

3.0 CRIMINAL INVESTIGATIVE DIVISION COMMAND (CIDC) <0509>5-9 </0509> <1015>10-15 </1015> <24PN>24 </24PN>RESIDENT AGENT FIELD FACILITY

3.1. GENERAL REQUIREMENTS

3.1.1. FACILITY DESCRIPTION: The CIDC field office (also known as a 'detachment') is the basic operating unit responsible for conducting criminal investigative activities within its respective geographic AOR. Each field office is assigned to a parent battalion for command, control, and overall management. Each field office has full operational capability but limited clerical and administrative capability; non-clerical support is provided by the parent unit either directly or by local installation support agreements. Each field office is identified by a unique CIDC unit number and maintains all its own operational files and an evidence depository. Each field office is authorized a number of CIDC special agents and is augmented with a 2-8 person Drug Suppression Team. The CIDC agents in the field office perform criminal investigations and other tasks to support the CIDC mission. The work conducted in a CIDC field office is analogous to the work done by detectives in a municipal police department. Agents investigate crimes by gathering and processing evidence, interviewing suspects and witnesses, conducting polygraph tests, and completing the associated recordkeeping. The field office differs from a typical municipal police precinct in that the field office does not include work space for uniformed/patrol police, and the field office does not have a dispatch area, nor prisoner holding facilities. However, each of the field office buildings includes a secure (escorted) suspect entry door leading to a fenced government vehicle parking lot, and a suspect waiting area where potentially unfriendly suspects are securely segregated from other building functions. Evidence gathered during an investigation is stored in the field office, in conformance with the requirements of Army Regulation (AR) 195-5 Evidence Procedures.

A. PERSONNEL: Following personnel will occupy the facility:

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Personnel 5-9 RA facility	Number	Grade	Remarks
Administrative/Operations	1	E7	
Special Agent in Charge (SAC)	1	CW3	SIPR
Investigative Ops Tech	1	GS12	
Operations NCO, Team Chief	1	CW2	
Drug Suppression Team	2		
Special Agents	2	CW2 and E6	
Special Agents	3	E5 and E6	

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Personnel 10-15 RA facility	Number	Grade	Remarks
Administrative/Operations	2	E7, E4	
Special Agent in Charge (SAC)	1	CW4	SIPR
Criminal Investigator	1	GS13	
Criminal Intelligence	1	CW3	
Investigative Ops Tech	1	GS12	
Evidence Custodian	1	E6	

Drug Suppression Team	4		
Special Agents	8		

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Personnel 24 RA facility	Number	Grade	Remarks
Administrative/Operations	2	E7, E4	E7 & E4 with 4 desks
Special Agent in Charge (SAC)	1	CW4	SIPR
Criminal Investigator	1	GS13	
Criminal Intelligence	1	CW3	
Investigative Ops Tech	2	GS12	
Supervising Team	2	CW3 & E7	
SR Team	4	CW2 & E6	
Evidence Custodian	1	E6	
Drug Suppression Team	6	E4, E5, E6	5 PN open area + E6 supervisor office
Special Agents	10	CW2 & E5	

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3.1.2. FACILITY RELATIONSHIPS: (NOT USED)

3.1.3. ACCESSIBILITY REQUIREMENTS

A. **GENERAL:** Comply with Secretary of Defense Memorandum, 31 October 2008, the “DoD Standards” for Access for People With Disabilities which incorporates the Architectural Barriers Act (ABA) Accessibility Standard for Department of Defense (DoD) Facilities; available at <http://www.access-board.gov/ada-aba/aba-standards-dod.cfm>.

B. **SITE PLAN DESIGN AND CONSTRUCTION**

- 1) Accessible parking spaces shall be provided in quantities specified by the DoD Standards for visitor and staff parking areas at the CIDC facility.
- 2) Accessible spaces are required to be located so as to provide convenient access to an accessible building entrance.
- 3) Parking areas located within the secure (fenced) government-vehicle parking area will be used only by able-bodied personnel in government vehicles, and for storage of impounded vehicles retained as evidence, and are not required to meet accessibility requirements

C. **FACILITY DESIGN AND CONSTRUCTION**

- 1) The main building entrance on the ground level and at least one emergency egress, designed per applicable code, shall be handicapped accessible. Consider electronic exterior door openers with push button control for handicapped accessibility.
- 2) Provide ABA clearances and door accesses in the building main entry/vestibule being used by visitors.

- 3) Also required:
 - a) Provide a handicapped accessible drinking fountain adjacent to the toilets.
 - b) Provide handicapped accessible public toilet(s), adjacent to the waiting area.

3.1.4. BUILDING AREAS

- A. **GENERAL:** Building area is measured in accordance with TI 800-01. The overall building gross area is 10,508 GSF. This includes 9,740 GSF area of the primary building as well as 768 GSF of the vehicle processing building.
- B. **GROSS AREA**
 - 1) **Definition:** Gross building area is measured to the outside face of exterior enclosure walls. Gross area includes floor areas, penthouses, mezzanines, and other spaces as follows:
 - 2) **Limitations:** Maximum authorized gross building areas for each facility is included in this paragraph. Proposals that exceed authorized gross area limitations may be considered non-conforming.
- C. **HALF SPACE:** Areas calculated as half space. Gross building area shall be calculated in accordance with Appendix Q, with the following exceptions in accordance with TI 800-01 Design Criteria – Appendix B, UEPH:
 - 1) All stairs and elevator shafts count as half space for each floor they serve.
- D. **EXCLUDED SPACE:** The following spaces are excluded from gross area calculations: Attic areas where average clear height does not exceed 7 feet, normal roof overhangs and soffits for weather protection, mechanical equipment platforms and catwalks.
- E. **NET AREA :**
 - 1) **Definition:** Net area is measured to the inside face of the room or finish walls.
 - 2) **Net Area Requirements:** Net area requirements for programmed spaces are included in this chapter. If net area requirements are not specified, the space shall be sized to accommodate the required function and to comply with code requirements, overall gross area limitations, and any other requirement of this RFP (for example, area requirements for corridors, stairs, and mechanical rooms will typically be left to the discretion of the offeror).

3.1.5. ADAPT BUILD MODEL: (NOT USED)

3.2. FUNCTIONAL AND OPERATIONAL REQUIREMENTS

- 3.2.1. **FUNCTIONAL SPACES** The requirements associated with each space and each set of spaces listed below are to be interpreted as the minimum requirements. The functional spaces of the facility generally fall within three broad categories; **Administrative, Special Use** (eg Evidence handling, suspect processing, interview and polygraph functions), and **Building Support**.
 - A. **ADMINISTRATIVE SPACES:** Administrative spaces most resemble the suite of administrative spaces typical of a commercial business enterprise in the private sector. Spaces generally accommodate official functions that are administrative in nature such as; receiving visitors such as witnesses, victims, and guests; office activities such as reading, writing, and typing; communication and training functions such as team meetings and credential maintenance training – all conducted by resident agents and drug suppression teams in the fulfillment of their investigative duties. These spaces do not generally require unique features or equipment.
 - 1) **Visitor Waiting Room:** This area shall be used by visitors to the facility. The visitors are usually witnesses, but may be VIPs and/or crime victims. This area shall be available 24/7 for use by visitors. Access is provided to Men's and Women's Toilets but not to other parts of the building unless escorted. Visitors are received by and checked in by administrative-operations personnel; a communication/transaction window is provided for this purpose. Provide lockable door into the main

corridor remotely controlled from the Administrative area Due to security and surveillance concerns, door from the Waiting area to the main corridor shall NOT have a vision lite.

- a) Occupancy Seating for 4 guests.
- b) Adjacency Requirements: Vestibule entry, Administrative Operations.
- c) Space Requirement: Provide a minimum area of 150 SF or more as may be required for different size facilities.
- d) Mechanical: Provide heating, cooling and ventilation.
- e) Electrical: Provide 120V duplex receptacles.
- f) Lighting: Provide recessed fluorescent light fixtures.
- g) Communications: Provide wall mounted telephone.
- h) FF&E: Provide lounge seating for two and one side table.
- i) Finishes: Carpet, rubber base, painted GWB walls, or vinyl wallcovering and suspended acoustic ceiling grid/tile system
- j) Other Requirements: Provide a bullet proof communication /transaction window and counter/ledge into Administration – Operations Office. The partition (above, below and surrounding) at the transaction window shall also be bullet proof for the protection of Administrative-Operations personnel in accordance with UL752 (level 3) criteria.

- 2) **Administration - Operations:** One large room with open office space for three - four (3-4) administrative staff. Office shall be located adjacent to Visitor Waiting, and shall maintain visual control of the front door. This space is where all administrative support functions are coordinated for the operation of the facility to include procuring all required supplies and coordinating housekeeping and maintenance of file storage, safe storage and reception. Provide a ballistic rated communication/transaction window and counter/ledge into Visitor Waiting Room. The partition (above, below and surrounding) at the transaction window shall also be bullet proof for the protection of Administrative-Operations personnel. The access gate to the secured parking should be remotely operated from this area (as well as from the Duty agent office) to allow for access for escorted vehicles that may be dropping off suspects with agents..

- a) Occupancy: 1-2 full time and 2-4 part time
- b) Adjacency Requirements: Visitor Waiting
- c) Space Requirement: See Floor Plans
- d) Mechanical: Space shall provide heating, cooling and ventilation.
- e) Electrical: Provide 120V duplex receptacles.
- f) Lighting: Day lighting is desirable but shall be controlled when used. Provide recessed fluorescent light fixtures with occupancy sensors.
- g) Communications: Provide telephone and data connections.
- h) FF&E: Furniture can be freestanding or system furniture panels and components. Provide three each 3-drawer lateral file cabinets (36" wide) and 1 each 5-drawer high safe per desk at a minimum. Final storage requirements are to be determined by each facility.
- i) Accessories Provide one coat hook per person on back of door or on systems furniture panels. Provide one clock.
- j) FF&E: Provide manual commercial grade roller shade window treatments for all windows.. Government furnished equipment includes metal furniture with wood grained plastic laminate tops.
 - i. Desk w/ Pedestal 30" x 60"
 - ii. Return 24" x 42" or 24" x 48"
 - iii. Credenza: Optional 24" x 60"
 - iv. Desk Chair
 - v. Hutch (to be used over return or credenza)
 - vi. Note: Guest chairs, file cabinets and/or bookshelves to be provide adjacent to work station as required.
 - vii. Mail Safe
 - viii. Lockable storage for office supplies

- k) Casework and Millwork: Provide a 60" L, 24" D and 1.5" thick solid polymer work surface with backsplash and lower closed cabinets with adjustable shelves. Provide a minimum of 3 each quadraplex power outlets and 3 each LAN outlets above worksurface for a printer, copier, fax and any other site specific equipment.
- l) Finishes Carpet, rubber base, painted GWB walls and suspended acoustical ceiling tile/grid system.
- 3) **Special Agent in Charge (SAC):** The chief of a detachment is tasked with performing criminal investigations within a specific area of responsibility. Represents USACIDC to all personnel within the area of responsibility. Performs quality assurance reviews on investigations and coordinates complex investigations as required. If required, performs criminal investigations and performs protective service mission work.
- a) Function: Office
- b) Occupancy: 1
- c) Space Requirement: Varies from 180 SF-200 SF. See plans.
- d) Mechanical: Provide heating, cooling and ventilation.
- e) Electrical: Provide four (4) 120V duplex power receptacles.
- f) Lighting: Day lighting is desirable, and shall be controlled when used. Each room shall have occupancy sensors.
- g) Communications: Provide telephone and data connections. Provide a SIPRNET outlet in SAC Office and CIC Office.
- h) FF&E: Provide manual commercial grade roller shade window treatments for all windows.. Government furnished equipment includes wood or metal casegoods:
- i. Desk, single pedestal: 36" x 72"
 - ii. Return 24" x 48"
 - iii. Credenza w/ 2 dwr file 24" x 72"
 - iv. Hutch (to be used over return or credenza)
 - v. Desk Chair
 - vi. Guest Chair (2)
 - vii. Round Conference Table 36"-42" Diameter
 - viii. Lateral File Cabinet, 2 drawer 36" wide
- i) Miscellaneous Coat hooks on back of door.
- j) Finishes: Carpet, rubber base, painted GWB walls and suspended acoustical ceiling grid/tile system.
- 4) **Special Agents (2 PN space):** See "Special Agents (3 PN space)" for description and requirements..
- 5) **Special Agents (3 PN space):** These personnel are part of a team and perform criminal investigations and also perform protective service, such as the Secret Service, when required. A closed office space is required to accommodate the team.
- a) Function: Office
- b) Occupancy: 2 or 3
- c) Space Requirement: Varies from 140 SF-150 SF. See plans.
- d) Mechanical: Provide heating, cooling and ventilation.
- e) Electrical: Provide Four (4) 120V duplex power receptacles.
- f) Lighting: Day lighting is desirable, and shall be controlled when used with mini-blinds or other device to mitigate direct sightlines from the outside. Each room shall have occupancy sensors
- g) Communications: Provide telephone and data connections.
- h) FF&E: Provide manual commercial grade roller shade window treatments for all windows. Government furnished equipment includes metal desk with plastic laminated tops and other metal casegoods for each personnel as follows:
- i. Desk, single pedestal: 30" x 60" or 36" x 72"
 - ii. Return 24" x 48"

