XR MRI, VAMC PORTLAND, ORPO# 648-B51020

This procurement requires a modular building, specs listed below.

1	1	Discovery MR750w 3.0T GEM MR System EX Platform The Discovery MR750w 3.0T GEM MR system from GE Healthcare is designed to deliver a comfortable patient-friendly environment while also delivering uncompromised clinical performance and streamlined workflow. The EX configuration includes the system electronics, operating software, imaging software, post-processing software and RF coil suite: • eXtreme Gradient Technology • Acoustic Reduction Technology • OpTix RF Receive Technology • Multi-Drive Transmit & PERFORM 2.0 • Volume Reconstruction Engine • Computing Platform and DICOM • GEM Express Patient Table GEM Suite - Expert Coil Package • Express 2.0 Workflow • ScanTools and EX Tools • Silent Suite with 3D MRA eXtreme Gradient Technology: The Optima MR450w delivers high temporal resolution through 3-axis gradient amplifier power supply and efficient gradient coil design as well as high spatial integrity through excellent magnet homogeneity and gradient linearity over a large FOV. In addition, the XRM gradients are non-resonant and actively shielded to minimize eddy currents, and use an innovative digital control architecture design to deliver high fidelity, accuracy and reproducibility. • Peak amplitude per axis: 44 mT/m • Up to 200 T/m/s instantaneous peak slew • Peak current & volts: 830 Amps, 1650 Volts • Digital PI feedback loop control • Maximum FOV: 50cm

• Duty Cycle: 100%

Acoustic Noise Reduction Technology: The Discovery MR750w GEM system features five levels of acoustic reduction technology to deliver an enhanced patient environment.

• Gradient and RF coil isolation
• Acoustic dampening material
• Vibro-acoustic isolation
• Gradient waveform optimization

OpTix RF Receive Technology: The OpTix RF receive chain enables high bandwidth, high channel count reception with improved SNR over conventional MR receiver designs. The MR signal is digitized within the scan room and then optically transmitted to the reconstruction engine in the electronics room increasing SNR for all volume acquisitions.

• Coil input ports: 138
• Simultaneous channel/receivers: 32
• Receiver sampling per channel: 80 MHz
• Receiver dynamic range at 1 Hz BW: >165 dB
• Receiver resolution: up to 32 bits
• Digital quadrature demodulation

RF Transmit Technology: The Discovery MR750w GEM system integrates an innovative RF transmit architecture designed to enhance overall image uniformity, and a multi-faceted SAR optimization system.

The MultiDrive RF architecture adjusts/optimizes the phase and amplitude of each RF amplifier output channel that is applied to the 4-port drive whole-body RF transmit coil to enhance RF uniformity and signal homogeneity regardless of patient size and body habitus.

PERFORM 2.0 combines RF body coil design, optimized pulse sequences, detailed predictive SAR modeling during prescription, and real-time SAR feedback and correction during scanning to

help ensure high performance across all applications, tailored for each patient.

Computing Platform: The Intel Xeon Nehalem Dual Core Processor computing platform utilizes a parallel, multi-processor design to enable simultaneous scanning, reconstruction, filming, post-processing, archiving, and networking. The keyboard assembly integrates an intercom speaker, microphone, volume controls, and emergency stop switch. Start scan, pause scan, stop scan and table advanced to center hot keys are also included.

- 8GB DDR3 Memory
- 146GB SAS disk subsystem
- 24" flat panel LCD with 1920x1200 resolution
- Single tower configuration
- DVD interchange

DICOM: The Discovery MR750w GEM system generates MR Image, Secondary Capture, Structured Report, and Gray Scale Softcopy Presentation State DICOM objects. The DICOM networking supports both send and query retrieve as well as send with storage commit to integrate with PACS archive.

GEM Express Patient Table with IntelliTouch: The GEM Express table is a mobile patient transport device with an embedded high-density, GEM Posterior RF Array and touch sensitive IntelliTouch land-marking. The fully detachable GEM Express table is easily docked and undocked by a single operator and simple to move in and out of the exam room for patient transport and preparation. These features can be vital in instances where multiple patient transfers can negatively impact patient care or when emergency extraction is required.

The GEM Express table and embedded GEM PA coil are designed to accommodate head-first or feet-first imaging for all supported exams. The table features three high-density coil connection ports: one at each end and one embedded for the GEM PA. Two additional coil connection ports are included in the docking

mechanism.

- Maximum patient weight for scanning: 500 lbs
- Maximum patient weight mobile: 500 lbs
- Maximum patient weight for lift: 500 lbs
- 205 cm symmetrical scan range
- Automated vertical and longitudinal power drive
- Fast longitudinal speed: 30 cm/sec
- Slow longitudinal speed: 0.5 cm/sec
- Arm boards and non-ferrous IV pole
- IntelliTouch and laser land-marking

GEM Suite - EX Coil Package: The Geometry Embracing Method - GEM - Suite of coils is designed to enhance patient comfort and image quality while simplifying workflow by ensuring that the geometry of the surface coil matches the geometry of the patient. The EX Coil Package includes:

- T/R Body Coil & T/R Head Coil
- GEM PA, HNU & AA Arrays
- GEM Standard Flex Suite & Positioners
- 3-channel Shoulder Array

The GEM Posterior Array is designed to provide optimal element geometry for each targeted anatomy by using different element geometries for the cervical-to-thoracic spine transition, thoracic and lumbar spine, and the body.

- Elements: 40
- Length: 100 cm; Width: 40 cm
- S/I coverage: 100cm head-first or feet-first
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

The GEM PA is designed to be used in conjunction with the GEM HNU, GEM AA or GEM Small AA (purchased separately), and the GEM PV Array (purchased separately). The GEM PA is invisible to additional surface coils when they are placed directly on top of

the surface.

The GEM Head and Neck Unit comprises the head base-plate and three anatomically optimized anterior arrays: the anterior Neuro-vascular array, the anterior cervical spine array, the anterior open-face array.

The GEM HNU may be positioned at either end of the GEM Express table to support head-first or feet-first imaging and may remain in place for all body, vascular, spine, and the majority of MSK exams. The GEM HNU base plate supports the patient's head, and the Comfort Tilt variable-degree ramp can be positioned under the HNU base plate to elevate the coil to match the patient's head and neck position.

- Elements: up to 28 combined with PA and AA
- Length: 49.5 cm; Width: 38.8 cm
- Height with NV Array: 35.4 cm
- Height with Cervical Array: 32.6 cm
- Height with Open Array: 25.9 cm
- S/I coverage: up to 50 cm with PA and AA
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

The GEM Large Anterior Array facilitates chest, abdomen, pelvis, and cardiac imaging. The GEM AA is lightweight, thin and flexible, and pre-formed to conform to the patient's size and shape. With 54 cm of S/I coverage, the GEM AA permits upper abdomen and pelvis imaging without repositioning the coil.

- Elements: up to 36 combined with PA
- Length: 55.6 cm; Width: 67.4 cm
- S/I coverage: 54 cm
- R/L coverage: up to the full 50 cm FOV
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

The GEM Flex Suite is a versatile set of high-density 16CH receive

arrays designed to provide high quality imaging in a wide range of clinical applications. The high degree of flexibility is particularly advantageous when imaging patients that do not fit the constraints of rigid coils. This standard set includes:

- Large Flex Array: 23 cm x 70 cm
- Medium Flex Array: 23 cm x 48 cm
- GEM Flex Interface Module P-Connector
- Positioning Devices

The 3-channel Shoulder Array offers the increased signal-to-noise characteristic of phased-array technology, along with a unique sleeve design that delivers exceptional joint-imaging capabilities.

Workflow: Express Workflow 2.0 incorporates features designed to streamline and automate exams.

- In-Room Operator Console and controls
- IntelliTouch land-marking
- Protocol Libraries & Management Tools
- Workflow Manager & Auto Functions
- Inline Processing, Networking & Viewing
- Start Scan, Stop Scan, Pause/Resume Scan

The In-Room Operator Console and dual-sided controls enable interaction with the host computer from the magnet room. The user has direct control or selection of:

- Display of patient name, ID, study description
- Display and entry of patient weight
- Display and entry of patient orientation and position
- Cardiac gating waveform display
- EKG lead confirmation with gating control:
- Respiratory waveform display
- IntelliTouch Landmarking
- AutoStart
- Display of coil connection and status

- Display of table location and scan time
- Screen saver

Express Exam enables complete control of protocols for prescription, archiving, searching, and sharing. Protocols are organized into two libraries – GE authored and Site authored – and Protocol Notes allow customized notes to be saved with each protocol. ProtoCopy enables a complete exam protocol, from either a library or previous exam, to be shared with a mouse click, and the Modality Worklist provides an automated method of linking exam and protocol information for a patient directly from a DICOM Worklist server.

The Workflow Manager controls the execution of scan prescription, acquisition, processing,
viewing and networking and may automate these steps, when requested by the user. Auto Coil Prescription automatically selects the optimum subset of elements for scanning, and AutoStart automatically starts the first acquisition as soon as the technologist exits the magnet room.

Processing steps are automatically completed with Inline Processing once the data have been reconstructed and the images saved into the database. For certain tasks, the user must accept the results or complete additional steps prior to saving the images. These automatic Inline Processing steps can be saved into the Protocol Library.

Inline Viewing allows the user to conveniently view, compare, and analyze images from the Scan Desktop by selecting the desired series from the Workflow Manager.

ScanTools: ScanTools 25.0 and the EX clinical package deliver an expansive portfolio of advanced applications, imaging options, and visualization tools packaged with the system operating software to provide extensive clinical capability and enhanced productivity.

Advanced Neuro Applications:

- Silent Suite with 3D Silenz
- eDWI diffusion with Multi-B and Smart-NEX
- Diffusion Tensor diffusion with FiberTrak
- SWAN 2.0 susceptibility imaging
- IDEAL FSE & GRE-based fat-water imaging
- PROPELLER 3.0 motion robust radial FSE
- PROPELLER 3.0 FSE-based diffusion imaging
- 3D Cube 2.0 FSE-based 3D imaging
- Dual Inversion 3D Cube imaging
- Spin Echo & Fast Spin Echo Suites
- T1-FLAIR & T2-FLAIR Suite
- Gradient Echo & Fast GRE Suites
- Spoiled Gradient Echo & Fast SPGR Suites
- Echo Planar, EPI FLAIR & fMRI EPI Suites
- EchoPlus with RTFA diffusion imaging
- 3D FIESTA & 3D FIESTA-C steady-state imaging
- 3D BRAVO IR-prepped fast SPGR imaging
- 3D COSMIC modified steady-state imaging
- 2D/3D MERGE multi-echo recombined GRE imaging
- PROBE PRESS & STEAM single voxel spectroscopy
- 2D & 3D CSI
- BrainSTAT GVF parametric maps
- BrainSTAT AIF parametric maps
- Ready Brain automated brain exam prescription
- DWI Prep

Advanced Spine & MSK Applications:

- Silent Suite for Spine & MSK
- eDWI diffusion with Multi-B and Smart-NEX
- Diffusion Tensor diffusion with FiberTrak
- IDEAL FSE & GRE-based fat-water imaging
- PROPELLER 3.0 motion-robust radial FSE
- 3D Cube 2.0 FSE-based 3D imaging

- Spin Echo & Fast Spin Echo Suites
- Gradient Echo & Fast GRE Suites
- 3D COSMIC modified steady-state imaging
- 2D/3D MERGE multi-echo recombined GRE imaging
- High Bandwidth FSE artifact reduction
- Spectral Spatial Fat Suppression

Advanced Body Applications:

- eDWI diffusion with Multi-B and Smart-NEX
- 3D LAVA Flex fat-water T1 DCE with Turbo ARC
- IDEAL FSE & GRE-based fat-water imaging
- IDEAL IQ fat assessment
- StarMap T2* imaging
- Body Navigators pencil-beam diaphragm tracker
- PROPELLER 3.0 motion robust radial FSE
- Spin Echo & Fast Spin Echo Suites
- Gradient Echo & Fast GRE Suites
- 3D Cube 2.0 FSE-based 3D imaging
- 3D LAVA T1 DCE imaging with Turbo ARC
- 2D/3D Dual Echo Fat-Water Imaging
- 3D FR FSE MRCP & HYDRO imaging
- Enhanced SSFSE single-shot FSE imaging
- 2D FS FIESTA steady-state imaging
- Multi-phase DynaPlan
- SmartPrep automated bolus detection
- Fluoro Trigger real-time bolus monitoring
- Respiratory Compensation, Gating & Triggering
- iDrivePro & iDrivePro Plus real-time imaging
- SPECIAL IR Fat Saturation

Advanced Vascular Applications:

- Inhance 2.0 NCE-MRA suite
- TRICKS dynamic 3D CE-MRA

- SWAN 2.0 susceptibility imaging
- Flow Analysis post-processing
- Body Navigators pencil-beam diaphragm tracker
- 2D/3D Time-Of-Flight & 2D Gated Time-of-Flight
- 2D/3D Phase Contrast & Phase Contrast Cine
- SmartPrep automated bolus detection
- Fluoro Trigger real-time bolus monitoring
- 3D QuickStep automated multi-station imaging
- Magnetization Transfer
- Flow Compensation
- Peripheral & EKG Gating & Triggering
- Respiratory Compensation, Gating & Triggering

Advanced Cardiac Applications:

- 2D Phase Sensitive MDE myocardial imaging
- MDE Plus
- Cine IR gated GRE imaging with progressive TI
- FGRE TC myocardial time course timing
- Black Blood SSFSE multi-slice imaging
- Flow Analysis post-processing
- Double-Triple IR-FSE with spectral fat suppression
- FastCine FGRE-based, gated multi-phase imaging
- 2D FIESTA Cine steady-state, gated multi-phase imaging
- 3D FS FIESTA steady-state coronary imaging
- iDrivePro Plus real-time inter-active imaging
- Blood Suppression
- Cardiac Navigator diaphragm tracker
- Cardiac Compensation, Gating & Triggering
- Respiratory Compensation, Gating & Triggering
- Cine Paging (128 images/4 windows @ 30fps)
- Flow Analysis post-processing

Advanced Imaging Tools:

- ARC & Turbo ARC data-based parallel acceleration
- ASSET 3.0 image-based parallel acceleration
- Real Time Field Adjustment for DWI
- Chemical Shift Direction Selection
- 2D/3D GradWarp compensation
- Acoustic Reduction Technology
- IR Prep, DE Prep & T2 Prep
- Full Echo Train & Tailored RF
- Spectral Spatial Fat Suppression
- SPECIAL IR Fat Suppression
- ASPIR Fat Suppression
- Matrix ZIP 512 & ZIP 1024
- 3D Slice 2X ZIP & 4X ZIP
- Square Pixel & Rectangular FOV
- No Phase Wrap & No Frequency Wrap
- Extended Dynamic Range

Advanced Processing & Display:
- Inline Viewing & Inline Processing
- Image Fusion & Image Pasting
- SCIC & PURE surface coil intensity correction
- Multi-planar Volume Reformat
- Interactive Vascular Reformat
- ClariView Image Filtering
- Compare Mode & Reference Image
- Cine Paging (128 images/4 windows @ 30fps)
- Flow Analysis post-processing

Advanced FuncTool Analysis:
- ADC maps & eADC mapping
- Correlation Coefficient analysis
- NEI Negative Enhancement Integral analysis
- MTE Mean Time To Enhance analysis

- Positive Enhancement Integral analysis
- Signal Enhancement Ratio analysis
- Maximum Slope Increase analysis
- Maximum Difference Function analysis
- Difference Function analysis

Included in this Silent Suite product are any Silent software enhancements for those sequences previously purchased, as will be provided to all customers who purchase the Silent Suite and the underlying sequences, for a period of ten (10) years. This does not include any hardware or upgrades, which shall be available to you at an additional charge.
GE Healthcare will provide the above referenced enhancements for the system quoted herein during above term if and/or when such enhancements receives any applicable FDA clearance and are made available as a general commercial offering in the United States. This Silent Suite product is not refundable and not contingent upon GE Healthcare's delivery of any particular enhancements or Customer's acceptance of any enhancements made available. Customer may, at its option, decline to accept any enhancements made available by GE Healthcare herein, provided that Customer shall not be entitled to any price reduction or refund if Customer declines to accept any such enhancements. GE Healthcare makes no representation or warranty as to the quantity or type of technology or functionality that may be included under any such enhancements. Customer is responsible for the proper accounting for all payments made in the manner required under any state or federal program which provides reimbursement to Customer for or related to any products or services provided under this Agreement.

2 1 Discovery MR750w Magnet Collector

The MR750w is equipped with GE's most-advanced 3.0T magnet design, high-performance 44 mT/m and 200 T/m/s slew rate gradients, a spacious 70cm patient bore with bright inner-bore lighting, and MultiDrive RF transmit technology delivering performance, productivity and exceptional image quality.

GE's Wide-Bore Magnet Design: With GE's active shielding technology and space-age composite design, the lightweight 3.0T magnet minimizes weight while preserving homogeneity and minimizing fringe fields. The result is a 3.0T magnet that does not compromise performance yet can be installed almost anywhere. The magnet's high-homogeneity delivers excellent fat-saturation away from iso-center and ensures image quality over a full 50 cm field-of-view. Coupled with its zero-boil off technology and remote magnet monitoring technology, the MR750w 3.0T magnet is designed to provide years of worry-free, reliable, low-cost operation.

In-Room Console (iROC): By consolidating all controls into one place, the In-Room Console (iROC) provides real-time feedback to the operator to improve exam room efficiency. With a high-resolution, color LCD display located just above the MR750w gantry, coil-connection, patient set-up, cardiac and respiratory waveforms make exam preparation a breeze. The iROC provides feedback on:

- Display of patient name, ID, and study description.
- Display and entry of patient weight.
- Display and entry of patient orientation / position.
- AutoStart - initiates automatic scan start.
- Cardiac & Respiratory waveform display.
- IntelliTouch landmarking information, table position, and scan time.
- Coil connection status.

High Performance Whole-Body Gradients: The MR750w incorporates the latest in MR gradient technology with the wide eXtreme Resonance Module (XRMw). XRMw gradients deliver 44 mT/m peak amplitude, up to 200 T/m/s instantaneous peak slew-rate on each axis, and deliver unmatched fidelity, accuracy, and reproducibility (please refer to system datasheet for additional information). They are water-cooled and equipped with integrated thermo-electric cooling panels to provide excellent stability and duty-cycle for gradient intensive applications. The XRMw gradients have been designed with excellent linearity across the 50cm FOV. Utilizing a unique

		acoustic barrier material, acoustic noise levels are reduced for enhanced patient comfort without compromising imaging performance. MR750w MultiDrive RF Whole-Body RF Coil: The Discovery MR750w system comes with GE's MultiDrive RF transmit technology as a standard system feature. This system features a high efficiency 4-port drive RF body coil and independent RF amplitude and phase control to improve RF signal homogeneity across the field of view. The system features a fully automated optimization to adjust the RF settings for each patient to deliver optimal image quality regardless of patient size or shape.
3	1	Discovery MR750w 32ch+ System Electronics The Discovery MR750w 3.0T system incorporates several innovative technologies designed to improve image quality, MR exam workflow and efficiency, and exam consistency at 70 cm. Included in this collector are the technologies that drive the MR750w system including: Volume Reconstruction Engine Architecture: The backbone of any high-channel count system is the reconstruction architecture. The MR750w utilizes the latest multi-core processing engines, acquisition to disk technology, and bulk-access memory to deliver the necessary processing power to reconstruct data from high channel count coils. With 55,000 2D FFTs/sec an impressive volume to ensure you are not hampered in image reconstruction speed. The result is reliable and efficient processing MR data that enhances exam productivity.
4	1	Preinstallation Collector and Cable Concealment Kit The Preinstallation Collector delivers to the site in advance of the magnet and main electronic components. This facilitates the later delivery and installation of supporting electronics. The following are the main components in the Preinstallation collector: • Heat exchange cabinet for distribution of chilled water. • Primary Penetration wall panel for support of the

		penetration cabinet. • Secondary Penetration wall panel for support of gradient filters, helium cables, and chilled air and water. • Helium cryocooler hose kit. The Cable Concealment Kit accommodates a wide-range of scan room ceiling heights and is designed to provide a clean-look installation by concealing the overhead cabling from view.
5	1	Discovery MR750w Scan Room Electronics The MR750w scan room electronics collector includes all of the following: • MultiDrive RF components (cabling and electronics). • Mechanical and electrical docking architecture that interfaces the GE Express patient tables, both GEM and non-GEM tables, to the Discovery MR750w magnet. • RF signal switching hardware and cabling that routes the MR signals received to the respective OpTix receivers.
6	1	Main Disconnect Panel The Main Disconnect Panel safeguards the MR system's critical electrical components, by providing complete power distribution and emergency-off control.
7	1	Vibroacoustic Dampening Kit Material in the Vibroacoustic Dampening Kit can significantly attenuate the transmission of gradient-generated acoustic noise through the building structure to nearby areas, including adjacent rooms and floors above or below the MR suite. If this kit is applied during the installation of a new magnet, no additional service charges are necessary. However, installation of the Vibroacoustic Dampening kit under an existing magnet requires special steps. The steps to prepare the site and steps to install, such as modifications to the RF screen room, and other magnet rigging, modifications to the RF screen room, and other finishing work, are not covered in the pricing.
8	1	3.0T Calibration Phantom Kit

		This 3.0T calibration kit contains a large volume shim phantom, a daily quality assurance phantom, an echo-planar calibration phantom, and associated loader shells.
9	1	3.0T Cable Configuration - A To accommodate various electronic and scan room configurations and sizes, the 3.0T has preset lengths of cables and connector kits to speed system installation. This cable collection is compatible with fixed and relocatable building configurations.
10	1	English Keyboard Required for our operator console. This keyboard is ergonomically designed to keep your staff comfortable even through the longest shifts. The scan control keyboard assembly has an intercom speaker, microphone, volume controls and emergency stop switch.
11	1	MR Seismic Sub Contract Catalog The MR seismic anchorage catalog allows GE Healthcare customers and architects to sub-contract with qualified outside engineering firms to meet local seismic siting requirements. This catalog does not contain any GE Healthcare manufactured equipment or parts and is intended for use during the room construction and installation phases of GE Healthcare MR equipment. Any and all construction related to meeting local seismic siting requirements is solely the responsibility of the customer and not GE Healthcare.
12	1	Calibration Kit Phantom Holder Cart
13	1	Operator's Console Table Wide table designed specifically for the color LCD monitor and keyboard.
14	1	DV Wide Standard Magnet Crate
15	1	Standard service package delivered for the warranty period.

