

## Appendix C: Basis of Design Narrative

This appendix contains Agency Specific Requirements that must be included in the construction and operation of the leased premises. These requirements supersede any conflicting requirements in the standard lease template.

The Department of Veterans Affairs (VA) seeks to lease approximately 51,592 ABOA square feet (ABOA, ANSI/BOMA Office Area) of space and 290 parking spaces (and mobile MRI technology vehicle pad) for use by VA as a Community Based Outpatient Clinic in Cape Girardeau, MO supporting the parent facility of the Cape Girardeau VAMC in Cape Girardeau, MO. This project will integrate all care delivery (Primary, Specialty Care, Mental Health, Audiology, Physical Medicine, Radiology, Laboratory, Pharmacy, Procedure and Optometry into an appropriately-sized and efficient state-of-the-art facility to meet the requirements of the VHA Health Care Uniform Benefits package.

The project will implement the VA design principles found within the VA PACT Design Manual and the VA CBOC Design Manual, both found on the [www.va.gov/til](http://www.va.gov/til) website. These principles place focus on creating an environment of care which brings the healthcare team and services to the patient all in one location. The result is for each patient to feel in control of their personal healthcare story resulting in reduced stress, decrease healing time and cost savings. The integration of all primary care team work areas within each PACT module also reduces the number of steps staff must take.

Through the combined efforts of many stakeholders much thought and time has been given to bring this project to this moment. The design and construction of this project has been envisioned as a destination healthcare facility of excellence for Veterans.

### I. Healthcare Requirements

The lease is for a healthcare facility and as such local building codes do not capture all requirements need for the facility to be accredited for operation after the completion of construction. Appendix D contains the additional standards and codes that must be met to ensure accreditation. Several standards and codes depend on the types and quantities of services provided to determine requirements.

#### **NFPA 99**

For NFPA 99 Chapter 5 the VA has determined medical gases, air vacuum systems are required at the following locations and are considered category 4.

For NFPA 99 Chapter 6 the VA has determined the following spaces are Category 3 spaces requiring appropriate Emergency Systems. Temporary generator connection, select outlets (at Pharmacy fridges/freezer, Pharmacy vault, Main Computer Room, Telecommunication Rooms, Procedure nutrition fridge), HVAC systems (Procedure and CT), and security system. There are none which are Category 1 or 2.

For NFPA 99 Chapter 7 the VA has determined the following systems to be Category 1, 2 or 3.

**Life Safety Systems** (i.e. exit signs, emergency lighting, fire alarm) **are considered Category 1.**

### **NFPA 101 and IBC**

For developer to properly determine occupancy type, the VA intends to simultaneously treat zero (0) patients at any given time who are incapable of self-preservation.

### **The Joint Commission (TJC)**

The following lists are location specific VA TJC standards that must be included in the construction and operation of the lease. Lessor shall refer to all TJC standards to ensure they understand and apply all the TJC requirements for Ambulatory Healthcare, Behavioral Health and Laboratory categories.

## **II. General Site Requirements**

### **EXTERIOR YARDS**

Provide exterior patio or yard areas for outdoor activities and dining to offer seating opportunities. Outdoor areas shall be designed with a diversity of landscape and hardscape elements to create an environment capable of accommodating a variety of activities.

### **SITE FEATURES**

Site should be accessible for primary roadway with space for adequate parking.

Site shall not be interrupted by railway or other cross streets that would impede access to the site.

If located in existing building, access to parking and roadways remains the same.

### **DUMPSTER ENCLOSURE**

Provide a port at the dock for access to the dumpster and recycling bins.

### **EXTERIOR SIGNAGE**

Lessor shall develop and provide a complete exterior signage program to include identification, directional, informational, and regulatory signage in accordance with VA's Exterior Signage standards. Signage must comply with local municipality's codes and specifications. Careful consideration of the location of monument signs shall be taken to avoid sight triangle encroachment at vehicular entrances. Lessor shall provide exterior, lighted, monument signs as permitted and required by local zoning requirements.

