XR RAD, VAMC PORTLAND, ORPO# 648-B51017

This procurement will require a modular building, specs listed below.

1	1	Precision 500D FULL Digital base System with 16 Inch/40cm Image Intensifier with FlashPad The Precision 500D Features a High-Frequency 65KW generator integrated into a single space savings cabinet. The Console consists of a 19 inch (48.36 cm) color touch-screen for adjusting X-Ray generation controls, Digital Review, Filming Parameters, a hand switch for making radiographic X-ray exposures, an interface module for X-Ray control including on/off and reset switch, and a set of lights to indicate system status. The Precision 500D system includes both a 19 inch (48.26 cm) LCD color monitor for the Exam room and a 19 inch (48.26cm) touch screen LCD monitor in the control room.The control room monitor may be desk (included) or wall mounted (accessory option); and the examination room monitor may be ceiling suspended or mounted on a mobile cart. For Reference Imaging, a third monitor can be installed (optional): this is a second monitor in the exam room: 19 inch (48.26cm) LCD color monitor. Installation with a ceiling dual monitor suspension. • The Basic Package Features the Following: - LFOV - 12/9/6/4-1/2 Inch QX-Spec Image Intensifier - CCD Imaging System - Digital Fluoroscopy 1024 x 1024 x 12-Bit Rapid Fluoro Frame Acquisition:1 to 30 FPS - Digital Radiographic 1024 x 1024 x 12-Bit Single Frame or Rapid Acquisition: 1 to 7.5 FPS • Patient Data, Image and Exam Management - Add / Delete Patient - Review / Edit Patient Info - Patient Select for Acquire / Review - Images Stored Under Patient Within Series (Runs) and Studies - Study Protection - On-Line Archival of up to 4,000 (1024 x 1024) Images on Hard Disk with 256 MB RAM for Capturing Images in Rapid-Acquisition Mode - SmartFluoro in Fluoroscopy (7 Settings) - Last Image Hold in Fluoroscopy. - Digital Radiography up to 7.5 Images / Second with Edge Enhancement Filters (Real-Time and Post Processing - 4 Levels) - 4-on-1 and 16-on-1 Image Display (Multiview)

- Horizontal and Vertical Digital Shutters with Automatic or Manual Adjustment.
- Image Contrast Invert
- Dynamic Series Review
- Infrared Remote Control

The Precision 500D Table Includes:

- 90/30 Tilting Table Base
- Intelligent Digital Device (IDD) User Interface Located at the Carriage Tower. It Includes:
  - Power Assist Handle with Speed Proportional to the Force Exerted on the Lever by the Operator.
  - Electromagnetic Locks Controlled at the IDD User-Interface. All Locks are Applied Automatically when Exposing a Digital Spotfilm or They May be Selectively Disengaged to Allow Panning During Bolus-Chase Studies.
  - No Spotfilm Device
  - Fluoroscopy Exposure Access Time is Less than .9 Seconds for All Digital Photospots
  - Motorized Grid (10:1) 60 Line / Centimeter (152 Line / Inch) Aluminum Interspaced May be Moved In and Out of the FOV.
- IDD Utilizes Graphical Electro-Luminescent (EL) Display Tilted at 35 Degrees in Conjunction with Other Controls for Complete System Control from Tableside. The Following Functionality is Available Tableside:
  - Table Angulation
  - Tabletop Motion (8-Way)
  - Fluoro and Record Actuation
  - Manual Collimation Controls
  - FOV Selection
  - Grid In/Out (Motorized)
  - Video Recorder On/Off
  - Digital Mode, which Makes the Following Controls Available: Variable Fluoro Noise Reduction Filters, Digital Record Frame Rate Selection, and Bolus Lock
  - Collimation Mode (Automatic or Manual)
  - Compression Lock
  - Lateral/Longitudinal Lock

- Cone In/Out
- Fluoro Timer Rest
- Total Patient Fluoro Time
- Table Bucky Mode

- Fluoro Carriage and Tower Provides Counterbalanced Support for Fluoro Tower and Maxiray 100 Fluoroscopic Tube Assembly. It has the Following Specifications:
  - Total Longitudinal Travel of 80.9 Centimeters (31.9 Inches)
  - Total Lateral Travel of 27 Centimeters (10.6 Inches)
  - When the Table is Vertical, There is a Maximum of 186.2 Centimeters (73.3 Inches) from the Fluoroscopic Beam to the Floor, for Cervical Esophagus Coverage on Patients up to 6 Foot 8 Inches (203.2 Centimeters) Tall.
  - 47.6 Centimeters (18.7 Inches) Maximum Caliper Opening Between Bottom of the Spotfilmer and Tabletop

- Fully Enclosed Steel Table Body for Radiation Protection
  - Variable Speed Angulation with Soft Start and Stop
  - Tabletop Longitudinal Drive is Interlocked with the Angulation Drive so that the Tabletop Automatically Shifts the Distance Necessary to Prevent Collision with the Floor and Ceiling
  - Myelographic Stop (Both Mechanical and Electrical)
  - Interlocked Patient Step Eliminates Need for Accessory Footstool

