









# Imaging Services Design Guide

September 1, 2020

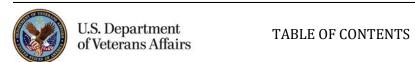
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# 1.0 GENERAL

#### 1.1 Foreword

VA Program Offices, project teams, designers and constructors, are obligated to our Nation's Veterans and taxpayers to make the most effective and efficient use of resources, by providing a continuum of safe, secure, high quality, high performance, and high value environments of care and service for Veterans. The VA Office of Construction & Facilities Management (CFM) supports the Department's mission through development and application of standards as a basis for disciplined planning, design, and construction of VA facilities.VA Standards are the culmination of a partnership among the Department of Veterans Affairs (VA), the Veterans Health Administration, Program Officials, Clinicians, Industry, Academic and Research Organizations, Consultants, and the Office of Construction and Facilities Management. Design Guides are developed through integration of VA-specific requirements, Federal law and regulation, benchmarking of industry best practice, evidence-based research and design, and value-based analysis of leading-edge innovation. The result is the establishment of best value standards for optimum functionality, safety, operability, performance, and quality throughout the VA environment of care and service.

Design Guides (PG-18-12) are a critical component of the VA Technical Information Library (TIL) (www.cfm.va.gov/TIL) which provides standards for all VA planning, design, and construction projects. Design Guides focus on selected healthcare departments and services and include an overview narrative of VA-specific planning and design principles and concepts, room templates, equipment lists, and basic technical/engineering requirements. They communicate the basis of design and are required to be utilized by project teams working on new construction and renovations of existing facilities. Design Guides will maximize the effectiveness and efficiency of the planning and design process and ensure a high level of design, while controlling construction, operating, and maintenance costs.

The material contained in Design Guides constitutes a Standard for VA Planning, Design and Construction. For all VA projects, it is required that project teams comply with the following in all phases of project development:

1) All applicable VA Standards published in the VA Technical Information Library (TIL) shall be applied as a basis, foundation, and framework in planning, design, and construction. Any substantial variance from Standards shall be considered only as required to accommodate specific site, functional, and operational conditions. Upon consideration of variance CFM shall be consulted, and each Administration will function as Authority Having Jurisdiction for decision. Each substantial variance shall have a basis rationale and be documented in the project record.

2) Clinicians, providers, primary users, and other stakeholders shall be involved in all phases of project development to best adapt Standards for specific functional, operational, and site conditions, and to provide optimum service environments for Veterans. This also includes installations and modifications of systems or technology involving safety, security, functionality, or environmental quality. Stakeholder involvement shall be documented in the project record.

Design Guides are not project-specific. It is impossible to foresee all rapidly evolving requirements of healthcare facilities and each site or project will have unique requirements or conditions. Site-specific issues must be addressed within the context of these standards and applied to each individual project. Use of this Guide does not preclude the need for, nor absolve planners, designers, and constructors of their responsibility to provide complete, functional, safe, and secure designs suited to the unique requirements of each project, within budget, and on schedule.

Materials, equipment and systems are shown in an illustrative, performance-based format and are not intended to depict, suggest, or otherwise constitute endorsement of any specific product or manufacturer. Manufacturers should be consulted for actual dimensions, configurations, and utility requirements.

All participants in the project development process must embrace VA Planning, Design and Construction Standards as fundamental in providing optimum environments for Veterans' care and services, in fulfilling VA's mission.

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#### 1.3 Introduction

This document merges three prior documents, Radiology Design Guide, Nuclear Medicine Design Guide, and Magnetic Resonance Imaging (MRI) Design Guide, under a common Imaging Services Design Guide to better reflect contemporary realities of the technologies, clinical applications, and enterprise-wide usage of Imaging Services.

The Imaging Services Design Guide is a tool to assist Contracting Officers, Medical Center Staff, and Architects and Planners with the design and construction of Imaging facilities. This publication is intended to provide an overview with respect to the design and construction of medical imaging facilities. Guidance herein may be applied to the siting of individual pieces of imaging equipment, or to departmental level planning and design.

Imaging Services is an area within healthcare that is experiencing extraordinarily rapid technological advancement. While the needs of a specific project are typically defined by contemporary and historical usage data, it is very strongly encouraged that the users of this document and planners of any VA facilities anticipate future equipment upgrades / replacements, expansions of clinical usage beyond the immediate conditions, and continued acceleration of examination times and the throughput implications that result. Planning and design decisions made exclusively based on historical data, without consideration of these continuous changes to the practice environment, may create long-term cost, staffing, and operational burdens for the VA facilities.

Room templates for various imaging rooms and associated spaces are included in this chapter to illustrate typical VA furniture, equipment, and personnel space needs. They are not project specific as it is not possible to foresee future requirements. The project specific space program is the basis of design for an individual project. It is important to note that the room templates are intended as a generic graphic representation only.

In addition to the general guidance included herein, equipment manufacturers should be consulted for specific minimum dimensions, utilities, shielding, power, structural requirements, and other requirements as they relate to specified equipment. Use of this design guide does not supersede the project architects' and engineers' responsibilities to develop a complete and accurate design that meets the user's needs, appropriately integrates complex medical equipment, and complies with appropriate code requirements and governing accreditation standards.

#### 1.4 Codes and Standards

Refer to the current versions of national, regional, and local codes and standards in addition to the VA specific standards and directives when designing facilities for Imaging Services. Additional codes and standards, not listed below, may also apply.

# 1.4.1 VA Technical Information Library

- 1. Master Construction Specifications PG 18-1
- 2. **Design and Construction Procedures** PG 18-3 (refer to Topic 1 for the list of Codes, Standards, and Executive Orders)
- 3. Standard Details PG 18-4
- 4. **Equipment Guide List PG 18-5**
- 5. **Seismic Design Handbook** H 18-8
- 7. Various **Design Manuals** PG 18-10 and technical criteria pertaining to Architectural, Heating, Ventilation, and Air Conditioning (HVAC), Plumbing, and Electrical
- 8. **Barrier-Free Design Standard** PG 18-13
- 9. Room Finishes, Door, and Hardware Schedule PG 18-14

## 1.4.2 VHA Directives, Handbooks and Manuals

- 1. VA Directive 7512, Seismic Safety of VA Buildings
- 2. VA Directive 7531, Acquisition of Artwork, Decorative Furnishings, and Decorative Items
- 3. VA Directive 0055, VA Energy and Water Management Program
- 4. VHA Directive 1611, Safe Patient Handling and Mobility Program
- 5. VHA Directive 1105.03, Mammography Programs and Procedures
- 7. VHA Directive 1105.04, Fluoroscopy Safety
- 6. VHA Directive 1105.05, Magnetic Resonance (MR) Safety

# 1.4.3 National Industry Codes/ Standards

- 1. National Council on Radiation Protection & Measurement (NCRP) Report No. 147
- 2. American Association of Physicists in Medicine (AAPM) Task Group 108 Report
- 3. American College of Radiology (ACR) Manual on MR Safety
- 4. Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Hospital Facilities

#### 1.5 Definitions

- **4-Zone:** A safety and screening paradigm promoted by the American College of Radiology (ACR) for MRI suite layout and operation.
- **Active Shielding:** An electromagnetic system, integrated in MRI scanners, by which the magnetic field is condensed into a smaller volume.
- **Automated Breast Ultrasound (ABUS):** Specialized imaging system utilizing three-dimensional ultrasound technology to supplement screening mammography.
- **Automated Supply Dispensing Unit (ASDU):** Automated material or medication dispensing and inventory control systems.
- **Bone Densitometry:** Imaging technique utilizing low-dose ionizing radiation to measure bone loss, commonly used to diagnose osteoporosis. Also known as dual-energy x-ray absorptiometry (DEXA).
- **Bore:** Open cylindrical center portion of 'doughnut' shaped MRI magnets.
- **Bore Format MRI:** A type of MRI system most commonly used in current MRI procedures. The patient is fully surrounded by the bore during the scanning process.
- **Class:** Designation of an imaging room based on the level of intervention / acuity it is intended to support, with Class 1 being low-acuity diagnostic, Class 2 being higher-acuity diagnostic or interventional, and Class 3 being intraoperative.
- **Computed Tomography (CT):** A CT scan, or computed tomography scan is a medical imaging procedure that uses computer-processed combinations of many X-ray measurements taken from different angles to produce cross-sectional (tomographic) images (virtual "slices") of specific areas of a scanned object, allowing the user to see inside the object.
- **Cryogen:** Ultra-low temperature liquid refrigerant with a boiling point of -238 Degrees Fahrenheit (-150 Degrees Celsius) or lower. For imaging, cryogens are typically required for MRI scanners, and the cryogenic liquid most often required is liquid helium.
- **Cryogen Quench Vent Pipe:** A pipe which provides a pathway for gaseous cryogen escape from a superconducting MRI to an exterior discharge point.
- **Departmental Net-to-Gross (DNTG) Factor:** A parameter, determined by the VA for each space planning criteria chapter, used to convert the programmed Net Square Foot (NSF) area to the Department Gross Square Foot (DGSF) area.
- **Digital Radiography:** A form of radiography that uses x-ray—sensitive plates to directly capture data during the patient examination, immediately transferring it to a computer system without the use of an intermediate cassette.
- **Exclusion Zone:** An area or volume to which access should be restricted and in which there are specific hazards.
- **Ferromagnetic:** The property of a material or device which is attracted to magnetic fields.
- Ferromagnetic Detection Systems (FMD / FMDS): Devices which detect ferromagnetic materials but do not alarm on non-ferromagnetic metals.
- **Fluoroscopy:** The technique using X-rays to produce realtime images. Imaging procedures utilizing this modality include upper and lower gastrointestinal series, cystography, myelography, angiography, and esophageal mobility studies.

