

## Predesign Summary Statement

### Project Summary Description

The Contemporary Operating Environment (COE) Instructional Facility at Camp Ripley is a joint undertaking of the Minnesota Departments of Military Affairs (DMA) and Public Safety (DPS). The proposed Instructional Facility would be approximately 20,000 sf of new building construction, consisting primarily of two large training rooms (one for each of the two departments) and supporting reception/administrative offices, break room, restrooms, storage and equipment rooms. New surface parking and a freestanding sign would also be provided.

### Project Budget and Funding

The project will be funded by a mix of state and federal funding from two or more sources. \$5 million in state funding was awarded to DMA for the project in the 2008 bonding session, without a predesign having been submitted. That money will be used for construction of the DPS portion of the building, as well as the construction contingency, design fees and most other soft costs for the entire project. In addition, DMA will obtain \$437,000 from the U.S. Department of Defense for the construction of the portion of the facility used for Minnesota Army National Guard IED Defeat training. Other sources of funding will be pursued for items such as furniture and technology equipment.

### Project Schedule

After completion of the predesign, the project will go through the State Designer Selection process. It is anticipated that a design team for the project will be selected by August 2009, construction documents would be ready for bidding in December 2009, and construction would start in March 2010. DMA and DPS intend to request additional funding for other elements of the COE in the 2010 bonding session.



# Building Project Data Sheet

Name of Project	Camp Ripley Contemporary Operating Environment Instructional Facility
Owner	Dept. Of Military Affairs
Project Location	Area 6, Camp Ripley Training Center, Minnesota
Building Occupancy Type	B
Primary Space Types	Training rooms/Emergency Operations Center and supporting administrative offices
Type of Construction	II-B
<b>Building Size</b>	
Number of Stories	..... 1
Approx. Floor Area	..... 20,000 S.F.
Approx. Site Area	..... 80,000 S.F. (no adjacent property lines are present)
<b>Parking</b>	
Type	Surface
Approx. Area	..... 10,000 S.F.
Number of Stalls	New parking on project site ..... 35 Existing parking lot adjacent to site..... 277
Roofing Type	Flat roofs: ballasted EPDM membrane Sloped roofs: standing seam metal panel
Exterior Wall Type	To be determined
Interior Wall Type	Metal stud with gypsum board
Structural System Type	To be determined
Mechanical System Type	Modular indoor units
Fire Protection System	Full automatic sprinkler system
Electrical System	800 amps, 120/208 volt, three phase, emergency standby power
Technology System	Energy management, fire alarm, fiber optic data access, SATV and cable TV access, wired telecommunications, PA system, video conferencing, HAM radio, central digital clock
<b>Costs</b>	
Predesign Cost	..... \$20,000.00
Construction - DPS Area	..... \$4,061,000.00
Construction - IED Defeat	..... \$437,000.00
IT Cost	..... \$1,040,000.00
FFE Cost	..... \$350,000.00
A/E Fees	..... \$410,000.00
Other Costs	..... \$1,117,000.00
Total Project Cost	..... \$7,435,000.00
<b>Funding Sources</b>	
State funding	
Received in 2008	..... \$5,000,000.00
Other Funding Sources	
National Guard	..... \$437,000.00
To be determined, or reduced through alternates to control budget	..... \$1,998,000.00



- M.3 Minimize use of resources through reduction and management of wastes generated during construction.
- Minimize waste generated from construction through detailing and specifications.
  - Non-destructive detailing for future recycling reuse of building materials to be considered.
  - Specifications to call for contractor to provide Waste Management and Recycling Program Plan.
  - Recycle packaging waste or return to supplier where possible.

## Alternative Energy Sources

In accordance with MN Statute 16B.32 - Alternative Energy Sources, at least 2% of the building's power must come from on-site wind and/or sun sources. The following items are to be considered in order to fulfill this requirement:

- Solar domestic water heating will be used for restroom lavatories and other sinks.
- Solar hot water reheat for multiple zone VAV systems.

See B3 guideline E.2 above for further information.

## Geothermal & Solar Heating-Cooling Systems

In accordance with MN Statute 16B.326 - Geothermal & Solar Heating-Cooling Systems, the design team is to consider the use of geothermal heat pumps and solar water heating systems. See B3 guidelines E.1 and E.2 above for further information.

## Information Technology

An extensive amount of technology equipment is planned for the proposed Instructional Facility, so a Technology Plan is required. However, since the project is relatively small, and involves only a small amount of offices, it is understood that the typical state procedures for submitting a project initiation form, and meeting and coordinating with an O.E.T. analyst and Dept. Of Administration project manager, are waived.

The predesign A/E team worked with a technology consultant to develop the Technology Plan, which can be found in Appendix H - 'Information Technology Documents'. The state "Building Infrastructure Best Practices for State Owned Buildings" guide is also included there.

Verification of the the existing technology utilities capacity is beyond the scope of this predesign, as the details of integrating the project into the Camp Ripley and State IT networks are not resolved. The design team selected for the project will need to verify adequacy of utilities for the needs of the project.

Telecommuting would not be possible for the permanent state-employed staff positions planned for the facility, due to the nature of their responsibilities, which would include reception, setup and A/V equipment operation for all events hosted in the DPS portion of the facility.

Predesign Technology Plan Narrative  
COE Instructional Facility  
May 28, 2009

The proposed COE Instructional Facility has extensive technology requirements. The following narrative describes the functions and features that are typically found in an EOC and/or instructional facility of this type. See Appendix D – ‘Room Program Data Sheets’ for further details, as well as space program and adjacency diagrams showing the nature of the rooms that are anticipated in the facility, and their relationships.

A. Outside Plant Cabling

1. There will need to be underground conduit and voice/data connectivity from the demarcation point of the new building to the Camp’s existing fiber optic and copper outside plant cabling systems.
2. The copper and fiber optic cables serving the new building could connect to the existing cable system at the NE corner of the adjacent parking lot.

B. Horizontal Data/Voice Cabling

1. This facility requires extensive data/voice/video cabling. Users have requested that cable type be Augmented Category-6 (CAT-6a) so as to prevent or forestall needing to re-cable in the future for increased bandwidth requirements.
2. The horizontal data/voice cabling system should be designed and tested for 10 gigabit Ethernet. Whether or not switches and network electronics are purchased to support 10 gigabit Ethernet would be decided later.
3. This request for CAT-6a should be confirmed in subsequent phases for cost-containment and infrastructure (conduit) planning purposes. Applications potentially requiring 10 gigabit Ethernet should be identified, if possible, to justify any extra expense relative to conventional 1-gigabit Ethernet cabling systems (CAT-5e, CAT-6). No 10 gigabit applications have been identified at this point.
4. Approximately 612 voice/data jacks would be needed within the building; the number of these that would be active at any given time would be determined later.
5. Due to the desire to reconfigure the large spaces (COE Training Room, IED Defeat Training Room), floor boxes will need to be used under the raised floor. Sizing of these boxes will need to consider the extensive audiovisual connectivity required. 10’ service loops will need to be provided on all floor box cabling connections to permit relocation of floor box connections within the access flooring.
6. Video cabling (CATV) should be installed with the horizontal data/voice cabling to certain locations requiring video display or audiovisual controls. Cable plant should be designed for



digital clear QAM distribution, with local origination/modulation from outside sources that may include off-air, satellite, cable television, and internal sources. Topology should follow industry standards for digital television delivery.

7. Approximately 30 CATV jacks would be needed within the building.

### C. Security Systems

1. Access Control: users have requested that up to 6 doors be equipped with access control systems, including the GAR/SIM office and adjacent restricted entrance and corridor. Final quantity and designation of secured areas to be determined after building layout is finalized.
2. Surveillance Systems: It is common for this type of facility to have external cameras on the building, to allow for warning of the approach of unauthorized persons. However, given the location at Camp Ripley, this may not be necessary, except for training purposes for city/county/state facilities that are not in as secure a location as the COE training facility. For this reason, at least one exterior IP-based CCTV camera should be planned to cover the main approach to the building, and one interior IP-based camera at the main entrance. Additional cameras may be desired to cover auxiliary entrances/exits, depending on the perceived vulnerability of the building and the needs for simulation/training purposes.
3. Intrusion Systems: Minimal requirements given the location of the facility and that EOC training does not typically include monitoring of internal sensors such as motion detectors or glass breakage sensors.

### D. Audiovisual Systems

1. COE Training Room: The audiovisual system will function in three distinct ways:
  - i. EOC system: to operate in similar fashion to the State EOC, including at least three (3) large projection screens with ceiling-mounted projectors, four (4) large (46" or larger) flat-panel monitors, ability to route various sources to each display, and ideally, to be able to route direct hardwired graphics from user laptops located at the tables up to one or more of the displays. The total number of selectable device inputs will likely exceed 16; the number of displays will exceed 8 (counting feeds to remote rooms) for purposes of estimating and selecting matrix sizes. The audio system will include wireless microphones that allow various event participants to address the entire room and be heard clearly. At least four (4) wireless microphones would be required. Encryption is not a required capability, and users would prefer a replaceable battery type to a rechargeable type. Control systems need to make this large, complicated system simple and easy to operate.
  - ii. EOC Simulation Drills: While performing the functions listed above, the audiovisual system needs to provide audio and video capture of the participants for remote live viewing and record playback for after-action assessment and debriefing purposes. This will require up to six pan/tilt/zoom cameras in the large Training Room, and additional cameras in the Planning, Logistics, Communication, PIO, GAR/SIM, Operations, and Conference Rooms, with the ability on the part of the exercise control personnel to easily control each camera, switch between cameras, and create a recorded narrative/production that is watchable by participants, has good-quality audio, and is easily played back by participants in the breakout rooms or placed onto

a removable media (like DVD) or on a secure website for later download. This will require additional microphones for the room beyond those normally used for the EOC function. The control over these systems and displays of all camera sources will be performed from the Exercise Control Room, which will require a large number of monitors to keep tabs on the 13 or more cameras that will be watching EOC simulation activities, plus the preview/program and recording feeds, plus all of the necessary presentation previews to assist the set-up and signal routing of the EOC display systems.