- iii. Credenza w/ 2 dwr file 24" x 60" or 24" x 72"
 - iv. Hutch (over return or over credenza as appropriate)
 - v. Desk Chair
 - vi. Guest Chair
 - vii. Bookcase, 3 shelves, 36" wide
 - viii. Lateral File Cabinet, 3 drawer, 36" wide
- i) Miscellaneous Coat hook on back of door.
- j) Finishes: Carpet, rubber base, painted GWB walls and suspended acoustical ceiling grid/tile system.
- 6) **Resident Agent Criminal Intelligence Center (RA CIC):** RA Resident Agent Criminal Intelligence Center is a closed meeting room with SIPRNET connections. Provide a small table used for meetings and/or a small workstation for the SIPRNET equipment. (Note that the AR 405-70 permits 150 SF for an 8 person conference room, plus space required for SIPR equipment equal to the footprint of the equipment x a circulation factor of 1.25).
- a) Function: Meeting room with a work station for SIPRNET
 - a) Occupancy: 4-6
 - b) Adjacency Requirements: Centrally located and adjacent to Resident Agent Staff
 - c) Space Requirement: 150 – 200 SF
 - d) Mechanical: Provide heating, cooling and ventilation. Mechanical system shall be designed to accommodate partial to full occupancy with temperature control separate from other portions of the building.
 - e) Electrical: Provide convenience power receptacles at perimeter of room. If table is in center of room, provide power and data in the floor.
 - f) Lighting: Daylight is not desirable. Provide recessed fluorescent light fixtures with occupancy sensors.
 - g) Communications: Provide telephone and data connections. Also provide SIPRNET Connections as per 'Technical Guide for the Integration of the Secret Internet Protocol Router Network'.
 - h) FF&E: Provide wood conference table and conference room seating on castors to accommodate 4-6 persons. Include separate work station in corner for SIPRNET equipment
 - i) Accessories: Provide coat hook on back of door and clock
 - j) Finishes: Carpet, rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system.
 - k) Other: Construction shall meet requirements of Technical Guide for the Integration of the Secret Internet Protocol Router Network (SIPRNET) published by USAISEC Criteria.
- 7) **Investigative Operations Technician:** Performs all general investigative support required and performs work on investigative data base systems. Performs limited criminal intelligence work as required. In the absence of any administrative/operations support provides support as needed. Refer to "Operations NCO, Team Chief" below, for space requirements.
- 8) **Operations NCO, Team Chief:** Assists in coordinating operations and investigations for the detachment as required. May perform criminal investigations required. Coordinates all administrative support for the detachment to include procurement of supplies and coordinating housekeeping and maintenance of the detachment facility.
- a) Function: Office
 - b) Occupancy: 1
 - c) Space Requirement: Varies from 130 SF-150 SF. See plans.
 - d) Mechanical: Provide heating, cooling and ventilation.
 - e) Electrical: Provide Four (4) 120V duplex power receptacles.
 - f) Lighting: Day lighting is desirable, and shall be controlled when used. Each room shall have occupancy sensors
 - g) Communications: Provide telephone and data connections.
 - h) FF&E: Provide manual commercial grade roller shade window treatments for all windows.. Government furnished equipment

includes metal desk with plastic laminated tops and other metal casegoods

- i. Desk, single pedestal: 30" x 60" or 36" x 72"
- ii. Return 24" x 48"
- iii. Credenza w/ 2 dwr file 24" x 60" or 24" x 72"
- iv. Hutch (over return or over credenza as appropriate)
- v. Desk Chair
- vi. Guest Chair (2 each)
- vii. Bookcase, 3 shelves, 36" wide
- viii. Lateral File Cabinet, 2 drawer, 36" wide

i) Miscellaneous

Coat hook on back of door.

j) Finishes:

Carpet, rubber base, painted GWB walls and suspended acoustical ceiling grid/tile system.

- 9) **Drug Suppression Team (2 PN space):** These personnel are part of a team and perform drug related criminal investigations. These personnel often coordinate with state, local, and national law enforcement operations in drug suppression operations and stings.

k) Function: Office

l) Occupancy: 2

m) Space Requirement: 150 SF. See plans.

n) Mechanical: Provide heating, cooling and ventilation.

o) Electrical: Provide Four (4) 120V duplex power receptacles.

p) Lighting: Day lighting is desirable, and shall be controlled when used. Each room shall have occupancy sensors

q) Communications: Provide telephone and data connections.

r) FF&E: Provide manual commercial grade roller shade window treatments for all windows.. Government furnished equipment includes metal desk with plastic laminated tops and other metal casegoods for each personnel as follows:

- i. Desk, single pedestal: 30" x 60" or 36" x 72"
- ii. Return 24" x 48"
- iii. Credenza w/ 2 dwr file 24" x 60" or 24" x 72"
- iv. Hutch (over return or over credenza as appropriate)
- v. Desk Chair
- vi. Guest Chair
- vii. Bookcase, 3 shelves, 36" wide
- viii. Lateral File Cabinet, 3 drawer, 36" wide

s) Miscellaneous Coat hook on back of door.

t) Finishes: Carpet, rubber base, painted GWB walls and suspended acoustical ceiling grid/tile system.

- 10) **Multi-Purpose Lounge:** This area is for multiple functions. It serves as a kitchen / break area with accommodations for a classroom / training configuration. Provide casework, upper and lower cabinets to accommodate the fixtures described under 'plumbing'. Some prefer some form of partial separation of seating area from kitchenette to allow for a more formal ambience. This semi-separation can be accommodated for example with a partial partition between the two spaces. Provide an area and containers for recycling and at least two vending machines. The furniture shall be arranged to accommodate the respective functions.

a) Occupancy: Provide one chair at table for each agent.

b) Adjacency Requirements: Centrally located for maximum convenience to all staff

c) Space Requirement: Varies on size of building and quantity of occupants. The kitchen/vending area shall require 150-200 SF. Should a classroom/meeting room function be required, estimate an additional 200-250 SF. See Appendix, Floor Plans.

- d) Mechanical: Space shall provide heating, cooling and ventilation. Heat load calculations shall consider the quantity of users and the additional demands for stove top, oven and vending machines.
 - e) Plumbing: Plumbing connections for a refrigerator ice maker and coffee maker. Provide stainless steel double bowl sink with disposal, faucets and instantaneous hot water dispenser. Water could be required for vending machines which require cooling/refrigeration.
 - f) Electrical: Provide convenience and counter height GFCI receptacles. Provide electrical connections for kitchen and training room equipment.
 - g) Lighting: Day lighting is acceptable but not required and shall be controlled when used. Provide recessed fluorescent light fixtures with occupancy sensors.
 - h) Communications: Space shall have wall mounted telephone. Provide conduit for Cable TV and data for wall mounted flat screen TV. Provide conduit from wall outlet (for computer connection) to wall mounted flat screen TV
- :
- i) FF&E: Provide 1 chair at table for each agent. Provide 1 table for every 6 agents and lounge seating (combination of sofas and lounge chairs with end table) appropriate for each facility. Provide microwaves (1 each), refrigerators w/ icemakers (1 each), dishwasher (1 each), stove top and oven (1 each) and vending machines (2 each-1 for food and 1 for drinks). Provide clock, wall mounted flat screen TV and 6 feet wide marker board / tackable board.
 - j) Casework and Millwork: Provide a minimum of 12'-0" L, 24" D solid polymer counter top with kitchen sink, base cabinets with adjustable shelves and upper cabinets with adjustable shelves.
 - k) Finishes: Resilient floor and rubber base, painted GWB walls and suspended acoustic ceiling tile/grid system.
 - l) Other: Provide an area and appropriate containers for recycling

B. **SPECIAL USE AREAS:** Each of the Special use spaces supports a specific critical function of the investigative operation of the CID unit; functions that are similar to those carried out by a municipal detective facility in the private sector. These functions are broadly categorized as suspect processing, interrogation, and evidence handling.

a. Suspect processing is supported by the Duty Agent office, photo ID lab, suspect waiting, and toilet. Suspects are typically escorted through the secured rear "suspect entrance" and are processed prior to interrogation, which may be conducted in the interview rooms or polygraph examination room depending on investigative protocol. In the interim; after processing and prior to interrogation, suspects may be escorted to the secured suspect waiting room. Suspect's non-evidence personal belongings such as coats, wallets, phones, and jewelry need to be accommodated in suspect lockers adjacent to the processing area in the corridor. Suspect lockers should be durable wood or solid polymer bolted to wall and/or floor within a shallow alcove space so as not to encroach into the hallway/corridor.

b. The interrogation function is supported by interview rooms (small interview for suspects, large interview for witnesses and victims) and the Polygraph "suite"; examination room, office, and Observation room. Polygraph activities are conducted in accordance with the strict protocols of AR 195-6 "Department of the Army Polygraph Activities".

c. Evidence handling is accommodated by evidence processing, evidence storage, and the evidence custodian office. Evidence-related activities are conducted in accordance with the strict protocols of AR 195-5 "Evidence Handling Procedures".

- 1) **Duty Office:** This office shall be used by the agent on duty to process paperwork for suspects entering the facility. The office shall be located near the rear vestibule and have a window to the

back of the building and into the interior corridor. The windows shall allow the Duty Officer to see the parking area and path to rear vestibule. Operation of the access gate for the secured parking area will be from this office, as well as through card swipe or other means at the point of entry. Duty office Operation is 24/7.

- a) Adjacency Requirements: Rear vestibule of building
- b) Space Requirement: See Floor Plans.
- c) Mechanical: Provide separate heating, cooling and ventilation
- d) Electrical: Provide 120V duplex power receptacles.
- e) Lighting: Day lighting is desirable. Provide fluorescent lighting with occupancy sensor.
- f) Communications: Provide telephone and data connections.
- g) FF&E: Provide manual commercial grade roller shade window treatments for all windows.. Provide a desk with return, metal with plastic laminate top, one desk chair and one guest chair. Also include a four drawer lateral file cabinet with a lock for each drawer (for temporary evidence storage) and a four shelf open bookcase.
- h) Finishes: Resilient floor and rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system

- 2) **Photo ID Room:** A work room for the processing of photo identification and fingerprinting is required. Provide a camera mounted on the wall or on a tripod and a plastic coating dispenser for processing photos. Provide a sink and counter and provisions for user provided finger printing equipment which may be counter mounted. This area operates 24/7.

- a) Adjacency Requirements: Duty Agent and within the 'suspect secured area'
- b) Space Requirement: See floor plans
- c) Mechanical: Provide heating, cooling and ventilation
- d) Plumbing: Provide a single sink with gooseneck faucet and disposal.
- e) Electrical: Provide 120V duplex receptacle at perimeter of room and GFGI outlets above counter top.
- f) Lighting: Day lighting is not desirable and shall be controlled when used. Provide fluorescent lighting with occupancy sensor.
- g) Communications: Provide wall mounted telephone and data connections.
- h) FF&E: A personnel workstation is not required. Provide undercounter refrigerator. Coordinate with the User on other equipment. A chair may be required.
- i) Finishes: Resilient floor and rubber base, painted GWB walls and suspended acoustic ceiling tile/grid system.
- j) Other requirements: Provide a minimum of 10 lineal feet of solid polymer surface countertop with base and wall cabinets with adjustable shelves and upper wall cabinets with adjustable shelves and a service sink, faucets and disposal. Establish local requirements for wall markings for photo identification, and storage of camera and tripod. One dimension is required to be 10 FT for photographing. Rooms shall have minimum STC rating of 45

- 3) **Suspect Waiting:** This room is to be a secure area for suspects to wait during the interrogation process, and are escorted here after processing. Space shall be easy to clean. Lighting shall not be controlled from inside room as suspects should not be able to turn lights off from inside the room. No occupancy sensors in this room. Lighting shall accommodate the function of the one way mirror-window from the Observation Room. Design shall be intended to protect CIDC personnel while containing suspects. Finishes are limited as they could allow items to be concealed. The furniture shall be heavy duty and bolted down so as not to be easily thrown around or broken if violent episodes occur. The suspect may even be handcuffed to the chair.

- a) Occupancy: 3-4 suspects

- b) Adjacency Requirements: Near Poly Office; Observation Room and Suspect Toilet. Room shall be in secured perimeter of the 'suspect area'.
 - c) Space Requirement: Minimum 100 SF.
 - d) Mechanical: Provide heating, cooling and ventilation
 - e) Electrical: Provide 120V tamper-resistant duplex receptacles.
 - f) Lighting: Day lighting is not permitted. Provide tamper proof recessed fluorescent fixtures. Do not provide occupancy sensors. Light switch shall be outside room. Ensure lights are not directed towards the observation glass.
 - g) Communications: Do not provide telephone or data.
 - h) FF&E: Provide 3-4 each heavy duty wood seating without upholstery and one end table.
 - i) Finishes: Painted impact resistant GWB walls and ceiling. No ACT ceiling. No adhered floor finishes: Provide easily cleanable sealed or epoxy floor paint. No applied base except for coved stainless steel non-removable base if maintenance is a concern.
 - j) Other Requirements: Provide one way observation glass from Observation Room into Suspect waiting. Special construction is required for sound attenuation. Comply with Department of Army Polygraph activities Regulation AR195-6. Provide heavy duty metal door/frame with window and special security hardware. Room shall have minimum STC45 rating, or higher if required by AR 195-6.
- 4) **Suspect Toilet:** Provide single occupancy, accessible unisex toilet room without privacy hardware. Arrange the entrance to provide clear vision from Suspect Waiting. This toilet is only to be used by suspects. Floors shall be sealed concrete. Lighting controls shall be outside the Suspect Waiting Room. Generally, it is not necessary to provide detention type fixtures, however the mirror shall be non-glass type.
- a) Adjacency Required: Adjacent to Suspect Waiting
 - b) Space Requirement: As required by code
 - c) Plumbing: Efficiently locate toilet. Lavatories shall be vandal proof and have automatic valves. Installation shall determine if the valves are battery or hardwired. Provide a tamperproof floor drain with deep seal trap, located in center of room.
 - d) Mechanical: Space shall provide heating, cooling and ventilation.
 - e) Electrical: Provide a 120V GFI duplex receptacle for general maintenance purpose. Receptacles to be tamperproof.
 - f) Lighting: Day lighting is not allowed. Provide vandal proof recessed fluorescent light fixtures. Provide occupancy sensors with the manual override located in the hallway, NOT in the bathroom..
 - g) Communications: Do not provide telephone or data.
 - h) FF&E: Provide wall hung, stainless steel lavatory, and wall hung stainless steel toilet with non breakable stainless steel (non-glass) mirror with concealed mounting. Include full paper towel dispenser/waste receptacle; one soap dispenser and one toilet tissue dispenser. Toilet accessories shall be fabricated from stainless steel, provide semi recessed units where possible
 - i) Finishes: Provide easily cleanable sealed or epoxy floor paint and ceramic wall tile to ceiling at fixture walls and impact resistant GWB walls elsewhere. Provide impact resistant GWB ceilings.
 - j) Other Requirements: Special construction is required for sound attenuation at the perimeter of the Polygraph 'Suite'. Comply with Department of Army Polygraph activities Regulation AR195-6. Provide heavy duty metal door/frame with window with no hardware on either side of the door.
- 5) **Small Interview (Two required):** The purpose of the Small Interview Room is to interview suspects. These rooms are located within the secured perimeter of suspect area. This is a closed

room where one agent and one suspect will sit across one another in an interview. The room shall have vandal proof wall or ceiling mounted audio/video equipment. The furniture shall be heavy duty so as not to be easily thrown around or broken if violent episodes occur. The suspect may even be handcuffed to the chair. Coordinate video/camera device location with the intended furniture arrangement and suspect location/orientation.

