

- Horizontal cross-connects.
- Transition point (optional).
- Main cross-connect (MC).
- Intermediate cross-connect.
- Backbone cabling, intra and inter.
- Workstation locations or information management outlets (IMO).
- Remote wiring closet (RWC).
- Main distribution frame (MDF).
- Entrance facility (EF).
- Grounding
- Administration

### **1.3.2 Documentation**

This document is intended to address the following specifications and installation practices related to structured cable plant installation:

- Recognized media.
- Closet requirements, environmental and design.
- Distribution cabling.
- Cabling specifications and limits.
- Installation practices.
- Performance testing.
- Supporting documentation.

## **2.0 NETWORK CABLE PLANT OBJECTIVES**

The objective of this network approach is to provide ICE with a standardized, cost-effective cable plant infrastructure that will accommodate present and future voice, video, and data requirements. Workstation cabling infrastructure shall support bandwidth demands from 10 Megabits per second (Mbps) to Gigabit speeds. Backbone cable infrastructure shall support bandwidth demands from Gigabit speeds and beyond. The installation of the cable plant infrastructure shall comply with local codes, as well as, industry and Federal standards.

## **3.0 STRUCTURED CABLE PLANT DESIGN**

The network cable plant shall utilize the following cable distribution methods to support connectivity throughout the building:

- Horizontal workstation cabling, which will connect the user workstation, or information management outlet (IMO) to the nearest Remote Wiring Closet (RWC).

- Where appropriate, Intra and Inter-building copper backbone cable, which provides connectivity between wiring centers and the MDF.
- Work zone distribution cabling for open office space.
- Fiber optic intra and inter-building backbone cable, which also provides connectivity between wiring centers and the MDF.

### **3.1 Structured Cable Plant Approach**

This section will describe the approach to structured cabling, identify and describe the various cable types, and provide detailed cable specifications for cable plant installation. These are minimum specifications for new cable plant installations or major renovations. These specifications follow the American National Standards Institute (ANSI)/Telecommunications Industries Association (TIA)/Electronic Industries Association (EIA) recommendations, and in addition, provide specific guidelines unique to ICE. Detailed cable plant material specifications and overall minimum characteristics are provided in Section 4.

### **3.2 Horizontal Workstation Cabling**

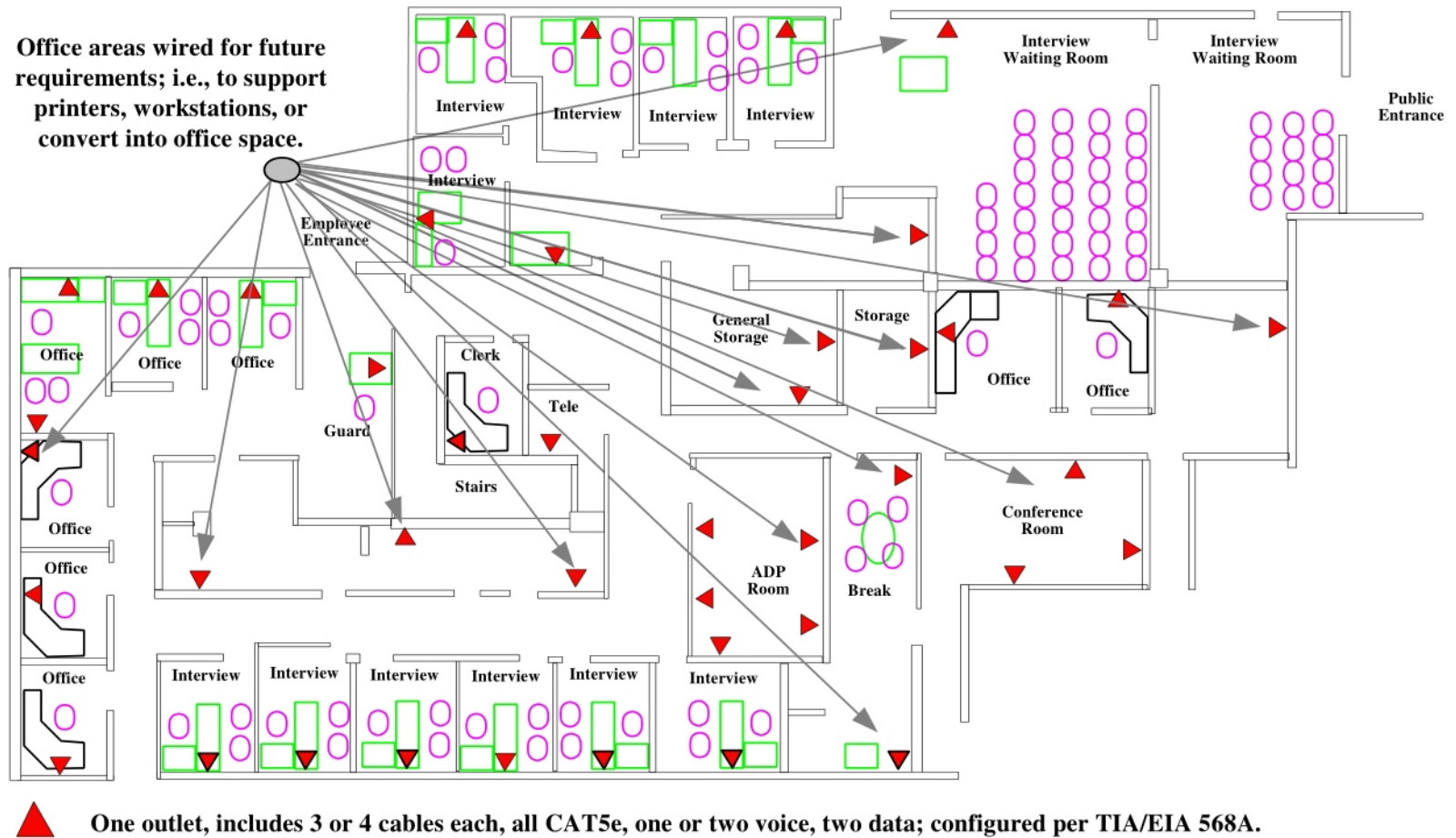
All end-user workstation locations, whether occupied or vacant, shall be cabled to the nearest wiring center. Also, storage rooms, conference rooms and similar space not designated as offices shall be cabled to allow for office expansion, as shown in Exhibit 1.

In general, each RWC equipment rack shall be capable of supporting a maximum of 288 data cables. A second rack is required to support up to 288 voice cables, providing a consolidated voice and data closet. The combined racks provide ample space for a total combined 144 workstation locations (voice and data). In smaller installations, typically less than 72 workstation locations, a single equipment rack will suffice for both voice and data termination.

To comply with ANSI/TIA/EIA-568-B.1 specification distance limits, the cable run from any user workstation location to the nearest wiring center shall not exceed 100 meters (328 feet). The actual length of a cable run is defined as the total combined length of the station cord, workstation cable, and patch-panel cable. When planning or designing office space the communications closets should be located within 90 meters of any workstation outlet. This design approach allows the addition of patch cables and workstation cords to connect devices, without exceeding the ANSI/TIA/EIA-568-B.1 specification distance limits.

In a building not exceeding two stories, horizontal workstation cabling may be installed to a single point, such as a computer room, wiring center, or the MDF. This scenario may be used in place of a creating a RWC, thus eliminating any need for backbone cabling systems. This installation method should be utilized when cost is a constraint and the length of the cable run does not exceed the specified distance limits.

**Exhibit 1: Typical Office Cable Planning**



Each user workstation location shall be cabled with two 4-pair, unshielded twisted pair (UTP), Category (CAT) 5e copper cables for data transmission, that will be labeled as “Data A” and “Data B.” The cable shall have a fire-retardant, plenum rated jacket.

Each workstation cable that is routed through a suspended ceiling area shall be secured in a manner that will keep all cable plant off of any suspended ceiling tiles, sprinkler systems, ceiling suspension hangers, and adhere to local and Federal building codes. Cable plant installed in plenum environments should provide enough slack to facilitate minor construction modifications, or cable re-locations, without the need to install new cable altogether. This installation approach normally requires approximately 20 feet of cable slack, secured in an appropriate manner, to ensure cable is minimized from radio frequency interference (RFI) and electro-magnetic interference (EMI) sources. However, installed cable shall at no time exceed the overall specifications for total lobe length of 100 meters in accordance with the ANSI/TIA/EIA standards. If required, an independent suspension system shall be installed for the cable plant, to keep the cables off of and away from the existing ceiling grid and fixtures.

If the building being cabled is a new installation, cable installation shall include voice wiring in addition to data. The workstation location shall be cabled with a minimum of one 4-pair, UTP, CAT 5e cable for voice or modem/fax services. It is recommended that two voice cables be installed rather than a single voice cable; however, budget and overall technical requirements will determine the need on a case-by-case basis. For planning and budgeting, two voice cables should be used in the design phase. Voice cable(s) shall be labeled “Voice A” or “Voice A” and “Voice B” while adhering to the labeling conventions as described in Section 12.

When routed above a suspended ceiling, horizontal cables should be routed down the inside of walls (“fished”) wherever possible to ensure no exposed cable is visible. If walls cannot be fished, surface mounted (external) raceway may be used to route the cable from the ceiling to the information outlet and installed in a surface-mounted outlet box. All attempts should be made to ensure no horizontal cable is exposed within the building area, providing a neat, professional installation. Horizontal cables shall never be exposed to outdoor elements without being protected in proper conduit/raceway systems and have proper lightning and bonding protection installed.

Optical fiber cable can also be used for horizontal workstation connectivity when the following conditions exist:

- Distance requirements exceed the 100 meter cable-length specification.
- Known high bandwidth/security requirements that exceed copper cable limitations and business case supports the installation.
- Space inside or outside of the walls to support the minimum fiber cable bend radius.
- Severe EMI or RFI in the copper cable plant.
- Adequate funding.
- Proposed fiber optic to the desktop is approved by the DSB.

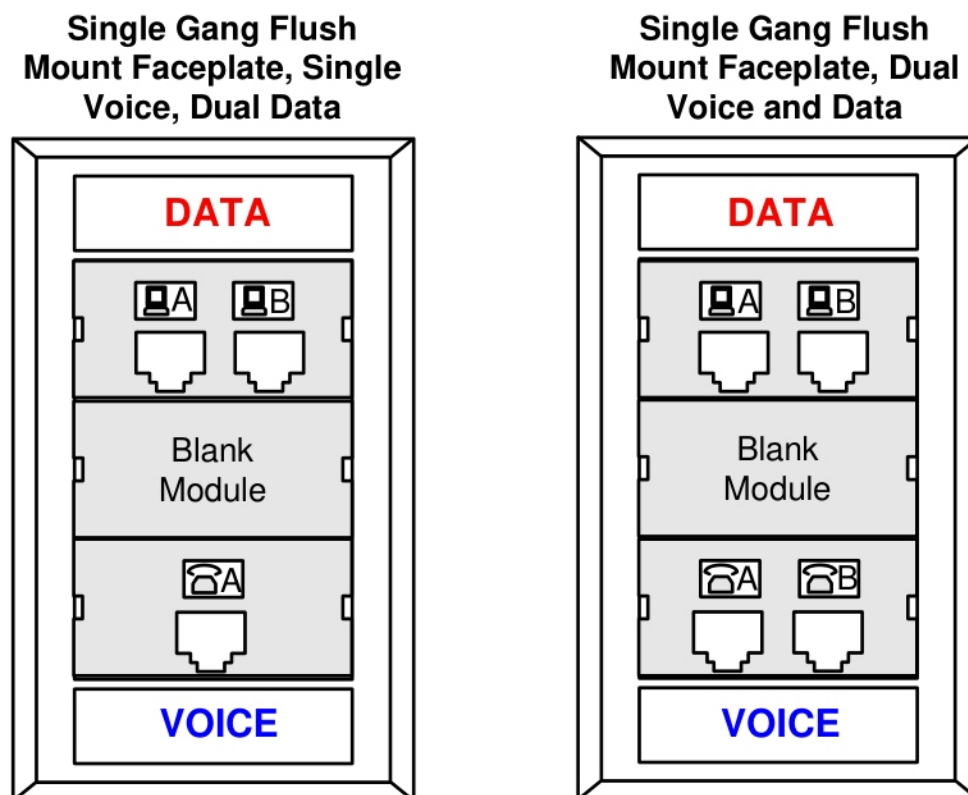
If optical fiber cables are used for workstation connectivity, each workstation location shall be cabled with a armored 4-strand, 62.5/125 micrometer (μm), graded index, multi-mode optical

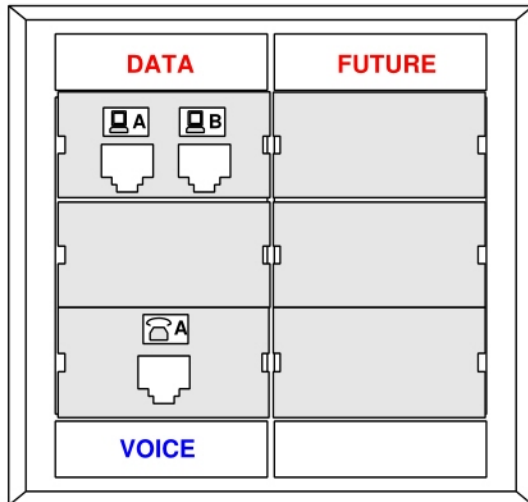
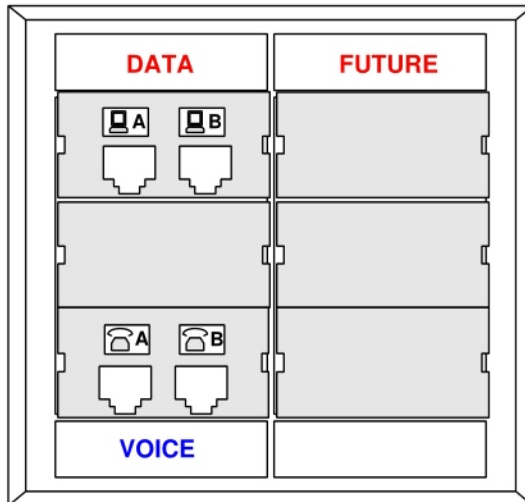
fiber cable with proper coating to meet local fire and building codes, whereas plenum is recommended. The cable shall be labeled as described in Section 12 of this document.

### 3.3 Workstation Outlets

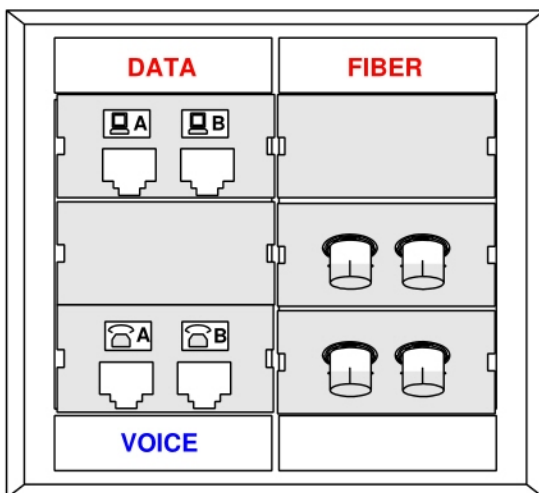
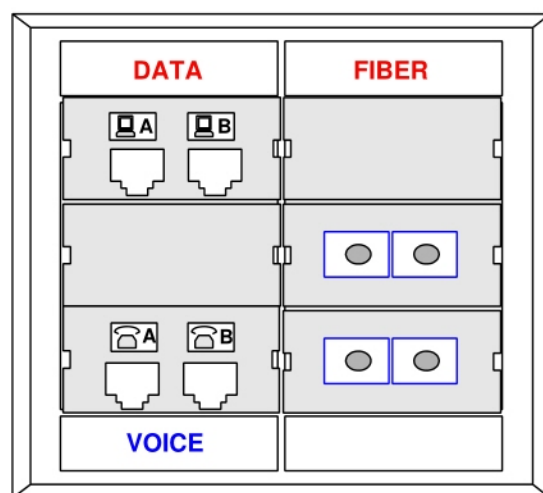
Each workstation area shall use a standard IMO (faceplate) that can support a minimum of three dual-connection interfaces (remote jack RJ-45, ST, SC, or MTRJ connectors). Regardless of the installation contractor, all voice and data cable shall utilize a single Information Outlet. Information outlets must be capable of future growth without the need to replace the entire Information Outlet. Information outlets can be either single gang or dual gang standard size; sizing will be determined by number of cables being installed. The data cables shall be installed on two RJ-45 jacks.

**Exhibit 2: Workstation (IMO) Faceplates without Optical Fiber Cables, Single Gang**



**Exhibit 3: Workstation (IMO) Faceplates without Optical Fiber Cables, Double Gang****Double Gang Flush Mount Faceplate  
Single Voice, dual data****Double Gang Flush Mount Faceplate  
Dual Voice, dual data**

Where fiber-optic cable is installed to the desktop, the corresponding IMO faceplate shall provide space to install at least four RJ-45 jacks and at least two ST, SC, or MTRJ optical fiber connectors (see Exhibit 4).

**Exhibit 4: Workstation Faceplate with Optical Fiber Cables****Double Gang Flush Mount Faceplate  
Fiber Optic ST connectors****Double Gang Flush Mount Faceplate  
Fiber Optic SC connectors**

### 3.4 Backbone Cabling

Intra and Inter-backbone cabling may consist of either or both copper and optical fiber cables and are required where there exists more than one wire center. The intra and inter-backbone shall be installed to provide structured connectivity between closets (see Exhibit 5). The installation provides a star-topology cable infrastructure that is capable of supporting high-speed and high bandwidth requirements between key resources in an enterprise building or campus environment.

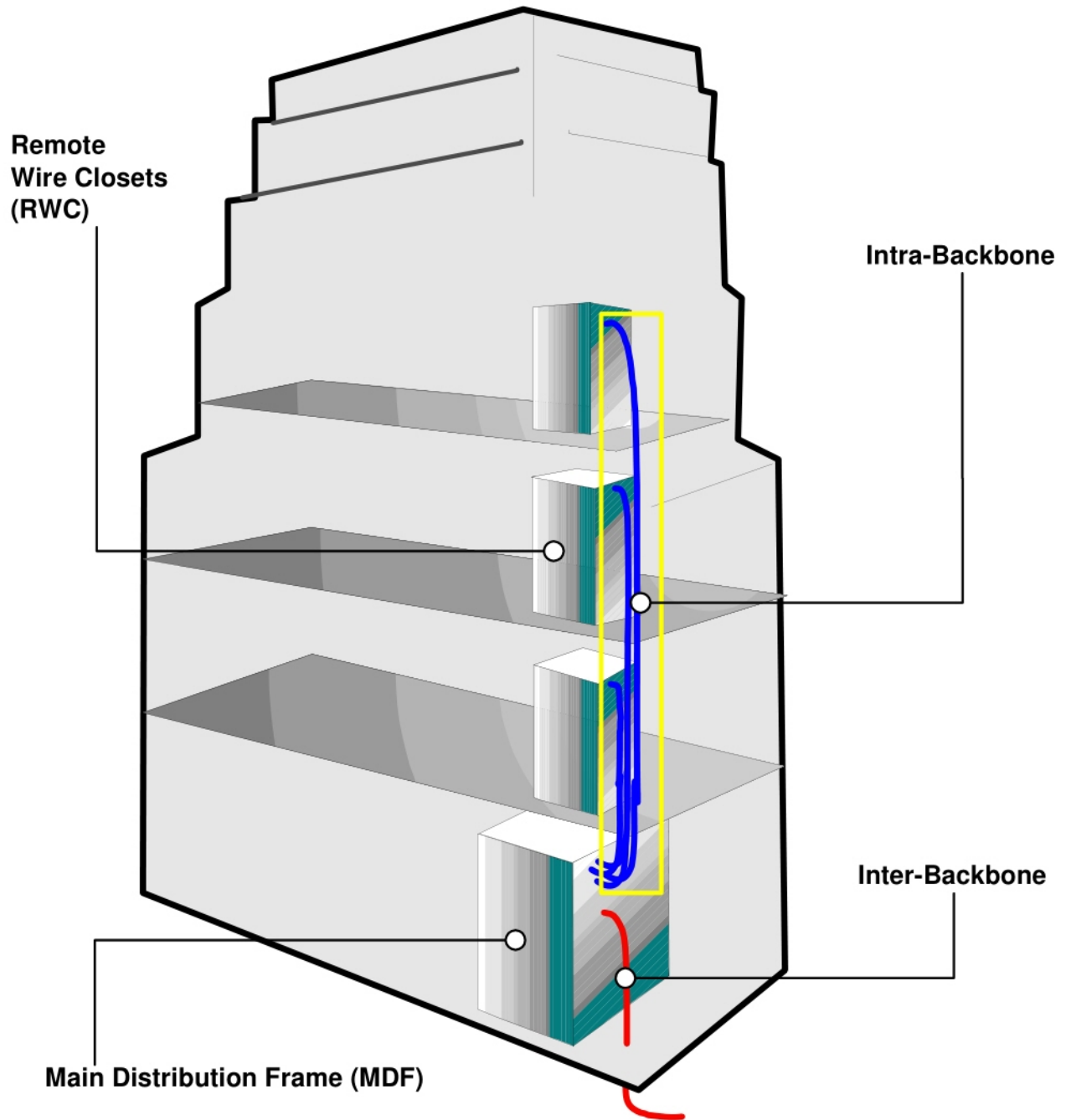
A multi-mode, single mode, or combination of fiber-optic backbone structure provides the means of interconnecting all wiring closets to the MDF in a multi-segmented environment. Optical fiber not only provides extensive bandwidth capabilities to the LAN and voice, but it also provides a solution to the distance-related problems encountered with copper cables in large installations and campus environments.

Copper backbone cabling is required to support voice services, however, the specifications and designs are determined on a site-by-site basis. This is due to the variety, funding, capacity and availability of voice services and designs. Copper backbone may also be installed to support networking services, where distance limitations do not exceed the ANSI/TIA/EIA-568-B.1 specifications. Copper backbone cabling provides a redundant connectivity option in the event of a catastrophic fiber failure, and shall be installed where voice and data closets are physically separated.

Each remote wiring closet shall be connected to the MDF with a multi-strand, optical fiber backbone cable that runs directly from the wiring center to the MDF. All strands will be terminated with ST, SC, or MTRJ-style connectors in accordance with the ANSI/TIA/EIA standards in rack-mounted patch panels. A minimum twelve-strand fiber shall be installed in any facility providing connectivity between communications closets. It is estimated that 12 strands of multi-mode fiber will meet most of the intra and inter backbone connectivity needs currently deployed and planned for ICE facilities. Considering the myriad of site functions, building designs, physical layout, application requirements and future technologies, backbone design is a critical element in the planning stages. To ensure facilities are properly engineered with respect to backbone fiber types and counts, DSB will provide engineering design in concert with local Automated Data Processing (ADP) support personnel and facilities architects. This ensures both short-term and long-term requirements are met in a cost-effective manner.

The optical fiber Intra and Inter-backbone cabling shall have one port per strand for cross-connection, and will conform to the specifications in Sections 4 and 6 of this document.

**Exhibit 5: Backbone Fiber Distribution**



## 4.0 SPECIFICATIONS

This section provides detailed component characteristics and specifications with respect to the materials used to install the structured cable plant.

### 4.1 Horizontal Cables

All cable, equipment, and materials shall meet applicable ANSI/TIA/EIA-568-B, National Electrical Code (NEC) 770, Institute of Electrical and Electronics Engineers (IEEE) 802 and Underwriters Laboratory (UL) Verification Program standards. All cable equipment and materials must be manufactured by facilities that are International Organization for Standardization (ISO) 9001 registered and certified.

- Shall be CAT 5e rating in accordance with ANSI/TIA/EIA-568-B.2
- Four-pair, 100-Ohm, 24 American Wire Gage (AWG).
- The cable should have contiguous, 2-foot segment-length markers printed on the cable jacket. The markings must also show the applicable performance CAT 5e, as well as the fire rating of the cable being installed.
- The finished cable shall be 100% plenum rated in accordance with the requirements of NEC Article 800, UL 444, NFPA 262, (UL 910), and applicable Canadian Standards Association (CSA) standards.

**Note:** CAT 5e cable types must meet or exceed specifications listed in Exhibit 6.

**Exhibit 6: 5e Cable Specifications**

Specification	Category 5e
Frequency Range	1-100 MHz
Attenuation (maximum)	24 dB
NEXT (minimum)	30.1 dB
PSNEXT (minimum)	27.1 dB
ACR (minimum)	6.1 dB
PSACR (minimum)	3.1 dB
ELFEXT (minimum)	17.4 dB
PSELFEXT (minimum)	14.4 dB
Return Loss (minimum)	10 dB
Propagation Delay (maximum)	548 nanoseconds (ns)
Delay Skew (maximum)	50 ns

### 4.2 Information Management Outlets

- Provide ANSI/TIA/EIA symbol icons for application identification (LAN, Voice, etc).
- Provide individual label window for cable identification.

- Provides a high-density design.
- Offers solutions for secure environments.
- Must match make and model in existing facilities.
- Meets or exceeds ANSI/TIA/EIA CAT-5e specifications.
- Mounts to standard electrical 2 inch and 4 inch boxes.
- Allows all modules (jacks) to be loaded and accessed from the front. No need to remove faceplate.
- Meets all Federal Communications Commission (FCC) Part 68 specifications.
- Provides standard 110D type insertion displacement connector (IDC) Printed Circuit Board (PCB) mounted connector.
- Is offered in a multitude of colors.
- Provides interchangeability between modules.
- Offers non-keyed RJ-45 style connectors.
- Offers SC, ST or MTRJ interchangeable modular fiber connectors.
- Is available in the ANSI/TIA/EIA-T568A wiring configuration.

### **4.3 Backbone Cabling**

Backbone cabling shall be a minimum of 12-strand multi-mode fiber optic. In limited instances, single mode fiber-optic cable may be used for distances that exceed 500 meters, in accordance with the Institute of Electrical and Electronics Engineers (IEEE) and the Gigabit Ethernet Alliance organizations. The IEEE 802.3z and IEEE 802.3ab published standards apply to gigabit Ethernet and overall specifications.

CAT 5e copper backbone cabling shall meet the same specifications as stated in Section 4.1 (Horizontal Cabling), in addition to the multi-pair construction in increments of 25, 50 and 100 pair complements. Voice copper backbone cabling is not specified in this standards document and shall be determined on a case-by-case basis. Voice copper backbone cables are not subject to the same 100 meter distance limitations as specified for networking backbone cabling which is the CAT 5e cable plant.

#### **4.3.1 Intra-Building Fiber Optics**

Specifications for fiber backbone cabling that will interconnect closets within a single building or high-rise environment are defined in this section.

##### **4.3.1.1 Multi-Mode Fiber Optics**

- 62.5/125- $\mu$ m optical fiber plenum (OFNP) or optical fiber riser (OFNR).
- Maximum Attenuation: 3.5/1.0 dB km at 850/1300 nm.
- Minimum Bandwidth: 200/500 MHz km at 850/1300 nm.
- Tight buffered.

- Plenum or riser rated.

#### **4.3.1.2 Single-Mode Fiber Optics**

- 8.3/125- $\mu$ m OFNP or OFNR.
- Maximum Attenuation: 1.0/0.5 dB km at 1310/1550 nm.
- Tight buffered.
- Plenum or riser rated.