- Tabletop is a Gray Laminate Measuring 72 x 213 Centimeters (28.5 x 83.9 Inches) and Provides the Following:
  - 500 Pounds(226 Kilogram) Patient in the Horizontal Position (static) and 300 Pounds (136.08 Kilograms) Complete table movement with angulation. A Mylar Sub-Top Cover Protects the Internal Parts of the Table when the Top is Extended.
  - Radiocapacity of the Top and Sub-Panel is Less than 1 Millimeter Aluminum Equivalent at 100 kVp when Top is Centered
  - Motorized 8-Way Flat Tabletop
  - Normal Tabletop Longitudinal Extension is 76.2 Centimeters (30 Inches) at Both Ends; However, at Installation, Travel Can be Extended to 114.3 Centimeters (45 Inches) at One End with Reduced Travel at the Other End of 38.1 Centimeter (15 Inches).
  - Lateral Tabletop Motion of 19.7 Centimeters (7.8 Inches)
  - Tabletop Height of 88.4 Centimeters (34.8 Inches) Closely Approximates

That of Stretcher Height

- Tableside Controls are Clustered Near the Center of the Table Body and are Protected from Spills with a One-Piece Silicon Rubber Cover. They Include:
  - Tabletop Motion
  - Tabletop Center
  - Angulation/Horizontal Stop Selector
  - Room Light Control
  - Digital Display of Table Angulation
- The Collimator has Integrated Copper Spectral Filters in Following Thickness: None, 0.1, 0.2, and 0.3 Millimeters.
- The Precision 500D System Comes with the Maxiray 100 Radiographic and Fluroscopic Tube Under the Table. MX-100 Provides:
  - Focal Spot Sizes 0.6-1.0 Millimeters
  - Target Angle 12.5 Degrees
  - Maximum Voltage Rating 150 kVp
  - Anode Diameter 100 Millimeters
  - Casing Heat Storage Capacity 1,100,000 Joules (1,500,000 H.U.)
  - Anode Heat Storage Capacity of 350 KHU (260 KJ)
  - Anode Heat Dissipation Rate of 925 Watts (75KHU per Minute)
  - Air Cooled
- The Precision 500D Table Offers a Radiographic Receptor that Provides 114.6 Centimeters (57.0 Inches) of Tabletop Coverage. Reciprocating Bucky Grid. 36 lp/centimeter, 12:1 Ratio, FD 110 Centimeter Grid. Optional Pediatric Stationary High-Line Rate Grid is Available.
- Standard Accessories Include:
  - Footrest
  - Patient Hand Grips
- IQST (Image Quality Signature Test) and QAP (Quality Assurance Program) are Tools Used to Assess the Image Quality of the System. Field Engineers and/or Customers Use these Tools to Ensure Image Quality Consistency. Results of QAP are Presented to the User as PASS or FAIL of Image Quality Testing. For IQST, Numerical Values are Presented to the User in Addition to PASS or FAIL.
- Exam Room 19 inch (48.26 cm) LCD Monitor.

- Dose Measurement
- Virtual Collimation

Virtual Collimation Provides the User with Virtual Feedback Regarding the Positioning of the Collimator Blades thus Reducing the Need to Use Fluoro to Adjust Collimation.

- DICOM 3.0 Kit
  - Full Fidelity Storage
  - Verification SCU and SCP
  - Storage SCU and Storage SCP
  - Storage Commitment (Push Model) SCU
  - Query / Retrieve (Study Root Model SCU and SCP)
  - Auto Transfer to Two Different Nodes
  - Transfer Progress Indicator
  - Access Control and Confidentiality
  - 10/100 MB/s Ethernet DICOM 3.0 Kit Option
  - Full Fidelity Storage
  - Verification SCU and SCP
  - Storage SCU and Storage SCP
  - Storage Commitment (Push Model) SCU
  - Query / Retrieve (Study Root Model SCU and SCP)
  - Auto Transfer to Two Different Nodes
  - Transfer Progress Indicator
  - Access Control and Confidentiality
  - 10/100 MB/s Ethernet
- DICOM Print Option
  - Print Management SCU
  - Multiple Printer Configuration
  - DICOM 3.0 Kit is Mandatory for this Function.
- DICOM Worklist Option
  - Modality Worklist SCU
  - Fill Image from Worklist
  - Modality Performed Procedure Step SCU
  - Mapping Between SPS and PPS
  - DICOM 3.0 Kit is Mandatory for this Function

		• Remote Diagnostics and iLinq Compatible • English Operator Manual • IDD Contrast Medium Select • Pulse Fluoro Adapter • Pediatric Mode • Fluoro Loop Store • Productivity Package • 1 Flashpad Detector • 2 Flashpad Batteries • 1 7m tether • Digital Interface Kit • System Computer
2	1	Repeat/Reject Analysis RRA is a quality assurance tool that allows for images to be captured and categorized by technologist for follow-up quality reviews.
3	1	Table Top Lateral Detector Holder Wireless DR detector holder, designed specifically for GE, secures the detector in a vertical position on the tabletop for cross-table imaging.
4	1	Single LCD Counterbalanced Monitor Support with Inboard Bridge or XT suspension for exam room.
5	1	The Precision 500D Features a High-Frequency 80kW Generator Integrated into a single space savings cabinet. • Computer Controlled System Manager and Control Modules for R&F applications • Built in System Distribution Power Module and Circuit Breaker for single point power feed to room subsystems and "Brown Out" protection • Millisecond Interrogation and Termination • Specs - 1000 mA at 80 kVp - 800 mA at 100 kVp - 640 mA at 125 kVp - 500 mA at 150 kVp

An Uninterruptible Power Supply (UPS) is provided in the main systems cabinet, to provide backup power required for the proper shutdown of sensitive computer subsystems. In the event of a power failure, the UPS has sufficient capacity to keep the required subsystems powered up for a minimum of 10 minutes.