- **Fringe Field:** Magnetic field that extends from an MRI scanner and may penetrate walls, floors, and ceilings, into adjacent spaces. Typical expressions of Fringe Field are in units of Tesla (T), milliTesla (mT), or Gauss (G).
- **Full-Time Equivalent (FTE):** A staffing parameter equal to the amount of time assigned to one full time employee. It may be composed of several part-time employees whose combined time commitment equals that of one full-time employee (i.e., 40 hours per week).
- **Functional Area (FA):** The grouping of rooms and spaces based on their function within a clinical service or department.
- **Gamma Imaging:** Nuclear medicine imaging technologies, such as SPECT, that use gamma radiation.
- Gauss: Measure of magnetic field strength. Equal to .0001 Tesla. Also see Tesla.
- **Gauss Line (Isogauss Line):** Lines depicted on plans and sections which indicate the boundaries of the magnetic field at a given field strength.
- **General Purpose Radiology Room**: A room in which general radiography is performed.
- **General Radiology:** Medical imaging which uses X-rays to produce a planar image of the inside of the body.
- **High-Field:** A description typically used to describe MRI equipment equal to or greater than 1 Tesla in magnetic field strength.
- "Hot": A colloquial term used to describe the presence of measurable radioactivity.
- "Hot Lab" / Radiopharmacy: Area for storage, preparation and dispensing of radiopharmaceuticals. Hot labs must be secured and provided with adequate shielding.
- **Imaging / Radiology:** The medical specialty that utilizes imaging examinations with or without ionizing radiation to affect diagnosis or guide treatment. Techniques include radiography, fluoroscopy, ultrasonography, mammography, computed tomography (CT), magnetic resonance imaging (MRI), and nuclear medicine or molecular imaging.
- **Imaging Room:** Designated room containing diagnostic equipment performing patient procedures such as radiography, radiography / fluoroscopy (R/F), breast imaging, ultrasound, interventional radiology (IR), computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine or molecular imaging.
- **Input Data Statements:** A set of questions designed to elicit information about the healthcare project in order to create a Program for Design (PFD) based on the parameters set forth in this set of documents. This information is processed through mathematical and logical operations in the VA Space and Equipment Planning system (SEPS).
- **Interventional Radiology (IR):** Interventional radiology is a medical subspecialty that performs various minimally-invasive procedures using medical imaging guidance, such as x-ray fluoroscopy, computed tomography, magnetic resonance imaging, or ultrasound. IR performs both diagnostic and therapeutic procedures through very small incisions or body orifices.
- **Ionizing Radiation:** A type of energy exemplified by X-rays and inherent to radiopharmaceutical agents, that may lead to the development of chromosomal damage at sufficient levels of exposure.
- **Isocenter:** The center of the imaging volume within a device. In MRI this is typically the location of system's rated field strength.

- **Low-Field:** A description typically used to describe MRI equipment less than 1 Tesla in magnetic field strength.
- Magnetic Spatial Gradient: The rate at which magnetic field strength changes by distance.

  Typical expressions of Spatial Gradient are in units of Tesla per meter (T/m) or Gauss per centimeter (G/cm)
- **Mammography:** Mammography is the process of using low-energy X-rays to examine the breast for diagnosis and screening.
- **MR / MRI:** Imaging technique utilizing magnetic and radio frequency fields to produce computer calculated images of human anatomy and monitor body chemistry. Other terms include magnetic resonance, magnetic resonance imaging and nuclear magnetic resonance. All refer to the same process or modality.
- **MR Conditional:** An ASTM International / FDA designation which indicates that an object is safe under specifically defined MR environmental conditions.
- **MR Safe:** An ASTM International / FDA designation which indicates that an object is safe under all MR environmental conditions.
- **MR Unsafe:** An ASTM International / FDA designation which indicates that an object is unsafe under all MR environmental conditions.
- **Net Square Feet / Net Square Meters (NSF/NSM):** The area of a room or space derived from that within the interior surface of the bounding walls or boundaries.
- **Non-Ferromagnetic:** The property of a material or device which is not attracted to magnetic fields.
- **Non-Ionizing Radiation:** A type of energy exemplified by radiofrequency (RF) transmissions, ultrasound, and magnetism, that is not believed to contribute to the development of chromosomal damage at any current clinical levels of exposure.
- **Nuclear Medicine / Molecular Imaging:** Method of producing images using devices that detect radiation from different parts of a patient's body after administration of a radioactive tracer material. Modalities include Single Photon Emission Computed Tomography (SPECT) imaging, and Positron Emission Tomography (PET).
- **Passive Magnetic Shielding:** Plates of magnetic material that may be provided to constrain the volume of the magnetic field from an MRI scanner.
- **Penetration Panel:** An access point through the RF shield between the MRI Scanner Room and the MRI System Component Room, provided by the MRI equipment vendor.
- **Permanent Magnet:** A material that retains magnetic properties indefinitely.
- **PET/CT:** An imaging modality that combines the functions of both positron emission tomography (PET) and computed tomography (CT).
- **PET/MRI:** An imaging modality that combines the functions of both positron emission tomography (PET) and magnetic resonance imaging (MRI).
- **Picture Archiving and Communication System (PACS):** A system designed for the digital capture, transfer, storage and evaluation of medical images.
- **Positron Emission Tomography (PET):** An imaging modality that generates the signal used for constructing the physiologic image from the energy emissions of a radioisotope that has been injected, ingested, or inhaled, which either binds to or absorbed by targeted cells within the body. Typically provided in hybrid form with another modality (i.e. PET/CT).

- **Program for Design (PFD):** A project specific itemized listing of the spaces, rooms, and areas required for the proper operation of a specific service / department, and the corresponding area for each.
- **Quench:** An event in which the liquid cryogen within an MRI system rapidly boils, escaping to atmosphere. This may be deliberately or spontaneously triggered.
- **Radiofrequency (RF) Shield:** A special enclosure required around all clinical MRI scanner equipment, typically integrated in room construction, which keeps incidental RF energies from interfering with MRI scans.
- **Radiography:** A still image of the density of tissues created through the use of ionizing X-ray radiation.
- **Radiographic / Fluoroscopic Room:** A room containing a radiographic / fluoroscopic system that produces either still photographic records or real-time cinematic images of internal body structures.
- **Radiology Room Chest:** A specific or specialized radiographic room used for routine chest X-rays and those radiographic procedures which can or should be performed in an upright position.
- **Rotational / Torque Effect:** The force exerted on ferromagnetic objects that attempts to align those objects with the polar orientation of magnetic fields.
- **SEPS:** Acronym for Space and Equipment Planning System which produces equipment lists and Program For Design for a healthcare project based on specific information entered in response to Input Data Questions.
- **Shim Tolerance:** The limits for an MRI scanner of the mass of ferromagnetic material that can be placed in proximity to the scanner.
- **Single Photon Emission Computed Tomography (SPECT):** An imaging technique using signal from photons generated by the decay of a radioisotope injected or ingested by a patient. May be stand-alone or provided in hybrid form with another modality (i.e. SPECT/CT).
- **Stereotactic Mammography:** Specialized technique for performing image guided breast biopsies utilizing low-dose x-ray images taken in two planes, allowing the radiologist to precisely locate the tissue to be examined or biopsied.
- **Superconducting:** A property of some electrical conductors where no current is lost to resistance during transmission. The majority of contemporary MRI scanners utilize low-temperature superconducting materials, which must be bathed in cryogenic liquids, to facilitate the generation of high-strength electromagnetic fields.
- **Tesla:** Measure of magnetic field strength. One Tesla (T) is equal to 10,000 Gauss (G).
- **Ultrasound:** Diagnostic ultrasound, also called sonography or diagnostic medical sonography, is an imaging method that uses high-frequency sound waves to produce images of structures within your body.
- **Wave Guide:** A component of an RF shield for MRI and PET/MRI rooms which is used to create an opening in the shielded enclosure that still prevents RF energies from entering the MRI Scanner Room. Needed for all penetrations into the room, including ductwork, piping or openings for medical equipment.

