RLP # 36C248-25-R-0031 - Exhibit B
Primary Care Annex Lease
AGENCY SPECIFIC REQUIREMENTS (ASR)

The Department of Veterans Affairs is interested in leasing 11886 ABOA SF of contiguous clinical space for a clinical lease.

Space shall be available for use by Tenant (VA) for personnel, furnishings, and equipment to meet the needs for a primary care clinic. Space design will provide maximum co-location of the staff providing services to our patients.

The space shall be of contiguous space in a professional and aesthetically pleasing Building. Space offered must be in a quality building of sound and substantial construction, either a new, modernized building, or one that has undergone restoration or rehabilitation for the intended use. Space shall be located in a prime commercial office space with attractive, professional surroundings. Streets and public walkways shall be well maintained. Space shall be located on the ground floor.

The lease shall be full serviced to include Janitorial, Basic Cable, Guest High Speed Internet Wi-Fi, Security Monitoring and Maintenance. The lease shall follow the standard specifications and requirements for a New/Replacing Lease as per the GSA Global Lease or Simplified Lease.

SPACE REQUIREMENTS

Room Name	ABOA AREA	QTY	TOTAL ABOA AREA
STAFF AND ADMINISTRATIVE AREA			
Staff workroom/storage	120	1	120
Leadership office	120	1	120
Administrative staff workstation	67.2	1	67.2
HAS workstation	67.2	1	67.2
LOBBY			
Veteran/guest seating	600	1	600
Refreshment station	60	1	60
CLINICAL AREA			
Women veteran patient care room	168	1	168
General patient care room	150	8	1200
Bariatric patient care room	240	1	240
Counseling patient care room	144	1	144
Patient toilet	90	2	180
Patient height and weight station	60	1	60
Gurney, wheelchair, mobile lift corral/parking	72	1	72
Consult patient care room	144	4	576
Lab	602.4	1	602.4
Lactation room	90	1	90
Bariatric patient toilet	90	1	90
Single occupant toilet	78	1	78
Point of use equipment/supply alcove	84	1	84
Hoteling workstation	57.6	2	115.2
Clinical Staff workstation	57.6	24	1382.4
Team copy/supply alcove	36	2	72
Clinical staff multipurpose room/breakroom	288	1	288

Staff toilet	78	1	78
Staff toilet/shower	102	1	102
Locker alcove	48	1	48
SUPPORT AREA			
Logistics staff workstation	67.2	1	67.2
OIT Telecommunications room	216	1	216
Demarc room OIT	96	1	96
Recycling holding station	48	1	48
Trash holding room	72	1	72
Receiving area	120	1	120
Breakdown area	120	1	120
Full and empty gas cylinder rooms	48	2	96
Medical equipment storage room	144	1	144
Clinical supplies storage room	120	1	120
Sterile supplies storage room	120	1	120
Housekeeping aides closet	0	1	0
20% Circulation/Fit Factor			3962
Total ABOA Sq. Ft			**11886**

SPECIFIC ROOM REQUIREMENTS

A. WAITING AREA/VETERAN WELCOME AREA

1. One Gurney, wheelchair, mobile lift corral/parking 60 NUSF
2. One Lactation room 75 NUSF
3. One Veteran/Guest seating 500 NUSF
4. One Refreshment Station 50 NUSF
5. Front entrance door shall have a power assisted door that is operated by a push pad.
6. Direct window access to waiting area.
7. Restricted access or lockable door to clinical area.
8. Eight (8) quadraplex electrical outlets (16 to 18 inches from the floor), location as determined by VA.
9. Four (4) telecommunication outlets, location as determined by the VA.
10. Duress alarm.
11. One (1) dimmer light switch.
12. Luxury Vinyl Tile (LVT).
13. Luxury Vinyl Tile (LVT) to continue through hallway/corridors.
14. Corridors shall be at minimum of 5 feet in clear width.
15. All walls to have Chair Rail (28 to 32 inches) and vinyl corner guards, mounted at height determined by VA.
16. Window coverings to have horizontal manual roller shades with solar glare and heat reduction.
17. Drinking Fountain. A wall hung stainless Bottle Filling Station & Single ADA Cooler will be provided in the suite waiting room. Complete cooler and bottle filling station in a consolidated space saving ADA compliant design.
18. Automated touchless sanitizer dispenser provided by the lessor.
19. Cable Television Service paid for/provided by the lessor through the annual rent.
20. Cable TV audio/video wall jack required backing and mounting materials for connection to a VA furnished television. Ensure that HDMI and telecommunication cabling is provided for computer hookup within wall connections. Mounting heights for power and data to be coordinated with the VA.
21. Guest high speed internet Wi-Fi paid for/provided by the lessor through the annual rent.
22. Layout shall be reviewed by the VA for final approval.

B. RESTROOMS (MALE AND FEMALE)

1. One universal staff toilet 65 NUSF
2. One universal staff toilet/shower 85 NUSF
3. One patient toilet 75 NUSF
4. One women veteran patient toilet 75 NUSF
5. One bariatric toilet 75 NUSF
6. One universal single occupant toilet 65 NUSF
7. One lab specimen collection toilet 65 NUSF
8. All bathrooms shall meet handicap accessibility codes and will include grab bars at commode.
9. All bathrooms shall have a power assisted door that is operatized by a push pad.
10. Minimum one (1) accessible commercial grade water closet and lavatory.
11. Toilet paper dispenser provided by the lessor installed within easy reach.
12. Mirror over sink, minimum of 24"x 36", shall be provided and installed by the lessor shall be installed.
13. Automated touchless soap dispenser provided by the lessor.
14. Automated touchless paper towel dispenser provided by the lessor.
15. Wall mounted coat rack shall be installed on the wall behind door.
16. Baby changing station.
17. One (1) GFCI duplex electrical outlet.
18. Duress Alarm to be hard-wired.
19. Porcelain Tile Flooring.
20. Porcelain Tile wall 4 foot up the wall with tile accent strip.
21. Layout shall be reviewed by the VA for final approval.