The Following Subsystems are supplied via UPS power:

- Integrated Console
- Digital System

Available in Either 50 or 60-Hz Version.

6 1

Overhead Tube Suspension with Inboard Bridge, Auto Collimation and Column Extension Select.

The Console with the display of kVp, mAs, SID Productivity, and Angle Interfaces with the Generator and Main Console, Allowing the user to adjust kV, mAs, and select receptors for maximum productivity.

- Specifications
  - Minimum Focal Spot to Floor*: 713 Millimeters (28.07 Inches)
  - Maximum Focal Spot to Floor*: 2213 Millimeters (87.12 Inches)
  - Vertical Travel: 1500 Millimeters (59.05 Inches)
  - Bridge Size: 3 Meters
  - Lateral Travel: 2110 Millimeters (83.07 Inches)
  - Longitudinal Travel: Customized
  - Standard Rail Length: 5790 Millimeters (224.40 Inches) or 4370 Millimeters (172.04 Inches).
  - Tube Angulation**: +/- 180 Degrees (90 Detents)
  - Tube Rotation***: +/- 180 Degrees (30 Detents)
  - Locks: Electromagnetic/Mechanical
  - Mounting: UNISTRUT or Equivalent
  - Standard Ceiling Height: 2900 Millimeters (114.7 Inches)
- Column Extension Selects:
  - 190.5 Millimeters (7.5 Inches), 287 Millimeters (11.3 Inches)
- The Precision 500D System Comes with the Maxiray 100 Radiographic Overhead Tube. The MX-100 Provides:
  - Focal Spot Sizes 0.6-1.25 Millimeters
  - Target Angle 12.5 Degrees

		- 34kW - 107kW - Maximum Voltage Rating 150 kVp * Vertical Heights with a Standard Ceiling Configuration. ** Tube Angulation is Rotation for Decubitus and Wall. *** Tube Rotation is Turning about the Vertical Column.
7	1	Knee Spacer option for non-tilting Wall Bucky Stand
8	1	Non-Tilting Vertical Bucky Stand with Grid. Includes: • SG-80 Select Right or Left • Bucky • CSS Tray • Ion Chamber • 130 cm/ 52 Inch Grid • 10:1 36 Lines/cm • Carbon Fiber Skins • 130 cm/52 Inch Focus. • Useful Range 101 cm - 190 cm
9	1	Patient Support for the SG80 Wallstand
10	1	DVD Cables and Video Switch This includes the necessary DVD and Video Switch cables (C1601RT) and Precision 500D Video Switch (C7011N) required for connecting the X-Ray system to a VCR or DVD recorder.
11	1	System/DVD Cable Select Select either the 9 meter cable (C1611KG) or the 21 meter cable (C1601PP) required to connect a VCR or DVD recorder to X-Ray system.
12	1	Sony Serial Keyboard for the DVO-1000MD DVD Recorder The Sony serial keyboard is designed specifically for the DVO-1000MD DVD recorder. It features a completely sealed, water-resistant, robust rubber casing. The keyboard can easily be washed down to prevent potential spread of harmful bacteria. Patient

		data can be entered efficiently by utilizing a standard QWERTY keyboard layout with tactile feedback keys. Warranty Code: B
13	1	Sony DVO-1000 Medical DVD Recorder. Includes: • Audio Kit • Remote Control • Foot Pedal
14	1	25 KAIC X-Ray Main Disconnect Panel 110 Amp, 480 V / 208 V FEATURES/BENEFITS • This X-Ray Main Disconnect is a custom panel that serves as the main power disconnect between the X-Ray or Vascular system and the facility 480V or 208V power source • These panels provide emergency disconnection and overcurrent protection for the X-Ray power cabinet • Standardized design provies for pre-engineered system modifications such as Uninterruptible Power Supply • Under-voltage trip circuit breaker disconnects incoming power on any loss of power preventing system damage due to power abnormalities SPECIFICATIONS • Dimensions (H x W x D): 48" x 20" x 6.68" • Weight: 80 lbs. • Mounting: Via keyhole slots; width is 16" on centers. Height is 45.5" on centers COMPATIBILITY • Advantx, Cath Lab, ComboLab, Tilt-C, LC+, LCA, LC-LP+, LC-LPN+, LC-V+, Precision 500D, Precision RXi, Precision MPi, Proteus QXi, Proteus XRd, Proteus XRa, Definium 5000, Definium 8000 NOTES: • Customer is responsible for rigging and arranging for installation with a certified electrician • ITEM IS NON-RETURNABLE AND NON-REFUNDABLE
15	1	6 Day XR System Training