# 1.6 Abbreviations

SYM	DESCRIPTION	
Α	Amperes	
ABA	Architectural Barriers Act	
ADA	Americans with Disabilities Act	
AFF	Above Finished Floor	
AR	As Required	
ASTMI	ASTM International	
AT	Acoustical Ceiling Tile	
AT (SP)	Acoustical Ceiling Tile (with Sprayed Plastic Finish)	
ВС	Base Cabinet	
С	Degree Celsius	
СВ	Circuit Breaker	
СВОС	Community Based Outpatient Clinic	
CC Contractor Furnished, Contract Installed		
CFM	Cubic Feet per Minute	
CLG	Ceiling	
CP Carpet (without cushion broadloom)		
CPT	Carpet Tile	
CRS	Corrosion Resisting Steel (SS)	
СТ	Ceramic Tile	
DG	Design Guide	
DS	Door Switch	
ESS	Essential Electrical System	
F	Degrees Fahrenheit	
FC	Foot-candle	
FD	Floor Drain	
FDA US Food & Drug Administration		
FIXT	Fixture	

SYM	DESCRIPTION	
FLUOR	Fluorescent	
FMS	Facilities Management Service	
GFI	Ground Fault Circuit Interrupter	
GWB	Gypsum Wallboard	
HAC	Housekeeping Aides Closet	
HVAC	Heating, Ventilating and Air Conditioning	
HP	Horsepower	
HR	Hour	
kW	Kilowatt	
LB	Pound/Pounds	
LLTS	Lockers, Lounges, Toilets & Showers	
MA	Medical Air	
MATV	Master Antenna Television	
MCS	Master Construction Specifications	
MID	Motion Intrusion Detection	
MTD	Mounted	
MV	Medical Vacuum	
NFPA	National Fire Protection Association	
NSF	Net Square Feet	
NSM	Net Square Meters	
OCFM	Office of Construction & Facilities Management	
OIT	IT Office of Information & Technology	
ОРС	Outpatient Clinic	
PACS	Picture Archiving and Communication System	
PH	Phase	

SYM	DESCRIPTION	
PL	Plaster	
PFD	Program for Design	
RB	Resilient Base	
RPS	Radio Paging System	
RSF	Resilient Sheet Flooring	
SD	Standard Detail	
SF	Square Feet, Square Foot	
SSTV	Security Surveillance Television	
STC	Sound Transmission Class	
TBB Telecommunications Bonding		
	Backbone	
TGB	Telecommunications Ground Bar	
UPS	Uninterruptible Power Supply	

SYM	DESCRIPTION	
V	Volts	
VA	Department of Veterans Affairs	
VACO	Veterans Affairs Central Office	
VAMC	Veterans Affairs Medical Center	
VC	VA Furnished, Contractor Installed	
VCT	Vinyl Composition Tile	
VHA	Veterans Health Administration	
VTEL	Video Teleconferencing	
VV	VA Furnished, VA Installed	
W	Watts	
WSF	Welded Seamless Flooring	
W/SF	Watts per Square Foot	

#### 2.0 NARRATIVE

## About This Design Guide.

This Design Guide provides both general planning guidance for imaging departments, and guidance to the level of individual imaging resources / modalities. The design criteria in this document have been developed with the intention of balancing the minimum effective standards and industry best practices. Comparing the standards and guidance herein with prior VA Design Guides, the reader will find some rooms very similar to prior releases, and some rooms substantially different. Every implemented change is a direct result of carefully considered changes in technology, patient mix, operational models, and the level of intervention / acuity that each modality supports (and is expected to support over the useful life of this document).

#### 2.1 General

# 2.1.1 About Imaging Services

Imaging Services have traditionally been those used for diagnostic purposes. Increasingly, these services are being used for anatomical guidance for different forms of intervention or therapy. Modalities within Imaging Services include X-ray emitting devices, such as radiography (conventional X-ray), fluoroscopy, and CT, and non-ionizing devices, such as ultrasound and MRI, and devices frequently identified as belonging to nuclear medicine / molecular medicine.

# 2.1.2 Conjoining Separate Design Guides.

In earlier versions of the VA Design Guides, separate Imaging Services (Magnetic Resonance Imaging (MRI), Nuclear Medicine, Radiology Services) were described in different guides. The separations were due, at the time, to distinct uses and planning criteria between and among the different groupings, including patient flows.

Technological innovations have changed both diagnostic / therapeutic capabilities and the very nature of imaging modalities, themselves. Imaging Services are now integral elements threaded throughout the healthcare enterprise, and not simply pieces of hardware collected in a centralized department.

This document unifies previously separate design guidance, though it is not the intent that this unification is to be seen as prescriptive instruction that all of the imaging resources described herein should be gathered in a single contiguous department.

This unification also follows other industry standards which seek to treat previously disparately-managed Imaging Services under a unified structure.



## 2.1.3 Radiology, MRI, and Nuclear Medicine within Imaging

MRI and Nuclear Medicine, which had been previously been described in separate Design Guides, are shown integrated within this document. Sites may choose to integrate or, if facility needs dictate, may pull these sub-departments out to be developed independent of the bulk of Imaging Services.

# 2.1.4 Intraoperative / Interventional Imaging Guidance

This document speaks to planning and design criteria for diagnostic clinical applications, and some interventional clinical applications for Imaging Services. This document covers the usage of conventional diagnostic imaging platforms, such as CT or MRI, as platforms for interventional procedures. For planning and design criteria for interventional clinical applications which use fixed installations of C-arm fluoroscopic devices (single-plane or biplane where the C-arm system is either mounted to an articulated arm on the floor, or suspended from a ceiling track), such as for cardiac catheterization, and for planning and design criteria for surgical uses of imaging systems (i.e. Hybrid OR), please refer to the Surgical and Endovascular Services Design Guide.

#### 2.2 Imaging Services Operations

The planning of Imaging Services requires more than placing pieces of equipment into a floor plan. Issues related to the strategic approaches to the delivery of Imaging Services, and the clinical care that Imaging Services will support, create the expectation that the facility planner will develop the facility layout in collaboration with clinical and operational input from the site.

#### 2.2.1 Public vs. Staff Core Organization

The Imaging Services documents have been developed based on the operational model of a 'front of house' patient accessible portion of the department, and a 'back of house' staff-only work core. Many of the individual imaging rooms illustrated herein are based on the concept of direct patient access to the imaging room from a patient corridor, and direct staff access to the control room / alcove from the staff work core. This concept is expanded upon in Section 3.0, FUNCTIONAL DIAGRAMS.

#### 2.2.2 Merged / Separated Areas

Individual imaging rooms were designed with minimum required dimensions and areas to serve the particular technical, operational, and clinical needs represented by the equipment and the clinical service. These rooms should not be casually modified from the provided room templates.

Support areas, on the other hand, may be understood to have a greater degree of flexibility in how their spaces are assigned, allocated, and configured. As an example, if several Radiology and Radiography & Fluoroscopy rooms were all accessed from a shared staff core, then the support spaces allocated for each room (e.g., Automated Supply Dispensing Unit (ASDU) alcoves) could be conjoined into a larger combined / shared area and would not need to be multiple independent spaces.

## 2.2.3 Central vs. Distributed Imaging Services

Imaging Services may be organized as one central department serving emergency, outpatients, and inpatients, or as separate facilities distributed throughout the enterprise as needed to serve specific patient populations.

These distributed services may be positioned to serve patient origins (e.g., inpatient vs. outpatient), different acuity levels (e.g., imaging surgical patients), separate clinical care pathways (e.g., cardiology vs. oncology), or even to gather services around a patient subgroup with shared needs (e.g., women's health). This distribution may also include imaging resources placed with the intention that they serve uses wholly separate from the general diagnostic role of a traditional radiology department, including interventional imaging, intraoperative imaging, or specialty-dedicated Imaging Services. For example, it is expected that all VA healthcare facilities with an emergency department would have a CT provided.

# 2.2.4 Diagnostic Imaging Processes

One of the principal changes from previous editions of the VA's guidance for these clinical areas is the distinction between diagnostic and interventional procedures. This change is in keeping with the changes in clinical practice and other design standards.

Diagnostic processes are those performed for all patient types, inpatient and outpatient, on a scheduled, as available, or STAT basis, depending on the facility and patient needs. These studies are performed to identify injury or disease process / progression for the purpose of informing subsequent decisions about the individual patient's care.

Diagnostic examinations may also have greater needs for patient care and support depending on the acuity of the patient. For example, if an ambulatory outpatient and a critical ICU patient each need a CT scan of the head, patient care needs above and beyond the specific siting requirements of the CT device should be a major consideration during planning.

#### 2.2.5 Interventional Imaging Processes

Imaging modalities that previously only served diagnostic roles are becoming platforms to inform interventional examinations or procedures. Where diagnostic imaging processes gather information for later decision-making, interventional imaging processes gather information for concurrent decision-making related to an intervention. Fluoroscopic, ultrasound, and CT-guided procedures and MRI-guided biopsies are examples of interventional procedures that are becoming increasingly common in VA medical centers.

Similar to the considerations about patient acuity levels that may present themselves for diagnostic imaging processes, the degree of intervention and the concerns that interventions may bring (e.g. working space for clinicians and equipment, infection control, medical gases and emergency power) should also inform the planning and design of imaging facilities. (See Section 2.3.1, Use of Acuity / Intervention Classes, for further information on patient acuity classifications and the division of authority for design standards between this document and standards for Surgery and Endovascular Services.)

Imaging facilities shall be planned based on their highest anticipated level of regular patient usage (acuity and intervention); facilities planned for higher levels of acuity and intervention may support lower level patient care. The reverse is not true: facilities shall be planned for higher acuity level if it is reasonably anticipated that the patient care needs will require care of higher acuity level patients.



Figure 2.2.5: Example of Class 2 Radiographic / Fluoroscopic (RF) Multipurpose Room that may support higher acuity and/or patient intervention.

Photo: New Orleans VA Medical Center.

# 2.2.6 Imaging Patient Care Support

Providing convenient access to healthcare in a warm and inviting environment is an objective of Imaging Services. Patient education and family consultation can further reduce the stress sometimes associated with imaging exams or procedures for patients who are not familiar with the process and imaging equipment. (See 2.6.7.1, Interior Finishes)



Figure 2.2.6: Example of finishes and artwork used to make more inviting environments within Imaging Services (Image used with permission from RAD-Planning)

It is anticipated that, as imaging utilization continues to increase, patient support spaces such as Dressing Room, Patient Waiting, and the IV Start Room, will be increasingly important in the future if maximum operational efficiency is to be maintained. Projects being planned today should ask 'what if' questions related to significant increases in patient volume capacity per scanner of 10% - 20% over the life of the piece of imaging equipment, or potentially as much as 50% greater throughput with the next replacement.