C. RECEPTION AREA/CHECK-IN

1. Twenty-two (22) quadraplex electrical outlets, location as determined by VA.
2. Twelve (12) telecommunication outlets, location as determined by the VA.
3. Minimum eight (8) foot-counter, with solid worksurface countertops utilizing concealed mounting brackets, where practicable. *Under counter storage cabinets provided by VA furniture vendor.*
4. Centralized for efficient utilization of staff. Separate check-in and check-out counters.
5. Reception area shall be strategically located to allow the office manager and/or team leader clear observation of waiting areas.
6. Reception area shall be adjacent with the Office Manager space.
7. Direct access to waiting area.
8. Duress alarm.
9. One (1) dimmer light switch.
10. Window coverings to have horizontal manual roller shades with solar glare and heat reduction.
11. Luxury Vinyl Tile (LVT).
12. Layout with counter, electrical, telecommunication outlets shall be reviewed by the VA for final approval.

D. MANAGEMENT AREA

1. One Staff workroom/storage room 100 NUSF each
2. One Leadership office 100 NUSF each
3. One Administrative staff workstation 56 NUSF each
4. One HAS workstation 56 each
5. Eight (8) quadraplex electrical outlets; one (1) per wall. Four power outlets at the desk meets the minimum requirement for monitors, docking station, wireless phone adapter, and accessory without the use of power strips.
6. Four (4) telecommunication outlets.

7. Power and data outlets should be at desk height when installed in modular furniture.
8. Duress Alarm.
9. One (1) Dimmer light switch.
10. Window coverings to have horizontal manual roller shades with solar glare and heat reduction.
11. Positioning furniture to ensure safety the of clinical staff; provided easy egress or exist. Reference the conceptual drawing for furniture placement.
12. All rooms (except IT Closet) should be master keyed, locking mechanism should be on the inside of the frame, and locking mechanism must be approved by the VA.
13. Layout shall be reviewed by the VA for final approval.

E. EMPLOYEE BREAK ROOM

1. One staff multipurpose room/breakroom 240 NUSF
2. One Staff personal property locker alcove 40 NUSF
3. Six (6) duplex electrical outlets (refrigerator, microwave oven, two counter height, two 16” to 18” from floor)
4. Minimum of ten (10) feet of counter with base and overhead cabinets; double compartment sink.
5. Luxury Vinyl Tile (LVT)
6. Automated touchless sanitizer dispenser provided by the lessor.
7. One (1) Dimmer light switch.
8. Space shall be large enough to accommodate lockers, table and chairs
9. Layout shall be reviewed by the VA for final approval.

F. JANITORIAL / UTILITY CLOSET

1. Two Housekeeping Aides Closet (HAC) 0 NUSF (Lessor space)
2. Mop Sink.
3. Two (2) duplex electrical outlets.
4. Adjustable wire shelving on two walls.
5. Tile flooring

G. SUPPLY/STORAGE/SUPPORT ROOMS

1. One Recycling Holding Station 40 NUSF
2. One Trash Holding Room 60 NUSF
3. One Receiving Area 100 NUSF
4. One Breakdown Area 100 NUSF
5. One Full Gas Cylinder Storage Room 40 NUSF
6. One Empty Gas Cylinder Storage Room 40 NUSF
7. One Logistics Staff Workstation 56 NUSF
8. Six (6) duplex electrical outlets (two counter height, four 16” to 18” from floor)
9. Two (2) telecommunication outlets.
10. Luxury Vinyl Tile (LVT)
11. Layout shall be reviewed by the VA for final approval.

H. CLEAN SUPPLY ROOM/STERILE SUPPLY STORAGE

1. One Medical Equipment Storage Room 120 NUSF
2. One Clinical Supplies Storage Room 100 NUSF
3. One Sterile Supplies Storage Room 100 NUSF
4. Four (4) duplex electrical outlets (two counter height, two 16” to 18” from floor)
5. Two (2) telecommunication outlets.

6. Welded Seam Sheet Flooring (Heat Welded with Rod)
7. Layout shall be reviewed by the VA for final approval.

I. LABORATORY AREA

1. One Blood draw station 64 NUSF
2. One Bariatric blood draw station 75 NUSF
3. One Laboratory specimen processing 120 NUSF
4. One Laboratory clean supply storage room 60 NUSF
5. One Laboratory soiled holding room 60 NUSF
6. One Handwashing station 10 NUSF
7. One Laboratory lead tech workstation 48 NUSF
8. Luxury Vinyl Tile (LVT)
9. Space requires sink
10. Layout shall be reviewed by the VA for final approval.

J. PATIENT CARE AREA

1. One Women veteran patient care room 140 NUSF
2. Eight General patient care room 125 NUSF each
3. One Bariatric patient care room 200 NUSF
4. One Counseling patient care room 120 NUSF
5. One Accessible patient height and weight station 50 NUSF
6. Four Consult patient care room 120 NUSF each
7. One Point of use equipment, supply and medication alcove 70 NUSF
8. Two Hoteling workstation 48 each
9. 24 Clinical staff workstation 48 each
10. Two Team copy/supply alcove 30 each
11. Each patient care room requires a sink and upper cabinet casework
12. Luxury Vinyl Tile (LVT)
13. Layout shall be reviewed by the VA for final approval.