		One 4 day and one 2 day TiP Onsite Training visits for the X-ray system. Includes T&L expenses. Days provided consecutively. This training program must be scheduled and completed within 12 months after the date of product delivery.
16	1	X-ray Precision 500D Service (Class/Lab) The Precision 500D Training is Designed as a Blended Curriculum: Successful Completion of R0137RY, Precision CD-ROM, followed by completion of R0138RY, Precision 500D In-Resident Classroom/lab. An online test will be required for each learning solution. This course will equip the In House Engineer with the Skills Needed to Operate, Calibrate, Troubleshoot and Support the Precision 500D. This course must be taken within 2 years from the purchase date.
17	5	Meals and Lodging Expense has been developed to allow the customer the convenience of prepaying for their meals and lodging expenses when attending Technical Service Training at the GE Healthcare Institute located in Waukesha, WI. The price of this convenience is based on a per day basis. Thus a quantity of 1 is equal to 1 day's meals and lodging expense. When purchasing the meals and lodging expense please be mindful of weekend days during the training stay and include 2 days to cover a weekend in the purchase quantity. Examples: A 5-day course needs a quantity of 5. Any course longer than 5 days should include 2 days to account for the weekend stay. Any course longer than 10 days will require an additional 4 days of the meals and lodging expense to cover the 2 weekends of the stay. Thus a 15-day course would have a quantity of 19 days to cover the 2 weekends of the stay. This expense must be used within 2 years from the purchase date. Three meals a day Monday thru Thursday, 2 meals on Friday, pluse breaks are provided in the onsite cafeteria. The GE Healthcare Institute cafeteria closes Friday after lunch and reopens Monday morning for breakfast. Weekend meals are the responsibility of the customer. Only for In-resident courses to be taken at the GE Healthcare Institute.
18	1	The AIRFARE EXPENSE has been developed to allow the customer the convenience to prepay their roundtrip Airfare expenses when attending Technical Service Training at the GE Healthcare Institute located in Waukesha, WI. To be used for engineers attending In-Resident Class/Lab courses for Diagnostic Imaging. Customer will make their Airfare arrangements thru the GE Travel Center. Specific directions will be provided to the customer upon confirmation of class. Please note

		that this expense must be used within 2 years of the purchase date
19	1	X-ray Precision 500D Theory Service (Online) This course is part 1 of 2 parts in a blended curriculum. After completing the web course, the engineer will attend the Precision 500D In-Resident Classroom/Lab at the GE Healthcare Institute. The Precision 500D is a full featured classical Rad and Fluoro system. This course must be taken within 2 years from the purchase date.
20	1	Console IUI Cable Select
21	1	Monitor Cable Select
22	1	Positioner Cable Select
23	1	System / Positioner Cable Select
24	1	System/IUI Cable Select
25	1	System/Table Cable Select
26	1	Wall Stand Cable Select
27	1	XT Extension Select
28	1	2, 3 or 4 Meter Longitudinal Rail Select (Dependent on Room Size)
29	1	XT Cable Select

30	1	Knee Crutches for Classical R&F tables
31	1	Myelographic Boots with Inserts
32	1	Table Shoulder Rest-Myelograms

Portland VA Medical Center, Vancouver Campus, Vancouver, Washington
Site Preparation Work for a GE Healthcare Diagnostic Imaging Facility using a Modular Building System – Unit E

Customer: Department of Veterans Affairs

Customer Facility: Portland VA Medical Center, Vancouver, Washington Campus
1601 E. Fourth Plain Blvd.
Vancouver, Washington 98661

Site Preparation for: A Diagnostic Imaging Facility consisting of the following modular building unit: Unit E

1) A Williams Scotsman modular building unit housing:
   a) Diagnostic Imaging Facility support areas

The site preparation work ("work") consists of furnishing the design, construction, labor, materials, equipment, and related services set forth in the specifications contained in this Scope of Work related to:

1) Preparing the site for the installation of three modular buildings (14' x 46') manufactured by Williams Scotsman, Inc., Portland, Oregon for the purpose of housing the diagnostic imaging systems and facility support areas listed under the above Site Preparation.
2) Furnishing and installing the modular building. Unit E

The work (defined below) will conform to the general configuration (floor plan) represented in the "Work Drawings" which consist of the following drawing(s), incorporated herein by reference.

- The drawing prepared by Colin Construction Company, Grass Valley, California, for its Outpatient Modular MR/CT project, sheet A1, revision 4, Unit E, and dated September 17, 2015.

The Williams Scotsman modular building will (i) comply with the Williams Scotsman, Inc., Portland, Oregon, outline specifications titled “Specification Sheet,” dated October 8, 2014, incorporated herein by reference.

The "site" where the work will be performed consists of approximately 3,100 sq. ft. of existing green space where the Diagnostic Imaging Facility will be located. The site is located adjacent to and north of the VA’s new Primary Care Building facility on the Portland VA Medical Center, Vancouver Campus identified above.