#### **4.3.2 Inter-Building Fiber Optics**

Specifications for fiber cable that will interconnect remote buildings in a campus environment.

##### **4.3.2.1 Multi-Mode Fiber Optics**

- 62.5/125- $\mu$ m OFN, OFNP, or OFNR.
- Maximum Attenuation: 3.5/1.0 dB km at 850/1300 nm.
- Minimum Bandwidth: 200/500 MHz km at 850/1300 nm.
- Loose Tube.
- Not Rated, Plenum rated, or Riser rated.

##### **4.3.2.2 Single-Mode Fiber Optics**

- 8.3/125- $\mu$ m OFN, OFNP, or OFNR.
- Maximum Attenuation: 1.0/0.5 dB km at 1310/1550 nm.
- Loose Tube.
- Not Rated, Plenum rated, or Riser rated.

#### **4.4 Patch Cables (Workstation and Patch Panel)**

- Shall conform to the ANSI/TIA/EIA CAT 5e specifications.
- 4-pair, UTP stranded cable.
- RJ-45 connectors on both ends.
- The patch cables shall be wired in accordance with the ANSI/TIA/EIA-568-B.2 and ANSI/TIA/EIA-568-B.3 specifications.
- Certified by the manufacturer as compliant with the ANSI/TIA/EIA CAT 5e criteria.
- Cables shall be available in a wide variety of colors and lengths.

#### **4.5 Patch Panels**

- Shall conform to the ANSI/TIA/EIA CAT 5e specifications.
- The patch panel wiring shall be in compliance with ANSI/TIA/EIA T568A wiring standards.

- Provide back wire management hardware.
- Provide modular design to facilitate field repairs.
- Provides standard 110D type IDC PCB mounted connector.
- Available in low and high density configurations.
- Meet the standard EIA-310 relay rack spacing specifications.
- Provide RJ-45 interface.
- Meets all FCC Part 68 specifications.
- Available in 12, 24, 48, and 96 port capacities.
- Match make and model within existing facilities, where possible.

#### **4.6 Equipment Racks**

- Shall conform to the ANSI/TIA/EIA standards.
- Conform to the standard EIA-310 mounting specification.
- Provide pre-tapped 10-32 threading.
- Provide a flexible modular concept.
- Provide vertical wire management.
- Provide floor mounting hardware except for swing gate style hardware.
- Match make and model within existing facilities, where possible.

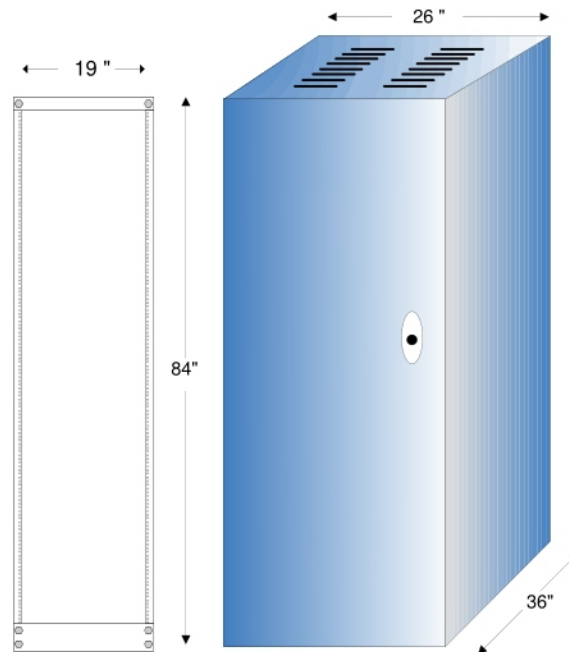
See Exhibit 7 for a typical rack and cabinet structure.

#### **4.7 Cabinets and Swing Gates**

- Shall conform to the ANSI/TIA/EIA standards.
- Conform to the standard EIA-310 mounting specification.
- Provide pre-tapped 10-32 threading.
- Provide a flexible modular concept.
- Provide vertical wire management.
- Provide floor mounting hardware except for swing gate style hardware.
- Match make and model within existing facilities, where possible.
- Available in widths up to 26 inches or more.
- Available in depths up to 36 inches or more.
- Allow fan assembly installation.
- Lockable and offer matching key/lock design where multiple cabinets are installed.
- Are of a welded, uni-body construction.

- For areas located within seismic activity, meet Zone 4 earthquake vibration test conditions in accordance with National Electrical Bell Standards (NEBS) document TR-NWT-000063, Issue 4, 1992

### Exhibit 7: Typical Rack/Cabinet Enclosures



## 5.0 COPPER CABLE INSTALLATION SPECIFICATIONS

This section details the specifications that are to be used when installing all copper cabling. All work shall be ANSI/TIA/EIA-568-B, ANSI/TIA/EIA-569-A, ANSI/TIA/EIA-606-A, NEC 770 and IEEE 802 standard specification quality (as applicable).

### 5.1 Horizontal Cables

These are cables installed from a typical workstation location back to a central point within a building or facility. These cables connect the IMO (jack), back to a central point, the closet. The closet may be the MDF or an RWC. These cables shall be installed in compliance with ANSI/TIA/EIA, building and industry practices. Cables should never be exposed nor create any safety hazards for the public.

All copper cables shall be positioned at a minimum distance of 4 inches from any EMI device (such as a light ballast, electrical motor, or power line). If contact is unavoidable (as in modular furniture), the copper cables shall not run more than 5 feet in parallel with the interference-generating medium. If traversing is necessary, all copper cables shall cross power lines and electrical conduits at a 90-degree angle to minimize interference.

Copper cables installed in a suspended ceiling environment shall at all times be self-suspended in the plenum air space by the use of a separate suspension system or installation in the building

construction frame at the top of the permanent ceiling, if it exists. At no time shall cables be secured to the suspended ceiling grid, water pipes, or electrical conduits.

All cables should be installed as far above the suspended ceiling as possible, and should be bundled together with tie-wraps at intervals no less than 6 feet unless a dedicated cable tray system is available to support the cable. The tie-wraps should not be installed so tight as to "dent" or compress the cable jacket because this could create excessive crosstalk in the cables, causing failure during the testing of the cable to meet CAT 5e specifications.

## **5.2 Patch Cables (Workstation)**

The workstation patch cable connects the end user devices (personal computer, terminals, etc.) to the IMO (jack). For most installations, these patch cables will be provided and left on-site for the deployment team or local ADP to install when setting up workstations and are not included in the overall cable plant certification. The workstation patch cable may be any length as long as the combined length of the workstation patch cable, the horizontal workstation cabling, and the patch-panel cable does not exceed 100 meters (328 feet). These cables are normally pre-constructed, certified and ordered in standard one-foot incremental lengths. If the installation vendor chooses, custom-length, certified station cables can be used.

## **5.3 Patch Cables (Panel)**

The patch-panel cable connects the horizontal cable port to the voice and data electronics within a central wire center or closet, typically a RWC or MDF. These cables are identical to the workstation cables and are pre-constructed and certified by the manufacturer. It is the cable installer's responsibility for patching all active cable locations into active ports, unless otherwise directed by the ICE manager or designated representative. These cables are pre-certified by the manufacturer; therefore, it is unnecessary to include them in the cable plant certification. Wire management and organization is important to facilitate troubleshooting, repair, and documentation and, as such, there are key elements to ensure patch cords are properly installed. The following requirements shall be followed for patching workstation ports to electronics:

- The patch-panel cable may be any length, provided that the combined length of the workstation patch cable, the horizontal workstation cabling, and the patch-panel cable does not exceed 100 meters (328 feet).
- If the installation vendor chooses, custom-length, certified station cables can be used.
- Patch cables must be labeled and matching on both ends, in a standard one-up numeric convention. An example would be a closet that has 100 active workstations, thus 100 patch cables are installed, one for each active node, starting with cable identification (ID) number one and ending with ID number 100. Any support personnel would be able to view the station patch panel and electronics equipment to determine which specific port a particular station is connected.
- Patch cable numbering shall be affixed to both ends of each patch cord approximately one inch from the terminator or mod plug.
- Label IDs must be legible and produced with indelible ink. The preferred method is a printed label. Installers must avoid the use of materials that will distract from the appearance of the installation, or any temporary marking.

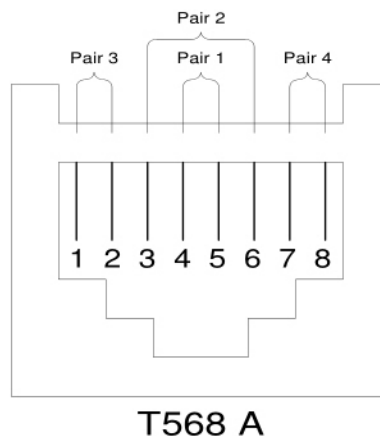
- Ensure patch cables are installed in a manner that does not require support personnel to “tug” or “trace” cables in order to determine the active port.
- Cables must be dressed utilizing available horizontal and vertical wire management.
- Patch cables should provide a neat and organized appearance, eliminating large bundles of cables in single locations, preventing tangles and using incorrect, or oversized cables that produce excess slack.
- Cables shall never exceed the minimum bend radius or have kinks or nicks in accordance with the ANSI/TIA/EIA specifications.
- Cables should utilize left and right vertical wire management to reduce cable patch congestion produce and even cable distribution within a given cabinet.
- Patch cables shall never create a trip hazard or other risk to equipment, services or personnel.

#### 5.4 Copper Cable Termination

This section applies to both the workstation and closet cable termination practices. All copper cable terminations shall conform to ANSI/TIA/EIA-568-B standards. The key areas and specifications are highlighted below:

- Pair twists shall be maintained as close as possible to the point of termination. Untwisting shall not exceed 13mm (0.5 in.) for CAT 5e links.
- Strip back only as much jacket as is required to terminate individual pairs.
- All connecting hardware shall be installed to provide well-organized cable management in accordance with manufacturer’s guidelines.
- All four pairs must be terminated.
- Pin/Pair assignments shall follow the T568A configuration (see Exhibit 8).

**Exhibit 8: T568A Pair/Pin Assignments**



## **6.0 INSTALLATION OF OPTICAL FIBER CABLES AND CONNECTORS**

This section provides the specifications to be used when installing all optical fiber cabling.

### **6.1 Fiber Horizontal Workstation Cable**

The fiber horizontal workstation cable connects the workstation to the wiring center. This cable shall be four-strand, multi-mode, 62.5/125  $\mu\text{m}$ , optical fiber cable with graded index 250 or 900  $\mu\text{m}$  buffer. Contiguous, 2-foot, segment-length markers shall be printed on the cable jacket.

The bend radius of any optical fiber cable installed shall be at least eight times the outside diameter of the cable. For example, a six-strand optical cable with an outside diameter of .30 inches and shall have a minimum bend radius of 2.40 inches.

Pulling tension for optical fiber cables must adhere to and not exceed manufacturer specifications.

### **6.2 Backbone Fiber Cable**

The optical fiber home-run backbone cable shall connect each remote wiring closet to the MDF. This cable shall be 12-, or 24-, or more strand, multi-mode, 62.5/125  $\mu\text{m}$ , optical fiber cable with graded index, 250 or 900  $\mu\text{m}$  buffer, and contiguous, 2-feet, segment-length markers printed on the cable jacket. All Intra and Inter-backbone fiber cables shall be installed in conduit or plenum-rated inner-duct.

Fiber-optic cable shall not share conduits with copper medium unless separation between copper and fiber is maintained. For large campus or complex backbone fiber installations where multiple conduits or pathways exist, fiber-optic cable shall be separated from the copper cable installation, wherein fiber-optic cable is dedicated to one conduit, copper to another. In retrofit or existing buildings, where pathways are insufficient to maintain separation between copper and fiber, ICE DSB shall review and approve the design prior to installation.

### **6.3 Optical Fiber Cable Jacket**

All overhead or above-ceiling installations shall use optical fiber cable with a plenum-graded jacket that is marked with a UL rating of "OFNP" or equivalent. All non-air-return (non-plenum) installations can use optical fiber cable with either a plenum or non-plenum jacket (such as PVC) that is marked with a UL rating of "OFNR" or equivalent.

### **6.4 Optical Fiber Connector**

The optical fiber connector for workstation or backbone connections shall follow the ANSI/TIA/EIA standards for installation. ICE is reviewing the MTRJ as an acceptable connector, but the use of this style will be determined on a case-by-case basis.

New buildings shall use SC or MTRJ type connectors for workstation and/or backbone installation.

In retrofit buildings, fiber connectors should match the existing installed connectors.

## **6.5 Optical Fiber Cable Termination**

All optical fiber cables shall be light tested prior to installation. This is typically done while the cable is still on spools or reels and only ensures all strands pass light prior to pulling cable into conduits and pathways.

The minimum termination shall be four strands for a horizontal cable. When installing fiber-optic backbone cabling, all strands will be terminated with the appropriate connectors and capped with a dust boot. All strands shall be terminated and tested.

All optical fiber cables shall have a twenty foot storage coil (wrapped in an appropriately sized loop for the minimum bend radius of the cable) positioned at each end, where possible before being terminated with connectors. All intermediate slack in the optical fiber cable shall be loosely coiled and suspended to avoid hard bends or kinks.

## **7.0 FACEPLATE CONFIGURATION**

Workstations that are not connected to an optical fiber cable typically utilize a single-gang faceplate that can support up to six connection ports (see Exhibits 2 and 3). When data only is installed in the faceplate, a dual, RJ-45 module shall be installed in the top position. If a dual gang faceplate is used, the dual RJ-45 module shall be installed in the top left position. When voice and data are installed in the same faceplate, the dual RJ-45 information outlet shall conform to the configuration as outlined in Exhibit 2 and 3. Voice shall be installed at the bottom, data at the top positions of all information outlets. Blank inserts shall be installed in all remaining positions.

Workstations that are connected to optical fiber cables shall have a double-gang faceplate and junction box installed that can support up to 12 connection ports (see Exhibit 4).

## **8.0 PATCH PANELS**

Patch panels, both fiber and copper are the approved methods of providing connectivity between horizontal cables, Intra and Inter-backbone copper, fiber backbone, and common network service devices, such as switches, PBX, routers, and other electronics.

Patch panel installation must adhere to manufacturer specifications and installed utilizing all wire management hardware, both front and back. Panels shall be installed to best utilize both vertical and horizontal wire managers, and should be separated by horizontal wire managers. There should be a minimum of one horizontal wire manager for each horizontal patch panel. Panels must be clearly marked as to the outlet designation. Labels must be of permanent indelible typed materials.

### **8.1 Copper Patch Panels**

Each panel will be installed to provide the maximum use of rack space. Each panel will be mounted in an equipment rack that shall conform to the EIA-310 mounting-hole spacing standard.

Separate patch panels will segregate “Data A”, “Data B”, “Voice A”, and “Voice B” cables. The upper patch panel will be used for “Data A” only; the lower patch panel will be used for “Data B” only. In addition, and depending on the number of total cables, voice cables may also share a single standard 7-foot equipment rack, swing gate or cabinet enclosure. Exhibits 9, 10, and 11

shall be used as a model for all new installations, and should be followed as close as possible for major retrofits and renovations with respect to existing cable plant configurations. Deviations to these layout exhibits shall be reviewed and approved by the DSB.

## **8.2 Fiber Optic Patch Panels**

Optical fiber cable patch panels for workstation connections (also called fiber cabinets) shall provide ST, SC, or MTRJ couplers. Optical fiber cable patch panels for backbone cabling (also called fiber cabinets) shall provide SC or MTRJ couplers. The color scheme and the port numbering scheme on the patch panel shall be consistent in any given installation to reduce confusion and to prevent mistakes in making cross-connections. Fiber patch panels shall be installed in standard increments of six-position, ST, SC or MTRJ, loads or interconnect couplers, as required in each wiring closet and MDF.

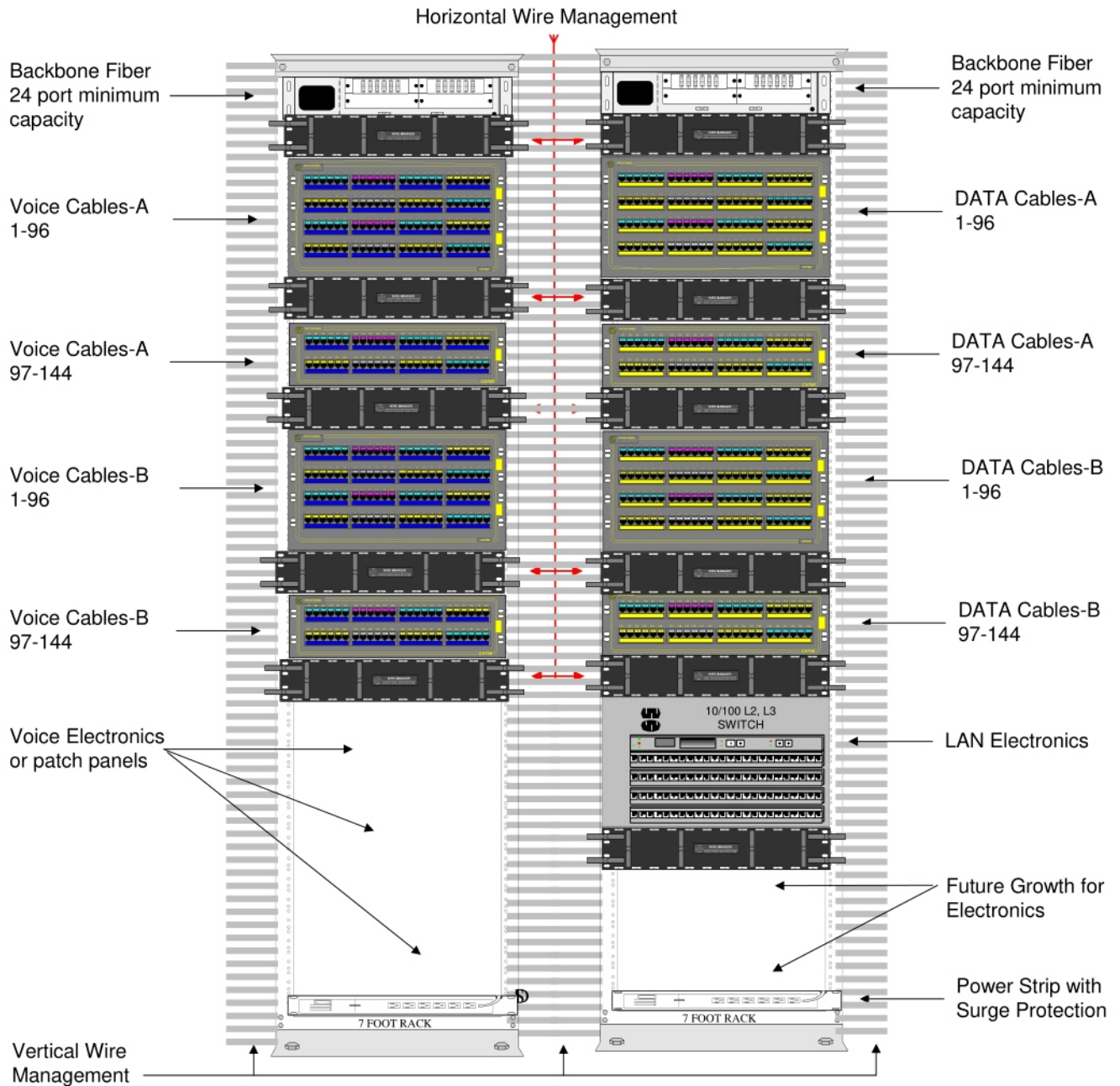
## **9.0 EQUIPMENT RACK**

There are a multitude of equipment racks and cabinets that are acceptable for use in ICE installations. Wherever possible, separate secure communication closets are recommended and are the preferred method for voice and data installation. In these dedicated communications closets, open racks, cabinets and swing gates may be used to meet the needs of the installation.

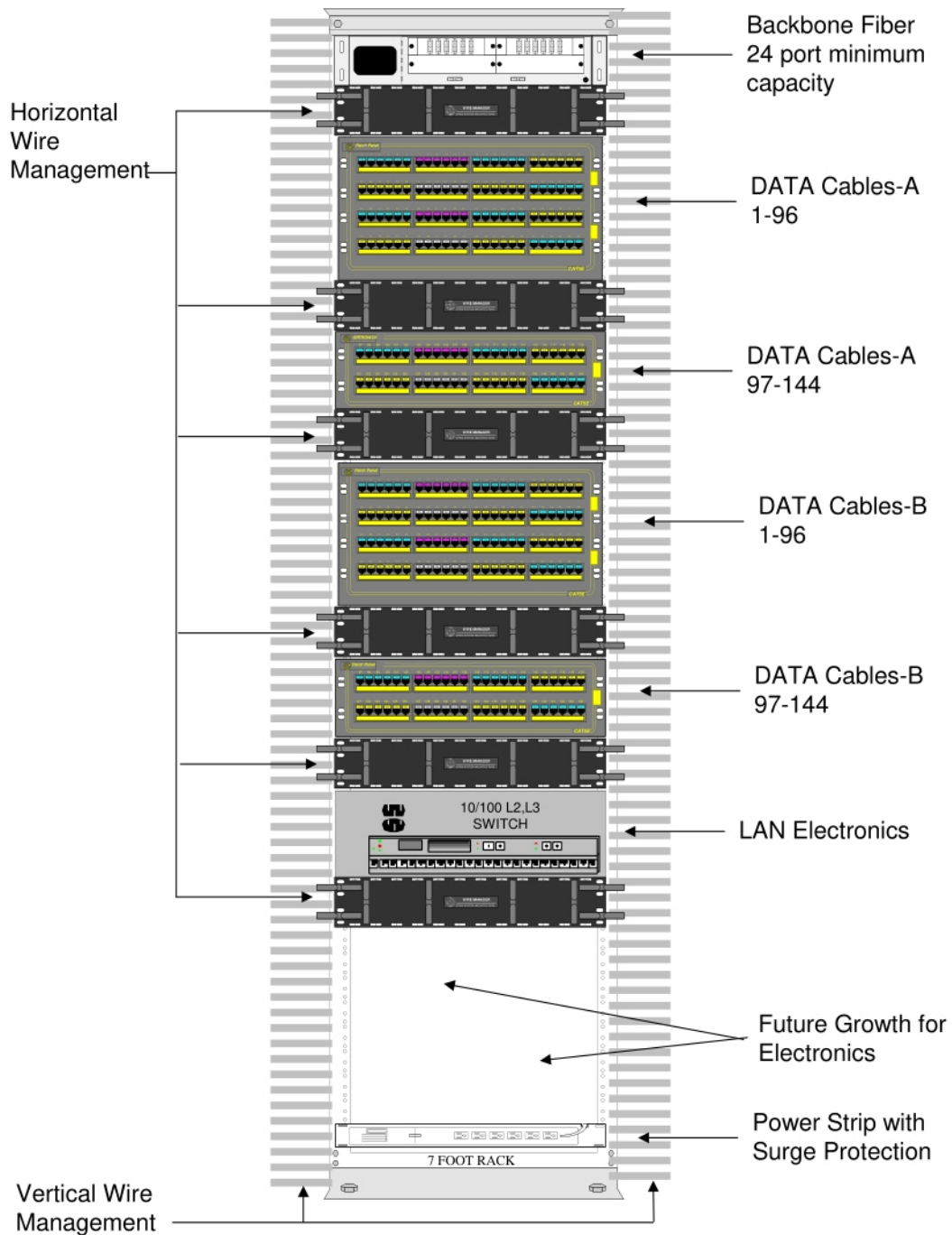
When open racks or swing gates are used, they shall be located within the wiring closets, and they shall provide structural support for the patch panels and required electronics. The open rack will be a standard 19 inches wide by 7 feet tall when used in a floor mount configuration. When space considerations mandate, it is acceptable to use an open, wall-mounted equipment rack (swing gate). If a wall mount configuration is used, the rack must be hinged, and space must be provided so that the rack can swing fully open and provide full access to the back of the rack.

All floor or wall-mounted equipment racks, cabinets and swing gates installed in earthquake-prone geographic areas shall be installed in compliance with specific seismic guidelines, regulations and codes. Special attention must be taken to ensure the proper installation techniques are followed to minimize risk to electronics and cable plant, and most importantly prevent the mounting hardware from toppling over during seismic activity.

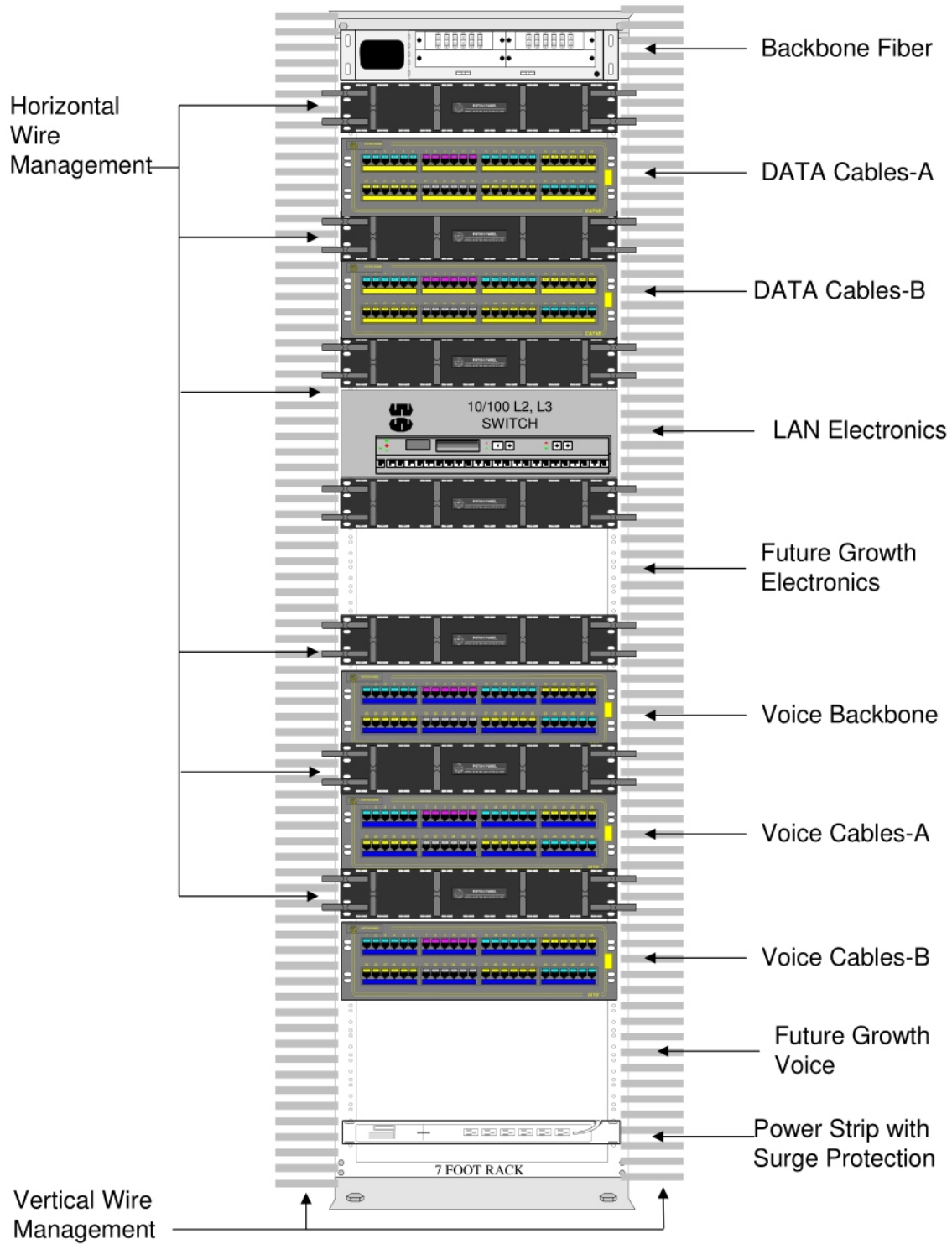
Equipment shall be mounted on the rack via holes in the frame or by using mounting hardware that conforms to the EIA-310 mounting-hole spacing standard. As an alternative for non-rack devices, equipment may be placed on flat shelves that are attached to the rack. All racks shall be secured either to the floor or wall with bolts or other fasteners that are rated to withstand the recommended weight limits and shear loads for the rack. Each rack shall include all mounting and assembly hardware (such as nuts and bolts) for full configuration use. When multiple racks and/or cabinets are used and they are butted together in the closet, they shall be bolted together for additional stability.