# 2.3 Imaging and Patient Acuities & Interventions

Just as design criteria in other areas of hospital standards vary between examination rooms, procedure rooms, and surgical rooms in response to the level of patient care, Imaging Services have evolved from only being examination / diagnostic resources, and now serve as platforms for intervention and image-guided surgery. This document provides planning and design criteria based on the different uses of Imaging Services, to allow design criteria to better align with the clinical realities of how these diagnostic and interventional tools are being used.

# 2.3.1 Use of Acuity / Intervention Classes

This document makes use of acuity / intervention classification codes first introduced in the 2018 Facility Guidelines Institute (FGI) design standards. This innovation allows for the planning and design of imaging rooms that respond to differing levels of patient acuity and patient care within an Imaging suite.

Class 1: A conventional diagnostic imaging suite where patients do not require monitoring for cardiac function or respiration, active life-support measures, or where there are no image-guided interventions or moderate sedation conducted.

Class 2: An imaging suite equipped to support high-acuity patients (e.g. ICU or emergent patients), patients undergoing minimally-invasive / percutaneous interventional procedures, or patients under moderate sedation or general anesthesia.

Class 3: An imaging suite equipped to support full and open surgical procedures (i.e., a hybrid OR).

	Level of Patient Acuity*	Level of Sedation*	Level of Intervention*
Class 1	No Monitoring /	Minimal Sedation	IV Access, Natural
(Diagnostic)	Support Required		Orifice Entry
Class 2 (Interventional)	Clinical Monitoring Required	Moderate Sedation / General Anesthesia	Minimally-Invasive Procedure (e.g., biopsy)
Class 3	Active Life-Support	General Anesthesia	Open Surgical
(Intraoperative)	Required		Procedure

TABLE 2.3.1: Imaging Room Classification Matrix

In this document, the design criteria for both Class 1 and Class 2 imaging suites that may typically be found in an imaging department will be provided. Planning and design guidance for suites that would likely be found in a surgical (or near-surgical) environment with permanently mounted (ceiling or floor) C-arm systems, including interventional radiology, electrophysiology, cardiac catheterization, any hybrid OR, are to be found in the Surgical and Endovascular Services Design Guide. Rooms that support multipurpose fluoroscopy units are included in this chapter.



<sup>\*</sup>For highest level of anticipated patient care.

## 2.3.2 Reference To Facility Guideline Institute (FGI) Guidelines

This Design Guide, while representing the VA Standard for planning and design of VA Imaging Service, references the Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Hospitals (2018 edition).

# 2.3.3 Criticality & Support Infrastructure

Different Imaging Services modalities may have different levels of criticality for patient care. An imaging modality that is essential to emergent imaging (e.g., CT) may need to have equipment power, equipment cooling, room lighting, and room power on emergency circuits, whereas modalities that are used for clinical screening (e.g., Bone Densitometry) may not have a justified need to be provided with emergency power. Similarly, Class 2 modalities that may support higher acuity patients or interventional procedures likely warrant greater criticality consideration than would a Class 1 counterpart.

Each modality should be individually evaluated for its criticality and interrupt-ability, with respect to patient care and clinical outcomes. Services for each modality shall be designed and allocated based on the combination of clinical needs and service criticality.

#### 2.4 Changing Facility Needs for Imaging Services

Over the past 20 years, imaging technology and clinical practice has evolved rapidly, and is likely to continue to rapidly change. Clinical, technical, and operational needs — as well as the equipment used to help meet those needs — will be different in the years ahead. Facilities shall be planned, designed, and constructed in anticipation of technological innovation and changing clinical patterns of use.

#### 2.4.1 Current Trends

Imaging Services have seen a trend towards decentralization in many facilities, moving from being organized within a central department to distributed throughout the enterprise in many locations, including outpatient settings. Additionally, hybrid imaging (PET/CT and PET/MRI) have become more common.

#### 2.4.2 Future Trends

Today we see early development of devices that hybridize diagnostics and therapeutics (e.g., MRI/LINAC). The future may prove the usefulness and viability of a variety of new modalities and devices. While today radiation oncology / radiation therapy services are distinct from Imaging Services, in the years ahead these divisions may blur significantly as have prior distinctions between nuclear medicine and radiology services.

The future holds substantial demographic shifts ahead for VA beneficiaries. Both the overall imaging demands, and the specific mix and locations of the imaging modalities required to best meet those new needs, are likely to change. Broadly, we anticipate growth in the demand for Imaging Services, though changes in the speed of imaging equipment may mean that increased demand does not directly equate to more imaging machines and



therefore scanning rooms, but rather to more support spaces for the greater number of patients being served by those modalities.

Given the mission-criticality of imaging for many clinical care pathways in VA healthcare, it is incumbent upon those planning capital projects for Imaging Services to consider not only the immediate project, but also how local needs are likely to change over time. Thoughtful planning of Imaging Services over time – with an eye to future needs – can dramatically reduce the cost and disruptive effects of future capital projects.

## 2.4.3 Strategic Planning

This document does not seek to forecast future imaging needs for any individual facility. It is strongly recommended that facility planners and designers use available information at the station-level to identify forecastable trends in beneficiary population numbers, conditions, etc., to anticipate station-level changes that may occur in the years ahead.

For example, a new service in an area with a growing beneficiary population (or growing utilization needs in a static population) may reasonably assume an increased future need for other imaging equipment. Anticipating future placement of an additional MRI unit or CT scanner, to maximize both patient and staffing efficiency, will serve the facility in the long run.

If, for example, an service was planned in a growing area, where the estimated number of annual procedures was close to (but not quite at) the level that would necessitate two MRI units, a facility planner / designer may be wise to locate 'soft' spaces (e.g. offices or storage spaces) adjacent to the initial MRI suite in an area that might be effectively converted to a second MRI suite at a later date (allowing for staffing efficiencies, and patient wayfinding simplicity of only needing to find a single location for either MRI scanner).

# 2.4.4 Changes in Technology / Clinical Utilization

Most advanced imaging equipment today has an effective first-use lifespan of approximately 6 - 8 years. The healthcare facilities supporting the delivery of VA medical care, by contrast, are often designed anticipating a thirty- to fifty-year lifespan, perhaps more. This means that individual pieces of imaging equipment will be expected to be removed and replaced multiple times over the lifespan of the facility.

When imaging suites are designed to the minimum manufacturer siting requirements of an individual piece of equipment, this often necessitates significant capital expense to modify the buildings / suites in conjunction with an equipment replacement or upgrade. Often the additional cost and delays to patient care stemming from replacement of a 'minimally sited' piece of equipment could be avoided if the imaging suite was designed with space above the equipment's minimum requirements.

Beyond equipment replacement, changes in clinical utilization may make 'minimally sited' equipment impractical or unusable for the range of clinical applications needed by the beneficiary population. The introduction of image-guided biopsies in rooms that never anticipated such a service, as an example, illustrates that while manufacturer minimums



may allow for the siting of the equipment, they may not accommodate the additional personnel, equipment, and working room that an image-guided procedure requires.

This document seeks to anticipate a variety of changes in individual device technology and the clinical utilization. Use of this document (in lieu of manufacturer minimum siting requirement templates) will help individual facilities more effectively transition with changes in equipment, technology, and clinical applications.

#### 2.4.5 Operational Costs

Design and construction project success are often measured against the construction cost, and how closely construction bids matched the estimate. In light of the understandable pressure to control construction project costs, designers and planners should continuously bear in mind that the operational costs of a medical center over ten to twenty years will dwarf construction costs. Planning decisions that may help reduce construction costs (e.g. not revising a layout with a poor line-of-sight) can wind up costing the VA many times more in staffing, and inefficiency (e.g., additional FTEs or underutilized patient areas).

This Imaging Services resource helps the planner and designer with a well-reasoned 'kit of parts.' The 'kit' that these tools can produce helps the talent, wisdom, and expertise of the planners and designers to develop facility plans that also work towards managing the long-term operational costs of the hospital.

# 2.5 Planning Imaging Services Facilities

When planning Imaging Services facilities, the designer must consider a variety of inputs related to the service's relationship to its placement within the building, relationship to patient care needs, and the resulting relationship with other departments / services, in addition to the internal relationships within the service.

# 2.5.1 Imaging Services Space Allocation

Imaging Services space requirements are outlined in the VA Space Planning Criteria: Chapter 295 Imaging Service.

#### 2.5.2 Where within the building

Imaging Services often include a mix of screening activities (to rule-out health concerns or catch disease processes early in their development), diagnostic activities (to better diagnose a condition from symptoms), or interventional activities (where imaging is used to guide a restorative procedure).

Additionally, in most services the significant majority of imaging patients are outpatients, arriving specifically for an imaging study, or for imaging in conjunction with a clinic visit.

It is recommended that Imaging Services be located in readily accessible areas within the building to facilitate efficient and effective flow of outpatients. (See Section 2.5.6, External Departmental Adjacencies) for further information about internal relationships within the hospital.)



#### 2.5.3 Service Design Considerations

Patient waiting areas should be located near the main entrance to the service. Because of the potential physical size of Imaging Services and patient travel distances, it is recommended that Imaging Services reception and general patient waiting be located central to the service. Centralized patient check-in may be provided to simplify the visit for patients as well as provide for staff efficiency. An area for in-person scheduling that provides for patient privacy should be closely adjacent.