### **MAIL BOX**

Lessor to provide a mailbox at the main entrance of the clinic in an appropriate location. VA will assist in defining the location during design.

## **III. Building Features**

### **PROGRAM, FLOOR PLAN, DESIGN AND HEALING ENVIRONMENTS**

Provide a design and construct a building based on the VA Design Manual for PACT and CBOC design. The project will implement the VA design principles found within the VA PACT Design Manual and the VA CBOC Design Manual, both found on the [www.va.gov/ti](http://www.va.gov/ti) website. These principles place focus on creating an environment of care which brings the healthcare team and services to the patient all in one location. The result is for each patient to feel in control of their personal healthcare story resulting in reduced stress,

decrease healing time and cost savings. The integration of pharmacy, mental health and team work areas within each PACT module also reduces the number of steps staff must take.

<https://www.cfm.va.gov/til/dGuide/dgPACT.pdf>

<https://www.cfm.va.gov/til/dGuide/dgLBOPC.pdf>

#### **EXTERIOR CANOPIES**

Provide a drop off area and drive through covered canopy at the main entrance.

Provide a drive through covered Ambulance entrance.

Provide a covered unconditioned walkway at MRI trailer.

#### **PROVISIONS FOR ALL FURNISHED AND ALL INSTALLED EQUIPMENT**

As part of the rental consideration, the Offeror shall include supporting construction (wall backing, ceiling struts, etc.), HVAC systems, utilities, and electrical distribution as required for all furnished and all installed equipment to be installed in the CBOC.

#### **MECHANICAL CONTROL SYSTEMS (SHELL)**

A complete automatic temperature control system shall be provided. The direct digital control (DDC) system shall be a complete system suitable for the heating, ventilating, and air conditioning (HVAC) systems provided. The system shall have read access for the VA. The system shall have a GUI interface that includes a floor plan showing the location and status of the controlled equipment. It shall be expandable and capable of accepting additional points.

Provide humidification where necessary for the reliable functioning of the production equipment and electronics as well as for 24/7 Rx handling per USP 797 and 800. Provide temperature (t), humidity (h), pressure monitors (pm) and air flow/ changes (af) monitoring in the following rooms.

- Procedure rooms: t, h , pm, af
- Medical Supply Rooms (Clean Utility): t, h, af
- Medication Storage Areas (Medication Alcoves): t, h
- Sterile Processing, Radiology and IT Data Processing: t, h, pm, af
- Pharmacy compounding areas (Temp, Humidity, Pressure Relationship with adjacent rooms): t, h
- Communications Rooms: t, h

#### **MECHANICAL SYSTEMS**

Procedure rooms, clean scope and decontamination rooms shall have 10 air changes per hour.

Decontamination rooms shall be more negative than all rooms.

Provide dedicated exhaust and ventilation as required for the Medical gas manifold, battery charging areas, Pharmacy compounding hood and hazardous storage.

Provide secure grill at ductwork wall penetrations at Police Secure Storage and Pharmacy Vault.

One PACT Exam room near the Decontamination room, shall be designed as an isolation room with negative pressure and shall exhaust directly to the outside.

Telecommunication and Main computer rooms shall redundant independent cooling systems and provide cooling to spaces with no unoccupied setback

Provide with air curtain at loading dock.

#### **PLUMBING**

- Provide on-demand filtered water at Procedure Suite Medivators.
- Provide foot controls at staff faucets. Provide hand sensors at the remainder.

#### **MEDICAL GAS SYSTEMS**

Provide medical gas systems as required for equipment and space functionality. Minimum systems required are medical compressed air, medical vacuum, and oxygen. Provide systems in accordance with all local building codes, including amendments, NFPA 55 and NFPA 99 requirements.

#### **FIRE PROTECTION**

Provide fire suppression and fire alarm throughout the building, including sprinklers in the audiology sound booth.