**Exhibit 9: Consolidated Closet, Voice and Data**

**Exhibit 10: Single Rack, Data Only (Voice and Data Not Consolidated)**



**Exhibit 11: Consolidated Closet, Voice and Data; Share Single Rack  
(less than 72 locations)**



Floor mounted racks and cabinets shall have a minimum of 36 inches of clearance in front of, behind, and on at least one side. Where space or room layouts limit the minimum clearances required, the installation contractor shall notify the DSB or designated representative for technical direction.

Equipment layout, specifically with respect to rack, cabinet, and swing gate location are critical design elements that ensure future growth, maintenance and flexibility are protected. Proper clearances also allow installers and maintenance personnel the required room to perform work safely and ensure electronics environmental conditions are maintained.

The patch cables shall run neatly through the wire management panels above the electronics, run down the sides of the rack, run below the electronics, and plug neatly into the respective port. The cables between the patch panels and the electronics shall not be excessively long nor shall they lie on the floor. The patch cables shall be secured and bundled using Velcro securing straps.

**Caution:** The use of tie-wraps is not acceptable when bundling and securing patch cables on the rack.

A power strip with surge suppression and an on/off switch shall be mounted to the back of the rack to supply at least six outlets for AC power (120-volt, 20-amp service).

## 10.0 GROUNDING

The NEC provides guidelines to ensure that electrical installations in buildings meet the necessary safety practices to prevent electrical shock hazards to personnel, ensure fault clearance of unintentional electrical breakdowns that could cause fire, and prevent transient voltages from causing electrical damage to installed network components. NEC Article 800 pertains to telecommunications industry and should be consulted for specific guidelines related to this topic. Article 800 also has references to other articles as the need arises.

In all new buildings and major retrofit projects an independent ground bus, installed in each communications closet, shall be provided. The independent ground bus in each closet should be installed by a certified electrician, or properly licensed installer. The independent ground buses are designated for, and utilized exclusively, by the communications equipment. In existing buildings, an independent ground is certainly desirable. In general, all communications systems, cable plant devices, equipment, and components shall be properly grounded and bonded.

All grounding shall be performed to meet the following published standards and guidelines:

- ANSI/TIA/EIA 607
- ANSI/IEEE C-142
- Federal Information Processing Standard (FIPS) 94
- NEC Articles 250 and 800
- UL
- ANSI CI-1978

All equipment racks, cabinets and systems must be properly connected to the independent ground bus per the ANSI/TIA/EIA 607 specifications. It is the responsibility of the cable

installer to connect all common closet equipment racks and cabinets to the provided ground bus. It is also the responsibility of the cable installers to report to the ICE Program Manager any discrepancies with respect to improper or omitted grounding systems.

For connecting equipment within the telecommunications/data wiring closets to the ground bus, a number six wire with green insulation should be used. This ground wire should be no longer than 30 feet.

All ground wire should be routed straight, with sweeping bends, neat, and orderly. Ground wire should be routed in the most direct fashion possible to the equipment. Ground wires should be supported by tie-wraps at 12-inch intervals.

The manufacturer instructions and recommendations shall be followed when grounding the electronic equipment installed in the telecommunications/data wiring closets.

## **11.0 CABLE LADDERS AND FASTENERS**

All cables installed in overhead spaces (such as above ceiling panels) shall be securely strapped to ceiling slab fasteners or cable ladders that are fastened to the ceiling slab to avoid contact with lighting equipment or drop ceiling supports. Wire management channels or cable ladders shall be used to provide orderly arrangement of all installed cables in and around the equipment racks.

As a general rule, all cables shall be securely suspended, fastened, tied, and bundled firmly (without damaging the cable jackets or creating kinks in the cable) to minimize the amount of space required for cabling.

## **12.0 ADMINISTRATION AND LABELING CONVENTIONS**

Label conventions shall apply to all sites, regardless of the number of buildings at the site. This section describes the ICE standard labeling convention for all cable installations, whether new or retrofit.

### **12.1 Building Designation**

The designation for the building shall be a two to four character alphanumeric scheme. Buildings typically have unique names/numbers, whether in multi-story complexes or in campus environments. The first designation should represent the unique building the cable plant is wired within. This nomenclature will rarely change throughout the life of the building and allows a structured naming convention to be used for Inter-building backbone cable installations.

#### **12.1.1 Floor**

The designation for the floor shall be a two-digit number. If the floor is a single number such as “4,” place a leading zero before the single-digit, for example “04.”

#### **12.1.2 Wiring Closets**

The designation for a wiring center is a single letter. The Computer Room or MDF shall always have the wiring closet designation of “M.” Remote wiring closets that are all located on the same floor shall be labeled A-L and N-Z (“M” is reserved for the MDF). Closets that stack directly on top of each other shall have the same letter designation.

### 12.1.3 Cable Numbers

The designation for the cable shall be a three-digit number, followed by an “A” or “B” designation, indicating the “Data A” or “Data B” cable drop. Use leading zeros as necessary. For example, the designation for drop #3A would become 003A.

## 12.2 Information Management Outlet

The IMO is the interface for the workstation cable and the horizontal workstation cable, which terminates in a wiring closet. This is typically referred to as the “jack” in the industry, also an enhancement to the Bell Labs Universal Service Order Code (USOC) specifications. These specifications also referenced the RJ pin assignments. The ANSI/TIA/EIA now prefers to use the term 8-pin modular plug or connector when describing jack pin-outs. Each information outlet should be labeled according to the following guidelines:

The designations on single-gang and double-gang faceplates will be as follows:

- Building (AANN, or combination).
- Floor (NN, with a leading zero).
- Wiring center (A).
- Cable drop (NNN, with leading zeros).

For example: “TW-12-C-111”

where: TW = TechWorld building  
 12 = 12<sup>th</sup> floor  
 C = wiring center and  
 111 = cable drop #111.

## 12.3 Intra and Inter-Building Backbone Cables

These backbone cables interconnect wiring closets either within a building or interconnect buildings in a campus environment.

The naming convention applies the same for Intra and Inter backbone cable labeling. Standard nomenclature for backbone cabling shall be as follows:

- First Building (4–6 alphanumeric characters).
- First wiring closet (includes floor, closet and pair or strand designations).
- Second Building (2–4 alphanumeric characters).
- Second wiring closet (includes floor, closet and pair or strand designations).

For example, “TW801I-06-W-001 – TW800K-01-M-001”

where: TW801I = TechWorld building 801 I is the first building (origination point)  
 6 = 6<sup>th</sup> floor  
 W = wiring center, closet W  
 001 = cable pair (copper) or strand (fiber)  
 TW800K = TechWorld building 800 K is the second building (destination point)  
 1 = 1<sup>st</sup> floor

- M = wiring center, Main Distribution Frame  
001 = cable pair (copper) or strand (fiber).

The cable label shall be affixed to both ends of the cable, approximately 2 to 3 inches from the termination point. Heat shrink labels are preferable. Wrap-around labels are permissible as long as they are printed using indelible ink and the labels are easily read.

#### **12.4 Patch Panel Patch Cables**

The patch panel patch cord connects the horizontal workstation cable to the network electronics. Patch cables in each wiring closet should be identified on each end of the patch cable in a standard, one-up, numeric order, so that an individual patch cable can be easily identified without having to physically “tug” the cable to follow and identify it.

The cable label shall be affixed to both ends of the cable, approximately one inch from the termination connector or modular plug. The labels should be printed using indelible ink, and the labels should be positioned so they can be easily read.

### **13.0 TEST AND DOCUMENTATION PROCEDURES**

The installation contractor shall complete all testing of the cable plant. The installation contractor is responsible for providing all personnel, equipment, instrumentation, and supplies that are necessary to perform the required testing.

#### **13.1 Testing of Installed Copper Cable**

All installed copper cables shall be tested with a Level III cable tester to certify that the cable conforms to ANSI/TIA/EIA-568-B specifications. The test device shall provide printed and electronic (soft) Pass/Fail test results that show the following:

- Electrical length in feet (accurate to 0.5 feet).
- Cross-talk in dB for each of the four pairs.
- End-to-end attenuation in dB for each of the four pairs.
- Drop number.
- Continuity (for all eight wires).
- Capacitance
- DC resistance
- Impedance
- Date of test
- Name and model of the field tester (i.e. Fluke OMNIScanner 2).
- Software version or level.
- Date the field tester was last calibrated.
- Which test was being performed (permanent link test, channel test).

### 13.2 Testing of Optical Fiber Cables

Testing shall be of the optical link as specified in ANSI/TIA/EIA-568-B.3 for multi-mode fiber optics and ANSI/TIA/EIA-526-7 method A for single-mode fiber optics. An optical fiber link is defined as the passive cabling network between two optical cross-connects (patch panels or outlets). This includes cable, connectors and splices but does not include active components. The link test contains the representative connector loss at the patch panel associated with the mating of patch cords, but does not include the performance of the connector at the equipment interface.

If the manufacturer of cables or connecting hardware has supplied post-manufacture performance data, copies of such data are to be included in the documentation.

Testing of installed multimode fiber cable shall meet or exceed the specifications in Exhibit 12.

**Exhibit 12: Multimode Fiber Cable Specifications**

Horizontal Fiber	Attenuation 850 nm	Attenuation 1300 nm
≤ 90 m	≤ 2.0 dB	≤ 2.0 dB
Backbone Fiber		
≤ 2000 m (6560 ft)	≤ fiber length (km) x 3.75 dB/km + number connector pairs x 0.75 dB + number of splices x 0.3 dB	≤ fiber length (km) x 1.5 dB/km + number connector pairs x 0.75 dB + number of splices x 0.3 dB

Testing of installed single-mode fiber cable shall meet or exceed the specifications in Exhibit 13

**Exhibit 13: Single Mode Fiber Cable Specifications**

Length	Attenuation 1310 nm	Attenuation 1550 nm
≤ 90 m (295 ft)	≤ 2.0 dB	≤ 2.0 dB
91-1000 m (3281 ft)	≤ 3.0 dB	≤ 3.0 dB
1001-2000 m (6562 ft)	≤ 3.3 dB	≤ 3.3 dB
2001-5000 m (16404 ft)	≤ 4.7 dB	≤ 4.7 dB

Test reports shall include the following information for each cabling element tested:

- Actual measured and maximum allowable attenuation (loss) at the specified wavelengths.
- Reference method.
- Number of mated connectors and number of splices (if any).
- Actual length and maximum allowable length.
- Group refractive index (GRI) for the type of fiber tested, if length was optically measured.
- Tester manufacturer, model, serial number and software version.
- Fiber ID number and project/job name.
- Link criteria used.

- Overall pass/fail indication.
- Date and time of test.

Test reports may be submitted in hardcopy , electronic, or both formats. ICE prefers these reports to be provided in the electronic format over hardcopy.

## **14.0 BUILDING PATHWAYS, CONDUIT, AND CLOSETS**

### **14.1 Closet Specifications (MDF and RWC)**

Typical communications closets house common equipment required to support both voice and data connectivity to workstations. Communication closets/rooms are typically centrally located on the floor, and adhere to the ANSI/TIA/EIA specifications for cable lobe lengths (e.g. maximum cable from closet to workstation will not exceed 100 meters, end-to-end). Closets/rooms should be vertically stacked, with a sufficient number of sleeves interconnecting each closet. All wiring centers shall comply with or support the following specifications and requirements:

#### **14.1.1 General Requirements**

- The space should be environmentally temperate, convenient, and professional looking.
- The communication closets must have sufficient infrastructure required to support the variety of communication services provided to ICE and contractor staff. Typically this includes items such as conduits, cable trays, building grounding system, etc.
- Communications closets should be designed for growth, and flexibility supporting new technologies without the need for major room modifications and rearrangements.

#### **14.1.2 Environmental**

- Room should be dust free with positive air pressure where possible and meet Federal guidelines for specified material to reduce airborne contaminants caused by off gassing.
- Ceilings should be finished with similar drop tiles used throughout the floor.
- Overhead lighting sufficient to provide 80 candle feet measured five feet above the finished floor, is to be switched controlled and is not to be connected to communications equipment circuits.
- Care must be taken to avoid structural columns, ductwork, other building structures, which would restrict the functionality of the space.
- Ceiling space above communications closets should be open and clear of major Heating, Ventilation, and Air Conditioning (HVAC) systems and ductwork, including major motors, elevator motors, generators, or equipment that induce excessive EMI and/or RFI to communications equipment or systems.
- Room temperature must be maintained between 65 to 85 degrees Fahrenheit, with a relative humidity range of 20 to 60 percent. When heat-generating equipment is placed into communication closets, maintaining environmental parameters is essential, thus avoiding down time due to equipment failures caused by equipment over heating. Where the building

HVAC is insufficient to maintain these parameters a standalone HVAC system should be considered to maintain these environmental ranges for 24 hour, 7 days a week (24/7) schedule.

- Where no dedicated HVAC system is required for plenum air return buildings, there should be a minimum of two diffusers for fresh HVAC air intake, with a minimum of two air return vents, vented door and a positive air flow maintained. Buildings without air return systems should provide clean air 24/7. Additionally, rooms without dedicated HVAC systems should have a continuous airflow 24/7.

#### **14.1.3 Construction**

- Closets vary in size depending on their function. However, minimum communications closet size should never be less than specified in the applicable ANSI/TIA/EIA specifications. ICE typical closet minimum size should be no less than 80 square feet, whereas the recommended size is calculated by the ANSI/TIA/EIA specifications.
- Door locks for all communications rooms will conform to local security requirements.
- Door must be a minimum 36 inches wide by 80 inches high. The door should swing out to facilitate equipment installation and provide maximum space utilization by allowing higher density equipment designs and configurations without the concern of lost space due to door travel.
- Floor should be rated to withstand 100 pounds per square foot and should be covered with appropriate tile or linoleum. Carpets are not acceptable in communications closets.
- Each communications closet should have a minimum of 2 separate 120 Volt @20A circuits installed for cable plant electronics. Preferred outlets are the National Electrical Manufacturers Association (NEMA)-20 5 quad receptacles. Outlets should be installed at heights that adhere to the building electrical codes, typically 18 inches above finished floor. Additional circuits may be required as equipment density is increased.
- A certified electrical ground and buss shall be installed into each closet for communications equipment grounding and be connected to a dedicated building ground, that is compliant with the ANSI/TIA/EIA 607.
- For the MDF, a pre-treated, fire-rated, plywood backboard (3/4 inches by 4 feet by 8 feet sheets) shall be fastened properly to the wall for riser cable control, where required.
- All cable shall be neatly tie-wrapped and anchored every 3 feet on the backboard
- ICE occupied floors that are contiguous, with stacked closets, should have a minimum of two 4-inch sleeves between closets for ICE Data and Voice cables. Additional sleeves will be required for the building voice riser system. Where ICE data and voice cables must pass through communications closets not controlled by ICE or the US government, mechanical protection must be provided. Thin wall ridged conduit will be sufficient for this requirement.

## 14.2 Conduits

Conduit installations shall comply with all ANSI/TIA/EIA-569-A specifications. Highlights of that specification are as follows:

- A maximum fill factor of 40% per conduit shall be adhered to for new conduits. If possible, installers shall avoid using those conduits that have exceeded the 40% fill factor.
- A pull-box shall be installed every 100 feet and every two 90-degree turns.
- All bends in the conduit must be made hydraulically to create smooth, sweeping turns.
- All pull-boxes shall be sized to allow for the largest minimum bend radius for any of the cables that are used.
- Where local codes mandate that rigid conduit must be installed from the distribution closet to the IMO, a minimum of one 1-inch diameter conduit from wiring center to workstation IMO is required. This single, 1-inch conduit will support both voice and data grade cabling to the workstation and requires a consolidated voice and data closet.
- In buildings which local codes do not mandate rigid conduit from the distribution closet to the IMO, a minimum of one 1-inch diameter conduit from above ceiling grids to respective IMO is recommended. These conduits are referred to as "ring and string" within the industry, and typically provide a pathway for plenum cable installation into the outlet box. Although many local codes do not require rigid conduits for low voltage wiring, ICE DSB recommends the general contractor install these for each IMO.
- Open office space (e.g., systems furniture where two or more IMOs are fed by a single column or feed) typically does not require conduit stubs or home-run conduits. If conduits or stubs are installed, then conduit sizing shall ensure fill factor does not exceed 40%.
- A minimum of two 4-inch diameter sleeves shall be provided for vertically stacked closets. In open plenum environments, where access to closets are not blocked by building structures or fixtures, and a clear pathway exists, conduit installation is not required to interconnect closets. Exceptions will be made by the ICE Project Manager
- A minimum of two 4-inch diameter conduits shall be provided in any building or campus environment where cable is subject to damage or there is no clear pathway for installation. These may be areas such as underground parking garages, outside cable routes, pathways through office space not under ICE control, or areas that prevent cable installation at future dates, such as main building lobbies, under-floor pathways, etc.
- A minimum of two 4-inch diameter conduits between buildings in a campus environment.

## 15.0 DOCUMENTATION

Upon completion of the cable plant installation, a documentation package shall be completed within 30 calendar days that shall include the following items:

- Letter of certification from the installing organization.
- Completed Contractor Information Form.
- Detailed materials list.

- Cable plant test certification letter.
- Electronic Copper cable test results (soft).
- Electronic Fiber-optic cable test results (soft).
- As-built site drawings.

All of this information shall be provided in both hardcopy and electronic formats, except as follows:

- Electronic Fiber test results (soft).
- Electronic Copper test results (soft).

### **15.1 Letter of Certification**

A letter of certification shall be supplied to the designated ICE Program Manager from the authorized project supervisor. A sample of the recommended letter of certification is included as Appendix B of this document. A letter of certification shall be supplied to the designated ICE Program Manager from the authorized project supervisor. A sample of the recommended letter of certification is included as Appendix B of this document. The letter of certification should be submitted in electronic format using word Processing software compatible with Microsoft Word 2000 or lower.

### **15.2 Implementation Report**

A brief implementation report shall be submitted as part of the completed documentation package. This implementation report, at a minimum, should include the following information:

- Installing company name and address.
- Contract number and Task or Delivery Order, if any.
- Beginning and ending dates of the installation project.
- Names of personnel assigned to the installation project.
- Installation summary, including deviations from the original task order.
- Responsible party names, address, and phone number.

The electronic version of this report shall be submitted using word Processing software compatible with Microsoft Word 2000 or lower. A sample implementation report is provided as Appendix D of this document.

### **15.3 Detailed Materials List**

A detailed materials list shall be included as part of the completed documentation package. At a minimum, this list shall include all materials originally called for from the site survey report, actual materials used for the installation project, and a column that shows the deviation between the two. Any unusual deviations in required quantities should be explained in the implementation report, as described previously.

The detailed materials list should be completed and submitted using spreadsheet software compatible with Microsoft Excel 2000 or lower. A sample form to be used for this list is provided as Appendix E of this document.

#### **15.4 Cable Plant Test Certification Letter**

In lieu of the responsible installation supervisor providing a signature on each printed cable test result, a letter of certification from the installation supervisor may be included to verify that installation personnel doing the testing have been properly trained in the use of the test equipment and that the test results included have been reviewed and are an accurate reflection of the installed cable plant.

The certification letter should be submitted in electronic format as a word Processing document compatible with Microsoft Word 2000 or lower. A sample cable plant test certification letter is included as Appendix F of this document.

#### **15.5 Copper Cable Test Results**

Test results for all cables shall be included in electronic format (ASCII text format) within the completed documentation package upon completion of the project. The cable test results shall be provided in numeric order on a per closet basis for horizontal cables. All copper tie and backbone cables shall be included as a sub-section and also numbered.

#### **15.6 Fiber-optic backbone Cable Test Results**

A hard copy of all fiber-optic cable test results shall be included as part of the completed documentation package. Opposite ends of each fiber strand tested should be included side by side or in direct sequential order. The fiber optic test results shall be submitted in a closet by closet format.

The electronic trace version of the test results should also be included. If a specific executable program is required to view the trace on a personal computer, a copy of this executable file shall be included with the electronic files.

#### **15.7 As-Built Site Drawings**

Complete as-built site drawings of the cable plant shall be included as part of the completed documentation package. At a minimum, the following information shall be included on the drawing:

- Accurate, reasonable facsimile of the building floor plan.
- Room and area numbers assigned for identification purposes.
- Location and designation of all wiring closets.
- Location and designation of all information outlets installed
- Routes for all cables, including horizontal, tie, and backbone.
- Location of all vertical penetrations.
- Location of horizontal penetrations through firewalls.

- Any special service application notes.
- Backbone and tie cable lengths between closets.

These as-built site drawings shall be completed using computer-aided drawing software that produces vector graphics data files, preferably AutoCAD version 2003 or lower.

***Attachment A***  
***Glossary***

AC	Alternating Current
ACR	Attenuation to crosstalk ratio
ADP	Automated Data Processing
ANSI	American National Standards Institute
AWG	American Wire Gauge
CAT	Category
CSA	Canadian Standards Association
dB	Decibel
DSB	Deployment Services Branch
DO	District Office
DHS	Department of Homeland Security
EF	Entrance Facility
EIA	Electronic Industries Association
ELFEXT	Equal Level Far End Cross-talk
EMI	Electromagnetic Interference
FCC	Federal Communications Commission
FIPS	Federal Information Processing Standard
GRI	group refractive index
HVAC	Heating, Ventilation, and Air Conditioning
ID	Identification
IDC	Insertion Displacement Connector
IEEE	Institute of Electrical and Electronics Engineers
IMO	Information Management Outlet
ICE	Immigration and Customs Enforcement
ISO	International Organization for Standardization
km	Kilometers
LAN	local area network
μm	Micrometer
Mbps	Megabits per second
MC	main cross-connect
MDF	Main Distribution Frame
MHz	MegaHertz
NEC	National Electrical Code
NEBS	National Electrical Bell Standards
NEMA	National Electrical Manufacturers Association
NEXT	Near End crosstalk
NFPA	National Fire Protection Agency

ns	Nanosecond
OFNP	Optical Fiber Plenum
OFNR	Optical Fiber Riser
OFN	Optical Fiber, not rated
OCIO	Office of Chief Information Officer
OTDR	Optical Time Domain Reflectometer
PCB	Printed Circuit Board
PS ACR	Power sum attenuation to crosstalk ratio
PS NEXT	Power sum near-end crosstalk
PS ELFEXT	Power sum
RFI	Radio Frequency Interference
RJ	Remote Jack
RWC	Remote Wiring Closet
TIA	Telecommunications Industries Association
TR	Technical Reference
TSB	Telecommunications Services Bulletin
UL	Underwriter's Laboratory
USOC	Universal Service Order Code
UTP	Unshielded Twisted Pair
WAN	Wide Area Network

ACR	Measurement of NEXT-Attenuation
Attenuation	The decrease in magnitude of a wave as it travels through any transmitting medium, such as a cable or circuitry. Attenuation is measured as a ratio or as the logarithm of a ratio decibel.
CAT 5e	A type of cable passing ANSI/TIA/EIA specifications, which allows data to be transmitted at 100 MHz.
Conduit	A pipe, usually metal, that runs either from floor to floor or along a floor or ceiling to protect cables.
Cross-talk	A type of interference caused by audio frequencies from one line being coupled into adjacent lines. The term is loosely used also to include coupling at higher frequencies.
Delay Skew	The propagation delay difference between the slowest and fastest cable pair.
EIA	Electronic Industries Association: the US national organization of electronic manufacturers. It is responsible for the development and maintenance of industry standards for the interface between data processing machines and data communications equipment.
EMI	“Noise” generated in copper conductors when electromagnetic fields induce current. External signals that disrupt the data transmitted on the local area network or electronic device being operated.
End-To-End Connection	A continuous connection, for example, from a workstation to a concentrator.
FC Connector	A type of optical fiber connector identifiable by its round, screw-operated locking nut. It is usually metal. Its ruggedness leads it to be widely used in test equipment. (Source BICSI Telecommunications Dictionary)
FEXT	Cross-talk measured at the opposite end from which the disturbing signal is transmitted.
Frequency	The number of times a periodic action occurs in a unit of time. The number of cycles that an electrical current completes in one second, expressed in Hertz.
Frequency Range	The range, measured in Hertz of a test signal.
Hertz	The unit of frequency, one cycle per second.
IEEE	Institute of Electrical and Electronics Engineers: An international professional society that issues its own standards and is a member of ANSI and ISO.
LAN	A geographically limited communications network intended for the local transport of data, video, and voice. Often referred to as a customer premises network.

Loose Tube	The fiber is contained in a plastic tube for protection. To give better waterproofing protection to the fiber, the space between the tubes is sometimes gel-filled. Typical applications are outside installations. One drawback of loose buffer construction is a larger bending radius. Gel-filled cable requires the installer to spend time cleaning and drying the individual cables, and cleaning up the site afterwards.
Megabits	A million bits per second: A unit of data transmission speed.
MDF	The main distribution frame, where central networking components are located. This refers to closets and large computer rooms and in most cases houses the WAN equipment and circuits. These rooms are the core rooms in a building or campus environment.
MTRJ connectors	The MT-RJ fiber optic couplers provide a complete system for premises applications. As the name suggests, the system was designed to bring many of the benefits of the RJ-45 modular plug and jack system to fiber optics: small size, lower costs, easier application, and easier use.
Nanosecond	One billionth of a second ( $10^{-9}$ seconds).
NEXT	Crosstalk measured at the end from which the disturbing signal is transmitted. Near End crosstalk is a measure of how much energy is coupled at the near end in a pair that is adjacent to an energized pair, and FEXT is the same measure at the far end from the transmitter. When all pairs are energized, as with Gigabit Ethernet, NEXT and FEXT are generated by each disturbing pair and must be power-summed to obtain a true measure of the coupled energy.
OFN, OFNP, OFNR	Type of optical fiber cable construction, which stands for: general purpose, plenum(P) or Riser (R)
Patch Panel	A modular termination and connection point for horizontal distribution cabling.
Plenum	A compartment or chamber to which one or more air ducts are connected and that forms part of the air distribution system. (Source National Electric Code)
Protocol	The means used to control the orderly exchange of information between stations on a data link or on a communications network or system.
Propagation Delay	The amount of time that passes between when a signal is transmitted and when it is received at the opposite end of a cable or cabling.
PS NEXT	Power sum near end crosstalk. Measurement
PVC	Polyvinyl Chloride: A type of plastic material used to make cable jacketing.
Return Loss	Return loss is a measure of the signal reflections occurring along a channel or basic link and is related to various electrical mismatches along the cabling.