- iii. General Training: When not used as a back-up EOC or for EOC simulation drills, the room must be simple to use for providing audio/voice reinforcement and for display of computer, video, or other electronic presentation sources, without the complexity engendered by the flexible configuration options of the EOC system or the hands-on control demanded by the simulation drill recording systems. Something akin to a one-button startup and simple source selection that is operable with a minimum of special training (or no training) is required.
2. Status Monitors: 32" or larger flat-panel monitors will be required in each of the breakout rooms, which will display status information from the EOC during a real or simulated event. Each of these monitors should also have a QAM-capable tuner to receive the CATV feed from the building's CATV headend. Monitor size to be determined based on monitor location, room configuration/dimensions, and sightlines from user seats.
3. Electronic Whiteboards: to be provided in all breakout rooms, with integral or closely-mounted projector for video playback and computer integration.
4. Video Conferencing: To be supported in two locations: in the Exercise Control Room for allowing EOC/Training activities to be shared outside of the facility, and in the Secure Conference Room to allow videoconferencing with remote sites. It is anticipated that all videoconferencing activities would be IP-based; provisioning and bridging services would be outside the scope of this project, but would need to be arranged for with the State and care should be taken to ensure sufficient contingency planning for continuity of services (if the State's primary EOC in St. Paul was compromised and the COE facility activated as the backup EOC, might that event also compromise videoconferencing bridging services on the state network?). The audio system in the secure conference room should be designed to pickup the voices of each participant, and include sufficient microphones to do so without picking up extraneous table or equipment noise.
5. Presentations: The Secure Conference Room should also be configured for being able to easily and simply present from a range of computer-based and video sources.
6. Video Monitors: While the status monitors should be able to do dual-duty as displaying either Facility Status announcements or CATV feeds, there are additional monitors which need only display CATV (reception area, break room, possibly in the permanent offices).

#### E. Video Headend

1. It will be desirable to distribute a clear-QAM digital CATV signal within the building, with the sources including in-building content (video signage and video playback), off-air 8VSB digital television broadcasts, satellite, and local cable television sources.
2. This equipment would be located in the Information Technology Equipment Room.
3. Users have requested up to six (6) 4" conduits from this room to the roof, for antenna/dish placement site.

4. Approximately 12 channels would be needed (local broadcast + major cable news/weather channels + in-building sources).
5. One of the in-building source channels would be tied to a local playback device in Exercise Control that would be used to provide “fake” news updates as part of simulation activities.

#### F. Two-Way Radio Communications

1. The State Patrol has indicated that they will attempt to provide a 2-way radio dispatching console for the facility. No project dollars need be budgeted to provide for this component.
2. The amateur radio equipment would be provided by the State Patrol. No project dollars need to be provided for this component.
3. The grounding system of the building needs to be designed to optimize performance and safety for communication radio systems.
4. At least two (2) 4” conduits should be provided from the communications room to the rooftop location where antennas can be mounted.
5. It is unknown at this time whether all desired current and future 2-way radio and radio communication devices, particularly mobile data applications for personal handheld devices, will have service coverage within the building. The building should be designed to allow future addition of an internal distributed antenna system should this function prove necessary.

#### G. Voice & Data Electronics

1. The state of Minnesota will need to provide data switches, of type and quantity appropriate for the number of activated ports and speed of desired network operation.
2. Wireless access points may be desirable for certain specific functions (control, simulation, security, etc.) and should be included, even though most of the computer connections in the building are envisioned and planned as being wired.
3. Telephone devices are assumed to be in the 96-150 count range, and are standard IP-type phones. Approximately a dozen of these would be configured for voicemail.
4. Active switched ports would be provided for all drops – this should be confirmed in subsequent phases for cost estimation.
5. Cost estimate includes 150 IP phones and active switched ports for each of 620 data drops.

#### H. Probable Costs

Outside Plant Cabling:	\$24,500
Horizontal Data/Voice Cabling:	\$185,000
Security Systems:	\$13,500

#### AudioVisual Systems:

Large Training Room	\$220,000
Communications	\$2,500
Operations	\$8,200
Logistics	\$8,200
Planning	\$8,200
PIO	\$6,200
GAR/SIM	\$8,200
Secure Conference	\$36,000
IT Support	\$8,800
Exercise Control	\$44,000
Total	\$350,300

Two-Way Radio Systems:	\$0
Video Headend	\$26,000
Voice & Data Electronics	\$440,000

**Technology Total: \$1,039,300**



### Appendix O - PREDESIGN CHECKLIST - continued

#### PREDESIGN CHECKLIST for TECHNOLOGY & TELECOMMUNICATIONS

Complete N/A

- |                                     |                                     |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. Obtain a copy of Office of Enterprise Technology's (OET's) "Building Infrastructure Guidelines For State-Owned Buildings" and review the requirements for costs to be included in the project. For future design use, should the project be funded, include the Technology Plan and guidelines in the predesign submittal. The technology guidelines are available in the appendix of the state's <i>Design Guidelines</i> .                                  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 2. Coordinate with the Office of Enterprise Technology to form and convene a Predesign meeting to determine the agencies needs, goals, timelines and objectives. The Predesign Team will consist of, but will not be limited to: <ul style="list-style-type: none"> <li>• Agency/customer</li> <li>• State Architect's Project Manager</li> <li>• Telecommunications Analyst (S)</li> </ul> Note: The State's Project Manager will provide the OET contact name. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3. In coordination with OET, determine the need for and develop a Technology & Telecommunications Plan for the project.  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 4. For remodeling projects, verify existing technology infrastructures for adequate capacity. Include upgrade costs in the Cost Estimate.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 5. Identify the user agency's short and long range plans for technology needs.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 6. Identify if the project is or will be a single building or campus configuration.  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 7. Identify existing distribution rooms and their capacity.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. Identify requirements for new distribution rooms.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. Identify Fiber Optic requirements, existing locations, new fiber lines.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 10. Identify copper-wiring requirements, existing and new.   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 11. If telecommunications work is to be within an existing building, identify existing conditions; i.e. Floor & ceiling heights & conditions, piping and duct conditions, water problems, feeder cable limitations, equipment room limitations.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. Identify existing telecommunications infrastructure service to the building.   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 13. Identify types of existing cable trays and requirements for new cable trays.   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 14. For projects in existing buildings, identify available communications "pairs" coming into the building.  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 15. Identify IPOP, APOP and MPOP needs.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 16. Forward a copy of the project Technology Plan to OET.  |

### Appendix O - PREDESIGN CHECKLIST – continued TECHNOLOGY & TELECOMMUNICATIONS

Complete    N/A

- |                                     |                                     |  |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 17. Incorporate any changes into the Technology Plan as requested by OET (resulting from review of agency's technology plan for the project).  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 18. Obtain a written letter from the Office of Enterprise Technology (OET) indicating acceptance of the Technology Plan for the project. Incorporate OET's letter into the Predesign Document. |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 19. Verify existing utility infrastructures for adequate capacity and cost upgrades needed to support the proposed building/facility or renovation.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 20. Project requires a Technology Plan .   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 21. See Appendix P for sample of predesign submittal cover letter.   |





## PREDESIGN SPACE PROGRAM TABULATION SHOWING GROSS AREAS

Space	Gross Area
<b>DPS TRAINING AREA</b>	
Training Room	3,520 sf
Break-Out Rooms	--
Communications Center	390 sf
Communications Equipment	170 sf
Operations	610 sf
Logistics	610 sf
Planning	660 sf
I.T. Support	360 sf
P.I.O.	660 sf
G.A.R. / S.I.M.	500 sf
Secure Conference	610 sf
Exercise Control Room	410 sf
Training Room Storage	400 sf
<b>SUBTOTAL</b>	<b>8,900 sf</b>
<b>DPS ADMIN. AREA</b>	
Lobby / Reception	550 sf
Administrative Work & Storage	660 sf
Permanent Admin. Offices	260 sf
Itinerant Admin. Office Area	200 sf
Media Briefing / Conference	310 sf
Restrooms	110 sf
<b>SUBTOTAL</b>	<b>2,090 sf</b>
<b>COMMON</b>	
Break Room	800 sf
Restrooms	630 sf
<b>SUBTOTAL</b>	<b>1,430 sf</b>
<b>SUPPORT</b>	
General Maint. / Storage (3%)	370 sf
I.T. Equipment	350 sf
Mech. / Elec. Equipment	1,050 sf
Circulation (20%)	2,480 sf
<b>SUBTOTAL</b>	<b>4,250 sf</b>
<b>D.P.S. PORTION TOTAL AREA</b>	<b>16,670 sf</b>
<b>IED DEFEAT AREA</b>	
Training Room	2,150 sf
Admin. Offices	200 sf
Lobby & Entrance	200 sf
Storage	110 sf
<b>SUBTOTAL</b>	<b>2,660 sf</b>
<b>TOTAL BUILDING AREA</b>	<b>19,330 sf</b>



## Appendix D: Room Program Data Sheets

### Space Name Training Room / Emergency Operations Center

#### General Description

Target Net Area	3,200 sf
No. of Spaces Required	1
Occupants	50 - 60 at tables & chairs in EOC simulation, with an additional 40 - 50 standing or sitting for short periods of time during briefings. 60 - 80 at tables & chairs in lecture setup.
Scheduling	On demand, sometimes for several days at a time
Description of Activity	Emergency operations center (EOC) simulation, lecture-style and group training

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Possibly clerestory windows for natural daylighting only (no views in directly from the exterior), with ability to darken room during activities requiring low lighting.
Floors	Access floor for power & communications cabling, with 6 inch height and carpet tile finish
Walls	Sound-absorbing / tackable surface
Ceilings	Sound-absorbing surface and/or baffling; high enough to allow projection screens to be easily viewed over seated people, min. 11 ft.
Specialty Requirements	

#### Furniture and Equipment

Fixed	Four projection screens
Movable	Operable partition in middle, with pocket for storage of partition panels. Rectangular 72" L x 30" W tables for EOC simulation, rectangular 72" L x 24" W tables for lecture setup. Multi-function printer/copier/fax.