For those modalities which require patient preparation, consider the volume of patients requiring special preparation and whether it would be advantageous to have combined IV Start function space, point of care lab testing, and preparing sedation for anesthesia patients, shared among multiple imaging units.

Radiology Rooms used for quick turnaround, high volume examinations such as chest, abdomen, and extremity radiography should be located close to the reception and patient waiting areas to decrease patient travel distance and improve patient wayfinding. Rooms with longer exam times such as MRI, and PET procedures, or higher acuities (e.g., Class 2 Imaging rooms) may be more remote.

All Imaging Procedure Rooms are sized and arranged to accommodate patients with disabilities as well as space for the transfer of patients from a stretcher to the diagnostic equipment (See Section 2.6.11, Safe Patient Handling). Careful planning of ceiling lift systems is particularly important for modalities with ceiling-mounted equipment, such as Radiography / Fluoroscopy systems, to assure that the different ceiling-mounted elements do not interfere with imaging equipment operation.

Radiology and Radiography / Fluoroscopy imaging rooms may be grouped together as they utilize similar support facilities and personnel. Breast Imaging (Mammography) and some Ultrasound imaging rooms (and their associated support spaces, including Patient Waiting and Patient Toilet rooms) may be co-located in service of a Women's Health Center to better respond to patient privacy concerns. Bone Densitometry, predominantly a screening modality, is sometimes sited with screening Breast Imaging, however care must be taken in order to serve male as well as female patients.

Nuclear Medicine / Molecular Imaging modalities and their associated support and patient care functions (including Hot Lab, PET Uptake Rooms, etc.) must have public access restricted, both for patient safety and for the security of radioactive materials (see Section 2.7.4.2, Access Control). Careful planning is required if designing facilities to share staff and support resources.

Further complicating the segregation of hybrid Radiology-Nuclear Medicine imaging modalities is the fact that hybrid PET devices (PET/CT or PET/MRI) may serve as backups to conventional CT or MRI scanners. The potential dual-workflow model of these hybrid imaging modality spaces calls for additional attention to facility planning. (See Section 3.2.8.1, Access Controls & Suite Security)



#### 2.5.4 Internal Adjacencies

It is recommended that planning of Imaging facilities consider a facility's needs for intra-unit adjacencies. If, for example, a facility uses multi-modality technologists, then adjacency / proximity of modalities is constructive for staffing considerations. If radiologists are frequently called to a patient consult (e.g., ultrasound or mammography), then having radiologist office(s) proximate to the Imaging rooms that more frequently require consults is beneficial for both quality of patient care and staff efficiency. Planners are recommended to consult with Imaging Services management to prospectively identify these important adjacencies. (See Section 2.5.6, External Department Adjacencies)

## 2.5.5 Imaging Services Common Rooms / Spaces

There are a number of rooms / spaces within Imaging Services that are common to several modalities. This section seeks to identify and describe the use and function of several of these.

#### 2.5.5.1 Exposure Control Alcove

The Exposure Control Alcove for each Radiology and Radiography / Fluoroscopy room accommodates the controls and room contents to support the control function, and must provide required radiation protection for the radiology technologist and other personnel who may be present. The wall space for each control booth which faces the examination area must accommodate an X-Ray shielded control window. Voice communication between the patient and the radiology technologist is often included as a component of imaging equipment, however provision of staff-to-patient intercom should be assured.

The Exposure Control Alcove must be positioned so that the technologist can observe both the patient in the examination position and the controls simultaneously. For tilting-table X-ray systems, the Exposure Control Alcove must also permit observations of the patient through the viewing window when the table is in the tilted / vertical position as well as when the table is horizontal. It is recommended that the Exposure Control Alcove be designed without a door, to be open into the exam room.

For patient privacy considerations, it is recommended that viewing windows from Exposure Control Alcoves into patient care areas be provided with screens or blinds which can be used to create visual privacy between the Exposure Control Alcoves and the exam room.

# 2.5.5.2 Control Room

The relationship between the Control Room and its associated Scanner Room (e.g., CT, SPECT/CT, MRI, PET/CT, PET/MRI) is that the control room is the location where the technologist operates the scanner from a console desk (and allied clinicians, such as nursing or anesthesiology, may monitor the patient, as needed).

Control Rooms should have the operator's console and viewing window positioned such that the operator, seated or standing at the console, has a clear view of the patient inside the scanner. The configuration of console and viewing window should also give



the operator a commanding view of the interior of the scanner room such that the operating technologist would be able to see any other person in the scanner room attending to the patient. Consideration should be given to whether to place the control surfaces at fixed sitting or standing heights, or with mechanically adjustable height.

While it may be possible to position the Control Room in a location other than indicated on the room templates provided within this Design Guide, the configurations shown in the room templates were developed to maximize safety and efficiency. Alternate relationships between a Control Room and the corresponding Scanner Room may compromise safety, effectiveness, and may be in contravention of codes, standards, and accreditation requirements.



Figure 2.5.5.2: Example of a Control Room's view to the imaging equipment. (Image used with permission from RAD-Planning)

The configuration of the Control Room should also be such that the operator, when at the console, can see the point of entry into the Control Room as well as the direct approach to the entry to the associated Scanner Room.

For patient privacy considerations, it is recommended that viewing windows from shared Control Rooms serving two or more imaging rooms be offset, or provided with screens or blinds which can be used to create visual privacy between the Control Room and the imaging rooms, particularly when it may be possible to view from one imaging room, through a shared control room, into another imaging room.

Shared control rooms can provide more collaborative work environments for the technologists, or they can add distraction. Planners are encouraged to identify Control Room preferences of the site's technical and clinical staff.

## 2.5.5.3 System Component Room

For all modalities for which a System Component Room is indicated in the room templates, System Component Rooms must be provided for any components that aren't required to be in the Imaging room for direct patient care. This is to reduce – and if possible, eliminate – from the Imaging room all equipment that is not designed to support terminal cleaning, or takes space that would otherwise be available for patient care activities.

The System Component Room must be close to the associated Scanner Room. Typically, imaging modalities have maximum allowable distances between the scanner and the system components. It is recommended that the system component room be adjacent to the scanner room. Consult with the imaging equipment manufacturer for equipment-specific distance limitations.

# 2.5.5.4 Stretcher / Wheelchair Alcove

To allow space for temporary holding of beds, stretchers, gurneys, wheelchairs for patients who arrive at an imaging room with these transport devices, it is the intention that each imaging room be provided with an alcove proximate to the patient entrance to the imaging room for the temporary holding of these items.

# 2.5.5.5 Patient Dressing Rooms

Many exams require patients gown and de-gown. Patient Dressing Rooms should be provided as allocated in Imaging Services **Space Planning Criteria** (PG 18-9) to assure that patient care is not slowed due to an inability to prepare patients in a timely manner.

Patient Dressing Rooms must be provided with privacy locks and should have external occupancy indicators. Patient Dressing Rooms with more than one entry must also be provided with means of coordinating access controls between multiple doors.

Many exams can be completed in a fraction of the time that they required 20 years ago, putting increasing emphasis on facility planning for appropriate numbers of patient support and preparation spaces to provide a continuous flow of prepared patients to keep pace with the technological improvements of the scanners.



Figure 2.5.5.5: Example of Patient Dressing Room.

Photo: New Orleans VA Medical Center.

#### 2.5.5.6 **Patient Lockers**

Except for pass-through Patient Dressing Rooms (which provide direct access to an imaging room) in which lockers must be within the room, it is recommended that lockers for patient belongings be placed outside of – but adjacent to – Patient Dressing Rooms such that a patient who just completed their imaging exam can collect their belongings and use any available dressing room.

#### 2.5.5.7 **Patient Waiting**

For the purposes of maximizing operational efficiency, a Patient Waiting area is provided where patients who have been fully screened, changed, and prepared for their exam are available to be moved directly to the exam room for their exam. Patient Waiting should be located on the shortest travel distance to the entry to the exam room as practical.

#### 2.5.5.8 IV Start Room

For patients prescribed exams with IV contrast, a space should be provided to start IVs and provide point-of-care lab testing. This space should be in a location conducive to good patient flow.

#### 2.5.5.9 Medication Preparation Room

Contrast agents are prescription medications and are subject to the same regulatory and accreditation controls. As such, imaging modalities that use contrast agents must have rooms dedicated to the storage and/or preparation of contrast agents. These rooms may be shared among several scanners.

#### 2.5.5.10 Holding Bay, Patient

To accommodate bed and stretcher patients who are brought to Imaging for an exam, a patient Holding Bay, which can also serve as a bed-transfer area, should be provided. This area also provides a preparation and recovery area for sedation and anesthesia (if operationally indicated). The Holding Bay area can also serve as the screening location for inpatients / non-ambulatory patients who might not otherwise proceed through standard ambulatory patient screening or preparation processes (e.g., IV Start, Consultation, or Dressing Room).

The first Holding Bay serving an imaging modality will be provided with a ceiling lift system. Ceiling lifts are to be provided for additional Patient Holding / Transfer bays as determined by a site needs assessment. (See Section 2.6.11, Safe Patient Handling)

#### 2.5.5.11 Nursing Observation Station

To provide a location for clinical observation of patients in the Holding Bay, a Nursing Observation Station shall be located with a view into Holding Bays serving patients who may need observation.

#### 2.5.5.12 Consultation Room

Provision of a patient consultation room in suites where interventional procedures are performed (such as CT, Ultrasound, or Radiography / Fluoroscopy) is considered a best practice. This space provides for a private area for the Radiologist to explain the procedure, obtain informed consent, and follow-up with the patient. This space is also useful when informed consent is required for non-interventional exams.