- a) Occupancy: 2
- b) Adjacency Requirements: At least two small Interview Rooms shall be provided. These rooms shall be located within the 'suspect secured area/corridor' and adjacent to Polygraph suite. The Interview Rooms shall be adjacent to each other if possible.
- c) Space Requirement: Approximately 150 SF
- d) Mechanical: Space shall provide heating, cooling and ventilation
- e) Electrical: Provide 120V duplex receptacles
- f) Lighting: Day lighting is not required, and shall be controlled when used. Provide recessed fluorescent light fixtures. Do not provide occupancy sensors.
- g) Communications: Provide telephone and data connections
- h) FF&E: Provide 2 solid wood chairs with legs and one metal desk (60" x 30") with plastic laminate top. The room shall have vandal proof wall or ceiling mounted audio/video equipment.
- i) Finishes: Carpet, rubber base, painted GWB walls and suspended acoustic ceiling tile/grid system.

- 6) **Large Interview:** The purpose of this room is to interview witnesses and/or victims. It needs to be a closed space with a conference table and seating for 6-8. This room will allow for agents and multiple witnesses, attorneys and others to sit around a table. These interview rooms will normally be located near the Visitor Waiting Room, outside of the 'suspect area'. Witnesses and suspects must not cross paths. The room shall have vandal proof wall or ceiling mounted audio/video equipment. Coordinate device location with the intended furniture arrangement and interviewee location/orientation. The furniture shall be comfortable as persons could be in the room for extended periods of time. Due to the sensitive nature of closed door discussions with witnesses and/or victims of crime, the Décor (and plantings if possible) should be selected to make the space as pleasant and non-aggressive as possible. Food or coffee might be provided, located either on the credenza/buffet in the room or in the Multi-purpose Lounge. Room may double as a mini-conference room.

- a) Occupancy: 8
- b) Adjacency Requirements: Visitor waiting and SAC
- c) Space Requirement: 180 – 250 SF
- d) Mechanical: Provide heating, cooling and ventilation
- e) Electrical; Provide 120V duplex receptacles
- f) Lighting: Day lighting is not required but shall be controlled when used. Provide recessed fluorescent light fixtures. Do not provide occupancy sensors.
- g) Communications: Provide telephone and data connections.
- h) FF&E: Provide wood conference table (42" x 84"), 8 chairs on castors and a credenza/buffet. The room shall have vandal proof wall or ceiling mounted audio/video equipment.
- i) Accessories: Coat hooks on back of door and clock
- j) Finishes: Carpet, rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system

- 7) **Polygraph Office:** This office is part of the Polygraph suite which also includes the Polygraph Room and Observation Room. This is an office where the polygraph officer manages the documents and other materials for polygraph exam. The office provides space for one polygraph person to monitor suspect's entry, waiting, exam and storage of materials which are necessary to operate the equipment. Operation is potentially 24/7, although the office will not be occupied at all times.

- a) Occupancy: 2

- b) Adjacency Requirements: Poly Exam and entry into entry into Polygraph area. Room shall be in secured suspect area.
 - c) Space Requirement: Minimum 100 SF
 - d) Mechanical: Provide heating, cooling and ventilation
 - e) Electrical: Provide 120V duplex receptacles.
 - f) Lighting: Day lighting is not allowed, provide recessed fluorescent lighting fixtures with occupancy sensors.
 - g) Communications: Provide telephone and data connections
 - h) FF&E: Provide one desk with return (w/ lockable pedestals) and one desk chair (no castors).
 - i) Finishes: Broadloom Carpet, resilient base, painted GWB walls and suspended acoustic ceiling grid/tile system
 - j) Other Requirements: Special construction is required for sound attenuation, the partitions around the office may require acoustical wall materials if necessary to meet the requirements in Department of Army Polygraph activities Regulation AR 195-6.
- 8) **Polygraph Exam:** Provide room for conducting polygraph exams to suspects and/or witnesses. There will be one examiner and one person taking the exam. Complete silence is required to perform a polygraph exam. The construction of the perimeter of the room, floor and ceiling must provide maximum isolation from all acoustical, visual distraction. Chairs shall not squeak or move around on casters. Any noise can distract the person taking the exam and the slightest movement can cause adverse effects on the integrity of the results. Lighting shall be designed to accommodate function of one way mirror from Observation Room. Comply with Army Regulation (AR) 195-6 "Department of the Army Polygraph Activities". Operation is 24/7.
- a) Occupancy: 2
 - b) Adjacency Requirements: Exam room must be located away from distracting noises such as street and office traffic, telephone or latrines. Access is to be through Poly Office and adjacent to Observation Room. Polygraph Exam Room shall be in the secured suspect area.
 - c) Space Requirement: Minimum 100 SF
 - d) Mechanical: Provide heating, cooling and ventilation and accommodate special requirements for sound attenuation for polygraph functions IAW AR 195-6.
 - e) Electrical: Provide 120V duplex receptacles
 - f) Lighting: Day lighting is not allowed. Provide indirect recessed fluorescent lighting fixtures. A person taking the exam shall not be disturbed by looking up into direct lighting. Do not provide occupancy sensors. Lighting shall be designed to accommodate function of one way observation glass. Ensure lights are not directed towards the observation glass.
 - g) Communications: Do not provide telephone or data.
 - h) FF&E: Provide seating for two(solid wood chairs with legs and one desk or table (30" x 60"), metal with plastic laminate top. Chairs must not have upholstery or castors to eliminate possibility of sound. The room shall have vandal proof wall or ceiling mounted audio/video
 - i) Finishes: Antistatic Broadloom carpet, rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system.
 - j) Other Requirements: Room shall have minimum STC45 rating, or higher if required by AR 195-6.
- 9) **Observation Room:** Provide a closed area between suspect waiting and Polygraph Exam Room for observation of suspects in each area. Provide visibility through one way observation glass with mini-blinds. To ensure sufficient space in the room for observers looking both directions, the observation window looking into the polygraph exam room shall be staggered (ie not directly opposite) relative to the window looking into the Suspect Waiting room on the opposing wall. This also helps reduce the potential of light spillage from one room illuminating the observers The room must have special

construction for sound attenuation. Verify the requirement for a continuous 12" wide plastic laminate ledge under each window – some field offices provide a desk instead located at one end of the observation room. Windows are typically mounted a minimum of 42" above the finished floor, based on viewing while standing or sitting at a stool. However, some interview sessions can last for hours, and some agents report better interview outcomes (less discomfort, better attention, etc) when agents are accommodated at a more comfortable seating height, ie at a conventional desk chair with seatback and castors. Therefore consider a lower window sill height to accommodate viewing from this lower viewing height if this is the likely scenario. There shall be space for audio/video equipment and a computer with a monitor. Operation is 24/7.

- a) Occupancy: 2
- b) Adjacency Requirements: Between Suspect Waiting and Poly Exam Room. The room shall be accessible from corridor entry in secured suspect area.
- c) Space Requirement: Minimum 80 SF
- d) Mechanical: Space shall provide heating, cooling and ventilation. System shall be designed to minimize sound from supply and return systems
- e) Electrical: Provide 120V duplex receptacles.
- f) Lighting: Day lighting is not allowed. Provide recessed fluorescent dimmable lighting fixtures. Do not provide occupancy sensors. Lighting shall be designed to accommodate function of one way observation glass; ie Install controls that insure that the ratio of illumination level between the observed spaces (suspect waiting and exam room) and the observation space be at least 8:1.
- g) Communications: Provide telephone and data.
- h) FF&E: Though persons are expected to stand during observation, provide two each wood straight leg stools without upholstery or castors so as to reduce any movement or noise which could affect the results of the tests. All furnishings shall be dark color.
- i) Finishes: Broadloom carpet, rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system. Carpet and walls are to have no patterns.

10) **Evidence Processing:** All evidence that is brought into the CIDC must be processed. In this workspace, the agent will collect, label, and prepare evidence as required for further handling by the evidence custodian in accordance with the strict protocols of AR 195-5. Operation is 24/7. Space shall be provided with a drying machine, a fuming machine and layout space for other evidence processing equipment. The agent will only use this room to perform the specialized tasks associated with evidence processing. (Suspect's non-evidential personal belongings such as coats, wallets, jewelry, etc are stored in lockers adjacent to the processing area).

- a) Occupancy 1
- b) Adjacency Requirements: Duty Office.
- c) Space Requirement: See Appendix, Floor Plans
- d) Mechanical: Provide heating, cooling and ventilation
- e) Electrical: Provide 120V duplex receptacles
- f) Lighting: Day lighting is not desirable, and shall be controlled when used. Provide recessed fluorescent lighting fixtures with occupancy sensors.
- g) Communications: Provide telephone and data connections.
- h) Finishes: Resilient floor, rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system.
- i) FF&E: Provide one desk with return with lockable pedestals. Provide two desk chairs, a guest chair and a layout table (minimum 30" x 60").
- j) Other requirements: Accommodate space and power for drying chamber and super glue fuming machines. This equipment shall have integral ventilation system. Comply with 'Evidence Procedures' Army Regulation 195-5.

11) **Evidence Custodian:** All evidence that is brought into the CIDC must be passed to the Evidence Custodian to be placed in the Evidence Depository. The agents will process the evidence and then submit this evidence to the custodian. The Evidence Custodian will label, document and prepare evidence as required to be stored in the Evidence Depository which is adjacent to the Evidence Custodian office or to mail out to other locations for testing. Operation is 24/7. The room will not be occupied full time. The evidence custodian will only use this room to perform the specialized tasks. They will have their own office space located with other personnel.

- a) Occupancy 1
- b) Adjacency Requirements: Evidence Depository.
- c) Space Requirement: See Appendix, Floor Plans
- d) Mechanical: Provide heating, cooling and ventilation
- e) Electrical: Provide 120V duplex receptacles
- f) Lighting: Day lighting is not desirable, and shall be controlled when used. Provide recessed fluorescent lighting fixtures with occupancy sensors.
- g) Communications: Provide telephone and data connections.
- h) Finishes: Resilient floor tile and base, painted GWB walls and suspended acoustic ceiling grid/tile system.
- i) FF&E: Provide one desk with return and lockable pedestals. Provide two desk chairs, a guest chair and a layout table (minimum 30" x 60").
- j) Other requirements: Provide a doorway between the Evidence Processing Office and the Evidence Depository. This opening must have two consecutive doors. One door is to be of steel construction and one door to be of steel or wood construction. Special hardware and an intrusion detection system are required. Comply with 'Evidence Procedures' Army Regulation 195-5.

12) **Evidence Depository:** A secure room for the storage of evidence. Room shall be equipped with steel evidence storage lockers. Provide special arms lockers, refrigerated storage lockers and heavy duty open and closed shelves to store evidence. The Operation is 24/7.

- a) Adjacency Requirements: Evidence Processing
- b) Space Requirement: See Floor Plans.
- c) Mechanical: Provide separate heating, cooling and ventilation
- d) Electrical: Provide 120V duplex power receptacles. Provide electrical for refrigerated storage lockers.
- e) Lighting: Day lighting is not allowed. Provide fluorescent lighting with occupancy sensor.
- f) Communications: Provide telephone and data connections.
- g) FF&E: Metal evidence storage lockers, refrigerated lockers, gun lockers, and heavy duty open and closed shelving. Quantity and type of lockers to be determined by the facility.
- h) Finishes: Resilient floor and rubber base, painted GWB walls and suspended acoustic ceiling grid/tile system
- i) Other requirements: Only one entry is allowed into the depository and there must be one opening with two consecutive doors. One door is to be of steel construction and one door to be of steel or wood construction. Special hardware and an intrusion detection system are required. Comply with 'Evidence Procedures' Army Regulation 195-5.

13) **Vehicle processing:** This secured garage building is located within the secured parking area of the facility. This building resembles a vehicle maintenance bay and is used for inspection of vehicles – automobiles, trucks, and others - for evidence, as well as for evidence processing in cases in which evidence within or on the vehicle is not removable at the crime scene without compromising its integrity. Within the vehicle processing building, this evidence may be retrieved by; methodical disassembly and removal of parts, as in removal of windshields, panels, doors or seats; taking samples, as in bodily fluids and such; or draining fluids from the engine or related reservoirs. This

Operation is 24/7. Provide a 4-post/column-type vehicle lift that allows for a standing person to conduct undercarriage inspections.

- a) Adjacency Requirements: Within the fenced perimeter of the facility as indicated on the drawings.
- b) Space Requirement: See Floor Plans. There shall be space for circulation around the vehicles under when they are up on the lift. Space is required on either side of the vehicle to remove and place doors, windshields, seats and/or other parts of the vehicle.
- c) Mechanical: Provide heating, cooling, ventilation and vehicle exhaust.
- d) Plumbing: Provide an industrial grade deep double sink with faucets
- e) Electrical: Provide GFCI convenience power receptacles.
- f) Lighting: Day lighting (other than a vision lite in the personnel door) is not allowed. Provide ceiling hung industrial linear fluorescent fixtures with the appropriate lamp guards. Also provide industrial linear fluorescent fixtures with appropriate lamp guards on the walls on each side of the lift area for lighting on the side of the cars and under the cars when on lift
- g) Communications: Provide wall mounted telephone and data connections.
- h) FF&E: Provide for 2 stainless steel work tables/benches, 2 stools, weapons cleaning equipment and 2 standing type tool boxes. Provide static dissipative rubber mats in front of metal storage and work surface area.
- i) Finishes: Sealed concrete floor, epoxy painted CMU walls
- j) Other requirements: Provide upper and lower industrial grade metal cabinets with drawers for storage of tools, chemicals and other investigative equipment along one wall. Provide stainless steel counter top with backsplash. Provide static dissipative rubber mats in front of metal storage and work surface area. Counter shall have two knee hole openings for industrial grade stools. Personnel door should have a vision lite and requires the same entry requirements as the main building. Garage door shall be secured from the inside. Provide insulated sectional overhead door and vehicle lift to accommodate standard type vehicles

C. **BUILDING SUPPORT SPACES:** Building support spaces include those supporting spaces needed for operation of the asset; including typical building support spaces such as mechanical, telecommunications spaces, staff/visitor restrooms, recycle area, vestibules, and corridors, as well as unit operations support spaces such as unit TOE storage and arms vault.