Work Elements Included:

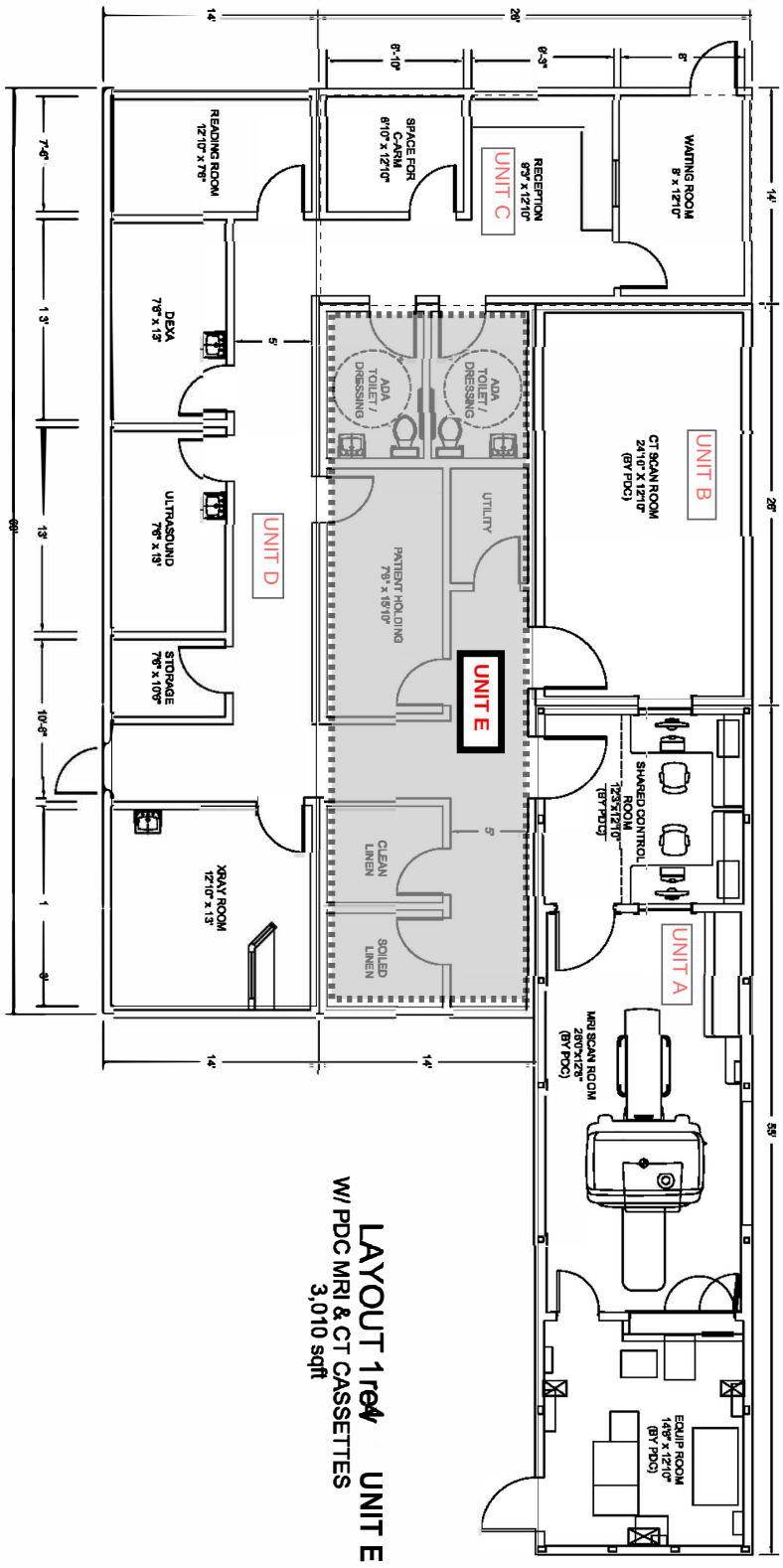
1. General:
    a. Coordinate and attend design meetings to define the work.
    b. Furnishing applicable architectural/engineering services and construction drawings.
    c. Coordinating the VA furnished geotechnical information into the structural foundation design of the diagnostic imaging facility.
    d. Submitting construction documents to facility for approvals.
    e. Coordinate and attend a pre-construction meeting and periodic progress meetings throughout the project.
    f. Providing record drawings and associated closeout documentation at project completion.
    g. Furnishing project management and on site supervision.
    h. Furnishing the rigging of the modular building unit on the weekend.
    i. Davis-Bacon wages and benefits.
2. Sitework and Foundations:
    a. Maintain a reasonably clean and safe job site in compliance with OSHA regulations.
    b. Furnishing site erosion control measures, temporary construction fencing, debris removal, and a dumpster.
    c. Furnishing the excavation and removal of the existing soils to the design depth for placement of the concrete foundations.
    d. Furnishing and installing reinforced concrete stem wall foundations and footings over existing undisturbed soil and/or engineered fill at the bottom of the foundation trenches for the diagnostic imaging facility.
    e. Furnishing and installing the steel anchoring plates and grouting required for the placement and attachment of the modular building units to the reinforced concrete foundations.
    f. Furnish the backfilling and rough grading after construction of the reinforced concrete foundations.
3. Exterior Elements:
    a. Furnishing and installing a brick veneer around the entire diagnostic imaging facility.