#### Adjacencies

Requirements	Surrounded by break-out rooms. At least two doors to corridor, one for each area as divided by operable partition, with door(s) in operable partition
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#### Mechanical

Temperature Controls	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool. DDC controls with VAV box and CO <sup>2</sup> reset of OSA. Two zones; one for each area as divided by operable partition.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 10 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Various lighting levels for different activities, spot lights for presenters, multiple control locations, light controls for single rooms or combined room usage, low glare type lighting
Power	Underfloor boxes with quadplex outlets and 10 feet flex, under each proposed table

## Appendix D: Room Program Data Sheets

### Special requirements

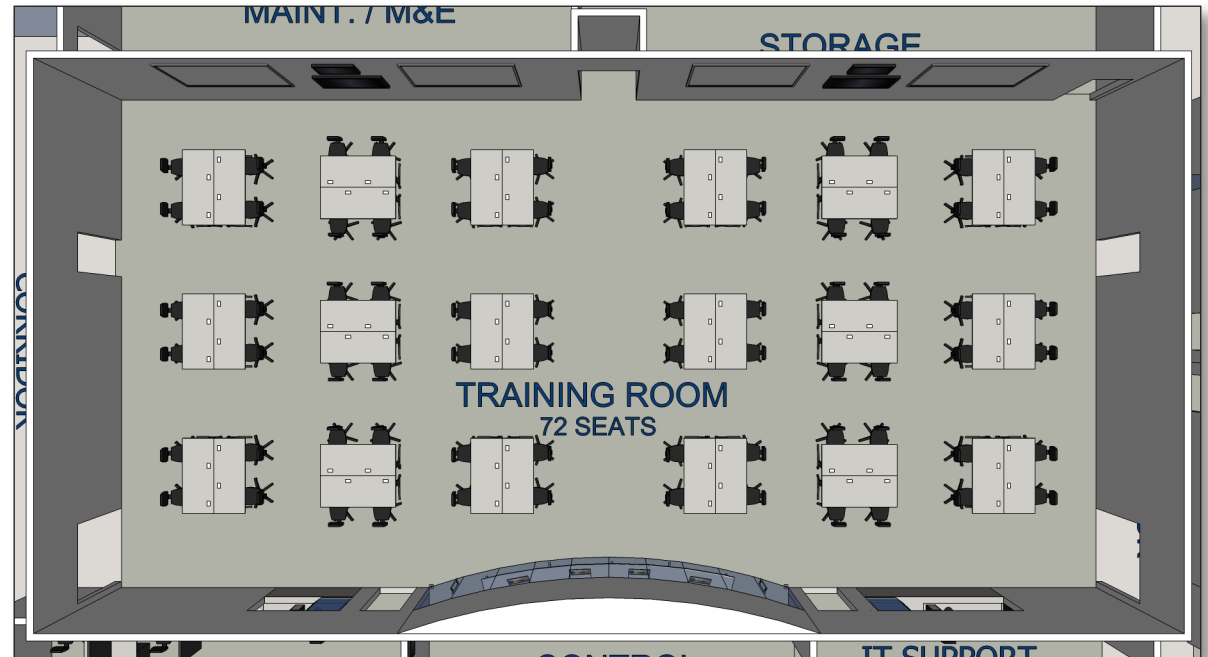
Emergency backup power to entire Training Room, Electric operated projector screens. Digital wall clocks in each space, Power and data raceway to wall-mounted and overhead A/V projection equipment.

### Technology

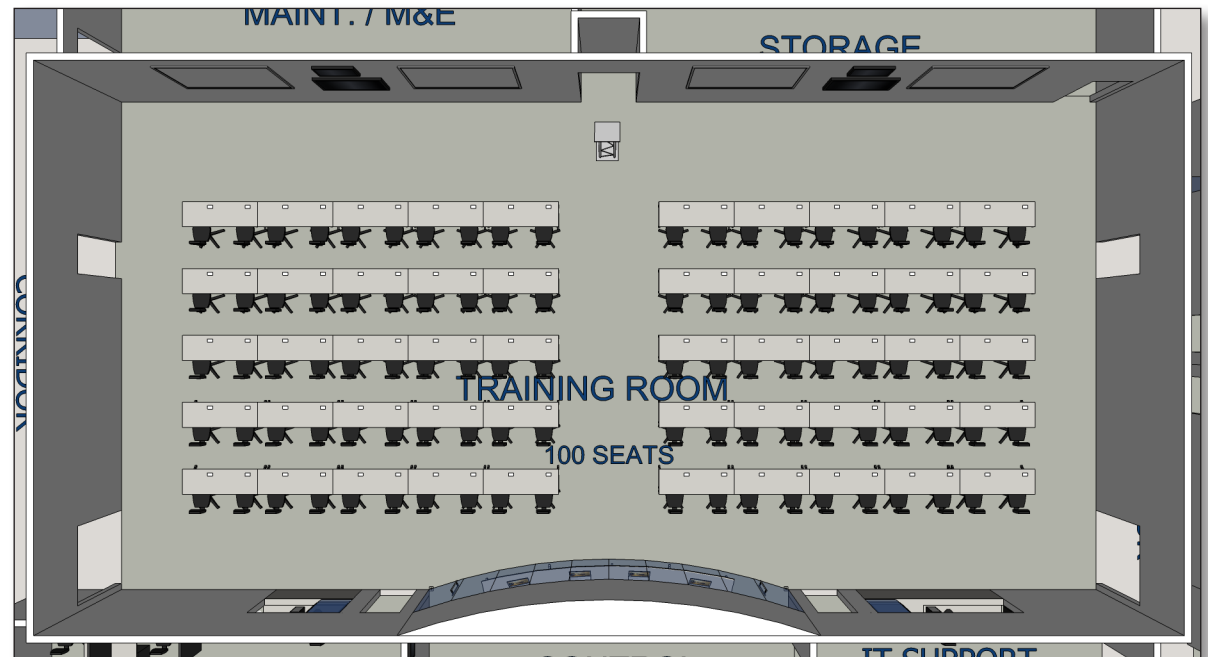
#### Requirements

Phone and data lines; video cameras for recording presentations and video conferencing; 4 projectors, 2 large flat panel TV's, 2 small flat panel TV's for status readout

### Drawings



EOC simulation layout



Lecture layout



## Appendix D: Room Program Data Sheets

### Space Name Break-out Room - Communication Center

#### General Description

Target Net Area	350 sf
No. of Spaces Required	1
Occupants	4
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Coordination of all communications coming in and going out of the facility

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Access floor for power & communications cabling, with 6 inch height and carpet tile finish
Walls	Sound-absorbing surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	4 workstations with high dividing panels to reduce noise between them.
Movable	Multi-function printer/copier/fax.

#### Adjacencies

Requirements	Door to Training Room: provide lock; no closer desired. Doors to Communications Equipment Room and Operations.
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lighting, occupancy sensor control
Power	Isolated ground, UPS backup, and generator backup to UPS,
Special requirements	Iso ground quadplex outlets along and below counters for computer and office equipment, Digital wall clock, Underfloor access to comm equipment room, Raceway to Training Room access floor, Emergency backup power to entire room.

#### Technology

Requirements	Phone and data lines; small flat panel TV for status readout. Headsets will be utilized with radio equipment.
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## Appendix D: Room Program Data Sheets

### Space Name Communication Equipment Room

#### General Description

Target Net Area	150 sf
No. of Spaces Required	1
Occupants	--
Scheduling	--
Description of Activity	Communication service entrance, network servers

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Access floor for power & communications cabling, with 6 inch height
Walls	Painted
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Work table/counter, shelves.
Movable	--

#### Adjacencies

Requirements	Door to Communications. No additional access necessary.
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 68°F heat, 78°F cool.
Controls	DDC controls with alternating lead/lag control.
Air supply/exhaust	Recirculated supply + minimum OSA from adjacent zone. No exhaust.
OSA	0.25 cfm/sf
Plumbing	Condensate drain receptor.
Special requirements	Two dedicated computer grade cooling units (N+1 redundancy).

#### Electrical

Lighting	Standard fluorescent with distribution front and rear of equipment racks
Power	Isolated ground, UPS backup, and generator backup to UPS, local panelboard with MCB
Special requirements	Common ground to room ground bar for equipotential grounding of all equipment, 4 to 6 four inch conduits to roof for antenna cables, Emergency backup power to entire room.

#### Technology

Requirements	Two radio equipment racks.
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#### Additional Requirements

## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Break-out Room - Operations

#### General Description

Target Net Area	550 sf
No. of Spaces Required	1
Occupants	8
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Directs all EOC activity.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	8 workstations
Movable	Multi-function printer/copier/fax.

#### Adjacencies

Requirements	Large opening to Training Room with lockable sliding glass window, and 36"-48" deep work counter below, for occasional pass-through use. Double door into Training Room; provide lock; no closer desired.
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground type quadplex outlets below perimeter counters for computers and office equipment.
Special requirements	Digital wall clock, Raceway to Training Room access floor; Power and data raceway to A/V equipment, Emergency backup power to entire room

#### Technology

Requirements	Phone and data lines; interactive white board(s); small flat panel TV for status readout
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#### Additional Requirements



## Drawing





## Appendix D: Room Program Data Sheets

### Space Name Break-out Room - Logistics

#### General Description

Target Net Area	550 sf
No. of Spaces Required	1
Occupants	8
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Coordination of materials and personnel

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	8 workstations
Movable	Multi-function printer/copier/fax.