RJ-45 Keyed Connector	An eight-conductor modular phone-style receptacle with a plastic tab on the side. This type of connector can only be inserted into a keyed jack.
RJ-45 Non-Keyed Connector	An eight-conductor modular phone-style receptacle without a plastic tab. This type of connector can be inserted into either a keyed or non-keyed jack.
SC connectors	Fiber connector that is duplexed into a single connector clip with both transmit/receive fibers.
ST connectors	Keyed, bayonet-style connector, very commonly used
TIA	Telecommunications Industries Association: The US national organization of telecommunications manufacturers. It is responsible for the development of data processing machines and data communications equipment.
Tight Buffered	Buffer layers of plastic and yarn material are applied over the fiber. Results in a smaller cable diameter with a smaller bending radius. Typical applications are patch cords and local area network connections. At least one mfr. Produces this type of cable for inside/outside use.
UTP	A cable with multiple pairs of twisted insulated copper conductors bound in a single sheath. An unshielded twisted pair CAT5 or 5e cable usually contains four pairs of wire in a single jacket.
WAN	Wide Area Network: A network that uses common-carrier-provided lines, usually to connect two or more LANs.

***Attachment B***  
***Sample Letter of Certification***

*[Use Corporate letterhead]*

*[Title]*

**Date:** [Current date]

**To:** [Full name of individual to whom the letter is being sent]

**Address** [of individual to whom letter is addressed]

**Re:** Cable Plant Installation

**Task Order No.:** [XXX-xxx]

Dear *[Mr., Ms., or Dr. and last name]*:

I hereby certify that the cabling installation completed for the above referenced ICE site was completed by our firm, according to the ICE Structured Cabling Standards, on *[date of installation in Month Day, Year]*.

Our firm has tested each unshielded twisted pair copper cable wire (not just cable pairs) we installed, as well as any previously installed Category 5 or 5e cable, if applicable, which will be re-used as part of this Task Order. I hereby certify that every wire and cable was tested and meets or exceeds the CAT 5e ANSI/TIA/EIA-568-B.2 transmission test requirements.

Our firm also tested each fiber-optic cable and strand we installed, as well as previously installed fiber-optic cable that will be used as part of this Task Order. I hereby certify that each strand of every cable meets or exceeds the required standards for fiber-optic cable.

*[Mr., Ms., or Dr. and full name]*

*[Title]*

***Attachment C***  
***Sample Contractor Information Form***

## CONTRACTOR INFORMATION

JOB NAME: LOCATION:

**DATE:**      **PROJECT:** Cable Plant Installation

FIBER CONTRACTOR

NAME:      PHONE:

ADDRESS:

CITY, STATE, ZIP:

CONTACT NAME:

COMPLETION DATE:

SCOPE OF WARRANTY RESPONSIBILITY:

In accordance with Existing Contract

SUPPLIED MATERIALS:

In accordance with Task Order XXX-xxx

COPPER CONTRACTOR

NAME: PHONE:

ADDRESS:

CITY, STATE, ZIP:

CONTACT NAME:

COMPLETION DATE:

SCOPE OF WARRANTY RESPONSIBILITY:

In accordance with Existing Contract

SUPPLIED MATERIALS:

In accordance with Task Order XXX-xxx

***Attachment D***  
***Sample Implementation Report***

## PROJECT IMPLEMENTATION REPORT SITE C

### INTRODUCTION

Company A under sub-contract to Company B, and working under Task Order Number XXX-xxx, recently performed a local cable plant installation at Site C. The project was begun on Monday July 7, 2003, and the installation was completed on Wednesday, July 23, 2003.

### PROJECT PERSONNEL

The following Company A personnel participated in the installation project at Site C:

Mr. X	Program Manager
Mr. Y	Task Team Leader
Mr. Z	Senior Network Engineer

### INSTALLATION SUMMARY

The network installation was completed in accordance with the Task Order, using the Site Survey Report as the guide for project completion. In accordance with the design documentation, two buildings at the headquarters site were cabled for a total of 52 dual cable drops. All drops were installed through a self-suspended overhead cable routing system above the acoustic ceiling tiles in the office areas and garage of Site C.

Two wiring closets, designated wiring closet HQ-01-A and HA-01-A, serve the workstation connectivity needs for Site C. The main building cables are identified by labels starting with HQ-01-A. The garage cable drops are identified by labels beginning with HA-01-A. All 45 copper cable drops for closet HQ-01-A terminate on the patch panels in the equipment racks located in room 118, which also serves as the main computer room. The seven drops in the garage in wiring closet HA-01-A terminate on the patch panels located on the equipment rack in room 105.

A six-strand multi-mode fiber-optic cable connects wiring closet HA-01-A in the garage to wiring closet HQ-01-A in the main building.

There were no modifications made to the design documentation from the Site Survey Report. All material was provided and installed in accordance with the materials listing in the report.

### PROJECT DOCUMENTATION

Included within the As-built documentation package, both in hard copy and electronic format, is the following information:

<u>Item</u>	<u>Electronic Format</u>
Letter of Certification	Word processing compatible with Microsoft Word for Windows (Version 97), or lower
Implementation Report	Word processing compatible with Microsoft Word for Windows (Version 97), or lower
Contractor Information	Word processing compatible with Microsoft Word for Windows (Version 97), or lower
Cable Plant Database	Spreadsheet compatible with Microsoft Excel (Version 97) or lower
Detailed Materials Listing	Spreadsheet compatible with Microsoft Excel (Version 97) or lower
Cable Plant Test Results	ASCII Text File
Active Equipment Installation Log	Spreadsheet compatible with Microsoft Excel (Version 97) or lower
As-built Site Drawings	CAD format compatible with AutoCAD Version 2000 or lower
Wiring Closet Detail	Raster or Vector drawing compatible with Visio Professional (Version 5.0) or AutoCAD Version 2000 or lower

### CONCLUSION

The installation project was completed on Wednesday, July 23, 2003.

All materials and workmanship provided by Company A are fully warranted under the terms of the existing contract between Company B and Company A.

Any questions concerning the project installation, documentation, and warranty may be addressed to Mr. Y of Company A. Mr. Y can be reached at (000) 555-0000.

***Attachment E***  
***Sample Detailed Materials List***

Item No.	Description	Projected Quantity	Actual Quantity	Variance
1	Wire Management Panel	6	6	0
2	48 Port Patch Panel	2	2	0
3	24 Port Patch Panel	4	4	0
4	Single Gang Faceplate, 6-plex CAT-5e	25	25	0
5	Workstation Blank Insert	50	50	0
6	Dual CAT-5e RJ-45 Jack, 568A, non-keyed	25	25	0
7	CAT-5e Cable, 24-4/P, plenum, feet	15000	15000	0
8	Patch Cord, yellow, 14 feet	30	30	0
9	Patch Cord, yellow, 10 feet	70	70	0
10	Open Rack, self support, double sided	1	1	0
11	Rack Mount Power Outlet Strip	2	2	0
12	Catalyst 4500 Chassis (6-Slot)	1	1	0
13	Catalyst 4500 1300W AC Power Supply	1	1	0
14	Catalyst 4500 Supervisor IV	1	1	0
15	Catalyst 4500 48-Port 10/100/1000 Base-T	2	2	0
16	1000BASE-SX "Short Wavelength" GBIC	1	1	0
17	WS-C3550-12T	1	1	0
18	19" Clear Vented Double Sided Rack Tray	1	1	0
19	0.9" x 1.5" Latching Duct, 6 foot lengths	8	8	0
20	Data Tab (Computer Icon) 100/PACK	2	2	0
21	Fiber-optic cable, Twelve-Strand, feet	600	300	300
22	Box Eliminators	50	50	0
23	Surface Mount Box	14	14	0
24	0.53"x1.01" Latching Duct, 6 foot lengths	14	14	0
25	Fiber Distribution Center	2	2	0
26	FDC Connector Panel, Preloaded w/ 6 SC	2	2	0
27	Dual Fiber Jumper Cable, SC to SC, 3 meter	2	2	0

***Attachment F***  
***Sample Cable Test Certification Letter***

*[Use Corporate letterhead]*

**Date:** [Current date]

**To:** [Full name of individual to whom the letter is being sent]

**Address:** *[of individual to whom letter is addressed]*

**Re:** ICE Cable Plant Installation at Site C

**Task Order No.:** [XXX-xxx]

Dear *[Mr., Ms., or Dr. and last name]*:

This letter is to certify that all cable test results included for the above mentioned project has been completed by Company A personnel who have been trained, and are competent in the use of, the required cable testing equipment.

Please accept this letter as certification of the accuracy of the test results furnished in lieu of individual signatures on each cable test result.

*[Mr., Ms., or Dr. and name]*

*[Title]*



# **U.S. Department of Homeland Security**

U.S. Immigration and Customs Enforcement

Office of Detention and Removal Operations

## **CONTRACT DETENTION FACILITY**

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# **DESIGN STANDARDS**

**for EXECUTIVE OFFICE FOR IMMIGRATION REVIEW**

March 20, 2007



# **U.S. DEPARTMENT OF HOMELAND SECURITY**

U.S. Immigration and Customs Enforcement

Office of Detention and Removal Operations

**CONTRACT DETENTION FACILITY**

## **Design Standards** for

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**Executive Office for Immigration Review**

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*Immigration and Customs Enforcement (ICE) is a component of the U.S. Department of Homeland Security (DHS). ICE brings a unified and coordinated focus to the enforcement of federal immigration laws, customs laws, and air security laws. ICE brings to bear all of the considerable resources and authorities invested in it to fulfill its primary mission: to detect vulnerabilities and prevent violations that threaten national security.*

*As an Operational Division of ICE, the Office of Detention and Removal Operations (DRO) is responsible for public safety and national security by ensuring the departure from the United States of all removable aliens and by enforcing the Nation's immigration laws.*

*Because of increasing demands on Service resources, ICE/DRO personnel must be able to share information rapidly and efficiently in order to succeed in fulfilling the Service mission.*

*In addition to this document, which establishes the EOIR Court Design Standards, other documents are being developed that provide additional related information for planning and design of Contract Detention Facilities (CDF).*

---

*The U.S. Department of Homeland Security gratefully acknowledges the participation and input of the following individuals:*

---

**U.S. Immigration and Customs Enforcement - Office of Detention and Removal Operations**

(b) (6), (b) (7)(C) Chief of Acquisition and Support

**U.S. Department of Justice - Executive Office for Immigration Review**

(b) (6), (b) (7)(C) Chief, Space and Facilities Management Staff

Deputy Chief, Space and Facilities Management Staff

**Performa, Inc.**

(b) (6), (b) (7)(C) President - Performa's Governmental/Justice Team

(b) (6), (b) (7)(C) NCARB, Strategic Planner

(b) (6), (b) (7)(C) Strategic Planner





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## 1. INTRODUCTION

Project Statement  
Design Standards Purpose  
Design Standards Organization



## Project Statement

### PROJECT INTENT

The U.S. Department of Homeland Security (DHS) and Immigration and Customs Enforcement (ICE) are responsible for detaining those who have entered the United State illegally or violated their immigration status. Facilities used by DHS/ICE for detention are called Service Processing Centers (SPC's) or Contract Detention Facilities (CDF's). The purpose of these facilities is to provide a place of detention for aliens who are taken into custody pending completion of their deportation case or pending release.

It is the intent of this project and Design Standards to develop a set of planning and design standards from which Contract Detention Facilities are built. The operational components within a CDF are derived from categorizing the personnel groups and service activities of a CDF. The level of securing required determines how the components are organized. The side bar to the right lists the main operational components within a CDF and for each their functional areas. This report establishes the planning and design guidelines for one of the court/interface components called the Executive Office for Immigration Review (EOIR) Court.

### EXECUTIVE OFFICE FOR IMMIGRATION REVIEW

The Executive Office for Immigration Review (EOIR) is part of the Department of Justice (DOJ) and oversees the immigration courts. The EOIR Court determines if an alien will be granted permission to reside in the U.S. The EOIR Court component is located within the court interface zone of the CDF complex and includes courtrooms, and work areas.

#### CDF Operational Components

##### **Office Components**

Normal office setting for administrative and public functions of the CDF. (They are located outside the secure perimeter.)

- Lobby
- Public Visitation
- Deportation
- INS Court Attorneys
- SPC Administration
- Staff Services & Training
- LANS

##### **Detainee Living Components**

Located inside the secure perimeter they are used by the detainees during their normal daily routine.

- Security Command
- Housing
- Commissary
- Recreation
- Law Library/Recreational Library
- Food Service Dining

##### **Court and Public/Detainee/Interface Components**

This component includes the EOIR Court work area and courtroom space.

##### **- EOIR Court**

- Attorney/Contact Visiting

##### **Service Components**

Service functions for the CDF detainee population. They are typically placed in a secure area because detainees require frequent access to them or are given work details in these components.

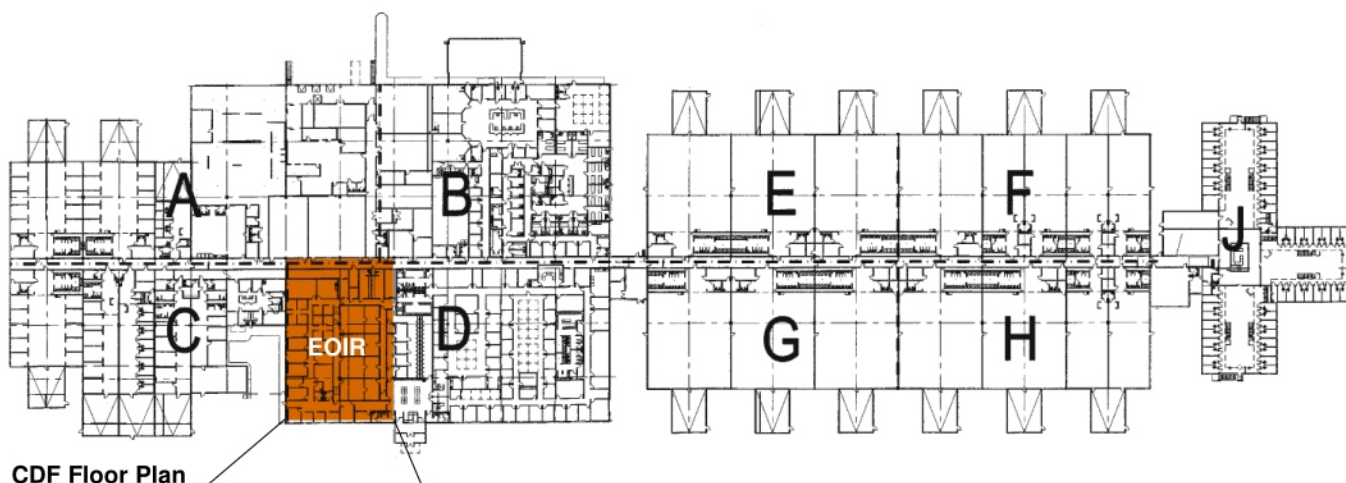
- Mailroom
- Processing
- Visiting
- Health Services
- Food Service Preparation
- Laundry
- Detainee Work/Industries

##### **Facility Support Components**

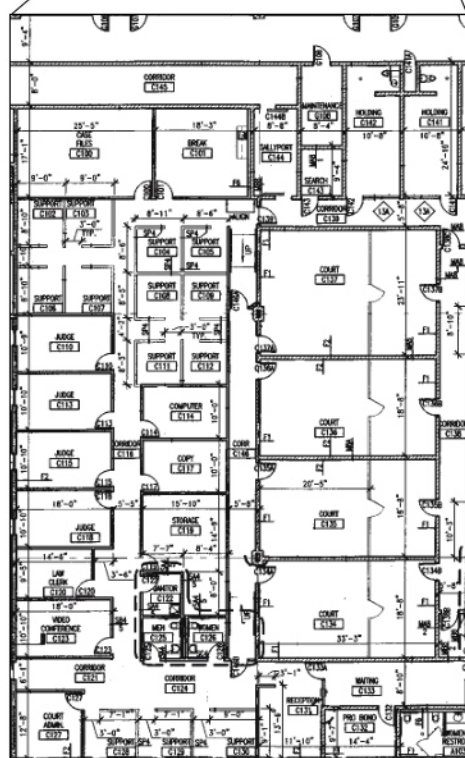
These elements support the facility but do not provide direct services to the detainees and may be located outside the secure perimeter.

- Warehouse and Supply
- Maintenance
- Central Utility Plant

### EXAMPLE: Contract Detention Facility



### CDF Floor Plan



## EOIR Floor Plan

**Pearsall Contract Detention Facility**  
Pearsall, TX

Total Facility Gross Square Feet =	251,950
Total EOIR Gross Square Feet =	9,480
Total Beds =	1,200



## CDF Site Plan



## Design Standards Purpose

### PURPOSE OF THE DESIGN STANDARDS

The EOIR Court Design Standards (hereafter referred to as the Standards) contains criteria and concepts for the planning and design of the EOIR Court. The standards contain the *organizational*, *operational*, and *functional* requirements for the EOIR Court Component.

The purpose of the Standards, is to establish operational directions and architectural relationships for future EOIR Court spaces. The decisions made and policies adopted during the development of the Standards are intended to provide direction and guidance during the planning and design of existing and future Contract Detention Facilities, bringing standardization to the facilities as well as reducing the amount of effort and time required to design, construct and activate facilities.

### USERS OF THE DESIGN STANDARDS

This document is intended for all individuals involved in the planning and design of a CDF facility, including architects and engineers, EOIR staff, DHS/ICE staff located at Headquarters, Regional, and District offices assigned to Detention and Removal, Engineering Design and Construction, and any other DHS agencies involved. This document is intended to communicate ICE/EOIR requirements to other service providers providing design, construction, and facility management services.

### APPLICATION OF THE DESIGN STANDARDS

The architectural information contained in the EOIR Court Design Standards should be viewed as ICE/EOIR policy applicable to the design of all CDF facilities. It is intended to provide to the user clear guidance on project requirements, conceptual solutions, and specific technical details. The information is intended to focus the user on meeting ICE/EOIR needs, to educate regarding design of EOIR Court facilities, and to establish design performance conditions as well as to provide design solutions.

The requirements in the Standards are generic in nature. Specific applications such as the mission of the proposed facility, site conditions, ability to receive

service support from local communities and other institutions, and climactic differences must be considered.

The EOIR Court Design Standards provide instructions that must be met, alternative acceptable solutions, and design issues the user should consider. For instructions that must be met, the user shall comply and provide final designs that meet these instructions. Alternative acceptable solutions provide the user with flexible choices to react to variations unique to the specific project. Issues being considered help the user understand the context of the problem and the needs of ICE and the EOIR Court.

The Design Standards are meant to be used as a guideline for the layout of the EOIR Court. Design decisions must be coordinated through EOIR Space and Facilities Management Staff (SFMS) and the ICE/DRO Facilities Management Unit. A review process will be established at the inception of each project and at the 30/60/90 percent design phases. EOIR SFMS and ICE/DRO OFM will provide approvals after each stage. EOIR will provide final approvals from the EOIR Office of the Chief Immigration Judge (OCIJ) and Office of the Director (OD).

Any deviations from the design standards must be approved by EOIR SFMS and ICE/DRO OFM.





## Design Standards Organization

### ORGANIZATION OF THE EOIR COURT DESIGN STANDARDS

The EOIR Court Design Standards are organized to provide conceptual and technical information in a structured manner.

The Design Standards document is organized for ease of use. The Standards are organized into five sections. Each section is designed to stand alone so it may be extracted for use in the planning and design process.

The side bar to the right briefly outlines the contents of each section of this document.

### DESIGN STANDARDS DEVELOPMENT PROCESS

The design standards documented herein have been developed by selected representatives from ICE/DRO and EOIR.

The Standards Development Team, reviewed and evaluated existing EOIR standards documents and assessed existing Service Processing Centers and Contract Detention Facilities noting advantages and disadvantages of each EOIR layout.

The goal of the new standards is to enhance the organizational, operational, and functional efficiencies within an EOIR Court unit and to enhance its relationship to all of the other CDF components.

#### Design Standards Contents

##### **Section 1. Introduction**

The Introduction identifies the overall function of a CDF and discusses the purpose and organization of the Design Standards.

##### **Section 2. Organizational Requirements**

This section of the Standards discusses the history of EOIR Court how it is organized within the Department of Justice (DOJ) as well as within a CDF.

##### **Section 3. Operational Requirements**

This section of the Standards discusses the physical relationships of EOIR Court within a CDF and between the EOIR Court Units. Staff positions are identified and correspond per the number of detainee beds.

##### **Section 4. Functional Requirements**

This section of the Standards discusses the spaces needed for each EOIR Court Unit and corresponding technical requirements (i.e. functional description, room or area photograph, space plan, material, and equipment list).

##### **Section 5. Appendix**

This section of the Standards contains a listing of reference publications and acronyms/abbreviations.

## Design Standards Report Contents



Project Statement  
Design Standards Purpose  
Design Standards Organization



EOIR Court Space Requirements  
1.0 Court Unit Requirements  
2.0 Administrative Unit Requirements  
3.0 Common Support Unit Requirements



EOIR Court Background  
EOIR Court Function  
EOIR Court Organization



Reference Publications  
Acronyms and Abbreviations



CDF Operational Model  
EOIR Court Operational Units  
EOIR Court Staff Positions  
EOIR Court Staff Forecasts



## 2. ORGANIZATIONAL REQUIREMENTS

EOIR Court Background  
EOIR Court Function  
EOIR Court Organization



## **EOIR Court Background**

### **OVERVIEW**

The Executive Office for Immigration Review (EOIR) is an administrative tribunal that presides over all trial and appellate cases involving charges of immigration violations. On behalf of the Attorney General, EOIR exercises authority to interpret and administer Federal immigration laws and regulations through Immigration court proceedings, appellate reviews, and administrative hearings in certain types of immigration-related cases.

The Executive Office for Immigration Review (EOIR) was created on January 9, 1983, through an internal Department of Justice (DOJ) reorganization which combined the Board of Immigration Appeals (BIA or Board) with the Immigration Judge function previously performed by the former Immigration and Naturalization Service (INS), now part of the U.S. Department of Homeland Security.

### **MANDATE AND MISSION**

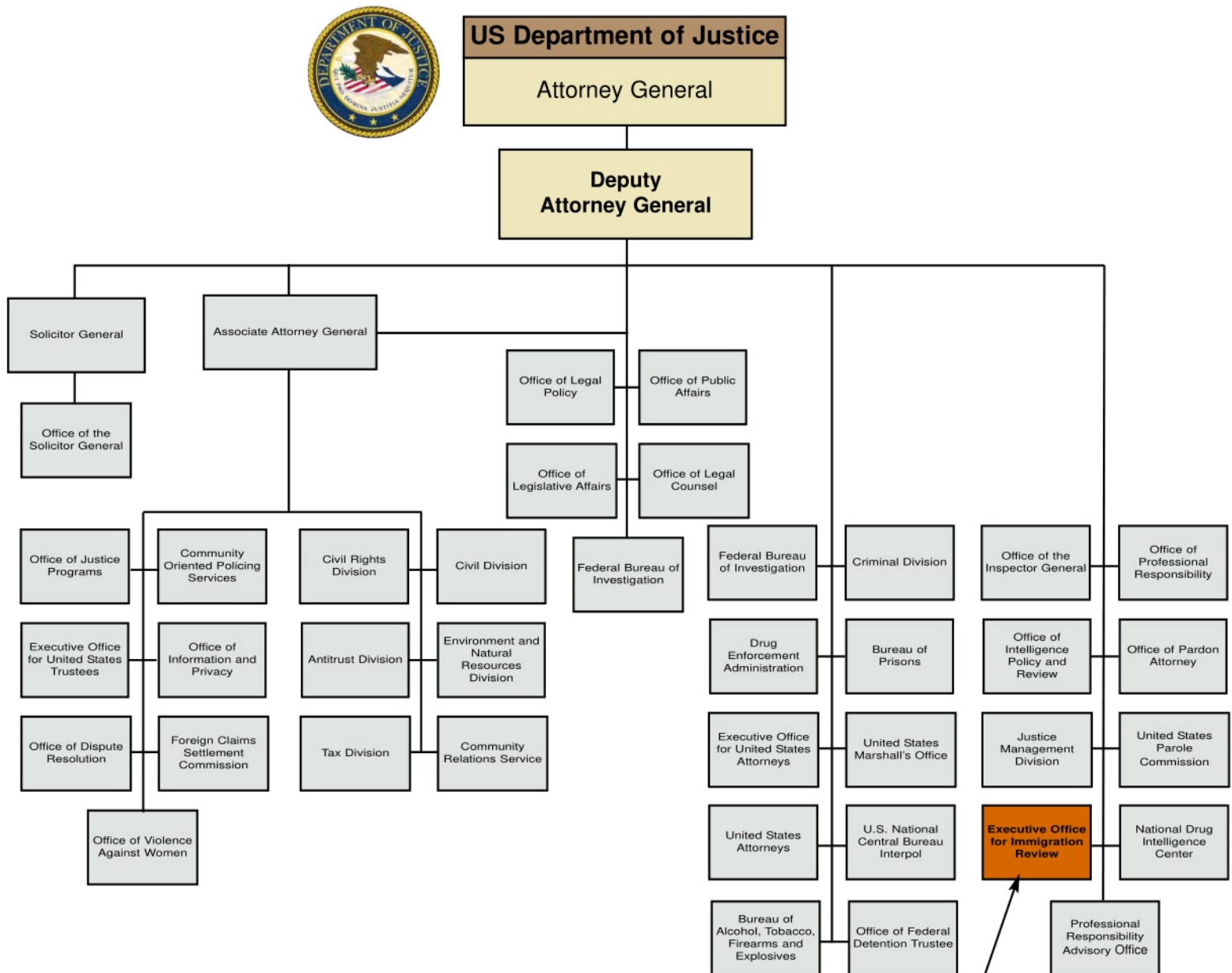
EOIR's mandate is to provide a fair, expeditious, and uniform interpretation and application of immigration law. This is accomplished through various adjudicative functions including immigration hearings; appellate review of decisions in immigration matters; and hearings pertaining to employment discrimination, document fraud, and employer sanctions. The purpose of these proceedings is to provide a process through which individuals can defend themselves against Government charges, complaints, denials of benefits, or through which they can seek relief from penalties imposed on or against them.

EOIR's mission is:

***To provide for the fair, expeditious and uniform interpretation and application of immigration law.***

Headed by a Director who reports to the Deputy Attorney General, EOIR carries out its mission through three main organizational components: The Board of Immigration Appeals (BIA); the Office of the Chief Immigration Judge (OCIJ); and the Office of the Chief Administrative Hearing Officer (OCAHO). Except for immigration courts located throughout the country, all component, management and support functions of EOIR are located at its headquarters in Falls Church, VA, just outside Washington, D.C.

### U.S. Department of Justice Organization Chart



Executive Office for Immigration Review (EOIR)



## EOIR Court Function

### FUNCTION

EOIR is responsible for adjudicating immigration cases under authority from the Attorney General. In conducting immigration court proceedings, appellate reviews, and administrative hearings EOIR interprets and administers immigration laws. EOIR consists of three primary components - Office of Chief Immigration Judge, the Board of Immigration Appeals and the Office of the Chief Administrative Hearing Officer. EOIR is separate from the Office of Special Counsel for Immigration-Related Unfair Employment Practices in the DOJ Civil Rights Division and the Office of Immigration Litigation in the DOJ Civil Division.