16	1	Standard service package delivered for 1 year period.
17	1	Body Freedom Elite Package • FOCUS • DISCO FOCUS delivers a highly efficient method for increasing the resolution in Single Shot DW EPI sequences. The outcome delivers robust high resolution results while removing artifacts typically induced from motion, image backfolding or unsuppressed tissue. In addition, with the higher efficiency of the application, the reduced field of view imaging leads to a reduction in blurring that translates into an overall improvement to the image quality result. The sequence utilizes 2D selective excitation pulses in DW-EPI acquisitions to limit the prescribed phase encoded field of view. DISCO provides highly accelerated LAVA FLEX based volumetric imaging for high resolution 3D volumetric results without compromising temporal imaging performance, and delivering 1.5mm isotropic results of whole organ coverage in as low as 5 seconds. DISCO utilizes a 2point DIXON method to increase the robustness of the technique.
18	1	GE Discovery MR450 and Discovery MR750 Heat Exchangers - 70kW (30 Tons) - Seismically Certified Heat Exchanger Cooling for your GE Healthcare MR system has never been so easy. GE Healthcare has partnered with the Glen Dimplex Group, a world leader in cooling systems, to offer heat exchangers designed to meet the needs of your Discovery MR System. Now you can look to GE Healthcare for your entire MR purchase and support. This heat exchanger is highly reliable and the only unit verified to perform with the new platform of GE Healthcare MR systems. As part of your integrated GE Healthcare solution, you'll work with a single contact throughout the whole installation. A Project Manager of Installation will help with building layout, room designs, delivery and installation - every step until your system is

ready to scan. Our team will work seamlessly with architects, contractors and your internal team to help ensure timely, cost-effective completion.

Once your cooling system is running, you'll get fast, highly-skilled service support managed through GE Healthcare - with the same quality and response time you expect from your MR system.

FEATURES AND BENEFITS

- Designed to provide stable fully dedicated cooling for your MR system's needs
- Water/glycol outdoor-air-cooled heat exchangers to support your highest exam volumes and your full range of diagnostic procedures
- Redundant fluid pumps with automatic switchover let you keep operating with no loss of cooling even if one pump goes down
- Quad compressor, dual tandem refrigeration circuit design saves on energy while your system smoothly transitions through the 10% to 100% heat load capacity cycles of patient scanning and idling
- Quiet operation between patient exams and overnight - ideal for facilities in residential areas
- Comes with installation support, installation visits, preventative maintenance visit and 1 full year of parts and labor warranty
- Installation support includes: support through GE's Project Manager of Install, GE's Design Center, technical support from the Glen Dimplex company, two (2) installation visits
- Comprehensive and quality service rapidly delivered through our CARES service solution
- 65 gallons of 100% glycol concentrate for complete system filling and diluting
- Wall mounted remote display panel provides the ability to monitor the system's operation and indicates possible system errors
- Filter kit with flow meter helps to ensure purity of water prior to entry to the MR system

- Rust inhibiting configuration specifically designed to deal with corrosive environments typical within 10 miles of coastline
- Highly recommended that Vibration Isolation Spring Kit (E8911CJ) be added for systems that will be roof top mounted

SPECIFICATIONS

- Net Cooling Capacity: 70 kW / 30 Ton
- Maximum Coolant Flow: 35 gpm (132 l/m)
- Coolant Outlet Temperature: 48 F (8.9 C)
- Coolant Temp Stability: E 1.8 F (E1.0 C)
- Max Coolant Pressure : 70 Psi (4.8 Bar)
- Refrigerant: R407C
- Ambient Temp Range: -20 to 120 F (-30 to 50 C)
- Condenser Air Flow (Approx): 18,000 Cfm
- Tank Capacity: 100 gal (378 l)
- Flow Meter Range: 4-40 gpm
- Filters: 50 micron cartridge filters
- Supply Voltage: 460v / 3 phase / 60 Hz
- Coolant Connections: 2" NPTF
- Overall Size (L x W x H) 44" x 136" x 84.5"

COMPATIBILITY:

- GE Discovery MR450 1.5T MR system
- GE Discovery MR750 3.0T MR system

NOTES:

- Item is NON-RETURNABLE and NON-REFUNDABLE
- Standard bolt anchoring is recommended over vibration isolation spring mounts in earthquake prone regions

Seismically Certified Heat Exchanger: Unit for regions where seismic activity is of concern, or, is otherwise mandated by state regulation, to be designed to pass seismic shake table testing. These chilelrs have been tested and certified in accordance with certification method 'ICC-ES AC-156', to remain fully operable

		after testing was completed. In addition, the units have passed the California Office of Statewide Health Planning & Development (OSHPD) board certification with pre-approval # OSP-0169-10.
19	1	Medrad Spectris Solaris EP MR Injection System Medrad Spectris Solaris EP MR injector for use use in all MR scanner field strengths up to and including 3.0T. Optimized touch-screen for fewer keystrokes, KVO (keep vein open) allows patient to be prepared before beginning the scan. Larger 115 ml saline syringe for longer KVO or multiple flushes. Includes cables and starter kit...E NOTE: GE is responsible for unpacking, assembly, and installation of equipment. Medrad will be available for technical assistance by phone at (412)767-2400. An additional charge will apply for on-site installation assistance. Medrad will be responsible for operational checkout, final calibration, in-service of the equipment, and initial applications training. Please contact the local Medrad office two weeks in advance of installation.
20	1	Magnacoustics Genesis ULTRA Communication & Music System The Magnacoustics Genesis ULTRA is the only MRI Communication & Music System to interface directly with GE's MRI hardware and software. This allows software driven Auto Voice Commands from GE's computer to be delivered directly into the patient's ears for breath-hold sequences. This same interface allows the Technologist to talk directly to the patient through the console Mic even while the scan is in progress. The Genesis ULTRA also features an exclusive Patient Ready Signal. By simply depressing a small button on the handheld control an audible and visual signal is transmitted to the Technologist indicating the patient's readiness for the scan to begin. This simple step streamlines the breath-hold exam which amounts to approximately 30% of all exams. Patient Handheld Volume and Media Selection Controls with Voice Feedback interface with an FM/AM stereo, CD player, and iPod interface. This distracts even the most apprehensive of your patients by allowing them to be in control of their own environment. Additionally, the Auto Gain feature automatically raises and lowers the volume level for the

patient based on the Sound Pressure Level of the MRI. Magnacoustics also provides the only patented 8-driver transducer that provides the highest sound directly to the patients ears with the MagnaLink Headset System. This patented system includes a stethoscope-style headset with the MagnaPlug (replaceable earplug) that provides 29dB of attenuation and complies with GE Healthcare MR Safety Guide Operator Manual.

The Genesis ULTRA's See-In-the-Dark GUI Electroluminescent Backlit Technologist Control Unit enhances operation in the normally low-lit MRI environment allowing the Technologist to operate the entire system with the touch of a button.

The Genesis ULTRA includes an integral interface for fMRI with built-in input for audio stimulation and output for responses...E

21 1 700 VA Partial System UPS - MR

Tested with all MR system computers, the 700VA Partial System UPS provides reliable, clean, consistent power for the data processing portion of the MR imaging system. The use of the double conversion UPS enables the MR system data processing portion electronics to operate when there is a power anomaly or total power loss. Valuable data and the system operating software are protected, if there is an extended outage the UPS allows for an orderly shutdown of the system.

FEATURES/BENEFITS

- True double-conversion, online technology provides reliable operation and uninterrupted glitch free power
- Automatic frequency selection eases startup, i.e., 50 or 60 Hz compatible
- Integral Electronic Static Bypass switch means zero transfer time
- Improves user productivity, system reliability, reduces service costs and increases system uptime
- Advanced Battery Management (ABM) software monitors / indicates battery health and improves battery service life

SPECIFICATIONS

- Dimensions (H x W x D): 9.09" x 6.3" x 13.9"
- Weight: 26 lbs.
- Input Voltage Range: Single Phase 80-138 V
- Input Frequency Range: 47-70 Hz
- Rating: 700 VA / 630 W

COMPATIBILITY

- MR Systems

NOTES

- This is a partial system UPS - it covers only the computer, not the entire MR imaging system. After a power event portions of the system will have to be reset before operation can resume
- Customer is responsible for rigging and arranging for installation with a certified electrician
- ITEM IS NON-RETURNABLE AND NON-REFUNDABLE

22 1

18 KAIC 20 Amp MR Maximum Variable Lighting Level System

The GE DC Lighting Control Panel converts three-phase 208 V, AC to 115 VDC for lighting power used within the MR shielded suite. Use of DC powered lighting is required in GE Signa System exam rooms and eliminates RF noise generated by 60 Hz incandescent lamps. The DC Lighting Controller System is compatible with any imaging system or application requiring 115 VDC lighting. The use of variable DC lighting also offers additional comfort to the patient.

FEATURES/BENEFITS

- Standardized design and testing improves product quality and system reliability
- Prevents AC interference when using radio frequency imaging
- Uniform factory design eliminates individual project design, delays and engineering costs of obtaining a locally manufactured panel
- 20 Amp or 28 Amp continuous current rated units to fit any

imaging application

- Internal current limiting fuses and branch circuit breakers protects individual DC circuits and rectifier
- OSHA lockout/tagout padlock provisions
- Surface or semi-flush mounting

SPECIFICATIONS

- Dimensions (H x W x D): 30.37" x 20.5" x 9"
- Weight: 171 lbs.

NOTES:

- Customer is responsible for rigging and arranging for installation with a certified electrician
- ITEM IS NON-RETURNABLE AND NON-REFUNDABLE

23 1

Physician's Chair with Padded Arms

Physician's chair has padded arms for comfort and comes in a charcoal gray color that blends with any environment. Chair adjusts from 16.75 in. to 21 in. (42.5 cm x 53.3cm) and is only for use in the MR Control Room. Weighs 45 lbs.

24 1

MR Dielectric Pad Set-Includes 1 Neck Pad and 1 Abdomen Pad

These soft and flexible dielectric pads are used to suppress shading artifacts that can sometimes be encountered at higher 3.0T field strengths, and especially when imaging in the cervical spine and abdomen and pelvis. Covered with a patient friendly outer cover, the neck pad is placed inside the coil, and under the patient's neck, while the abdomen pad is placed over the patient's abdomen or pelvis and under the front portion of the torso array coil.

25 1

TiP Discovery and Optima Family Training 10 Days Onsite Plus 10 Hrs TVA

The TiP Training Choices program is designed for CURRENT GE customers WITHOUT HDx experience who purchase a Discovery or Optima system. Training is delivered onsite at the customer's facility and instructs students in start-up operation of the system and introduces participants to the system design, workflow, new

		options and clinical applications included. Extended TVA support ensures learners maintain performance over the long term. This training program must be scheduled and completed within 36 months after the date of product delivery.
26	1	TiP Applications Onsite MR Training 2 Days per year over 3 Years Two consecutive days of TiP Applications Onsite MR training presented during the 2nd, 3rd, and 4th year after system purchase. Onsite training provided from 8AM to 5PM, Monday through Friday. Includes T&L expenses.
	1	**NonProducts**
27	1	MR Rigging Costs
	1	**Optima MR450w 1.5T IB Options**
28	1	DV25 Upgrade with Flex Positioner • 25.0 Software and Tech Pub Collector • Flex Positioner The Flex Positioner is a multipurpose support for a broad range of exams including foot, ankle, forefoot, knee, and head. A dedicated forefoot attachment allows the flex array elements to be wrapped tightly around the foot, yielding improved image quality. A repositionable support pad in the foot and ankle attachment allows for selection of a 90 degree position, or a relaxed position of the ankle. The pads and straps included with the stabilizer facilitate rapid setup and allow for flexibility in how the anatomy is secured.
29	1	DV25 Service package delivered for the lifetime of the equipment (20 years) - for upgrades
30	1	Silent MR Upgrade Manual
31	1	1.5T Silent Suite - Silent Neuro Exam Package - Forward Production

The Silent Suite Package includes a complete set of sequences designed to generate high-resolution images which deliver T1, T2, FLAIR, and PD weighted contrasts. The Silenz imaging sequence delivers 3D isotropic images with T1 or PD contrast with sound levels that are within 3dB of the ambient conditions. Newly enhanced gradient waveforms have been employed to minimize the acoustic signature of FSE, 3D Cube, and PROPELLER-based acquisitions to generate T2 and T2 FLAIR weighted images. In addition, the localizer, Prescan, and calibration sequences have been optimized as well to deliver a complete neuro exam at nearly silent levels.

Included in this Silent Suite product are any Silent software enhancements for those sequences previously purchased, as will be provided to all customers who purchase the Silent Suite and the underlying sequences, for a period of ten (10) years. This does not include any hardware or upgrades, which shall be available to you at an additional charge.

GE Healthcare will provide the above referenced enhancements for the system quoted herein during above term if and/or when such enhancements receives any applicable FDA clearance and are made available as a general commercial offering in the United States. This Silent Suite product is not refundable and not contingent upon GE Healthcare's delivery of any particular enhancements or Customer's acceptance of any enhancements made available. Customer may, at its option, decline to accept any enhancements made available by GE Healthcare herein, provided that Customer shall not be entitled to any price reduction or refund if Customer declines to accept any such enhancements. GE Healthcare makes no representation or warranty as to the quantity or type of technology or functionality that may be included under any such enhancements. Customer is responsible for the proper accounting for all payments made in the manner required under any state or federal program which provides reimbursement to Customer for or related to any products or services provided under this Agreement.

		One Day MR Onsite Training provided from 8AM to 5PM, Monday through Friday. Includes T&L expenses. This training program must be scheduled and completed within 12 months after the date of product delivery.
33	1	TiP Applications Onsite MR Training 2 Days per year over 3 Years Two consecutive days of TiP Applications Onsite MR training presented during the 2nd, 3rd, and 4th year after system purchase. Onsite training provided from 8AM to 5PM, Monday through Friday. Includes T&L expenses.
	1	**TECHNICAL SERVICES TRAINING ROC**
34	1	MR Full Service The MR Full Service will equip the Service Engineer with system and subsystem theory and hands-on lab activities to address technical service issues for the Signa LX and EXCITE product families.
35	1	Discovery MR750/MR450 and Optima MR450w Full Service Class and Lab This 9-day training program will be available to all MR Service Engineers with sites upgrading to Discovery MR750, Discovery MR450 and Optima MR450w, as well as those receiving Discovery MR750, Discovery MR450 and Optima MR450w as part of forward production. The Discovery MR750, Discovery MR450 and Optima MR450w System class/lab provides the instructional and hands-on opportunities for the student to acquire the fundamental competencies to effectively and safely service the Discovery MR750, Discovery MR450 and Optima MR450w Systems.
36	1	MR BASIC SERVICE READINESS (CLASS/LAB) The MR Basic Service Readiness in-resident course will equip the Engineer with the theory and physics of MR and the ability to identify, operate and PM systems at a basic service level. This one-week in-residence course will provide classroom instruction

		as well as practical application of Basic Service skills on a variety of GE MR systems. This course is prerequisite to all of the other MR training courses. This course must be taken within 2 years from the purchase date.
37	22	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.
38	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

39	3		Lodging Weekend Expense Weekend Lodging Expense is to cover Saturday and Sunday lodging expenses for those engineers who are staying at the Rivers Edge Condos while attending Diagnostic Imaging Biomed training at the Healthcare Institute. Please note that there are no meals included on the weekend. Must be used within 2 years from the purchase date.

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

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 A

1) A PDC modular building housing a MR System

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 a 14' x 55' GE MR Entree® modular building

2) Furnishing and installing the modular building. Unit A

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 A, and dated September 17, 2015.

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. Furnishing the rigging of the diagnostic imaging system's magnet on the weekend.
    j. 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 an on-grade reinforced concrete pad for the placement of the MR systems chiller.

f. 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.

g. 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. Radio Frequency and Magnetic Shielding:

   a. Provide radio frequency shielding in the MR Scan room to meet GE MR requirements.

   b. Provide magnetic shielding within the walls of the MR Scan room to contain 5 gauss within those walls.

6. Mechanical:

   a. Provide package roof top HVAC units with electric reheat. Provide devices, controls, wiring, and programming to tie the HVAC units into the VA's energy management system.

   b. Provide start up and check out of all HVAC units and a complete test and balance report.

   c. Provide wet pipe fire suppression system throughout the entire diagnostic imaging facility. Provide connection to water source within the site provided by the VA.

   d. Provide domestic water connection to water source within the site provided by the VA.

   e. Provide sanitary and storm sewer connections to sanitary and storm sewer tie in points within the site provided by the VA.

   f. Provide medical gas connections to medical gas connection tie in points within the site provided by the VA.

   g. Provide the MR system's chiller, installation, and mechanical and electrical connections to the diagnostic imaging facility and the MR system.

7. Electrical:

   a. Provide the main power feed from the VA provided source within the site to diagnostic imaging facility.

   b. 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.

c. Provide nurse call system design, devices, controls, wiring, and programming to tie the diagnostic imaging facility nurse call system into the VA's nurse call system.

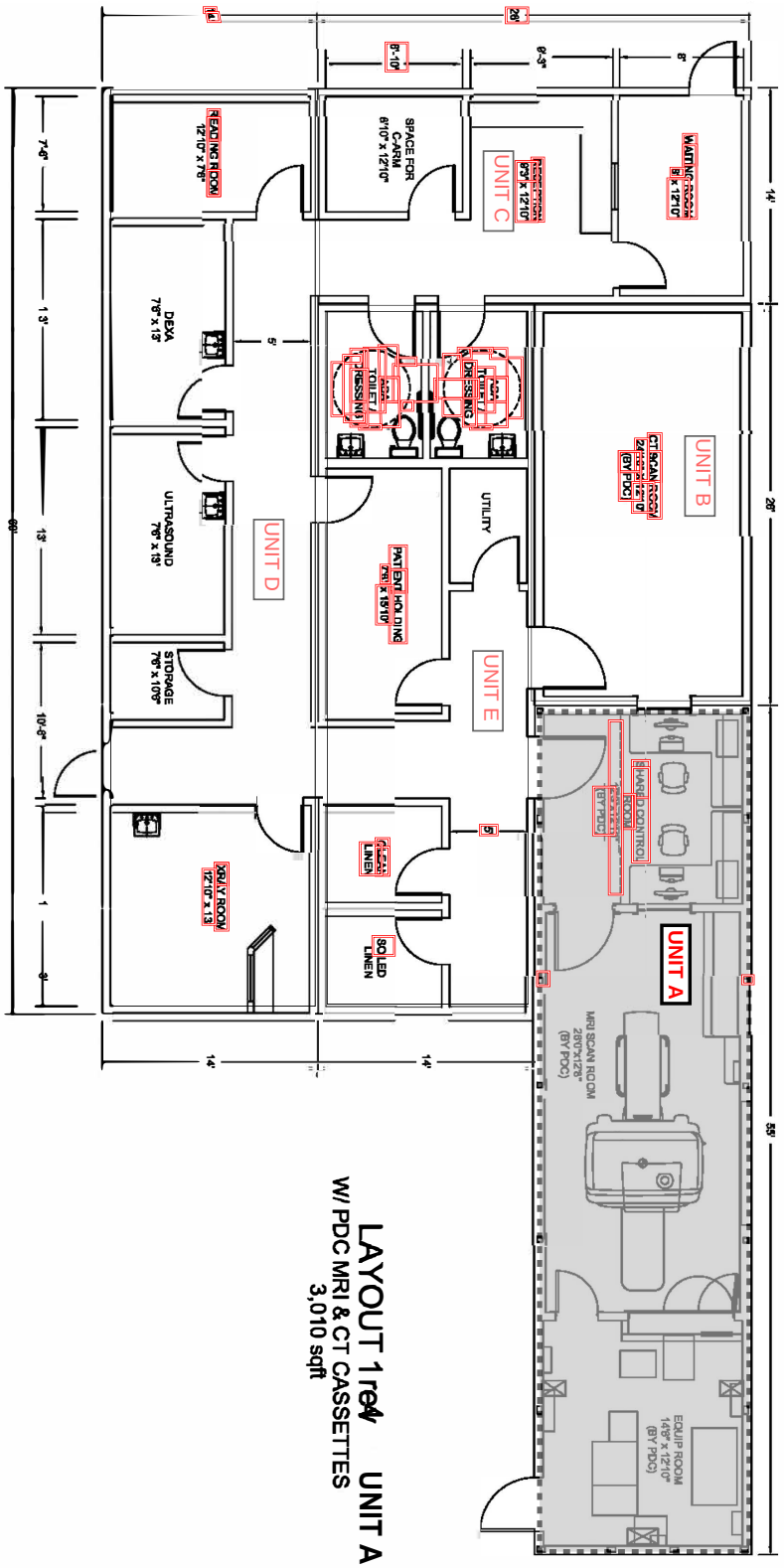
d. Provide phone and data wall plates, conduits, and wiring to patch panels within the diagnostic facility. VA to provide wiring, finial connections, and programming from the patch panels to the VA main panels.