4. Modular Buildings Specifications:
    a. Refer to the outline specification documents described above under "Site Preparation."
    b. All modular building interior design elements and finishes will be coordinated with the VA interior design staff.
5. Mechanical:
    a. Provide wet pipe fire suppression system throughout the entire diagnostic imaging facility. Provide connection to water source within the site provided by the VA.
    b. Provide domestic water connection to water source within the site provided by the VA.
    c. Provide sanitary and storm sewer connections to sanitary and storm sewer tie in points within the site provided by the VA.
6. Electrical:
    a. Provide fire alarm system design, devices, controls, wiring, and programming to tie the diagnostic imaging facility fire alarm system into the VA's fire alarm system.
    b. Provide phone and data wall plates, conduits, and wiring to patch panels within the diagnostic facility. VA to provide wiring, finial connections, and programming from the patch panels to the VA main panels.
    c. Paging and security systems by the VA.

Work Elements Excluded:

1. Providing any work elements that are not specifically listed in the above Work Elements Included section.
2. Providing state and local drawing reviews and building permits and associated fees.
3. Providing any rough and finish site work, grading, landscaping, sidewalks, curb, etc.
4. Reinforcing any adjacent existing building structural system or elements.
5. Providing vibration remediation of excessive site vibration levels.
6. Providing magnetic field surveys.
7. Removal or abatement of asbestos, mold, biohazard, or hazardous materials.
8. Providing a UPS system or associated battery cabinet(s) and bypass panel.
9. Piles or subsurface caissons.
10. Excavation and removal of rock or other subgrade impediments.
11. Site surveys.

gwh)



LAYOUT 1 rev4 UNIT E

W/ PDC MRI & CT CASSETTES

3,010 sqft

DRAWING NUMBER					
A1	VAMC PORTLAND - VANCOUVER CAMPUS 1601 E FOURTH PLAIN BLVD. VANCOUVER, WA 98661	OUTPATIENT MODULAR MRI/CT	DIMEN. FLOOR PLAN		
			SCALE: 1/8" = 1'-0"	DATE: 9/17/15	REVISION: 4

COLIN CONSTRUCTION COMPANY
DESIGNBUILD for HEALTHCARE
111 MARGARET LANE | GRASS VALLEY, CA 95945
O: 530.272.3357 | F: 530.272.4581 | WWW.COLINCC.COM

SPECIFICATION SHEET

Date:	~~9/18/2014~~ Updated 10/8/14	Size:	14x28, 14x46, 14x60	DESIGN LOADS: Floor:	50
Customer:	**Williams Scotsman**	Description:	Medical office for use w/ future MRI/CT cassettes	Wind:	110c
Location:	Vancouver, WA	Insignias:	WA	Roof:	30
Project:	**Portland/Vancouver VA MC**		**MBI Seals - One per Module**		

PERIMETER FRAME	
Size:	(1) 14 x 28, (1) 14 x 46, (1) 14 x 60
Main rails:	10" x 4" x 3/16" tube
Crossmembers/floor joists:	
Type 1 - End:	Same as main rails
Type 2 - Heavy duty	W6 x 15 @ 4' oc
Running gear	No
Primer/Paint	
Primer	Rustoleum Zinc coating (everything)
Paint	Perimeter only
Bottom cover prep:	1" x 1" x 1/8" steel angle
Insulation:	R30 rigid insulation
Decking/finish:	B-36 (20 ga) floor deck with 4" lightweight concrete
WALL FRAMING	
Framing (Exterior):	6" x 18 ga LGS @ 16" oc **Height: 12' nominal**
Framing (Interior):	3-1/2" x 18 ga LGS @ 16" oc Except plumbing wall to be 6" **Height: 10'8" nominal**
Steel posts:	6 x 6 steel tube at each corner - 3-1/2 x 3-1/2 steel tube at quarter points for top picking purposes
Cap beam:	Provide 6 x 4 "cap beam" at top of all exterior walls
Frame For:	Doors, windows
ROOF STRUCTURE	
Style:	"Flat"
Framing:	Rafter 6" x 18 ga LGS @ 16" oc attached inside perimeter walls
Ceiling Joists (RR's)	6" x 16 ga @ 2' oc
Bottom cover:	5/8" sheetrock firetaped (double layer for 1-hour fire rating)
Rims:	6" x 18 ga LGS track
Frame For:	Rooftop HVAC
Insulation:	R30 continuous rigid (min) on top of B-deck
NOTE:	Use 3-1/2" rigid + 4" to 0" tapered on top to achieve 1/4 / 12 roof slope
Sheathing:	20 ga B-36 deck
Venting:	None
EXTERIOR WALL FINISH	
Insulation (Exterior):	R19 fiberglass batt + min R10 rigid on exterior side of walls
Sheathing:	5/8" exterior gyp over 24 gauge sheet metal sheathing
Moisture protection:	Wrap lower 12" of building and corners with moistop - Wrap building with Typar building wrap
Siding:	Cementboard - smooth, then finished with Stuc-O-Flex
Trims:	None
ROOFING	
Cover:	Duralast (white) single ply 40 mil membrane, Class A (15 year warranty) over 1/2" Densdeck - run up and over mini parapet, walls - Cap parapet walls with concealed fastener - sheet metal cap flashings
Drainage:	Roof drains with internal downspouts Overflows plumbed internal to exit just above floors
NOTE:	**HVAC roof curb to be shipped loose for installation on site by others**
Mod Line Closeup:	Field weld (by Durolast certified installer(s))