- 1) **Vestibule (Visitor Entry):** Vestibule is accessed from exterior and serves as a transition to the conditioned space of the building into the main lobby. The vestibule shall accommodate the maximum number of people determined by the occupancy load. The latch on the door from vestibule to waiting area shall be remotely operable from the reception counter for access control.
 - a) Function: Entry into Visitor Waiting
 - b) Adjacency Requirements: Exterior, Visitor Waiting, Corridors
 - c) Space Requirement: Minimum 150 SF
 - d) Mechanical: Space shall provide heating, cooling and ventilation.
 - e) Electrical: Provide 120V duplex power receptacles for maintenance.
 - f) Communications: Provide intercom connections with paging speakers.
 - g) Finishes: Quarry or porcelain tile and base with recessed walk off mat and GWB or plaster ceiling painted ceilings. Vestibule shall have glass windows and or GWB painted walls.
- 2) **Vestibule (Suspect entrance and Staff entrance):** Similar to main entrance vestibule, this serves as a transition to the conditioned space of the building. The vestibule shall accommodate the maximum number of people determined by the occupancy load.

- h) Function: Entry into Corridor
- i) Adjacency Requirements: See plans
- j) Space Requirement: Minimum required to comfortably accommodate ADA and Code required access and egress.
- k) Mechanical: Space shall provide heating, cooling and ventilation.
- l) Electrical: Provide 120V duplex power receptacles for maintenance.
- m) Communications: Provide intercom connections with paging speakers.
- n) Finishes: Quarry or porcelain tile and base with recessed walk off mat and GWB or plaster ceiling painted ceilings. Vestibule shall have GWB painted walls. Doors shall have vision lites..

3) **Women:** Provide ADA compliant female toilet room with minimum number of fixtures. Include accessible fixtures as required by code and applicable accessibility standards. Arrange the entrance to provide visual privacy. This room will be used by visitors, staff, and witnesses, but never by suspects. Doors shall be used designed with separate entries for visitors and staff.

- a) Occupancy: As required per code
- b) Adjacency Req'd: Visitor Waiting area and Men's Room
- c) Space Requirement: See Floor Plans
- d) Plumbing: Efficiently locate fixtures. Provide a minimum of one tamper proof floor drain with deep seal trap; locate floor drain outside of traffic areas. Provide countertop with integral mounted lavatories. Provide wall hung toilets and urinals Lavatories and toilets shall have automatic valves. Installation shall determine if the valves are battery or hardwired.
- e) Mechanical: Space shall provide heating, cooling and ventilation.
- f) Electrical: Provide one (1) 120V GFI-duplex power receptacles at each sink. Provide one (1) 120V GFI-duplex power receptacles at floor level for convenience power.
- g) Lighting: Provide GWB ceiling with fluorescent fixtures.
- h) Communications: NA.
- i) Equip and Accessories: Countertop shall be solid surface material with integrated bowls. Provide solid polymer overhead-braced type toilet partitions at each toilet. Provide the following toilet accessories; one continuous mirror full width of countertop at lavatory; full length mirror, paper towel dispenser/waste receptacle; soap dispensers for each lavatory, one toilet tissue dispenser per toilet; one robe hook on each toilet partition door; one sanitary napkin/tampon vending machine. Accessories shall be fabricated from stainless steel and vandal proof. Provide semi recessed units where possible.
- j) Finishes: Porcelain floor tile and base, ceramic wall tile 4'-0" AFF and GWB or plaster painted ceilings

4) **Men:** Provide ADA compliant male toilet room with minimum number of fixtures. Include accessible fixtures as required by code. Arrange the entrance to provide visual privacy. This room will be used by visitors, staff, and witnesses, but never by suspects.. Doors shall be used designed with separate entries for visitors and staff.

- a) Occupancy: As required by code
- b) Adjacency Req: Visitor Waiting area and Women's Room
- c) Space Requirement: See Floor Plans
- d) Plumbing: Efficiently locate fixtures. Provide a minimum of one tamper proof floor drain with deep seal trap; locate floor drain outside of traffic areas. Provide countertop with integral mounted lavatories. Provide wall hung toilets and urinals Lavatories and toilets shall have automatic valves. Installation shall determine if the valves are battery or hardwired.

- e) Mechanical: Space shall provide heating, cooling and ventilation.
- f) Electrical: Provide one (1) 120V GFI-duplex power receptacles at sink. Provide one (1) 120V GFI-duplex power receptacles at floor level for convenience power.
- g) Lighting: Provide GWB ceiling with fluorescent fixtures.
- h) Communications: NA
- i) Equip and Accessories: Countertop shall be solid surface material with integrated bowls. Provide solid polymer overhead-braced type toilet partitions at each toilet. Provide the following toilet accessories; one continuous mirror full width of countertop at lavatory; full length mirror, paper towel dispenser/waste receptacle; soap dispensers for each lavatory, one toilet tissue dispenser per toilet and one robe hook on each toilet partition door. Accessories shall be fabricated from stainless steel and vandal proof. Provide semi recessed units where possible.
- j) Finishes: Porcelain floor tile and base, ceramic wall tile 4'-0" AFF and GWB or plaster painted ceilings
- 5) **Shower Room:** Provide accessible shower room with toilet and countertop lavatory for staff.
- a) Function: Shower room for staff
- b) Adjacency Required: Adjacent to other areas with plumbing (i.e., Men's and Women's Rooms, Janitor's closet, Staff Break Area)
- c) Space Requirement: See Floor Plans
- d) Plumbing: Provide a minimum of one tamper proof floor drain with deep seal trap; locate floor drain in Shower Area. Efficiently locate fixtures. Toilets and lavatory shall have automatic valves. Installation shall determine if the valves are battery or hardwired. Do not use prefabricated shower stall.
- e) Mechanical: Space shall provide heating, cooling and ventilation.
- f) Electrical: Provide one (1) 120V GFI-duplex power receptacles at counter top height at the sink. Provide one (1) 120V GFI-duplex power receptacles at floor level for convenience power
- g) Lighting: Provide GWB ceiling with fluorescent fixtures with prismatic lenses. Provide occupancy sensors.
- h) Communications: NA
- i) FF&E: Provide five times the quantity of lockers as toilet/urinal fixtures. Generally provide half size lockers (stack two high) unless unit requires single tier. The lockers shall be solid polymer, and mounted above raised concrete platform base with coved CT base.. Provide one mirror above lavatory/vanity, one full length mirror, one paper towel dispenser/waste receptacle per two sinks; one soap dispenser per sink; one robe hook per stall. Accessories shall be fabricated from stainless steel and vandal proof. Provide semi recessed units where possible.
- j) Finishes: Porcelain floor tile and base, ceramic wall tile to ceiling in shower locations and wet walls and GWB or plaster painted ceilings.
- 6) **Janitor:** Provide one Janitor closet for building maintenance.
- a) Function: Janitors Closet is to store cleaning and maintenance housekeeping supplies and equipment.
- b) Adjacency: Men's and Women's Room
- c) Space Requirement: Minimum 48 SF
- d) Plumbing: Provide floor mounted mop sink and floor drain. Faucet shall be designed to support a bucket and have a threaded end to receive a hose.
- e) Mechanical: Space shall be ventilated

- f) Electrical: Provide GFI-protected convenience receptacle adjacent to the shelving.
 - g) Lighting: Provide wall mounted or ceiling hung industrial linear fluorescent lights.
 - h) Communications: NA
 - i) Equipment: Provide a wall mounted metal strip to hang mops locate near floor mounted mop sink. Include one each 3'-0" wide open industrial type metal shelving to store cleaning supplies.
 - j) Finishes: Resilient floor and rubber base, painted GWB walls and suspended acoustical ceiling grid/tile system
- 7) **Mechanical:** Provide a dedicated interior space for plumbing, fire protection, and HVAC equipment with access from the exterior. Size and locate rooms (including doorways) to allow equipment removal and maintenance. Provide floor openings and vertical openings as necessary. Walls will be full height from floor to structure above. Persons maintaining and servicing the equipment in this space will access from the exterior, and are not to have unescorted access to the remainder of the building.
- a) Function: Space for mechanical systems to service the building.
 - b) Adjacency Requirements: Mechanical room shall not be used for storage or other purposes; access shall be limited to authorized personnel. Locate exterior mechanical equipment and air intake and openings in exterior walls to comply with force protection standards.
 - c) Space Requirement: This area is part of the gross area factor calculation. The area is to be equal to or greater than 5% of the gross building area for planning purposes. Actual required area shall be determined during programming based upon geographical location.
 - d) Plumbing: Provide floor drain, faucet and other plumbing as required for functions of space.
 - e) Mechanical: Provide heating, cooling, ventilation and exhaust as required.
 - f) Electrical: Provide convenience power receptacles as well as required service for equipment.
 - g) Lighting: Provide wall mounted or ceiling hung industrial linear fluorescent fixtures with the appropriate lamp guards.
 - h) Communications: Provide telephone service for energy management system and a wall mounted telephone outlet general use.
 - i) Equipment: As required
 - j) Finishes: Sealed concrete floor, painted GWB walls with exposed structure ceiling.
 - k) Other requirements: Locate air intake and exhaust openings to provide optimum indoor air quality. Locate air intakes to comply with AT/FP requirements. Fire Pump Room: An area has been identified (see dashed line on floor plan) for the location of a Fire Pump Room if required.
- 8) **Electrical:** Provide dedicated interior space with exterior access only for electrical equipment. Size and locate room (including doorways) to allow equipment removal and maintenance. Walls will be full height from floor to structure above.
- a) Function: Electrical support space for the building
 - b) Adjacency Requirements: Access from exterior, and interior corridor and adjacent to the Mechanical Room.
 - c) Space Requirement: Actual required area shall be determined during programming based upon geographical location.
 - d) Mechanical: Space shall be ventilated.
 - e) Plumbing: Do not run plumbing over electrical panels.
 - f) Electrical: Provide 120V convenience power receptacles.
 - g) Lighting: Provide wall mounted or ceiling hung industrial linear fluorescent fixtures with the appropriate lamp guards.

- h) Communications: Provide telephone service for fire alarm and security systems. Where transmitters and antennas are used by the installation, provide compatible equipment. Provide a wall-mounted telephone outlet for general communications.
 - i) Equipment: As required
 - j) Finishes: Sealed concrete floor, painted GWB walls with exposed structural ceiling.
 - k) Other Requirements: Electrical service to the building shall be underground. Provide masonry screen walls with lockable metal access gates around outdoor equipment. It is preferable to locate transformer within the screened mechanical equipment area. Comply with AT/FP standards.
- 9) **Telecommunication Room:** (TR): A Communications room is required to manage building connection to telephone, fiber optic, cable television, and other infrastructure. The room shall serve as a primary means of distributing information/communications through the facility to desktops. This space shall conform to USAISEC and I3A requirements.
- a) Function: Communications service to the building
 - b) Adjacency Requirements: Mechanical Room and Electrical Room
 - c) Space Requirement: The area is part of the gross area factor calculation.
 - d) Plumbing: Not Applicable
 - e) Mechanical: Provide adequate cooling for respective equipment in an independently climate controlled room. This equipment shall provide year-round ambient temperature control to protect all installed electronic equipment.
 - f) Electrical; Provide electrical support as required
 - g) Lighting: Provide wall mounted or ceiling hung industrial linear fluorescent fixtures with the appropriate lamp guards.
 - h) Communications: Provide telephone and data connections
 - i) Equipment: GFGI distribution hardware, switches, servers, etc. Provide backboards and racks.
 - j) Finishes: Sealed concrete floor, painted GWB walls with exposed structural ceiling.
 - k) Other requirements: Route communications service to building's Entrance Facility (EF) via underground 4" conduits.
- 10) **Corridors:** Minimum corridor width shall be as required by applicable codes, but not less than 5' -0" wide clear. An eyewash station is provided in the secured corridor for the use of agents in the event of incidental foreign object intrusion. Unless required by Code, all doors shall swing into the space served by the corridor, rather than into the corridor. This helps to insure that activities such as the safe passage/escorting of suspects will not be unduly compromised by the sudden and unexpected encroachment of a door swing.
- a) Function: Circulation and egress; movement of equipment and personnel throughout the building. Provide insulated hollow metal doors and frames for exterior service areas.
 - b) Adjacency Requirements: Exterior entrances and offices
 - c) Space Requirement: The total net area as required by the design. The net area of corridors is part of the gross area factor calculation for the project.
 - d) Mechanical: Space shall provide heating, cooling and ventilation.
 - e) Electrical: Provide 120V duplex receptacles for convenience.
 - f) Lighting: Day lighting is not required, and shall be controlled when used. Provide recessed fluorescent light fixtures with occupancy sensors.
 - g) Communications: Provide public address system in corridors and throughout public areas.
 - h) FF&E: Provide room signage at doors to each room.

- i) Finishes: Resilient floor and rubber base, painted abuse and/or impact resistant GWB walls, and suspended acoustical ceiling grid/tile system.
- j) Other Requirements: Coordinate user requirements for access control of exterior doors. Provide wall and corner guard protection.

11) **TOE Storage:** The TOE (Tables of Equipment and Allowance) Storage is intended to store a variety of unit materials and equipment. Provide industrial grade double doors to the exterior to facilitate loading/unloading of the field boxes and/or equipment. Equipment items may include traffic gear, medical equipment, kits for hostage situations, kits for biological events. Some items may have to be stored in wire cages with locks which will also be inside the TOE Storage room. The agents will go to the TOE and gather the appropriate 'equipment to go box' before leaving the facility and return the equipment to the TOE upon their return. There should be a burn barrel outside the TOE so the Agents may discard munitions upon their return.