The most common type of proceeding before EOIR is a removal hearing at an EOIR Court. In these hearings, DHS charges and must prove that an alien is in the United States unlawfully and should be removed. EOIR does not have jurisdiction over an alien's cases unless DHS files charging documents with EOIR.

If DHS charges an alien with an immigration law violation, it serves the alien with a charging document, known as a Notice to Appear, ordering the individual to appear before an Immigration Judge. The Notice to Appear is filed with the Immigration Court having jurisdiction over the alien, and advises the alien of the nature of the proceedings, the alleged acts that violated the law, the right to obtain legal representation at no expense to the Government, and the consequences of failing to appear at scheduled hearings.

The issue of removal from the United States is often only the first step in the process because the outcome of many hearings depends on the decision regarding relief from removal. Immigration law provides relief from removal to some aliens who meet specific eligibility criteria. To qualify for relief, aliens must prove that they are eligible. Relief can include asylum, voluntary departure, cancellation of removal, or remedies provided by immigration law.

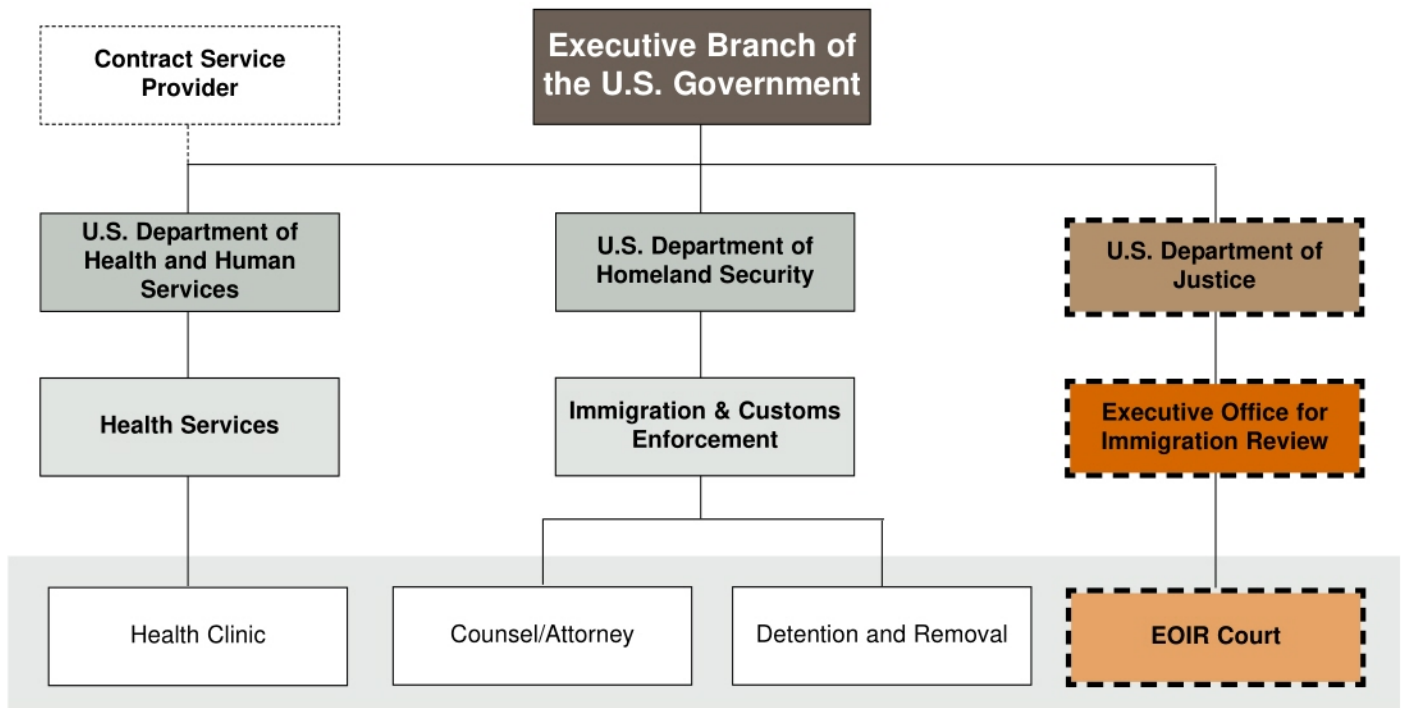
Another common proceeding is the bond redetermination hearing for aliens who are detained by DHS but have pending immigration hearings with EOIR. Eligible aliens can ask an Immigration Judge to reduce the amount of bond set by DHS, or set a bond if DHS has determined that no bond should be set.

Once a case is completed, if the alien or DHS disagrees with the Immigration Judge's decision, either party or both parties may appeal the decision to the BIA, which is the final decision-maker on "discretionary relief" decisions. ("Discretionary relief" is a type of relief where, even though the alien may meet the requirements, the Immigration Judge has the discretion to determine whether the relief is granted.)

In some instances, if the alien disagrees with the BIA's ruling, the alien may appeal the decision to the Federal court system. In rare instances, if DHS disagrees with the BIA's ruling, the case may be referred ("certified") to the Attorney General for review.

The organizational chart on page 2.5 illustrates the three agencies present within a CDF and their respective responsibilities.

### CDF Organization Chart



Three agencies are present within the CDF: Detention and Removal Operations (DRO), [Executive Office for Immigration Review \(EOIR\)](#) and Health Services (HS). These groups' respective areas of responsibility are:

1. Detention and Removal Operations (DRO) is responsible for managing the detainees, presenting cases for deportation and executing deportations.
2. [Executive Office for Immigration Review \(EOIR\)](#) is part of the Department of Justice and is responsible for conducting the court hearings.
3. Health Services (HS) is part of the Department of Health and Human Services and is responsible for providing health services.

*NOTE: In some instances Health Services are provided through Contract Detention Service Providers.*



## **EOIR Court Organization**

### **EOIR COURT ORGANIZATION**

The EOIR Court is organized into three units;

- 1.0 Court Unit
- 2.0 Administrative Unit
- 3.0 Common Support Unit

The units are managed by the EOIR Court Administrator. Immigration Judges are assigned to Courtrooms and manage the court proceedings with support from the Administrative Support Unit.

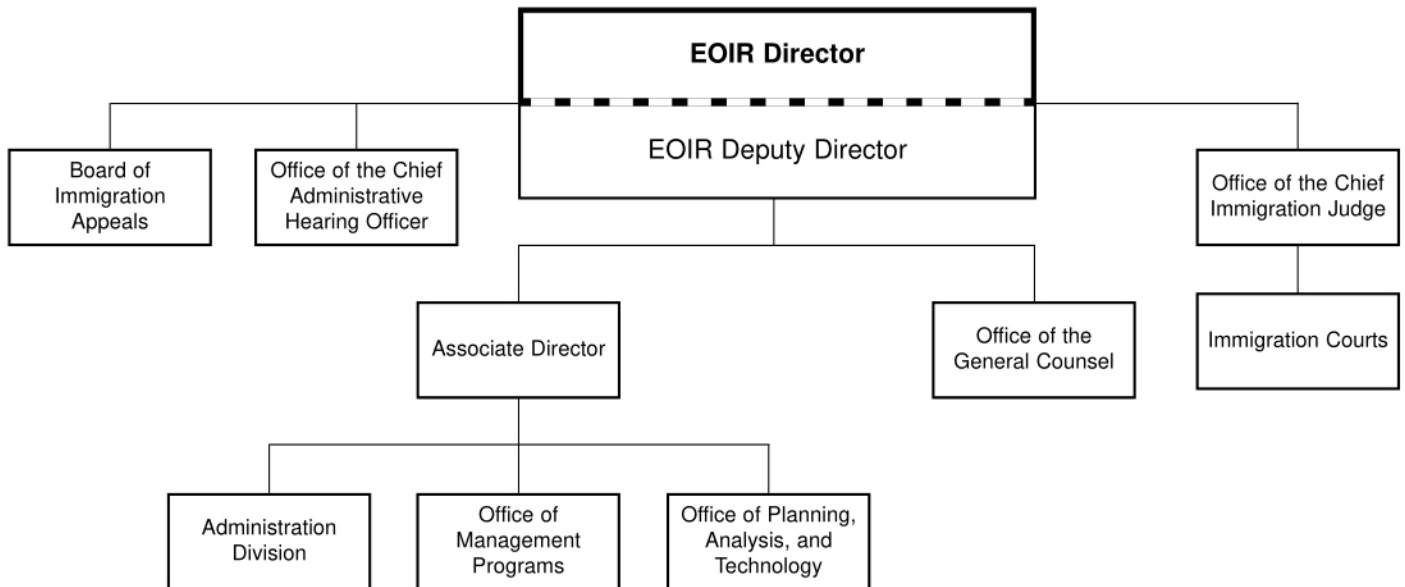
The Court Administrator manages staff that work in support of the courts with the exception of the Immigration Judges. The Court Administrator also controls the Master Hearing Schedule and day-to-day administrative operations for EOIR.

The diagram on page 2.7 illustrates the organizational structure of the EOIR Court.

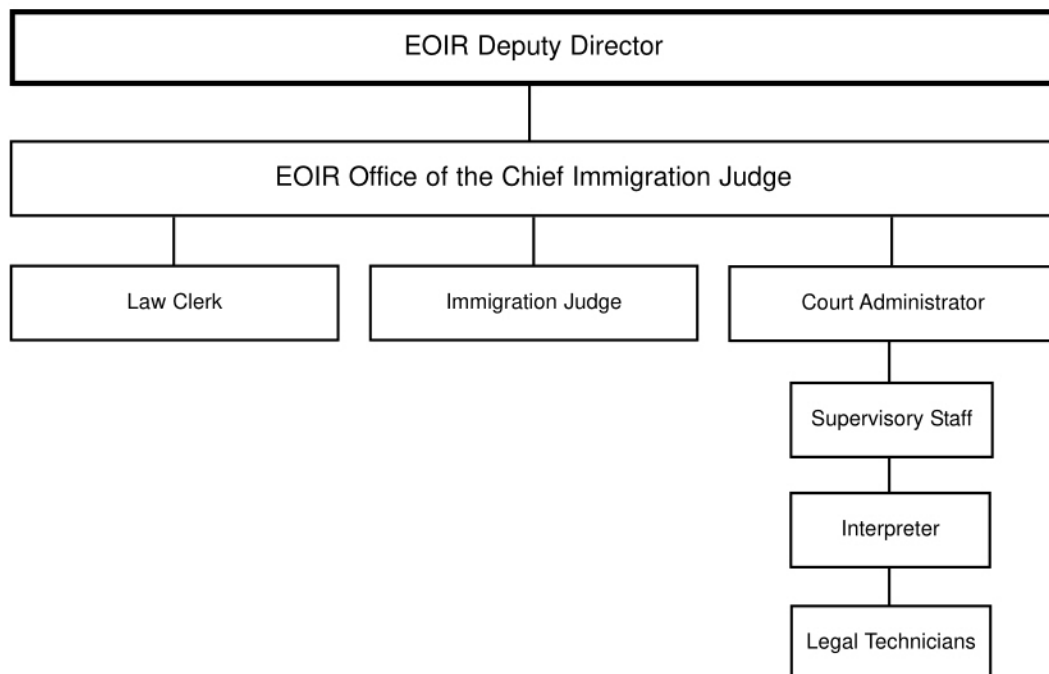
### **FUNCTION**

EOIR within the CDF is responsible for proceedings providing a process through which individuals can defend themselves against Government charges, complaints, denials of benefits, or through which they can seek relief from penalties imposed on or against them to the full extent of the law. EOIR Courts are provided within CDF to provide expeditious processing of aliens charged without having to move them to locations remote from where they are currently held.

**EOIR Organizational Chart**



**EOIR Court Organizational Chart**





### 3. OPERATIONAL REQUIREMENTS

CDF Operational Model  
EOIR Court Operational Units  
EOIR Court Staff Positions  
EOIR Court Staff Forecasts



## CDF Operational Model

### CDF MISSION

Contract Detention Facility (CDF) is responsible for providing expeditious resolution of aliens that have been charged with violations of United States Immigration, Civil or Criminal law. For this reason, EOIR assigns Immigration Judges to each CDF where they conduct on and off site hearings. In most cases the process begins with DHS filing charges against an alien respondent and represents the Government in seeking the respondent's removal from the United States. Detainees awaiting arraignment are held in Housing Units until proceedings are completed.

### THE EXECUTIVE OFFICE FOR IMMIGRATION REVIEW

The EOIR consists of work area and courtroom space, and is an interface area between the court personnel, the Deportation staff, the public, and detainees under restraint. It requires a secure area demised from the rest of the CDF. The purpose of a distinct secure perimeter for the EOIR courtroom is twofold: (1) to allow general public to enter without going through the secure perimeter of the main facility; and (2) to ensure a secure perimeter for an area where detainees are present. Detainees who have attended proceedings in the court component and may have come in contact with individuals from the public should be searched prior to returning to other secure zones. Public attending hearings or proceedings should be given a secure screening prior to admission.

### PUBLIC ACCESS GROUP

Components that require public access must be adjacent to and open to the public lobby. This includes the Administration, Deportation, the EOIR Court, and Visiting. Other components that have direct adjacency requirements with these must also be included in this arrangement. These additional components include the DHS Attorneys, Staff Training and Services, and Central Control. This public access group includes components within the non-secure and public interface security zones. The primary secure perimeter must separate public access groups from others. In a multi-story facility, this group should be located on the ground floor for direct public access.

### SECURITY ZONES

The secure zones of the facility correspond to the degree of detainee and public access required in the components. The Court/Interface Zone should be in its own secondary secure perimeter, contiguous with but separate from the main facility primary secure perimeter. Access will be by hardened commercial grade doorways, with special controls for general and emergency egress. The perimeter barriers, electronic controls, and procedures should be at the same level as the other secondary secure perimeters.

### CDF Operational Zones

#### Office Zone

Normal office setting for administrative and public functions of the CDF. (They are located outside the secure perimeter.)

- Lobby
- Public Visitation
- Deportation
- CDF Administration
- Staff Services & Training
- LANS

#### Detainee Living Zone

Located inside the secure perimeter they are used by the detainees during their normal daily routine.

- Security Command
- Housing
- Commissary
- Recreation
- Law Library/Recreational Library
- Food Service Dining

#### Court/Interface Zone

This component includes the EOIR Court work area and courtroom space.

- EOIR Court
- Detainee Visitation

#### Service Zone

Service functions for the CDF detainee population. They are typically placed in a secure area because detainees require frequent access to them or are given work details in these components.

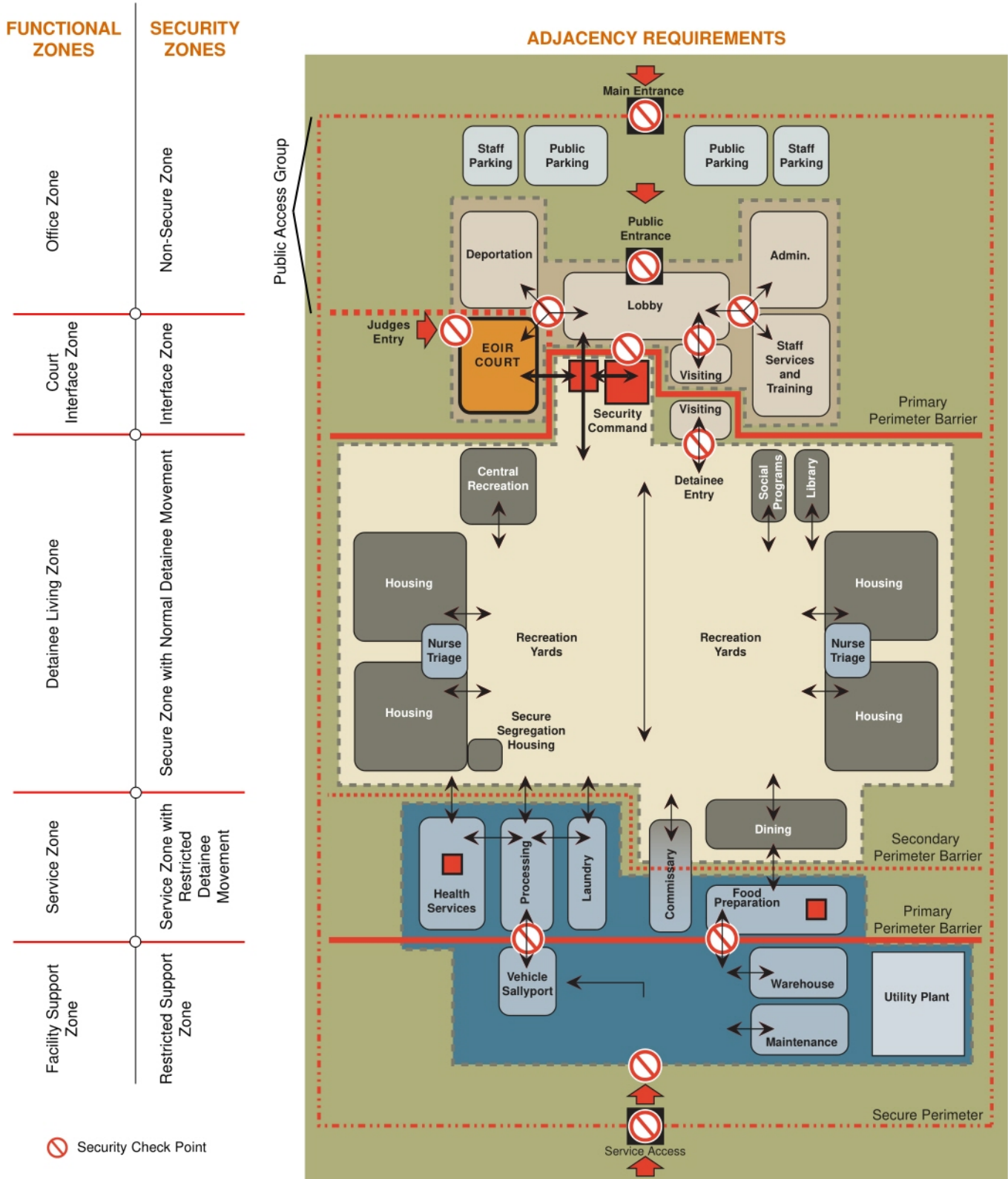
- Processing
- Health Services
- Food Preparation
- Commissary
- Laundry

#### Facility Support Zone

These elements support the facility but do not provide direct services to the detainees and may be located outside the secure perimeter.

- Warehouse and Supply
- Maintenance
- Central Utility Plant

## CDF Facility Model





## EOIR Court Operational Units

### EOIR COURT ORGANIZATIONAL MODEL

The EOIR Court consists of three operational units.

- 1.0 Court Unit
- 2.0 Administrative Unit
- 3.0 Common Support Unit

*The description for each unit is provided in the sidebar to the right.*

Public access to the EOIR Court is gained through the waiting area and is directly accessed from the CDF Public Lobby. All official court business, internal department access, deliveries, and visitors to EOIR Court come through the Public Lobby. The Courtrooms are located for secure and controlled access by Judges, EOIR staff, the public, and detainees.

### EOIR COURT WORKFLOW

The EOIR Court is located in the Court Interface Zone immediately adjacent to the Public Lobby and near the ICE Attorney's Office. There shall be a separate exterior Judge/Staff entrance for EOIR from staff parking with designated parking spaces for the Judges. Detainees are escorted into the Courtroom(s) through a secure corridor from either a Holding Room or directly from Housing. Visitors and Attorneys access the Courtrooms through the same secure corridor as detainees. Corridor traffic is regulated by CDF guards. Traffic in the Public/Detainee corridor will need to be monitored for segregating traffic to and from the Courtrooms. The Judges access the Courtrooms from the EOIR suite through a secure door behind the Judges bench.

### EOIR COURT ADJACENCIES

Deportation, Administration, EOIR Court, and Visiting should be adjacent to the public entrance and lobby to allow public access without requiring entry any further into the facility. Due to the presence of the detainees, the entrance to the EOIR Court must have security measures. The EOIR staff members are located adjacent to the courtrooms. Outside individuals attending EOIR Court functions must be admitted to the Court. The DHS attorneys must be located next to Deportation for access to records. The attorneys interact with EOIR and should be placed adjacent to this function.

The diagram on page 3.5, illustrates the adjacencies needed between the three EOIR units as well as critical workflow patterns and security check points.

### EOIR Unit Descriptions

#### 1.0 Court Unit

The Courts Unit consist of courtrooms, vestibules and secure corridors. A separate secure corridor is provided for visitors and aliens. A Judge's secure corridor is provided for ease of access from inside the EOIR suite.

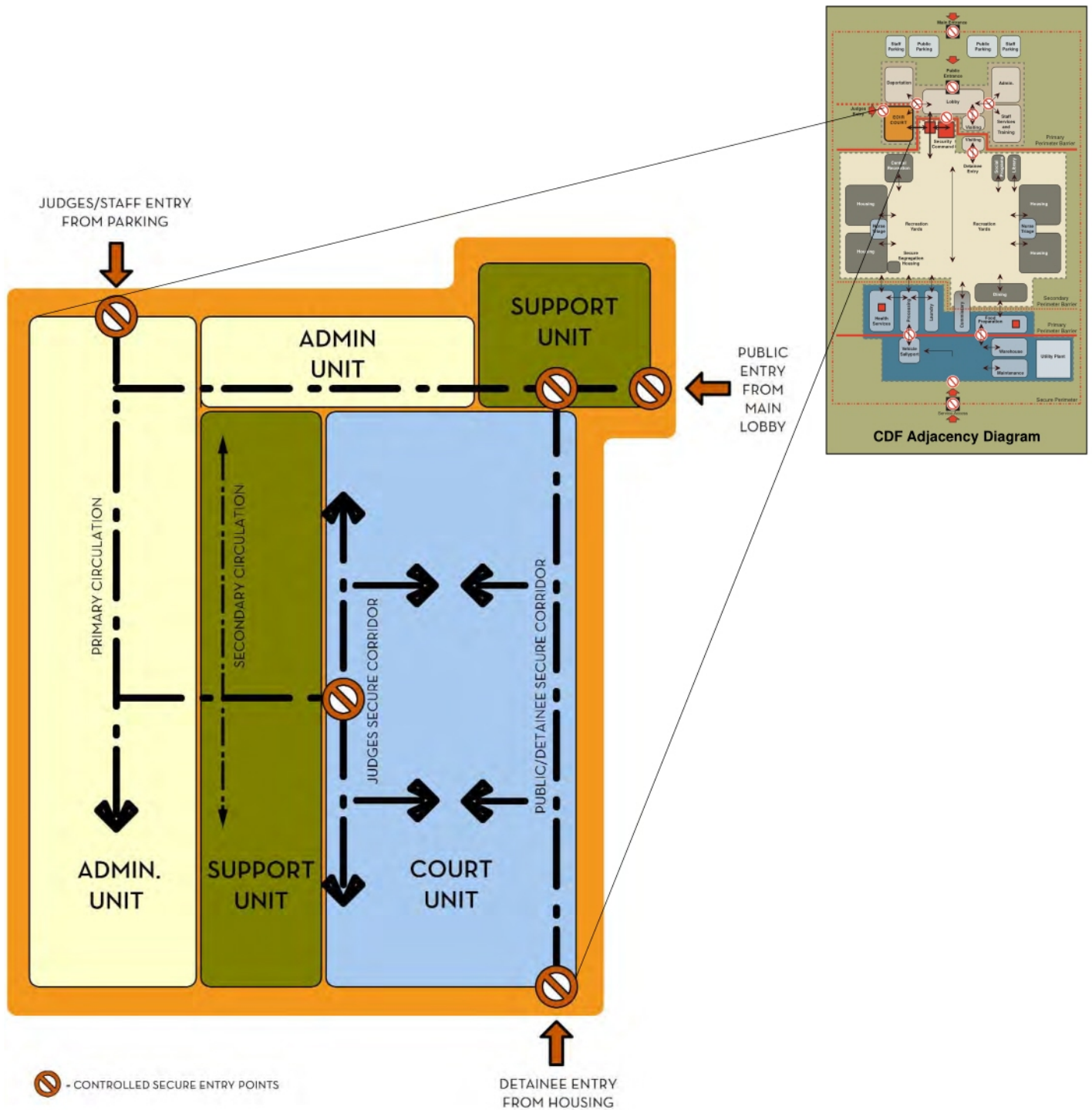
#### 2.0 Administrative Unit

The Administrative Unit consists of the Judges Chambers, staff offices, workstations and work areas. Included in this unit are enclosed offices and open work areas. Open work areas are fixed low partitions central to the unit. This unit should be adjacent to the Courts Unit.

#### 3.0 Common Support Unit

The Common Support Unit consists of all the service functions used by EOIR Staff in completion of their mission. Included with this are public waiting areas, conference and equipment spaces, file and storage rooms. Common support should be located with ease of access to the Administrative Unit and Courts Unit.

## EOIR Court Facility Organizational Diagram





## **EOIR Court Staff Positions**

### **STAFF AND ACTIVITIES**

The work activities of EOIR Court include preparing and hearing cases and administration of EOIR affairs. Staff involved in these activities include: EOIR Judge(s), a Court Administrator and support staff. (For planning purposes 3.5 support staff are assigned per judge.)

Participants within EOIR Court hearings include: the EOIR Judge, and interpreter/legal tech., Court Attorneys, detainee defendant and his/her attorney(s), witnesses, and public viewing. The EOIR Court does not conduct jury trials. Detainees, in groups of individuals, may be present in the Courtroom at one time.

### **STAFF DESCRIPTIONS**

The following describes the roles and responsibilities for each of the staff positions within the EOIR Court Unit.

#### **Immigration Judge**

An immigration judge presides at formal hearings to determine issues arising in removal and other immigration proceedings. An Immigration Judge presides over cases involving claims of persecution in which an alien applies to the Immigration for asylum. Immigration Judges also hear cases involving the rescission of adjustment of status for aliens who had previously been adjusted to that of a permanent resident, and cases involving departure control to determine whether the departure of an alien from the United States may be prejudicial to the interest of the United States. Immigration Judges hear custody determination cases when an alien is arrested by the Department of Homeland Security which initially sets the amount of bond and conditions for an alien's release and an Immigration Judge may reduce the amount of bond or rule that the alien be released upon their own recognizance. Immigration Judges regulate the course of hearings, rule on all objections, motions, procedural issues, requests for continuances and receive the testimony of witnesses and other evidence.

Immigration Judges may issue subpoenas to compel an appearance by a witness for a hearing or the production of documents. Immigration Judges hear oral arguments, and may receive and consider briefs prior to a decision. At the conclusion of the hearing, the Immigration Judge issues a decision on the issues of the proceeding. This decision is final unless appealed to the Board of Immigration Appeals in Removal Proceedings (other types of proceedings are not appealable to the Board.) In most cases, a permanent verbatim record of the entire proceedings is kept and a transcript is certified in case of an appeal. Immigration Judges have the authority to order an alien removed from the United States or to grant relief from removal such as asylum, cancellation of removal, waivers of removal and adjustment of status.

#### **Attorney Advisor - Judicial Law Clerk**

A Judicial Law Clerk assists the Immigration Judges in preparing for immigration hearings, in drafting of facts and conclusions of law. A Law Clerk drafts recommendations on proposed orders and decisions for a case, and examines formal filings to make sure they meet the legal and procedural requirements of the court.