SPECIFICATION SHEET

DOORS

EXT/INT	QTY	SIZE	TYPE	HINGE	LITE	FINISH	LOCK	DEADBOLT	CLOSER	OTHER
EXT	2	3 x 7	HM	SS-BBH NRP	NO	PAINT (textured)	Schlage ND50PD	NO	LCN 4040XP	Thresh, Sweep, Weatherstrip & Kickplate 1-side
INT *7, 9* *(Ultra Sound, X-ray)*	2	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND10PD	NO	LCN 4040XP	KICKPLATE
INT *1* (Waiting)	1	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND53PD	NO	LCN 4040XP	KICKPLATE
INT *3, 4* *(RR, Dressing)*	2	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND40PD	NO	NO	KICKPLATE
INT *8, 11, 13, 14* *(Storage, Utility, Linen)*	4	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND80PD	NO	NO	KICKPLATE
INT *5, 10, 12* *(Reading Room, Patient Hold)*	3	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND10PD	NO	NO	KICKPLATE
INT *2* *(Space for C arm)*	1	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND53PD	NO	NO	KICKPLATE
INT *6* (Dexa)	1	3 x 7	KDHM SPL	BBH	NO	PAINT/ FRAME	Schlage ND53PD	NO	NO	KICKPLATE

PROVIDE WALL BUMPERS FOR ALL INTERIOR DOORS

EXTERIOR
HM = Insulated Steel door/Welded Steel Jamb/Galvanized

INTERIOR
KDHM = Knock Down Hollow Metal
SPL = Solidcore P-lam

LOCKS
Schlage ND50PD Entrance
Schlage ND53PD Entrance
Schlage ND40PD Privacy
Schlage ND80PD Storeroom
Schlage ND10PD Passage

Main Entry door to have Horton Auto-Operator with push button and a 1070 tempered sidelite.

WINDOWS

	EXT/INT	QTY	SIZE W x H	BRAND	SLIDER	GLAZING
1	INT	1	4 x 3	YES	HORIZONTAL	SINGLE - SHOP BUILT

FLOOR COVER	
Restrooms: Dressing Room	Sheet vinyl - Armstrong, Medintech with heat welded seams
Base:	Cove sheet vinyl up walls 4"
All Else:	Armstrong "Standard Excelon" 1/8" VCT
NOTE:	**Lay VCT in 50% offset layout**
Base:	4" rubber
WALL COVER	
Insulation (Interior):	R11 acoustic fiberglass batt @ all walls full height to rafters, except insulate only 1 wall at dble mod line walls.
Restrooms:	4' Acrovyn (laid up on gypsum) wainscot all 4 walls - Finish room with 5/8" Gypsum "Light Orange Peel" texture
NOTE:	**Use moisture resistant gypsum in restroom**
All Else:	5/8" Gypsum "Light Orange Peel" texture
Type of Paint:	Pittsburgh Paints (Speedhide - Eggshell) or equal
NOTE:	**All Interior walls painted 1 color only - Additional colors will incur an additional charge**
CEILING	
Entire Building:	2' x 2' T-bar grid & tile - Armstrong "Cortega" #770 square edge, except provide gypsum ceiling in RR
Ceiling Height:	8'-0"

We assume 4# leaded drywall (up to 7'), window, and doors in the Xray room. Shielding report by others.