K. TELECOMMUNICATIONS ROOM

1. The Lessor shall ensure all below requirements from the *VA Office of Electronic Healthcare Modernization Site Infrastructure and End User Device Requirements* are met.
2. Minimum of 80 square feet (8'x10' form factor) for a one-rack telecommunications room (TR) and an additional 20 square feet for each additional rack required. Health care facility TRs shall be a minimum of 180 square feet. One Demarc Room 80 NUSF
3. Local Area Network (LAN)
    i. Reference: *Infrastructure Standard for Telecommunications Spaces, Version 3.1,* https://www.cfm.va.gov/til/dguide/OIT-InfrastrucStdTelecomSpaces.pdf.
    ii. Horizontal cabling shall be Category 6 (Cat6) or higher (American National Standards Institute (ANSI)/Technology Industries Association (TIA)-1179 Healthcare Facility Telecommunications Infrastructure). If existing horizontal cabling is not minimally Cat6, Lessor shall upgrade to Category 6A (Cat 6A).
    iii. Telecommunications outlets/connectors and the horizontal cross-connects (patch panels) shall be of equal or greater Category to connected horizontal cable.
    iv. Installation shall be compliant with the BICSI standards (ANSI/NECA/BICSI 568, Standard for Installing Commercial Building Telecommunications Cabling and ANSI/TIA-1179-A Healthcare Facility Telecommunications Infrastructure for new installations).

1. New cable installations additionally shall be compliant with TIA 568.2-D, TIA TSB-184-A, and NFPA-70 Section 725.144 to prevent PoE heat accumulation. Provide certification reports to the COR.
2. Alternatively, new UTP cabling shall carry a UL listed "LP" (Limited Power) rating.
3. Cat6A cable shall be terminated to a CAT6A RJ-45 patch panel in IT closet and CAT6A RJ-45 jack at wall plate and labeled at both ends.
4. Use a cable analyzer to determine cable length (max cable length 90M/295 linear feet) and certify that cable meets or exceeds TIA-EIA-568-C.2.
5. Cables shall be installed in continuous lengths from origin to destination, no splices with a 1' service loop.

v. All patch cables shall be Category 6A for copper, OM4 for multi-mode fiber or OS2 level for single mode fiber.

vi. Cable management shall be implemented for all patch cables in accordance with the latest version of *Infrastructure Standard for Telecommunications Spaces,* ensuring proper bend radius, bundling, airflow, support and labeling.

vii. 1 GbE connectivity to desktops, and other End User Devices.

viii. End-to-End latency from the user desktop to Cerner Data Center of equal to or less than 90ms for Citrix connection.

ix. Provide additional data drops and network ports in Telecommunication Rooms (TR) to support required network printers and medical devices per Cerner Current State Review (CSR). If the CSR is not provided as an attachment to this document, an additional Lease Amendment may be required.

x. Copper structured cabling shall be certified as meeting or exceeding TIA-EIA-568.1-D (max fixed cable length 90M/295 linear feet) independent of media type.

xi. Lessors shall provide service with a minimum of 10 GbE fiber or better.

xii. Network Infrastructure devices supported by UPS and/or //Emergency Power / Backup Generator as described below in 2.3//.

4. Power

i. UPS Functional Requirements: This Scope of Work includes UPS requirements for OIT equipment only. All OIT equipment in the Telecommunications Room shall be connected to the UPS.
   1. All UPS units supporting Information Technology infrastructure shall be functional and maintain a 10-minute run-time.
   2. UPS shall be managed and report the following information to a management system.
      a. Overload
      b. Battery Temperature High
      c. Battery Charge Low
      d. Battery Failure
      e. Critical Condition (fan failure, low output voltage, etc)

ii. UPS shall support both monitoring and remote management to include full compliance with RFC-1628 – UPS Management Information Base Support for Simple Network Management Protocol (SNMP) v3.0, BaCnet and Modbus protocols.

iii. UPS shall be connected to a monitoring system by Ethernet (wired or wireless) or serial interface (RS-232 or RS-485).

iv. All units within one (1) year of end of life by facility Go-Live shall be replaced with new units.
   1. End of Life for stand-alone units assumed to be six (6) years from date placed into service.
   2. End of Life for UPS batteries assumed to be three (3) years from date replaced.

v. Upstream bonding requirements to the Secondary Bonding Busbar or Primary Bonding Busbar must use two lugs. Bonding for telecommunications equipment must be performed per manufacturer's specifications. All grounding shall comply with ANSI/NECA/BICSI 607-C, Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises, November 2015.

5. Heating, Ventilation, and Air Conditioning (HVAC) Design Requirements

i. Reference: *U.S. Department of Veterans Affairs Office of Construction & Facilities Management HVAC Design Manual, dated May 1, 2019*, https://www.cfm.va.gov/til/dManual/dmHVAC.pdf.

ii. Telecommunications Rooms, Class B space temperature range 41°F to 95°F, relative humidity: 8 to 80% noncondensing.

1. Temperature and humidity shall be monitored in proximity to the OIT equipment rack. Place sensors either on populated rack or within 6 feet of rack.
2. Temperature and humidity shall be connected to a monitoring system by Ethernet (wired or wireless) or serial interface (RS-232 or RS-485).
3. In areas where there are environmental issues (e.g., steam pipes, lack of ventilation, etc.), the use of thermal curtains and additional vents will be considered as a temporary alternative, not permanent resolution. Any existing temporary alternatives, such as thermal curtains and door vents, shall be corrected with an approved, engineered solution.

6. Physical Security Design Requirements

i. Reference: *Infrastructure Standard for Telecommunications Spaces*, https://www.cfm.va.gov/til/dManual/dmTelecomm.pdf.

ii. Provide an electronic Security Management System (SMS) with a Physical Access ContrMost ol System (PACS).

iii. Doors shall include a mechanical spring loaded "deadlocking feature" (not separate "deadbolt" lock), PACS associate electronic Personal Identity Verification (PIV) card access device with keypad, electric strike and digital Closed Caption Television (CCTV) color camera routed to and directly controlled by the facility SMS.

iv. Telecommunication Room security system shall be connected to a UPS or emergency backup power system.

v. Facility programmable door controller shall be fully functional in a standalone status if connection to the SMS is lost. Once the connection is restored, the local door control system shall update the SMS, regarding all operations that occurred after the connection was interrupted. Then, the SMS shall update the local door control units to current operational function.

vi. The PACS and SMS shall be fully compliant with VA's PII, PIV "Smart" ID Card and at a minimum, FIPS 201-1 and NRTL (i.e. UL) listed and labeled.