#### **MEETING ROOMS**

Four (4) Data (3-1) outlets and Four (4) electrical receptacles shall be provided at the following locations within a floor box: Shared Medical Appointment, Group Rooms, and two (2) at each end of the Conference room. Provide two (2) 3" conduits at each group workstation, routed through VA provided workstations panels to each individual workstation.

Provide approximately eight (8) floor boxes containing four (4) electrical receptacles at the Waiting rooms. A power pole shall be provided within the Pharmacy at the Script Pro.

#### **BACKUP POWER SYSTEMS**

The facility shall have a standby emergency generator connection/ hook up to support emergency receptacles at the following locations: Pharmacy fridges/ freezer, Pharmacy vault, Main Computer Room, Telecommunication Rooms, Procedure nutrition fridge. Receptacles connected to the temporary generator connection system shall be so identified.

Uninterrupted Power Supply (UPS) shall be provided and have a minimum 2 hour run time to support emergency egress lighting, fire alarm, intrusion detection and security systems. Emergency generator shall connect to and recharge the UPS.

#### **SOUND MASKING WITH PUBLIC ADDRESS (PA)**

Provide sound masking with public address and mass notification (PA) system(s). System(s) shall be most current technology or manufacturer. System shall be capable of being zoned by area as requested by the VA.

At a minimum provide a system with the capacity of 12 zones plus an all call. Exterior speakers shall be a separate zone. Attenuators at Conference and group rooms. Achieve STC 45 minimum in patient specific areas, including exam, consult, group, conference rooms, tele-rooms and management offices.

#### **NURSE CALL SYSTEM**

Provide nurse call system as required for exam rooms, public toilet rooms (at accessible fixtures), public family toilet rooms, patient toilets, procedure rooms, and radiology rooms identified by local clinic staff. Master station shall be placed in building and Staff Stations in ten (10) manned nursing and reception locations. Nurse call shall include Code Blue. The crash carts at Radiology and Procedure shall also have Code Blue.

#### **STRUCTURED CABLING SYSTEM**

Lessor to provide Category 6A structured cabling system throughout clinic per Appendix E (IT). VA network and Non-VA networks (public Wi-Fi) shall terminate in separate rooms. Provide wireless access point cabling outlets throughout clinic for VA provided and installed WAP units.

#### **SECURITY SYSTEMS**

Access Control: For the electronic access control system provide card readers compliant with FIPS 201. System must network with the Poplar Bluff VA Physical Access Control System which is the Avigilon system. Provide a Separate internal stand-alone system for both the Pharmacy suite and Police suite, networked to Poplar Bluff Police. At a minimum the following doors require card readers: all Telecomm rooms, Main Computer Room, Electrical, Mechanical, Police Storage Secure, Pharmacy vault, Pharmacy, Exterior doors and dock door.

CCTV system shall be IP based with 60 cameras of various types. Provide cameras as defined by the user at the following locations:

- at Automatic Distribution System Medication, Automatic Distribution System Supply and Automatic Distribution System Prosthetics (aka Pyxis).
- inside of all Telecomm rooms, Main Computer Room, Electrical, Mechanical, Police Storage Secure, Pharmacy vault, Pharmacy and main corridors.
- at all Interior doors showing exits and entrances to Telecomm rooms, Main Computer Room, Electrical, Mechanical, and Pharmacy vault.
- at all Exterior doors and dock showing exits and entrances and showing the perimeter of the building.
- all drop off areas and exterior parking.
- Provide three client stations: one at Pharmacy (views only pharmacy), one at Poplar Bluff and one at Cape Girardeau Police Operations.

The system shall be capable of recording a minimum of 30 frames-per-second simultaneously across all cameras. Storage will be sized such that 30 days storage retention is possible with motion detection disabled and compression on the "normal" setting. The system must be networked such that it can be viewed and accessible from the Poplar Bluff VA Medical Center.

Intrusion detection system shall be provided with flush mounted annunciator panels for the clinic. The system will connect to the facilities existing security management system and will include lights, buzzer, silencing switch, and visual indication of intrusion location. Keypads shall be provided to arm and disarm the system.