#### Adjacencies

Requirements	Door to Training Room: provide lock; no closer desired. Doors to Operations and Planning.
--------------	---

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent-dimming, occupancy sensor controls
Power	Isolated ground type quadplex outlets below perimeter counters for computers and office equipment. Floor outlet under center table with quadplex and data jacks
Special requirements	Digital wall clock, Raceway to Training Room access floor; Power and data raceway to A/V equipment, Emergency backup power to entire room

#### Technology

Requirements	Phone and data lines, min. 2 fax lines; interactive white board(s); small flat panel TV for status readout
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#### Additional Requirements

## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Break-out Room - Planning

#### General Description

Target Net Area	600 sf
No. of Spaces Required	1
Occupants	12
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Forecasting of timelines related to emergencies

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	9 workstations, in groups of 3
Movable	Multi-function printer/copier/fax

#### Adjacencies

Requirements	Door to Training Room: provide lock; no closer desired. Door to Logistics.
--------------	--

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

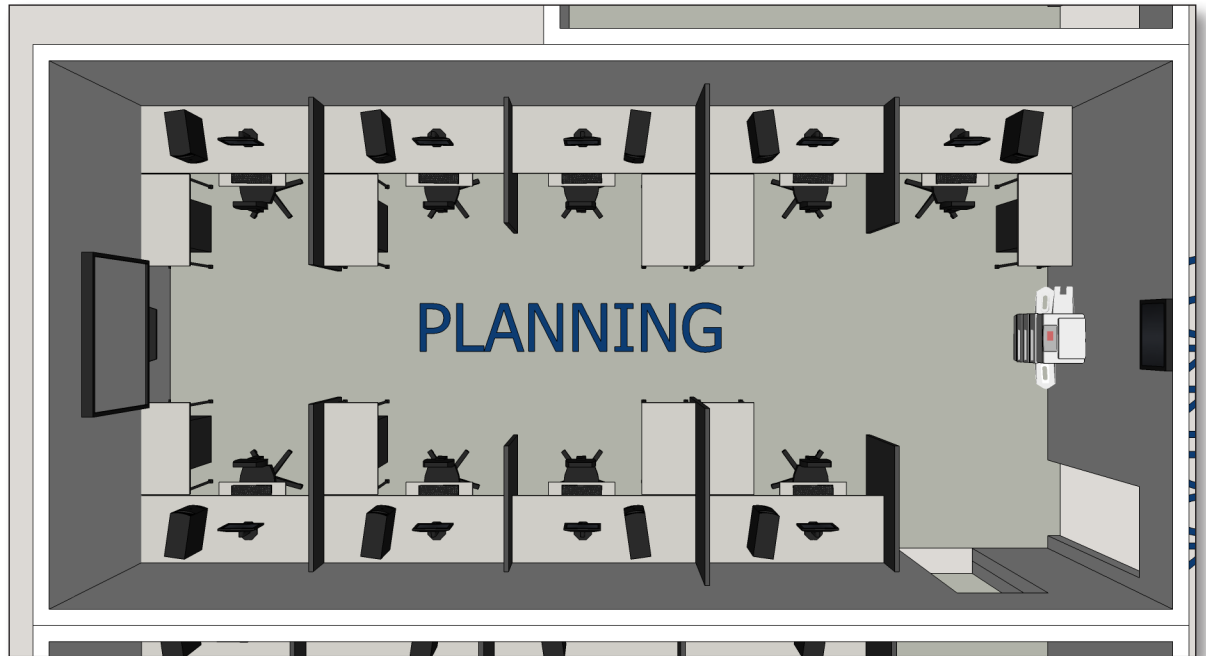
Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground type quadplex outlets below perimeter counters for computers, fax, copiers
Special requirements	Digital wall clock, Power and data raceway for A/V equipment, Raceway to Training Room access floor; Power and data raceway to A/V equipment, Emergency backup power to entire room

#### Technology

Requirements	Phone, fax and data lines; interactive white board(s); small flat panel TV for status readout
--------------	---

#### Additional Requirements

## Drawing





## Appendix D: Room Program Data Sheets

### Space Name Break-out Room - P.I.O. (Public Information Officers)

#### General Description

Target Net Area	600 sf
No. of Spaces Required	1
Occupants	20
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Work area for Public Information Officers, who communicates with the public and media. All contact with public will occur in the Media Briefing Room.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	
Movable	Rectangular 72" L x 24" W tables with chairs in various layouts; computers, document shredders, multi-function printer/copier/fax.

#### Adjacencies

Requirements	Door to Training Room: provide lock; no closer desired. Door to Corridor.
--------------	---

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground type quadplex outlets along perimeter walls for computers and office equipment
Special requirements	Digital wall clock, Raceway to Training Room access floor, Power and data raceway to A/V equipment, Emergency backup power to entire room

#### Technology

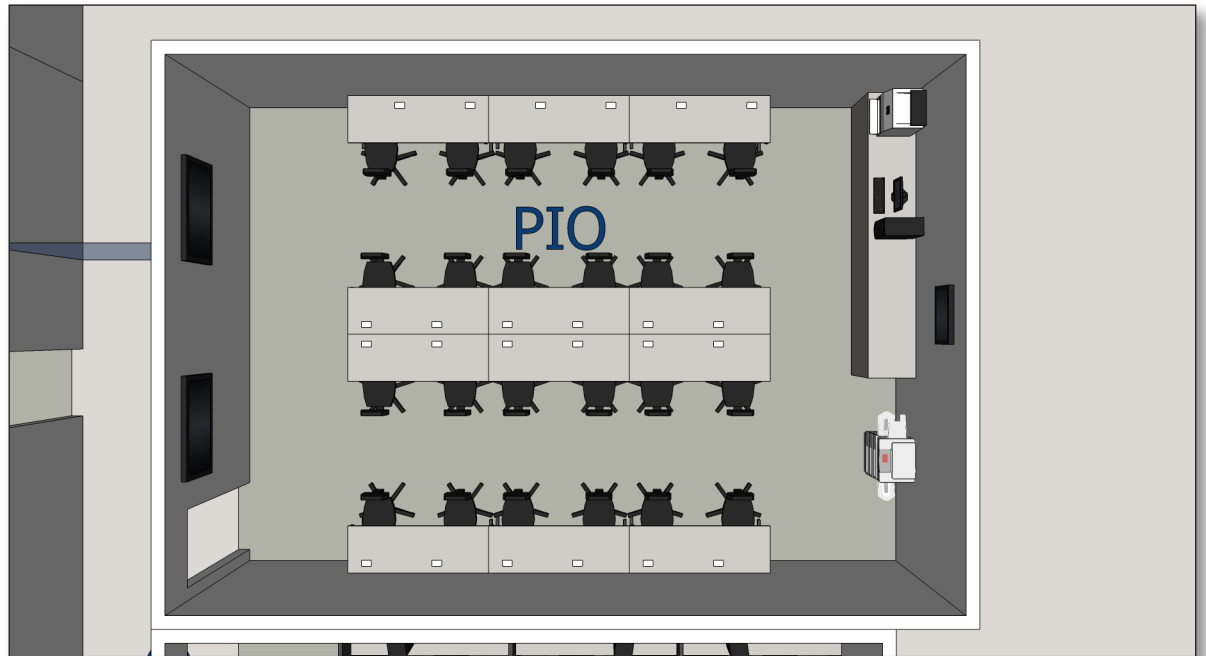
Requirements	Phone and data lines; 2 flat panel TV's for monitoring media, 1 small flat panel TV for status readout
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#### Additional Requirements

Privacy and security are concerns for this room.



## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Break-out Room - G.A.R. / S.I.M.

#### General Description

Target Net Area	450 sf
No. of Spaces Required	1
Occupants	6
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Work area for Governor's Authorized Representative (G.A.R.) and State Incident Manager (S.I.M.)

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	Acoustical isolation, security

#### Furniture and Equipment

Fixed	6 workstations
Movable	Multi-function printer/copier/fax.

#### Adjacencies

Requirements	Door to Training Room: provide lock; no closer desired. Doors to Corridor and Conference Room.
--------------	--

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground type quadplex outlets along perimeter walls for computers and office equipment
Special requirements	Digital wall clock, Power and data raceway to A/V equipment, Emergency backup power to entire room

#### Technology

Requirements	Phone and data lines; small flat panel TV for status readout, 2 interactive white boards
--------------	--

#### Additional Requirements

Privacy and security are concerns for this room.

## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Secure Conference Room

#### General Description

Target Net Area	550 sf
No. of Spaces Required	1
Occupants	15
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Used by Governor's Authorized Representative for secure conferencing communications

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	Acoustical isolation, security

#### Furniture and Equipment

Fixed	Work counter
Movable	Video conferencing table for 15 people, safe, document shredder

#### Adjacencies

Requirements	Doors to G.A.R. / S.I.M. and Corridor
--------------	---------------------------------------

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 25. Extraordinary measures required.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	UPS power to secure video conference equipment. Digital clock on wall, Power and data raceway to A/V equipment, Power and data raceway to wall TV for network view, Intrusion detection system
Special requirements	Digital wall clock, Door security monitoring, Underfloor power and data jacks under conference table, Power and data raceway to A/V equipment, Emergency backup power to entire room

#### Technology

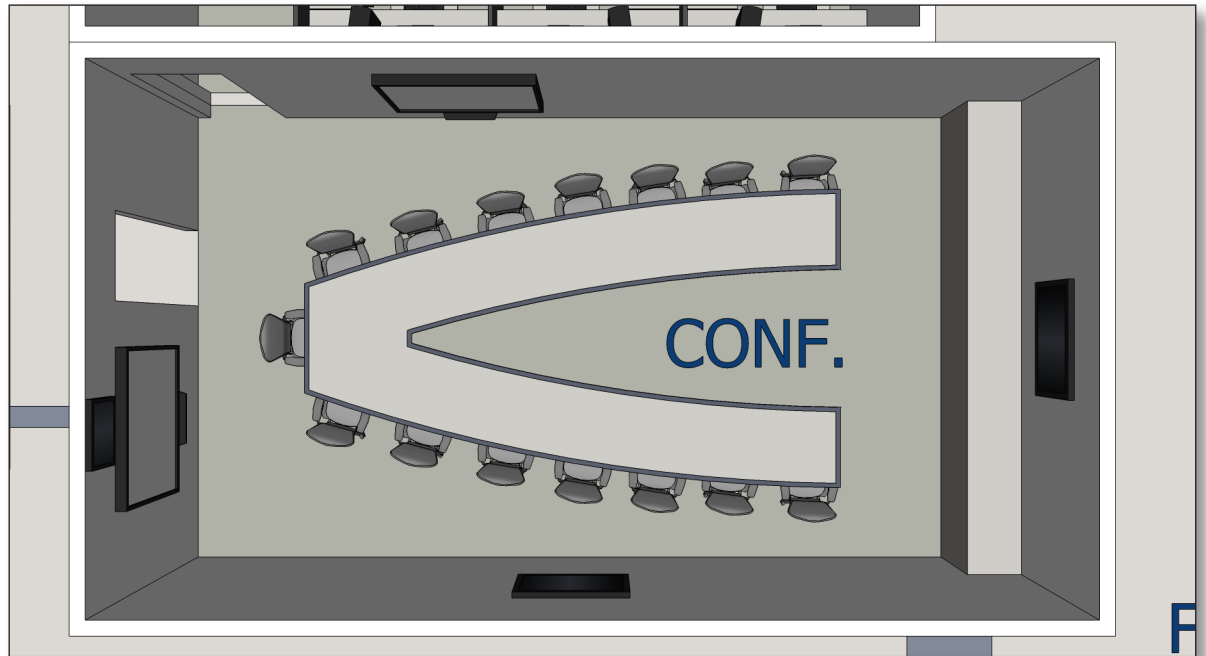
Requirements	Phone and data lines; video camera and flat panel TV for video conferencing, 1 flat panel TV for monitoring local media, and a small flat panel TV for status readout; 2 interactive white boards
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#### Additional Requirements

Privacy and security are concerns for this room. Special finishes to express importance of room.



