



US Army Corps of Engineers

Center of Standardization, Fort Worth District

STANDARD DESIGN CRITERIA GENERAL PURPOSE WAREHOUSE

SMALL	30,000 SF
MEDIUM	65,000 SF
LARGE	130,000 SF

ROOM BY ROOM DESCRIPTIONS

June 20 2012

General Purpose Warehouse

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General Purpose Warehouse

General Requirements:

- The General Purpose Warehouse shall be of commercial construction standards. It will be comprised of the following areas:
 - Logistics
 - Administration
 - Shipping and Receiving operations
 - Open storage areas
- All GPW facilities shall be protected by an automatic fire suppression system and full detection system to include closets and all conditioned spaces.
- All GPW facilities shall comply with the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities.
- The facility shall be LEED Silver certified.
- A recycling area shall be included in the facility.
- The building may be rotated or mirrored on the site.

Architectural Requirements

- Exterior walls and roof/floor/ceiling assemblies, doors, windows and interior partitions shall be designed to provide for attenuation of external noise sources such as airfields in accordance with applicable criteria, but no less than the following:
 - a) Interior partitions – STC 42
 - b) Exterior walls – STC 49
 - c) Doors and frames – STC 35
 - d) Ceilings - CAC 38
- Due to the operation of mechanical and electrical systems and devices, sound conditions and levels for interior spaces 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 offices and other areas requiring noise suppression.
- All exterior doors from the facility shall not have a step in the case of an emergency. The exterior pathways from activity room and corridor doors shall meet ADA. Exterior Doors: Provide galvanized insulated hollow metal exterior doors for entry to all spaces other than corridors, lobbies, or reception/waiting rooms. Doors and frames shall comply with applicable codes and criteria. Doors shall be heavy duty (grade 2) insulated with 18-gage steel cladding; top edge closed flush; A60 galvanized. Frames shall be 12-gauge, with continuously welded mitered corners and seamless face joints. Doors and frames shall be constructed of hot dipped zinc coated steel sheet, complying with ASTM A653, Commercial Steel, Type B, minimum A40 coating weight; 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. Exit devices shall be installed all building egress doors. Provide aluminum storefront doors and frames where indicated.

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• Interior 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. Provide wood doors at all interior locations except noted otherwise. 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.

Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes.

• Where exterior windows are provided the following requirements shall be met. Shall comply with ATFP requirements.

• Safety glass shall be provided where required by code or Authorities Having Jurisdiction, with a manufacturer's label indicating that the glass is safety glass.

• Refer to the Army Standard for additional information on View Windows and Vision Panels. View Windows extend from 18"-24" above the floor to the height of the top of the door. Vision Panels extend from 54" above the floor to the height of the top of the door. • Wall, ceiling and floor finishes and movable partitions shall conform to the requirements of the IBC, NFPA and UFC 3-600-01 Fire Protection Engineering for Facilities. Where code requirements conflict, the most stringent code requirement shall apply.

• 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. Interior spaces should be structured to allow maximum flexibility for future modifications.

• Carpet shall be minimum of 2 yarn ply, modular tile conforming to ISO 2551, ASTM D 418, ASTM D 5793, ASTM D 5848, solution dyed, tufted, cut and loop pile, commercial 100% branded (federally registered trademark) nylon continuous filament. Vinyl composition tile (VCT) shall be 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.

• Where ceramic or quarry tile is provided, grout shall be non-staining and resistant to liquid absorption.

• Walls: All wall finish shall be minimum 5/8" painted gypsum board, except where stated otherwise. Gypsum board shall be paperless gypsum board. Use impact resistant paperless gypsum board in corridors and storage rooms. Gypsum wall board shall not be used as a wall finish in the warehouse area below 8 feet above finish floor. The warehouse side of all gypsum wall board partitions shall have a minimum 20 gage sheet metal finish up to a height of 8 feet above the finish floor.

• Corner guards are to be provided on all outside corners of interior walls.

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- All ceiling finishes shall be minimum 5/8" painted gypsum board, except where stated otherwise. Gypsum board shall be paperless gypsum board.
- Unless noted otherwise in this document, all ceiling heights shall be a nominal 9'-0".
- In storage rooms where shelves are provided, interior shall be marked with a red line 1 inch in width and located 18 inches below the lowest point of the sprinkler head.
- Window Treatment: Provide horizontal mini blinds at all exterior windows. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building. Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material. Uniformity of window covering color and material shall be maintained throughout the building.
- Provide interior signage as required by applicable codes and criteria.
- Toilet partition doors shall include latching hardware and coat hooks.
- If automatic flushing toilets are used, the sensors must be hard wired and not battery operated.

Structural Requirements:

- Design and construct as a complete system in accordance with APPLICABLE CRITERIA
- Live Loads: Design live loads shall be per the IBC but not lower than the following minimums.
 - Primary roof members, exposed to work floor (in addition to the uniform load):
Single panel point on lower chord of roof trusses or any point along primary structural members supporting roofs.....2,000 pounds
 - Floor slab:
 - Warehouse: The most stringent loading of the following:
 - Uniform Load.....300 psf
 - Fork lift with lifting capacity of6,000 lb
 - Pallets with average weight of 1200 lb each will be stacked 6 high in pallets storage racks with the first pallet sitting on the floor. (Maximum pallet weight is 2500 lb). Slab shall be designed for all loads induced on slab by racking system.
 - Administration.....80 psf
- Column spacing shall not be less than 25 feet in the long direction of building and 60 feet (in warehouse) in the narrow direction. Columns are to be spaced in such a way as to allow standard industrial shelving for palletized loading. Shelving shall be constructed in a back-to-back double row configuration with no interspersed single rows. Preference is to have no freestanding columns in open warehouse space.

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Electrical Requirements

- Lighting: Interior lighting controls and lighting power density shall be provided in accordance with ASHRAE 890.1. Design luminance shall meet IESNA. All compact fluorescent lamps shall be a minimum of 13 watts. Provided lighting levels shall be within +/- 10% of required lighting levels. All interior areas, other than the Warehouse, shall be illuminated using fluorescent or LED lighting fixtures.
- Voice/data outlets shall be two 8-pin modular (RJ45 type) outlet/connector in a double gang outlet faceplate, one connector labeled voice use and one labeled data use. Copper outlet/connector must be TIA/EIA Category 6 for all projects. All connectors must be 8-pin/8-position insulation displacement terminations wired per T568A (default configuration).
- Wireless access point (WAP): Provide WAP outlets to the building with one-Cat 6, unshielded twisted pair (UTP) cable, to a standard 8-pin modular connector for each wireless WAP outlet. WAP outlets shall be installed in accordance with the Technical Guide for I3A.
- Wall mounted receptacles and dual port (voice/data) communication outlets shall generally be mounted 18" above finished floor unless otherwise noted. Above counter receptacles shall be mounted in the vertical wall space 6" above the counter-top unless otherwise noted.
- Wall mounted CATV outlets shall generally be mounted 7' above finished floor unless otherwise noted.
- Per code, emergency lighting shall be provided in the Mechanical Room.
- Provide mass notification system in accordance with UFC 4-021-01.
- Electrical circuit breaker panels may be located in the corridors if they are provided with locks.
- GFCI outlets shall be installed per electrical code.

Fire alarm Requirements:

- There shall be one complete addressable Fire Alarm System for each building. This system shall consist of a Fire Alarm Panel, a communication device, initiating devices and notification devices. Class type addressable systems shall be installed according to the local fire marshal.
- The fire alarm system shall be designed by a professional Fire Protection Engineer and installed by a National Institute for Certification of Engineering Technologies (NICET) 3 technician.
- All software, software locks, special tools and any other proprietary equipment required to maintain, add devices to or delete devices from the system, or test the Fire Alarm system shall become property of the Government and be furnished to the Contracting Officer's Representative prior to final inspection of the system.