e. 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 rev UNIT A

W/ PDC MRI & CT CASSETTES

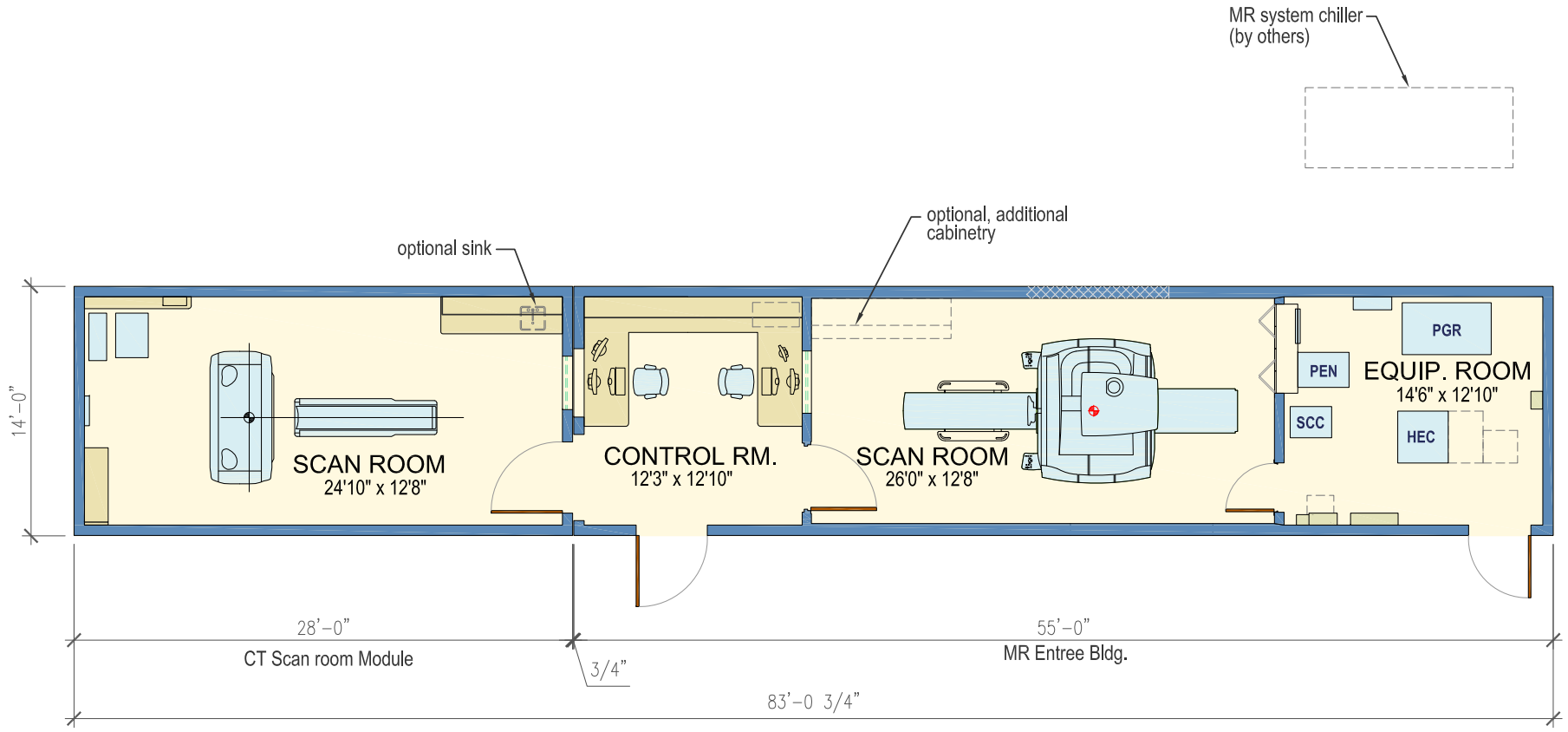
3,010 sqft

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

FEATURES

- Institutional occupancy
- 1-hour fire rated walls
- 1-hour fire rated roof
- Hospital code-compliant bldg.
- MR electronics pre-installed
- CT system site installed
- Fully finished interior
- Fully finished exterior
- Fully contained HVAC
- GE Design Certified & Tested
- Limited lifetime RF shield warranty
- 5 Gauss containment
- IBC siesmic zone D
- IBC 120 mph structure
- HHS compliant
- MR magnet site installed



CT Scan Module - Diagnostic Imaging Suite Building

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

Base Entree® Features:

1. GE Certified Entree® 14' x 55" w/ Limited Five Year Building Warranty
2. Entree® Fully Finished Movable Structure
3. EMI Shielding with 5 year Limited Warranty
4. GE PIM Compliant and Enhanced Institutional Type-ll-A State Building Code Compliance

Entree® Extended Features:

1. Health Care Facility Guidelines / OSHA, ADA' Hearth Department Compliance
2. IBC 120 MPH Structural Wind Exposure "C"
3. IBC 110 MPH Roof System (mandated up-grades available)
4. IBC Seismic Zone “E” Structure (mandated up-grades available)
5. UL Listed / Classified Designs & Materials Throughout
6. UL One Hour (1) Fire Rated Ceiling & Exterior Walls (All Sides)
7. Two Self Contained Rooftop HVAC Units with Humidification
8. State Permits, In-Plant State Inspection Fees & PDC Site Entree® install Services
9. MR Electronic. Cabinet, Cables Installed & Anchoring at PDC

Entree® Included Options:

1. Semi-Automatic RF Door Latching & Sound Suppression (STC) Door System
2. Wet Fire Suppression Piping w/ EMI Waveguides & Sprinklers
3. LED Lights / Emergency Call / Imaging Conduits / Fire Alarm Conduits
4. 90% HVAC Filter Air In Scan Room
5. Hand Wash Sink & Plumbing (counter top w/ electric heater)
6. Interior Scan Room Cabinets & Counter Tops
7. Transportation, Permits, Insurance FOB Hartland, WI
8. Roof Access Panel for Magnet Delivery
9. Equipment Room Service Door
10. Caring MR Suite

gwh

I. NOMINAL DIMENSIONS

A. The MR Entree is a nominal 14'-0"w x 55'-0"l, comprising 770 SF.

B. The MR Entree overall height is 12'-4".

C. Gross Weight: approx. 105,000 lbs.

II. NATIONAL CODE COMPLIANCE

A. Entree manufacturing documents are reviewed, approved, and the building is inspected by State Inspectors, and/or nationally recognized 3rd party inspection agencies, and is listed to meet the following Institutional Healthcare Building Codes:

<table>
<tr><th colspan="2">OCCUPANCY CLASSIFICATION</th><th>FIRE RATINGS</th></tr>
<tr><td colspan="2">COMMERCIAL - BUSINESS
or
INSTITUTIONAL - HEALTH CARE</td><td rowspan="3">Exterior walls……...UL U425 - 1 Hr.
Roof/Ceiling……UL P518 - 1 Hr.
Floor…… Non-Combustible</td></tr>
<tr><th>APPLICABLE
BUILDING CODES</th><th>CONSTRUCTION
TYPE</th></tr>
<tr><td>International Building Code
IBC……2012</td><td>Type II A</td></tr>
<tr><td>International Plumbing Code
IPC……2012</td><td colspan="2">DESIGN CRITERIA</td></tr>
<tr><td>International Mechanical Code
IMC……...2012</td><td colspan="2" rowspan="2">Wind Load……..120 mph, ‘Exposure C’
Floor Load……..100 psf
Roof Load…….. 90 psf
Seismic Category……D
Outside Ambient Air……..-20°F thru 115°F
Min. Water Pressure……30 lbs. Residual</td></tr>
<tr><td>National Electric Code
NEC……...2011</td></tr>
</table>

III. FLOOR ASSEMBLY

A. Perimeter structural steel beam with cold formed metal joist infill.

B. Joists: Fully welded 8" x 16 ga. metal joists @ 16" o.c.
Fully welded (6" x 14 ga. metal joists @ 12" o.c. in Scan Room)

C. Floor Decking: 1" nominal metal deck with 2 1/2" reinforced light-weight concrete.

D. Insulation: R-25, 8" Fiberglass batts, with vapor barrier
(R-14, 6" Fiberglass batts, with vapor barrier in Scan Room)

E. Bottom Decking: 9/16" metal deck welded to bottom of steel floor joists.

F. Finish Floor Covering

1. Scan Room: medical grade VCT.

2. Control Room: medical grade VCT.

3. Equipment Room:

3.1 Static dissipative VCT (SDT)

4. Custom flooring available upon request.

IV. EXTERIOR WALL ASSEMBLY

A. Structural Studs: Fully welded 4" x 16 ga. steel studs @ 16" o.c.

B. Insulation: R-11, 4" fiberglass batts, with vapor barrier

C. Sheathing: One (1) layer of 5/8" *DensGlass*® Fireguard gypsum sheathing at the exterior with *Sto* Gold Coat® application and one (1) layer of 5/8" gypsum wallboard type X at the interior side of the exterior wall.

D. Finish: Standard exterior finish system shall be *Dryvit Outsulation*, fine sand finish; with system that includes high impact for first 2'-0" above foundation and at four (4) outside corners, and standard mesh imbedded in RFP coat over 1-1/2" rigid insulation board on all surfaces.

V. INTERIOR WALLS

A. Studs: Fully welded 18 ga. metal studs @ 16" o.c. minimum. (16 ga. at scan room)

B. Wall Height: Full height to bottom of roof assembly. Nominal 10'-1" height.

C. Finish Wall Covering:

1. Control Room: Acrylic latex paint over gypsum board.

2. Scan Room: Acrylic latex paint over gypsum board.

3. Equipment Room: Flat acrylic latex paint over gypsum board.

4. Vinyl Base: Coordinated with wall finish.

5. Options: custom finishes available upon request.

D. EMI Shield: Scan Room to have GRQ Series, fully welded, non-oxidizing, RF Shield enclosure by PDC, with five (5) year limited guarantee. Enclosure to be supplied with GRQ, black-plated *Kleer-View* window, and lightweight compression, automatic latching RF door.

E. Magnetic Shield (option)

1. Isolated steel shielding in the Scan Room walls to contain the 5 gauss public access exclusion zone within the Entree exterior walls.

F. Doors:

1. Interior Doors: Solid core oak veneered, stained and varnished
2. Exterior Doors: Hollow metal insulated, fire-rated, "B" label, with semi-gloss alkyd paint.

VI. ROOF ASSEMBLY

A. Perimeter: Perimeter structural steel beam with cold form metal joist in-fill.

B. Joists: 8" x 16 ga. metal joist at 16" o.c.

C. Insulation: 8", R-25, batt insulation with vapor barrier.

D. Insulation: 1-1/2" - 5" tapered polyisocyanurate insulation board.

E. Insulation: 1/2", *Firestone Isogard* HD cover board.

F. Roofing: fully-adhered EPDM rubber membrane. 120mph, exp. “C” rated.

G. Finish Ceiling:

1. Control room: 2 x 2 Armstrong ceiling tile in 2 x 2 metal grid.
2. Scan room: 2 x 2 Armstrong ceiling tile in 2 x 2 aluminum grid.
3. Equipment room: Acrylic latex paint over gypsum board.

H. Roof Top Safety Railings: Customer Provided. Structural roof blocking for any required safety railing systems are excluded, but can be incorporated if requested by the customer.

VII. FIRE PROTECTION OPTIONS

A. Fire Alarm System

A PDC Fire Protection Plan will be provided to the customer for its local fire alarm contractor's design review and approval for compliance with local codes. Empty electrical conduit and junction boxes to accommodate smoke detectors, audio/visual annunciators, pull stations and an alarm control panel (if required), will be provided in the Entree. Wiring and devices will be provided, installed, tested, and certified by customer's local contractor. Existing fire alarm panel capacity checks are the customer's responsibility. New sub-panel installations are the customer's responsibility unless specifically pre-ordered for installation into the Entree

B. Wet Sprinkler System

A PDC Fire Protection Plan will be provided to the customer for its local fire suppression contractor's design review and approval for compliance with local codes. A Wisconsin licensed contractor hired by PDC will install, test and certify a schedule 40 copper pipe sprinkler system attached to automatic sprinkler heads, rated for 165°F, at the ceiling. Concealed type sprinkler heads will be provided in rooms with acoustic ceilings, and protected heads will be provided in the Equipment room. System contains water and shall be connected to a water supply so that water discharges immediately from sprinkler head opened by heat from a fire. The system can be provided with a back flow prevention device, and an indicating type control valve with built-in tamper switch, if pre-ordered by the customer. The entire system will be connected to the customer's existing system by the customer's contractor who will re-test and certify the entire system. Power shall be supplied to the flow switch and any other such alarm devices by the customer's electrical contractor. Sprinkler pipe sizing will be determined by NFPA 13 Light Hazard Pipe Schedule. Head spacing also will be determined by NFPA 13 Light Hazard Occupancy 225 sq. ft. maximum per head.

C. Dry Sprinkler System

The "dry" fire suppression system shall be a single interlock preaction type system. The system will consist of a complete preaction deluge valve with the necessary trim for proper operation and will be controlled by an indicating type control valve. The system can be provided with a backflow prevention device, and an indicating type control valve with built-in tamper switch, if pre-ordered by the customer. Air compressor is a wall mounted unit. Detection for the preaction system will be by fixed temperature and/or heat detectors, and connected by owner's contractor. An alarm contact will be provided at the preaction valve. The piping system will consist of a schedule 40 copper pipe, attached to automatic sprinkler heads, rated for 165°F, at the ceiling. Concealed type sprinkler heads will be provided in rooms with acoustic ceilings, and protected heads will be provided in the Equipment room.

VIII. HVAC

A. The HVAC System maintains (2) separate temperature zones, provides relative humidity, and that provides continuous ventilation. The system consists of wall-hung AC units with up to a total rated capacity of 12 tons. The system is designed for ambient conditions of -20^{o} F to 115^{o} F. Duct mounted electric heaters provide heat as required to the (2) zones. A stand-alone wall mounted electric steam generating humidifier provides humidity. An optional roof top DX system is also available.

B. 90% air filtration package is available for occupied spaces.

IX. MEDICAL GAS & SUCTION (optional)

A. The scan room will be provided with three (3) wall mounted medical gas and suction lines. Face plates will be compatible with the existing facility system. The copper piping will be ACR oxy/med nitrogenized, type "L" copper tube. Piping system and outlets are pre-installed, pressure tested, and capped, by a NFPA certified medical gas installer.

B. Shut-off valve boxes, and medical gas alarm panels, are not included in the Entree building, unless specifically requested by the customer.

C. The final site connection, system testing, and final system certification is the customer's site contractor's responsibility.

X. PLUMBING

A. Water pipe & fittings will be type "L" copper tube, with lead free solder. Soil and vent pipe will be type "M" copper. Valves will be bronze ball type.

B. Toilet room fixtures will be *Kohler* vitreous china, or equivalent. Faucets will be *Chicago* chrome plated finish, or equivalent, with wrist blades. Counter top mounted sinks will be *Lustertone* stainless steel self-rimming, or equivalent.

C. Water heaters will be *Chronomite* point-of-use type, or equivalent.

XI. ELECTRICAL

A. Main Distribution Panel:

1. 480V 3-phase wye, consisting of 3 phase conductors, and 1 ground. (Amperage varies with MR system), or a 480V 3-phase delta, consisting of 3 phase conductors, and 1 ground.

B. Lighting:

1. Equipment Room shall have wall mounted fluorescent light fixtures.

2. Control Room shall be provided with 2 x 2 fluorescent in suspended ceiling grid and LED down lights controlled by a dimmer located in Control room.

3. Scan Room shall be provided with LED down lights powered by a low-power light controller, and a dimmer switch in the Control Room.

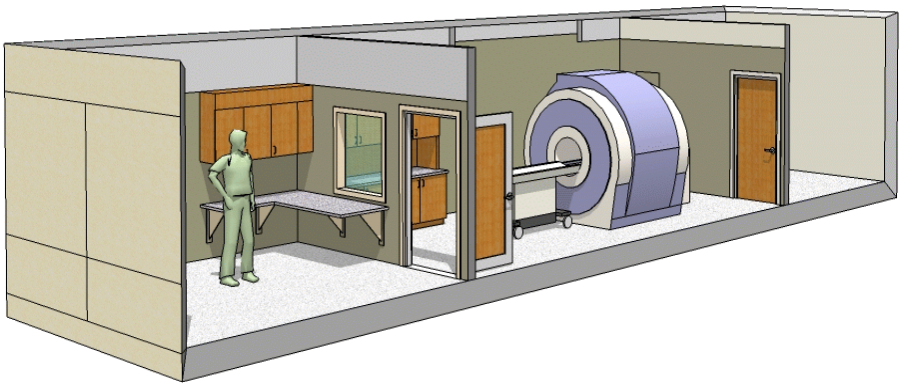
C. Critical Circuit (option)

1. Critical 110V duplex outlets, can be provided if specifically requested by customer, but is not included as a standard feature in the Entree building. If provided, hard conduit and wires shall be included, and routed back to the existing site building's critical power circuit.

D. Exterior Signage / Lighting / Security Cameras

1. Exterior building junction boxes with conduit and appropriate switching gear for signs, lighting and security cameras will be provided if specifically requested by the customer, but is not included as a standard feature in the Entree building.

14'x55' & 15'x55'



I Scope-of-Work Outline

A. Cassette Building Delivery and Installation Program

1 Program Summary
2 Responsibilities
3 Site Foundation Details - Division of Work & Responsibilities
4 PDC Contacts

II Cassette Building Information

A Physical Data

1 Floor Plan
2 Exterior Elevations
3 Roof Plan
4 Available Door Configurations

B Gauss Fields

1 1.5T Non-shielded
2 1.5T Shielded
3 3.0T Non-shielded
4 3.0T Shielded

III Site Requirements

A Utility Extensions

1 Electrical Power
2 Communications
3 Domestic Plumbing
4 Chiller Plumbing
5 Fire Sprinkler
6 Medical Gases

B Foundation Design

1 Strip-wall type
2 Slab-on-grade type
3 Pier type (temporary or permanent)
4 Isolated foundation details

IV Site Installation

A Transporter Information

B Rigging Information

I-A Cassette/Entrée Building Delivery and Installation Program

The GE Design Certified Building Program is comprised of three components.

1. A GE design certified, pre-manufactured, Cassette® /Entree ® Building.
2. A GE tested and GE certified Building foundation design.
3. A GE design certified and FDA validated, "fixed site" imaging system, pre-installed and shipped within the Cassette Building or installed on-site in the Entrée Building.

This Site Planning Guide ("SPG") is a generic site planning and reference document. This SPG describes the Cassette/Entrée Building. The SPG presents tested, isolated foundation designs, utility requirements, and site design parameters that are specific to the Cassette/Entrée Building. The SPG highlights the scope-of-work to be performed by those engaged with the foundation design, site construction and installation of a GE Certified Cassette/Entree Building.

The Site Planning Document ("SPD") is a limited set of documents produced by PDC and specific to the project. The SPD clarifies SPG information following SPG investigation. The SPD will identify final building size, site orientation, utility connection locations and building entrance points. The SPD can be relied upon as being accurate and compliant with GE Design Certified Building Program foundation design and Cassette/Entree Building installation requirements.

I-A-1.0 Program Summary

The Customer will hire the architect, hereinafter (Architect) and engineer(s) hereinafter (Engineer) to analyze the site(s) based upon the SPG. The Architect will prepare its final site work construction documents based upon the SPG and SPD. The Customer will hire a general contractor hereinafter (Contractor) to prepare the foundation, extend the utilities, rig and install the building onto the foundation according to architectural plans and SPG directives. PDC will manufacture the Cassette/Entree Building, install the imaging equipment, coordinate delivery to the site, and perform specialty installation work as outlined in this SPG.

1. Preliminary Site Analysis Work

   a. Ambient Site Vibration Analysis: Contact your local GE representative.
   b. Existing Site Information: The Customer shall provide to PDC an accurate site plan along with digital site photos of the proposed "building envelope" site and adjacent buildings. This information should identify existing and proposed utility extension locations, site access photos and building connection points
   c. Building Envelope Location: The Customer or Architect should indicate the preferred building orientation on the building envelope site and preferred door opening locations. (see options sheet)
   d. Proposed Cassette/Entree Building: PDC will evaluate the building and prepare a suggested Cassette/Entrée Building installation plan highlighting any potential building or system performance issues.

e. Accepted Building Solution: Following the Customer's acceptance of a final building design and siting solution, PDC will provide a Cassette/Entree Building Quotation. Following acceptance of the quotation, PDC will prepare the Site Planning Directive ("SPD").

2. Site Planning Document (SPD): The site specific SPD information prepared by PDC will include the following:

- Foundation (Example) Plan & Details
- 'A', 'B' and 'EP' Plate Locations
- Foundation Base Plate Reaction Table
- Utilities Extension Plan
- Floor Plan
- Exterior Elevations
- Fire Protection Plan
- Plumbing Plan
- Comm/Data Plan

3. Site Work Construction Documents: Site work construction documents are prepared by the Customer's Architect and Engineer based upon site specific SPD information and SPG scope-of-work and Cassette/Entrée Building installation guidelines. One complete set of Site Work Construction Documents shall be provided to PDC for its review and comment. Deviations from SPD and SPG documents should be avoided and discussed with PDC.