## Drawing





## Appendix D: Room Program Data Sheets

### Space Name I.T. Support

#### General Description

Target Net Area	325 sf
No. of Spaces Required	1
Occupants	4
Scheduling	In conjunction with use of Training Room as EOC
Description of Activity	Information Technology support for Training Room and breakout rooms, including coordination of GIS mapping

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	4 workstations
Movable	

#### Adjacencies

Requirements	Large opening to Training Room with locking counter shutter; and 30" deep work counter below. Door to Training Room: provide lock; no closer desired.
--------------	---

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground type quadplex outlets at workstations for computers and office equipment,
Special requirements	Digital wall clock, Raceway to Training Room access floor, Emergency backup power to entire room

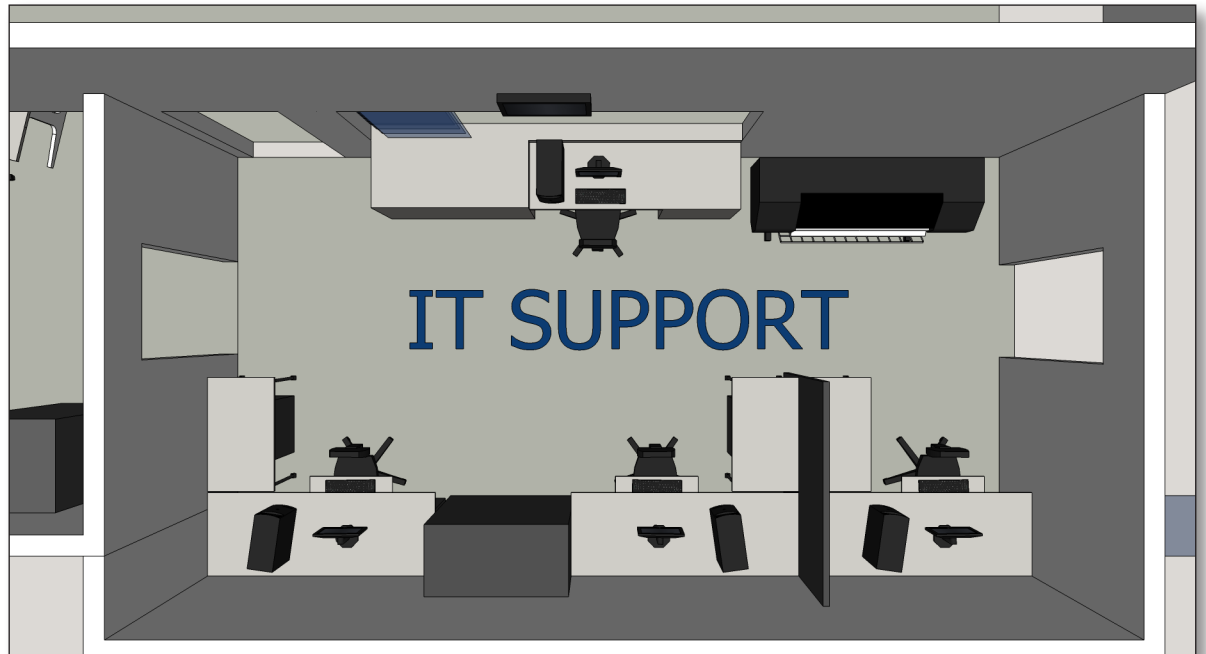
#### Technology

Requirements	Phone and data lines; small flat panel TV for status readout
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#### Additional Requirements

Control of video in Training Room.

## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Exercise Control Room / Instructor's Prep.

#### General Description

Target Net Area	375 sf
No. of Spaces Required	1
Occupants	5
Scheduling	In conjunction with use of Training Room as EOC, and other training
Description of Activity	Preparation, monitoring and control of EOC simulation exercises

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undetermined
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Work counters at opening into Training Room.
Movable	Large-format printer, computers, multi-function printer/copier/fax.

#### Adjacencies

Requirements	Located to provide observation of Training Room, with large one-way glass opening and doors into Training Room. Door to Training Room to lock; no closer desired. It may be necessary for the observation desk to extend out into the Training Room.
--------------	--

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

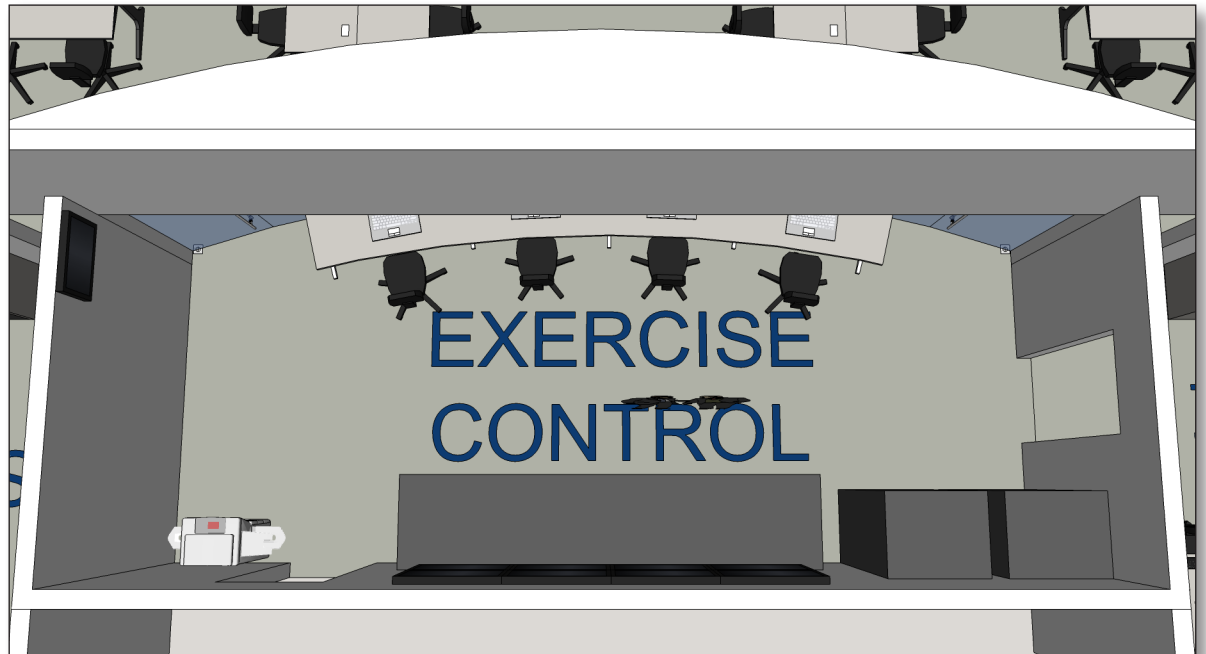
Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground type quadplex outlets along perimeter counters for computers
Special requirements	Digital wall clock, Raceway to Training Room access floor, Power and data raceway to wall-mounted A/V equipment., large format printer, Emergency backup power to entire room

#### Technology

Requirements	Phone and data lines; small flat panel TV for status readout; controls for video system throughout training area, with numerous monitor displays; capabilities for distance learning A/V connections.
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#### Additional Requirements

Drawing





## Appendix D: Room Program Data Sheets

### Space Name Training Room Storage

#### General Description

Target Net Area	360 sf
No. of Spaces Required	1
Occupants	--
Scheduling	--
Description of Activity	Storage of tables, chairs, bins, office supplies, easels, podiums, etc.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Carpet
Walls	Painted
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Storage racks along walls for bins, office supplies, etc.
Movable	

#### Adjacencies

Requirements	Adjacent to Training Room
--------------	---------------------------

#### Mechanical

Temperature	Occupied: 55°F heat. Unoccupied: 55°F heat.
Controls	None; fed from an adjacent zone.
Air supply/exhaust	Supply air varies with adjacent zone. No exhaust.
OSA	0.25 cfm/sf
Plumbing	None
Special requirements	

#### Electrical

Lighting	Normal glare lighting, occupancy sensor control
Power	Wall duplex outlets
Special requirements	Emergency backup power to entire room

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Main Entrance

#### General Description

Target Net Area	--
No. of Spaces Required	1
Occupants	--
Scheduling	Open 8 am - 5 pm, or as needed for training schedule
Description of Activity	Entrance vestibule

#### Architectural Description

Doors	Aluminum-framed entrances with full glass
Windows	Aluminum-framed with tinted insulated glass
Floors	Entrance mat
Walls	Undetermined
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	Adjacent to Lobby
--------------	-------------------

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum controllable. No exhaust.
OSA	ASHRAE 62.1-2004: 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 45. Cabinet unit heater supplemental heating.

#### Electrical

Lighting	Compact fluorescent recessed downlights- aesthetically pleasing, occupancy sensor controls
Power	Duplex receptacle at tables for visitor laptop use
Special requirements	Emergency backup power to room lighting and receptacles

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Lobby / Reception

#### General Description

Target Net Area	500 sf
No. of Spaces Required	1
Occupants	
Scheduling	Open 8 am - 5 pm, or as needed for training schedule
Description of Activity	Waiting area, reception, access control. Sign-in for training participants.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Aluminum-framed with tinted insulated glass
Floors	Tile
Walls	Undetermined
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Reception desk
Movable	4 chairs in waiting area

#### Adjacencies

Requirements	Adjacent to Administrative Area
--------------	---------------------------------

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 45.

#### Electrical

Lighting	Overhead lighting at reception counter
Power	Duplex receptacles and data raceway to reception desk casework
Special requirements	Raceway for access control, Emergency backup power to room lighting and receptacles

#### Technology

Requirements	Phone and data line
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#### Additional Requirements

Access control into to administrative area and remainder of facility.