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- Mass Notification system: Mass notification system shall meet intelligibility requirements up to a distance of 30' from the building's perimeter and in all court yards. Visible notification appliances are not required on the building's exterior walls.
- Paging system: A zoned paging system shall be provided throughout the facility and integrated with the telephone system. System may utilize mass notification amplifiers and speakers, but shall be overridden by the mass notification system if mass notification system is activated while the paging system is being utilized. System shall have a minimum capacity of eight zones. Facility shall be zoned per user requirements.

Mechanical Requirements:

Building shall be heated and cooled in accordance with the latest version of ASHRAE criteria and the International Mechanical Code.

Plumbing systems shall be designed in accordance with the latest version of International Plumbing Code.

The fire protection system shall be designed in accordance with latest version of the applicable NFPA and UFC criteria

CORRECTIONS TO THE ARMY STANDARD:

The following items are clarifications or updates to the information in the Army Standard. Where there is a conflict between the information in subparagraphs through below and the Army Standard, the information below governs.

N/A

General Purpose Warehouse

GPW MINIMUM SQUARE FOOTAGE REQUIREMENTS NET SQUARE FEET

Administrative/General Areas

NOTE:

Administrative spaces indicated in this table are maximum for each warehouse size.

Specific facilities may require fewer personnel or a different mix of administrative spaces.

The net area of Administrative/General spaces that are not required by a particular facility may be added to the net area of Warehouse space to maintain the designated Overall Gross Square Footage.

SPACE	NET AREA									Remarks
	30,000 GSF			65,000 GSF			130,000 GSF			
	Quan	Net Area SF	Total Net SF	Quan	Net Area SF	Total Net SF	Quan	Net Area SF	Total Net SF	
Vestibule	1	80	80	1	80	80	1	80	80	
Waiting Area	1	100	100	1	260	260	1	260	260	
Manager's Office	1	144	144	1	144	144	1	144	144	
Private Offices	1	120	120	2	120	240	3	120	360	
Open Offices	8	56	672	16	56	1,344	24	56	2,016	Total Net Incl Aisles
Copy/Storage	1	40	40	1	60	60	1	80	80	
Public and Staff Toilets	2	60	120	2	60	120	2	60	120	
Staff Toilets	2	60	120	2	60	120	2	160	320	
Lactation Room	1	64	64	1	64	64	1	64	64	
Janitor Closet	2	45	90	2	45	90	2	45	90	
Training/Conference Room	1	260	260	1	460	460	1	660	660	
Break Room	1	300	300	1	400	400	1	600	600	
Corridors & Circulation	1	600	600	1	1,200	1,200	1	1,500	1,500	
Stairs and Elevator	0	0	0	1	640	640	1	640	640	

Administrative/General Area Total

2,710

5,222

6,934

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Warehouse/Service Areas

NOTE:

Warehouse space net area may be increased by the amount of Administrative/General space not required by a particular facility.

Overall Gross Square Footage for the building should not be exceeded.

SPACE	NET AREA									Remarks
	30,000 GSF			65,000 GSF			130,000 GSF			
	Quan	Net Area SF	Total Net SF	Quan	Net Area SF	Total Net SF	Quan	Net Area SF	Total Net SF	
Warehouse			25,010			55,363			115,846	
Mechanical Rooms			840			1,460			2,090	
Main Electrical Room	1	200	200	1	300	300	1	300	300	
Remote Electrical Room	1	80	80	3	80	240	3	80	240	
Telecom Room	2	80	160	3	80	240	3	80	240	
Forklift Recharge area										Incl in Warehouse
Secure Storage (cage)										Incl in Warehouse
Covered Dock			800			1,750			3,500	Half Scope Area

Warehouse/Service Area Total	26,690	58,478	120,466	Dock at 1/2 area
Net Building Area	29,400	63,700	127,400	
Allowance for Exterior Walls @ 2%	600	1,300	2,600	
Total Building GSF	30,000	65,000	130,000	

General Purpose Warehouse

1. SPACE: VESTIBULE

- **FUNCTIONAL DESCRIPTION:** Provide separate entrance to exterior. Minimize mechanical air transfer of high traffic doors. Flooring serves to promote cleanliness by removing excess dirt from shoes.
- **ADJACENCIES:** Vestibule shall be on direct path from parking. Opens into lobby.
- **OCCUPANTS:** GPW users
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, durable (able to withstand wet and dirt conditions), easily repairable, and easy to maintain. Flooring shall be non-slip. A 4" covered wall base material, appropriate for the flooring material used, is required. Depressed walk-off mat required.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, repairable, easy to maintain, and durable. Painted GWB walls. Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall and column outside corners. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guards.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include resistance to environmental conditions, such as changes in air pressure and high humidity, and shall be durable.
- **DOORS/FRAME:** 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, sub frames, transoms, sidelights, trim, applied mountings, 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, including applicable ATFP requirements.
 - **Finish Hardware:** All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Plastic cores are unacceptable. Provide closers and exit devices..

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• ENTRY DOOR REQUIREMENTS:

- **SPECIAL HARDWARE AND ELECTRICAL REQUIREMENTS:** Provide an Intrusion Detection System (IDS) for each entry door. Intrusion Detection System shall include control panel, balanced magnetic switches and motion sensors unless specified otherwise.
- Non Destructive Emergency Access System (NDEAS): Furnish and install a Knox-Vault 4400 Series (Single Lock Model) mounted on the exterior, adjacent to the Main Entry.
- Provide buzzer type access system at entry including following features:
 - Buzzer that sounds at reception desk.
 - Intercom system for communication between reception desk and entry.
 - Electronic lock system. Features of electronic lock system shall include:
 - Control of access into facility at reception desk.
 - Manual override of electronic lock by key from the outside.
 - Manual override to allow the doors to unlock from the interior.
 - Ensure the locking mechanism does not negate the use of the panic hardware during emergency evacuation. The fire department shall be provided with a key to the manual override.
- **AUXILIARY HARDWARE: PROVIDE WALL OR FLOOR STOPS FOR ALL EXTERIOR DOORS THAT DO NOT HAVE OVERHEAD HOLDER/STOPS. PROVIDE OTHER HARDWARE AS NECESSARY FOR A COMPLETE INSTALLATION.**

• **AUTOMATIC DOOR OPERATION REQUIREMENT:** Provide ADA approved automatic door operators at outer and inner doors for handicapped accessibility. The automatic door operators at inner door shall be interlocked with Buzzer Access System controls.

• **SPECIAL ELECTRICAL REQUIREMENTS:** Provide a buzzer at inner set of doors that sounds at the reception desk. Provide intercom connection with Reception Desk. Provide power for lock mechanism at inner doors.

• **VISION PANELS/VIEW WINDOWS:** N/A

• **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** N/A

• **HVAC:** Provide heating and air conditioning in accordance with the latest ASHRAE criteria

• **PLUMBING:** Not applicable for this area

• **ELECTRICAL:** Provide junction box and raceway for CCTV camera. Note that power for camera is provided as part of data cable. Confirm exact location of the CCTV camera with end users. Provide 1 (one) wall mount duplex receptacle for housekeeping purposes. Provide lighting level at 10 foot candles (+/- 10%) and controlled by occupancy sensor(s).

• **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.

General Purpose Warehouse

- **SPECIAL REQUIREMENTS:**

- a) Provide one bulletin board at each entry vestibule. Bulletin board shall be 4'-0" high and 6'-0" wide. Bulletin boards shall have a header panel and shall have lockable, glazed doors.