- a) Function: Storage
- b) Adjacency Requirements: Adjacent to the COF in Battalion Headquarters' Buildings. Adjacent to the Arms Vault and Evidence Processing in the RA Buildings.
- c) Space Requirement: See floor plans
- d) Mechanical: Provide heating, cooling and ventilation.
- e) Electrical: Provide 120V duplex receptacles.
- f) Lighting: Day lighting (other than double doors) is not allowed. Provide ceiling hung industrial linear fluorescent fixtures with the appropriate lamp guards and occupancy sensors.
- g) Communications: Provide wall mounted telephone.
- h) FF&E: Heavy duty industrial open rack shelving 24" D and 30" D, minimum 20 lineal feet.
- i) Finishes: Sealed concrete floors and epoxy painted CMU walls

12) **Arms Vault:** Provide a secure vault for the storage of arms and ammunition. Comply with AR 190-11 Physical Security of Arms, Ammunition and Explosives

- a) Function: Secure storage of weapons
- b) Adjacency Requirements: TOE Storage.
- c) Space Requirement: Minimum 100 SF
- d) Mechanical: Provide heating, cooling, dehumidification and ventilation.
- e) Electrical: Provide 120V duplex receptacle and electrical infrastructure for intrusion detection system.
- f) Lighting: Day lighting is not allowed. Provide fluorescent lighting with occupancy sensors.
- g) Communications: Provide empty conduit with pull string for government installed intrusions detection system.
- h) FF&E: Provide gun racks, shelving and clearing barrel. The quantity and type to be determined by the facility.
- i) Equipment: Intrusion detection system
- j) Finishes: Sealed concrete floor and epoxy painted CMU walls and concrete ceiling.
- k) Other Requirements: Provide GSA approved Class 5 vault door (w/ day gate). Walls and ceiling of Vault shall be reinforced concrete masonry or concrete. Floor shall be reinforced concrete. Rack anchor rings shall be provided.

3.3. SITE FUNCTIONAL REQUIREMENTS

A. GENERAL

- 1) **Siting:** Site the facility so it is clearly visible to pedestrians, cars and delivery vehicles. Visitor entrance is restricted to the main entrance of the facility. Suspects arriving in vehicles accompanied by agents will access the building through the secured parking area. Staff and agents working under cover will park in the staff parking area or in the secured parking area. Therefore, separate visitor parking, staff parking and secure government parking areas as shown on the included site plans. During the site selection process, the installation should consider conducting a site traffic impact study to determine the traffic patterns and impact on the local roads and circulation patterns. Design entrance and exit drives for safe circulation and to control unauthorized traffic. Consider pavement maintenance and snow removal (if applicable) in the design. Consider the use of alternate materials such as turf (open-grid) pavers for service vehicle access to mechanical rooms. The schematic site plans indicate the user's required quantity of staff parking spaces for each building prototype, and a baseline quantity of visitor parking spaces; all POV parking requirements shall be verified with the user and quantities adjusted to reflect the actual requirements of the particular facility/Installation. Although the schematic site indicate a number of standard 9-foot wide spaces for government sedans, and a number of 12-foot wide spaces for parking of government HMMVs, trucks and trailers, the design team shall obtain from the user, and include in the RFP, the type, size, loading characteristics and quantity of vehicles for which the secure government vehicle parking area will be designed. Provide handicap parking spaces at visitor and staff parking areas. Control vehicular access in accordance with UFC 4-010-01 requirements. Comply with UFC 3-210-02 Privately Owned Vehicles (POV) Site Circulation and Parking and other applicable codes and standards. Coordinate parking and vehicular circulation with ATFP standards. Access requirements for fire equipment, trash/recycling removal, and service vehicles on site must be considered. Fire department access requirements shall comply with Section 2-10 of UFC 3-600-01, and the requirements of the local fire department. . For security reasons, the secured parking area shall not be located between the building and the primary street.

B. SECURED AREAS

- 1) **Secure Government vehicle parking area:** Provide Secured, paved government vehicle area shown on the site plans. This area accommodates government trucks and sedans in numbers as noted on the drawings. This areas provide restricted access to the impound parking area, Vehicle Processing building, and the main building's TOE storage as well as suspect entrance. Coordinate any remote actuation, intercom, or camera surveillance requirements of the gate. Provide an 8 foot high security fence around the secure government vehicle parking area. Coordinate fence material with the approved Installation Design Guide; minimum requirement is galvanized chain link fence fabric, without barbed wire top, and with privacy slats. Provide sliding motor-operated vehicle gate with access control by authorized staff members. Coordinate fire department access requirements with Base Fire Marshal, who may require access in the event of emergency. Coordinate gate access controls with user. Minimum requirement is for the gate to be operated by card or keypad, as well as remote operation from within the building.
 - a) **Impound area** - Provide an 8 foot high security fence with swing gates secured by padlock, around the impound vehicle parking area within the secure government parking area. Operation of the access gate will most likely be with padlock; confirm with User.

C. ACCESS DRIVES AND LANES

- 1) **Services Drives:** The Contractor shall provide service drives to the building as shown on the drawings to both visitor parking as well as staff and secured parking areas. Locate the drives in accordance with UFC 4-010-01. Restrict access to the drives, where applicable, as required by UFC 4-010-01. Design the pavements as required by paragraph 5.2.3, "VEHICLE PAVEMENTS". The minimum access drive width shall be 10 feet. The Contractor shall design and construct drives with curb and gutter when necessary for drainage purposes.
- 2) **Emergency Vehicle/Fire Access Lanes:** The Contractor shall provide fire access lanes. Drives designed to support emergency vehicle traffic shall be a minimum of 20 feet wide per NFPA requirements. Access must be provided to three sides, minimum and must be within 33 feet of a building's entrance. Design the fire access lanes in accordance with NFPA 1, UFC-3-600-01, and the

installation's requirements. If required, provide a second access gate into the secured parking area with access control for emergency vehicles and personnel only.

3.4. **SITE AND LANDSCAPE REQUIREMENTS**

B. **SITE STRUCTURES**

- 1) **Dumpster Area:** The Contractor shall locate, design, and construct the dumpster enclosure area(s) and screening. Dumpster screening shall be aesthetically and architecturally compatible with the building it serves and shall be designed in accordance with the Installation's guidelines. Locate the dumpster areas in accordance with UFC 4-010-01 "DoD Minimum Antiterrorism Standards for Buildings". Position the GFGI dumpsters outside of restricted areas to allow for servicing activities.
- 2) **Signage:** Design site and building identification signage in coordination with vehicular and pedestrian approaches, landscaping and lighting. It is critical that visitors, especially crime victims and witnesses, can readily identify the facility when arriving by vehicle. Therefore, insure that building identification is clearly displayed and unobstructed to passing motorists. Additionally, traffic and pedestrian control signage must clearly direct visitors to the public entrance and away from unauthorized portions of the site. Comply with the approved Installation Design Guide and the Army Installation Design Standards. Provide "No Parking" signs at service drives.
- 3) **Site Lighting:** Illuminate all building entrances, secured parking area, staff parking, and the walkway leading to the main entrance. This facility is a 24/7 operation, therefore it is critical that visitors have adequate lighting to ensure safe passage to the main entrance, and sufficient lighting to ensure safe movement through outdoor areas. Consider the color rendition of outdoor lighting, and use bollards or variations in lighting to articulate entrances and illuminate pedestrian walkways from the parking to the entrance. Design lighting levels shall be no less than those of the *Illuminating Engineering Society (IES) Lighting Handbook* illumination levels. Where applicable, use photocells and timers to control lighting and conserve energy. However, check with the User and Installation concerning the use of motion-sensor security lighting, which is sometimes prohibited based upon perceived security concerns. Ensure that adequate lighting levels are achieved to allow for optimal operation of the CCTV cameras; coordinate with the CCTV manufacturer. Comply with the requirements of the approved Installation Design Guide.
- 4) **Clearing Barrel:** Provide for a clearing barrel near the staff entrance. Coordinate with the CID unit regarding the mounting and clear space requirements. **Outdoor Furnishings:** Coordinate requirements for outdoor and outdoor break areas and site furnishings with user needs. Provide fixed clearing barrels at Staff and Suspect entrances. Where climate is acceptable, and when requested by the user, consider providing outdoor break areas in the site design. Provide site furnishings such as trash and recycling receptacles, seating, bicycle racks and bollards in coordination with the approved Installation Design Guide, and in accordance with the user's requirements.

C. **LANDSCAPING/HARDSCAPING**

- 1) **General:** Coordinate the landscape design with ATFP and Installation requirements. Preserve natural landscape features including existing topography, trees, and vegetation to the extent practicable. Provide windbreaks and shading where appropriate. Consider earth berms to screen parking and roadways; coordinate berm slopes with mowing and maintenance requirements. Screen service area and outdoor equipment. Shade parking areas to reduce heat developed by exposed pavement. Landscaping shall be in accordance with requirements of the Installation. Where appropriate, provide a variety of plants with seasonal change, color, texture, fragrance, and interpretive value. Use local, durable, native species to help ensure survivability; the use of native plants will also minimize the requirement for chemical pesticides, herbicides and irrigation. Choose plant materials on the basis of plant hardiness, climate, soil conditions, low maintenance, and quality. Selected plant materials shall be easily maintained and tolerant of the specific site conditions. Incorporate sustainable design principles into the selection of plants. Planting or seeding shall occur only during periods when beneficial results can be obtained. Plant varieties shall be nursery grown or plantation grown stock. They shall be grown under climatic conditions similar to those in the locality of the project. Landscaping shall not obscure building identification, way-finding, and pedestrian and vehicular signage.

- 2) **Non-Vehicular Walks:** Construct pedestrian walks within the designated construction area and connect to existing sidewalks, where applicable. Construct walks paralleling buildings beyond the eave drip line and at least 5 feet from the foundation.
 - a) **Pedestrian Sidewalks:** Sidewalks shall be a minimum of 6 feet wide. Restrict vehicular access to the sidewalks, as required by UFC 4-010-01. Construct non-vehicular pedestrian sidewalks of Portland cement concrete having a minimum nominal thickness of 4 inches. Design joint patterns uniformly, symmetrical, and in accordance with the American Association of State Highway and Transportation Officials (AASHTO) standards. For joints, do not exceed the length to width ratio of 1.25 for non-reinforced pavements.
- 3) **Shared pedestrian and Vehicular Walks:** Sidewalks designed to support emergency and service vehicle traffic will be considered roadway pavements and shall be designed to meet the AASHTO standards. Construct vehicular supported walks of Portland cement concrete having a minimum nominal thickness of 7 inches. Design joints uniformly, symmetrical, and in accordance with AASHTO standards. Do not exceed the length to width ratio of 1.25 for non-reinforced pavements. Sidewalks designed to support emergency and service vehicle traffic shall have minimum widths as stated in 3.3 Access Drives and Lanes.

3.5. **ARCHITECTURAL REQUIREMENTS**

- A. **GENERAL:** Provide durable and easily maintainable materials. Do not use exterior materials that require periodic repainting or similar refinishing processes. Material exposed to weather shall be factory pre-finished, integrally colored or provided with intrinsic weathering finish.
- B. **WALLS:**
 - 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 shall be in conjunction with a Masonry wainscot. EIFS shall be "high-impact" type and shall be "drainable" type. Masonry units shall be tested for efflorescence. Efflorescence testing shall conform to the provisions of ASTM C 67. CMU construction shall comply with the provisions of ASTM C 1400.
 - 2) **Interior Walls:** Painted gypsum board or plaster shall be the standard wall finish. Concrete or concrete masonry walls are required at spaces such as Arms Vault and evidence-related rooms. Metal studs for interior partitions shall not be lighter than 20 ga. Provide wall protection at chair rail height in corridors, Visitor Waiting, Interview Rooms and Conference Rooms. Provide corner guards at all locations receiving wall protection
 - 3) **Mold and Mildew:** The Designer of Record shall provide details in the design analysis and design showing steps taken to mitigate the potential growth of mold and mildew in the facility.
- C. **ROOF SYSTEMS:** Minimum roof slope for membrane roof systems shall be 1/4 inch per foot. Minimum roof slope for pitched roof systems shall be 3 inches per foot. Membrane roof systems shall be fully adhered. Structural standing seam metal roofs shall comply with the requirements of ASTM E 1592. Roof system shall be Underwriters Laboratory (UL 580 Class 90) rated or Factory Mutual Global (FM) I-90 rated. Roof system shall comply with applicable criteria for fire rating.
 - 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 shall be completely screened by the roof parapet.
 - 2) **Roof Access:** Roof access from building exterior is prohibited.
 - 3) **Trim and Flashing:** Gutters, downspouts, and fascia shall be factory pre-finished metal and shall comply with SMACNA Architectural Sheet Metal Manual.
- D. **OPENINGS**
 - 1) **Storefronts/Curtain Walls & Entrances:**
 - a) **Main Entrance and Staff 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 muntins, and accessories. Framing systems shall have thermal-break design. Storefront

systems shall be capable of withstanding area wind loads, thermal and structural movement required by location and project requirements, and shall comply with applicable codes and criteria.