## Appendix D: Room Program Data Sheets

### Space Name Administrative Work & Storage Area

#### General Description

Target Net Area	600 sf
No. of Spaces Required	1
Occupants	
Scheduling	--
Description of Activity	Work and storage area for permanent and itinerant administrative offices

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Aluminum-framed with tinted insulated glass, if any
Floors	Carpet
Walls	Painted
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Casework
Movable	--

#### Adjacencies

Requirements	Adjacent to permanent and temporary administrative offices.
--------------	---

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground quadplex at work stations
Special requirements	Emergency backup power to room lighting and receptacles

#### Technology

Requirements	Phone and data lines
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#### Additional Requirements



## Appendix D: Room Program Data Sheets

### Space Name Permanent Administrative Offices

#### General Description

Target Net Area	80 sf
No. of Spaces Required	3
Occupants	1
Scheduling	--
Description of Activity	Management of facility by DPS staff

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Aluminum-framed with tinted insulated glass
Floors	Carpet
Walls	Painted
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Desk
Movable	--

#### Adjacencies

Requirements	Adjacent to Administrative Work Area.
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground quadplex at work stations
Special requirements	Emergency backup power to room lighting and receptacles

#### Technology

Requirements	Phone and data lines
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Itinerant Office Area

#### General Description

Target Net Area	180 sf
No. of Spaces Required	1
Occupants	3
Scheduling	--
Description of Activity	Office space for training exercise instructors

#### Architectural Description

Doors	None
Windows	Undetermined
Floors	Carpet
Walls	Painted
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	3 workstations
Movable	--

#### Adjacencies

Requirements	Adjacent to Administrative Work Area.
--------------	---------------------------------------

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground quadplex at work stations
Special requirements	Emergency backup power to room lighting and receptacles

#### Technology

Requirements	Phone and data lines
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Administrative Area Restrooms

#### General Description

Target Net Area	--
No. of Spaces Required	1
Occupants	Capacity to accommodate rooms in Instructional Facility administrative area.
Scheduling	--
Description of Activity	Restrooms

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Tile
Walls	Tile
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	Adjacent to Administrative Area
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls for exhaust fan operation, temperature indirectly controlled by adjacency.
Air supply/exhaust	None. Greater of 50 cfm / WC & UR or 1.0 cfm/sf exhaust.
OSA	Transfer air only.
Plumbing	Fixtures including: WC, UR, LAV, FD as programmed.
Special requirements	HVAC noise shall be less than NCB 40.

#### Electrical

Lighting	Compact fluorescent downlights, occupancy sensor controls, lighting at mirrors
Power	Power to electric hand dryers
Special requirements	Emergency backup power to room lighting and receptacles

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Media Briefing / Conference Room

#### General Description

Target Net Area	280 sf
No. of Spaces Required	1
Occupants	Approximately 10, seated in chairs, plus presenters
Scheduling	As needed for EOC simulation or other conference needs
Description of Activity	Conference room, and simulation of P.I.O. and G.A.R. addressing media. This activity would occur at a different building in the event that this facility was used as the alternate EOC in an actual emergency.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Carpet
Walls	Sound-absorbing/tackable surface
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Video projection screen
Movable	Raised platform, podium

#### Adjacencies

Requirements	Adjacent to Lobby and Administrative Work Area.
--------------	---

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Lighting for televised news conferences. Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Duplex receptacles along wall and at podium. power and data raceway to A/V equipment
Special requirements	Emergency backup power to entire room, digital wall clock

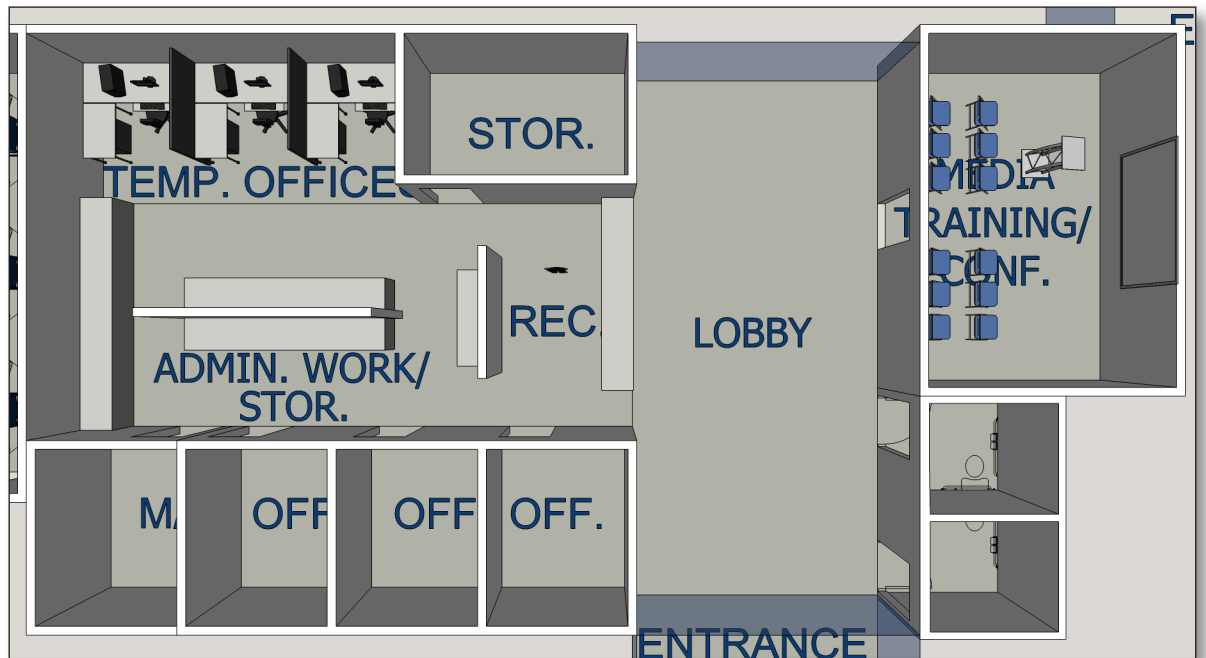
#### Technology

Requirements	Four phone and data lines, TTY connection in room; projector
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#### Additional Requirements



Drawing



## Appendix D: Room Program Data Sheets

### Space Name Break Room

#### General Description

Target Net Area	730 sf
No. of Spaces Required	1
Occupants	50
Scheduling	As needed to support training schedule
Description of Activity	Snacks, and outside catering of meals, serving both the Training Room and IED - Defeat portions of the facility.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames at interior; aluminum store-front and entrances at exterior
Windows	Aluminum frames with tinted insulated glass
Floors	VCT
Walls	Painted
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Counter, sink, range, refrigerator, 2 microwaves, ice maker, etc. All appliances to be commercial grade.
Movable	Snack and drink vending machines, several computers, tables and chairs.

#### Adjacencies

Requirements	Doors/windows to exterior patio, with south exposure. Accessed via corridor.
--------------	--

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. Exhaust hood and fan over microwaves.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	Fixtures including: Sink, ice maker, range as programmed.
Special requirements	HVAC noise shall be less than NCB 40.

#### Electrical

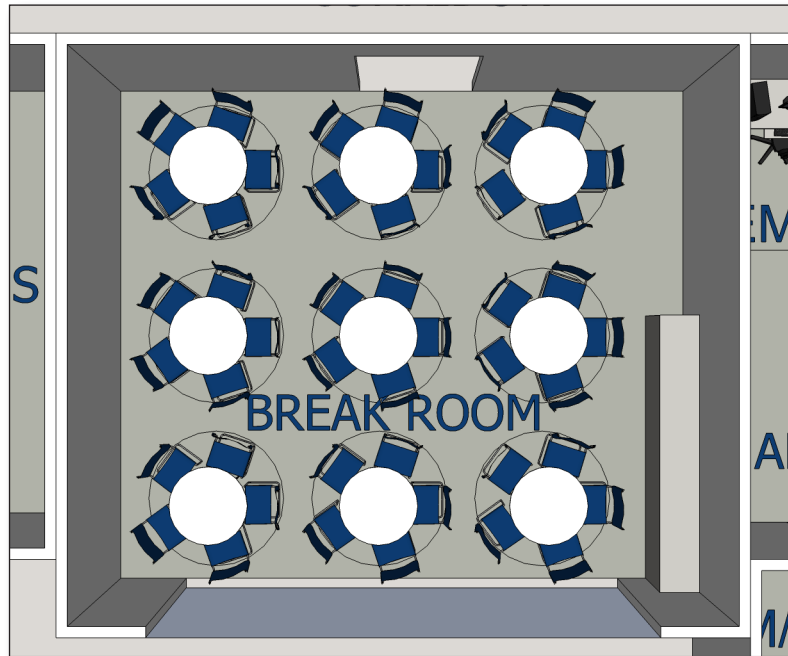
Lighting	Compact fluorescent downlights, wall sconces, occupancy sensor controls
Power	Receptacles for food prep and kitchen appliances
Special requirements	Emergency backup power to entire room, Digital clock.

#### Technology

Requirements	Phone and data lines; flat panel TV
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#### Additional Requirements

## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Training Area Restrooms

#### General Description

Target Net Area	--
No. of Spaces Required	1
Occupants	Capacity to accommodate simultaneous use of Training Room, IED Defeat Training Room and all other rooms, except those in Instructional Facility administrative area.
Scheduling	--
Description of Activity	Restrooms

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Tile
Walls	Tile
Ceilings	Suspended acoustical ceiling tile
Specialty Requirements	--

#### Furniture and Equipment

Fixed	Toilet partitions
Movable	--

#### Adjacencies

Requirements	Near Training Room and Break Room
--------------	-----------------------------------

#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls for exhaust fan operation, temperature indirectly controlled by adjacency.
Air supply/exhaust	None. Greater of 50 cfm / WC & UR or 1.0 cfm/sf exhaust.
OSA	Transfer air only.
Plumbing	Fixtures including: WC, UR, LAV, FD as programmed.
Special requirements	HVAC noise shall be less than NCB 40.