- **ADDITIONAL INFORMATION:** N/A

General Purpose Warehouse

2. SPACE: WAITING AREA

- **FUNCTIONAL DESCRIPTION:** A waiting area for visitors. Provide an area for seating.
- **ADJACENCIES:** Shall be adjacent to the vestibule. Shall also have direct access to the toilets.
- **OCCUPANTS:** GPW users
- **AREA:** See Minimum Square Footage Requirements.
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy cleaning, durable, easily repairable, and easy to maintain. A 4" coved wall base material, appropriate for the flooring material used, is required
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, repairable, easy to maintain, and durable. Wall material shall have the ability to absorb pushpins. Wall surface shall be able to withstand tape peeling. Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall and column outside corners. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guards.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. A "designer" ceiling system may be used in this area.
- **DOORS/FRAME:** Aluminum storefront, non-thermal break type.
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A
- **VISION PANELS/VIEW WINDOWS:**
- **HVAC:** Provide heating and air conditioning in accordance latest edition of ASHRAE criteria
- **PLUMBING:** Provide a total of 2 (two) electric water coolers adjacent to the public toilets, one adult ADA height, and one at 20" above finish floor.
- **ELECTRICAL:** Provide GFCI receptacles for electric water coolers, 1 (one) wall mount duplex receptacle for CCTV (security video) monitor, and a minimum of 1 (one) wall mount duplex receptacle for housekeeping purposes. Provide lighting level at 10 foot candles (+/- 10%) and controlled by occupancy sensor(s).
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.

General Purpose Warehouse

- **SPECIAL REQUIREMENTS:**

- a) A CCTV (security video) monitor shall be mounted on the wall so that it is visible from the reception desk, as shown in the Security and Monitoring Plans.
- b) Stairwell (2) - The flooring in stairwell landings will be of vinyl composition tile with 4" covered vinyl base. Stair treads and risers to be rubber, with painted steel handrails. Underside of stairs to be exposed, painted. Partitions extend to deck above, and ceiling is exposed. One stairwell to serve, and provide access to, top of Administrative deck and roof of building.
- c) Passenger Elevator – 100 SF, Hydraulic passenger elevator with adjacent equipment room. Provide a state licensed elevator inspector to inspect the installation, test all new elevators, applicable to project, and certify in writing that they meet all requirements.

- **ADDITIONAL INFORMATION:** N/A

- **FURNITURE/FIXTURES/EQUIPMENT (FF&E):** Visitor seating

General Purpose Warehouse

3. SPACE: PRIVATE OFFICES

- **FUNCTIONAL DESCRIPTION:** Offices for the CDC management staff. Includes a private office for Manager, a private office for the Assistant Manager, and an open office area. Area includes (xx) private office (xxx sf). Provide separate entrance to exterior and warehouse.
- **ADJACENCIES:** Shall be adjacent to the Lobby. Private office shall open off of the Open Office area.
- **OCCUPANTS:** Staff
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy cleaning, maintain, and repair. Use of a low profile raised floor required (Reinforced FreeAxez or Equal). A 4" coved wall base material, appropriate for the flooring material used, is required. Area consists of carpet tile flooring.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to repair, easy to maintain, and durable. Standard floor-to-ceiling steel stud partitions. Wall material shall have the ability to absorb pushpins. Wall surface shall be able to withstand tape peeling. Painted GWB walls. Extend walls to underside of ceiling grid.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Use of a Screw-slot grid, acoustical locking angle and 24" x 24" tegular tile (9'-0" AFF). Ceiling grid shall provide a level termination and horizontal support for walls.
- **DOORS/FRAME: WOOD DOORS• VISION PANELS/VIEW WINDOWS:**
 - Exterior windows: Provide insulated, high efficiency window systems, with thermally broken frames complying with applicable codes and criteria. Operable windows shall be furnished with locks, and fiberglass or aluminum insect screens removable from the inside. Curtain wall 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. Window sills shall be designed to discourage bird nesting.
 - Window Treatment: Provide horizontal mini blinds at all exterior windows. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building. Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material. Uniformity of window covering color and material shall be maintained throughout the building.
- **HVAC:** Provide heating and air conditioning in accordance latest edition of ASHRAE criteria.

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- **PLUMBING:** Not applicable for this area
- **ELECTRICAL:** Provide 1 (one) wall mount duplex receptacle per wall in conjunction with the proposed equipment, furniture layouts and for general purpose use. Provide one duplex receptacle adjacent to CATV outlet. Provide lighting level at 30 foot candles (+/- 10%) and controlled by vacancy sensor(s).
- **TELECOMMUNICATION:** Provide 1 (one) CATV outlet and at least 1 (one) voice/data outlet in conjunction with the proposed furniture layouts.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
 - a) Copier/scanning station in the Area shall be located along an interior circulation path and will be enclosed with walls extending to underside of deck above, and door equipped with closer.
- **ADDITIONAL INFORMATION:** N/A
- **FURNITURE/FIXTURES/EQUIPMENT (FF&E):** As required by facility.
- **DESIGNER OPTION:** Administrative Offices - If desired by the installation, one or two more private offices, not to exceed 90 net square feet, may be provided in the open office area. The addition of these offices shall not affect the arrangement or size of any other function or space.

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4. SPACE: OPEN OFFICES

- **FUNCTIONAL DESCRIPTION:** Workstations for the staff. An open office area.
- **ADJACENCIES:** Shall be adjacent to the Lobby. A general office copy/storage room shall be accessible from this area.
- **OCCUPANTS:** Staff
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, maintain, and repair. Use of a low profile raised floor required (Reinforced FreeAxez or Equal). A 4" coved wall base material, appropriate for the flooring material used.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to repair, easy to maintain, and durable. Wall material shall have the ability to absorb pushpins. Wall surface shall be able to withstand tape peeling. Painted GWB walls. Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall and column outside corners. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guards.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Use of a Screw-slot grid, acoustical locking angle and 24" x 24" tegular tile (9'-0" AFF)
- **DOORS/FRAME:** N/A
- **SPECIAL ELECTRICAL REQUIREMENTS:** Provide under floor power and data/voice cabling to workstations using floor monuments or panel in-feeds. Provide a minimum of two duplex power outlets and three data/voice outlets per workstation, or as required by the facility.
- **VISION PANELS/VIEW WINDOWS:** Window Treatment: Provide horizontal mini blinds at all exterior windows. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building. Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material. Uniformity of window covering color and material shall be maintained throughout the building.
- **HVAC:** Provide heating and air conditioning in accordance latest edition of ASHRAE criteria.
- **PLUMBING:** Not applicable for this area
- **ELECTRICAL:** Provide a minimum of 2 (two) duplex receptacles for each workstation. Provide lighting level at 30 foot candles (+/- 10%) and controlled by occupancy sensors.

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- **TELECOMMUNICATION:** Provide 1 (one) voice/data outlet for each workstation. Provide data outlets along an interior circulation path and adjacent to wall mount duplex receptacle to support copier/scanner stations.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:** Copier/scanning station in the Open Office Area shall be located along an interior circulation path and will be enclosed with walls extending to underside of deck above, and door equipped with closer.
- **ADDITIONAL INFORMATION:** N/A
- **FURNITURE/FIXTURES/EQUIPMENT (FF&E):** Open office work stations with overhead storage, file and storage pedestals, task lighting and raceways for power and data/voice cabling.