Motion detection at Distribution System Medication Automatic, Distribution System Supply Automatic, Distribution System Prosthetics Automatic and Pharmacy (Entry doors, windows, vault).

Door Contacts at all Telecomm rooms, Main Computer Room, Electrical, Mechanical, Police Storage Secure, Pharmacy vault, Pharmacy, Exterior doors and dock door.

Provide an integrated intercom/ buzzer with camera at Pharmacy suite entry doors.

#### **PANIC BUTTONS**

- Locate panic buttons at Mental Health Consult rooms and Reception.
- Locate panic annunciator panel at Police Operations.
- Electronic door shut down control at Police Operations.

#### **NON-VA NETWORKS**

The facility will contain Non-VA networks for CBOC contractors and the lessor. Non-VA modems and routers shall be located in the Demarc room, not the VA IT rooms. The Non-VA networks shall not utilize wireless connectivity, only hard-wired, to prevent interference with VA wireless antennas. A guest Wi-Fi system shall be managed and provided by the lessor.

Non-VA network infrastructure, including outlets, cabling, pathways, patch panels, wire management, racks and other components of the Non-VA network system shall be provided with the facility construction.

All Non-VA active equipment such as servers, switches, wireless access points, PC's, etc. will not be included in the building construction scope but will be furnished using other sources.

#### **SPECIAL ELECTRONICS SYSTEMS**

Audio-visual rough-in conduit and back boxes shall be installed within the training and meeting rooms and throughout the production floor at approximately ten (10) locations. Rough-in shall be provided for projectors and electronic screens or large format monitors as required by the user. Display type shall be

dependent on room size and shall be selected by the A/V designer. Floor boxes shall be installed within rooms for serving telecommunications requirements and A/V cabling.

Cable TV shall be located in the Waiting rooms, Staff Lounges, Police Operations, Patient PreOp Bay, Infusion Specialty Care, and Treatment Exercise Area.

#### **LIGHTING**

- Provide automated lighting control system in compliance with locally-adopted energy codes.
- Provide LED lighting throughout the building.
- Provide dimmable slide switches at Eye Clinic, Endoscopy, Procedure, Radiology, Mental Health, Conference room, Shared Medical Appointment, Group Mental rooms.
- Provide emergency egress lighting in compliance with locally adopted building codes.

#### **ELECTRIC CHARGING STATION**

Provide rough-in (conduit and box only) for five (5) future electric car charging stations.

#### **INTERIOR CONSTRUCTION PARTITIONS**

The Lessor shall be responsible for construction and carrying the cost of a Pharmacy Vault and Police Secure Storage (framed wall to structure above with reinforced drywall/ mesh). Lessor shall follow federal government rules and regulations, for the construction of the controlled substances enclosure.

Achieve STC 45 minimum in patient specifics areas, including exam, consult, group, conference rooms, and management offices. STC shall pertain to walls, doors, openings and penetrations. Walls shall be full height, extending to structure/ decking above.

Provide recessed slab at audio booth to permit for a zero-transition entry.

Minimum width of all corridors serving multiple departments and building entrances and lobbies shall be 6 feet in width, minimum except where greater widths are required to comply with egress requirements.

#### **INTERIOR DESIGN AND FINISHES**

Interior finish materials shall comply with VA PG-18-14 Room finishes, Door and Hardware Schedule.

- All swing doors must be equipped with cylinder lock locking hardware and master keyed to match existing VA "Best" brand, 7 pin locking system. Egress doors must be equipped with panic hardware and meet NFPA requirements for exit. Toilets are to be equipped with privacy locks that can be

unlocked in emergency with coin from outside. Sliding barn doors must provide a locking mechanism that can create privacy for the patient and security for the staff member.