#### Electrical

Lighting	Compact fluorescent downlights and above mirrors
Power	Power to electric hand dryers
Special requirements	Emergency backup power to entire room

#### Technology

Requirements	
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#### Additional Requirements



## Appendix D: Room Program Data Sheets

### Space Name General Maintenance / Storage

#### General Description

Target Net Area	533 sf
No. of Spaces Required	1
Occupants	--
Scheduling	--
Description of Activity	General storage and maintenance area for facility

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Sealed concrete
Walls	Painted
Ceilings	Open to structure
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	--
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#### Mechanical

Temperature	Occupied: 55°F heat. Unoccupied: 55°F heat.
Controls	None; fed from an adjacent zone.
Air supply/exhaust	Supply air varies with adjacent zone. No exhaust.
OSA	0.25 cfm/sf
Plumbing	None
Special requirements	

#### Electrical

Lighting	Industrial wrap-around lense fluorescent surface mounted, occupancy sensor controls
Power	Duplex receptacle at light switch
Special requirements	Emergency backup power to room lighting and receptacles

#### Technology

Requirements	--
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Information Technology Equipment Room

#### General Description

Target Net Area	315 sf
No. of Spaces Required	1
Occupants	--
Scheduling	--
Description of Activity	

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Sealed concrete
Walls	Painted
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	--
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 68°F heat, 78°F cool.
Controls	DDC controls with alternating lead/lag control.
Air supply/exhaust	Recirculated supply + minimum OSA from adjacent zone. No exhaust.
OSA	0.25 cfm/sf
Plumbing	Condensate drain receptor.
Special requirements	Two dedicated computer grade cooling units (N+1 redundancy).

#### Electrical

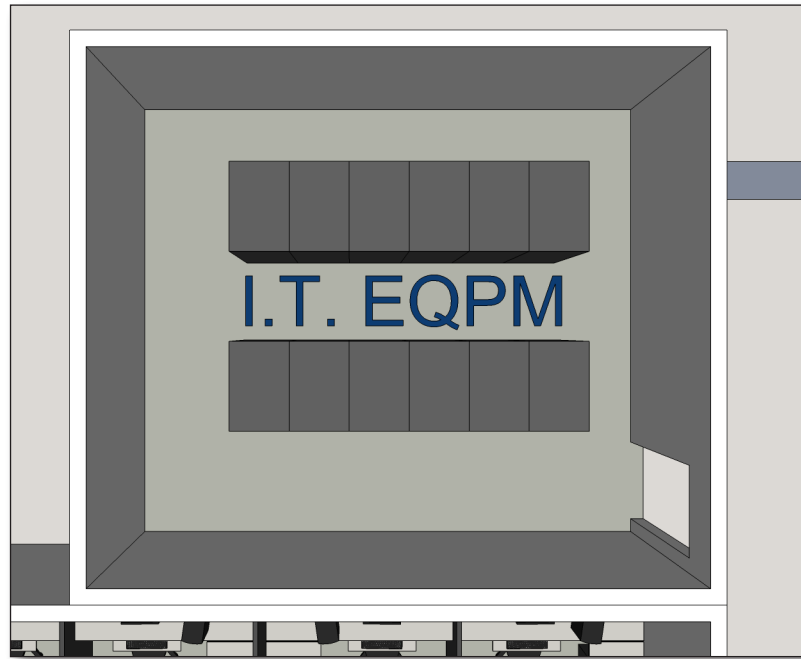
Lighting	Fluorescent surface wrap around lense, occupancy sensor controls
Power	Dedicated circuits with UPS backup to equipment racks
Special requirements	Emergency backup power to entire room, Ground bar for equipotential grounding of all equipment in room.

#### Technology

Requirements	--
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#### Additional Requirements

## Drawing



## Appendix D: Room Program Data Sheets

### Space Name Mechanical & Electrical Equipment Room

#### General Description

Target Net Area	--
No. of Spaces Required	--
Occupants	--
Scheduling	--
Description of Activity	Location for mechanical and electrical building services equipment

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Sealed concrete
Walls	Painted
Ceilings	Open to structure
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	--
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#### Mechanical

Temperature	Occupied: 55°F heat, 85°F exh. Unoccupied: 55°F heat, 85°F exh.
Controls	Supply fed from an adjacent zone, exhaust activated above 85°F.
Air supply/exhaust	Supply air varies with adjacent zone. Exhaust to prevent overheating.
OSA	0.25 cfm/sf
Plumbing	None
Special requirements	

#### Electrical

Lighting	Industrial surface fluorescent, no occupancy sensor controls- manual switch only
Power	Duplex receptacles for maintenance purposes
Special requirements	Emergency backup power to entire room

#### Technology

Requirements	--
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#### Additional Requirements



## Appendix D: Room Program Data Sheets

### Space Name Circulation

#### General Description

Target Net Area	--
No. of Spaces Required	--
Occupants	--
Scheduling	--
Description of Activity	Main circulation from reception to training area; connection of IED - Defeat area to Break Room and restrooms.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Aluminum frames with tinted insulated glass, if any
Floors	Carpet
Walls	Painted
Ceilings	Undetermined
Specialty Requirements	Wall corner guards and other wall protection devices

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	--
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum controllable. No exhaust.
OSA	ASHRAE 62.1-2004: 0.06 cfm/sf
Plumbing	None
Special Requirements	HVAC noise shall be less than NCB 45.

#### Electrical

Lighting	Fluorescent lay-in troffer or compact fluorescent down lighting,
Power	Duplex receptacles 50 feet on center for vacuum
Special requirements	Emergency backup power to room lighting

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name Restricted Entrance

#### General Description

Target Net Area	--
No. of Spaces Required	1
Occupants	--
Scheduling	As needed in conjunction with use of Training Room as EOC
Description of Activity	For use by VIP's to access G.A.R.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames at interior, insulated hollow metal doors at exterior
Windows	Aluminum frames with tinted insulated glass
Floors	Carpet
Walls	Painted
Ceilings	Undetermined
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	Separate restricted-access exterior entrance and corridor serving G.A.R. / S.I.M.
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum controllable. No exhaust.
OSA	ASHRAE 62.1-2004: 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 45. Cabinet unit heater supplemental heating.

#### Electrical

Lighting	Weatherproof lighting to public access with two lamps in luminaire, Photocell control
Power	Wet location type duplex receptacle with "in-Use" cover
Special requirements	Emergency backup power to lighting

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name IED Defeat Entrance

#### General Description

Target Net Area	180
No. of Spaces Required	1
Occupants	--
Scheduling	As needed for training schedule
Description of Activity	Separate entrance to IED Defeat area

#### Architectural Description

Doors	Aluminum-framed entrances with full glass
Windows	Aluminum frames with tinted insulated glass
Floors	Entrance mat
Walls	Undetermined
Ceilings	Suspended acoustical ceiling tile (2x2)
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	--
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum controllable. No exhaust.
OSA	ASHRAE 62.1-2004: 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 45. Cabinet unit heater supplemental heating.

#### Electrical

Lighting	Weatherproof lighting to public access with two lamps in luminaire, Photocell control
Power	Wet location type duplex receptacle with "in-Use" cover
Special requirements	

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name IED Defeat Training Room

#### General Description

Target Net Area	1,950 sf
No. of Spaces Required	1
Occupants	50 people seated at tables & chairs
Scheduling	As needed for training schedule
Description of Activity	Computer simulation training of soldiers for dealing with improvised explosive devices (IED's). Would also be open to use for other purposes.

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Undertermined
Floors	Carpet
Walls	Painted
Ceilings	Suspended acoustical ceiling tile (2x2)
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	Rectangular 72" L x 48" W tables, 3 large projection screens

#### Adjacencies

Requirements	Access to Break Room and Training Room
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box and CO <sup>2</sup> reset of OSA. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground quadplex at tables, wall and floor types,
Special requirements	Digital wall clock

#### Technology

Requirements	Phone lines, data lines (including 50 for workstations)
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#### Additional Requirements



## Appendix D: Room Program Data Sheets

### Space Name IED Defeat Storage

#### General Description

Target Net Area	110 sf
No. of Spaces Required	1
Occupants	--
Scheduling	--
Description of Activity	Storage for IED Defeat Training Room

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	None
Floors	Carpet
Walls	Painted
Ceilings	Open to structure
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	--

#### Adjacencies

Requirements	Door to IED Defeat Training Room
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#### Mechanical

Temperature	Occupied: 55°F heat. Unoccupied: 55°F heat.
Controls	None; fed from an adjacent zone.
Air supply/exhaust	Supply air varies with adjacent zone. No exhaust.
OSA	0.25 cfm/sf
Plumbing	None
Special requirements	

#### Electrical

Lighting	Fluorescent surface wrap around lense, occupancy sensor controls
Power	Duplex receptacle at light switch
Special requirements	

#### Technology

Requirements	
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#### Additional Requirements

## Appendix D: Room Program Data Sheets

### Space Name IED Defeat Offices

#### General Description

Target Net Area	90 sf
No. of Spaces Required	2
Occupants	1
Scheduling	Full-time
Description of Activity	Reception

#### Architectural Description

Doors	Solid core wood doors with hollow metal frames
Windows	Aluminum frames with tinted insulated glass
Floors	Carpet
Walls	Painted
Ceilings	Suspended acoustical ceiling tile (2x2)
Specialty Requirements	--

#### Furniture and Equipment

Fixed	--
Movable	Desk

#### Adjacencies

Requirements	Door to entrance area
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#### Mechanical

Temperature	Occupied: 68°F heat, 78°F cool. Unoccupied: 55°F heat, 85°F cool.
Controls	DDC controls with VAV box. One zone.
Air supply/exhaust	Supply air varies from maximum cooling to minimum meeting OSA requirements. No exhaust.
OSA	ASHRAE 62.1-2004: 5 cfm/person + 0.06 cfm/sf
Plumbing	None
Special requirements	HVAC noise shall be less than NCB 35.