General Purpose Warehouse

5. SPACE: COPY/STORAGE

- **FUNCTIONAL DESCRIPTION:** General storage for office supplies and other supplies.
- **ADJACENCIES:** Located adjacent to the Open Office Area. Other storage rooms shall be adjacent to the areas they serve (such as Training Room, etc.)
- **OCCUPANTS:** Staff
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, maintain, and repair. A 4" coved wall base material, appropriate for the flooring material used, is required.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to repair, easy to maintain, and durable. Walls shall be painted gyp board. Extend walls to underside of structural deck above, or provide gyp. board ceiling.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and free of sags or other defects.
- **DOORS/FRAME:** Hollow Metal Doors and Frames
- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **HVAC:** Provide heating and air conditioning in accordance latest edition of ASHRAE criteria.
- **PLUMBING:** Not applicable for this area
- **ELECTRICAL:** Provide a minimum of 2 (two) duplex receptacles to support copier/scanner stations. Provide lighting level at 30 foot candles (+/- 10%) and controlled by occupancy sensors.
- **TELECOMMUNICATION:** Provide a minimum of 2 (two) voice/data outlets adjacent to wall mount duplex receptacle to support copier/scanner stations.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
 1. A minimum of 4 adjustable shelves with heavy duty standards and brackets will be provided. Provide shelves on as many walls of the storage rooms as possible while maintaining adequate circulation space. Shelving shall be able to support 100 pounds per lineal foot.
- **ADDITIONAL INFORMATION:** N/A

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- **FURNITURE/FIXTURES/EQUIPMENT (FF&E): See SPECIAL REQUIREMENTS**

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6. SPACE: TOILETS

- **FUNCTIONAL DESCRIPTION:** Toilet Rooms ((1) Men, (1) Women) - Each toilet room will have sufficient water closets (and urinals in Men's Room) enclosed
- **ADJACENCIES:** Administration area toilets shall be located directly adjacent to the Lobby and Lactation room. Warehouse unisex toilet is an option and shall follow the guidance listed below.
- **OCCUPANTS:** Per code.
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include shall be easy to clean and maintain, and shall be durable. A covered wall base material, appropriate for the flooring material used, is required. Rooms to have non-slip unglazed ceramic with static coefficient of 0.6 or better.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include shall be easy to clean and maintain, and shall be durable. On all walls, a minimum 48" tall wainscot is required that is impervious to water and be able to withstand daily sanitizing. Walls extend to structural deck above with smooth ceramic wall tile finish to a height of 48" and with painted GWB on all remaining wall surfaces.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and free of sags or other defects. Ceilings will be moisture-resistant plaster or pointed-and-taped gypsum board.
- **DOORS/FRAME:** Salient characteristics include durability. Doors, frames, and hardware shall be able to withstand constant opening and closing. Door shall be fitted with a locking mechanism and lever type handle that allows the door to be opened from the inside while locked. Doors shall be provided with self-closing device. Insulated Hollow Metal Doors: Comply with applicable codes and criteria. Doors shall be minimum Level 3, Physical Performance Level A, Model 2; factory primed. 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.
Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A

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- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** Toilet countertops and all other countertops with sinks shall have integral covered backsplash. Toilet countertops shall be minimum ½-inch thick cast 100 percent acrylic polymer solid surfacing material with waterfall front edge and integral covered backsplash. Provide cabinets complying with AWI Quality Standards. Countertops shall have waterfall front edge. Toilet countertops and all other countertops with sinks shall have integral covered backsplash. Toilet countertops shall be minimum ½-inch thick cast 100 percent acrylic polymer solid surfacing material with waterfall front edge and integral covered backsplash.
- **TOILET PARTITION/ ACCESSORIES:** floor mounted, overhead braced partitions. 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. Each room to include ADA compliant mirror, soap dispenser for each lavatory, paper towel dispenser / trash receptacle, and toilet paper dispenser for each WC. At least one of each fixture type per restroom to be ADA compliant (includes required grab bars, mounting heights of fixtures, etc.). Provide following fixtures: Men: (1) WC, (1) Urinal, (2) Lavatory, Women: (2) WC, (2) Lavatories.
- **HVAC:** Provide heating, cooling and ventilation in accordance with the latest ASHRAE and International Mechanical code criteria requirements.
- **PLUMBING:** 1 ADA compliant water closet, and 1 ADA compliant lavatory in each. A floor drain is required in this area that shall be self priming, or designed to prevent sewer gases from entering the occupied space by a proven and maintenance-free design. Toilet area plumbing systems shall meet the criteria requirements set forth in the latest version International Plumbing Code criteria.
- **ELECTRICAL:** Provide lighting level at 20 foot candles (+/- 10%) and controlled by occupancy sensor(s). Ensure appropriate lighting is provided above the mirror. Provide 1 (one) GFCI outlet near the lavatory.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
- **ADDITIONAL INFORMATION:** N/A

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7. SPACE: LACTATION ROOM

- **FUNCTIONAL DESCRIPTION:** ABA compliant area for female staff. Large enough for a chair and an adjacent flat surface. Electrical outlet is needed.
- **ADJACENCIES:** Located directly adjacent to the staff toilets.
- **OCCUPANTS:** 1 person.
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include shall be easy to clean and maintain, and shall be durable. A covered wall base material, appropriate for the flooring material used, is required. Rooms to have non-slip unglazed ceramic with static coefficient of 0.6 or better.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include shall be easy to clean and maintain, and shall be durable. Walls extend to structural deck above with painted GWB on all remaining wall surfaces, able to withstand daily sanitizing.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and free of sags or other defects.
Ceilings will be moisture-resistant plaster or pointed-and-taped gypsum board.
- **DOORS/FRAME:** Salient characteristics include durability. Doors, frames, and hardware shall be able to withstand constant opening and closing. Door shall be fitted with a locking mechanism and lever type handle that allows the door to be opened from the inside while locked. Doors shall be provided with self-closing device. Insulated Hollow Metal Doors: Comply with applicable codes and criteria. Doors shall be minimum Level 3, Physical Performance Level A, Model 2; factory primed. 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.
Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.

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- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** Countertops and all other countertops with sinks shall have integral covered backsplash. Countertops shall be minimum ½-inch thick cast 100 percent acrylic polymer solid surfacing material with waterfall front edge and integral covered backsplash. Provide cabinets complying with AWI Quality Standards. Countertops shall have waterfall front edge.
- **HVAC:** Provide heating and air conditioning in accordance latest version of ASHRAE criteria.
- **PLUMBING:** A lavatory in accordance with the latest version of the International Plumbing Code criteria.
- **ELECTRICAL:** Provide lighting level at 20 foot candles (+/- 10%) and controlled by occupancy sensor(s). Provide 1 (one) GFCI outlet near the lavatory.
- **TELECOMMUNICATION:** Provide 1 (one) voice /data outlet.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS: As required by facility**
- **ADDITIONAL INFORMATION:** N/A
- **FURNITURE/FIXTURES/EQUIPMENT (FF&E):**
 - Arm chair
 - Small refrigerator

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8. SPACE: JANITOR CLOSET

- **FUNCTIONAL DESCRIPTION:** Space to store janitor's equipment and cleaning supplies.
- **ADJACENCIES:** Located next to the toilets.
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include shall be easy to clean and maintain, and shall be durable. A 4" covered wall base material, appropriate for the flooring material used, is required.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include shall be easy to clean and maintain, and shall be durable. Walls shall be able to withstand moving of mop buckets and other janitorial supplies, and shall be able to resist damage due to moisture. Walls to be painted GWB
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and free of sags or other defects. Shall have a minimum CAC rating of 40. Suspended grid and tile at 9'-0" AFF.
- **DOORS/FRAME:** Salient characteristics include durability. Doors, frames, and hardware shall be able to withstand constant opening and closing. Door shall be fitted with a locking mechanism and lever type handle that allows the door to be opened from the inside while locked. Door shall be provided with minimum half-height glass. Door shall open 180 degrees into the corridor. Doors shall be provided with self-closing device. Insulated Hollow Metal Doors: Comply with applicable codes and criteria. Doors shall be minimum Level 3, Physical Performance Level A, Model 2; factory primed. 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. Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.
- **HVAC:** Local exhaust vent ventilation is required and shall be in accordance with the latest version of ASHRAE and International Mechanical Code Criteria.
- **PLUMBING:** A janitor's floor mop sink is required. Floor drain is required in this area. A vacuum breaker is required. Janitor closet shall have a 10-inch deep floor mounted stainless steel mop sink, with hot and cold service faucet. Follow the latest version of International Plumbing Code criteria.