7. Access to the Telecommunications Room will be restricted to include only those persons specifically authorized by VA OIT, including facility lessors.
8. All perimeter walls shall extend from floor slab to structural system (deck) to prevent up and over access.
9. The Telecommunications Room shall be secured to VA access only and not be shared with any other tenant. Core should be locked to the VA OIT TR key.
10. Please refer to the OIT Enterprise Facility IT Support Infrastructure Standards for details https://www.cfm.va.gov/til/dguide/OIT-InfrastrucStdTelecomSpaces.pdf
11. Questions about telecommunications infrastructure guidance can be directed to OIT.
12. Layout shall be reviewed by the VA for final approval.

L. TELECOMMUNICATIONS OUTLETS (TO CONNECT INTO THE VHA NETWORK)

1. Standard Data Outlets: Each data outlet/device location will have four (4) cable runs that terminate on the high-density rack mounted patch panel in the Telecommunications Room. Each typical data outlet will be on a four-port base plate.
2. Wall Mounted Phones: Any jacks for wall mounted phones should have 1 data cable to support VoIP, and be on a 1 port metal plate, and accommodate RJ45.Cabling must be installed according to BISCI standards.
3. All permanent link cabling from the Telecommunications Room to the outlet shall be continuous runs with no splices and be less than 295'.
4. Patch Panels, jacks, and cable shall all be rated at Cat 6A and be tested and certified. A copy of the test results will be provided to the COR as a deliverable.

5. Must have the capability to add additional data locations as determined by occupants to be provided by the lessor within ten days from request.
6. VAMC can suggest a cable contractor if necessary.
7. Location of Data Outlets:
   a. If the construction at the location of the data outlet is drywall, provide flush-mounted single-gang outlet boxes with four-port base plates and applicable wall device faceplates (cable to be installed behind drywall).
   b. If the construction at the location of the data outlet is a solid wall, provide surface-mounted single-gang outlet boxes with four-port base plates and applicable wall device faceplates (cable to be installed in plastic wall mold equipped with protective insulator or sleeve).
   c. Where modular furniture is used, the location of the data outlet will be in the baseboard of the furniture, where the networked equipment (computers, printers, etc.) will be located. Provide flush-mounted single gang outlet boxes with four-port base plates and applicable wall device faceplates. If flush-mounted single-gang outlet boxes cannot be used, then modular surface mount boxes will be used with four-port inserts. All cable runs in modular furniture will be through furniture wire baseboard ducts/conduit.
8. The contractor shall follow VA naming and labeling conventions as detailed in section 5.1.5, *Information Transport Systems Equipment and Component Labeling*, of the Infrastructure Standard for Telecommunications Spaces. Labels shall be attached at both the patch panel and wall plate. All labeling shall be easily visible and printed; hand-written labeling is prohibited.
9. Layout shall be reviewed by the VA for final approval.

M. FINISHES

1. All finish selections shall be reviewed and approved by the VA.
2. Color Board/Finish options are available, provided by VA.
3. Lessor to provide samples of their specific manufacturer finishes for VA approval.
4. Brand Name or Equal. Characteristics and level of quality that will satisfy the Government's needs.
   a. Carpet Tile (offices, group rooms, family/multi-purpose) – INTERFACE
   b. Luxury Vinyl Tile Flooring (waiting, corridors, kitchen) 5mm commercial grade thickness – ARMSTRONG
   c. Sheet Vinyl, homogeneous (storage) 6.58" x 98.4' x 0.80 – ARMSTRONG
   d. Solid Surface Counter - AVONITE
   e. Casework Laminate (kitchen, built ins) - WILSONART
   f. Doors Oil Based Stain - MINWAX
   g. Wall Base - INPRO
   h. Seven (7) paint colors with five (5) serving as accent wall color, one (1) field color, one (1) color for trim – BENJAMIN MOORE

Product	Code	Manufacturer	Product Number	Notes	Illustration
Paint, Wall	P1	Benjamin Moore - Eco Spec	OC-24, Color Winds Breath	Latex, Satin Finish Field color	Wind's Breath OC-24
Paint, Accent	P3	Benjamin Moore - Eco Spec	1552, Color River Reflections	Latex, Satin Finish Trim colot	River Reflections 1552
Paint, Accent	P4	Benjamin Moore - Eco Spec	CSP-775, Color Sage Wisdom	Latex, Satin Finish Accent	Sage Wisdom CSP-775
Paint, Accent	P5	Benjamin Moore - Eco Spec	2050-40, Color Florida Keys Blue	Latex, Satin Finish Accent	Florida Keys Blue 2050-40
Paint, Accent	P6	Benjamin Moore - Eco Spec	1635, Color Waters Edge	Latex, Satin Finish Accent	Water's Edge 1635
Paint, Accent	P7	Benjamin Moore - Eco Spec	669, Color Oceanic Teal	Latex, Satin Finish Accent	Oceanic Teal 669
Paint, Accent	P8	Benjamin Moore - Eco Spec	710, Color Kensington Green	Latex, Satin Finish Accent	Kensington Green 710

i. Restroom: Porcelain Tile Floor, Porcelain Tile Wall (4' up the wall), Ceramic Tile Accent Strip – DALTILE
j. Acoustical Ceiling Attenuation System with 0.75 Noise Reduction Coefficient (NRC)/Ceiling Attenuation Class (CAC)