4. Cassette/Entrée Building Plans: PDC will prepare Cassette/Entree Building documents for state, local and health department review. All PDC plans will be reviewed and sealed by an appropriate, state licensed professional engineer or architect.

5. Project Plan Submissions & Approvals: In the absence of a state agency Cassette/Entrée Building plan review and approval program, the Architect shall submit Cassette/Entrée Building plans along with its foundation plans, to all state, local and health departments for necessary reviews and approvals.

6. Foundation Site Work: The Contractor shall construct the Cassette/Entrée foundation, with utility extensions according the Architect's plans. PDC will provide telephone consultation throughout the planning and implementation process. PDC will provide a "Site Readiness" document for completion and return to PDC by the Contractor prior to the Cassette/Entrée shipment.

7. Site Rigging Work: The Contractor shall hire a crane and rigger (rigging company) to lift and set the Cassette/Entrée, along with any HVAC units or chiller systems that are being provided.

8. Site Access Work: The Contractor shall provide "traffic control" and an unobstructed route

and staging area for the rigger and the Cassette/Entree transporter.

9. Building Installation Work: The Contractor shall provide and install all required hold-down attachments, as specified in the SPG and SPD, for anchoring the Cassette/Entrée to the foundation. Building installation work also includes adjacent building attachment work and other utility and communication device installation, connections and certifications as required in the SPG and SPD. (Note: A-plates are provided by PDC, but are installed by the Site Contractor).

10. Utility Connections: The Contractor shall make all utility connections to Cassette/Entrée within the time frames specified in the SPG and SPD.

I-A-2.0 Responsibilities

1. Customer

   a. Hires the Architect & Engineers to investigate the site according to SPG requirements and information.
   b. Hires the Architect & Engineers to design a foundation, utility and building installation plan according to SPG requirements and site specific SPD information provided by PDC.
   c. Hires a general contractor to prepare the site, and to install the Entree according to Architect's plans and SPG information.
   d. Hires PDC to manufacture the Cassette/Entree .
   e. Hires the transportation company to deliver the Cassette/Entree .
   f. Commences with a routine HVAC service and maintenance program following the Cassette/Entree Building installation.

2. Architect & Engineer

   a. Reviews SPG and investigates the proposed site for compliance with SPG requirements. Further investigates existing site conditions and assists the Customer in establishing a complete project scope-of-work. Assists Customer is establishing a site work budget estimate.
   b. Creates all site work documents that incorporate SPG requirements and SPD information provided by PDC.
   c. Secures all state, local and health department reviews and approvals including Cassette/Entree Building plan review and approvals in the absence of a state agency pre-manufactured building program.

3. Contractor

a. Hires appropriate subcontractors to perform the site work.
b. Hires a crane and local rigging company to lift & set the Cassette/Entree Building onto the site foundation.
c. Provides and installs 'EP' plates and Anchor plates as designed by the Architect and Engineer.
d. Installs 'A' plates, provided by PDC and 'EP' plates provided by Contractor.
e. Provides minimal materials and labor assistance to PDC during the building delivery and installation phase (as specified in this SPG).
f. Receives, stores, and delivers to the site, any critical materials and items (ie. GE chiller systems) that may be shipped by GE or PDC prior to the arrival of the Cassette/Entree .
g. Provides "traffic" control services on the Customer's property and on the surrounding streets to facilitate the arrival, and a clear site access, for the crane and Cassette/Entree Building transporter.
h. Completes the Cassette/Entrée Building installation and utility connections to, and within the Cassette/Entree, as prescribed in the SPG.
i. Completes the extension, installation, connection and state and local certification of any medical gases lines, alarm systems; fire suppression systems; and communication systems as prescribed in the SPG and included in the plans.
j. Performs all other functions per the Customer contract.

4. PDC

a. Provides a SPG for a specific GE Design Certified and tested Cassette/Entree Building.
b. Provides a "site specific" SPD, (Site Planning Document) following Cassette/Entree Building contract acceptance.
c. Provides Cassette/Entree Building "Foundation Base Plate Reaction Table" to the Architect for foundation design purposes.
d. Provides four (4) "A' plate units to Contractor for installation.
e. Provides Cassette/Entree Building and GE equipment "electrical load values" to the Architect for site electrical power design purposes.
f. Provides PDC consultation services throughout the project planning and implementation process.
g. Creates and provides state "sealed" and state reviewed and approved Cassette/Entree Building documents in the quantity required for state, local and health department plan submittals.
h. Manufactures the GE Cassette/Entree Building in compliance with state mandated "third party" building inspections throughout the manufacturing process.
i. Provides all required independent tests and secures state building certifications and insignia for shipment of the Cassette/Entree Building into the state.
j. Provides, on behalf of the Contractor, accurate building information and rigging requirements to local riggers for competitive bidding purposes. Coordinates rigger site visits with the contractor.

k. Provides, on behalf of the Customer, accurate building transportation bids for their selection and contracting purposes.
l. Coordinates Cassette/Entrée Building delivery logistics with the Contractor, Logistics Company and the rigger and conducts a final site readiness inspection one day prior to delivery.
m. Installs and certifies GE equipment delivery within the Cassette/Entrée Building following building installation.
n. Performs Cassette/Entree Building orientation and systems training.

I-A-3.0 Site Foundation Details - Division of Work & Responsibilities

1. Primary Building Bearing Plates ('A' Plates Assemblies)

PDC:

a. Provides Architect with the location of the four (4) primary 'A' Plate bearing locations for foundation design purposes.
b. Provides Contractor with four (4) primary 'A' Plate Assemblies for installation into the foundation work.

Contractor:

a. Installs the four (4) primary 'A' Plate Assemblies as shown in the SPG and detailed in the SPD.
b. Installs, levels, and grouts in place, the 'A' Plates Assemblies, a minimum of 24 hours prior to the delivery of the Cassette/Entree Building.
c. Provides clear site access and a foundation clean of all debris.
d. Ensures a concrete bearing strength to meet specifications.

2. Secondary Building Bearing Plates ('B' Plates Assemblies)

PDC:

a. Provides, installs and adjusts multiple 'B' Plates Assemblies within 24 hours following the Cassette/Entree installation onto the foundation.
b. Provides the non-shrink grout material for 'B' Plate Assemblies.

Contractor:

a. Provides tools and labor to mix and pack PDC provided, non-shrink grout material at all 'B' Plate Assembly locations following PDC installation of 'B' Plates Assemblies.

3. Foundation - Embed Plates ('EP' Plates) & Anchor Plates

Architect/Engineer:

a. Relies upon PDC provided SPD "Foundation Base Plate Reaction Table" (reaction forces) and SPG and SPD design examples to determine exact number and size of "EP" plates, embed studs and "hold-down" weld sizes that are required at the foundation.

Contractor:

a. Provides and installs 'EP' plates into the foundation.
b. Welds into place all 'EP' Anchor Plates following the grouting of all 'A' and 'B' Plate Assemblies.
c. Provides a copy of EP-plate fabrication quotation to PDC for review. PDC can fabricate and ship EP-plates, based on Engineer's design, to site if local fabrication is not available or economical.

4. Utility Extensions And Connections

PDC:

a. Provides conduit "pass through" penetration access points in the exterior walls of the Cassette/Entree for "above grade" utility extensions into the Cassette/Entree from an adjacent building.
b. Provides a network of empty conduit and "J" boxes in the walls and in the ceiling of the Cassette/Entree for the installation of fire alarm wiring and alarm devices within the Cassette/Entree, by others.
c. Provides a network of empty conduit and "J" boxes on the walls and in the ceiling of the Cassette/Entree for the site installation of comm/data systems wiring and devices for communication & data systems within the Cassette/Entree, by others.
d. Provides convenient utility connection within the Cassette/Entree .
e. Provides convenient utility floor access and connection points for "below-grade" utility extensions.
f. Provides NFPA compliant pneumatic pressure tests, reports, and system certifications on the pre-installed, fire suppression piping system.
g. Provides state compliant pneumatic pressure tests, reports, and system certifications on the pre-installed, capped, medical gas piping system.
h. Provides all utility splice pieces between multiple Cassette/Entree Buildings.

Contractor:

a. Provides all utility extensions to the Cassette/Entree Building.
b. Provides all alarm boxes, alarm panels, water or medical gas shut-off values or

boxes, and fire suppression risers and shut-off valve systems in adjacent buildings prior to their connection to the Cassette/Entree Building, unless otherwise noted.

c. Provides all utilities connections within the Cassette/Entree Building.
d. Provides all utility connections between multiple Cassette/Entree Buildings, unless otherwise noted.
e. Provides all final pneumatic or water pressure tests and system certifications on the entire fire suppression system including that portion pre-installed within the Cassette/Entree Building.
f. Provides all final pneumatic pressure tests and system certifications on the entire medical gas piping system including that portion pre-installed within the Cassette/Entree Building.
g. Provides for the extension, installation, connection, testing and certification of any fire alarm and fire device installations within the Cassette/Entree Building.
h. Verifies fire alarm system zone capacity and compatibility for the project.
i. Provides MDP power to the Cassette/Entree Building within four (4) hours following installation onto the foundation.
j. Completes all mechanical and electrical connections and tests for the remote chiller system within 24 hours following the Cassette/Entree installation onto the foundation.

5. Cassette/Entrée Delivery - Transportation Arrangements

PDC:

a. Provides, on behalf of Customer and Contractor, pertinent Cassette/Entree shipping and rigging information to qualified transportation firms for competitive bidding purposes.
b. Reviews and qualifies, on behalf of Customer and Contractor, all competitive bids for their final selection and direct contracting purposes.

Contractor:

a. Provides for both on-site and surrounding area traffic control and parking restrictions to facilitate a direct and unobstructed access to the installation site for both the crane and the Cassette/Entrée building delivery vehicle (“transporter”).
b. Provides a suitable “over-night” parking location in the immediate installation vicinity ... if necessary.
c. Provides a suitable staging area for both the crane and transporter the evening prior to the Cassette/Entrée delivery (if requested to do so).
d. Removes all obstructions (permanent or temporary) on the Customer’s property as well as those along the delivery route within two (2) blocks of the Customer’s property.
e. Provides reasonable protection to existing structures on the Customer’s property.
f. Provides for the repair to structures, and landscaping that may be damaged during the delivery process.
g. Provides a foundation that is clean of all debris.

h. Provides grout mixing tools and one labor person to prepare the grout for PDC use during the Cassette/Entree Building installation process.

6. Cassette/Entrée Site Rigging

PDC:

a. Provides, on behalf of Customer and Contractor, pertinent Cassette/Entree shipping and rigging information to qualified crane and rigging firms for competitive bidding purposes.
b. Reviews and qualifies, on behalf of Customer and Contractor, all competitive bids for their final selection and direct contracting purposes.
c. Provides specialty rigging devices ("hoist-rings") for rigger's use in lifting the Cassette/Entrée Building onto the foundation.
d. Opens and seals "hoist ring" attachment points on the Cassette/Entree roof.
e. Provides specialty rigging devices for rigger's use in removing and replacing the Cassette/Entrée Building wall (or roof) access panel (if appropriate).
f. Opens and seals the Cassette/Entrée Building wall (or roof) access panel, internally and externally, (if appropriate).

Contractor:

a. Hires and issues a contract to the crane and rigging company to rig the Cassette/Entrée Building, any HVAC units, and the GE chillers into place at the site.
b. Coordinates a site access and Cassette/Entrée Building delivery meeting with the chosen rigger and transportation company no later than 4 weeks prior to the Cassette/Entrée Building delivery.
c. Coordinates a pre-delivery meeting with PDC, the rigger and the transport driver the day prior to the Cassette/Entrée Building delivery.
d. Coordinates all sub-contractor tasks.
e. Coordinate site delivery access and rigging issues involved with a separate magnet delivery by GE.

7. Cassette/Entree Grout Cylinder Installation

PDC:

a. Provides grout materials and cylinders for the building installation.
b. Installs grout and cylinders during the building installation process.

Contractor:

a. Provides mixing tools and labor assistance to prepare grout mixture and to assist PDC in the installation process.

8. Cassette/Entrée Building Weather-Proofing Attachments

PDC:

a. Provides tested weather proofing details in the SPG.
b. Provides and installs all roof venting systems and roof membrane flashing and patching materials that are required for PDC work.

Contractor:

a. Provides all weather proofing material and labor for attachment of the Cassette/Entrée Building and any adjacent buildings that may be required.
b. Maintains “soft” building connections per SPG directives.
c. Seals and weather proofs all utility openings into the Cassette/Entrée Building.

9. Exterior Lighting (Optional)

PDC:

a. Provides and installs any electrical circuitry, conduit and exterior junction boxes if specified on the plans and ordered as an optional item.

Contractor:

a. Provides fixtures and install work following Entree building delivery.

10. Signage (Interior & Exterior)

Contractor:

a. Provides all signs and labels as required.

11. Gutters & Down Spouts (Optional)

PDC:

a. Provides a standard roof drip edge flashing system that can be modified, if requested, to accommodate a rain gutter system.

Contractor:

a. Provides material and labor to installs any gutter & down-spout system.

12. HVAC Installation & Start-Up (Wall Hung, DX System)

PDC:

a. Provides and installs the appropriate wall hung HVAC system onto the Entree Building.
b. Performs certification tests on the HVAC system prior to shipment.
c. Provides a "Service & Routine Maintenance Manual".
d. Performs a HVAC orientation and training session prior to departing the site.

Contractor:

a. Performs a system acceptance inspection, performs the system start-up tasks and confirms the operating condition of the HVAC system.
b. Performs final system HVAC system balancing and provides an acceptance report to the Customer.
c. Participates in a PDC HVAC Orientation and Training session prior to PDC departing the site.

Customer:

a. *Establishes a routine service and maintenance program on the building and its HVAC system immediately following the installation of the Entree Building. Failure to do so may jeopardize OEM warranties.*

13. HVAC Installation & Start-Up (Roof Top Systems)

PDC:

a. Provides, installs and de-installs, and performs certification tests on roof top HVAC systems during the Entree manufacturing process.
b. Crates and separately ships the HVAC systems to arrive at the site prior to the Entree Building arrival.
c. Provides a "Service & Routine Maintenance Manual".
d. Performs the HVAC orientation and training session prior to departing the site.

Contractor:

a. Accepts, stores (if necessary), and has available at the site any HVAC roof top units that may have been shipped for installation at the site.
b. Provides labor, materials and means to rig the HVAC unit(s) onto the Entree roof.
c. Provides a delivery inspection and acceptance report.
d. Provides labor, materials and means to install the HVAC units, performs all

mechanical and electrical connections, performs prescribed start-up work per OEM instructions and warranty requirements, and confirms the operating condition of the units for sign-off and acceptance purposes.

d. Performs final system HVAC system balancing and provides an acceptance report to the Customer.

e. Participates in a PDC HVAC Orientation and Training session prior to PDC departing the site.

Customer:

a. *Establishes a routine service and maintenance program on the building and its HVAC system immediately following the installation of the Entrée Building. Failure to do so may jeopardize OEM warranties.*

14. Mechanical Equipment Roof Screens / Safety Railings (Optional)

PDC:

a. Provides engineering services and the structural roof "blocking" system, if specified and ordered as an optional item.

Contractor:

a. Purchases and provides labor and materials for system installation.

15. Imaging Equipment - Remote Chiller(s) Installation

GE imaging systems often require the installation of separate, "closed looped", separate pad mounted and anchored, "remote" water chillers. These water chillers require mechanical and electrical connections, as well as insulated piping, above or underground, that connects to the Cassette/Entrée Building. Chiller selections, installation techniques, unit purchases and delivery arrangements are coordinated by GE.

PDC:

a. Provides all interior chilled water insulated piping lines within the Cassette/Entree along with "capped" pipe stubs and wired conduit for exterior building connections by the Contractor.

b. Provides in the Cassette/Entrée a 480V, 3-phase power circuit for a remote package chiller.

Contractor:

a. Receives the chiller(s), inspects for damage, unloads, temporarily stores, delivers to the site, and performs final installation and system start-up no later than 24 hours after the Cassette/Entrée Building is installed at the site.

b. Provides materials and labor for final chiller utility connections to the Cassette/Entree Building per the SPG & SPD.
c. Provides all materials and labor to perform chiller(s) installation per OEM installation manual.
d. Performs full system purge and operational tests on the fully installed closed-loop piping system between the outside chiller and within the Cassette/Entree Building.

Customer:

a. Purchases the chiller(s) and provides PDC and the Contractor with appropriate manufacturer's system installation information.
b. Arranges chiller(s) delivery to coincide with the Cassette/Entrée Building delivery schedule.

16. Miscellaneous Items (To Simplify The Work)

PDC:

a. Participates, at no additional cost, in telephone planning conferences as the need arises.
b. Provides telephone assistance, at no additional cost to Contractor's sub-contractors, during the planning and the installation phases of the project.
c. Provides a "site specific" Site Planning Document (SPD).

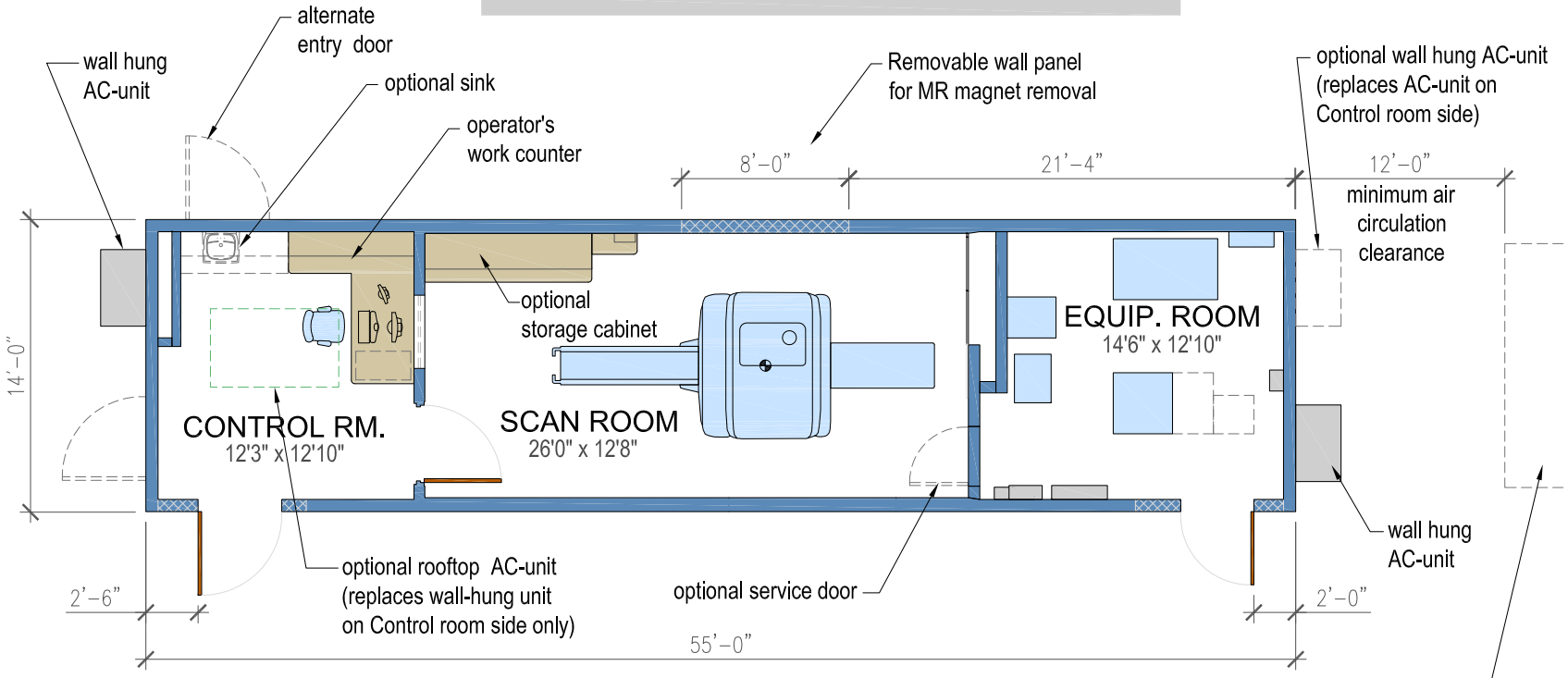
Contractor:

Provides the following miscellaneous items and labor to assist PDC personnel during the building installation process:

a. Provides a water source, hoe, grout mixing tub, and one laborer to mix the grout immediately prior to setting the Cassette/Entrée Building on the foundation.
b. Provide temporary 110v power and lighting, if permanent power is not immediately available after the Cassette/Entrée is installed on the foundation. (A temporary power condition must be pre-arranged with PDC).
c. Provides one 20' extension ladder.
d. Provides one 6' step ladder.