- 2) **Windows:** Material and installation shall comply with applicable codes and criteria.
 - a) **Exterior Windows:** Provide insulated, high efficiency window systems, with thermally broken frames complying with applicable codes and criteria. Window shall meet egress requirements of NFPA 101 and International Building Code. Window sills shall be designed to discourage bird nesting.
 - b) **Interior Windows:**
 - (1) **Laminated Glass:**
 - (a) Interior glazing will be tempered if required by Code.
 - (b) One way observation glass required in select areas.
- 3) **Doors and Frames:** Fire-rated and Smoke Control Doors and Frames: Comply with applicable codes, criteria and requirements of labeling authority. STC ratings shall be of the sound classification required and shall include the entire door and frame assembly. Provide hollow metal frames and solid core wood stain grade doors for the interior generally. Hollow metal doors are acceptable at service areas. Where equipment will be moved in and out often, consider double doors.
 - a) **Exterior Insulated Hollow Metal Doors & Frames:** Provide insulated hollow metal exterior doors for all exterior doors except for main entrance. Doors and frames shall comply with applicable codes and criteria. Doors shall be minimum Level 3, physical performance Level A, Model 2. Frames shall be minimum 12-gauge, with continuously welded mitered corners and seamless face joints. Doors and frames shall be A60 galvanized, shall comply with ASTM A653 and shall be factory primed. Fire-rated openings shall comply with applicable codes, and the requirements of the labeling authority. Door and frame installation shall comply with applicable codes and criteria.
 - b) **Interior Insulated Metal Doors:** Shall comply with applicable codes and criteria. Doors shall be minimum Level 3, physical performance Level A, Model 2; factory primed.
 - (1) Insulated metal doors may be used at mechanical/electrical rooms.
 - c) **Solid Core Wood Doors:** Provide flush solid core wood doors with Grade A hardwood face veneer for transparent finish. Stile edges shall be non-finger jointed hardwood compatible with face veneer.
 - (1) Provide flush solid core wood doors in hollow metal frames for all interior doors unless noted otherwise.
 - d) **Interior Hollow Metal Frames:** Comply with ANSI A250.8/SDI 100. Frames shall be minimum Level 3, 16 gauge, with continuously welded mitered corners and seamless face joints; factory primed.
- 4) **Hardware:**
 - a) **Door Hardware:** All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed on all building egress doors.
 - (1) **Finish Hardware (Master Keying System/Cores):** All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided.. Cores shall have not less than seven pins; cylinders shall have key-removable type cores. Disassembly of knob or lockset shall not be required to remove core from lockset. Locksets for mechanical, electrical and communications rooms only shall be keyed to the existing Installation Master Keying System. HVAC terminal units that are accessed from a central corridor shall have a deadbolt to minimize protrusion into corridor. Plastic cores are unacceptable.
 - (2) **Fire and Exit Door Labeling:** Hardware for fire doors shall be installed in accordance with the requirements of applicable codes. Exit devices installed on fire doors shall have a visible label bearing the marking "Fire Exit Hardware". Other hardware installed on fire doors, such as locksets, closers, and hinges shall 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 shall be installed in accordance with applicable codes.

- (3) **Special Security Locks:** Security locks are required for Arms Vault, Evidence Processing, Evidence Custodian, and Evidence Depository. Refer to applicable Army Regulations.
 - (4) **Auxiliary Hardware:** Provide other hardware as necessary for a complete installation
 - (a) **Door Stops:** Provide wall or floor stops for all exterior doors that do not have overhead holder/stops.
 - (b) **Acoustical:** Provide for all necessary acoustical isolation hardware for the opening.
 - b) **Electronic Key Card Access System:** A Programmable Electronic Key Card Access System shall be provided on all doors unless otherwise noted. Extension of the Installation key card access system (if existing) shall be provided. The minimum operability requirement is a key card access system that provides a single key card for the individual agent, programmable to open all doors authorized for him/her to open. For example; only certain authorized agents will be authorized to access the evidence custodian office and evidence depository. A Programmable Electronic Key Card Access System Manufacturer's Representative shall install all hardware and software necessary for the operation of the Electronic Key Card Access System and program all locksets. Provide six (6) blank key cards for each personnel each building is designed to accommodate. All blank key cards shall be serially numbered and each key card shall have its number permanently inscribed on it. The Design-Build Contractor shall furnish in three-ring binders, one full set of the system manufacturer's system training manual, system maintenance manual, and one training video (in format provided by the system manufacturer), with each system installed. The Programmable Electronic Key Card Access System Manufacturer's Representative shall provide two (2) separate 4-hour classes of training for the user on software use, programming locks, encoding cards and printing reports. Each building shall be furnished with a complete stand-alone key card system package. System shall be capable of being compartmentalized so that each building has only the capability to produce key cards for that building. Provide a two (2) year warranty on the system and all components and locksets. All special tools, software, connecting cables and proprietary equipment necessary for the maintenance, testing, and reprogramming of the system shall be furnished to the Contracting Officer Representative.
 - 5) **Glass and Glazing:** Material and installation shall comply with applicable codes and criteria.
 - 6) **Louvers and Vents:**
 - a) **Exterior:** Exterior louvers shall have bird screens and shall be designed to exclude wind-driven rain. Exterior louvers shall be made to withstand wind loads in accordance with the applicable codes. Wall louvers shall 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 shall be factory applied.
- E. **EXTERIOR SPECIALTIES:**
- 1) **Bird Habitat Mitigation:** The Contractor shall provide details in the design necessary to eliminate the congregating and nesting of birds at, on, and in the facility.
- J. **ACOUSTICAL REQUIREMENTS:** Exterior walls and ceiling assemblies, doors, windows and interior partitions shall be designed to provide for attenuation of noise sources in accordance with applicable criteria, but no less than the following:
- 1) **Exterior Walls:** STC 49
 - 2) **Administrative Spaces:** STC 40
 - 3) **Conference Rooms and interview rooms:** STC 45
 - 4) **Polygraph Room:** STC 50
 - 5) **Mechanical Room:** STC 50
 - 6) Sound conditions (and levels) for interior spaces, due to the operation of mechanical and electrical systems and devices, shall not exceed levels as recommended by ASHRAE handbook criteria. Provide acoustical treatment for drain lines and other utilities to prevent noise transmission into the interior of dwelling units. An acceptable level of background noise (defined by Noise Criteria Curve or NC) is provided based upon the following criteria:

- a) Conference Rooms: NC 25
- b) Private Administrative Offices: NC 30
- c) Polygraph Exam Room: NC 30
- d) Open Administrative Offices: NC 35
- e) Interview Rooms: NC 35

K. THERMAL REQUIREMENTS:

- 1) **Thermal Insulation:** Provide exterior wall, floor, and roof/ceiling assemblies with thermal transmittance (U-values) required to comply with the proposed energy calculations for the facilities. Insulation shall not be installed directly on top of suspended acoustical panel ceiling systems. See Paragraph 3.12 Energy Conservation for details.

3.5.1. **FINISHES AND INTERIOR SPECIALTIES**

- A. **GENERAL:** Provide sustainable materials and furnishings that are easily maintained and replaced. Maximize use of day lighting. Provide interior surfaces that are easy to clean and light in color. Design interior spaces in accordance with the function; ie, administrative spaces should resemble a commercial office in the private sector with a professional ambience. Evidence handling spaces must be easily cleanable and light in color so that dirt, evidence, and/or foreign objects can be easily seen. Suspect areas must be easily cleanable, very durable and abuse resistant. Finishes in suspect areas must not facilitate hiding of objects , ie behind cove base, under carpet, above ceiling tile, etc, nor should items within these suspect spaces be used potentially as weapons and/or projectiles.
- B. **FINISHES:** Designers are not limited to the minimum finishes listed in this paragraph and are encouraged to offer higher quality finishes.
 - 1) **Minimum Finish Requirements:** Wall, ceiling and floor finishes shall conform to the requirements of the IBC, NFPA and UFC 3-600-01. Where code requirements conflict, the most stringent code requirement shall apply.
 - a) **Walls:** All wall finish shall be minimum 5/8" painted gypsum board, except where stated otherwise. All gypsum board shall achieve a score of 10, the highest level of performance for mold resistance under the ASTM D 3273 test method. All gypsum board shall be transported, handled, stored and installed in accordance with the GYPSUM ASSOCIATION – Guidelines For Prevention Of Mold Growth On Gypsum Board (GA-238-03). Use impact resistant gypsum board in corridors, storage rooms, and Suspect areas.
 - b) **Ceilings:** All gypsum wall board ceiling finishes shall be minimum 5/8" painted gypsum board, except where stated otherwise. All gypsum board shall achieve a score of 10, the highest level of performance for mold resistance under the ASTM D 3273 test method. All gypsum board shall be transported, handled, stored and installed in accordance with the GYPSUM ASSOCIATION – Guidelines For Prevention Of Mold Growth On Gypsum Board (GA-238-03). Where acoustic tile is used, gypsum board or plaster may be incorporated to add interest such as bulkheads, soffits or other patterns. In acoustically rated spaces the wall/partition shall penetrate the ceiling. The acoustic rating shall include the entire envelope, therefore requiring partitions to extend to the structure above or treatment of the ceiling to prevent sound from transmitting over the partition. Finished ceiling heights shall be 9'-0" unless otherwise noted
 - c) **Floors:** Consider the requirements for durability in areas that will receive more traffic and areas that have high abuse. Porcelain tile is identified for traffic areas but other durable products such as terrazzo may be considered. Consider using a waterproofing membrane and mortar bed for thick set tile materials. Carpet may be used in offices and corridors. Vinyl tile shall be used in break/multi-purpose rooms, Evidence Processing, Evidence Depository, Photo ID. Where carpet is used, provide broadloom in a multi-color pattern (except in polygraph suite). Carpet static control shall be provided to permanently control static buildup to less than 3.5 kv when tested at 20% relative humidity and 70 degrees F in accordance with AA TCC 134. In communications and computer rooms provide non-static resilient flooring. Provide recessed entry mat (walk-off mat) systems at building entrances.

- (1) **Resilient Flooring):** Resilient flooring shall be a minimum 1/8 inch thick, conforming to 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) **Porcelain/Quarry Tile:** Slip-resistant and in accordance with applicable criteria.
- (3) **Ceramic Tile:** Slip-resistant and in accordance with applicable criteria
- (4) **Sealed Concrete:** Slip-resistant and in accordance with applicable criteria
- (5) **Walk-off mats:** Provide recesses walk-off entry mat systems at building entrances.
- d) **Counter Tops:** Countertops shall have waterfall front edge, and have integral covered backsplash. countertop with minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing.
- e) **Window Stools:** Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material.
- f) **Interior doors and frames:** Provide hollow metal frames and solid core wood stain grade doors generally. Hollow metal doors are acceptable at service areas. Where equipment will be moved in and out often, consider double doors
- 2) **Minimum Paint Finish Requirements:** All paints used shall be listed on the "Approved product list" of the Master Painters Institute, (MPI). Application criteria shall be as recommended by Master Painters Institute (MPI) guide specifications for the substrate to be painted and the environmental conditions existing at the project site.
 - a) **Exterior Surfaces:** Except factory pre-finished material or exterior surfaces receiving other finishes shall be painted 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 shall not be used on this project. Exterior paints and coating products shall be classified as containing low volatile organic compounds (VOCs) in accordance with MPI criteria. Application criteria shall be as recommended by MPI guide specifications. Provide an MPI Gloss Level 5 Finish (Semi-gloss), unless otherwise specified.
 - b) **Interior Surfaces:** Except factory pre-finished material or interior surfaces receiving other finishes shall be painted 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 shall not be used on this project. Interior paints and coating products shall contain a maximum level of 150 g/l (grams per liter) of volatile organic compounds (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 all other areas.

C. INTERIOR SPECIALTIES:

- 1) **Signage & Directories:**
 - a) **Room Signage:** Provide ADA compliant interior room identification signage for all rooms. Provide gloss or matte finish plaques with slots in base laminate for insertion of changeable message strips. Classroom and conference room signage shall have an "In Use" feature. Provide a building directory at the public entrance.
 - b) **Directories:** Provide a building directory at the public entrance.
- 2) **Visual Display Units/Cases:**
 - a) **Bulletin Boards:** Provide a minimum of one bulletin board centrally located in the administrative corridor, and one in the multi-purpose room. Bulletin board shall be 4'-0" high and 6'-0" wide. Bulletin boards shall have a header panel and shall have lockable, glazed doors. Glazing shall be laminated glass.
- 3) **Toilet Accessories:** Furnish and install the items listed below and all other toilet accessories necessary for a complete and usable facility. All toilet accessories shall be Type 304 stainless steel with satin finish.

- a) **Main Toilet(s):** Public Toilets (IF REQUIRED BY THE RFP): Toilet accessories shall conform to the requirements of the ABA and shall include, but are not limited to the following:
 - (1) Glass mirrors on stainless steel frame and shelf – at each lavatory
 - (2) Liquid soap dispenser – at each lavatory
 - (3) Combination recessed mounted paper-towel dispenser/waste receptacle
 - (4) Sanitary napkin disposal at each female/unisex toilet
 - (5) Recessed mounted lockable double toilet paper holder – at each water closet.
 - (6) Sanitary toilet seat cover dispenser – a minimum of one per toilet room
 - (7) Grab bars – as required by ABA
- 4) **Wall Protection:**
 - a) **Chair Rail:** Chair rails shall be installed in areas prone to hi-impact use, including corridors and waiting area.
 - b) **Corner Guards:** Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall/column outside corners in all areas. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guards.
- 5) **Storage Shelving:**
 - a) **Janitor's Closet:** Provide a minimum of six linear feet of 18 inch deep, heavy duty, stainless steel shelving for storage of janitorial supplies.
 - b) **Evidence Depository:** mix of open and closed industrial shelving.
- 6) **Fire Extinguisher Cabinets & Mounting Brackets:** Furnish and install fire extinguisher cabinets and fire extinguisher cabinets as required by applicable codes and criteria. Furnish a list of installed fire extinguisher cabinets and mounting brackets (including location, size and type) to the Contracting Office Representative. Provide recessed or semi-recessed units.

3.6. **STRUCTURAL REQUIREMENTS**

- A. **GENERAL:** Design and construct as a complete system in accordance with APPLICABLE CRITERIA.
- B. **DESIGN LOADS:**
 - 1) **Live Loads:** Design live loads shall be per the IBC but not lower than the following minimums.
 - a) **Slab on grade:** 150 psf minimum

3.7. SEE PARAGRAPH 6.7 THERMAL PERFORMANCE – NOT USED

3.8. **PLUMBING REQUIREMENTS**

- A. **DESIGN STANDARDS AND CODES:** The plumbing design for all CIDC facilities shall be in accordance with the current version of the Unified Facilities Criteria (UFC) documents and all applicable codes and standards, including the ABA Accessibility Standards for Federal Facilities, LEED – NC for New Construction Reference Guide Version 3.0, and ASHRAE 189.1-2009 Standard for the Design of High-Performance Green Buildings
- B. **BUILDING USE WATER REDUCTION:** Low-flow plumbing fixtures shall be used to maximize water efficiency. Public metering self-closing faucets shall use a maximum of 0.25 gallons per metering cycle. Public lavatory faucets shall have a maximum flow rate of 0.5 GPM. Single flush water closets shall have a maximum flush volume of 1.28 gallon; dual flush water closets shall have an effective flush volume of 1.28 gallons; and urinals shall have a maximum flush volume of 0.5 gallons
- C. **DOMESTIC WATER:** Consider an active or passive solar water heating system to meet part or the entire domestic hot water load. Consider instantaneous natural gas-fired water heaters, in place of a combination

hot water heater and storage tank. The domestic hot water system for the Vehicle Processing Building shall be separate from the main building. Consider an instantaneous domestic water heater

- 1) **Heating System:** In accordance with applicable criteria.
- 2) **Pipe Sizing:** In accordance with applicable criteria.