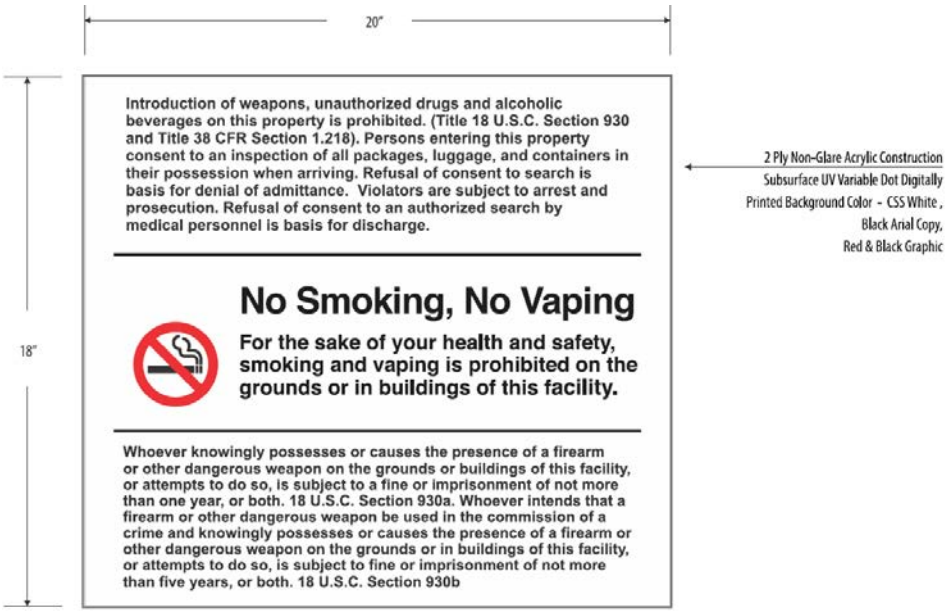
N. SIGNAGE

1. Interior Signage.
   a. Lessor shall provide interior signage for a standard wall sign.
   b. Lessor shall provide samples for the VA to review and approve.
   c. VA to approve sign design schematic prior to fabrication/installation.
   d. VA Interior Signage Manual PG-18-10 VA Signage Design Manual
   e. Mounting heights are 5'-0" to top of sign and 2" from door frame.

2. Exterior Signage.
   a. Lessor shall provide Exterior Signage on the building suite
   b. Lessor shall provide VA logo on marquee or monument sign.
   c. Lessor shall provide samples for the VA to review and approve.
   d. VA to approve sign design schematic prior to fabrication/installation.
   e. Lessor shall develop, provide, deliver, stage/move, and install the new exterior sign
   f. Lessor shall provide all the equipment, cabling, labor, materials, and sign.
   g. Signage shall comply with local municipality's codes and specifications.
   h. Signage shall be legible from main serving road.
   i. Size: Minimum of 4ft by 8ft
   j. Lighting/Electrical:
      - Internally lighted sign using channel lettering
      - LED
      - Dusk to Dawn Photocell
      - *Each part of the stencil style font is like a separate sign*

3. Main Entry Door Decal.
   a. VA to approve sign design schematic prior to fabrication/installation.
   b. Lessor shall provide signage on the main entrance door.
   c. Decal Information to include:
      - Name
      - Address
      - Open Monday – Friday 7:30AM–4:00PM
      - Phone Number
      - After Hours Call Center
      - Veterans Crisis Line Call 1-800-273-8255 and Press 1 to receive confidential support 24 hours a day.
      - VA Seal:
        Special Topic Criteria - Office of Construction & Facilities Management (va.gov)
        SD101400-03.pdf (va.gov)
        Color Specifications for the Department of Veterans Affairs Seal (va.gov)

4. Entrance Signs.
   d. Lessor shall provide the mandatory entrance signage. VA Signage Design Guide
   e. VA to approve sign design schematic prior to fabrication/installation.
   f. No Smoking, IN-02.02, 18"-20"
   g. No Weapons Permitted, IN-02.10, 6" x20"
   h. Sample Illustration.



O. HVAC Design:

1. Lessor must adhere to VA HVAC Design Guide and HVAC Design Manual, VA Technical Information Library
2. Temperature, humidity and pressure requirements, for the types of rooms listed below, must be monitored and recorded from a building automation system in accordance with ASHRAE 111, 170 and 180. The building automation system must electronically alert the space owner when conditions are out of range within specified timelines in accordance with ASHRAE 111, 170 and 180.
    i. Clean utility
    ii. Storage
    iii. Clinical supply storage
    iv. Sterile supply storage
    v. Supply storage
    vi. Clean supply storage

P. Generator quick connect

1. Lessor shall provide inclusion of a portable electric generator quick connection and associated transfer switch. The lessor shall provide a design to include the specifications, location and characteristics of a portable electric generator quick connection and associated transfer switch that will comply with building infrastructure/equipment needs for return to normal operations in the event of loss of normal power. A 525 gallon portable electric generator will be provided by the VA. Spec sheet included below.