FEATURES

- Institutional construction
- 1-hour fire rated walls
- 1-hour fire rated roof
- MR magnet site -installed
- Fully finished interior
- Fully finished exterior
- Fully contained HVAC
- UL designs
- GE Design Certified
- IBC seismic zone E
- IBC 120 mph structure
- FGI compliant



MR system chiller
(GE recommended:
Dimplex model: WO2-2-7500,
or equivalent,
furnished by owner

Floor - Plan

1/8" = 1'-0"

FEATURES

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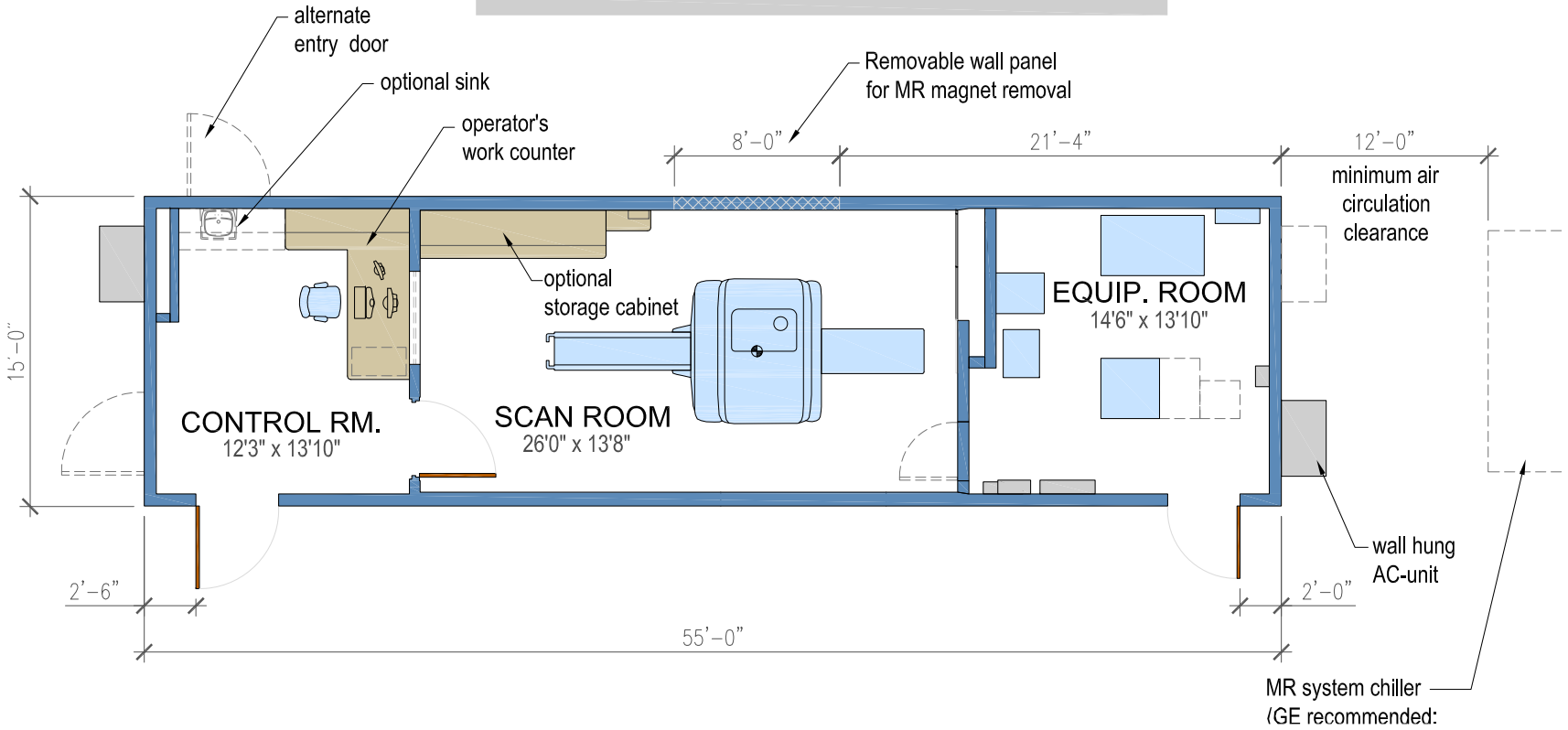

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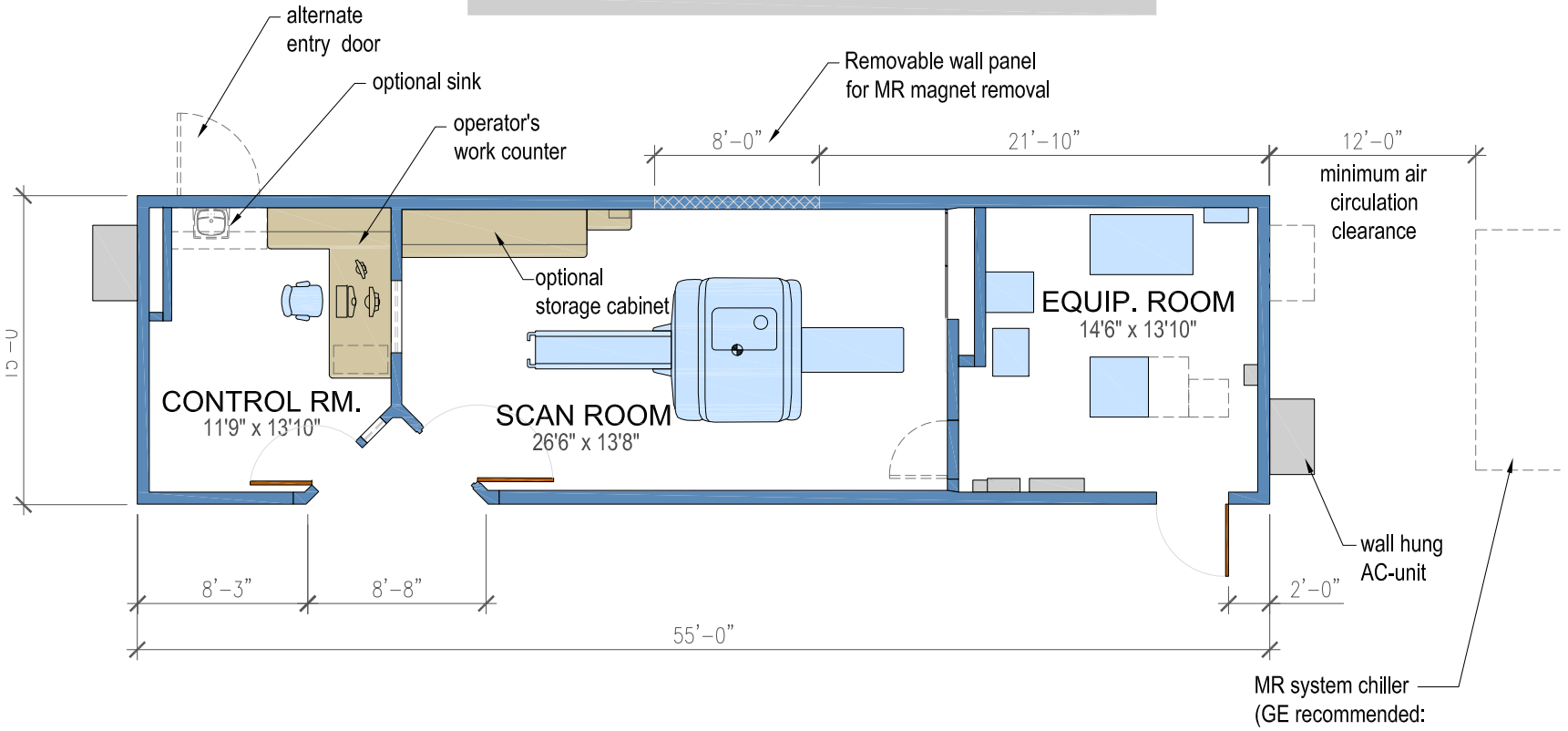
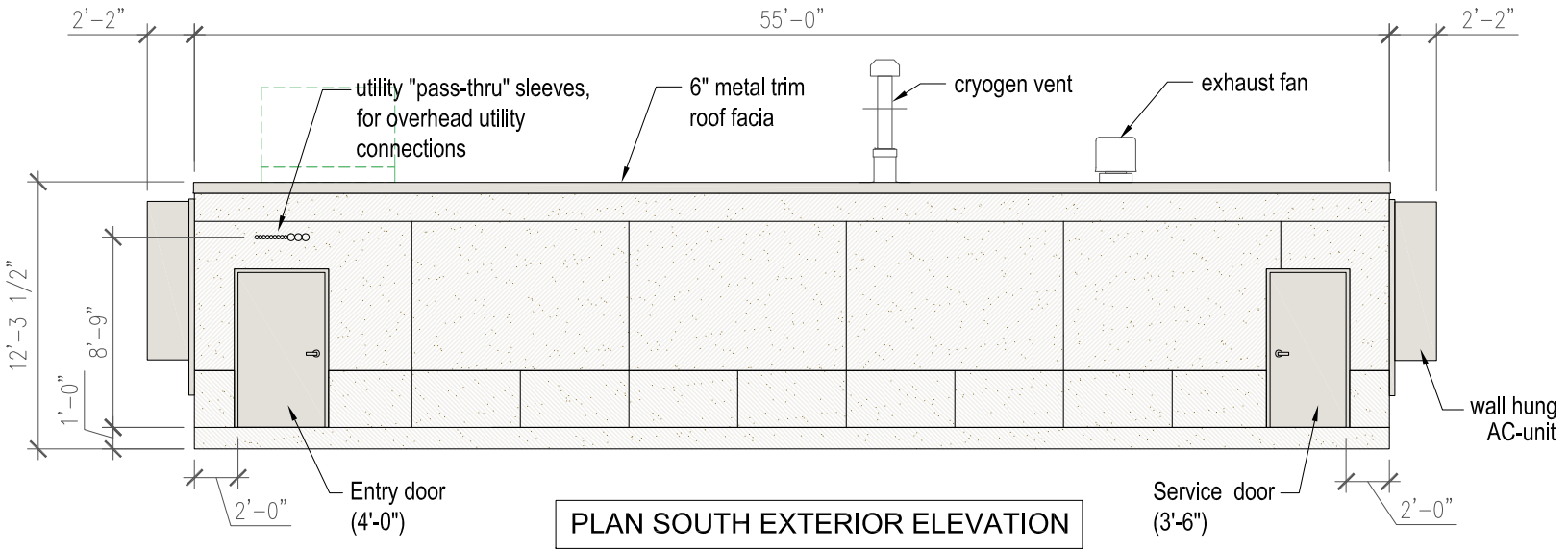


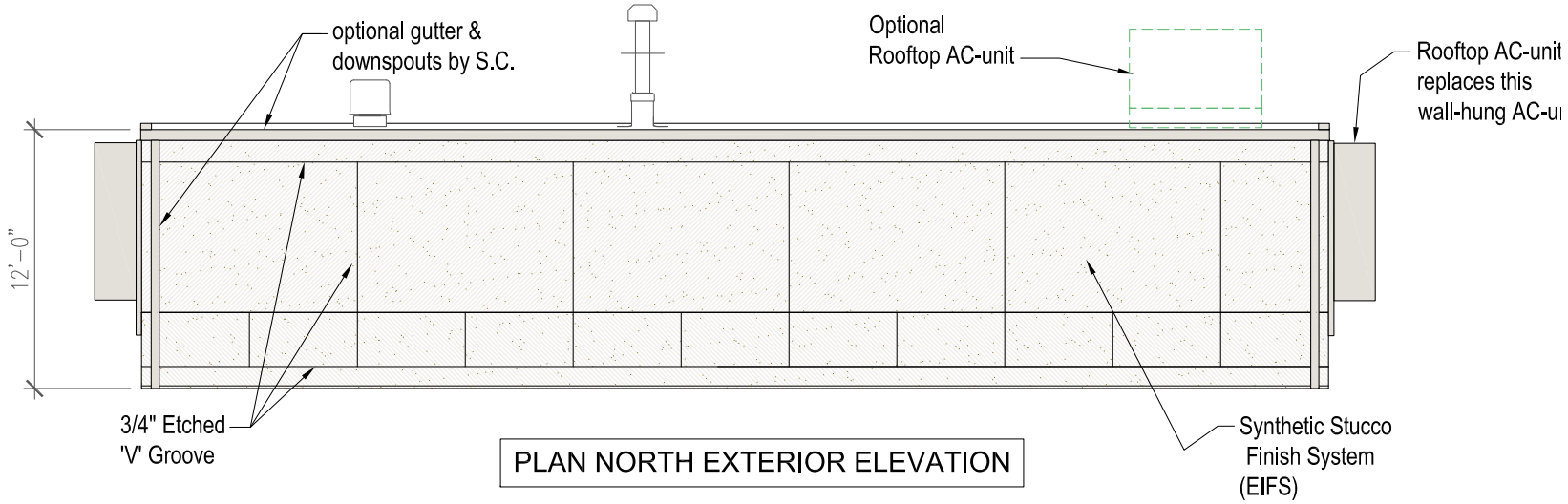
Floor - Plan (optional 15 ft. wide building)

1/8" = 1'-0"

with "Y" style entrance



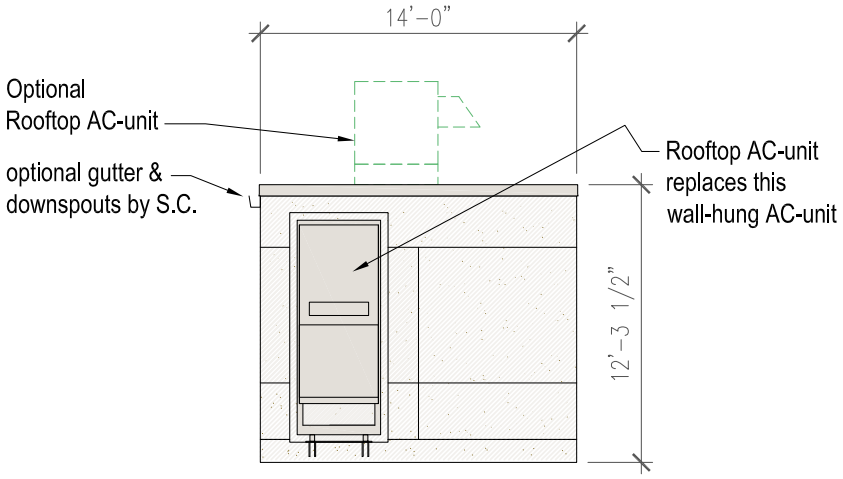
PLAN SOUTH EXTERIOR ELEVATION



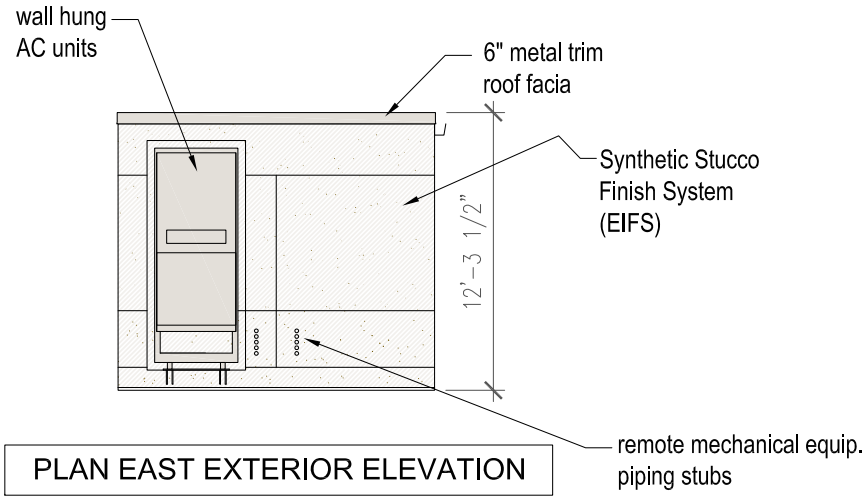
PLAN NORTH EXTERIOR ELEVATION

Exterior - Elevations

1/8" = 1'-0"



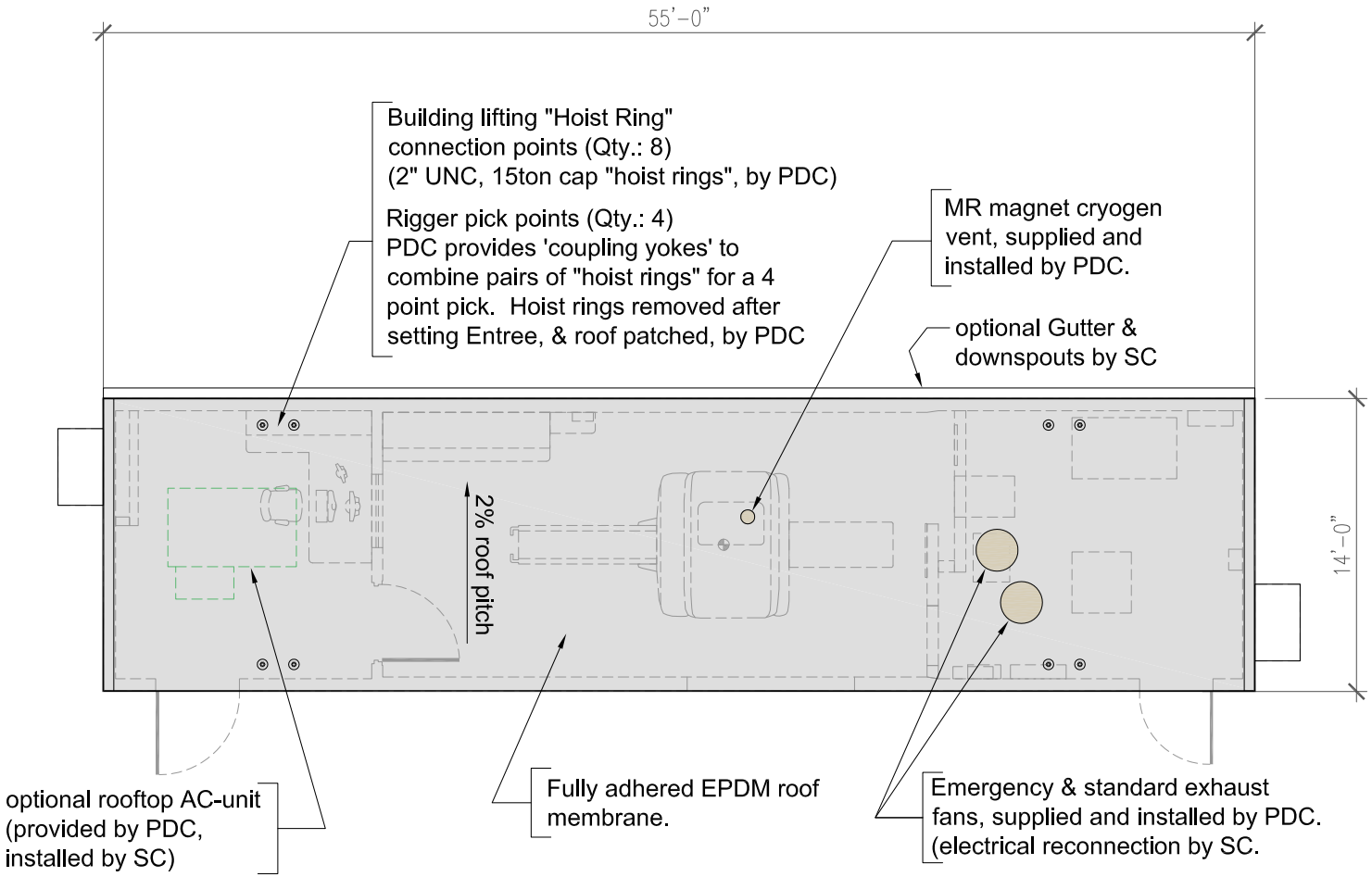
PLAN WEST EXTERIOR ELEVATION



PLAN EAST EXTERIOR ELEVATION

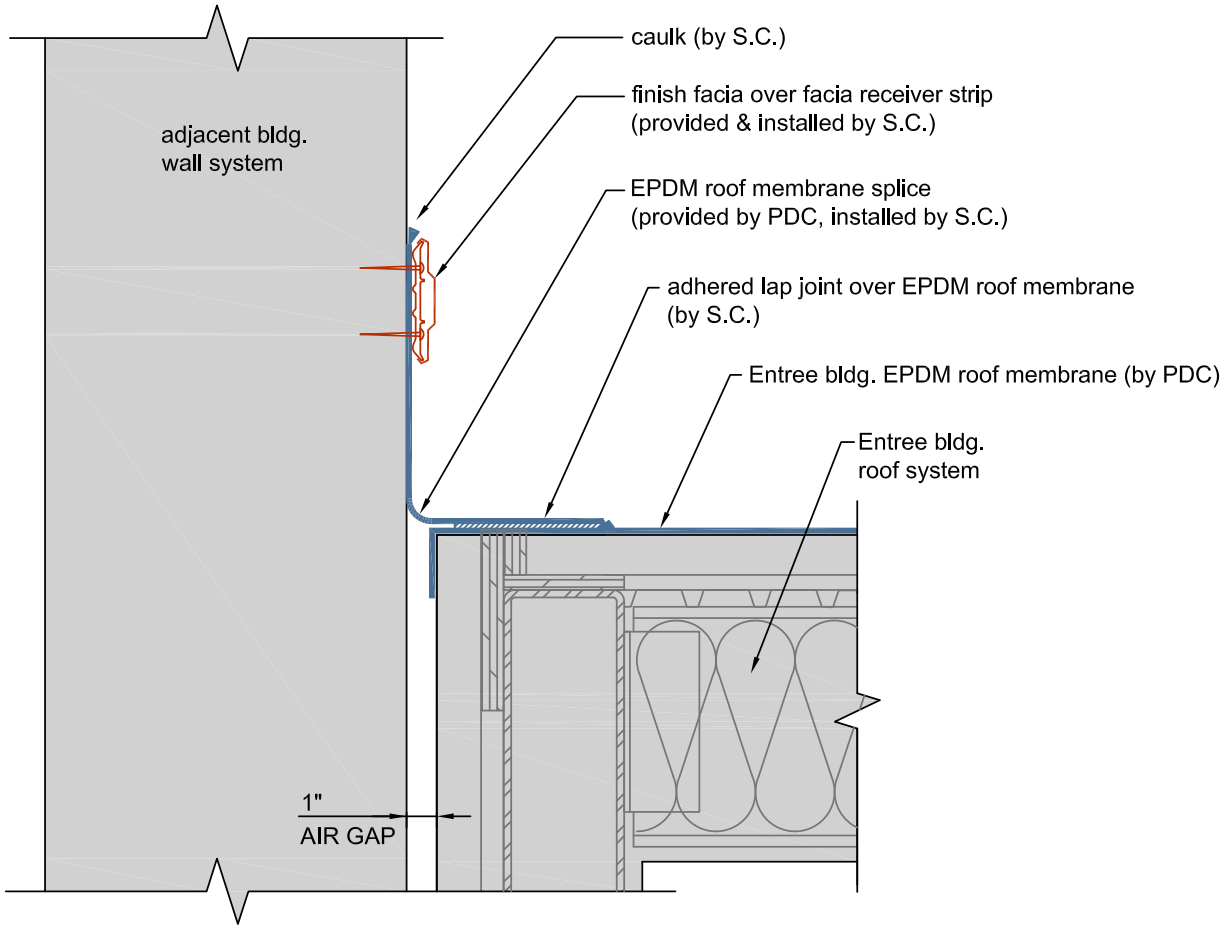
Exterior - Elevations

1/8" = 1'-0"