- Main entrance and Ambulance entrance doors shall be automatic bi-parting sliders with motion sensor, ADA actuators and breakaway.
- Public Toilets (Men, Women and Family) shall be equipment with ADA actuators.
- Procedure, Endo and Recovery doors shall require handsfree operation.
- Interior finishes shall meet minimum specifications defined in Lease Agreement. Floor coverings shall be classified for commercial use and when identified shall be classified for heavy duty use. Carpet tile shall be permitted in waiting rooms, workstation center core area at workstations and inside of the audio booth. Interior floor finishes shall meet all code requirements for slip resistance and sustainability standard.
- Built-in cabinets shall be lockable, keyed as directed by the VA.

Accessible and barrier free design shall be incorporated throughout the building. Floor material changes shall be minimized to prevent trip hazards. Finish selections shall be based on finish prevention considerations:

- materials shall withstand disinfecting chemicals
- finish materials shall have flat, non-textured surfaces to promote cleanability.
- When available, finishes shall have inherent antimicrobial qualities such as copper or silver fibers

The interior design shall create a classic and timeless interior with emphasis on therapeutic environments. The layout of the space shall minimize dead end corridors and blind spots and maximize visibility from staff stations. The layout shall create circulation paths that are clear and well defined. The layout shall use repetition for simplicity and wayfinding.

Provide wayfinding signage in public areas, a building directory and door signage throughout. Provide signage to conform to local code requirements. All door signs shall meet ABAAS guidelines. Refer to the VA Signage Design Guide.

Provide motorized programmable window coverings at all exterior windows. Provide adequate opacity to 'block' the sunlight.

Refer to the Project Room Contents for a comprehensive list of furniture and equipment which shall be accommodated for functionality, code and regulatory requirements.

#### **IV. Security Requirements**

Refer and coordinate with Standard FSL Level II requirements. Lessor to ensure that the VA police have jurisdiction at the proposed facility location.



### **POLICE SERVICE AREA**

Provide adequate clearance for a clearing barrel to accommodate long guns in Secure Storage area.

Provide one-way glass to lobby from Police Operations, 3'x4', laminated.

### **PHARMACY PARTITIONS AND OPENINGS**

Partitions at the dispensing and receiving windows facing the public corridor shall be UL Level 3 ballistic construction and 15-minute forced entry construction, including partitions, suite entry doors, glazed openings, teller windows, and transaction tray.

## **V. Special Space Requirements**

### **MOBILE MRI**

Lessor shall provide the following provisions for mobile MRI/CT Scanner Truck:

- Lessor shall furnish a dedicated five-wire 480V, 3-phase wye connection with neutral and ground, 150 Amp circuit to supply power to mobile MRI/CT scanner trucks at the MRI pad shown on the site plan. The safety disconnect switch shall have lock-on provisions, which will allow the switch to be locked in the "ON" position. The disconnect switch shall also have lock-off provisions. Provide safety disconnect in electrical circuit, per code, on exterior of building for MRI/CT. Electrical feed shall terminate on exterior of building at a Russellstoll connector rated for service required. Provide MaxGuard interlocked receptacle (200 amp) with circuit breaker in a weatherproof box. The circuit breaker shall be a minimum 200A/3P. Coordinate exact size with equipment vendor. The bottom of the receptacle shall be a minimum of 3 feet above grade. The disconnect switch, receptacle, and telecommunications jacks shall be mounted on concrete posts with strut framing adjacent to the MRI concrete pad.
- Lessor shall furnish a weatherproof box for telecommunications (IT and non-IT related cabling) located adjacent to power receptacle. Conduit shall extend to interior distribution system in the building. Install six (6) exterior telecommunications jacks. Include 3 telecommunications cables and 3 data cables.
- Truck pad shall be Portland cement concrete. Pad will be approximately 65'-0" x 18'-0" with a minimum of 12" thick slab with appropriate reinforcing. Prior to the Second Design Development submittal, the Pad shall be sized based on the MRI unit that will be used at the site. If reinforcement of concrete is required, use only non-ferrous reinforcement materials. Variations in pad levelness shall not exceed 1/8-inch in 10'-0". The pad should not be located adjacent to a roadway.
- Provide the following plumbing provisions in two in-ground boxes adjacent to the truck pad. One in-ground box shall be for water supply connections and one in-ground box shall be for sanitary wastewater connection:
- Provide a hose bib and backflow preventer, connected to a cold water supply line, for connection of a 3/4-inch hose.
- Provide 3/4-inch female connector and backflow preventer, connected to a cold water supply line, for connection of a 3/4-inch I.P.S. male threaded hose connector. Size line to provide 5 gallons per minute at 45-60 PSI. Provide an adjustable pressure regulator with gauge to ensure that pressure does not exceed 60 PSI. Water intake equipment will be protected with physical hardware equipment to