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- **ELECTRICAL:** Provide a minimum of 1 (one) wall mount GFCI duplex receptacle. Provide lighting level at 5 foot candles (+/- 10%) and controlled by occupancy sensor(s).
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
 - a) a four holder mop rack
 - b) two 18 inch deep by 48 inch long heavy duty stainless steel shelves for storage of cleaning supplies. Shelves shall be able to support 100 pounds per lineal foot.
 - c) Janitor closet shall have space for storage of buckets and vacuum.
- **ADDITIONAL INFORMATION:** N/A

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9. SPACE: TRAINING / CONFERENCE ROOM

- **FUNCTIONAL DESCRIPTION:** To facilitate training/distance learning by staff.
- **ADJACENCIES:** Directly accessible from the corridor.
- **OCCUPANTS:** Staff.
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy cleaning, maintain, and repair. A 4" coved wall base material, appropriate for the flooring material used, is required. Carpet tile flooring.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to repair, easy to maintain, and durable. Wall surface shall have the ability to absorb pushpins and to withstand tape peeling. Shall have a minimum STC rating of 45. Room consists of, painted GWB walls. Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall and column outside corners. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guard.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Shall have a minimum CAC rating of 40. 24" x 24" acoustical ceiling grid and tile (9'-0" AFF).
- **DOORS/FRAME:** Salient characteristics include durability. Doors, frames, and hardware shall be able to withstand constant opening and closing. Doors shall be provided with self-closing device. Doors shall be a minimum of half-height glass. 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. Provide wood doors at all interior locations except noted otherwise. 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.
Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A

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- **VISION PANELS/VIEW WINDOWS:** Salient characteristics include easy to clean and able to withstand continuous use. Individual windows shall be single hung, with only the top portion operable. Screens shall be provided. (Applicable to Small facility only.) Window Treatment: Provide horizontal mini blinds at all exterior windows. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building. Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material. Uniformity of window covering color and material shall be maintained throughout the building.

- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** N/A

- **HVAC:** Provide heating and air conditioning in accordance with latest version of ASHRAE criteria.

- **PLUMBING:** Not applicable for this area

- **ELECTRICAL:** Provide a minimum of 6 (eight) duplex receptacles evenly spaced along the walls of the room. Provide power outlets for projector and screen. For conference room, provide two floor mount duplex receptacles under conference table.

Provide lighting level at 40 foot candles (+/- 10%) and controlled by occupancy sensors and dimmer (continuous, flicker-free dimming from 100% to 10%) or a multilevel switching scheme (with one inboard lamp switched separately from outboard lamps to provide distinct, evenly distributed lighting levels.)

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- **TELECOMMUNICATION:** Provide a minimum of 2 (two) wall mount voice/data outlets. For conference room, provide 2 (two) floor mount voice/data outlets adjacent to floor mount duplex receptacles. Following is example of floor mount duplex receptacles and voice/data outlets installed under conference table.



- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
 - a) white board,
 - b) projection screen
 - c) projection machine
- **ADDITIONAL INFORMATION:** N/A
- **FURNITURE/FIXTURES/EQUIPMENT (FF&E):**
 - a) conference table
 - b) chairs

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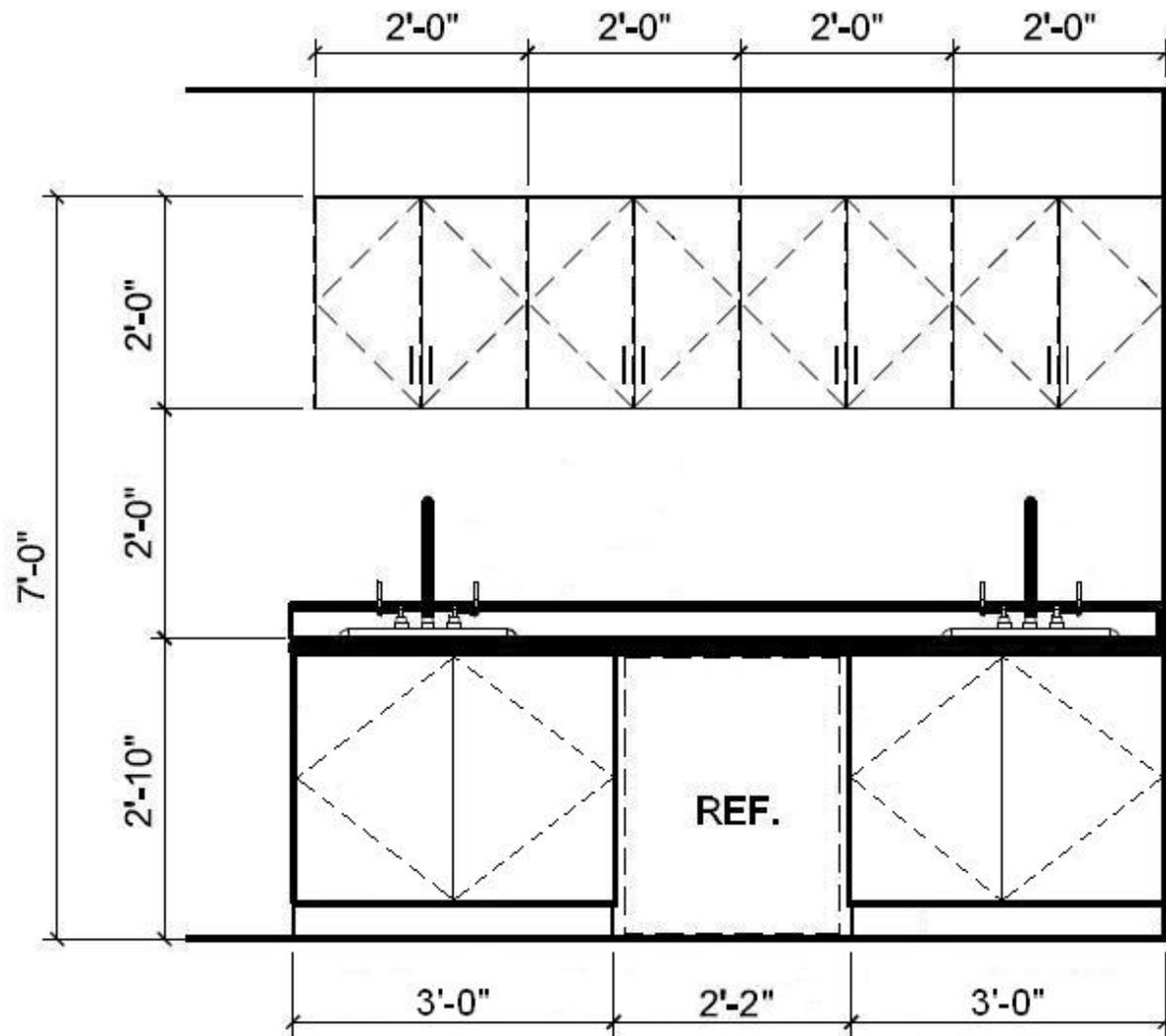
10. SPACE: BREAK ROOM

- **FUNCTIONAL DESCRIPTION:** If possible, this room shall be located in the facility along an exterior wall to allow for windows.
- **ADJACENCIES:** Directly accessible from the corridor.
- **OCCUPANTS:** GPW staff
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, durable, easily repairable, and easy to maintain. A 4" coved wall base material, appropriate for the flooring material used.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include easy to clean, repairable, easy to maintain, and durable. Wall surface shall have the ability to absorb pushpins and to withstand tape peeling. Shall have a minimum STC rating of 45. Wall covering shall be painted GWB. Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall and column outside corners. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guard.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Shall have a minimum CAC rating of 40.
- **DOORS/FRAME:** 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. Provide wood doors at all interior locations except noted otherwise. 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. Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.