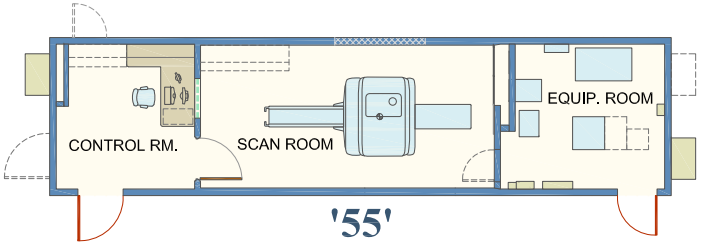
Roof - Plan

1/8" = 1'-0"

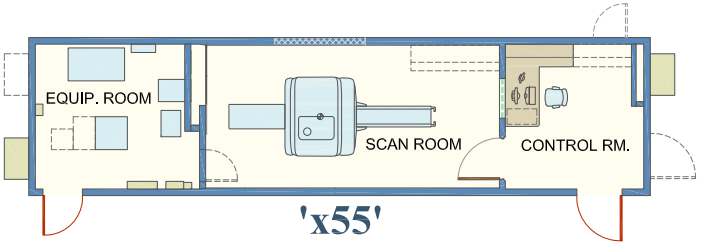


Roof Section @ Adjacent Building

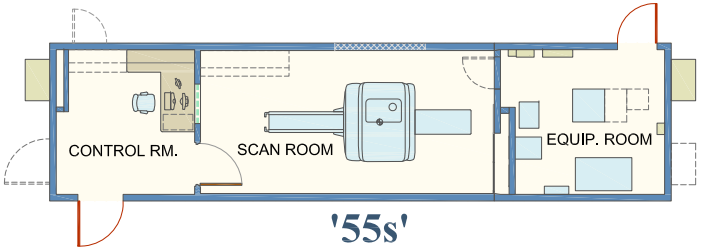
2" = 1'-0"



'55'



'x55'



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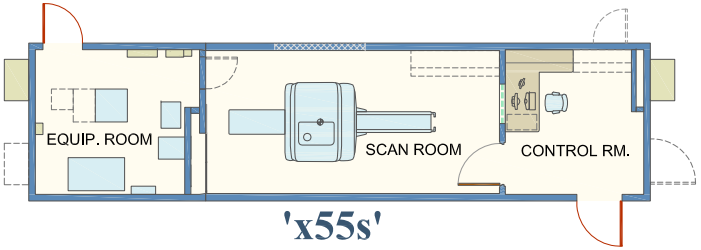

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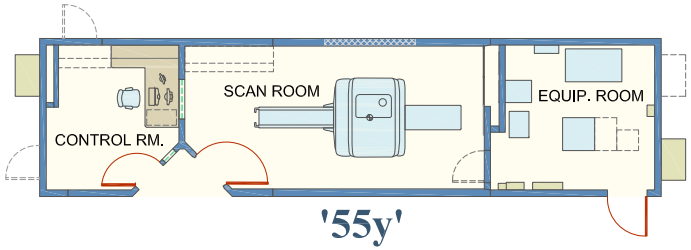

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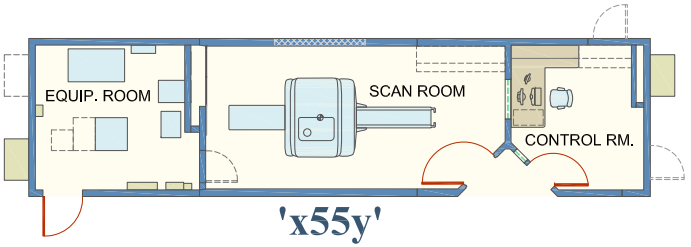

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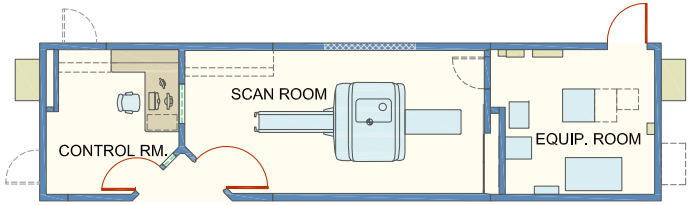

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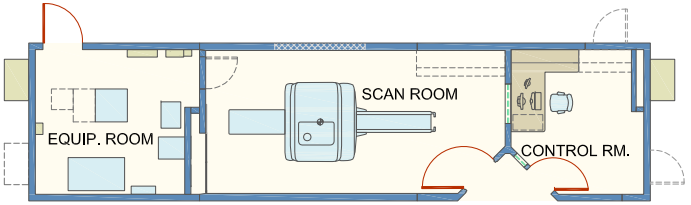
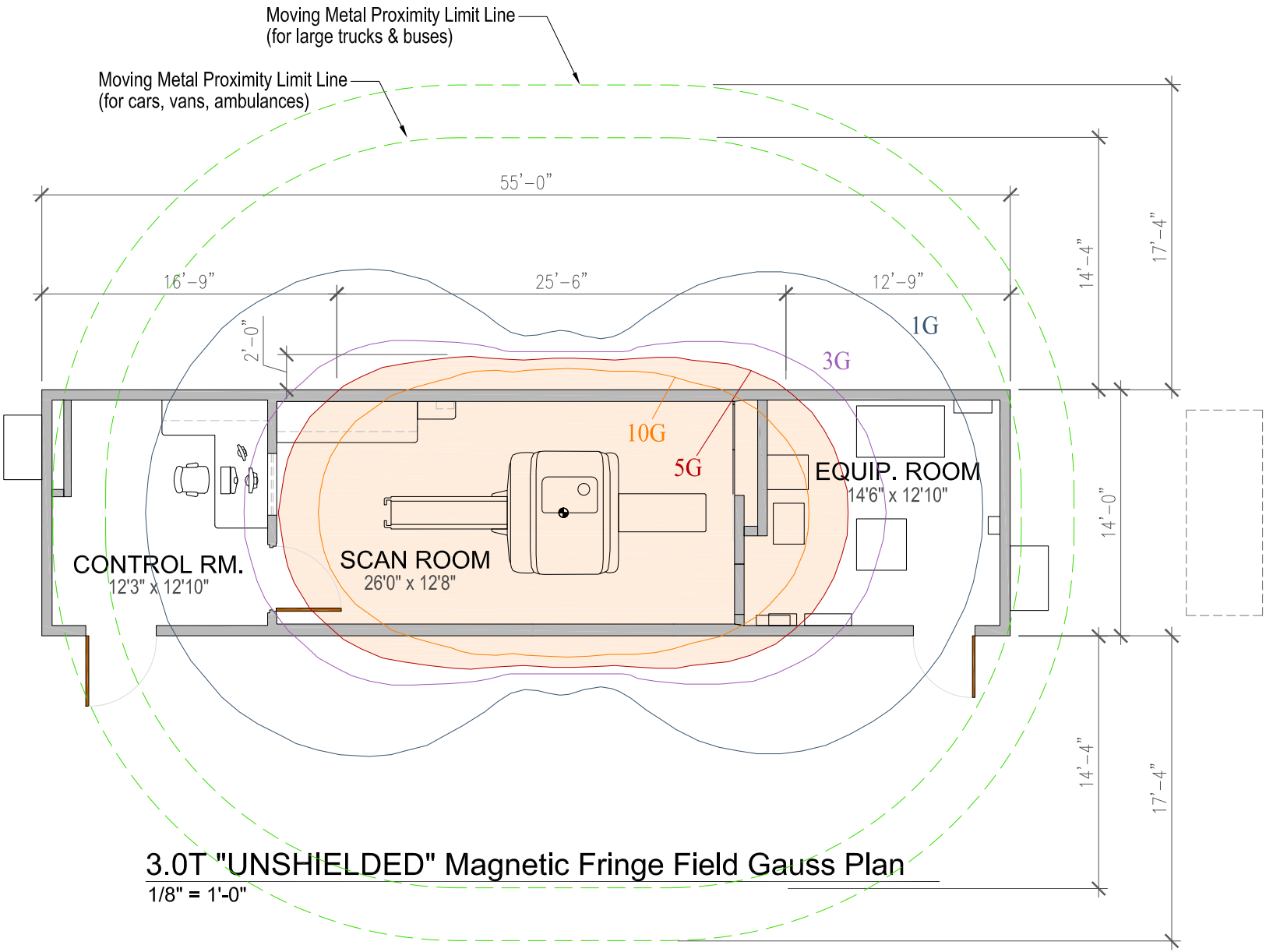
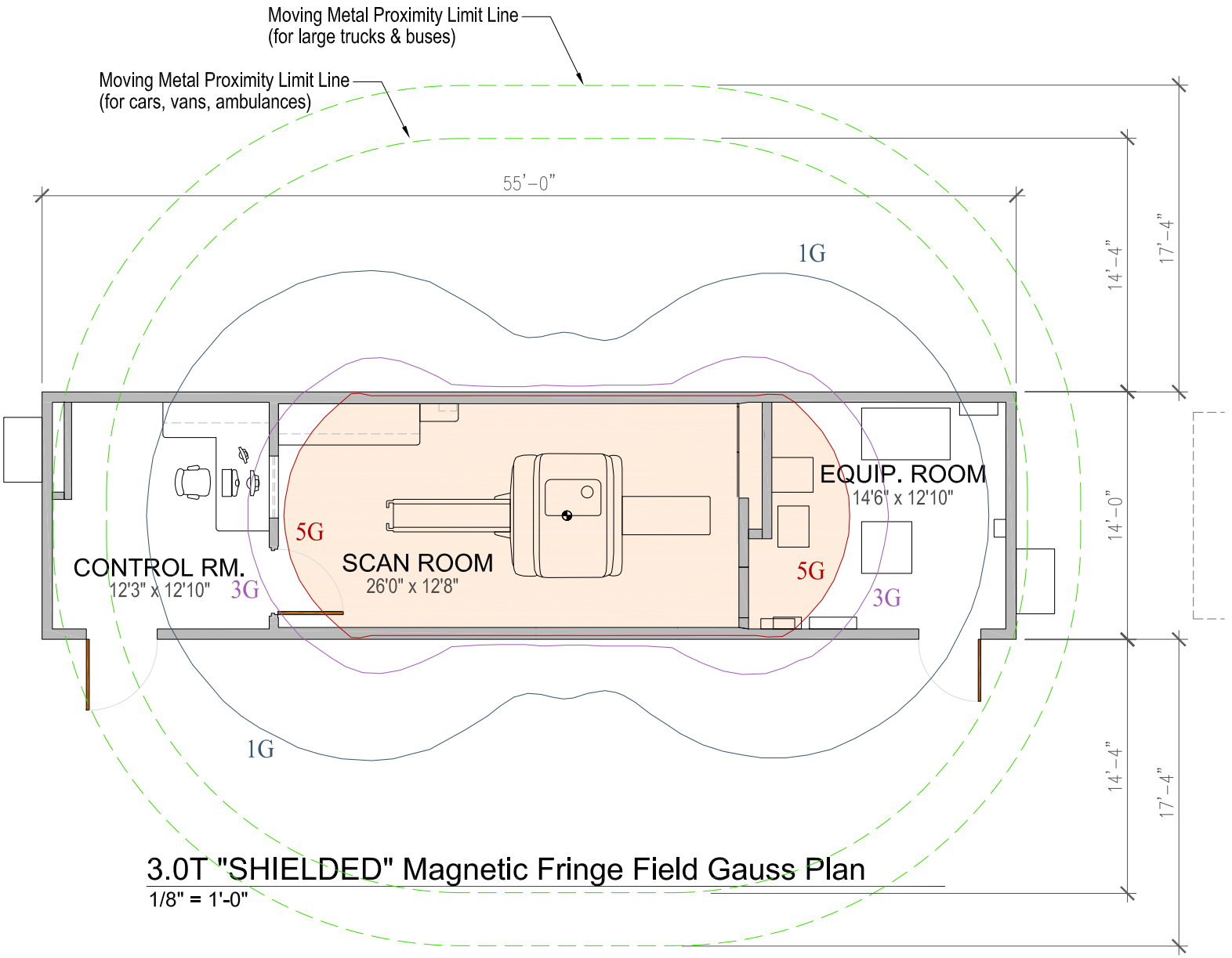


'x55ys'



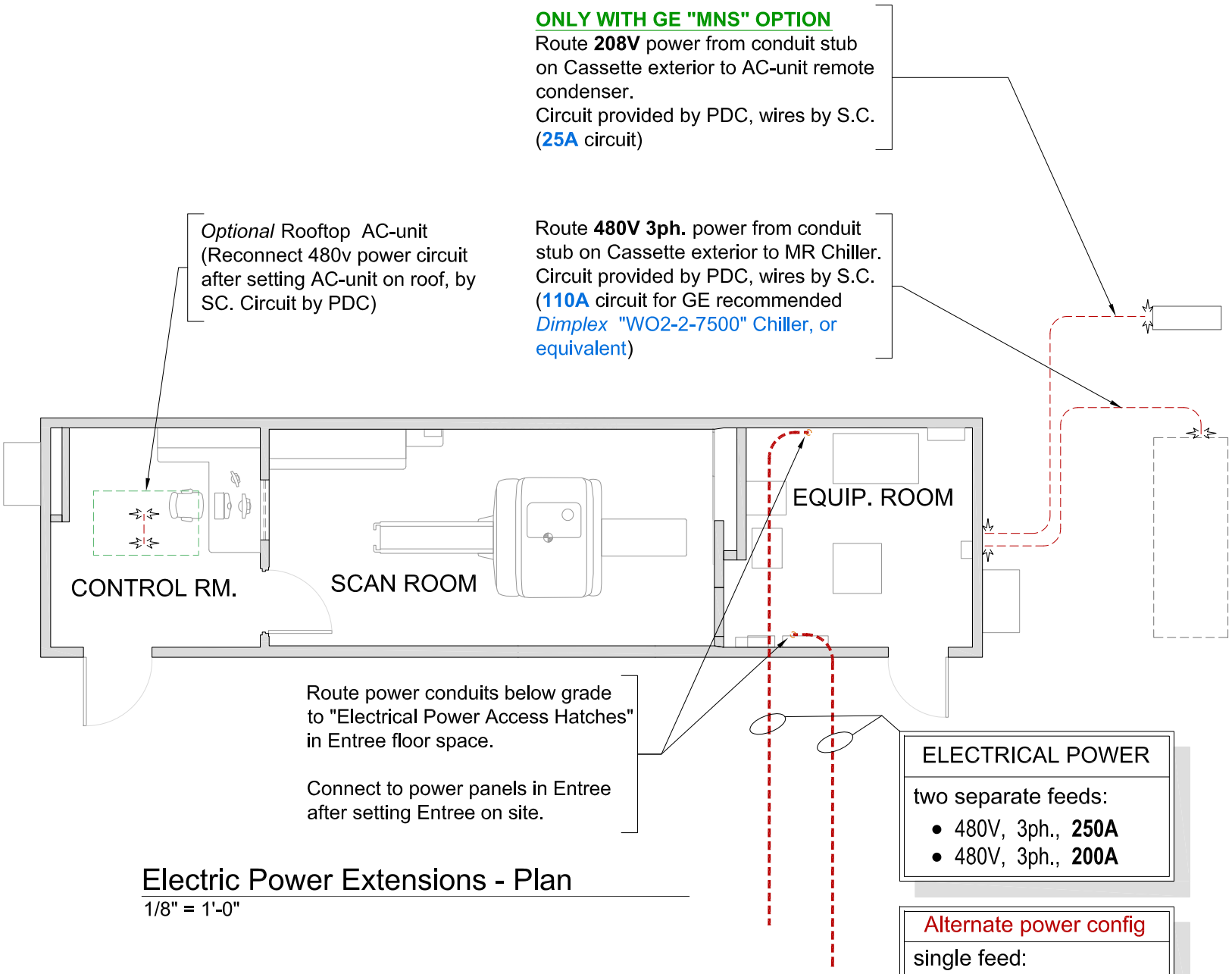
3.0T "UNSHIELDED" Magnetic Fringe Field Gauss Plan

1/8" = 1'-0"



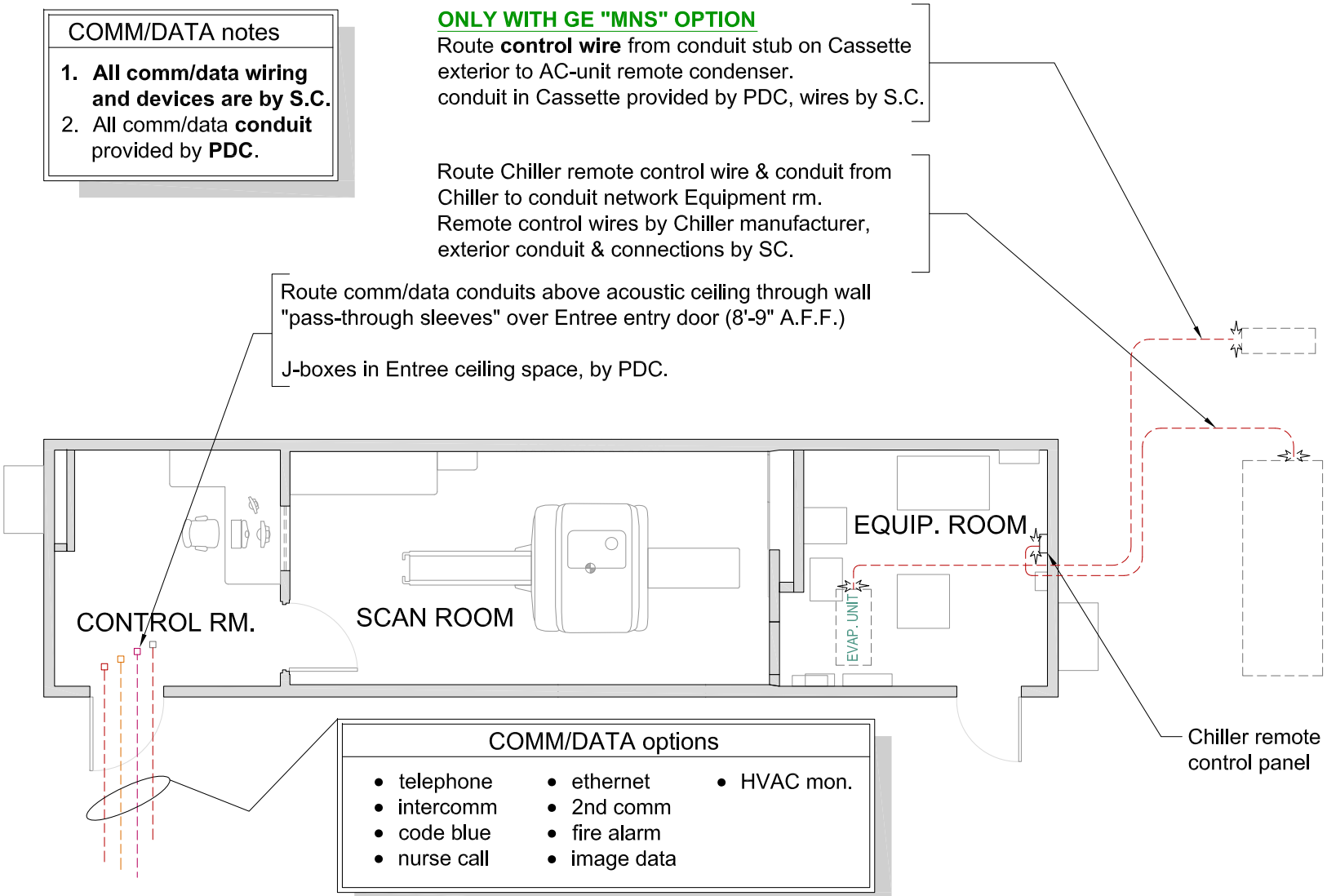
3.0T "SHIELDED" Magnetic Fringe Field Gauss Plan

1/8" = 1'-0"