B. **FIXTURE FLOW RATES:**

- 1) **Water Closets:** Shall have a maximum flow rate of 1.28 gallons per flush or dual flush with an equivalent average flush volume of 1.28 gallons per flush.
- 2) **Shower heads:** Shall have a maximum flow rate not to exceed 1.5 gpm.
- 3) **Bathroom Sinks:** Shall have a maximum flow rate not to exceed 0.5 gpm.
- 4) **Kitchen Sinks:** Shall have a maximum flow rate not to exceed 1.0 gpm.
- 5) **Janitor and utility Sinks:** Shall have a maximum flow rate not to exceed 2.0 gpm.

C. **DRAINS, INTERCEPTORS SEPARATORS & CLEANOUTS:**

- 1) **Interceptors:**
 - a) **Oil/Grease Interceptors:**
 - (1) Provide at Vehicle Processing as required.
- 2) **Cleanouts:**
 - (1) Provide as required by applicable criteria and code.
- 3) **Drains:**
 - (1) Provide as required; mechanical/ utility spaces, bathrooms, multi-purpose room, etc. Provide a continuous 6 inch wide trench drain with continuous grating at the inside of the overhead door of the Vehicle Processing building. Locate drain approximately 24 inches from the inside face of the door.

D. **PLUMBING FIXTURES:**

- 1) Provide commercial grade plumbing fixtures.
- 2) Emergency eye wash and shower shall be provided in accordance with OSHA 1910, in both the main building and the vehicle processing building. See drawings for locations.

E. **METERING:**

- 1) **Smart Meters** : shall be used to monitor the energy and resource use of the facility. Smart Meters capture complex energy or resource use information and transmit this information on a real-time (or near real-time) basis
- 2) **Water meters:** Provide metering and sub metering of water use including separate metering of reclaimed, potable, and rain water systems.
- 3) **Natural gas meter and pressure regulator:** A gas meter and pressure regulator shall be provided when facilities utilize natural gas as an energy source. The gas meter shall be a 'Smart Meter' which reports to the Energy Management Control System.

3.9. **COMMUNICATIONS AND SECURITY SYSTEMS**

- A. **TELECOMMUNICATION SYSTEMS:** Telecommunications outlets shall be provided per the applicable criteria based on functional purpose of the space within the building. Information systems shall consist of a complete end-to-end voice, data cable based functional design accomplished in accordance with the I3A Technical Criteria. Information system equipment provided to satisfy the service requirements of this design shall meet the technical specifications and planning guidance found in ANSI/TIA/EIA-568-B and 569-A, as appropriate. Functional requirements shall be developed and implemented based upon the I3A Technical Criteria to satisfy both the near-term as well as the growth potential of the CIDC facility. When two Telecommunication Rooms (TR) are required, size main TR at a minimum of 1.1% of serving area

and secondary room at a minimum of 8' x 10'. Additional TR shall be provided and placed centrally to the area served. The TR placement shall ensure the serving areas do not exceed 10,000 square feet as stipulated in TIA/EIA-569-B, and linear footage from TR to outlet does not exceed 250 feet. System provisions shall be compliant with the requirements of the Department of Defense (DOD) Standards for Accessibility, as directed for the facility. All cable utilizing conduit in slab, including floor boxes to be evaluated and labeled for use in a 'wet location'. Metallic separation is required between telecommunication and power wiring in power poles, under floor conduit and/or systems furniture raceway.

- 1) **CATV:** All CATV outlet boxes, connectors, cabling, and cabinets shall conform to applicable criteria unless noted otherwise. All horizontal cabling shall be homerun from the CATV outlet to the nearest telecommunications room unless indicated otherwise. The cable television system shall consist of cabling, pathways, and outlets. All building CATV systems shall conform to applicable criteria including I3A Technical Criteria and UFC 3-580-01 Telecommunications Building Cabling Systems Planning/Design. See paragraph 6 for possible additional requirements.
- 2) **Paging System:** A zoned paging system shall be provided throughout the facility and integrated with the telephone system. Provide a system that allows paging to individual rooms and to all building areas. Outdoor spaces such as break areas (if provided) shall be on the public area system. Coordinate microphone location with user requirements.
- 3) **Audio/Visual System:** Audio/Visual systems shall be provided and shall comply with I3A Technical Criteria and the program requirements. Provisions (consisting of a power receptacle and conduit for signal wiring) for a GFGI projector shall be provided in each conference room and classroom. Provide camera and microphone for audio/video recording capability at polygraph room and each Interview Room; determine with user, the location of recording head end equipment.
- 4) **Clock System:** Clocks shall be provided in conference rooms, offices, and visitor waiting areas. When requested by the user, this requirement may be met by providing an integrated clock system that provides adjustment of all clocks from one central point.
- 5) **Wireless Technology:** The use of wireless technology for data transfer must be in accordance with Army Regulation 25-1 Army Information Management found at http://www.army.mil/usapa/epubs/25_Series_Collection_1.html as well as the latest memorandum and letters regarding this quickly evolving issue.
- 6) **Information System Equipment:** All equipment provided for the facility shall meet the functional standards found in the I3A Technical Criteria. The building's interior copper cabling shall be EIA/TIA 568B Category 6 RJ-45. Installation shall be in accordance with applicable UFGSS.

B. SECURITY INFRASTRUCTURE/SYSTEMS:

- 1) **Electronic Security System (ESS):** The security infrastructure shall be designed and installed to support all Government-furnished equipment and security apparatus including ICIDS systems, CCTV surveillance systems, CCTV camera locations, doors/rooms requiring access controls and restricted access systems. Provisions shall include dedicated power circuits, communications connections, raceways, and signal wiring for user installed devices. System requirements shall be coordinated with the installation security office. Design of security systems shall also be coordinated with the Mandatory Center of Expertise (MCX) Electronic Security Center, US Army Installation Support Center, Huntsville, Alabama.
 - a) **ICIDS System:** Equipment will include all components including interior and exterior sensors, monitor consoles, remote monitors, area data collectors, CCTV, and entry control equipment. See individual room descriptions for security required at each space. Arms Vault and Evidence suite will require IDS. Additional security features will be required at the Arms Vault IAW AR 190-11 "Physical Security of Arms, Ammunition, and Explosives". Central Monitoring and control equipment will be located in the Admin Operations and/or the Duty Agent office. Alarms and reporting may also be sent to the Installation Security Office. Coordinate with User and Installation requirements.
 - b) **SIPR:** Secure Internet Protocol Routing Network (SIPRNET) access, installed in accordance with provisions of SIPRNET Technical Implementation Criteria. Secure communications rooms to

- accommodate SIPRNET and secure Video Conferencing (VTC) shall be designed and constructed in accordance with the SIPRNET Technical Implementation Criteria (Minimum secure communication room dimensions shall be minimum 6 feet wide x 6 feet deep. Each room shall include a communication signal ground busbar, connected to the main telecom room signal busbar via properly sized ground wire (see MIL-HDBK-419-A), and one dedicated 20-amp circuit for the SIPRNET rack/safe, in addition to convenience receptacles. The connection to the main telecommunications room shall be via a single 2-inch trade size steel conduit. Additional TEMPEST requirements shall be met on a per site basis dependent on the facility zone type and the equipment NSTISSAM level. All unclassified telecommunications systems and associated infrastructure shall be electrically and physically isolated from all classified telecommunications systems in accordance with NSTISSAM requirements.
- c) **CCTV:** Infrastructure for an alarm and CCTV system shall be provided. Coordinate mounting location with the user. At a minimum, corridors, secured parking and impound area, staff parking, and building entrances will require CCTV coverage.
 - d) **Access Control:** All doors should have provisions for installation of programmable keypad access.
- C. **MASS NOTIFICATION SYSTEMS:** Provide a mass notification system conforming to UFC 4-010-01 and UFC 4-021-01 for the purpose of providing real-time announcements in the immediate vicinity of the building during emergency situations. Coordinate specific system requirements with the user and the Installation. A combined Fire Alarm/Mass Notification system is permitted in accordance with UFC 4-021-01, Mass Notification Systems. A voice evacuation system will be used for the audible notification appliances. The speakers used for the fire alarm voice evacuation system will also serve as the audible Mass Notification System. Clear lens strobe lights for "Fire" and amber lens strobe lights for "Mass Notification" will be provided for visual notification and must be installed in accordance with NFPA 72 and ADA guidelines

3.10. ELECTRICAL REQUIREMENTS

- A. **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. The effect of nonlinear loads such as computers, other electronic equipment and electronic ballasts shall be considered and accommodated as necessary. Voltage drop shall not exceed the maximum allowed per ASHRAE 90.1. Transient voltage surge protection shall be provided on service equipment. .
- B. **DISTRIBUTION:** Power receptacles shall be provided per NFPA 70 and in conjunction with the proposed equipment and furniture layouts. Provide power, data and telecommunications connectivity to each workstation. A duplex power receptacle shall be accessibly located adjacent to each duplex voice/data and CATV outlet. At all levels of the power distribution system, there shall be 20 percent built-in spare circuit and load capacity. Power poles shall not be utilized. In areas such as conference rooms, floor-mounted recess power and telecomm receptacles shall be utilized
- C. **POWER:** Power shall be provided for all installed equipment requiring power to include convenience receptacles and government furnished government installed equipment.
 - 1) **Panels:** Panelboards located in accessible areas, shall be lockable and keyed to one master key.
 - 2) **Outlets:**
 - a) **Waiting Area:** Provide a minimum of one 120 volt duplex receptacle for housekeeping purposes.
 - b) **Corridors:** Provide a minimum of one 125 volt duplex receptacle per corridor for housekeeping. No point along a corridor wall at 18" above finished floor shall be more than 25 feet from a receptacle.
 - c) **Mechanical & Electrical Room:** Provide a minimum of two 125 volt duplex receptacles in mechanical rooms in addition to those required by NFPA 70. This requirement does not apply to the small mechanical rooms used for individual dwelling units. In addition, provide a minimum of one 125 volt duplex receptacle in each electrical room.

- d) **Multi-Purpose Room Area:** Provide power receptacles for vending machines, Refrigerators, ice cube machine-dispensers, and other appliances.
 - e) **Office Spaces:** In accordance with NFPA 70.
 - f) **Other Spaces:** Spaces such as the Vehicle Processing area, Evidence Processing, photo ID lab, and others have special equipment that require dedicated power.
- D. **BUILDING LIGHTING LEVELS, FIXTURES & CONTROLS:** Interior lighting controls shall be provided in accordance with ASHRAE 90.1 and the requirements of each functional space. Electronic ballasts for linear florescent lamps shall be the high efficiency programmed start type. Provided lighting levels shall be within +/- 10% of required lighting levels. Insure proper lighting level ratio of adjoining "observer/observed" spaces of the polygraph suite. Occupancy sensors shall be provided, in accordance with UFC 3-530-01, in restrooms, electrical and mechanical rooms, telecommunication rooms and similar areas. Occupancy sensors shall not be provided in Suspect Toilet, Suspect Waiting, Polygraph Office, Polygraph Exam, or Observation Room. Interior lighting shall combine 2'x4' and 2'x2' fluorescent, cove lighting, direct and indirect recessed, direct and indirect recessed with parabolic lens, sconces, decorative, and exit fixtures. Dimming ballasts, where required, shall be capable of dimming to 5 percent. Lighting for video-teleconferencing and office spaces shall have special parabolic diffusers, which shall eliminate any effects on the screens or displays.
- E. **BACKUP POWER:** Provide an exterior waterproof receptacle, manual transfer switch, and distribution panel to connect to a temporary mobile generator. The generator shall not be included in the construction contract. The voltage and amperage shall be determined during the design process to address any mission essential emergency power needs. Where applicable, individual unit Uninterruptible Power Systems (UPS) shall be provided, where required by the program. The systems shall have a minimum of five minutes capacity of full load to allow for orderly shutdown of critical loads. UPS equipment shall have isolation/bypass capabilities for maintenance and shall utilize leak-proof maintenance-free sealed lead-acid batteries with suspended electrolyte.
- F. **LIGHTING PROTECTION:** Facilities shall be protected from lightning in accordance with NFPA 780 National Standard for the Installation of Lightning Protection Systems and all applicable UFC. A risk analysis using the appropriate calculations based on NFPA 780 National Standard for the Installation of Lightning Protection Systems and all applicable UFC shall be performed to determine what, if any, lightning protection is required.
- G. **SPECIAL LIGHTING, POWER AND TELECOMMUNICATIONS REQUIREMENTS FOR VEHICLE PROCESSING BUILDING:** The Vehicle Processing Building shall have a separate distribution power panel, fed from the main 208Y/120V distribution panel, to power lighting, receptacles, special equipment loads, and mechanical loads. The panel shall be recessed mounted inside of the building and contain a main circuit breaker. Lighting fixtures for the vehicle maintenance bay shall be wall mounted to illuminate sides and underside of vehicles on the vehicle lift. Provide two (2) phone and two (2) data lines to the Vehicle Processing Building

3.11. HEATING VENTILATING AND AIR-CONDITIONING (HVAC) REQUIREMENTS

A. HVAC DESIGN CRITERIA:

1) General:

- a) Consider HVAC systems that include vertical self-contained air-handling units, located in the Mechanical Room, and an outdoor dry cooler or wet closed loop cooling tower, located on grade. Evaluate the outdoor environmental and climate conditions to determine if a dry cooler or a wet cooling tower should be selected. Consider a four-pipe fan coil system for space heating and cooling. Consider 'Economizer Cooling'. An air-side economizer uses filtered outdoor air for cooling during a part of the year. A water-side economizer uses fluid from the cooling tower or dry cooler for cooling directly, without the use of a refrigeration cycle. Avoid selecting HVAC systems which require simultaneously heating and cooling; consider waste energy (waste heat) recovery systems. Chlorofluorocarbon (CFC) based refrigerants shall not be used in HVAC and refrigeration systems. Recognize the STC ratings required within the facility, and design the HVAC system so that these sound ratings are not compromised.