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- **VISION PANELS/VIEW WINDOWS:** Window Treatment: Provide horizontal mini blinds at all exterior windows. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building. Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material. Uniformity of window covering color and material shall be maintained throughout the building.
- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** Contractor shall provide 50 linear feet of base cabinets, 24" deep, 34" high, with an integral 4" high back-splash. Except for the ADA cut-out under the sink, base cabinets shall include one drawer and one internal adjustable shelf, with door. The cabinet top, edges, and back-splash shall be high pressure plastic laminate finish. All other surfaces shall be laminated. Matching wall-mounted cabinets will be provided by Contractor.
- **HVAC:** Provide heating and air conditioning in accordance latest version of ASHRAE criteria.
- **PLUMBING:** Provide kitchen sink and associated plumbing. Follow requirements of the latest version of International Plumbing Code.
- **ELECTRICAL:** Provide GFGI duplex receptacles above backsplash for home type appliances (coffee pot, microwave, etc.) and duplex receptacles for refrigerators and vending machines. Provide lighting level at 30 foot candles (+/- 10%) and controlled by vacancy sensor(s).
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
 - a) Locate a vending area in the Common Break Room.
 - b) Size vending area to accommodate three full size GFGI vending machines.
 - c) Provide space, plumbing, and electrical for vending machines. Half-height, "z-locker", lockable wall lockers, secured to the wall, with a minimum foot print of 15" x 15", shall be provided in this area (total of 10 lockers in the small GPW, 14 lockers in the medium GPW, and 16 lockers in the large GPW). Each locker unit shall be 72" H.
 - d) Provide water for icemaker in refrigerator.
- **ADDITIONAL INFORMATION:** N/A
- **FURNITURE/FIXTURES/EQUIPMENT (FF&E):** Contractor to provide sinks, Microwave ovens, refrigerators, 36" sq. tables, chairs.
- A recommended solution for the Food Prep/Arts and Crafts cabinets in the Break Room is shown below:

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11. SPACE: CORRIDOR

- **FUNCTIONAL DESCRIPTION:** Main Circulation Space. Provide 6' minimum width corridors.
- **MINIMUM FLOOR and WALL BASE CONSTRUCTION/SURFACE PERFORMANCE:**
Salient characteristics include easy to clean, durable, easily repairable, and easy to maintain. A 4" coved wall base material, appropriate for the flooring material used, is required. Base shall be seamless except at inside corners.
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:**
Salient characteristics include easy to clean, repairable, easy to maintain, and durable. Wall material shall have the ability to absorb pushpins. Wall surface shall be able to withstand tape peeling. Also, wall surface shall be durable so that impacts from carts do not damage the wall. Provide surface mounted, high impact resistant, integral color, snap-on type resilient corner guards, extending from floor to ceiling for wall and column outside corners. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guards. Chair rails shall be installed in areas prone to hi-impact use, such as corridors.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:**
Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Shall have a minimum STC rating of 45. 24" x 24" acoustical ceiling grid and tile (9'-0" AFF).
- **DOORS/FRAME:**
All doors that open into the corridor, that are not located within a recessed alcove, must swing 180 degrees to avoid reducing the usable corridor width. Only infrequently-used doors, such as janitor's closet, may open into the corridor without a recess. Doors leading to the outside from the corridor must also be provided with a side light.
Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A
- **VISION PANELS/VIEW WINDOWS:** Window Treatment: Provide horizontal mini blinds at all exterior windows. Uniformity of window covering color and material shall be maintained to the maximum extent possible throughout each building. Window stools shall be minimum ½ inch thick cast 100 percent acrylic polymer solid surfacing material. Uniformity of window covering color and material shall be maintained throughout the building.
- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** N/A

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- **HVAC:** Provide heating and air conditioning in accordance latest version of ASHRAE criteria.
- **PLUMBING:** Provide an electric water cooler, near the lobby as shown on the drawings.
- **ELECTRICAL:** Provide a minimum of one duplex receptacle per corridor for housekeeping purpose. Receptacles shall not exceed 25 feet apart. Provide ceiling mount receptacles for wireless access point (WAP). Coordinate location of receptacles with WAP locations. Provide lighting level at 10 foot candles (+/- 10%) and controlled by occupancy sensors.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:** Corridor SHALL have a minimum clear width of NO LESS THAN 6'-0". To allow for bulletin boards and other projections, recommend maintaining a clear width between walls of at least 6'-2".
- **ADDITIONAL INFORMATION:** N/A

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12. SPACE: MECHANICAL, ELECTRICAL AND TELECOMMUNICATIONS ROOMS

• FUNCTIONAL DESCRIPTION:

- **Mechanical rooms** shall accommodate space for equipment maintenance/repair access without having to remove other equipment. Mechanical, electrical and telecommunications rooms shall be keyed separately for access by Installation maintenance personnel. Filter changes and preventative maintenance shall be performed without requiring access to the facility. Exterior access is required for centralized mechanical room. All telecommunications rooms shall be conditioned space.
- **Electrical room** The flooring shall be vinyl composition tile with 4" rubber base. Walls to be painted GWB with suspended grid and tile at 9'-0"
- **Telecommunications room** will be provided on each floor in accordance with the latest Installation Information Infrastructure Architecture (I3A) guidance. Telecommunications room provides a demarcation point between the outside plant cable and the building telecommunications cabling. Provide an Intrusion Detection System (IDS) for the Sensitive Secure Storage areas Level II and III. The flooring shall be static dissipative vinyl composition tile. Contractor shall provide and install 50 square feet of finish-grade interior, fire treated, 5/8 inch plywood wall panel to serve as a termination board; the plywood shall be finish painted. Contractor will provide and install in a wall cabinet one 5-pound dry chemical fire extinguisher in this room.
- Refer to paragraphs 3.6 MECHANICAL REQUIREMENTS and 3.7 ELECTRICAL AND TELECOMMUNICATIONS REQUIREMENTS for additional information.

• MINIMUM FLOOR and BASE CONSTRUCTION/SURFACE PERFORMANCE:

Salient characteristics include easy to clean, durable, easily repairable, and easy to maintain. A base material, appropriate for the flooring material used, is required. Base shall be seamless except at inside corners.

• MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:

Salient characteristics include easy to clean, repairable, easy to maintain, and durable. Wall material shall have the ability to absorb pushpins. Wall surface shall be able to withstand tape peeling. Also, wall surface shall be durable so that impacts from buggies and carts do not damage the wall.

• MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:

Salient characteristics include ease of accessibility to mechanical system above ceiling, durable, and shall provide an aesthetically pleasing surface, free of sags or other defects. Shall have a minimum STC rating of 45.

• CAT-6 CABLE AND CONNECTION: As required

• DOORS/FRAME: Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated

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with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.

- **HVAC:** Provide heating and ventilation in accordance with the latest version of ASHRAE and International Mechanical Code requirements for mechanical rooms. Telecommunications rooms shall be designed to maintain a constant room temperature of 75 degrees F. Provide separate cooling equipment (separate from building main cooling equipment) for telecommunication rooms.

PLUMBING: For mechanical room provide floor drains with deep traps or trap inserts.

- **ELECTRICAL:** In addition to NFPA 70 requirements, provide a minimum of 2 (two) duplex receptacles in each room mechanical room and one in each electrical and telecommunications room. In addition to the I3A Technical Guide requirements, provide two 120 Volt, 20 Amp receptacles each on a dedicated circuit on the telephone backboard in each telecommunications room.