#### **Court Administrators**

The Court Administrator for an Immigration Court is the chief management resource in the court and sometimes a region. A Court Administrator exercises delegated authority for planning and directing the work of court staff to ensure that Immigration Judges are provided support services to conduct immigration hearings. A Court Administrator administers a court management program to include supervising the processing of charging documents that are filed by the Department of Homeland Security, and the processing of motions, applications for relief, briefs and appeals from the initial creation of the Record of Proceeding to the final disposition of the matter. A Court Administrator creates and maintains the court's calendaring docket and is responsible for managing the court's hearing notice system to provide notice to all parties, and for monitoring case related actions.

#### **Interpreters**

The Interpreters in Immigration Courts perform a full range of interpretations from one or more languages into English for the Immigration Judges, aliens, attorneys and alien representatives during all types of immigration proceedings (master calendar hearings, individual calendar hearings and bond hearings). Interpreters also serve as a language advisor and expert for an Immigration Court, advising judges on language services at the court. Immigration Court interpreters translate the full range of legal, technical, and general material and information received or issued by the Immigration Court. Interpreters also assist the court in other activities such as processing, maintaining Records of Proceeding and electronic data and perform a variety of administrative functions to support court operations.

#### **Legal Technicians**

Legal Technicians provide direct legal support assistance to the Immigration Court in support of the hearing process. Legal Technicians receive, examine and process charging documents and create a Record of Proceeding for each case that comes before an Immigration Court. Legal Technicians provide hearing notices to the parties of an immigration case. Legal Technicians perform the duties of court clerks during Master Calendar hearings where a legal assistant will prepare for immigration hearings by posting calendars and providing the immigration judge with the Records of Proceeding for that day's docket of cases. Legal Technicians call cases to hearing; receive filings in court from the parties to a hearing which include applications for relief, briefs or motions. Legal Technicians also receive calls and visitors, process correspondence, and coordinate hearing room and the hearing logistics for the transportation of detained aliens who are heard at Immigration Courts and for an Immigration Court's Institutional Hearing Program. Legal Technicians also perform administrative duties as required such as assisting with procurement of supplies for a court, administering time and attendance and creating travel vouchers.



## **EOIR Court Staff Forecasts**

### **STAFF FORECASTS**

The EOIR Court staff is organized into three functional units. The Staff Requirements matrix shown on page 3.9, illustrates the number of staff assigned to each unit based on the number of detainee beds at the CDF. The numbers illustrate a general rule and may vary based on the operational model used at the specific detention facility. In all cases the staffing must be verified and approved by the OCIJ and OD.

### **STAFF ASSIGNMENTS**

The EOIR Court staff may serve in several functional areas within the court facility. The matrix also illustrates which EOIR unit the staff member may be assigned.

### 3. OPERATIONAL REQUIREMENTS

#### EOIR Court Staff Forecasts

Staff Position by Unit	Staff Forecast By # of Detainee Beds					Staff Assignment by Unit			Weekly	
	<200	200-400	400-600	600-800	800-1000				Shift	Day
<b>1.0 COURT UNIT</b>										
<b>No Permanently Assigned Staff</b> Staffed only when court is in session										
<b>2.0 ADMINISTRATIVE UNIT</b>										
Immigration Judge	1	2	3	4	5	P	P		B	M-F
Court Administrator	1	1	1	1	1		P		B	M-F
Law Clerk	1	1	1	1	2		S		B	M-F
Supervisory Staff	0	1	2	2	3		S		B	M-F
Support Staff	3.5	6	8.5	12	14.5	S	S		B	M-F
<b>Subtotal</b>	<b>6.5</b>	<b>11</b>	<b>15.5</b>	<b>20</b>	<b>25.5</b>					
<b>3.0 COMMON SUPPORT UNIT</b>										
<b>No Permanently Assigned Staff</b> Support Staff (Reception)										
<b>TOTAL EOIR STAFF</b>	<b>6.5</b>	<b>11</b>	<b>15.5</b>	<b>20</b>	<b>25.5</b>					

P = Primary Role  
 S = Secondary Role  
 B = Business 8am-5pm  
 M-F = Monday through Friday

NOTE: The numbers of Judges forecasted is based on the high-end of the bed forecast.



## 4. FUNCTIONAL REQUIREMENTS

EOIR Space Requirements Summary  
1.0 Court Unit Requirements  
2.0 Administrative Unit Requirements  
3.0 Common Support Unit Requirements  
Technical Requirements



## Space Requirements Summary

### SPACE IDENTIFICATION

The space requirements for the EOIR Court were developed by interviewing with ICE/EOIR and staff representatives. They were developed as a tool for delineation of EOIR Court space needs based on the number of detainees housed within a CDF.

The size of a CDF is determined by the number of staff and detainees served as well as specific functional requirements. There may, however, be variations to its requirements depending on operations and specific types of available staff.

The chart to the right lists the spaces needed to support the EOIR mission. The spaces are categorized by the three operating units. The diagram illustrates a prototype layout for an 800-1000 bed CDF.

### Planning Assumptions

- (1) Supervisory Legal Technician per (4) Legal Technicians/Clerks
- (1) Supervisory Interpreter per (4) or more Interpreters under the supervision of a Court Administrator
- (1) Judge per courtroom for each 200 beds
- 5' wide corridor for Judge's secure corridor
- (15) file cabinets per Judge at 12 sf per cabinet
- Printer workstations = number of courtrooms + 1 X 65 sf
- Waiting room = 100 sf + 75sf per Court Room
- Supervisory Staff = 1:4 Support Staff
- (3.5) Support Staff per (1) Judge
- Circulation is determined by these factors:
  - 30% for all spaces through 175 sf
  - 20% to 176 sf through 600 sf
  - 10% to 600 sf

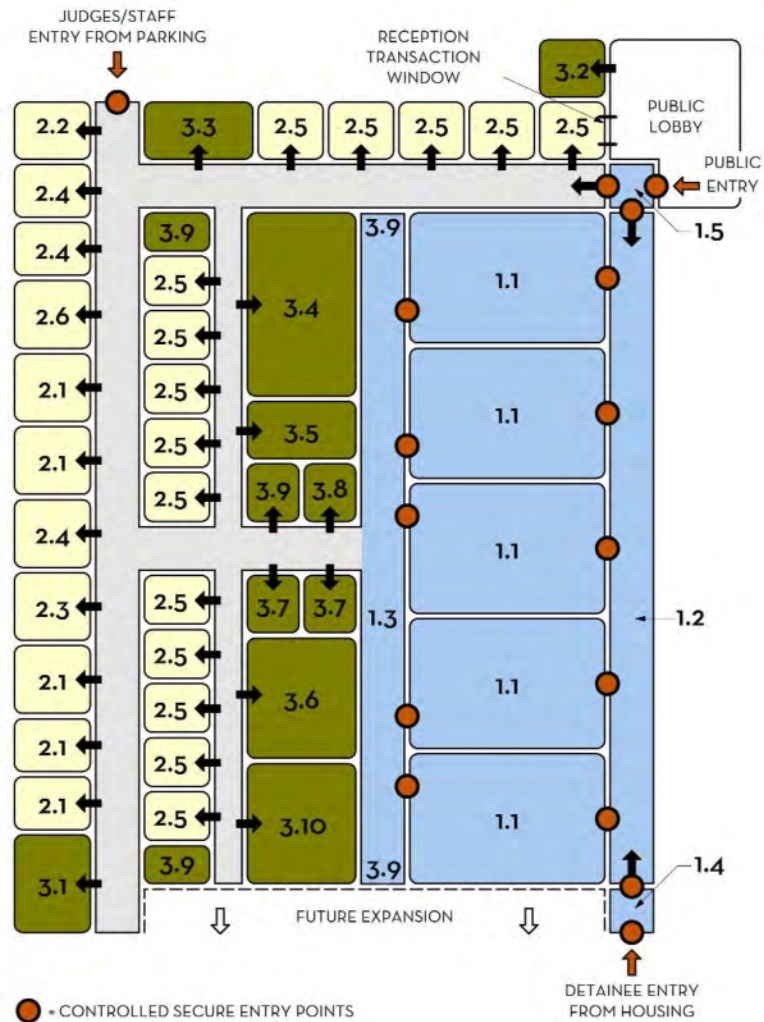
## 4. FUNCTIONAL REQUIREMENTS

### EOIR Court Layout : 800-1000 Beds

1.0	COURT UNIT
1.1	Courtroom
1.2	Courtroom Sub-Lobby
1.3	Judges Corridor
1.4	Detainee Sally-Port
1.5	Public Sally-Port

2.0	ADMINISTRATIVE UNIT
2.1	Immigration Judge Chambers
2.2	Court Administrator Office
2.3	Law Clerk Office
2.4	Supervisory Office
	Supervisory Legal Tech Office
	Supervisory Interpreter Office
2.5	Support Work Station (incl. Recpt.)
	Legal Tech Workstation
	Interpreter Workstation
2.6	Supervisory Interpreter Office

3.0	Common Support Unit
3.1	Conference Room
3.2	Pro Bono Room
3.3	Copier/Mail Room
3.4	File Room Capacity = file cabinets
3.5	Computer (ADP) Room
3.6	Break Room
3.7	Staff Restroom (1 Male, 1 Female)
3.8	Janitor Closet
3.9	Printer Workstation
3.10	Supply Room





## Space Requirements Summary

### SPACE FORECAST MATRIX

The Space Requirements Summary Matrix on the following page, identifies the spaces needed for each of the three EOIR Court Units. The matrix is also designed to forecast these needs for five planning scenarios, they include:

1. <200 beds
2. 200 - 400 beds
3. 400 - 600 beds
4. 600 - 800 beds
5. 800 - 1000 beds

The bed ranges were determined to best represent the capacity range for existing and planned detainee populations.

For each planning scenario, the following information is provided:

- # of Users is the number of persons (staff or detainees) in a given space.
- # of Spaces is the quantity of a given space.
- Space Size NSF is the net square feet or size of a given space.
- Total Size NSF is the number of spaces or quantity of a space times it's NSF or size.

### SPACE CALCULATIONS

The total Net Square Footage is the sum of all net areas of the spaces listed. This number is multiplied by a Net Usable Factor (1.30) (an industry factor based on facility type and utilization efficiency) to determine Usable Square Footage. The Net Usable Area is multiplied by a usable Gross factor (1.05) to determine the Total Gross Square Foot for the EOIR Court Space Requirements.

### DEFINITIONS

#### **Net Square Footage (NSF)**

Total clear floor area within a given room, excluding walls, corridors, mechanical equipment rooms, shafts, stairs, and chases.

#### **Usable Square Footage (USF)**

Total floor area including mechanical and electrical equipment rooms general circulation spaces including corridors, stairs, and elevator shafts.

#### **Gross Square Footage (GSF)**

Total building area measured from outside face of exterior walls.

Space Requirements Summary

		SPACE FORECAST MODEL: BY NUMBER OF DETAINEE BEDS																					
		Current DOJ Planning Standard	<200 Beds				200 - 400 Beds				400 - 600 Beds				600 - 800 Beds				800 - 1,000 Beds				Comments
ID #	EOIR Components and Spaces		# of Users	# of Spaces	Space Size NSF	Total Size NSF	# of Users	# of Spaces	Space Size NSF	Total Size NSF	# of Users	# of Spaces	Space Size NSF	Total Size NSF	# of Users	# of Spaces	Space Size NSF	Total Size NSF	# of Users	# of Spaces	Space Size NSF	Total Size NSF	
1.0	COURT UNIT																						
1.1	Courtroom	850	30-35	1	864	864	30-35	2	864	1728	30-35	3	864	2592	30-35	4	864	3456	30-35	5	864	4320	1 Judge/Courtroom for each 200 beds
1.2	Courtroom Sub-Lobby	150	N/A	1	150	150	N/A	2	150	300	N/A	3	150	450	N/A	4	150	600	N/A	5	150	750	5' wide corridor by width of Courtroom
1.3	Judges Corridor	150	N/A	1	150	150	N/A	2	150	300	N/A	3	150	450	N/A	4	150	600	N/A	5	150	750	5' wide corridor by width of Courtroom
1.4	Detainee Sally-Port			1	64	64		1	64	64		1	64	64		1	64	64		1	64	64	
1.5	Public Sally-Port			1	64	64		1	64	64		1	64	64		1	64	64		1	64	64	
	Subtotal Courts NSF					1,292				2,456				3,620				4,784				5,948	
2.0	ADMINISTRATIVE UNIT																						
2.1	Immigration Judge Chambers	175	3	1	175	175	3	2	175	350	3	3	175	525	3	4	175	700	3	5	175	875	
2.2	Court Administrator Office	150	3	1	150	150	3	1	150	150	3	1	150	150	3	1	150	150	3	1	150	150	
2.3	Law Clerk Office	120	3	1	120	120	3	1	120	120	3	1	120	120	3	1	120	120	3	2	120	240	
2.4	Supervisory Office	120					3	1	120	120	3	2	120	240	3	2	120	240	3	3	120	360	
	Supervisory Legal Tech Office	120																					
	Supervisory interpreter Office	130																					
2.5	Support Work Station (incl. Recpt.)	65	1	4	85	340	1	6	85	510	1	9	85	765	1	12	85	1020	1	15	85	1275	Reception cubicle may be manned by Legal Tech or Interpreter
	Legal Tech Workstation	65																					
	Interpreter Workstation	65																					
2.6	Supervisory Interpreter Office	120					1	1	130	130	1	1	130	130	1	1	130	130	1	1	130	130	
	Subtotal Administrative NSF					785				1,380				1,930				2,360				3,030	
3.0	Common Support Unit																						
3.1	Conference Room	200	8	1	226	226	12	1	244	244	16	1	264	264	20	1	280	280	24	1	304	304	
3.2	Pro Bono Room	120	4	1	120	120	4	1	120	120	4	1	120	120	4	1	120	120	4	1	120	120	Table and 4 chairs in room adjacent to Waiting Area
3.3	Copier/Mail Room	120		1	120	120		1	120	120		1	120	120		1	120	120		1	120	120	
3.4	File Room	15 cab/judge		15	12	180		30	12	360		45	12	540		60	12	720		75	12	900	15 file cabinets per Judge at 12 SF per file
3.5	Computer (ADP) Room	120	1	1	120	120	1	1	120	120	1	1	120	120	1	1	120	120	1	1	120	120	
3.6	Break Room	150	4	1	150	150	4	1	150	150	4	1	150	150	4	1	150	150	4	1	150	150	
3.7	Staff Restroom (1 Male, 1 Female)	56	1	2	56	112	1	2	56	112	1	2	56	112	1	2	56	112	1	2	56	112	
3.8	Janitor Closet			1	30	30		1	30	30		1	30	30		1	30	30		1	30	30	If needed, designer to confirm with overall layout
3.9	Printer Workstation	65		2	64	128		3	64	192		4	64	256		5	64	320		6	64	384	Number of Courtrooms + 1 x 65 sf
3.10	Supply Room	120		1	120	120		1	140	140		1	160	160		1	180	180		1	200	200	
	Subtotal Common Support NSF					1,306				1,588				1,872				2,152				2,440	
	Total NSF					3,383				5,424				7,422				9,296				11,418	
	Net Usable Factor (NUF)					1.3				1.3				1.3				1.3				1.3	
	Total Usable Area (TUA x NUF)					4,398				7,051				9,649				12,085				14,843	
	Usable Gross Factor (UGF)					1.05				1.05				1.05				1.05				1.05	
	Total Gross Area (TGA x UGF)					4,618				7,404				10,131				12,689				15,586	

## 1.0 COURT UNIT REQUIREMENTS

- Function
- Workflow Patterns
- Room Data Sheets



## 1.0 Court Unit - Function

### FUNCTION STATEMENT

The Court Unit is responsible for conducting Master and Merit Hearings.

#### Master Calendar Hearings

These hearings are for arraignment-like purposes only. The charges against each detainee are read and he/she is asked to admit or deny the charges. Also each detainee is asked if they concede removability. Detainees are advised of eligibility for types of relief and the cases are scheduled to an individual hearing, several, based on the request for relief.

#### Merit Hearings

Immigration Judges have jurisdiction to consider applications for various forms of discretionary or mandatory relief, including applications for asylum, adjustment of status, cancellation of removal, and waivers of inadmissibility. The decisions are administratively final unless appealed or certified to the Board of Immigration Appeals.

### Design Criteria

#### Critical Issues

- ✓ Courtrooms need to be grouped together for ease of access by security, aliens, Judges, attorneys, EOIR Court staff, and the public.
- ✓ Because of the need for visitor access to the Court rooms, and the need to maintain security, it is desirable for Courtrooms to be located adjacent to the main CDF Public Entry lobby/waiting area.
- ✓ Access to the Courtrooms by visitors and detainees is through the same secure corridor. Controlled visual access to this corridor for both types of traffic will require timed flow.
- ✓ The Court Unit will accommodate all classifications of detainees: Low, Medium and High Risk Populations.
- ✓ All visitors must enter the Main Public Lobby before entering the EOIR Court Unit.
- ✓ All detainees will be escorted to the EOIR Court Unit.
- ✓ The EOIR Court Unit does not conduct jury trials.

#### Special Requirements

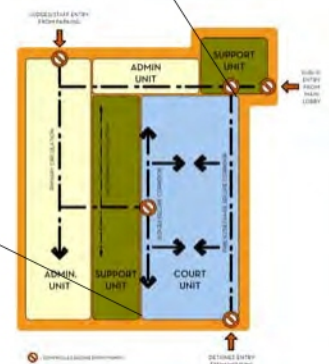
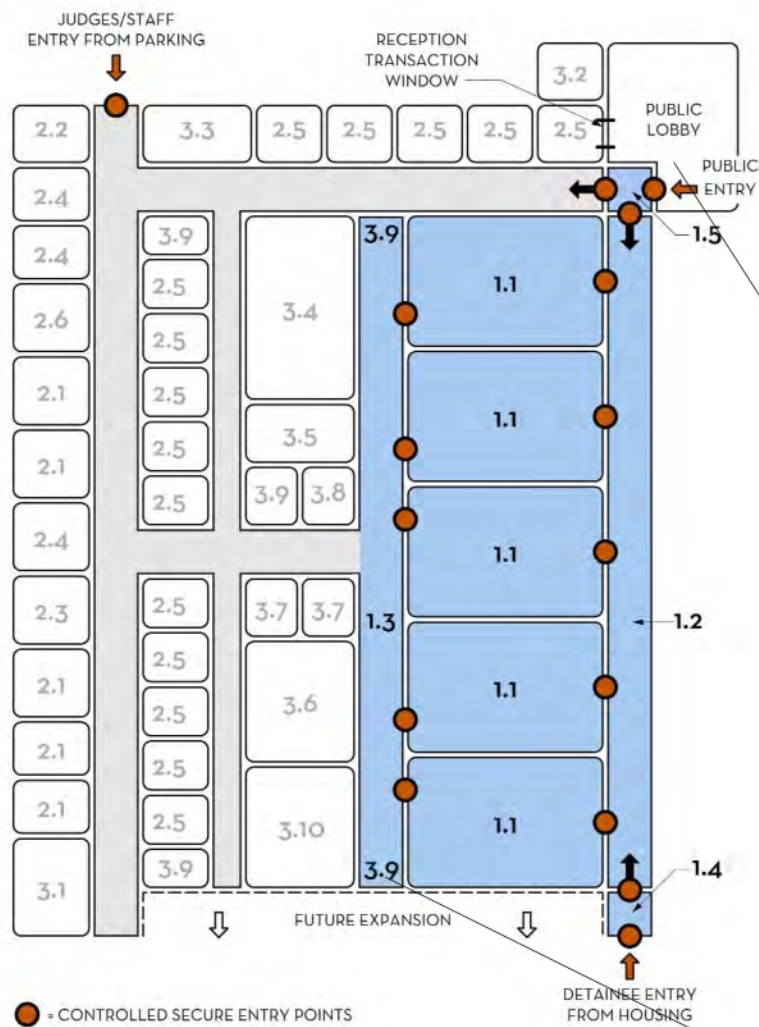
- ✓ Due to the nature of the proceedings, courtrooms must be acoustically isolated from background and equipment noise.
- ✓ The Judge's access to the courtroom(s) is through a separate secure corridor opposite the courtroom sub-lobby. The Judge enters the courtroom from behind the Bench. The Bench is on a raised platform or dais and shall be provided with ramp access from the Judges secure corridor per ADAAG standards.
- ✓ A Judges secure corridor shall be accessed from the EOIR Court and be near the Judge Chambers.
- ✓ Courtrooms shall not contain any exterior windows.

#### Space Requirements

##### 1.0 COURT UNIT

- 1.1 Courtroom
- 1.2 Courtroom Secure Corridor
- 1.3 Judges Secure Corridor
- 1.4 Detainee Sally-port
- 1.5 Public Sally-port
- 1.6 Courtroom Storage Room

## 1.0 Court Unit : Organizational Diagram



EOIR Diagram



## **1.0 Court Unit - Critical Workflow Patterns**

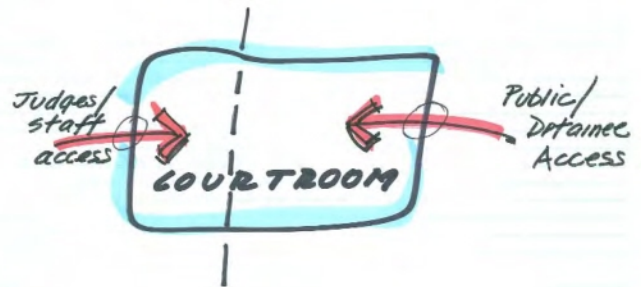
### **INTRODUCTION**

The diagrams on the following page (p4.9) illustrate some of the most critical workflow issues and patterns of the Court Unit.

### 1.0 Court Unit : Critical Workflow Patterns

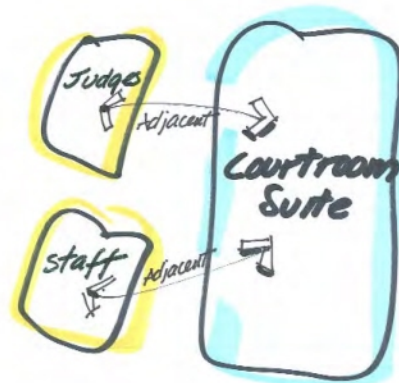
#### 1. "SEPARATE ENTRIES"

The courtrooms will each have 2 secure points of entry.  
1 Judges/Staff and 1 Public/Detainee entrance.



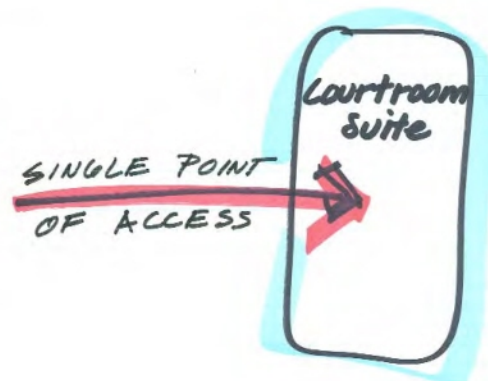
#### 2. "DIRECT ACCESS"

Judges and Administrative staff require direct/immediate access to the courtrooms.



#### 3. "SINGLE CONTROLLED POINT OF ENTRY"

The courtroom suites shall have a single and controlled point of entry.





## 1.0 Court Unit - Room Data Sheet

### 1.1 COURTROOM

#### Function

The Courtroom is used for both Master Calendar Hearings and individual Merit Hearings. It is the largest space within EOIR and the center for legal proceedings. The Courtroom Dais is a raised platform for the Judges Bench.

The Courtrooms must provide seating for approximately thirty to thirty-five (30-35) people. The Courtroom will have varying numbers of individuals at each proceeding to include the Immigration Judge, Legal Technician, Interpreter, Trial Attorney, respondent, respondent Attorney, respondent family and friends, witnesses and observers.

Pew seating is provided for the visitors, tables for Attorneys and Detainees, Witness Stand, Interpreter Station and Clerks Station are the primary types of furniture within the Courtroom.

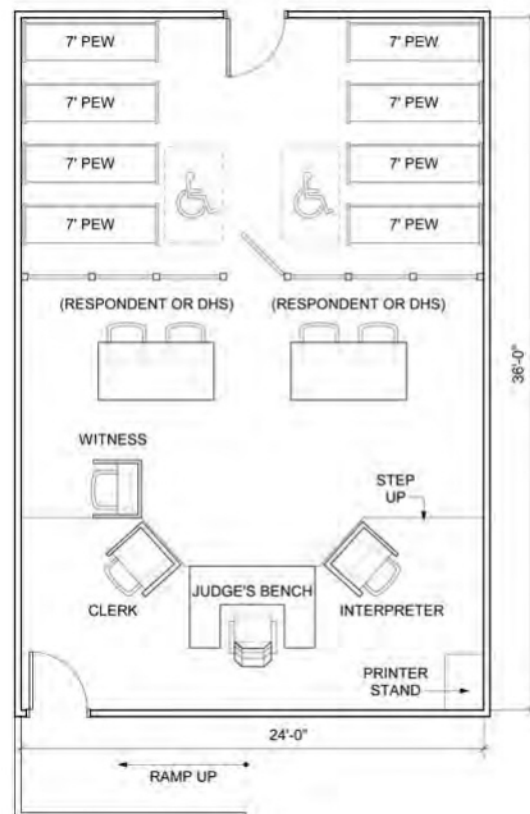
#### Video Proceedings

Where there are limitations, some Courtrooms may be equipped to conduct remote hearings using video technology. Future development of the Courtroom standard may be modified to better accommodate remote operation using video and digital technology.

All courtrooms shall be wired for televideo proceedings, via ISDN. The number of courtrooms to be used for televideo will be determined at a later date. Once determined, the ISDN lines shall be activated.



Photograph



Floor Plan (864 nsf)

## 4. FUNCTIONAL REQUIREMENTS

### 1.1 SYSTEMS MATRIX

<i><b>Walls</b></i>	<i><b>Floors</b></i>	<i><b>Ceiling</b></i>	<i><b>Doors</b></i>	<i><b>Hardware</b></i>	<i><b>Glazing</b></i>
See Appendix - Section 5 - for Finish Schedule	See Appendix - Section 5 - for Finish Schedule	ACT - 10' high	3'x6'8" Solid Core Wd	See Schedule Below	N/A
<i><b>Plumbing</b></i>	<i><b>HVAC</b></i>	<i><b>Lighting</b></i>	<i><b>Power</b></i>	<i><b>Security</b></i>	<i><b>Communications</b></i>
N/A Avoid plumbing piping above ceiling	Stand alone A/C Unit AHU mounted outside Courtroom for sound isolation - High Volume Low Velocity Diffusers No transfer grills	Recessed Parabolic Fluorescent remotely switched. Emergency lighting connected to back-up generator.	Receptacles NEMA 5-20R 125v/20A, 3 wire Single Phase	See Schedule Below Duress alarm button below Judges Bench	See Schedule Below Run Telephone/Data in 1" dia. floor conduit for future addn'l. cable runs.