Cat® XQ425 Rental Generator Set

Image shown may not reflect actual configuration

Standby 375 kW, 469 kVA
Prime 340 kW, 425 kVA
U.S. EPA Tier 4 Final
50/60 Hz Switchable
1500-1800 rpm

Specification

Generator	Frequency	Speed rpm	Voltage	Standby kW (kVA)	Prime kW (kVA)	Phase	Amp (A)
Standard	60 Hz	1800	480/277V	375 (469)	340 (425)	3-phase	511.19
	60 Hz	1800	240/139V	375 (469)	340 (425)	3-phase	1110.29
	60 Hz	1800	208/120V	350 (438)	320 (400)	3-phase	1022.39
	50 Hz	1500	400/230V	320 (400)	290 (363)	3-phase	523.22
Optional	60 Hz	1800	600V	375 (469)	340 (425)	3-phase	408.96
	60 Hz	1800	480V	320 (400)	292 (365)	3-phase	439.03

Cat® C13 ACERT™ Diesel Engine	Metric	Imperial (English)
Configuration	I-6, 4-Stroke-Cycle Water Cooled Diesel	
Bore	130 mm	5.1 in
Stroke	157 mm	6.2 in
Displacement	12.5 L	763 in^3
Aspiration	Turbocharged-Aftercooled	
Compression Ratio	17.0:1	
Fuel System	MEUIC	
Governor Type	ADEM™ A4	
Aftercooler	ATAAC	
Turbocharger	Single	
Fuel	Requires ULSD	

Benefits & Feature

Fuel/Emissions Strategy
- Meets U.S. EPA Tier 4 Final and CARB Certified for Non-Road Mobile applications at all 50 and 60 Hz ratings

Single-source Supplier
- Factory designed and fully prototype tested with certified torsion vibration analysis available
- ISO 9001:2000 compliant facility

Cat C13 ACERT Tier 4 Final Diesel Engine
- Uses ACERT Technology and Cat NOx Reduction System (NRS)
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine controller

Cat CEM (Clean Emissions Module)
- Aftertreatment module consists of Caterpillar Regeneration System (CRS), Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF), and Selective Catalytic Reduction (SCR)

Diesel Exhaust Fluid (DEF) Tank
- 12 gallon DEF tank with on tank fill and integrated pump, level sensor and heating elements
- Electrically heated DEF lines from DEF tank to CEM

Cat EMCP 4.2 Control Panel
- Fully featured power metering, protective relaying and engine/generator control and monitoring
- Simple user friendly interface and navigation
- Automatic set-point adjustment integrated with voltage and frequency changes

Cat SR4B Series Generator
- Designed to match performance and output characteristics of Cat diesel engines
- Permanent magnet excitation
- Segregated AC/DC, low voltage accessory box provides single-point access to accessory connections

*N/A for 600V

Cat Digital Voltage Regulator (Cat DVR)
- Three-phase sensing
- Adjustable volts-per-hertz regulation
- Provides precise control, excellent block loading, and constant voltage in the normal operating range

Enclosure
- Highly corrosion-resistant 12-gauge sheet steel construction
- Two-coat polyester powder-coated finish
- 7 doors and 3 access doors for ease of maintenance
- Secure and safe design with safety glass control panel viewing window with lockable access door
- Fuel fill and battery can only be reached through lockable access doors
- Single-point lift designed to lift complete package

Distribution Panel*
- Switchable via linkboard from 480/277V 3-phase to 240/139V 3-phase (can be adjusted down to 208/120V 3-phase)

Rear Customer Access
- Separate control panel and distribution panel access doors
- Hinged door over main bus connectors
- Emergency stop on panel
- Remote start/stop contacts

Reduced Environmental Impact
- EPA Tier 4 Final technology
- 110% spill containment of onboard engine fluids
- Meets 76 dB(A) at 7 m per SAE J1074 measurement procedure at 75% prime loads
- Variable speed cooling fan for reduced fuel consumption and reduced sound as part load

Rental Ready Features
- Anti-condensation heater 110-120 VAC
- Coolant heater 110-120 VAC
- UL Listed battery charger
- Solar powered battery maintainer

Factory-installed Standard Equipment

Air Inlet
- Air cleaner, two-stage cyclonic/paper with dust cup and service indicator
- Turbocharger and air-to-air aftercooler

Charging System
- UL/CSA listed 120V, 20A battery charger, shock mounted and enclosed in dust-proof housing
- Charging alternator; 24V-45A, heavy-duty with integral regulator and belt guards

Control Panel
- EMCP 4.2 generator set mounted controller
- NEMA 2, IP23 dust-proof enclosure, UL508 listed
- Idle/rated and 50/60 Hz frequency switches
- Generator protection features: 32, 32RV, 46, 50/51, 27/59, 81 O/U
- Metering display: voltage, current, frequency, power factor, kW, WHM, and kVAR
- Panel illumination lights and emergency stop switch

Cooling System
- Package-mounted radiator with vertical air discharge provides 43°C ambient capability
- Blower fan, fan drive, fan guard, and belt guards
- 120VAC coolant heater, fuse protected, thermostatically controlled, automatically disconnected on start-up
- Coolant drain line with shut off valve piped to base-frame
- Coolant sight gauge, level switch, and shutdown
- 50% coolant antifreeze with corrosion inhibitor

Distribution System
- NEMA 1 steel enclosure, separate hinged, lockable door with rust-resistant pinned hinges
- Main bus connections with hinged load cover with Plexiglas window closed for operation
- Main circuit breaker 3-pole, 240/480V-1600A with 24V DC shunt trip wired to load door safety switch
- Current transformers, hard mounted
- Multiple duplex and twist-lock receptacles with individual circuit breakers
- Two-wire remote start/stop terminals and 120 VAC shore power connection for rapid starting

Enclosure
- Sound attenuating, 12-gauge sheet metal enclosure
- Modular panel construction and one-piece welded roof design with 2 degree pitch
- Interior walls and ceilings insulated with flame retardant, precision cut foam materials meeting NFPA220
- Black stainless steel pad-lockable latches, doorkeepers on all doors and zinc die-cast hinges/grab handles
- Single-point lifting
- Painted Cat power module white with Cat rental decals

Engine
- EPA Tier 4 Final certified Cat C13 ACERT ATAAC heavy duty diesel engine
- Electronic ADEM A4 controls

CEM
- Cat CEM comes with integrated DOC, DPF, and SCR and is located in separate compartment