Provide lighting level at 30 foot candles (+/- 10%) for electrical and mechanical rooms and controlled by switch. Provide lighting level at 50 foot candles (+/- 10%) for telecommunications room and controlled by switch.

- **TELECOMMUNICATION:** Provide 1 (one) wall mount telephone outlet at 48" above finish floor for each room.

- **SECURITY INFRASTRUCTURE:** The security infrastructure shall be installed to support Government furnished equipment including cameras, door alarms, and motion sensors. These devices will be utilized at all exterior entrances with the exception of utility room entrances. Infrastructure shall consist of conduit, pull wire and outlet boxes per user requirements. Conduits shall be homerun from outlet boxes for equipment connection to designated security monitor room.

- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.

- **SPECIAL REQUIREMENTS:** N/A

- **ADDITIONAL INFORMATION:** N/A

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13. SPACE: WAREHOUSE

- **FUNCTIONAL DESCRIPTION:** Standard, high bay, temperature and humidity controlled warehouse. This facility type is to store combustible and non-combustible supplies. Ability to store Class2, Class4, Class6, Class7 and Class9 supplies as defined by AR 700-8. It is intended to be similar, both functionally and technically, to similar warehouse storage facilities in the private sector surrounding the community.
- **ADJACENCIES:** Direct access to admin area and dock.
- **OCCUPANTS:** Small: 4-10, Medium: 15-40, Large: 40-50
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM INTERIOR CLEAR HEIGHT:** 32'-0"
- **MINIMUM FLOOR and BASE CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** Due to the operation of mechanical and electrical systems and devices, sound conditions and levels for interior spaces shall not exceed levels as recommended by ASHRAE handbook criteria.
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **DOORS/FRAME:**
 - a) Vertical Lift doors: Provide 10'H x 8'W sectional or rollup doors at truck docks, openings to exterior dock and for ventilation purposes. For safety reasons provide eyebrows of sufficient width and depth to protect forklift drivers from the elements during inclement weather.
 - b) Truck And Pedestrian Doors - The (xx) large dock rollup doors shall be a minimum of 10'w x 12'h. One 3'-0 x 6'-8" pedestrian door shall also be provided. All doors shall have nylon brush-style weather-stripping to prevent the entry of insects and to protect against external weather conditions.
 - c) Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.
 - d) Electrically Operated Sectional Overhead Doors: Doors shall be industrial class, high-lift sectional overhead doors, electrically operated, with auxiliary hand chain override. In the open position, the horizontal portion of the door shall be aligned with the angle of the

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roof structural elements; and shall be no more than 6 inches below the bottom of the roof structural elements. Doors shall consist of horizontal sections hinged together which operate in a system of tracks to completely close the door opening in the closed position and make the full width and height of the door opening available for use in the open position. Provide a permanent label on the door indicating the name and address of the manufacturer. Doors, components, and methods of installation shall be designed in accordance with DASMA 102. Minimum design wind load shall be 20 psf. Maximum wind load deflection of the door shall not exceed the door height in inches divided by 120 and the door width in inches divided by 120. Doors shall be operable during design wind load when tested in accordance with ASTM E 330. Door sections shall be formed from hot-dipped galvanized steel not lighter than 16 gage with longitudinal integral reinforcing ribs. Meeting rails shall have interlocking joints to ensure a weather tight closure and alignment for full width of the door. Provide sections of the height indicated or the manufacturer's standard. Do not exceed 24 inch height for intermediate sections. Bottom sections may be varied to suit door height. Do not exceed 30 inch height for bottom section. Door sections shall be insulated and shall provide a "U" factor of 0.14 or less when tested in accordance with ASTM C 1363. Interior of door sections shall be covered with steel sheets of not lighter than 20 gage to completely enclose the insulating material. Provide galvanized steel tracks not lighter than 10 gage. Provide vertical tracks with continuous steel angle not lighter than 10 gage for installation to walls. Incline vertical track through use of adjustable brackets to obtain a weather tight closure at jambs. Reinforce horizontal track with galvanized steel angle; support from track ceiling construction with galvanized steel angle and cross bracing to provide a rigid installation. Provide hinges, brackets, rollers, locking devices, and other hardware required for complete installation. Counterbalance doors with an oil-tempered, helical-wound torsion spring mounted on a steel shaft. Provide adjustable spring tension; connect spring to doors with cable through cable drums. Provide cable safety factor of at least 7 to 1. Provide operators of the type recommended by the door manufacturer. Operators shall include electric motor, machine-cut reduction gears, steel chain and sprockets, magnetic brake, brackets, pushbutton controls, limit switches, magnetic reversing contactor, a manual operator as specified below for emergency use and other accessories necessary for operation. The electric operator shall be designed so that the motor may be removed without disturbing the limit switch timing and without affecting the manual operator. The manual operator shall be clutch controlled so that it may be engaged and disengaged from the floor; operation shall not affect limit switch timing. Provide an electrical or mechanical device that disconnects the motor from the operating mechanism when the manual operator is engaged. Provide a galvanized, endless chain operating over a sprocket. Extend chain to within 4 feet of the floor and mount on inside of building. Obtain reduction by use of roller chain and sprocket drive or gearing. Provide chain cleat and pin for securing operator chain. The force required to operate the door shall not exceed 35 pounds. Each door motor shall have an enclosed, across-the-line type, magnetic reversing contactor, thermal overload and undervoltage protection, solenoid-operated brake, limit switches, and control switches. Locate control

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switches at least 5 feet above the floor so the operator will have complete visibility of the door at all times. Control equipment shall conform to NEMA ICS 1 and NEMA ICS 2. Control enclosures shall be NEMA ICS 6, Type 12 or Type 4, except that contactor enclosures may be Type 1. Each control switch station shall be of the three-button type; buttons shall be marked "OPEN," "CLOSE," and "STOP." The "OPEN" and "STOP" buttons shall require only momentary pressure to operate. The "CLOSE" button shall require constant pressure to maintain the closing motion of the door. If the door is in motion and the "STOP" button is pressed or the "CLOSE" button released, the door shall stop instantly and remain in the stop position; from the stop position, the door may be operated in either direction by the "OPEN" or "CLOSE" buttons. Pushbuttons shall be full-guarded to prevent accidental operation. Provide limit switches to automatically stop doors at the fully open and closed positions. Limit switch positions shall be readily adjustable. Provide a safety device on the bottom edge of electrically operated doors. The device shall immediately stop and reverse the door in its closing travel upon contact with an obstruction in the door opening or upon failure of the device or any component of the control system and cause the door to return to the full open position. The door-closing circuit shall be automatically locked out and the door shall be operable manually until the failure or damage has been corrected. Do not use the safety device as a limit switch. Each sectional overhead door shall be furnished with a "headache bar" on the interior and exterior side of the facility. Set bottom of each "headache bar" 6-inches below bottom of door head height and 4-feet from face of door. Each interior "headache bar" shall be suspended from a pair of steel cables mounted on the roof structure. Each exterior "headache bar" shall be suspended from a pair of steel cables mounted on the roof structure or suspended from a pair of steel cables mounted on the upper arm of a structural steel tube "I" structure set in concrete on one side of the door. Use one structural steel tube "I" structure on each side of doors wider than 10-feet. Length of "headache bar" shall be minimum 80% the width of the door and shall be centered on the door width.