### 1.1 FURNITURE - EQUIPMENT - HARDWARE SCHEDULE

<i><b>ID</b></i>	<i><b>Item</b></i>	<i><b>Vendor*</b></i>	<i><b>Style</b></i>	<i><b>Model #</b></i>	<i><b>Qty.</b></i>
<b>FURNITURE</b>					
F	Waste Receptacle				2
F	Pew 7'-0" (custom built)	UNICOR		EOIR7PEW	TBD
F	Pew 6'-0" (custom built)	UNICOR		EOIR6PEW	TBD
F	Interpreter Station (custom built)	UNICOR		EOIR CLERK	1
F	Judges Bench (custom built)	UNICOR		EOIRBENCH	1
F	Clerk Station (custom built)	UNICOR		EOIRClerk	1
F	Witness Stand (custom built)	UNICOR		EOIRSTAND	1
F	Attorneys Tables	UNICOR	Symphony	S7236-02-WN	2
F	Printer Stand	UNICOR	Baritone	BT3524MCWWN	1
F	Attorney Chair	Trinity Furniture	Walnut	7110-00-584-6490	4
F	Clerk Chair	UNICOR	Budget (Black)	ZZUST2032-3601	1
F	Witness Chair	UNICOR	Budget (Black)	ZZUST2032-3601	1
F	Interpreter Chair	UNICOR	Budget (Black)	ZZUST2032-3601	1
F	Immigration Judges Chair	UNICOR	Queen Anne	WVC1211WN	1
	or	UNICOR	Overture	FC-HB-VG-UG-SM-S-C-04	1
F	AV Stand w/Casters	KLOG	Medium Oak	MLCT-75	1
<b>EQUIPMENT</b>					
BI	Floor Mounted Telephone Outlet			RJ45	1
BI	Floor Mounted Microphone Outlet, Male			XLR	4
BI	Floor Mounted Microphone Outlet, Female			XLR	4
BI	Microphone Jumper - Extension cables		Include Connectors	XLR (1 Male/1 Female)	4
BI	Female Outlet for Speaker Phone			RJ11	4
BI	Outlet for Soundstation Microphone			RJ9	4
BI	Female Outlet to Connect Console			RJ45	4
BI	Observers Rail with Gate and Hardware				1
BI	Floor Mounted Data Outlet			RJ45	5
BI	Floor Mounted Electrical Outlet			Duplex	8
BI	Wall Mounted Electrical Outlet			Duplex	4
BI	Wall Mounted Data Outlet			RJ45	3
BI	Emergency Lighting				1
BI	Wall Mounted ISDN Hook-up			RJ45	3
<b>HARDWARE</b>					
BI	Public Entry Door Closer	LCN	w/Hold Open	LCN 4040	1
BI	Duress Alarm System	Radionics or Ademco		D7212B or 50P	1
BI	Public Entry Door Lockset				1
BI	Public Entry Door Offset Hinges (Swing Away)				3
BI	Door Floor Stops				2
BI	Judges Entry Door Closer	LCN		LCN 4040	1
BI	Judges Entry Door Cipher Lock	Trilogy		DL 2700	1
BI	Judges Entry Door Deadbolt Lock	Schlage Lockset		B680	1
BI	Judges Entry Door Peephole	Ives	190 degree	Ives 698	1
BI	Judges Door - Non-removable hinge pins	Site Specific			3
BI	Door Sweep - Automatic retracting inset				2
BI	Door Sound Seal				2

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

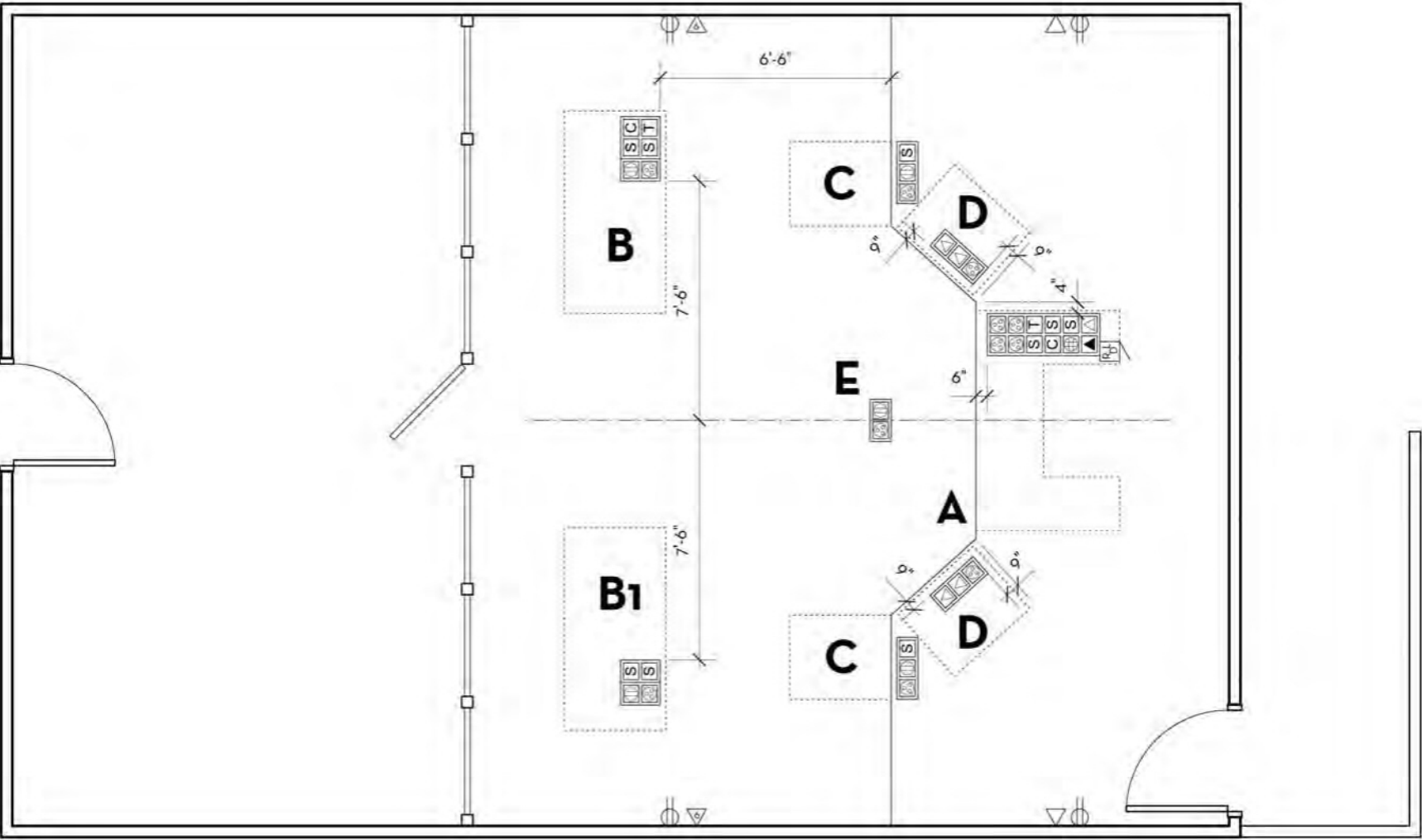
\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.





1.0 Court Unit - Room Data Sheet

1.1 COURTROOM - TECHNICAL SPECIFICATIONS



SYMBOL LEGEND

	FLOOR MOUNTED TELEPHONE OUTLET - RJ45		FLOOR MOUNTED DUPLEX 110V OUTLET
	FLOOR MOUNTED DATA OUTLET - RJ45		FLOOR MOUNTED QUADRUPLX 110V OUTLET
	RJ11 - FEMALE OUTLET FOR ANALOG PHONE LINE TO PLUG IN SOUNDSTATION PREMIER SATELLITE CONSOLE SPEAKER PHONE.		WALL MOUNTED TELEPHONE OUTLET - RJ45
	RJ9 - OUTLET FOR SOUNDSTATION MICROPHONE		WALL MOUNTED DATA OUTLET - RJ45
	RJ45 - FEMALE OUTLET TO CONNECT THE SOUNDSTATION PREMIER CONSOLE TO SOUNDSTATION PREMIER SATELLITE		WALL MOUNTED DUPLEX 110V OUTLET
	FLOOR MOUNTED MICROPHONE CONNECTOR - XLR (FEMALE)		
	FLOOR MOUNTED MICROPHONE CONNECTOR - XLR (MALE)		

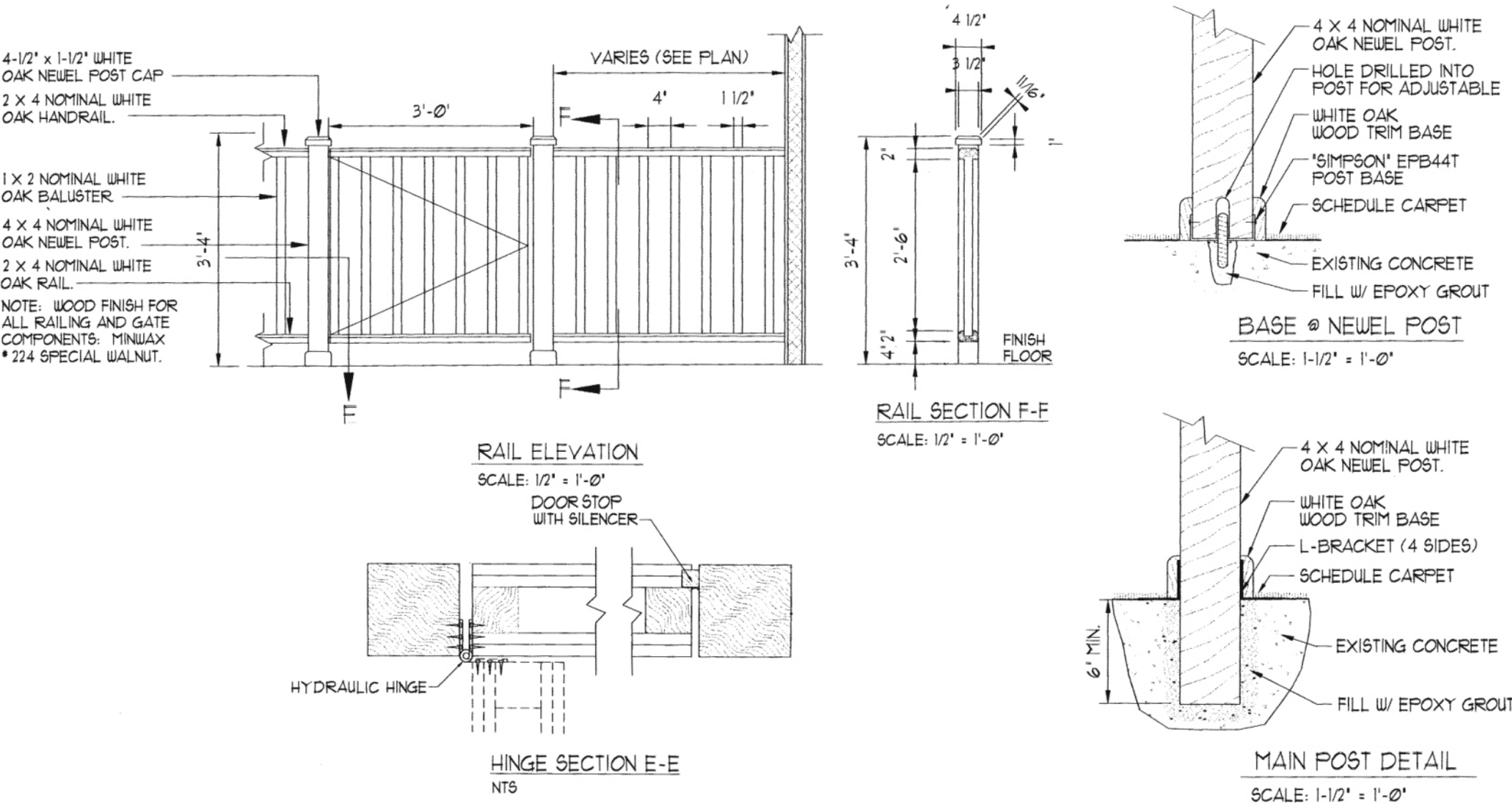
TECHNICAL NOTES

- A** Recessed Floor Box in DAIS/Platform
- One (1) Female Data Outlet for Computer Network (RJ45)
  - One (1) Female Phone Outlet for Judges Phone (RJ45)
  - One (1) Female Phone Outlet for Speaker Phone (Analog RJ9)
  - One (1) Female Outlet to connect to the Soundstation Premier to Soundstation Satellite (RJ45)
  - Three (3) Female Outlets for External Microphone to Speaker Phone (RJ9)
  - Four (4) Male 3-XLR Connectors to connect Microphone to Recorder
  - One (1) Fourplex Electrical Outlet
- B** Recessed Floor Box at Atty. Table
- One (1) Female Phone Outlet for Speaker Phone (Analog RJ9)
  - One (1) Female Outlet to connect to the Soundstation Premier to Soundstation Satellite (RJ45)
  - Two (2) Female Outlets for External Microphone to Speaker Phone (RJ9)
  - One (1) Female 3-XLR Connectors to connect Microphone to Recorder
  - One (1) Duplex Electrical Outlet
- B1** Recessed Floor Box at Atty. Table
- Two (2) Female Outlets for External Microphone to Speaker Phone (RJ9)
  - One (1) Female 3-XLR Connectors to connect Microphone to Recorder
  - One (1) Duplex Electrical Outlet
- C** Recessed on the Face of the DAIS
- One (1) Female Outlets for External Microphone to Speaker Phone (RJ9)
  - One (1) Female 3-XLR Connectors to connect Microphone to Recorder
  - One (1) Duplex Electrical Outlet
- D** Recessed Floor Box in DAIS/Platform
- Two (2) Female Data Outlets for Computer Network (RJ45)
  - One (1) Duplex Electrical Outlet
- E** Recessed in the Center of the face of the DAIS
- One (1) Female 3-XLR Connectors to connect Microphone to Recorder
  - One (1) Duplex Electrical Outlet



1.0 Court Unit - Room Data Sheet

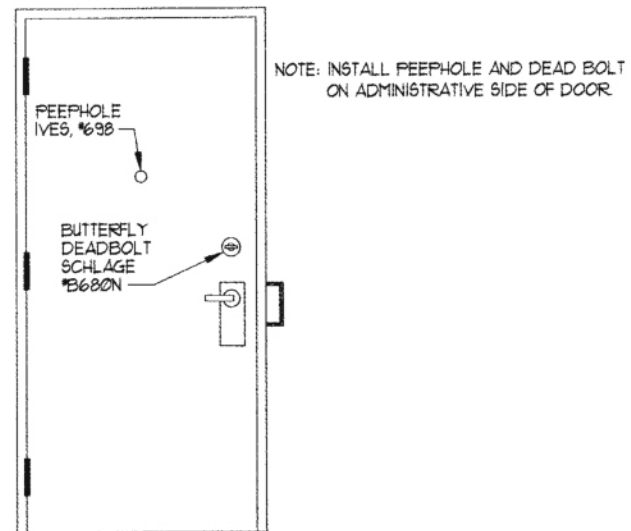
1.1 COURTROOM - RAILING DETAILS



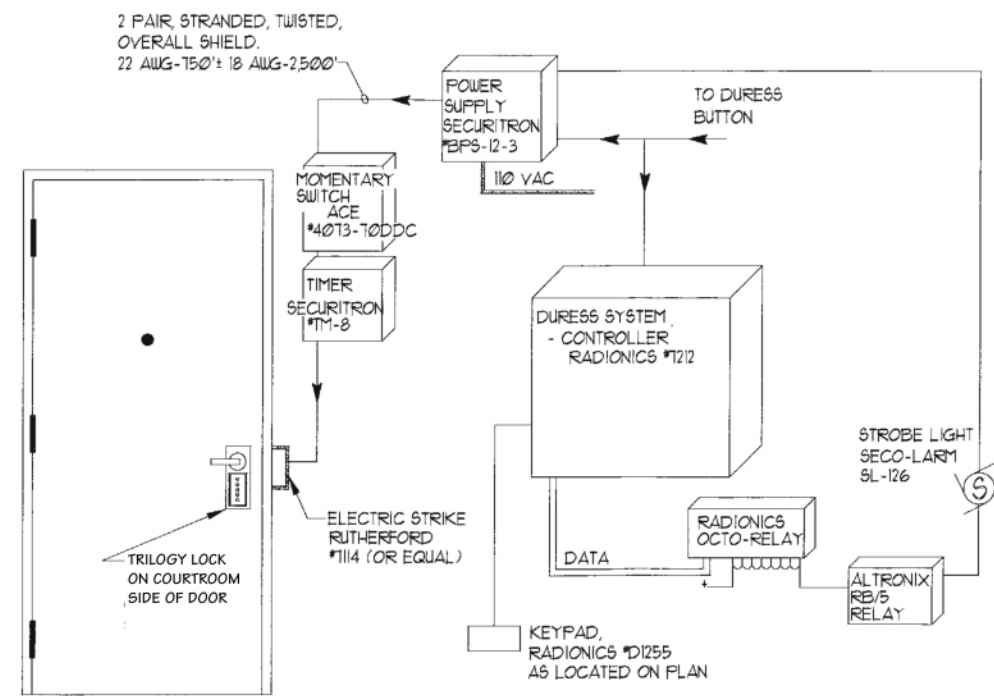


## 1.0 Court Unit - Room Data Sheet

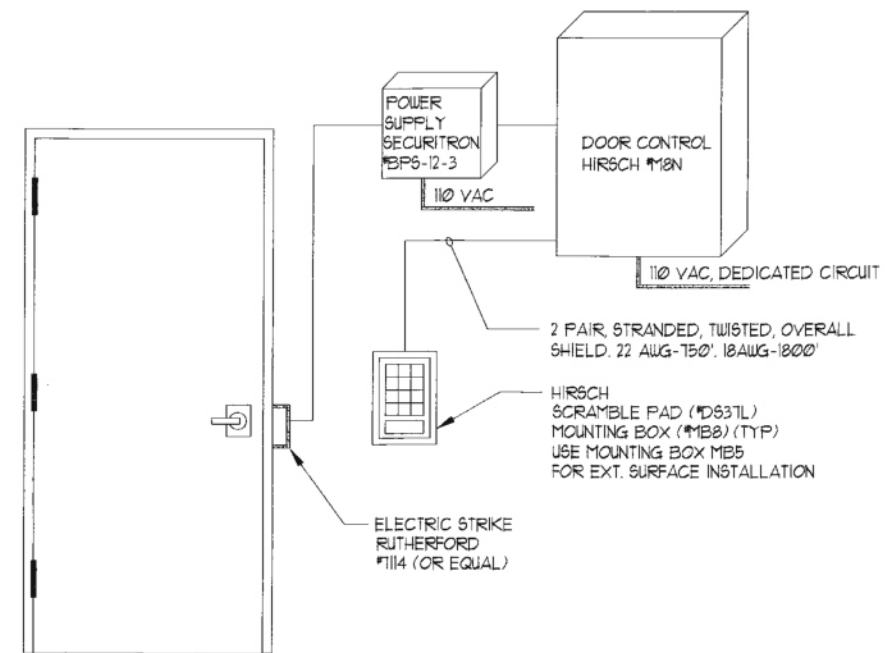
### 1.1 COURTROOM - DOOR SECURITY



DOOR ELEVATION -  
OUTSIDE COURTROOM  
NTS



DOOR ELEVATION -  
INSIDE COURTROOM W/ EDRS  
NTS

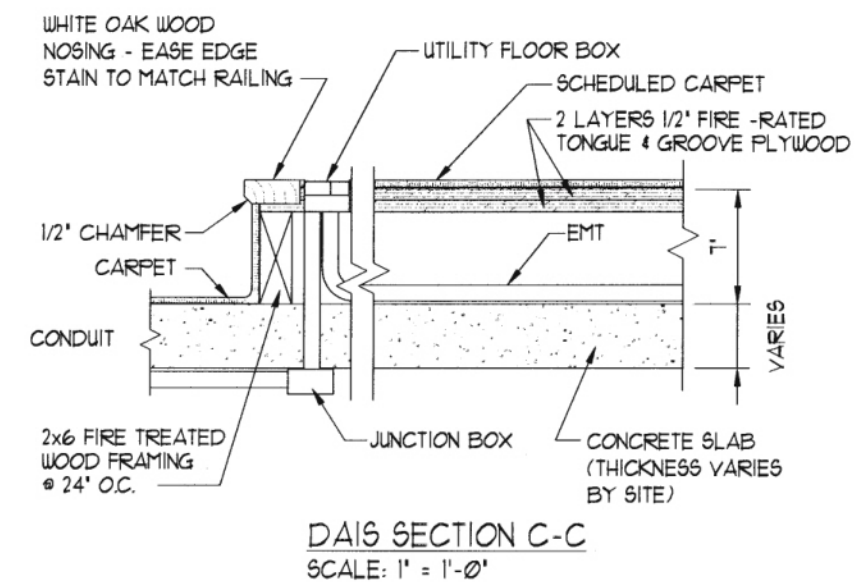
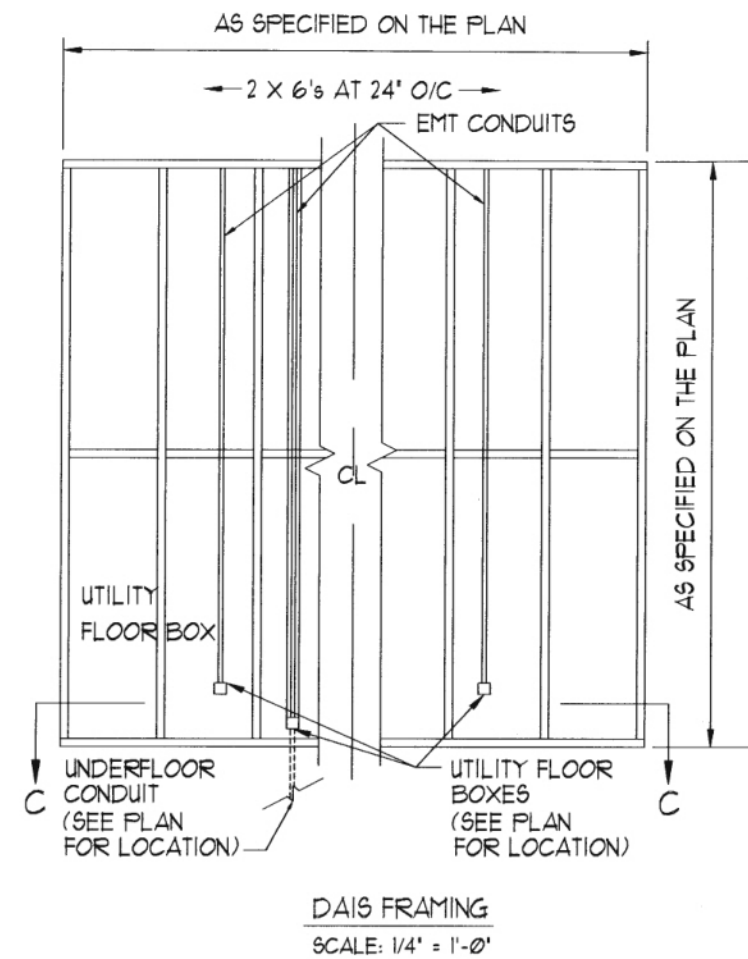


ELECTRIC SCRAMBLE PAD ENTRANCE  
NTS



## 1.0 Court Unit - Room Data Sheet

### 1.1 COURTROOM - DAIS DETAIL





## 1.0 Court Unit - Room Data Sheet

### 1.2 COURTROOM SUB-LOBBY

#### Function

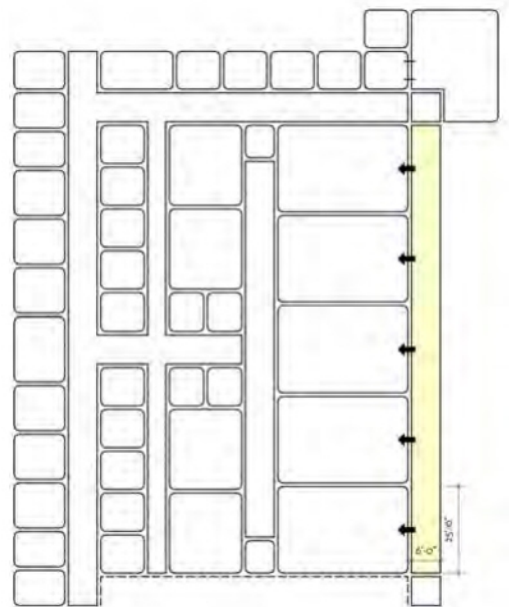
The Courtroom Secure Corridor is used to provide access to the Courtrooms by the Public/Visitors, and detainees. Pedestrian sally-ports are located at opposite ends of the corridor to monitor the flow of pedestrian traffic entering and leaving the courtrooms.

The Courtroom Sub-Lobby is used for visitor/public and alien access to the Courtroom. It is essentially a corridor leading from the Public Lobby/Waiting Room at one end and the detainee Housing Units/Holding Rooms on the opposite end.

Security controls are incorporated to make sure that there is not any cross traffic of detainees and the public when entering the Sub-Lobby. This may be accomplished through the installation of a vestibule or secure air lock at the Public end of the corridor.



**Photograph**



**Floor Plan (150 nsf per Courtroom)**

## REQUIREMENTS

## 1.2

<b>Walls</b>	<b>Floors</b>	<b>Ceiling</b>	<b>Doors</b>	<b>Hardware</b>	<b>Glazing</b>
See Appendix - Section 5 - for Finish Schedule	See Appendix - Section 5 - for Finish Schedule	ACT - 8' High	Security	See Schedule Below	N/A
<b>Plumbing</b>	<b>HVAC</b>	<b>Lighting</b>	<b>Power</b>	<b>Security</b>	<b>Communications</b>
N/A	Typical	Recessed Fluorescent	110v Duplex - Security	See Schedule Below	Site Specific

## 1.2

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.

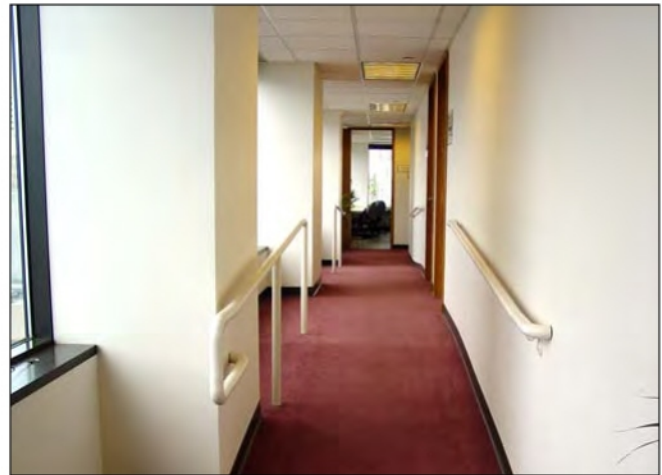


## 1.0 Court Unit - Room Data Sheet

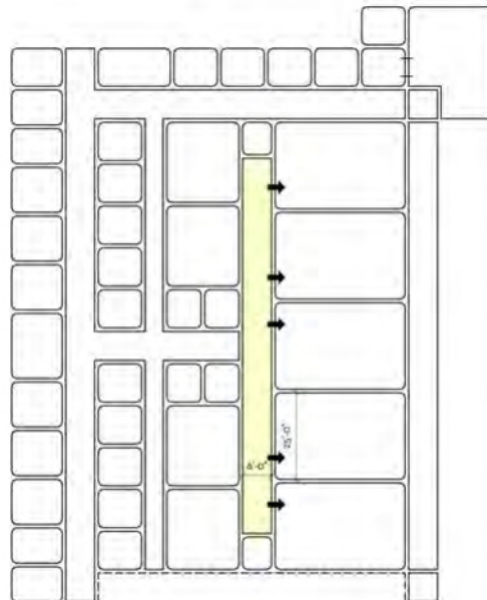
### 1.3 JUDGES CORRIDOR

#### Function

One corridor is required for each courtroom to provide separate and secured access to and from the hearing. This ensures that the Immigration Judges and other court personnel do not have to pass through waiting areas or the seating area of the hearing room to reach the bench. In case of an emergency, the staff can escape from the hearing room through the door immediately behind the Judge's Bench. The security system then locks the door to the corridor to provide safe egress.