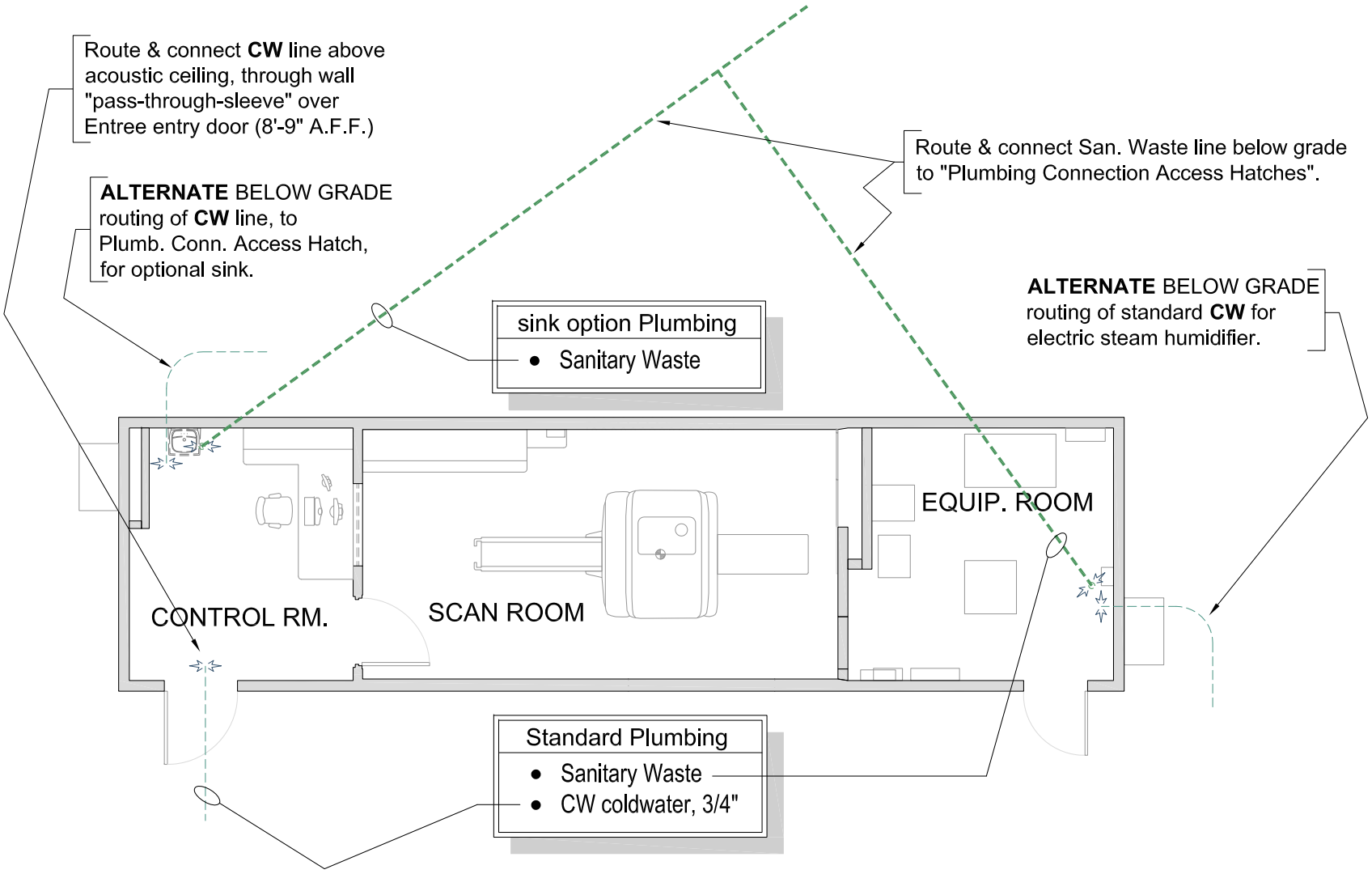
Electric Power Extensions - Plan

1/8" = 1'-0"



Electrical COMMUNICATIONS Extensions - Plan

1/8" = 1'-0"



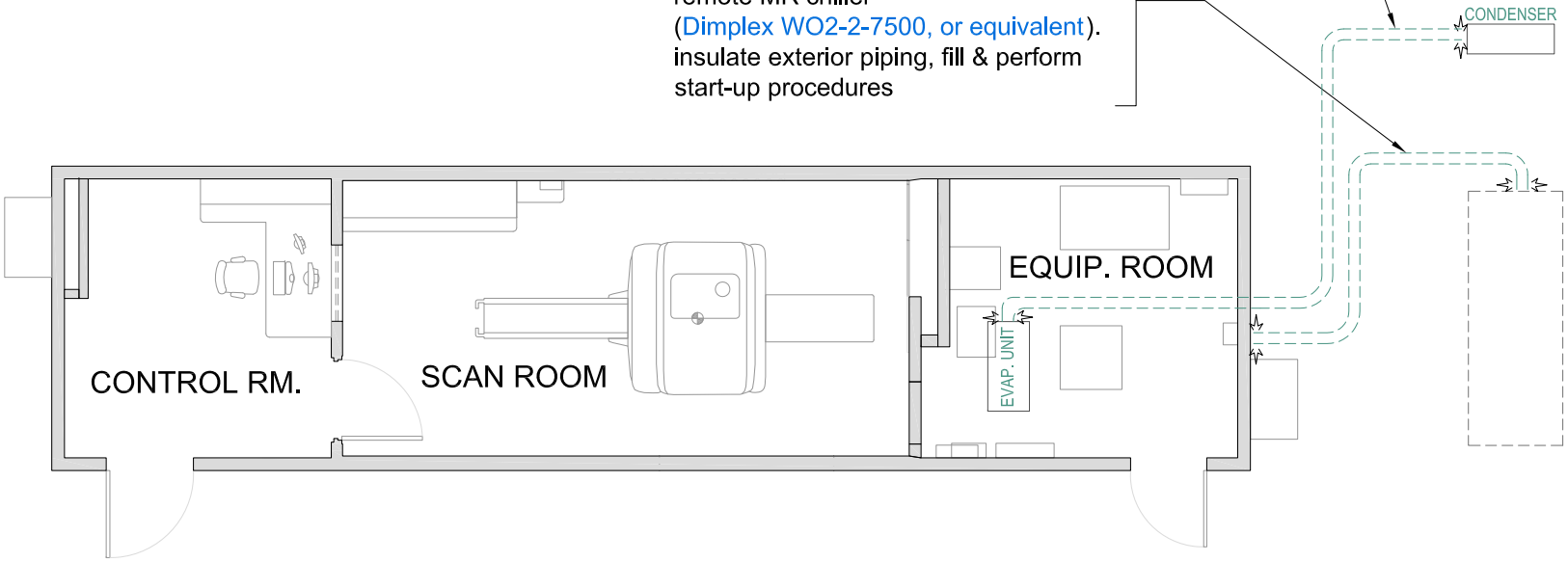
Domestic Plumbing Extensions - Plan

1/8" = 1'-0"

ONLY WITH GE "MNS" OPTION

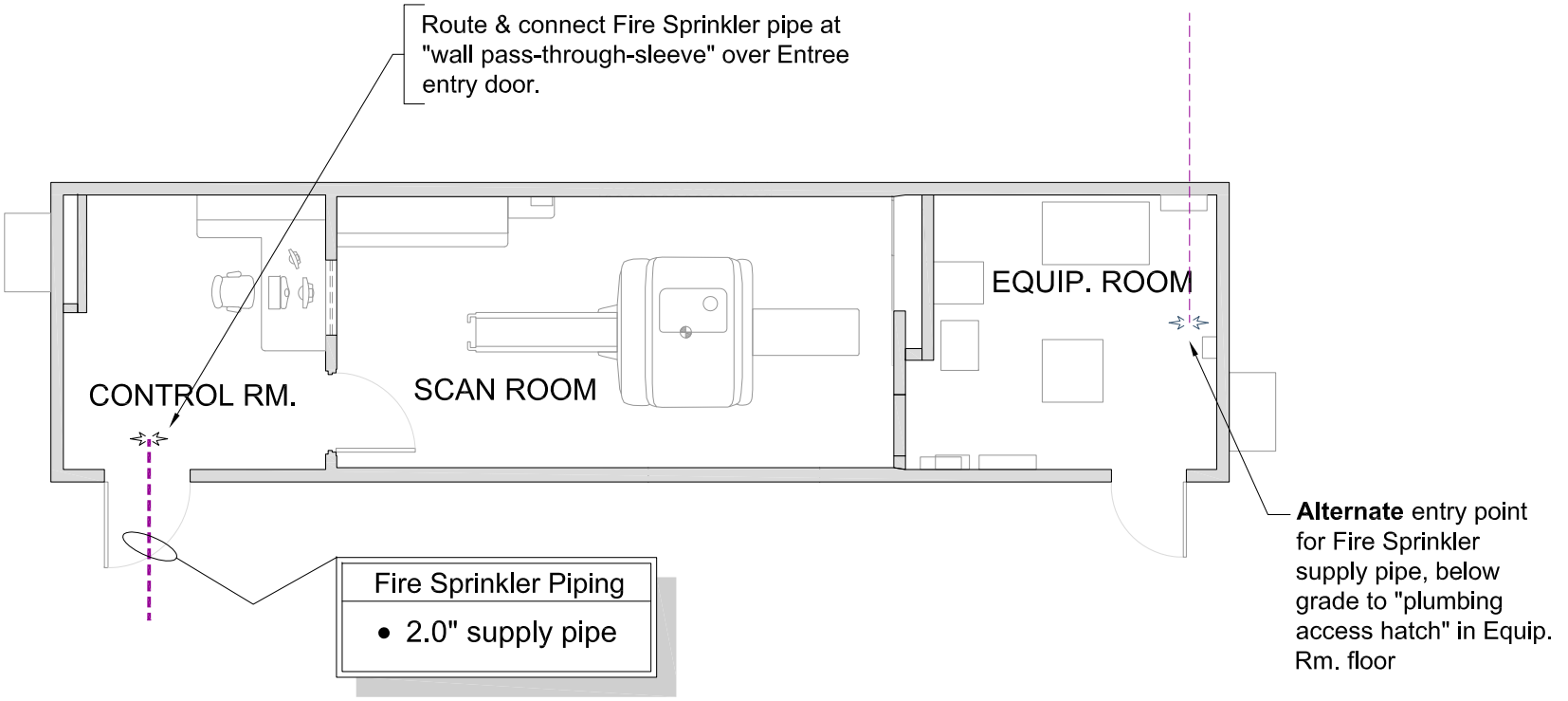
Route PDC supplied copper refrigerant lines from AC-unit evaporator in Cassette Qeuipment room, to AC-unit remote condenser.
If condenser is located further than 30 ft away, contact PDC to request long lines)

Extend **(2) 1.5" dia.** chilled water pipes from stubs on Cassette exterior to remote MR chiller (Dimplex WO2-2-7500, or equivalent). insulate exterior piping, fill & perform start-up procedures



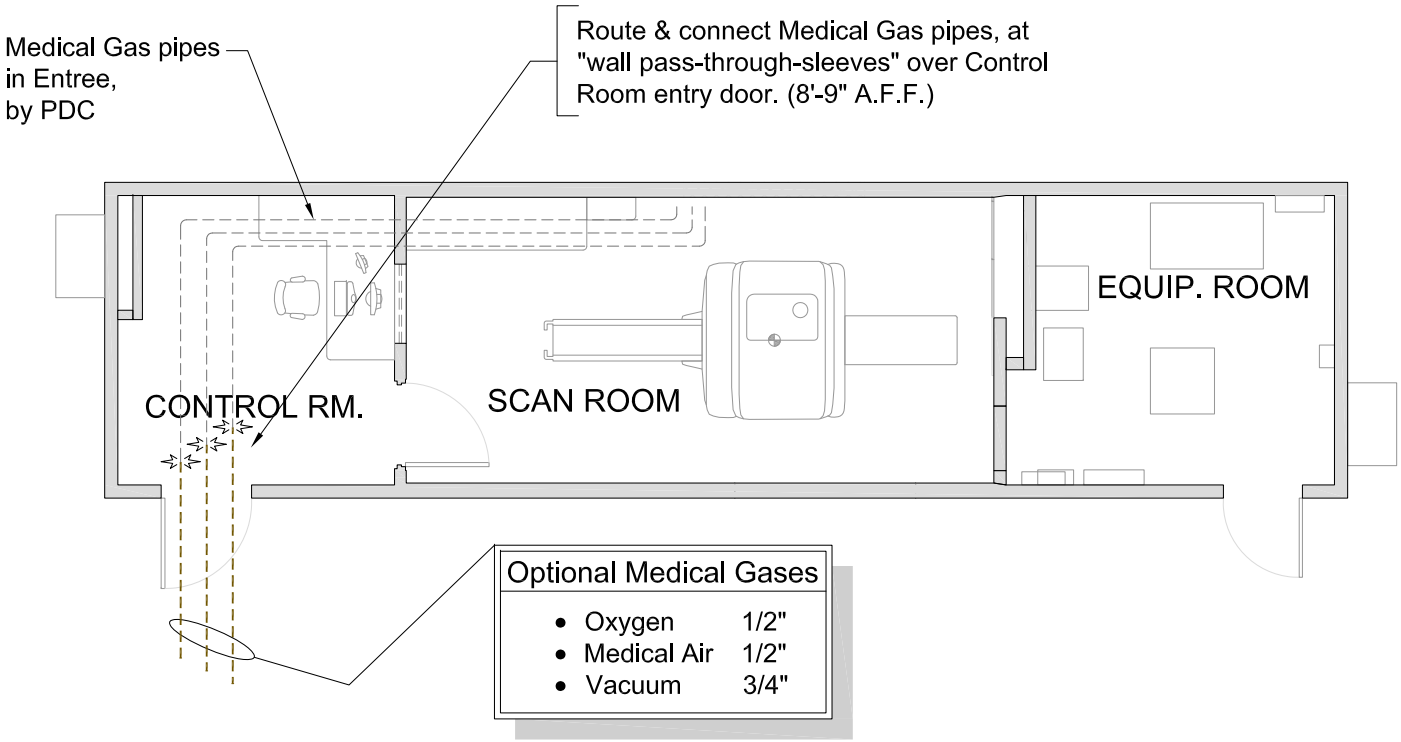
"Chilled Water, and Refrigerant Line" Extensions - Plan

1/8" = 1'-0"



Fire Sprinkler Extension - Plan

1/8" = 1'-0"

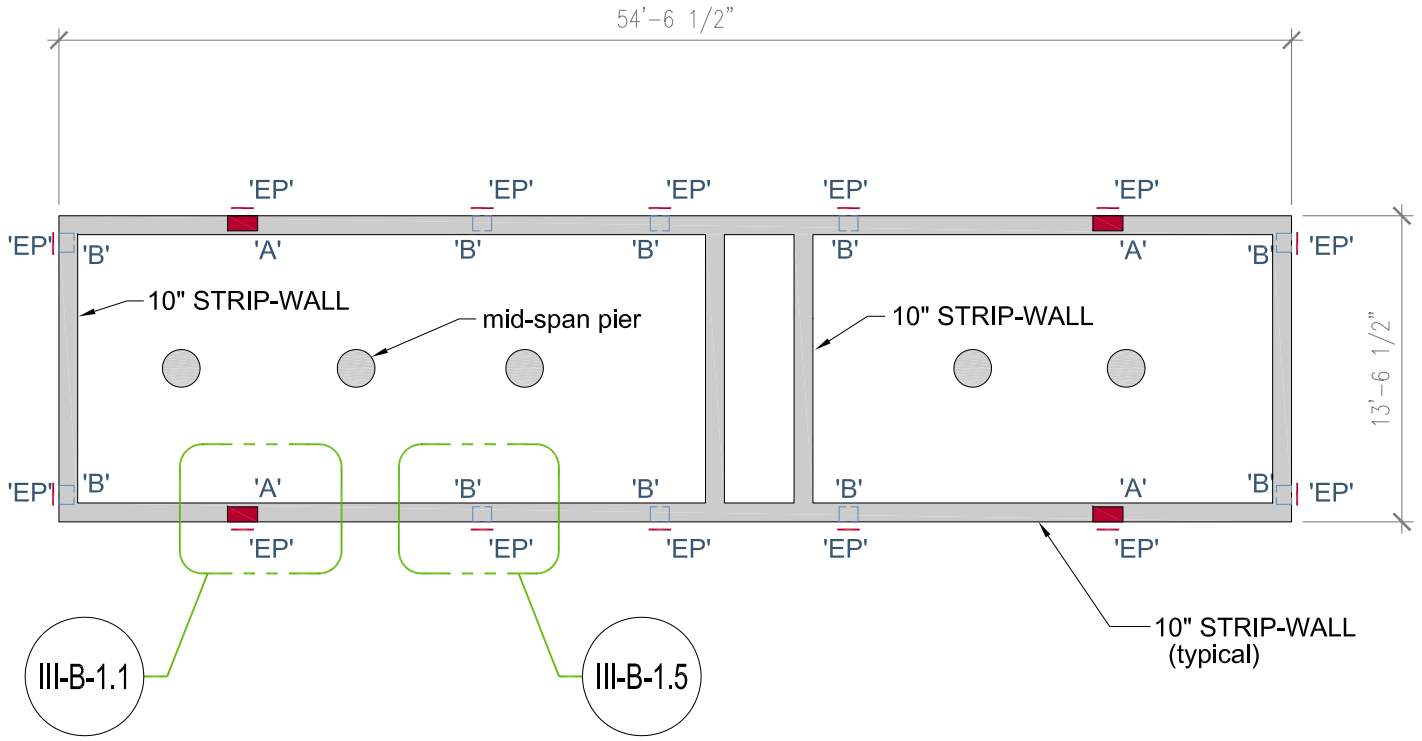


Optional MEDICAL GAS Extensions - Plan

1/8" = 1'-0"

FOUNDATION - NOTES

- 'A' Plate Assemblies by PDC and installed by S.C.
- 'B' Plate Assemblies by PDC and installed by PDC
- 'EP' Plate Assemblies by SC and installed by S.C.

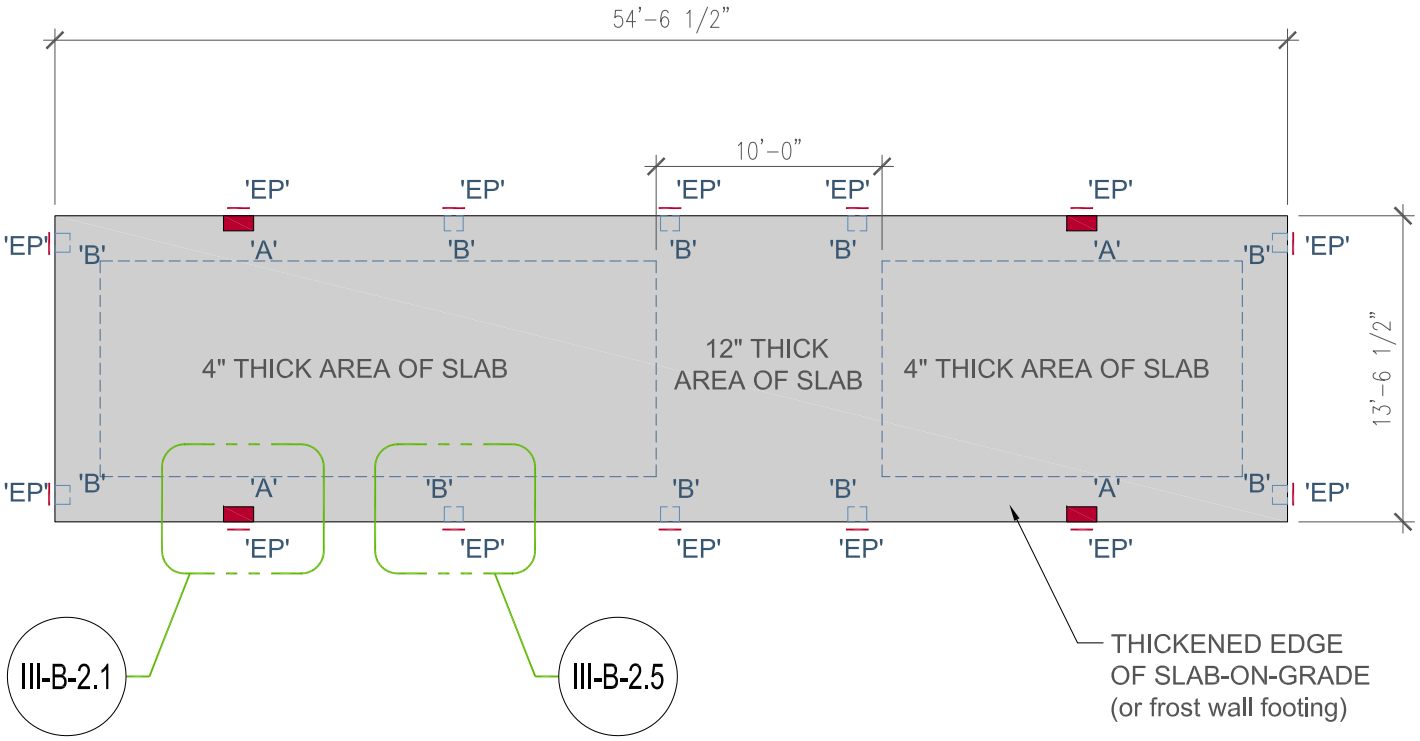


"Strip-Wall" Foundation - Plan

1/8" = 1'-0"

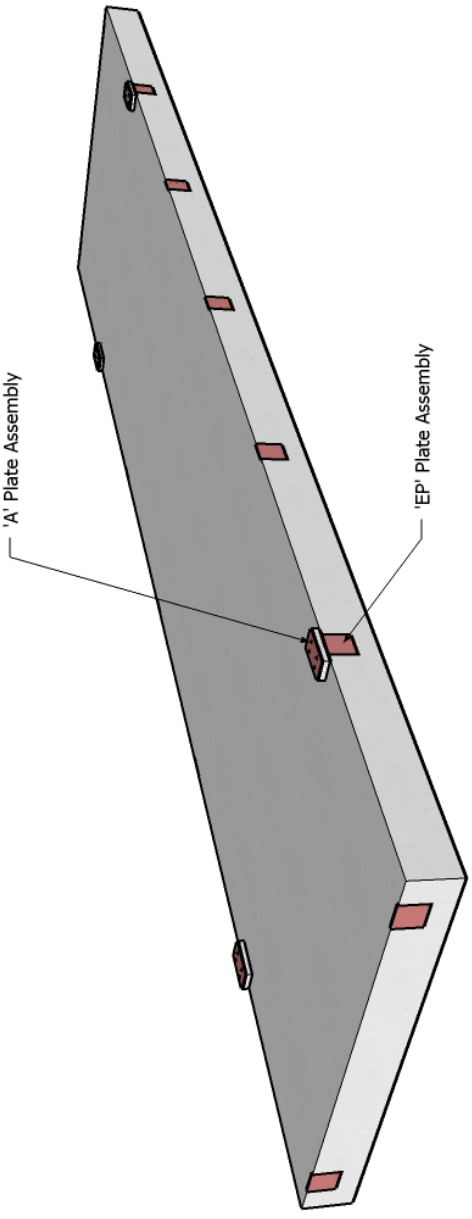
FOUNDATION - NOTES

- 'A' Plate Assemblies by PDC and installed by S.C.
- 'B' Plate Assemblies by PDC and installed by PDC
- 'EP' Plate Assemblies by SC and installed by S.C.