DEF System
- 12 gal plastic DEF tank provides 33 hours run time @ 75% Prime
- DEF tank is equipped with integrated pump, level sensor to display the DEF level in EMCP panel, and electrically heated lines from DEF tank to CEM
- Equipped with low and critically low level alarms with a critically low shutdown

Fuel System
- 520 gal (1970 L) double wall fuel tank, UL142, ULC, and Transport Canada certified, 29 hours run time @ 75% prime
- Engine mounted primary and secondary fuel filter with water separator
- Radiator mounted fuel cooler
- Switch operated, electric priming pump
- Auxiliary connections for customer supplied fuel transfer system with 6-way fuel transfer valve

Factory-installed Standard Equipment (continued)

Generator
- SR4B 450 frame, three-phase, random wound, 12-lead design, permanent magnet excited, 0.750 pitch
- 240-480 volt link board built into distribution system provides either 480/277 volt or 240/139 volt*
- Coastal insulation protection
- Windings impregnated in a triple dip, thermo-setting moisture, oil and acid resisting polyester varnish; heavy coat of anti-tracking varnish for additional protection
- Cat DVR with VAR/PF control, RFI suppression, exciter diode monitor
- 120VAC anti-condensation heater

Lube System
- Pump, integral oil cooler, lube oil, filter, filler and dipstick, and oil sampling valve
- Open crankcase breather with 75% filter
- Oil drain line with internal brass ball valve routed to connection point accessible from exterior
- 500-hour oil change intervals

Mounting System
- Generator set soft mounted to the heavy-duty, fabricated steel base frame
- Skiddable steel base frame with tie-down eyes contains integral fuel tank
- Provides 110% spill containment of all engine fluids

Starting System
- Single electric starting motor, 24V
- Dual 12V (1400 CCA) maintenance free batteries with disconnect switch, battery rack, and cables
- UL listed, 120V single-phase jacket water heater with thermostat and shut-off valves

General
- Canadian Standards Authority (CSA) certified
- Factory testing of standard generator set
- Full manufacturer's warranty
- O&M manuals

Optional Equipment

Available Options
- Tandem axle trailer with electric brakes

Cat EMCP 4.4 Control Panel
- Simple user-friendly interface and navigation
- Automatic set-point adjustment integrated with voltage and frequency selection
- UL508A recognized
- Convenient service access for Cat service tools (not included)
- Integration with the Cat DVR provides enhanced system monitoring
- Ability to view and reset diagnostics of all controls networked on primary CAN data link eliminates need for separate service tools for troubleshooting
- True RMS AC metering, 3-phase
- Multiple stored setpoint group selection via switched input eliminates need to reprogram control when switching voltages and frequencies

EMCP 4.4 Engine Operator Interface
- Controls
  - Run/Auto/Stop
  - Speed adjust
  - Voltage adjust
  - Emergency stop
  - Cycle crank
  - Cool-down timer
- Digital indication for
  - RPM
  - Operating hours
  - Coolant temperature
  - DC volts
  - Oil pressure
  - Oil temperature
  - L-L volts, L-N volts, phase amps, Hz
  - ekW, kVA, kVAR, kW-hr, %kW, PF
- Shutdowns with common indicating light for
  - Low oil pressure
  - High coolant temp
  - Failure to start (overcrank)
  - Low coolant level
  - Overspeed
  - High oil temp
  - Emergency stop
- Emergency stop pushbutton
- Panel illuminating lights
- Display navigation keys including two shortcut keys for engine parameters, generator parameters, control, and main menu
- Fuel level monitoring and control

EMCP 4.4 Generator Protective Relaying
- Phase over/under voltage (device 27/59)
- Over/under frequency (device 81 O/U)
- Reverse power (device 32/32RV)
- Current balance (46)
- Overcurrent (device 50/51)
- Bus phase sequence

*N/A for 600V

Optional Equipment (continued)

Modes Of Operation

- Provides for:
  - Single unit standalone mode
  - Island mode paralleling and load sharing (multi-unit mode) with other EMCP4.4 product
- Single unit standalone mode
  - The utility is providing power for the plant loads
  - The PM generator breaker is open
  - The PM is in automatic standby mode to respond to a utility failure
- Multi-unit mode
  - Features auto synchronization (voltage and phase matching), load sharing (kW) analog signal (like units only), and load sharing (kVAR) analog signal (like units only)
  - The customer protective relaying senses a utility abnormal condition
  - A run request is sent to the PM generator plant
  - The first PM generator to reach rated to voltage and frequency is closed to the bus and remaining units are paralleled to the bus as they reach rated voltage and frequency
  - Plant load is transferred to the power modules, which share load equally via load share lines

Technical Data

Cat Generator	
Frame size	SR4B – 450
Pitch	0.750
No. of poles	4
Excitation	Static regulated brushless PM excited
Number of bearings	Single bearing, close coupled
Insulation	Class H
Temperature rise	105°C
Enclosure	Drip proof IP23
Overspeed capability – % of rated	125% of rated
Voltage regulator	3-phase sensing with volts-per-hertz
Voltage regulation	Less than ± 1/2% voltage gain (adjustable to compensate for engine speed droop and line loss)
Wave form deviation	3%
Telephone Influence Factor (TIF	Less than 50%
Harmonic Distortion (THD)	Less than 5%

Technical Data (continued)