#### Electrical

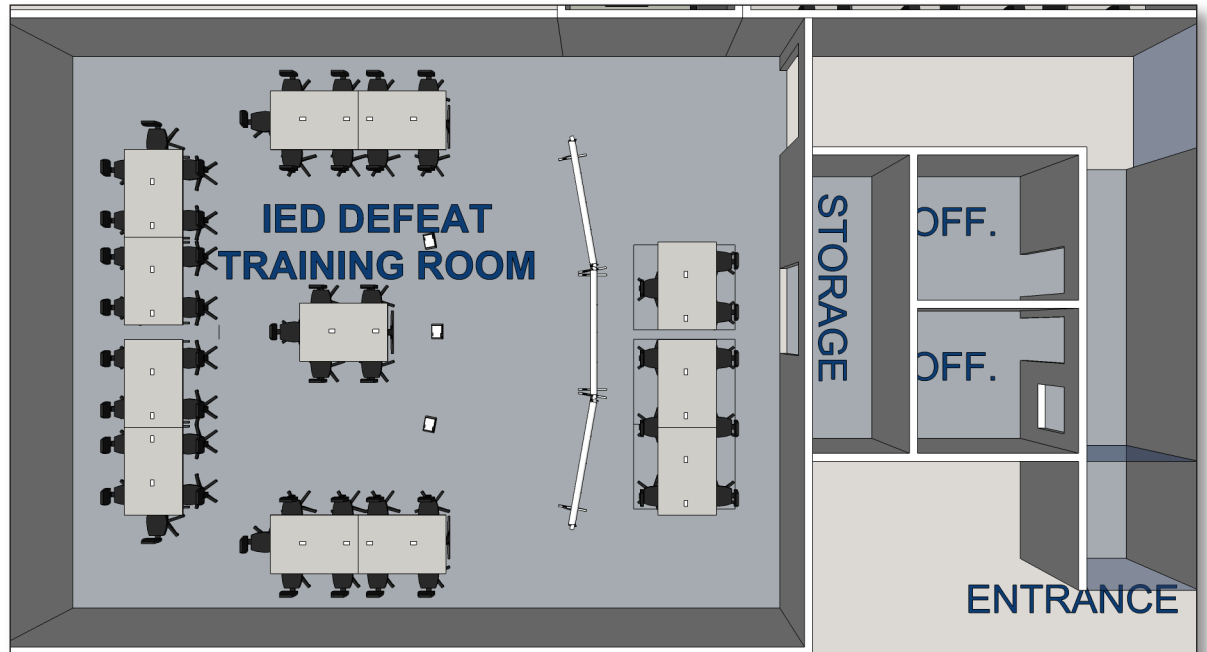
Lighting	Low glare lay-in fluorescent, adjustable levels, occupancy sensor controls
Power	Isolated ground quadplex at work stations
Special requirements	

#### Technology

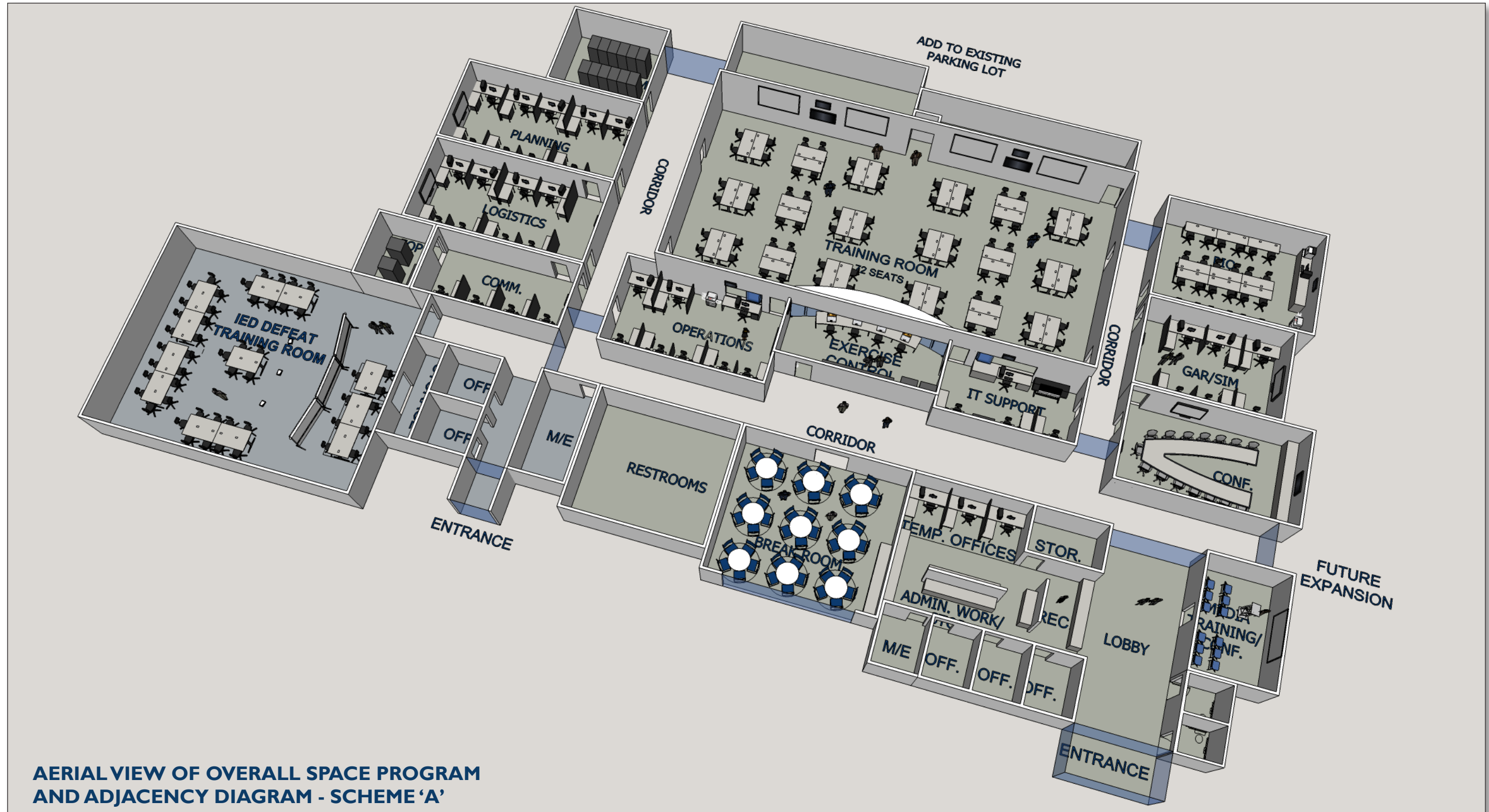
Requirements	Phone and data lines
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#### Additional Requirements

Drawing

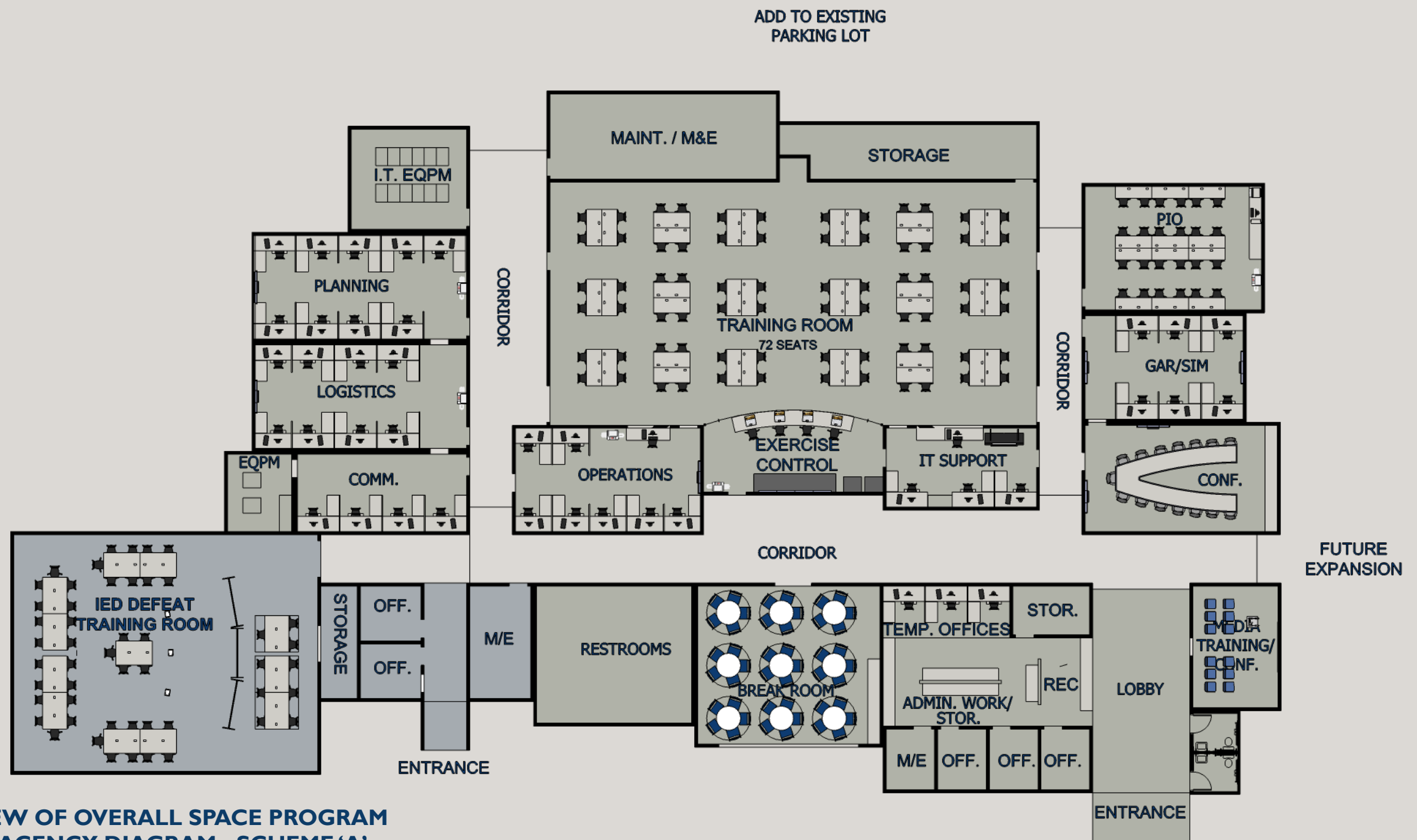






This diagram shows the nature of the spaces that are anticipated in the facility, and provides direction for their adjacencies. It is not intended to propose an actual floor plan layout.





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