"Slab" Foundation - Plan

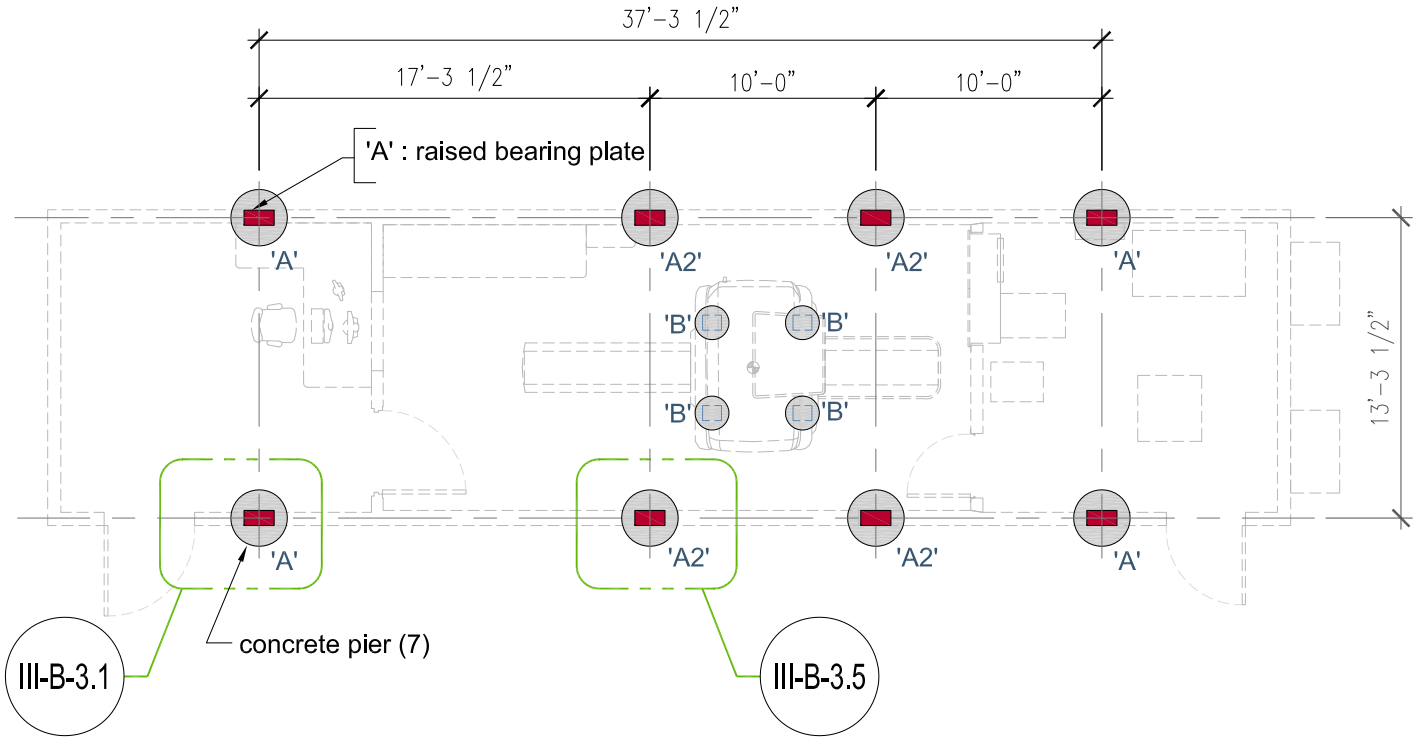
1/8" = 1'-0"



Slab Foundation

FOUNDATION - NOTES

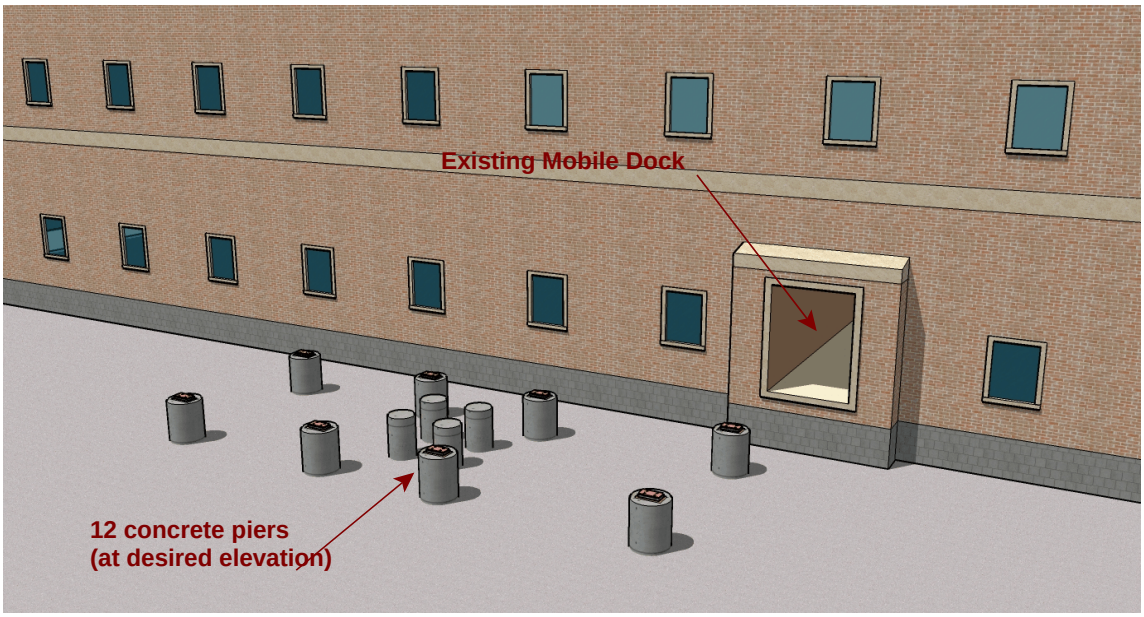
- 'A' Plate Assemblies by SC, installed by S.C.
- 'A2' Plate Assemblies by SC, installed by S.C.
- 'B' Plate Assemblies by PDC, installed by PDC



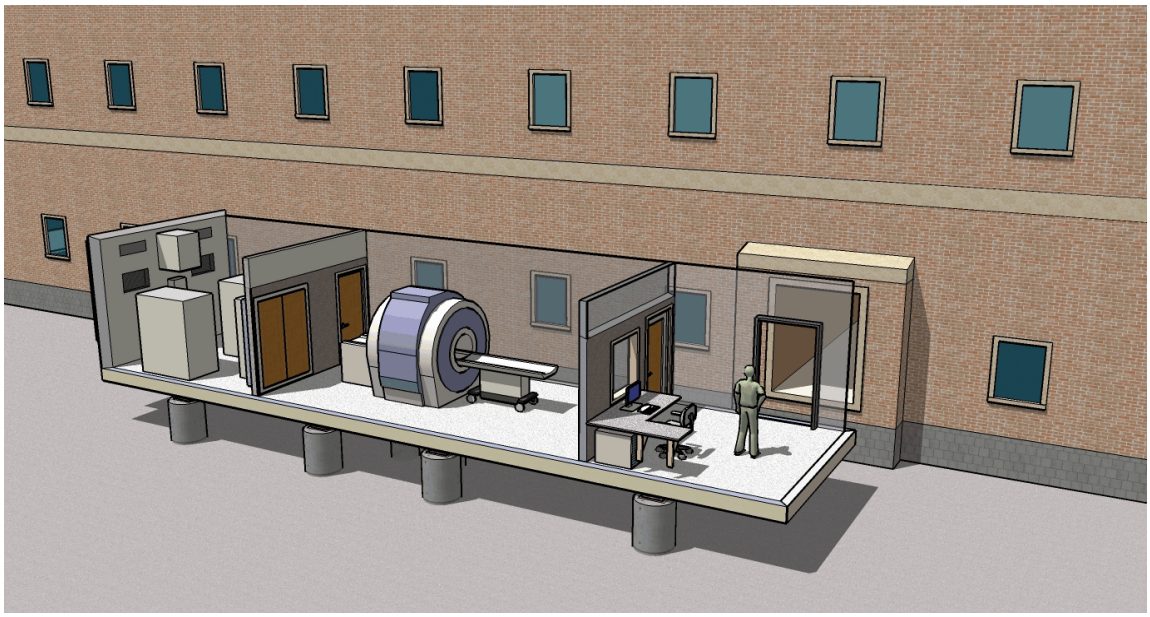
Pier Foundation - Plan (temporary or permanent)

1/8" = 1'-0"

Pier Foundation



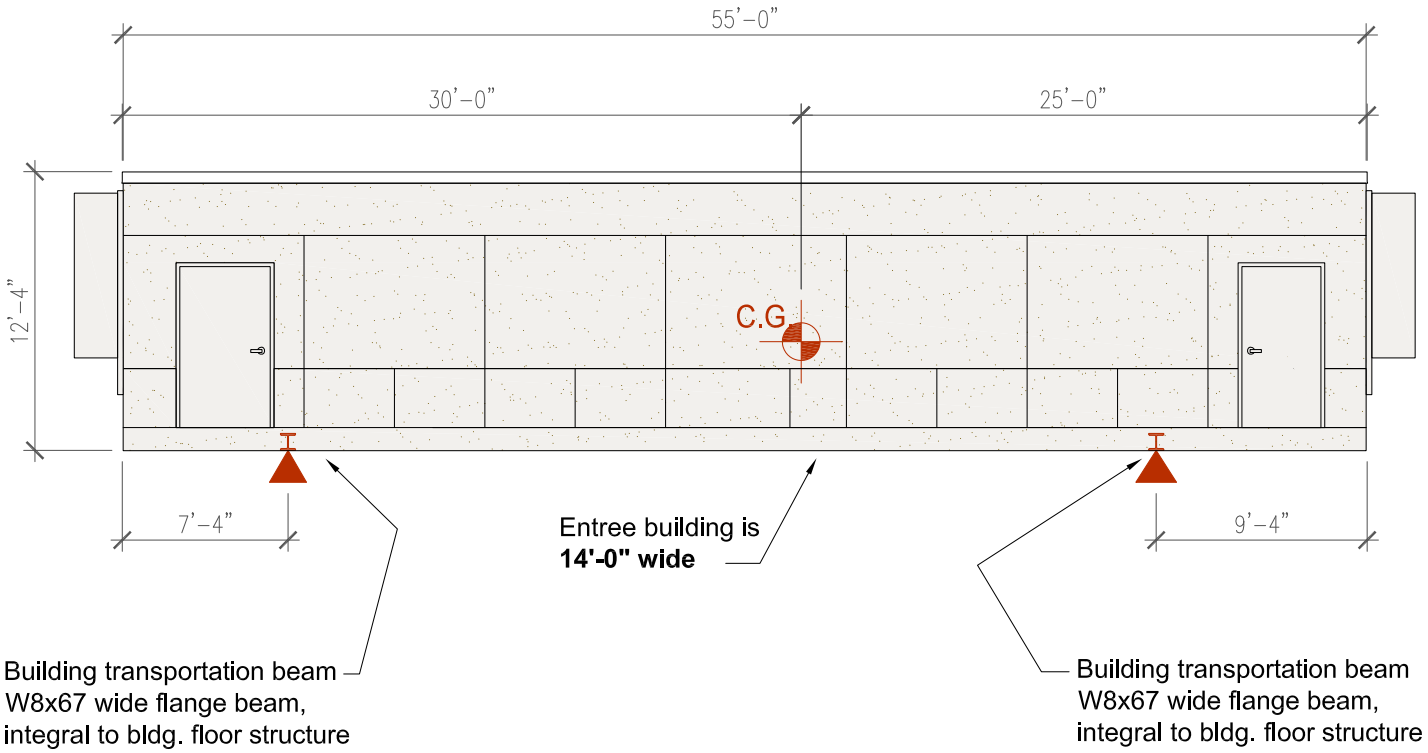
Foundation only



Isolated Foundation Details
(provided in SPD)

TRANSPORTATION - notes
▲ • bearing location 8 ft' wide minimum bearing surface. • All bearing locations must be given support during transportation.

Entree Bldg - WEIGHT
108,000 lbs.



Entree Building - Transportation Bearing Diagram

1/8" = 1'-0"

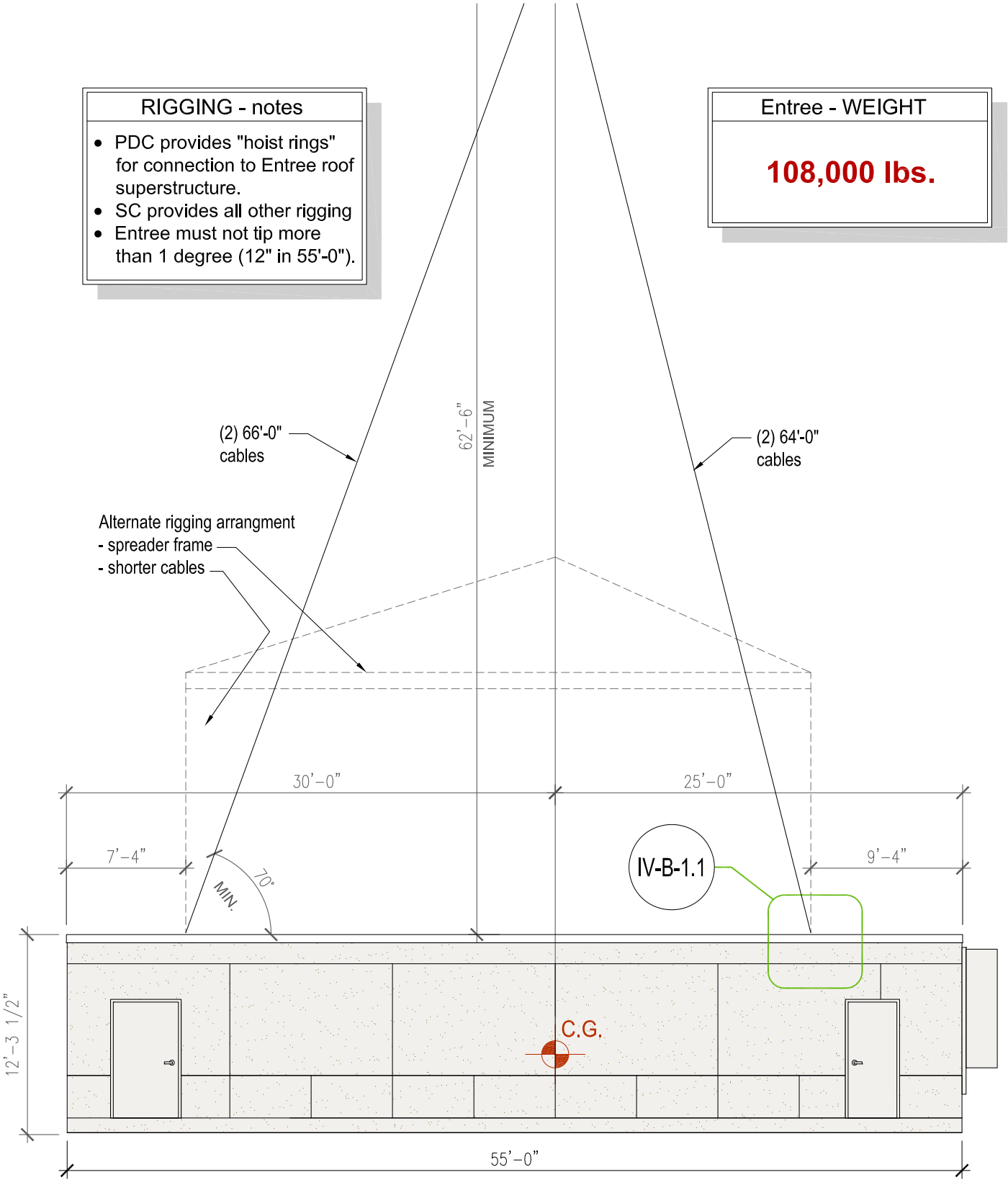
(14'x55' model Entree)

RIGGING - notes

- PDC provides "hoist rings" for connection to Entree roof superstructure.
- SC provides all other rigging
- Entree must not tip more than 1 degree (12" in 55'-0").

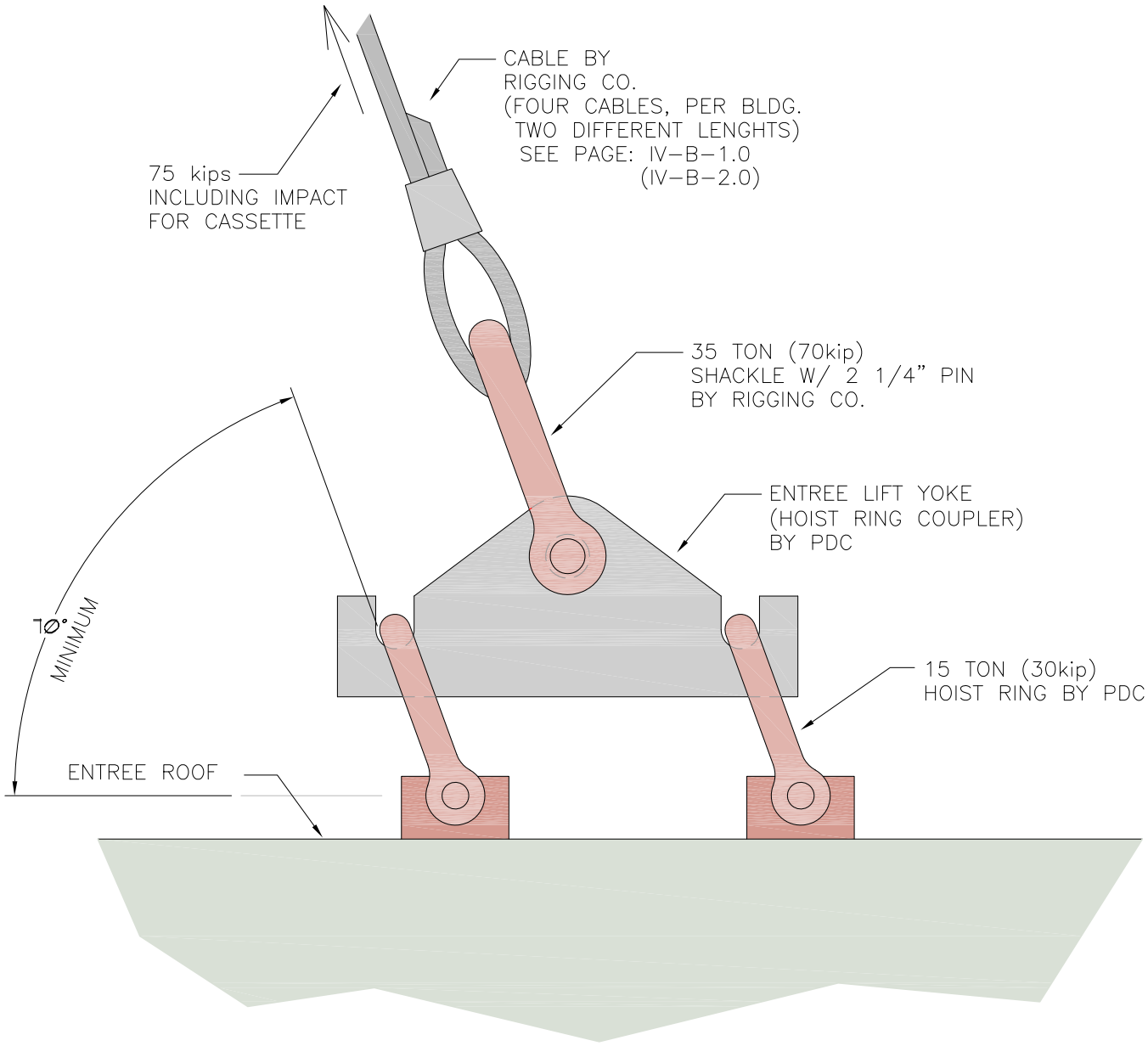
Entree - WEIGHT

108,000 lbs.



Entree Bldg. RIGGING - Elevation

1/8" = 1'-0"



Entree "Dual Hoist-ring" PICK-POINT Detail

1-1/2" = 1'-0"