provide preclusion of entry or introduction of foreign materials and also provide indication of tampering. Intake facilities above ground will provide physical barriers to preclude entry and tampering of equipment.

- Provide 1½-inch female threaded connector, connected to the sanitary wastewater drainage system, for connection of a 1½-inch male threaded hose connection.
- Provide an accessible sidewalk from an exterior door of the outpatient clinic to the MRI pad. Provide a canopy for the walkway from the clinic to the MRI pad. The canopy shall comply with criteria in Paragraph 2.9.2.
- Extend panic (duress) alarm system to MRI pad. Provide connection for one (1) panic button in MRI enclosure, connected to main panic (duress) alarm panel.

## VI. Commissioning Requirements

In addition to the system commissioning requirements called out in the FGI the developer will also test and commission all sound rated walls required by FGI.

## VII. Maintenance Requirements

Lessor will maintain utilities and equipment as prescribed by local codes and references listed in Appendix D. Lessor will provide records of the maintenance in the format and frequency required by the VAMC to ensure compliance with TJC.

## VIII. Environmental Management Plan

### JANITORIAL AND SITE MANAGEMENT SERVICES

- A. The VA shall provide Janitorial supplies and services.
- B. The Lessor shall maintain all exterior, entrances, exits, patios, dock and site services of the leased premises to provide a clean, neat, and attractive appearance by performing the functions described below.

#### **(1) Work Schedule**

Work will be accomplished at times indicated. Work schedule shall be from 7:00 AM to 5:00 PM, (or as requested by the LCO), Monday through Friday and 8:00 AM to 12:00 PM, Saturday. The Lessor shall ensure that sufficient employees are available to prepare the clinic to see patients at 7:00 AM.

#### **(2) Safety and Special Procedures**

The Lessor shall consider the clinical environment and ensure that the maintenance staff is instructed on applicable safety precautions and special requirements. The maintenance staff shall comply with applicable Federal, State, and Local safety and fire regulations and codes. The Lessor shall immediately bring to the attention of the Government any fire and safety deficiencies. The Lessor shall take reasonable safety precautions to promote a safe environment within the lease premises.

#### **(3) Equipment and Materials**

All equipment and materials used in the performance of this contract will be cleaned and stored properly at the end of the workday. Carts and/or equipment will not be left unattended for any reason while patients are in the clinic. Lessor shall ensure all equipment, tools, and supplies meet necessary safety requirements and staff has full working knowledge of their use. The Lessor shall provide all labor,

materials, supplies, machinery, and appliances that may be necessary or appropriate in the performance of maintenance services.

The Lessor shall provide clear plastic linings for all exterior trash receptacles. All accumulated waste shall be removed and disposed of in the dumpster. Hazardous waste shall be picked up and stored in a designated storage area. Supplies to be used shall be approved by the Government. Specifications for supplies are as follows:

- **Trash receptacle liners:** (a) Polyethylene, flat type, 33 inches long, 52 inches wide, .66 millimeters thick; (b) Polyethylene, flat type, 24 inches long, 33 inches wide, .31 millimeters thick; (c) Polyethylene, red bags (biohazard) 33 inches long, 52 inches wide and 24 inches long, 33 inches wide
- **Window cleaner:** Ammonia type sufficient to remove smoke film and dust.
- A copy of the MSDS sheets for all products used shall be maintained at the clinic and shall be available for review by VA upon request.