- **ENTRY DOOR REQUIREMENTS:** N/A
- **SPECIAL HARDWARE AND ELECTRICAL REQUIREMENTS:** N/A
- **AUTOMATIC DOOR OPERATION REQUIREMENT:** N/A
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A
- **VISION PANELS/VIEW WINDOWS:** N/A
- **HVAC:** Provide heating, ventilation, and air conditioning in accordance latest version of ASHRAE criteria.
- **PLUMBING:** Not applicable for this area

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- **ELECTRICAL:** Provide duplex receptacles along warehouse wall. Provide duplex receptacles in warehouse and mount on storage racks or columns at 48" minimum above finished floor. Receptacles shall not exceed 25 feet apart. Provide at a minimum of two battery-charging receptacles for fork-lift equipments. Provide lighting level at 10 foot candles (+/- 10%) and controlled by occupancy sensors for individual aisle groups. All of the warehousing lighting levels shall be measured 48 inches from the floor.
- **TELECOMMUNICATION:** Provide voice communication between offices, shipping/receiving and all areas of the warehouse. Following is example of receptacle and voice communication installed in a typical warehouse.



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- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria.
- **SPECIAL REQUIREMENTS:**
 - a) Provide guard rails. Guardrails shall protect all exterior walls with minimum 17" high single guard rails and all interior walls with minimum 44" high double guard rails adjacent to the defined warehouse storage area.
 - b) Customer Pickup: Standard warehouse floor used for storage.
 - c) Ramps with Vertical Lift doors: Provide (xx) ramps with vertical lift doors.
 - d) Corridors: Provide 6 feet minimum width corridors.
- **ADDITIONAL INFORMATION:** N/A
- **DESIGNER OPTION:** The area of Administrative areas indicated in this document which may not be required by a particular facility may be added to the net warehouse area to maintain the total building gross square footage.
 - a) Team area – provide in within Warehouse area for 130,000 GSF warehouses:
 - a. Breakroom
 - b. Unisex toilet - Provide toilet facilities to serve the public and administrative personnel assigned to company- provide to meet code.
 - c. Janitor's closet - shall have a 10 inch deep floor mounted stainless steel mop sink, with hot and cold service faucet, a four holder mop rack and two 18 inch deep by 48 inch long heavy duty stainless steel shelves for storage of cleaning supplies. Janitor's closet shall have a space for storage of buckets and vacuum.

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14. SPACE: FORKLIFT RECHARGE AREA

- **FUNCTIONAL DESCRIPTION:** Provide an area for recharging (XX) battery operated forklifts with a capacity of (xxx) lbs. Conventional and standup electrical lifts will be used.
- **ADJACENCIES:** Within the warehouse footprint, direct access to the dock
- **AREA:** See Minimum Square Footage Requirements
- **MINIMUM FLOOR and BASE CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **DOORS/FRAME:** N/A
- **ENTRY DOOR REQUIREMENTS:** N/A
- **SPECIAL HARDWARE AND ELECTRICAL REQUIREMENTS:** N/A
- **AUTOMATIC DOOR OPERATION REQUIREMENT:** N/A
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A
- **VISION PANELS/VIEW WINDOWS:** N/A
- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **HVAC:** See HVAC requirements for Warehouse. No additional exhaust system required in this area.
- **PLUMBING:** Emergency eyewash/ facewah shall be provided. System shall meet the requirements of the latest version of ANSI Z358.1.
- **ELECTRICAL:** Provide at a minimum of two battery-charging receptacles for fork-lift equipments. Provide lighting level at 10 foot candles (+/- 10%) and controlled by occupancy sensor(s).
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria
- **SPECIAL REQUIREMENTS:** N/A
- **ADDITIONAL INFORMATION:** N/A

15. SPACE: DOCK

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- **FUNCTIONAL DESCRIPTION:** Provide covered exterior dock. Dock shall be 48" (nominal) above hardstand and have 3 vertical lift doors into warehouse. Provide high-capacity, low-maintenance, ergonomically-friendly dock levelers at each truck dock door. Dock height above the hardstand shall be 48". Truck/trailer heights may vary from 36" above their hardstand up to 60" above the hardstand. Provide dock levelers to accommodate this range (using electric lifts). Dock levelers need to be of sufficient width for safe and efficient fork lift operation and have features intended to prevent lifts from driving off the dock when a truck/trailer is not present. Provide features such as dock bumpers suitable to prevent building or truck/trailer damage. Also provide dock seals that will work effectively with standard truck/trailer sizes.

The facility shall have five dock wells must be truck-level height and shall have automatic dock leveling plates, one dock ramp for vans, cars and smaller trucks, (xx) steel rollup doors, one pedestrian door, one stairwell, and a dock ramp for forklifts to enter and exit the facility. Vented electric forklift charging station inside dock. Provide safety rail along edge of dock, stopping to allow clearance at each truck door.

- **ADJACENCIES:** The dock area must be separated from adjacent areas by a 2-hour rated fire.

- **OCCUPANTS:** N/A

- **AREA:** See Minimum Square Footage Requirements

- **MINIMUM FLOOR and BASE CONSTRUCTION/SURFACE PERFORMANCE:** N/A

- **MINIMUM WALL CONSTRUCTION/SURFACE PERFORMANCE:**

- **MINIMUM CEILING CONSTRUCTION/SURFACE PERFORMANCE:** N/A

- **DOORS/FRAME:**

- Finish Hardware: All hardware shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Extension of the existing Installation keying system shall be provided. The Installation's keying system is Best Access Systems B.A.S.I.S. G. 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. Provide closers for all exterior doors, all doors opening to corridors and as required by codes. Exit devices shall be installed all building egress doors.

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- Fire Door Hardware: 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.

- **ENTRY DOOR REQUIREMENTS:** N/A
- **SPECIAL HARDWARE AND ELECTRICAL REQUIREMENTS:** N/A
- **AUTOMATIC DOOR OPERATION REQUIREMENT:** N/A
- **SPECIAL ELECTRICAL REQUIREMENTS:** N/A
- **VISION PANELS/VIEW WINDOWS:** N/A
- **CABINET CONSTRUCTION/SURFACE PERFORMANCE:** N/A
- **HVAC:** Not applicable for this area
- **PLUMBING:** Provide an adequate number of wall hydrants.

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- **ELECTRICAL:** Each loading dock shall be illuminated for security shall be illuminated with building mounted lighting fixtures. Following is an example of lights provided at docking station.



- **TELECOMMUNICATION:** Provide wall mount telephone outlets at 48" above finish floor at shipping/receiving areas.
- **FIRE PROTECTION:** Provide per latest version of NFPA and UFC criteria
- **SPECIAL REQUIREMENTS:**
 - a) Dock Wells - Each dock well shall be designed to service a 53-foot long trailer plus tractor. Floors shall be reinforced concrete with a concrete sealed surface and level. Floor loading shall be adequate for maximum allowable truck/trailer loads. Sump pumps shall be provided. The wells shall be 4'-0" below the floor of the loading dock except for the well for vans, cars, and small trucks. Dock wells should run most of the full length of the building.
 - b) Dock/Truck Guards - To avoid damage to the door jambs from trucking operations, suitable protective posts (bollards) or concrete truck wheel guards shall be provided at all truck entrances.

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- c) Dock Levelers - (xx) 5'd x 7' w automatic pit-type platform levelers are to be provided and installed by the Contractor. The levelers shall be adjustable 6" below and 6" above the platform, and incorporate forward and backward movement of the dockboards themselves. When at rest and in the level position, the levelers shall be supported by steel posts rather than totally dependent on hydraulics. Capacity of levelers shall be rated at 20,000 pounds or more. Also provide dock seals that will work effectively with standard truck /trailer sizes.
- d) Dock Bumpers And Chocks - Rubber bumpers, size 12"d x 24"w x 12"h, are to be installed on both sides of each truck bay per manufacturer's specifications. Truck wheel chocks 8" x 8" shall be provided and chained to the dock by the Contractor.

• **ADDITIONAL INFORMATION:** N/A