- b) **Space Heating:** Consider a space heating system that includes natural gas hot water condensing boilers, located in the Mechanical Room.
- c) **Cooling Towers:** Cooling towers, if provided, shall be equipped with efficient draft eliminators in compliance with ASHRAE 189.1.
- d) **SIPR room:** Provide an independent and dedicated air-handling system for Telecommunications and SIPRNet rooms. These systems shall not be located on the floor of the actual space served. These rooms shall be conditioned 24 hours per day, 7 days per week to a temperature of 72 degrees F (dry bulb) and to a relative humidity of 50%. Estimated equipment heat dissipation is 1,800 BTU per hour. Verify equipment heat dissipation during design.
- a) **Arms Vault:** Provide a dehumidifier for the Arms Vault, located outside of the secure area of the vault. Consider placing the dehumidifier on a shelf near the ceiling to prevent damage caused by movement of weapons within the vault.
- b) **Corridors:** Corridors shall be ventilated per ASHRAE 62.1 by supply from the dedicated outdoor air unit.
- c) **Emergency Shutdown:** Provide an air distribution system emergency shutoff switch as required under UFC 4-010-01.

2) **Mechanical Rooms:**

- a) **Planning and Equipment:** Mechanical rooms shall be provided with both combustible gas detectors and carbon monoxide detectors when appropriate. The mechanical room shall have outdoor access so that maintenance personnel do not need to enter the secure areas of the building to service the main air conditioning unit or pumps. Provide space within the Mechanical Room for the future installation of on-site renewable energy systems. Provide chase space through the building for these future systems.

3) **Terminal Unit Location and Access:**

- b) **Building:** All HVAC terminal units shall not be located in suspect or evidence handling areas, but in the nearest corridor space. Corridor HVAC access doors shall be sized for ease of service and maintenance of HVAC units. Access for maintenance shall not require entry into suspect or evidence handling areas. Air filters shall be located in the equipment room. All HVAC units shall have piping and duct connections that allow quick and easy removal and replacement of individual units.

4) **Evidence Suite:**

- a) **Heating and Cooling:** Provide for dedicated heating and cooling separate from the building HVAC system: this can be in the form of mini-split, Fan-coil units, DX units, or other similar terminal device. The Evidence depository will have no ducted air supplied from the main building AHU. For Security reasons, Depository mechanical unit should not be located within the Evidence Depository Room, but in a less sensitive place such as above the corridor ceiling. This allows for mechanical maintenance access outside the secure zone.
- b) **Exhaust and ventilation:** Dedicated exhaust system to maintain a negative pressure relationship between the Depository and adjacent rooms. This will pull in air from the building spaces through door undercuts and door transfer opening. Controls will need to be thought out to maintain the negative differential economically. Ideally, the system will be an integrated system to best comply with ASHRAE 62.1 and energy conservation requirements.

5) **Vehicle Processing Building HVAC Systems**

- a) **Ventilation air:** Ventilation rates shall meet or exceed the minimum requirements of the International Mechanical Code, and the current version of ASHRAE Standard 62.1. Provide permanent equipment to measure the minimum outdoor air flow rate for each ventilation system, as required by ASHRAE 189.1. Exhaust rates shall be in accordance with the current edition of the International Mechanical Code and the current edition of ASHRAE Standard 62.1.
- b) **Design Conditions:** For heating, the indoor design temperature shall be 60 F db. For cooling, the indoor design conditions shall be 80 F db and 60% relative humidity.

- c) **System Selection:** Consider a radiant heating system for space heating.

B. DIRECT DIGITAL CONTROL SYSTEM

- 6) **System Requirements:** Provide a building automation system consisting of a building control network, and integrate the building network into the existing base-wide EMCS/UMSC (if present). The building control network shall be a single complete non-proprietary Direct Digital Control (DDC) system for control of the heating, ventilating, and air conditioning (HVAC) systems and other systems. The building control network shall be an Open implementation of LonWorks@ technologies using ANSI/EIA 709.1 B as the only communications protocol and use only LonMark Standard Network Variable Types (SNVTs), as defined in the LonMark@ Resource files, for communication between DDC hardware devices to allow multi-vendor interoperability. The building control network shall be an Open system. The system shall be designed and installed so that the Government or its agents are able to repair, replace, upgrade, and expand the system without dependence on the original control network contractor.

3.12. ENERGY CONSERVATION REQUIREMENTS:

- A. **ENERGY PERFORMANCE:** The building, including the building envelope, HVAC systems, service water heating, power, and lighting systems shall be designed to achieve a non-plug load energy consumption that is at least 40% below the consumption of a baseline building meeting the minimum requirements of ANSI/ASHRAE/IESNA Standard 90.1-2007 (see paragraph 5.9 Energy Conservation). (Note: Plug loads shall be included in building energy modeling but are subtracted in the final calculation of Energy Performance. See section "Design After Award" for additional guidance.)
 - 1) **Solar Water Heating:** In addition, the building shall be designed and constructed to provide all of domestic hot water by use of solar hot water system.
- B. **REQUIRED ENERGY CONSERVATION FEATURES & TABLES:** All design features not described below will be in accordance with the minimum requirements of ANSI/ASHRAE/IESNA Standard 90.1-2007 including conformance with paragraph 5.9.2, which requires purchase of Energy Star and FEMP designated products. Additional energy conservation features may be required to meet the above energy performance. The contractor is responsible for determining and providing additional energy conservation features to meet the energy performance requirement.
- C. **COMPLIANCE DOCUMENTATION:** The required energy conservation features contribute to the achievement of the above energy performance and are life cycle cost effective for the facility. Use of the required energy conservation features does not eliminate the requirement for energy analysis calculations documenting compliance. The D-B contractor must document compliance with the above energy performance utilizing the methodology described in ASHRAE 90.1, Appendix G as discussed in section 01 33 16 Design After Award.
- D. **COMMISSIONING:** Energy-related building systems shall be commissioned in accordance with LEED requirements for both Fundamental Commissioning and Enhanced Commissioning. Energy and water resource related systems shall be tested in accordance with Chapter 10 of ASHRAE Standard 189.1. Commissioning of building energy systems shall comply with the requirements of U.S. Army Corps of Engineers Engineering and Construction Bulletins 2011-1 and 2010-14. Commissioning activities shall be completed for the following energy-related systems, at a minimum:

3.13. FIRE PROTECTION REQUIREMENTS

- A. **DESIGN STANDARDS AND CODES:** The fire protection design for all facilities shall be in accordance with the current versions of the Unified Facilities Criteria 3-600-01 Fire Protection Engineering for Facilities, and where applicable, the International Building Code and the referenced National Fire Protection Association (NFPA) Codes and Standards.

- B. BUILDING OCCUPANCY: The CIDC prototype building is classified as a Business Occupancy (Group B). The Vehicle Processing Building is considered a Storage Occupancy – Moderate Hazard (Group S-1; Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials).
- C. BUILDING CONSTRUCTION: Based on building size, construction type is anticipated be Type IIB (Non-combustible, Unprotected) as defined by the International Building Code. The Vehicle Processing Building will also be constructed as Type IIB. (Non-combustible, Unprotected). Based on a minimum separation of 20 ft., the exterior walls of both buildings will not require a fire rating; although, the designer shall verify that the exterior walls of the Vehicle Processing Building will not require fire rating based on actual distance from adjacent property line or existing structures. Based on current applicable code criteria, building corridors will be non-fire-rated; and hazardous areas (i.e. storage rooms, etc.) will be enclosed with smoke partitions.
- D. SPRINKLER SYSTEM: Provide a wet pipe sprinkler system in each structure as required by the project. Design shall be provided by a qualified Fire Protection Engineer as defined in UFC 3-600-01 and shall be in compliance with UFC 3-600-01 and NFPA 13: Standard for the Installation of Sprinkler Systems. Covered loading docks shall be fully protected by a dry sidewall sprinklers or a dry-pipe sprinkler system. All sprinklers should be quick response type.
- E. HYDRANT FLOW DATA: A hydrant flow test shall be performed in the early stages of design indicating Date and Location of Test, Static Pressure, Flow, and Residual Pressure. Coordinate fire hydrant flow test with local water authority. Provide hydraulic calculations to determine whether there is sufficient water supply and pressure to meet the flow demands of the sprinkler systems within the facility and the fire department hose stream requirements from the fire hydrants
- F. FIRE HYDRANTS: Fire Hydrants shall be provided and spaced such that all parts of the building exterior must be within 350 ft of a hydrant with consideration given to accessibility and obstructions. In addition, at least one hydrant must be located within 150 ft of the fire department connection. Coordinate Fire Hydrant specifications and spacing requirements with local water utility and local fire department
- G. FIRE DEPARTMENT ACCESS: All buildings greater than 5,000 sq ft, or more than two stories in height must have at least one means of all-weather ground access to allow emergency vehicles unimpeded access to the building. The paved all-weather ground access must start from the road and terminate no farther than 33 ft from the building. Any force protection equipment, such as bollards or gates, must not require more than one person to remove or open and any locking device controlling vehicle access must be under control of the Fire Department or 24-hour security personnel located at the specific facility. Dimensions of fire lanes and turnarounds must comply with NFPA 1, Uniform Fire Code
- H. FIRE PUMP: It is unlikely that a fire pump will be required, however, should a pump be necessary, the pump shall be in accordance with Unified Facilities Criteria 3-600-01 - Fire Protection Engineering for Facilities. Provide electric driven fire pump and controllers in accordance with NFPA 20.
- I. FIRE EXTINGUISHERS AND CABINETS: Provide portable fire extinguishers in accordance with NFPA 10. Provide bracket-mounted extinguishers in service areas. Provide semi-recessed aluminum fire extinguisher cabinets with clear view panel in public areas. Provide fire-rated cabinets in fire-rated wall assemblies.
- J. FIRE ALARM: Provide fire alarm system conforming to requirements of UFC 3-600-01 and NFPA 101 throughout each structure. Fire alarm system shall consist of pull stations, audio and visual devices, control/annunciation panel and tamper and/or flow connection/supervision to the sprinkler system. Provide supervision of fire pump where fire pump is provided. Fire alarm system shall tie into the base-wide system in accordance with base requirements. Installation of Fire alarm system shall be in accordance with NFPA 72. A combined Fire Alarm/Mass Notification system is permitted in accordance with UFC 4-021-01, Mass Notification Systems. A voice evacuation system will be used for the audible notification appliances. The speakers used for the fire alarm voice evacuation system will also serve as the audible Mass Notification System. Clear lens strobe lights for “Fire” and amber lens strobe lights for “Mass Notification” will be provided for visual notification and must be installed in accordance with NFPA 72 and ADA guidelines. Fire alarm

and Mass notification systems must conform to the applicable base standards (i.e. transmitter frequency).

3.14. SEE PARAGRAPH 6.14 SUSTAINABLE DESIGN – NOT USED

3.15. SEE PARAGRAPH 6.15 ENVIRONMENTAL – NOT USED

3.16. SEE PARAGRAPH 6.16 PERMITS – NOT USED

3.17. SEE PARAGRAPH 6.17 DEMOLITION – NOT USED

3.18. SEE PARAGRAPH 6.18 ADDITIONAL FACILITIES – NOT USED

3.19. **EQUIPMENT AND FURNITURE REQUIREMENTS:**

3.19.1. **FURNISHINGS:**

A. **FURNITURE:** refer to room specific requirements for furniture items and drawings for locations.

- a) administrative furniture
- b) multi-purpose lounge tables and chairs
- c) visitor waiting chairs and end tables
- d) plants
- e) recycle bins
- f) suspect waiting chairs
- g) conference room and interview room tables and chairs.
- h) art and décor items
- i) Evidence depository shelving
- j) Evidence depository safe (ammunition)
- k) Evidence depository refrigerator
- l) Evidence processing work table
- m) TOE storage shelving.
- n) suspect lockers
- o) safes
- p) file cabinets

B. **CASEWORK:** Provide cabinets complying with AWI Quality Standards. Refer to room specific requirements.

- 1) **Multi-Purpose Lounge:** Provided a minimum of twelve (12) linear feet of base cabinet systems with twelve (12) linear feet of standard height counter and twelve (12) linear feet of wall cabinet systems. Twelve (12) linear feet of standard height counter includes required sink. Provide a minimum of two 18 inches wide drawer units in the base cabinet system. A dishwasher is not preferred.
- 2) **Observation room:** countertop, if applicable.

- C. WINDOW TREATMENTS: Provide commercial duty horizontal mini blinds/shades at all exterior windows. It is important that shades preclude nighttime visibility into the offices from the exterior, while also mitigating daytime glare on occupants. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building.

3.19.2. EQUIPMENT:

A. APPLIANCES:

- a) Refrigerator: A full size refrigerator will be GFGI.
- b) Range: Range shall be GFGI oven/range with a CFCI built-in vent hood.
- c) Garbage Disposer: Furnish and install a garbage disposer at the kitchen sink.
- d) Microwave: GFGI.

B. USER-FURNISHED EQUIPMENT: refer to room by room requirements and drawings for locations.

1) CID equipment:

- a) Photo Lab equipment
- b) Fuming hood
- c) Drying rack
- d) Polygraph equipment

C. VENDING AND ICE MACHINE EQUIPMENT:

- a) **Vending Machines**: Vending Machines shall be full-size and shall be GFGI.
- b) **Ice Machines**: Ice cube machine-dispenser shall be capable of producing a minimum 250 pounds of regular ice cubes in 24 hours, with 180 pound storage capacity and shall be GFGI.

3.20. FACILITY SPECIFIC REFERENCES: (NOT USED)