# 2.5.5.13 Support Area (Staff Work Core)

A best practice is to provide a staff work core for each modality providing "back-of-house" work space and non-public staff circulation while connecting exam and procedure rooms. This space provides for team huddles and planning, required staff computer access, patient arrival and scheduling notifications, staff restrooms, etc. Support areas serving interventional procedures should make provision for Radiologist reading / review stations for procedure planning, case review, orders management, etc. Modality technologist supervisors may have administrative space within the work core.

# 2.5.5.14 Automated Supply Dispensing Unit (ASDU) Alcove

With the increasing usage of automated dispensing machines for more accurate inventory control, each imaging modality is assigned ASDUs based on typical storage needs for the modality and the clinical usage. It is the intention that each imaging room be provided with an ASDU alcove or room proximate to the staff core entrance to the control room / alcove. When multiple modalities share a common staff core, ASDU alcoves may be merged into a large alcove or enclosed room. Individual ASDU devices may be used for storage of materials for more than one imaging device or modality.

When ASDU equipment (e.g., Pyxis, Omnicell) is not used, the assigned NSF for each ASDU alcove may be converted into a storage room, either as multiple individual storage rooms or combined into larger shared storage rooms.

# 2.5.5.15 Apron / Glove Rack Alcove

Alcoves dedicated to the storage of lead apron and glove racks are to be provided as indicated in Imaging Services **Space Planning Criteria** (PG 18-9) as it would be impractical to maintain all sizes and configurations of radiation PPE in each imaging room that uses ionizing radiation. It is the intention that each Apron / Glove Rack Alcove be proximate to the staff core entrance to the control room / alcove for each ionizing radiation modality (X-ray / Radiography, Radiography & Fluoroscopy, CT). Apron / Glove Rack Alcoves may be combined (instead of repeated individual alcoves).



Figure 2.5.5.15: Example of Alcoves for aprons & gloves, and portable units.

Photo: University Medical Center, New Orleans.

# 2.5.5.16 Teaching Reading / Consult Room

In facilities with radiology training programs, spaces for imaging physician exam interpretation, including dedicated Teaching Reading / Consultation Rooms should be provided with effective acoustic isolation from adjacent spaces, sound-absorbing finishes and surfaces in shared work areas, and individually controlled dimmable lighting. When multiple Teaching Reading / Consultation Rooms are allocated, these rooms may be planned either as two individual-station rooms, or may be combined into a larger multi-station communal reading room. Multi-station rooms should ensure ample separation between workstations for sound and privacy control as well as appropriate physical distancing between personnel. Planners should consult with the coordinator(s) of training programs to identify the medical center's preferred format.

#### 2.5.5.17 Conference Room

With imaging's focus on the visual interpretation of clinical images, Conference Rooms used for review of clinical cases will require dimmable lighting and may require larger monitors, or monitors with higher resolution, than conventional conference room monitors.

# 2.5.6 External Departmental Adjacencies

Important relationships between the Imaging Services department and other areas within the medical center exist and shall be part of the planning considerations. Imaging is often central to the patient care pathways for emergent patients, surgical patients, and cardiology. Imaging is also widely used for both outpatients and inpatients of varying acuities (including ICU patients). Imaging Services should be strategically located with proximity to these services, either on the same floor, or close to the patient elevators that provide access to the other floors.

The diagram, below, illustrates the potential for adjacencies between other departments and Imaging Services. If facilities or layouts don't allow for same-floor adjacencies, a similar outcome may be accomplished with clinical services on other floors (dashed circles) when patient elevators are closely accessible to both Imaging Services and the adjacent department.

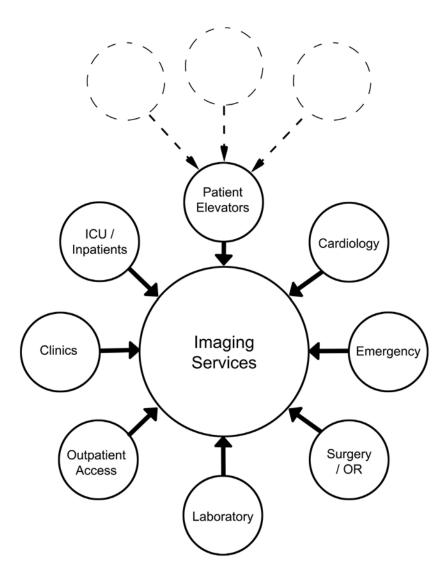


Figure 2.5.6: Illustration of external department adjacency recommendations.



When Imaging Services are centralized, the size of a department and the travel distance between a referring department and the modality (modalities) may be significant. For example, Cardiology may have significantly greater demands for Nuclear Medicine studies than other modalities, so the benefit of adjacency between Cardiology and Imaging Services may be maximized if these most-utilized modalities are closest to Cardiology.

If a distributed Imaging Services model is adopted, individual modalities should be positioned within a facility with an eye towards essential departmental functional relationships and patient care needs.

Planners are advised to consult with Imaging Services management to prospectively identify the clinical departments that most frequently refer patients to each modality.

## 2.5.7 Imaging Equipment Types / Internal Adjacencies

When composing departmental layouts for Imaging Services, it is often beneficial for the planner to consider the 'families' of similar equipment, as these will often share supplies, support, staff, and patient types.

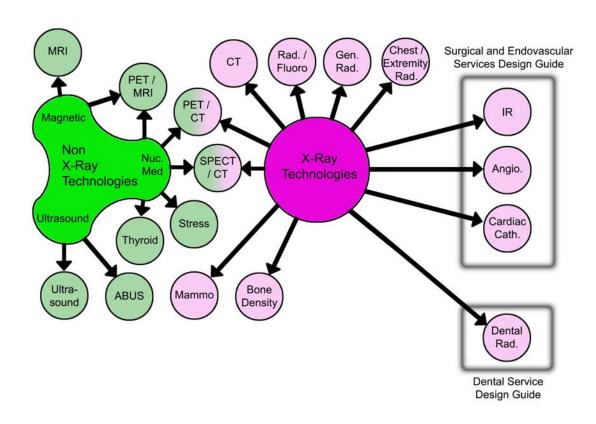


Figure 2.5.7: Illustration of imaging technologies, groupings, and other VA resources.

### 2.6 Building Technical Considerations

Imaging areas, because of the equipment's highly specific siting requirements, will typically require conventional hospital planning and design (e.g., infection control / prevention, medical gas services, etc..), plus equipment-specific designs (which will likely include shielding, equipment cooling, floor loading, etc.).

In addition to the requirements specified in this Imaging Services **Design Guide** (PG 18-12), the most current version of the criteria in the following VA Technical Publications shall be followed, where applicable to the project:

- 1. **A/E Submission Instructions** (PG 18-15) https://www.cfm.va.gov/til/aeDesSubReq.asp
- 2. **Building Information Modeling (BIM) Standard** https://www.cfm.va.gov/til/projReq.asp
- CAD: National CAD Standard, VHA Application Guide https://www.cfm.va.gov/til/projReq.asp
- 4. **Design and Construction Procedures** (PG 18-3) https://www.cfm.va.gov/til/cPro.asp
- 5. **Design Manuals** (PG 18-10) https://www.cfm.va.gov/til/dManual.asp
- 6. **Master Construction Specifications** (PG 18-1) https://www.cfm.va.gov/til/spec.asp
- 7. **Standard Details** (PG 18-4) https://www.cfm.va.gov/til/sDetail.asp
- 8. Sustainable Design https://www.cfm.va.gov/til/sustain.asp

### 2.6.1 Structural Design

Imaging Services frequently have greater structural performance requirements than other areas of the facility.

### 2.6.1.1 Seismic

VA projects are to comply with VA Directive 7512, **Seismic Safety of VA Buildings**, and VA **Seismic Design Handbook** (H 18-8), and its adopted edition of the Interagency Committee on Seismic Safety in Construction (ICSSC) Recommended Practice (RP) Standards. Where required, install all components and equipment with seismic provisions for non-structural components as outlined in the various discipline-specific VA Design manuals for healthcare projects and VA project specifications. These would include, but are not limited to, imaging equipment, shielded assemblies, and overhead cable-trays. Consult with equipment vendor(s) for specifications for anchoring imaging equipment and appurtenances, including electronic cabinets, in seismic zones.

### 2.6.1.2 Building Structure

The size, weight and support requirements for imaging equipment vary greatly between vendors and models. Manufacturer data sheets shall be obtained for each type of equipment under consideration. Configure framing systems to accommodate support and serviceability requirements established by the manufacturer. The structural design



in support of imaging equipment should anticipate future replacement with a new piece of equipment that could weigh significantly more than the initial equipment. It is recommended that structural designs anticipate 'worst case' dead and live equipment loads for future uses of imaging spaces, wall or roof hatches for equipment removal / delivery, as well as the path-of-travel through a building for delivery or removal of imaging equipment and the associated live loading conditions. (See Section 3.2.6.4, Delivery Path)

Shielding (see Section 2.7.2, Shielding) may also add substantially to a design's structural dead load. It is important, when considering the structural implications of siting a large piece of imaging equipment, to include consideration of the shielded assemblies' mass and distribution. These considerations apply both in the design of new structural systems, and the evaluation of existing structural systems' capacity to accept the loads associated with the imaging equipment and associated shielding.