SPECIFICATION SHEET

INTERIOR TRIM		
Wainscot:	Plastic or aluminum inside corners - Plastic or alum J at top of wainscot	
Window casing:	None	
Doors (exterior):	Caulked & painted HM frame	
Doors (interior):	Painted HM frames	
SPECIALTIES		
Toilet Tissue:	(2) single roll - Bobrick	B-2730
Mirror:	(2) 18"x30" - Glass with no frame	
Grab Bars:	(2) 36" & (2) 42" & (2) 18"	
Corner Guards:	Furnish & install 2" x 2" x 4' Acrovyn corner guards at all (6) outside corners	
CABINETS		
Type:	Plastic laminate	
Brand/Style:	Cascade Casework	
For	Reading & Reception	
Countertop:	Plastic laminate	
Backsplash	Same as top	
Front edge:	Same as top	
HVAC	See attached for more specifics	
Comb Heat/AC:	Carrier 13 SEER Package HP - roof top with Economizer (2 units)	
Ducting:	Overhead	
Diffuser:	24" x 24" T-bar	
Thermostat:	(2) Programmable - 7 day, stand alone	
Ship loose:	Roof top units with curbs	
NOTE:	**Start up, testing and balancing on site by Pacific Mechanical**	
PLUMBING		
Toilet - Handicap:	(2) Handicap Height, Elongated Bowl, Pressure Assist	Gerber 21-318
Lavatory:	(2) 19" x 17" Wall Hung, One Piece Wall Hanger	Gerber 12-314
Faucet Sensor	(2) Electronic Hand Washing Faucet	Sloan ETF-600
Water Heater:	(1) Electric Tankless Water Heater 240V - 7.5kw - 32A	Eemax EX75T
NOTE:	**Water Heater mounted on wall in Restroom below Lavatory**	
Roof Drains:	(6) PVC Body, Gravel Guard, Dome Strainer	Sioux Chief 867-P3
Water Lines:	Copper and Aquapex - Single Point Water Stub	
Sewer Lines:	PVC DWV Schedule 40 Plastic - Single Point Waste Stub	
NOTE:	**Plumbing tree stubbed to one point connection - Provided by Blazer - Installed on site by others**	
EXCLUDE:	**CONDENSATE - GAS**	

Reading Room, DEXA, Ultrasound, Storage, Hall and X-ray rooms

1. One Carrier 2 ½ ton 13 SEER pkg. heat pump with 7 K.W. electric strip and economizer
2. Engineered drawings
3. All ducting per our design
4. Grilles, registers and diffusers
5. Seven day programmable stand-alone thermostat
6. Travel expenses to Blazer and Portland job site
7. Start up and test
8. In house balance (not certified)
9. One year parts and labor warranty

Waiting Room, Reception, Space for C-ARM, Restrooms, Patient Holding, Utility , Clean and Soiled linens

1. One Carrier 3 ton 13SEER pkg. heat pump with 7 K.W. electric strip and economizer
2. Engineered drawings
3. All ducting per our design
4. Restroom exhaust
5. Grilles, registers, and diffusers
6. Seven day programmable stand-alone thermostat
7. Start up and test
8. In house balance (not certified)
9. One year parts and labor warranty

Excluding:

1. Anything to do with the MRI or C/T scan room
2. On – site crane or fork lift
3. Permits if required
4. Cutting, patching or painting if required
5. Commissioning if required
6. Condensate drain piping

SPECIFICATION SHEET

ELECTRICAL		
Service:	**Provided and installed on site by others**	
Meter Base:	**Provided and installed on site by others**	
Panel:	(1) 200 amp 120/208 volt - Stub thru exterior wall	
Material:	Metallic Raceway System - EMT, MC Cable and/or Flex Conduit	
Receptacles:	(35) Duplex 20 amp	
	~~(5)~~ Dedicated 20 amp (10)	
	(2) 20 amp GFCI	
	(2) 20 amp WP GFCI	
Switches:	(6) 3 way	
	(5) Single pole 0-10V dimmer	
Automatic Controls:	(6) Occupancy sensors - **Wall mount**	
	(5) Occupancy sensors - **Ceiling mount**	
Phone/Data Box:	(10) 4" square boxes with single gang mud ring - Stub up and down with 3/4" flex conduit - **Wire and Devices provided and installed on site by others**	
NOTE:	**All devices and face plates to be White**	
Wire For:	Roof Mount Packaged Heat Pump with Economizer per Pacific Mechanical	
	Programmable Thermostats per Pacific Mechanical	
	(1) Electric Tankless Water Heater 240V - 7.5kw - 32A	
	(2) Sensored faucets	
Sign circuit:	(1) 20 amp dedicated circuit	
Lights:	(20) Troffer 2'x4' - 2-tube with T-8, 32 watt tubes and single electronic ballasts	
	(6) Troffer 2'x4' - 3-tube with T-8, 32 watt tubes and single electronic **dimmable** ballasts	
Exterior Light:	(2) 42 watt fluorescent with vandal resistant cover and integral Photo Cell	Lithonia OWPS 42F
Ext. Emergency Light:	(2) dual head with battery back up	Compass CSWEU2
Exit-Emergency Combo:	(3) Illuminated with dual head emergency lights and battery back up - **Red Letters**	Lithonia LHQM
Int. Emergency Light:	(3) dual head with battery back up	Lithonia ELM2
Exhaust Fan:	(2) Restroom exhaust fan Switched with light in Restroom (by Pacific Mechanical)	
FA Raceway Only:	(1) Exterior Horn/Strobe - (2) Pull Station - (15) Interior Horn/Strobe - 4" square boxes (painted red) with single gang mud ring (painted red) - Stub up only with 1/2" flex conduit	
EXCLUSIONS:	**ALL SERVICE EQUIPMENT**	
	ALL LOW VOLTAGE DATA/PHONE/TV CABLING	
SPRINKLER SYSTEM - ~~No~~	Yes; city water to be brought to site within 10LF of modular building.	
OTHER		
Building Height:	13'-2" - Add transport trailer height to get total shipping height	
Closeup:	Shrinkwrap entire building	
Wire sliders:	Provide (2) per module	
Other:	Provide roof hatch & ladder. Hatch to be field installed by other.	