Cat Generator Set					
	Units	50 Hz		60 Hz	
		Standby	Prime	Standby	Prime
Performance Specification		EM0677	EM0678	EM0675	EM0676
Power Rating	**kW (kVA)**	**320 (400)**	**290 (360)**	**375 (468)**	**340 (425)**
Lubricating System Total oil pan capacity	L (gal)	37 (9.8)			
Fuel System Fuel Consumption – 100% Load 75% Load 50% Load Fuel Tank Capacity Running Time @ 75% rating	 L/hr (gal/hr) L/hr (gal/hr) L/hr (gal/hr) L (gal) Hr	 82.1 (21.6) 62.4 (16.4) 43.9 (11.5) 1970 (520) 31	 75.3 (19.8) 57.3 (15.1) 40.2 (10.6) 1970 (520) 34	 95.7 (25.1) 73.4 (19.2) 52.3 (13.6) 1970 (520) 26	 88.0 (23.1) 67.9 (17.7) 48.6 (12.7) 1970 (520) 29
DEF System DEF Tank Capacity DEF Consumption – 100% Load 75% Load Running Time @ 75% rating	 L (gal) L/hr (gal/hr) L/hr (gal/hr) Hr	 48 (12) — — —	 48 (12) — — —	 48 (12) 2.5 (0.7) 1.8 (0.5) 27	 48 (12) 2.4 (0.6) 1.5 (0.4) 33
Cooling System Ambient capability Engine & radiator coolant capacity	 °C (°F) L (gal)	 43 61 (16.2)			
Air Requirements Combustion air flow	m^3/min (cfm)	19.7 (693.2)	18.3 (646.1)	(828.3)	(803.3)
Exhaust System Exhaust flow at rated (dry exhaust Exhaust temperature at rated kW	 m^3/min (cfm) °C (°F)	 13.8 (485.1) 496.4 (924.7)	 13.1 (460.3) 488.9 (911.8)	 16.0 (565.7) 473.4 (880)	 15.9 (558.9) 454.1 (846.9)
Noise rating **@ 7 meters and 75% load** 25ºC, Sea Level 43ºC, 500m	 dB(A) dB(A)	 — —	 69 71	 — —	 72 76
Emissions (not to exceed data) NOx CO HC PM	 g/hp-hr g/hp-hr g/hp-hr g/hp-hr	 1.42 0.08 0.01 0.02	 1.28 0.07 0.01 0.02	 1.55 0.08 0.02 0.01	 1.56 0.07 0.02 0.02

Weights and Dimensions

Model	Length mm (in)	Width mm (in)	Height mm (in)	Weight with Lube Oil & Coolant kg (lbs)	Weight with Fuel, Lube Oil, & Coolant kg (lbs)
XQ425 without trailer	5080 (208.7)	1524 (60)	2642 (104)	6667 (14,700)	8571 (18,900)
XQ425 with trailer	7206 (283.7)	2591 (102)	3204 (126.1)	8132 (17,930)	10 036 (22,130)

Standard Features

- NEMA 2, IP23 dust-proof enclosure with hinged lockable door and viewing window
- EMCP 4.2 display
- Panel light on/off switch
- Emergency stop pushbutton
- Lamp test/reset pushbutton
- Voltage adjust potentiometer
- Alarm and shutdown indicators
- Idle/rated switch
- Regeneration alarm indications for DPF 80% soot level and high exhaust temperature
- 50/60 Hz frequency adjustment
- Fuel level display
- Convenient service access for Cat dealers (service tools not included)

EMCP 4.2 Engine Operator Interface

- Controls
  - Run/Auto/Stop
  - Emergency stop
  - Speed adjust
  - Cycle crank
  - Voltage adjust
  - Cool-down timer
- Engine monitoring
  - RPM
  - DC volts
  - Operating hours
  - Oil pressure
  - Coolant temperature
  - Oil temperature
  - Crank attempt and successful start counter
- Generator monitoring
  - L-L volts, L-N volts, current (phase)
  - Average volts, amps, frequency
  - ekW, kVA, kVAR, kW-hr
  - Power factor (average, phase)
  - kW-hr, kVA-hr (total)
  - Excitation voltage and current (with Cat DVR)
- Shutdowns with common indicating light for
  - Low oil pressure
  - Overspeed
  - High coolant temp
  - High oil temp
  - Failure to start (overcrank)
  - Emergency stop
  - Low coolant level

EMCP 4.2 Generator Protective Relaying

- Generator phase sequence
- Over/under voltage (27/59)
- Over/under frequency (81 O/U)
- Reverse power (kW) (32)
- Reverse reactive power (kVAR) (32RV)
- Over current (50/51)

*N/A for 600V

Distribution Panel

- Separate load and control sections
- Access using a hinged padlock-able door
- Main busbar with hinged cover door with a clear Plexiglas window
- Customer convenience power receptacles protected by miniature circuit breaker:
  1 – 240V, 50A California-style twist lock
  1 – 240V, 20A twist lock
  2 – 120V, 20A ground fault interrupters
  2 – 120V, 15A duplex receptacles with GFI

Circuit Breaker

- Includes DC shunt trip coil activated on any monitored engine or electrical fault
- 100 KA-interrupting capacity at 480 VAC
- Undervoltage release
- 1600A fixed type, 3 poles, generator set mounted*
- 600A fixed type 3 poles, generator set mounted (600 V only)

Link Board Assembly*

- High/low voltage output reconnection via movable link board
- Includes switch providing voltage setting input to the EMCP 4.2 for automatic set point configuration

Ratings Definitions and Condition

Meets or Exceeds International Specifications: CSA 22.0 No. 100, IEC60034-22, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-16, UL1004B, NEC,CEC, 2006/42/EEC, 2006/95/EC, 2004/108/EC, 2000/EC/14, UL142, Ulc601, IBC CGSB43, API 546, EGSA 101P, IEEE 43, DEFRA, UL1741, NFPA 99/110, OSHA, 97/68/EC, BS4999, BS5000, IEC60034-5.

Fuel Rates are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lb/U.S. gal).

Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding low sulfur fuel and biodiesel capability, consult your Cat dealer.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

Standby – Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator on the generator set is peak prime rated (as defined in ISO8528 at 30°C (86°F).

Prime – Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation on the annual hours of operation and the generator can supply 10% overload power.

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The International System of Units (SI) is used in this publication.

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