Photograph



Floor Plan (150 nsf per Courtroom)

## REQUIREMENTS

### 1.3

<b><i>Walls</i></b>	<b><i>Floors</i></b>	<b><i>Ceiling</i></b>	<b><i>Doors</i></b>	<b><i>Hardware</i></b>	<b><i>Glazing</i></b>
See Appendix - Section 5 - for Finish Schedule	See Appendix - Section 5 - for Finish Schedule	ACT - 8' High	Solid-Core Wood	See Schedule Below	N/A
<b><i>Plumbing</i></b>	<b><i>HVAC</i></b>	<b><i>Lighting</i></b>	<b><i>Power</i></b>	<b><i>Security</i></b>	<b><i>Communications</i></b>
N/A	Typical	Recessed Fluorescent	110v Duplex	N/A	N/A

### 1.3

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

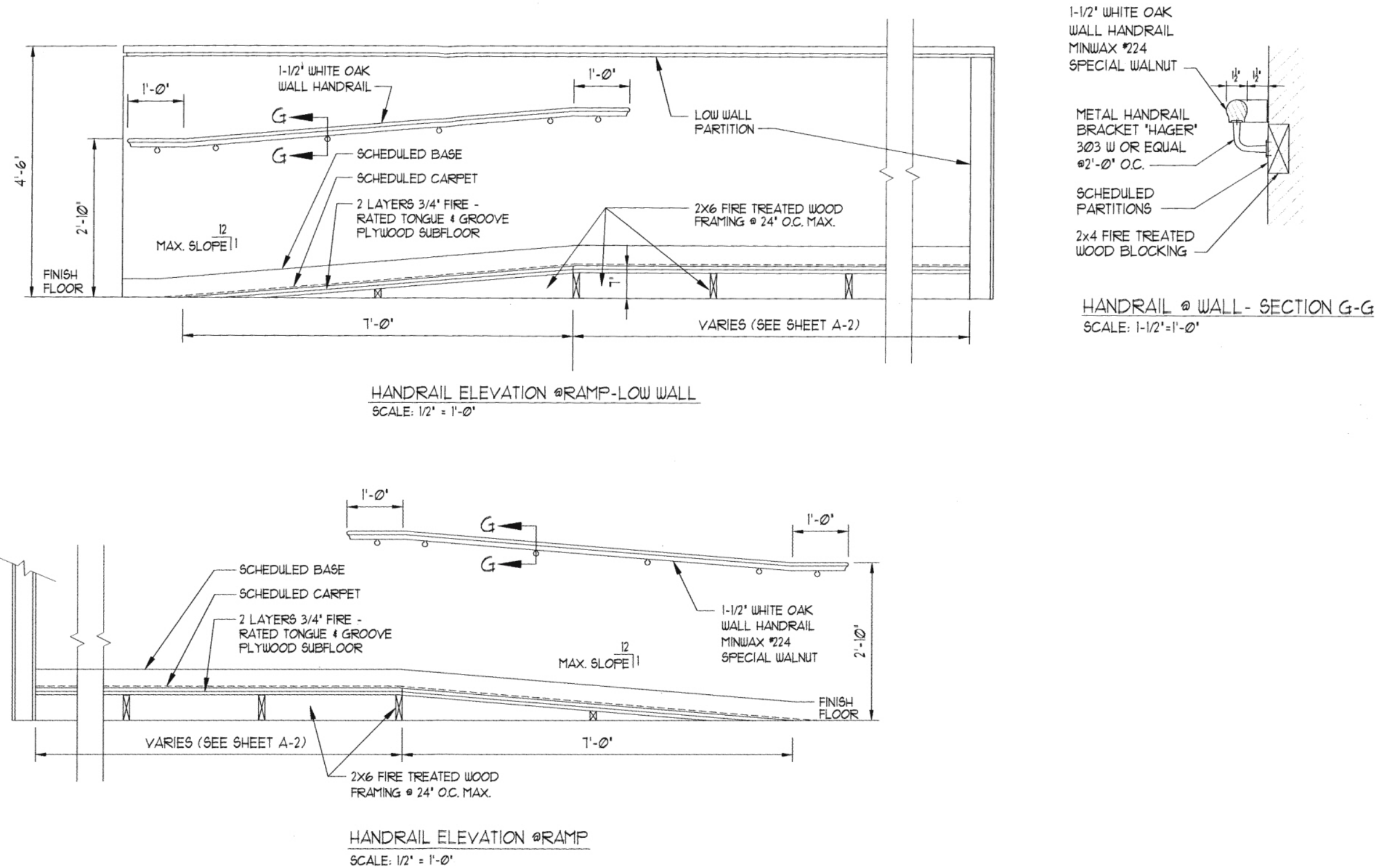
\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.





1.0 Court Unit - Room Data Sheet

1.3 JUDGES SECURE CORRIDOR - RAMP ELEVATION







## 1.0 Court Unit - Room Data Sheet

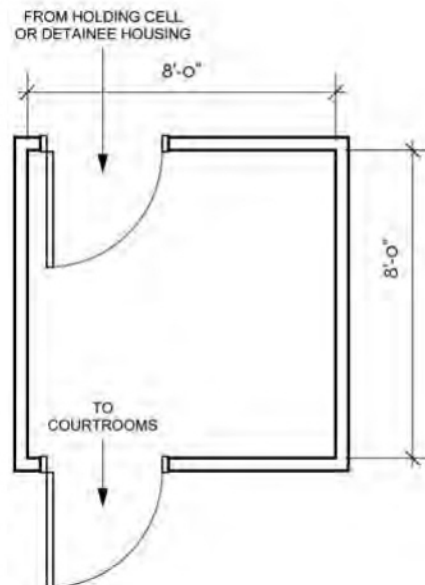
### 1.4 DETAINEE SALLYPORT

#### Function

The Detainee Sallyport is located at the end of the Public/Detainee Secure Corridor which leads to the EOIR Courtrooms. Its function is to control detainees movement to and from the EOIR Courtrooms. Detainees would remain within the Detainee Sallyport if any members of the public are present in the Public/Detainee Secure Corridor. Detainees will be accompanied by a CDF officer during this process.

NOT AVAILABLE

Photograph



Floor Plan (64 nsf)

## REQUIREMENTS

## 1.4

<b><i>Walls</i></b>	<b><i>Floors</i></b>	<b><i>Ceiling</i></b>	<b><i>Doors</i></b>	<b><i>Hardware</i></b>	<b><i>Glazing</i></b>
See Appendix - Section 5 - for Finish Schedule	See Appendix - Section 5 - for Finish Schedule	ACT - 8' High	Security	See Schedule Below	N/A
<b><i>Plumbing</i></b>	<b><i>HVAC</i></b>	<b><i>Lighting</i></b>	<b><i>Power</i></b>	<b><i>Security</i></b>	<b><i>Communications</i></b>
N/A	Typical	Recessed Fluorescent	N/A	See Schedule Below	Site Specific

## 1.4

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.



## 1.0 Court Unit - Room Data Sheet

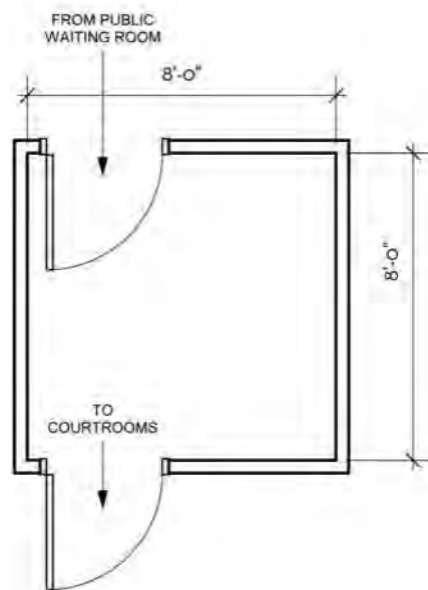
### 1.5 PUBLIC SALLYPORT

#### Function

The Public Sallyport is located at the end of the Public/Detainee Secure Corridor which leads to the EOIR Courtrooms directly adjacent to the Main Public Lobby. Its function is to control the public movement to and from the EOIR Courtrooms. The public would remain within the Public Sallyport if any detainees have been cleared to enter the Public/Detainee Secure Corridor. The public will be escorted to the courtrooms by a CDF officer.

NOT AVAILABLE

Photograph



Floor Plan (64 nsf)

## REQUIREMENTS

## 1.5

<b><i>Walls</i></b>	<b><i>Floors</i></b>	<b><i>Ceiling</i></b>	<b><i>Doors</i></b>	<b><i>Hardware</i></b>	<b><i>Glazing</i></b>
See Appendix - Section 5 - for Finish Schedule	See Appendix - Section 5 - for Finish Schedule	ACT - 8' High	Security	See Schedule Below	N/A
<b><i>Plumbing</i></b>	<b><i>HVAC</i></b>	<b><i>Lighting</i></b>	<b><i>Power</i></b>	<b><i>Security</i></b>	<b><i>Communications</i></b>
N/A	Typical	Recessed Fluorescent	N/A	See Schedule Below	Site Specific

## 1.5

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.



## 2.0 ADMINISTRATIVE UNIT REQUIREMENTS

- Function
- Workflow Patterns
- Room Data Sheets



## 2.0 Administrative Unit - Function

### FUNCTION STATEMENT

The function of the Administrative Unit includes leading court proceedings, managing records of proceedings, recording, printing, and filing of documents.

The Court Administrator manages the operations including scheduling and staff. The Immigration Judges conduct hearings and arraignments with assistance from the support staff.

In a typical proceeding a charge is filed by DHS against a detainee being held at the CDF. The charge is filed with EOIR in the form of a written document and is received at the receptionist area. Then, the document is sent to the Court for schedule determination, and transferred to the Judge for the hearing. Once the hearing is completed the record of the proceedings is printed and the recorded information is transferred/stored in the File Room.

### Design Criteria

#### ***Critical Issues***

- ✓ All support work areas shall be adjacent to each other
- ✓ The Judges Chambers shall be located near the support staff
- ✓ The Main Entry into EOIR shall be off of the main CDF lobby/waiting area.
- ✓ The Administrative Unit staff members need to be located adjacent to the courtrooms.

#### ***Special Requirements***

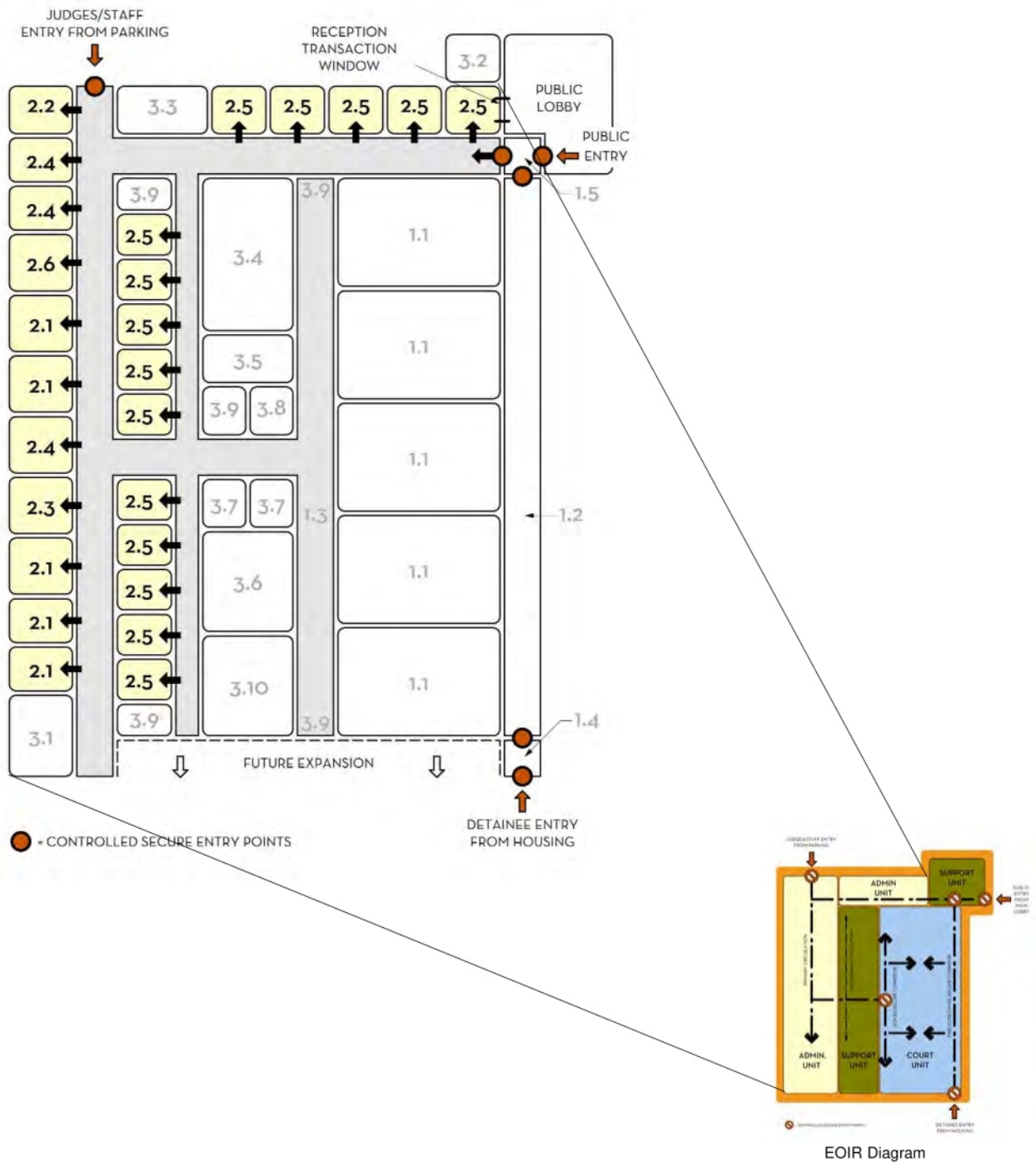
Consideration shall be made to provide natural light to both private offices and general office areas.

#### ***Space Requirements***

##### **2.0 ADMINISTRATIVE UNIT**

- 2.1 Immigration Judge Chambers
- 2.2 Court Administrator Office
- 2.3 Law Clerk Office
- 2.4 Supervisory Legal Technician Office
- 2.5 Support Work Station
- 2.6 Supervisory Interpreter Office

## 2.0 Administrative Unit : Organizational Diagram





## **2.0 Administrative Unit - Critical Workflow Patterns**

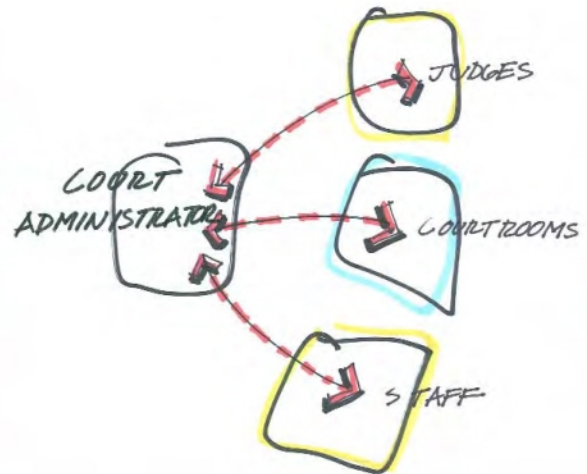
### **INTRODUCTION**

The diagrams on the following page (p4.29) illustrate some of the most critical workflow issues and patterns of the Administrative Unit.

## 2.0 Administrative Unit : Critical Workflow Patterns

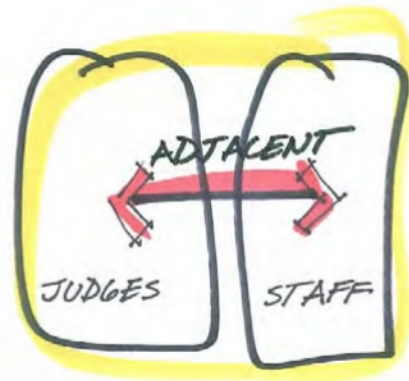
### 1. "CENTER CONTROL"

The Court Administrator coordinates activities for the EOIR Court Unit. For ease of coordination, the Court Administrator Office shall be central to all functions within the Unit.



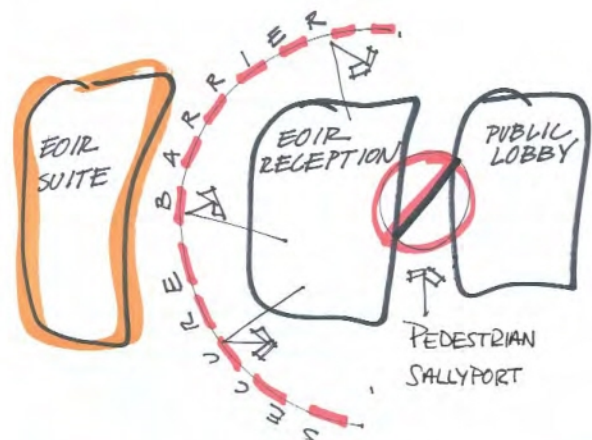
### 2. "STAFF CONNECTIVITY"

The EOIR Judges are assisted by the support staff. Direct and immediate access to staff is desirable.



### 3. "CONTROLLED PUBLIC PENETRATION"

The EOIR Court Suite is a secure area. All public/visitor entry into the EOIR Court Suite shall begin at the Public Lobby and be contained within an EOIR Reception Area. No public/visitors are allowed into the EOIR Court Suite with the exception of the courtrooms.





## 2.0 Administrative Unit - Room Data Sheet

### 2.1 IMMIGRATION JUDGE CHAMBERS

#### Function

The Immigration Judge Chambers is the primary office for the Immigration Judge and shall be located in close proximity to the courtroom.

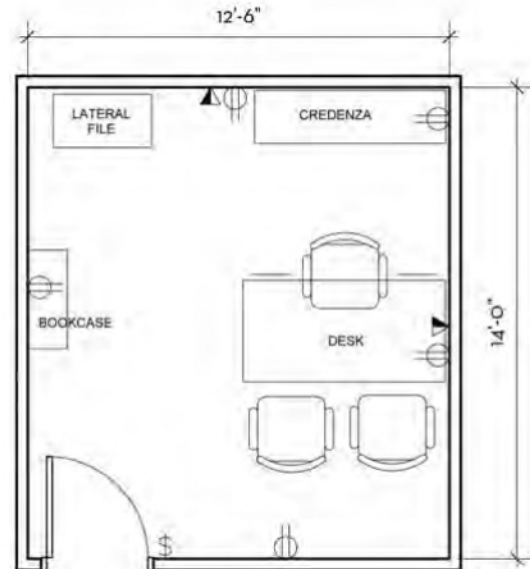
#### Judges activities include :

- ✓ Holding hearings
- ✓ Analyzing evidence
- ✓ Making legal judgement
- ✓ Issuing appropriate legal action
- ✓ Rendering a decision

Immigration Judges are responsible for conducting judicial proceedings and act independently in their decision-making capacity; their decisions are administratively final, unless appealed or certified to the Board of Immigration Appeals. The Judges conduct hearings concerning the removal of illegal aliens throughout the United States. Through its Criminal Alien Institutional Hearing Program, OCIJ currently has programs coordinated and in place in all 50 states, including Puerto Rico, the District of Columbia, and selected municipalities and Bureau of Prison facilities to adjudicate the immigration status of alien inmates incarcerated by Federal, State, and municipal correctional authorities as a result of convictions for criminal offenses. Judges report directly to the Office of the Chief Immigration Judge.



Photograph



Floor Plan (175 nsf)

#### SYMBOL LEGEND:

- △ Voice Outlet    ▲ Voice/Data Outlet    ▲ Data Outlet    ⊕ Duplex Outlet    △ ISDN Outlet    D Duress Alarm Outlet

## REQUIREMENTS

## 2.1

<b>Walls</b>	<b>Floors</b>	<b>Ceiling</b>	<b>Doors</b>	<b>Hardware</b>	<b>Glazing</b>
See Appendix - Section 5 - Finish Schedule	See Appendix - Section 5 - Finish Schedule	ACT - 8' High	Solid Core Wood	See Schedule Below	Exterior Windows
<b>Plumbing</b>	<b>HVAC</b>	<b>Lighting</b>	<b>Power</b>	<b>Security</b>	<b>Communications</b>
N/A	Typical	Recessed Fluorescent	110v Duplex	N/A	Telephone and Data - 2 Walls

## 2.1

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.



## 2.0 Administrative Unit - Room Data Sheet

### 2.2 COURT ADMINISTRATOR OFFICE

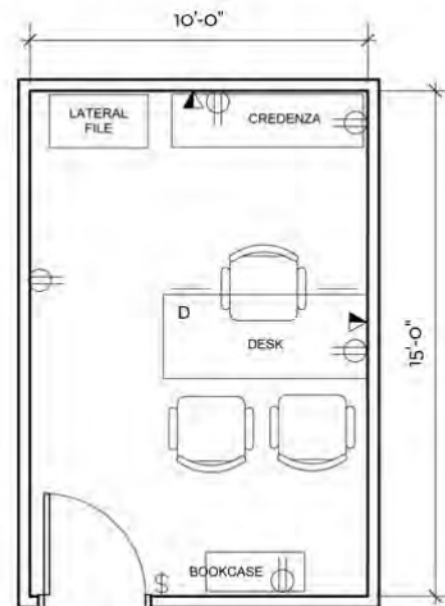
#### Function

The Court Administrator manages the day to day operation of EOIR Court Unit including staffing. The Court Administrator is responsible for the following:

- ✓ Administrative management of operations
- ✓ Scheduling hearings
- ✓ Management of support staff



Photograph



Floor Plan (150 nsf)

#### SYMBOL LEGEND:

△ Voice Outlet    ▲ Voice/Data Outlet    ▲ Data Outlet    ⊕ Duplex Outlet    △ ISDN Outlet    □ Duress Alarm Outlet

## REQUIREMENTS

## 2.2

<b>Walls</b>	<b>Floors</b>	<b>Ceiling</b>	<b>Doors</b>	<b>Hardware</b>	<b>Glazing</b>
See Appendix - Section 5 - Finish Schedule	See Appendix - Section 5 - Finish Schedule	ACT - 8' High	Solid Core Wood	See Schedule Below	Exterior Windows
<b>Plumbing</b>	<b>HVAC</b>	<b>Lighting</b>	<b>Power</b>	<b>Security</b>	<b>Communications</b>
N/A	Typical	Recessed Fluorescent	110v Duplex	N/A	Telephone and Data - 2 Walls

## 2.2

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.



## 2.0 Administrative Unit - Room Data Sheet

### 2.3 LAW CLERK OFFICE

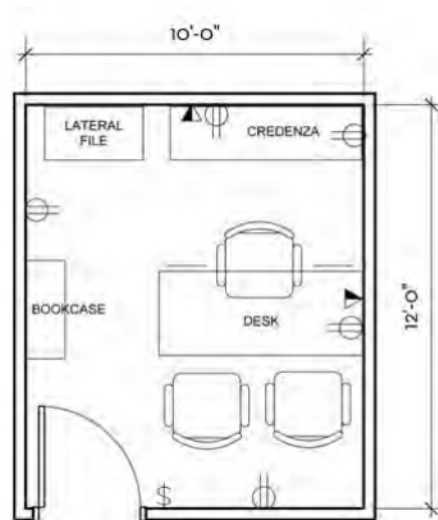
#### Function

The Law Clerk Office is a private office. This position is non-supervisory and provides direct support to the Immigration Judge. The Law Clerks are responsible for the following:

- ✓ Supporting the Immigration Judge in case preparation
- ✓ Conducting research for the Immigration Judge



Photograph



Floor Plan (120 nsf)

#### SYMBOL LEGEND:

- △ Voice Outlet    ▲ Voice/Data Outlet    ▲ Data Outlet    ⊗ Duplex Outlet    △ ISDN Outlet    □ Duress Alarm Outlet

## REQUIREMENTS

## 2.3

<b>Walls</b>	<b>Floors</b>	<b>Ceiling</b>	<b>Doors</b>	<b>Hardware</b>	<b>Glazing</b>
See Appendix - Section 5 - Finish Schedule	See Appendix - Section 5 - Finish Schedule	ACT - 8' High	Solid Core Wood	See Schedule Below	Exterior Windows
<b>Plumbing</b>	<b>HVAC</b>	<b>Lighting</b>	<b>Power</b>	<b>Security</b>	<b>Communications</b>
N/A	Typical	Recessed Fluorescent	110v Duplex	N/A	Telephone and Data - 2 Walls

## 2.3

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.



## 2.0 Administrative Unit - Room Data Sheets

### 2.4 SUPERVISORY LEGAL TECHNICIAN OFFICE

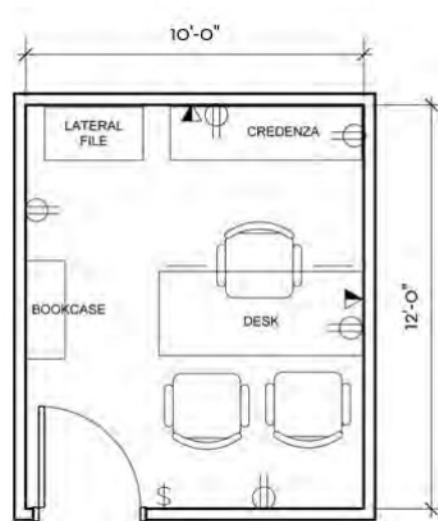
#### Function

The Supervisory Legal Technician supervises and provides administrative and court support. The Supervisory staff is responsible for the following:

- ✓ General staff administrative functions
- ✓ One to One supervision, work assignment(s), scheduling and consultation



Photograph



Floor Plan (120 nsf)

#### SYMBOL LEGEND:

Voice Outlet Voice/Data Outlet Data Outlet Duplex Outlet ISDN Outlet Duress Alarm Outlet

## REQUIREMENTS

## 2.4

<b>Walls</b>	<b>Floors</b>	<b>Ceiling</b>	<b>Doors</b>	<b>Hardware</b>	<b>Glazing</b>
See Appendix - Section 5 - Finish Schedule	See Appendix - Section 5 - Finish Schedule	ACT - 8' High	Solid Core Wood	See Schedule Below	Exterior Windows
<b>Plumbing</b>	<b>HVAC</b>	<b>Lighting</b>	<b>Power</b>	<b>Security</b>	<b>Communications</b>
N/A	Typical	Recessed Fluorescent	110v Duplex	N/A	Telephone and Data - 2 Walls

## 2.4

[illegible]

\* Vendor names are listed as a point of reference for equipment specs. Equal products by other manufactures can be used.

\*\* Lockset to be determined based on CDF facility requirements. Where an existing facility is being modified, new hardware shall be compatible with existing preference is for electronic keyless entry - via card readers or cipher locks. Each system must provide for key override.