#### **C. Daily Cleaning Requirements**

##### **(1) Exterior Building Entrances, Exits, Patios and Dock**

- Snow removal.
- Sweeping and cleaning.
- Pest Control.
- Pick up trash and cigarette butts.
- Trash receptacles shall be emptied, and liners changed.
- Trash shall be removed from the site and placed in appropriate containers.

#### **D. Weekly Cleaning Requirements**

##### **(1) Exterior Building Entrances, Exits, Patios and Dock**

- Lawn maintenance.

##### **(2) Exterior Site and Parking**

- Lawn maintenance.
- Sweeping and cleaning.
- Pest Control.
- Pick up trash and cigarette butts.
- Trash receptacles shall be emptied, and liners changed.
- Trash shall be removed from the site and placed in appropriate containers.

##### **(3) Glass Cleaning**

- Clean interior and exterior side of exterior doors and entrance glass.
- Clean exterior side of exterior windows.

E. Properly maintain plants and lawns. Replace light bulbs, fluorescent tubes, ballasts, and starters.

F. Control pests as appropriate, using Integrated Pest Management techniques, as specified in the VA Environmental Management Integrated Pest Management Technique Guide (E402- 1001).

## **IX. Construction Observation**

### **RESIDENT ENGINEER'S OFFICE SPACE**

A. All costs associated with the Resident Engineer's office including, but not limited to, construction, demolition, hook-ups to utilities, furniture, fixtures, and equipment (RE Office Costs) shall be paid by the

Lessor. Upon acceptance of the space, VA shall reimburse the Lessor for all RE Office Costs as part of the Tenant Improvement Cost.

**B. Remote Oversight Space**

The lessor shall provide one (1) office space not less than 120 SF for the sole use of the VA and its delegate, when present. The office space shall be within three (3) miles of the jobsite and may be within the prime contractor's trailer. Offsite locations must be approved by the SRE considering safety and security. The office space shall have conditioned air and electricity for proper lighting and receptacles in accordance with typical office area standards. Access to high speed wireless internet shall be provided. The space shall be near a restroom, break room, copy room and conference room in which the RE is able to use as needed. The break room shall contain a shared microwave, refrigerator and coffee pot. The conference room shall be able to seat a minimum of 10 people. The office space shall contain the following items:

- 1 Office desks, double pedestal, executive size
- 1 Swivel chairs with arms
- 2 Arm chairs
- 1 5 drawer file cabinets, letter size
- 1 Drawing rack, with 12-30 inch "Plan Hold" drawing holders, freestanding
- 2 Apple I PAD Pro 12" Tablets, Wi-Fi + 4G service, 510 GB and Word app, with Signed/Numbered awarded SFO loaded. Loading of all drawings and specifications when "completed" after acceptance of final drawings should be up-loaded / accomplished at that time frame.
- 1 Work table, folding 30" x 72"

**C. Lessor shall, for the duration of the Resident Engineer's occupancy, provide the following:**

- Secure, safe, clean, and sanitary conditions in and around the field office and parking area.
- Maintenance of gravel surfaced area, weed free, including the area for parking, in an acceptable condition for vehicle and foot traffic at all times.
- Maintenance of utility services.
- Daily janitorial services and supplies (toilet paper, paper towels, soap, trash removal, etc.).
- Potable water, fuel, and electric power for normal office uses, including lights, heating, and air conditioning.
- Lessor shall be responsible for all maintenance for field office and equipment including replacement of burned out light bulbs or tubes and changing of A/C filters.

**PHOTOGRAPHIC DOCUMENTATION**

**A. During the construction period through completion, a 3rd party shall provide photographic documentation of construction progress and at selected milestones including electronic indexing, navigation, storage and remote access to the documentation, as per these specifications. The commercial photographer or the subcontractor used for this work shall meet the following qualifications:**

- Demonstrable minimum experience of five (5) years in operation with at least 500 projects documented to date providing documentation and advanced indexing/navigation systems including a representative portfolio of construction projects of similar type, size, duration and complexity as the Project.
- Demonstrable ability to service projects throughout North America with operational resources within

150 miles of project, which shall be demonstrated by a representative portfolio of active projects of similar type, size, duration and complexity as the Project.

