15.1.3 WINDOW TREATMENTS: Provide room darkening mini blinds in B/COF barracks areas.

</AITCOF><AITBN>

2.15.1 FURNISHINGS - BATTALION HEADQUARTERS (BNHQ)

2.15.1.1 FURNITURE LIST/CHARTS

2.15.1.1.1 Furniture Chart:

BNHQ FURNITURE CHART		
Description	Comments	Furniture Required
Battalion Commander	Private Office	L-shaped executive desk with two pedestals, two 4-drawer lateral files, one conference table, four conference chairs, two guest chairs, one executive chair
Executive Office (BNXO, CSM)	Private Office	L-shaped executive desk with two pedestals, one double pedestal credenza, hutch, two 4-drawer lateral files, two guest chairs, one managerial chair
Office 1 (S-1, S-2, S-3, S-4)	Private Office	L-shaped executive desk with two pedestals, one double pedestal credenza, hutch, one 4-drawer lateral file, two guest chairs, one managerial chair
Office 2 (Chaplain)	Private Office	L-shaped executive desk with two pedestals, one double pedestal credenza, hutch, one 4-drawer lateral file, one guest chair, one 3-seat upholstered arrangement, one managerial chair
Office 3 (Chaplain Asst)	Office	L-shaped desk with two pedestals, two 4-drawer lateral files, two guest chairs, one task chair
Personnel and Admin	48 NSF Open Workstations	Nine Systems furniture workstations with work surface, file pedestals, and overhead storage, two 4-drawer lateral files per workstation, one guest chair and one task chair per workstation
Training and Operations Area	48 NSF Open Workstations	Three Systems furniture workstations with work surface, file pedestals, and overhead storage, two 4-drawer lateral files per workstation, one guest chair and one task chair per workstation
Supply and Logistics	48 NSF Open Workstations	Two Systems furniture workstations with work surface, file pedestals, and overhead storage, two 4-drawer lateral files per workstation, one guest chair and one task chair per workstation
Instructor Workspace	48 NSF Open Workstations	Three Systems furniture workstations with work surface, file pedestals, and overhead storage, two 4-drawer lateral files per workstation, one guest chair and one task chair per workstation
Intelligence Area	48 NSF Open Workstations	Three Systems furniture workstations with work surface, file pedestals, and overhead storage, two 4-drawer lateral files per workstation, one guest chair and one task chair per workstation, four 4-drawer safes.
Executive Reception (Personnel and Admin)	Reception Desk	Reception furniture workstation with work surfaces, transaction top, file pedestals, and overhead storage, one task chair, four reception chairs, one side table
Classroom	Multi-Purpose	200 tablet-armchair desks, movable partitions to divide large classroom space into three equally-sized spaces
Conference Room	Commander's Conference Rm	Boat-shape 12 eight side chairs, one small storage credenza
Lobby	Waiting Area	Six guest chairs, two side tables
Staff Duty/Message	Reception Desk	One task chair, one 4-drawer lateral file
Supply Storage	Storage	Two lockable storage cabinets

</AITBN><AITBDE>

2.15.1 AITBDE FURNISHINGS - BRIGADE HEADQUARTERS (BDE HQ)

2.15.1.1 FURNITURE LIST/CHARTS:

2.15.1.1.1 Furniture Chart:

BDE HQ FURNITURE CHART		
Description	Comments	Furniture Required
Senior Executive Office (CO)	Private Office	L-shaped executive desk with two pedestals, two 4-drawer lateral files, one conference table, four conference chairs, two guest chairs, one executive chair
Executive Office (BDEXO, CMD SGT MAJ)	Private Office	L-shaped executive desk with two pedestals, one 4-drawer lateral file, one bookcase, two guest chairs, one managerial chair
Office 1 (S-1, S-2, S-3, S-4)	Private Office	L-shaped executive desk with two pedestals, one double pedestal credenza, hutch, one 4-drawer lateral file, two guest chairs, one managerial chair
Office 2 (Chaplain)	Private Office	L-shaped executive desk with two pedestals, hutch, one 4-drawer lateral file, two guest chairs, one 2-seat upholstered arrangement, one managerial chair
Office 3 (Chaplain Asst)	Office	L-shaped desk with two pedestals, two 4-drawer lateral files, two guest chairs, one task chair
Open Workstations (Personnel and Admin, Training and Ops, Supply and Logistics, Intelligence)	48 NSF Open Workstations	Systems furniture workstation with work surfaces, file pedestals, and overhead storage, two 4-drawer lateral files per workstation, one guest chair, one task chair
Executive Reception (P&A)	Reception Desk	Reception furniture workstation with work surfaces, transaction top, file pedestals, and overhead storage, one task chair, six reception chairs, two side table
Conference Room	Commander's Conference Room	Boat-shaped conference table, 14 conference chairs, one small storage credenza, eight side chairs
Lobby	Waiting Area	13 guest chairs, five side tables
Staff Duty/Message	Reception Desk	One task chair, one 4-drawer lateral file
Document Storage	Storage	Five lockable storage cabinets
Supply Storage	Storage	Three lockable storage cabinets

</AITBDE>

2.15.2 EQUIPMENT

2.15.2.1 AUDIO/VISUAL EQUIPMENT:

2.15.2.1.1 Projectors:

2.15.2.1.1.1 Projection Screens: Screens must be GFGI power operated 8'-0" x 6'-0" ceiling flush mounted projection screens at front of the classroom. Projection screens must be flame retardant, mildew resistant, and white matte with black masking borders.

2.15.2.1.1.2 Projector Mounting System: A low profile ceiling mounted projector mount system with each projection screen must be GFGI. Ceiling mount must consist of a steel ball joint and universal projector bracket. Ceiling mount must project a maximum 6 inches below finished ceiling height and must securely attach to ceiling and structure above. Steel ball joint must attach to the universal projector bracket with twist-lock engagement. Mount must provide up to 30° roll or pitch adjustment and 360° yaw adjustment at ball joint. Two setscrews lock ball joint in position. Projector mount must be capable of supporting a 26 pound load.

2.15.2.2 RESIDENTIAL APPLIANCES:

2.15.2.2.1 Command Suite:

2.15.2.2.1.1 Coffee Bar: Microwave must be GFGI.

2.15.2.3 COMMERCIAL EQUIPMENT:

2.15.2.3.1 Vending Equipment:

2.15.2.3.1.1 Vending Machines: Vending machines must be full-size and GFGI.

2.15.2.3.1.2 Ice Machines: Must be GFGI.

<AITCOF>

2.15.2 EQUIPMENT - BARRACKS/COMPANY OPERATIONS FACILITIES (B/COF)

2.15.2.1 COMMERCIAL EQUIPMENT:

2.15.2.1.1 Laundry Equipment: Each laundry room must accommodate the following:

2.15.2.1.1.1 Washers: Washers must be heavy-duty, extra capacity, commercial washers. GFGI

2.15.2.1.1.2 Dryers: Dryers must be heavy-duty, extra capacity, double stacked commercial dryers. GFGI

2.15.2.1.1.3 Fixed Tables: Contractor to provide fixed heavy gauge stainless steel clothes folding/hanging tables measuring 2 feet deep by 5 feet wide.

2.15.2.1.1.4 Laundry Supplies Vending Machines: Must be GFGI.

</AITCOF>