MRI equipment (including PET/MRI) may be adversely affected by conventional steel (including framing members and concrete reinforcing) in the floor below the scanner. Efforts should be taken to eliminate (or minimize) ferrous reinforcing and structural steel content in a region of at least  $9'-10'' \times 9'-10'' \times 3m$ ) centered under the MRI scanner, even below quantities identified as 'maximum permissible' in the siting documents for a single MRI unit.

## 2.6.1.3 Building Vibration

As imaging equipment gets faster and more precise, the equipment's sensitivities to vibration also increase. Structural designs for areas within Imaging Services may be governed by building stiffness and vibration dampening / countermeasures requirements for sensitive imaging equipment. In existing facilities vibration / accelerometer testing may be indicated for prospective site evaluation for imaging equipment with sensitive vibrational tolerances.

### 2.6.2 Mechanical Design

Below is general mechanical design guidance for all of Imaging Services. Cross reference these service-level guidance identified within this standard against specific design minimum requirements from the equipment manufacturer, and additional guidance particular to the modality, as applicable.

#### 2.6.2.1 HVAC Design Standards

Air conditioning systems will be provided to heat, cool, and ventilate the Radiology spaces as required to satisfy VA design criteria and radiology equipment vendor requirements. Make sure adequate cooling and ventilation is provided to Class 2 procedure rooms.

#### 2.6.2.2 HVAC Operation and Capacities

The number of occupants, air change requirements, exhaust requirements, room pressurization, and equipment loads are indicated on the Room Data Sheets in the **HVAC Design Manual** (PG 18-10). This information is for establishing general planning parameters. The design engineer shall verify the actual occupant load and air conditioning load for each specific room on each project. Verify equipment loads for actual equipment to be furnished within that room for the specific project. Refer to ASHRAE 170-2017 for indoor design conditions for spaces not included in **HVAC Design Manual** room data sheets. For spaces not listed in the room data sheets or ASHRAE 170, consult with project management for VA input.

Provide a dedicated computer room type AC unit to cool and control humidity for separate equipment rooms for radiology equipment. Utilize a computer room or fan coil unit for air conditioning of UPS rooms when segregated from other spaces. These units need to be available for cooling 24/7/365 to keep equipment properly cooled. Individual terminal units for zone-level conditioning should be provided for each imaging room to provide for patient comfort and efficient equipment operation. Temperature sensor placement shall be in a location to receive minimal localized temperature effects from heat generating equipment.

Some radiology equipment may require chilled water for cooling of the equipment. The equipment manufacturer vendor drawings will always specify which equipment requires chilled water for cooling. When the equipment requires chilled water cooling, the imaging equipment vendor may furnish a dedicated air-cooled chiller & pumps specifically for their application, or they may be provided by the contractor to meet the specifications of the imaging vendor. When chillers are provided by the imaging equipment vendor, coordinate with the equipment vendor to determine what portion of the chilled water piping between the chiller and imaging equipment is provided by the vendor and what portion is provided by the mechanical contractor.

### 2.6.2.3 Air Quality and Distribution

The design of the air distribution system shall be in accordance with criteria given in the **HVAC Design Manual** and Infection Control guidelines. Specific room pressure requirements are noted on the Room Data Sheets in the **HVAC Design Manual**.

HVAC ductwork, terminal units, and air distribution above ceiling will need to be carefully coordinated to avoid structural supports required for radiology equipment ceiling tracks. Diffuser & grille locations will need to be carefully coordinated with locations of equipment ceiling tracks where required. Diffuser & grille types need to be of a style that will not protrude below ceiling plane where it will inhibit radiology equipment from moving as required for operation.

For most radiation shielding applications in Imaging Services, lead lining in walls terminates at or below ceiling level. However, in special instances where lead linings extend higher and ductwork penetrates the lining, refer to Lead Shielded Duct Requirements in the **VA HVAC Design Manual**.

In MRI and PET/MRI rooms with RF shielding, all penetrations will require wave guides and will utilize details provided by the imaging equipment vendor. These penetration locations must be carefully coordinated with the equipment vendor.

Routing of ductwork, piping, etc. should be done in such a manner as to reduce penetrations thru lead lining and RF shielding as much as possible. (See Section 2.7.2, Shielding)

### 2.6.2.4 HVAC Seismic Design

Where required, install HVAC systems with seismic provisions as outlined in **Seismic Design Handbook** (H 18-8), the Master Construction Specifications (MCS) Section, and Seismic Restraint Requirements for Non-Structural Components.

#### 2.6.2.5 HVAC Noise Level

Select HVAC equipment, ductwork and air distribution devices to achieve noise levels listed in the VA **HVAC Design Manual** (PG 18-10) and with governing healthcare design codes and standards. Particular attention should be paid to HVAC design potential for the communication of high sound pressure levels between interconnected rooms (e.g., from MRI).

### 2.6.2.6 MRI Helium Exhaust / Quench Pipe

See Section 2.7.3.4, Quench Pipe.

### 2.6.3 Plumbing / Piping Design

Plumbing systems will be provided for the Radiology department to satisfy VA design criteria and radiology equipment vendor requirements.

### 2.6.3.1 Water and Waste Systems

Carefully review imaging equipment manufacturer cutsheets to determine if equipment has any plumbing requirements and design accordingly.

When an emergency secondary water supply is required to serve as a backup for the equipment chilled water cooling, proper drainage and backflow prevention assemblies shall be provided. Due to the sensitivity of the equipment, it is preferable to have the backup system be an automatic changeover system rather than manual, with alarms to the building management system. Refer to the imaging equipment manufacturer's details for required backup cooling water supply. This backup changeover assembly can be pre-manufactured in a wall-mounted cabinet enclosure and is available from several manufacturers, or to save money it can be fabricated by the mechanical contractor utilizing the same design requirements.

Where plumbing is required to penetrate radiation shielding, coordinate penetration locations with shielding design to provide appropriate radiation shielding at the penetration point(s).

Where plumbing is required to penetrate MRI RF shielding, coordinate penetration locations with shielding design to provide required wave guides. It is preferable that piping penetrates RF shielding in only one location. All plumbing piping within an MRI shielded enclosure shall be of non-ferrous materials. (See Section 2.7.2, Shielding)

### 2.6.3.2 Medical Gas Systems

The type of medical gases and the minimum number of outlets required of each are indicated on the Room Data Sheets in Section 4.0, Room Templates, for select rooms from Imaging Services. This information is for establishing general planning parameters. The architect and engineer shall verify the actual medical gas locations and quantities for each specific room on each project. The need for medical gases within VHA buildings should be determined during programming. Careful consideration must be given to location of medical gas outlets. In general ceiling mounted access close to the patient location on or in the imaging device is a best practice.

Waste Anesthetic Gas Disposal (WAGD) outlets are shown as an option for local consideration. WAGD infrastructure is recommended for Class 2 imaging rooms.

Where medical gases are required to penetrate radiation shielding, coordinate penetration locations with shielding design to provide appropriate radiation shielding at the penetration point(s).

Where medical gases are required to penetrate MRI RF shielding, coordinate penetration locations with RF shielding design to provide required wave guides. It is preferable that piping penetrates the shielding in only one location. All medical gas piping and outlets within an MRI shielded enclosure shall be of non-ferrous materials. (See Section 2.7.2, Shielding)

#### 2.6.3.3 Fire Protection

The recommended fire protection for the radiology department is a wet pipe sprinkler system in accordance with the VA **Fire Protection Design Manual** and NFPA 75 – Standard for the Protection of Information Technology Equipment.

Where sprinkler piping is required to penetrate radiation shielding, coordinate penetration locations with shielding design to provide appropriate radiation shielding at the penetration point(s).

Where sprinkler piping is required to penetrate MRI RF shielding, coordinate penetration locations with RF shielding design to provide required wave guides. Sprinkler piping and heads within an MRI shielded enclosure shall be of non-ferrous materials. Every effort should be made to minimize piping penetrations thru MRI RF shielding. (See Section 2.7.2, Shielding)

Pre-action ("dry pipe") sprinkler systems, or clean-agent systems may be considered for Imaging Services rooms where the cost/benefit analysis of the risk of accidental activation against the cost or criticality of the service warrant.

## 2.6.4 Lighting And Power Systems

The electrical design for the Imaging Services department shall comply with the VA electrical design criteria and VA Standards Publications.

### 2.6.4.1 **Lighting**

The A/E shall provide complete lighting system design for the project. The VA **Lighting Design Manual** (LDM) provides the A/E with design requirements of the lighting systems such as design parameters and recommended types of luminaires. In term of design standards and codes, section 1.4 of the LDM states a list of design standards and codes that lighting system design must comply with, as a minimum.

In the Imaging Services area, comfort of the patients and requirements to support procedures should be the primary goals the A/E when designing the lighting system. The Lighting Designer and Interior Designer must coordinate their design method and material to create lighting solutions that are patient centric and are comforting, while still meeting procedural requirements.

Control Rooms, Teaching Reading / Consult Rooms, and Imaging Physician Reading Rooms will typically require dimmable and / or indirect lighting systems for visual comfort, reduced glare, reading accuracy, and critical determinations. Individual dimmer switches are required for control of variable illumination levels in all exam and procedure rooms.

The A/E has the option of using either fluorescent or LED lighting technology as the design basis. However, the A/E should confirm the selected lighting system with clinical users, the radiology equipment manufacturer, and design the lighting system based on the preferences / requirements.