**B. Photographic documentation elements:**

- Each digital image shall be taken with a professional grade camera with minimum size of 6 megapixels (MP) capable of producing 200x250mm (8 x 10 inch) prints with a minimum of 2272 x 1704 pixels and 400x500mm (16 x 20 inch) prints with a minimum 2592 x 1944 pixels.
- Indexing and navigation system shall utilize actual AUTOCAD construction drawings, making such drawings interactive on an on-line interface. For all documentation referenced herein, indexing and navigation must be organized by both time (date-stamped) and location throughout the project.
- Documentation shall combine indexing and navigation system with inspection-grade digital photography designed to capture actual conditions throughout construction and at critical milestones. Documentation shall be accessible on-line through use of an internet connection. Documentation shall allow for secure multiple-user access, simultaneously, on-line.
- Construction progress for all trades shall be tracked at pre-determined intervals, but not less than once every thirty (30) calendar days throughout the project upon commencement of vertical construction ("Progressions"). Progression documentation shall track both the exterior and interior construction of the building. Exterior Progressions shall track 360 degrees around the site and each building. Interior Progressions shall track interior improvements beginning when stud work commences and continuing until Project completion.
- Miscellaneous events that occur during any Contractor site visit, or events captured by the Department of Veterans Affairs independently, shall be dated, labeled and inserted into a Section in the navigation structure entitled "Slideshows," allowing this information to be stored in the same "place" as the formal scope.
- Customizable project-specific digital photographic documentation of other details or milestones. Indexing and navigation accomplished through interactive architectural plans.
- Monthly exterior progressions (360 degrees around the project) and slideshows (all elevations and building envelope). The slideshows allow for the inclusion of Department of Veterans Affairs pictures, aerial photographs, and timely images which do not fit into any regular monthly photopath.
- Regular (5 max) interior progressions of all walls of the entire project to begin at time of substantial framed or as directed by the Resident Engineer through to completion.

**C.** Images shall be taken by a commercial photographer and must show distinctly, at as large a scale as possible, all parts of work embraced in the picture.

**D.** Coordination of photo shoots is accomplished through Resident Engineer or other designated on-site point of contact. Contractor shall also attend construction team meetings as necessary. Contractor's operations team shall provide regular updates regarding the status of the documentation, including photo shoots concluded, the availability of new Progressions or Exact-Built's viewable on-line and anticipated future shoot dates.

**E.** Contractor shall provide all on-line domain/web hosting, security measures, and redundant server back-up of the documentation.

**F.** Contractor shall provide technical support related to using the system or service.

**G.** Upon completion of the project, final copies of the documentation (the "Permanent Record") with the indexing and navigation system embedded (and active) shall be provided in an electronic media

format, typically a DVD or external hard-drive. Permanent Record shall have Building Information Modeling (BIM) interface capabilities.

## **X. Design Review Documentation**

All design review comments shall be tracked in the Dr. Checks web-based system. Dr. Checks enables an actionable collaboration among the reviewers and Lessor's design team. This process allows project reviewers to enter their project review comments so that the design team may provide timely responses from a web browser into a database. The main function of Dr. Checks is to document and streamline the communication process between the project reviewers and the design team. This process provides transparency and consistency by tracking the review comments to assure timely response and resolution.

All information is captured into a database and will remain in the system throughout the design and construction period and will be archived for future reference. Once the review period for a given phase of a project is ended, the designer(s) will be required to respond to all comments.

The SRE is responsible for assuring that access is available to all required users. The Lessor or designer can propose the use of an alternative web-based system as long as it provides equal or better functionality as that offered by Dr. Checks.

## **End of Appendix C: Basis of Design Narrative**