## 2.6.4.2 Power

**Electrical Design Manual** (EDM) provides the A/E with design requirements of the electrical power systems. The A/E shall provide the electrical power design system that comply with all applicable requirements stated in the EDM, specifically section 2.1.5 - Radiology Rooms - of the EDM. In term of design standards and codes, sections 1.5 and 1.6 of the EDM state a list of design criteria that the electrical power system design must comply with, as a minimum.

Normal Power: Selected lighting fixtures, receptacles and equipment, not connected to the Essential Electrical System (EES), shall be connected to normal power.

Emergency Power: Selected lighting fixtures, receptacles and equipment shall be connected to the Critical Branch of the EES.

See Section 2.6.8.3, Floor-Mounted Appurtenances / Conduit In Patient Care Areas, for Infection Control guidance for conduit / cable management within patient care areas.

#### 2.6.5 Sound System

A stereo sound system must be provided to all Class 2 Procedure Rooms for Patient comfort that must be specifically designed for the imaging environment in which it is used (e.g., pneumatic sound system for MRI & PET/MRI systems). Contact AHJ 007A2 (Re CFM PG 18-10, Telecommunications, and Special Communications Systems Design Manual (TDM 2016; Paragraph 1.3(a); https://www.cfm.va.gov/TIL/) for specific technical assistance contact information.

## 2.6.6 Information Management Systems

Information Management Systems shall include elements of image retrieval, processing, storage, treatment planning, electronic patient records including patient registration, patient charges, physician order entry, and patient / staff movement.

These systems elements will require high-speed, high-bandwidth access to the facility information system as well as the departmental local area network. A standardized structured cable system and pathway system are provided to facilitate current and future network access.

Sufficient network access points must be planned. In particular, network ports (and power outlets) should be available in alcoves used to park portable X-ray and ultrasound units, as well in storage spaces housing ADSU units.

## 2.6.7 Architectural Design

#### 2.6.7.1 Interior Finishes

To foster a warm and patient-centric environment, planners are encouraged to design spaces with adequate storage to help facilitate clean uncluttered appearances.

Additionally, planners should include views from patient care areas to the outdoors, when practical and desirable. When direct views are not practical, consider the use of natural imagery, particularly within scanning rooms in positions that will be viewable during the imaging procedure. This may mean imagery and artwork on ceilings or walls.

Refer to VA Directive 7531, **Acquisition of Artwork, Decorative Furnishings, and Decorative Items,** for particular sourcing and procurement standards.

Consider the following key factors in the design process, which have an impact on the built environment and the user experience:

- Maintenance
- Durability
- Life cycle cost
- Imaging space acuity / intervention classification
- Shielding requirements
- Serviceability limitations
- Warranty
- Therapeutic attributes (specifically for staff standing for long durations)

- Improved wayfinding (clear demarcation between staff and patient spaces)
- Specify appropriate materials to maximize infection control. These materials can include but are not limited to upholstery fabric with special coatings and moisture resistant backings, stainless steel or solid surface countertops.

Refer to the current version of **Room Finishes, Door, and Hardware Schedule** (PG 18-14) and to the included room data sheets for each modality.

## 2.6.7.2 Wayfinding

Clear delineation of staff spaces and patient / visitor spaces aids in efficient operations within Imaging Services. Also, it should be noted that some staff members will not visit the department regularly. It is therefore important to consider both staff and public routes when designing wayfinding and signage.

Patients and visitors to the department will need to navigate to individual modalities (e.g., "X-ray" or "MRI"). Unified signage and wayfinding within the department pointing to specific modalities is critically important.

Additionally, because of access controls within the Imaging Services department, individual suites or regions of the department (e.g., MRI and Nuclear Medicine) may be locked to casual patients, visitors, and even staff.

#### 2.6.7.3 Partitions

Interior partitions should be primarily painted gypsum wallboard on metal studs. Partitions enclosing physician offices, reading rooms, exam rooms, and treatment rooms should be provided with sound attenuation batts, full height between the studs in accordance with **VA Construction Standard** (H 18-03), and **Noise Transmission Control** (CD 34-1).

Partitions, windows and doors enclosing Radiographic Rooms, Fluoroscopy Rooms, CT Scanning Rooms, Nuclear Imaging Rooms, SPECT/CT Rooms, and rooms with PET function require radiation shielding, engineered by an appropriately certified Health Physicist. Shielding attenuation may be accomplished by shielded finish materials (e.g., leaded gypsum board), or by a composite assembly (e.g., conventional gypsum board over lead foil or filled concrete masonry units). All penetrations in the shielded face(s) of partition assemblies (e.g., electrical boxes, plumbing / ductwork penetrations, and low-voltage telecommunication boxes) will require shielding details to protect the penetration. Construction documents describing shielded partition design or construction will require written shield engineering report prepared by a registered Health Physicist. (See Section 2.7.2, Shielding)

Refer to **Room Finishes, Door, and Hardware Schedule** (PG 18-14) for partition construction and finish specifications.

## 2.6.7.4 **Ceilings**

The finished ceiling height of typical Imaging Services spaces should be a minimum of 9'-0" (2750 mm) above the floor, unless otherwise noted, and be free of dust-collecting overhangs. Consideration of acoustics should be addressed as required by the function of the space.

The surfaces of the ceilings in all Class 2 imaging spaces shall be smooth, impervious, free from cracks and crevices, and non-shedding, thereby promoting cleanability, and minimizing spaces in which microorganisms and other contaminants may accumulate.

Carefully coordinate locations of above-ceiling access (e.g., fan coil access, filter pull) to coordinate with light fixture, air device, and ceiling-mounted equipment positions.

Refer to **Room Finishes, Door, and Hardware Schedule** (PG 18-14) for ceiling specifications.

#### 2.6.7.5 Floors

Cleanability of the flooring material is of primary importance in the imaging rooms. Consider the following when choosing a flooring material:

- Smooth, impervious, non-shedding, free from cracks
- Readily cleanable
- Resistant to damage by disinfectant agents

In addition, in rooms where radiopharmaceutical materials may be stored, drawn-up, or administered, floors shall be impervious resin.

Flooring material selection in MRI and PET/MRI areas shall take into consideration that powered floor cleaning machinery such as vacuums and buffers are never to be brought into the scanning rooms. Materials must be chosen with consideration of manual cleaning.

The use of softer, anti-fatigue, ergonomic flooring should be considered in control spaces, but due to the frequency of heavy rolling loads in imaging rooms, padded flooring materials are contraindicated for scanning rooms and any rooms where shielded transport containers will travel (e.g., Radiopharmacy and Uptake Rooms).

Subfloors in some rooms may require either a depressed slab trench to facilitate installation of the floor duct / raceway system, or (preferably) under-floor conduits. Coordinate substructure design and preparation, equipment installation requirements, and floor finishes. (See Sections 2.7.2.3, RF Shielding for MRI, and 2.6.8.3, Floor-Mounted Appurtenances / Conduit In Patient Care Areas)

Refer to **Room Finishes, Door, and Hardware Schedule** (PG 18-14) for flooring specifications.

#### 2.6.7.7 Wall Protection

Wall and corner guards should be used in corridors and all other areas where damage from cart and stretcher traffic is anticipated. 'Rub rails' should be used in alcoves and storage spaces intended for the storage / holding of rolling equipment (e.g., computers on wheels (COWs), crash carts, gurneys, linen carts, etc.).

Refer to **Room Finishes, Door, and Hardware Schedule** (PG 18-14), for additional information.

#### 2.6.7.8 Handrails

Provide handrails, wall guards (crash rails) should be installed on both sides of all corridors with walls constructed of gypsum board, veneer plaster, or plaster. Provide continuous reinforcing in the wall for attachment of handrails and wall guards.

#### 2.6.7.9 Interior Doors and Hardware

Interior doors should be 1 3/4-inch-thick solid core flush panel wood doors or hollow metal doors in hollow metal frames.

Doorjambs, except in rooms with radiation shielding, should have hospital type sanitary stops that stop 8 inches from the floor to facilitate mopping. Hollow metal doors should be used where high impact is a concern and where fire rated doors are required. Kick / mop plates should generally be applied to both sides of the doors. Handicapped accessible hardware should be used throughout.

Doors, frames, and door hardware placed in radiation-shielded partitions must be shielded to the minimum level of the wall into which they are placed, unless otherwise indicated in the shield engineering report. Penetrations in a shielded door (e.g., glazed lites or locksets) must be shielded to the minimum level of the door into which they are placed, unless otherwise indicated in the shield engineering report. (See Section 2.7.2, Shielding)

Doors, frames, lites, and door hardware placed in radiofrequency-shielded partitions (for MRI) are typically provided by the RF shield vendor and must maintain the shield integrity / RF attenuation required by the MRI manufacturer.

For Patient Dressing Rooms and single-occupancy toilet rooms, it is required that doors be provided with privacy locks and strongly recommended that door systems include an exterior-facing occupancy indicator.

In some instances, sliding doors (either surface mounted 'barn doors', or pocket doors) may provide space-saving alternatives to conventional swinging doors, but may require more wall area adjacent to the door opening. Always consult governing life safety codes and standards for doors and hardware for requirements for smoke / fire separation and for egress path requirements.

Refer to Room Finishes, Door, and Hardware Schedule (PG 18-14) for additional information.

#### 2.6.7.10 Casework

Casework may be millwork or modular. Within Imaging rooms, a mix of floor-mounted and wall-hung floating base cabinets are shown and recommended both for ergonomics and to facilitate cleaning / infection control within rooms.

Carefully coordinate among cabinetry designs, shielding requirements, and construction preparations for mounting / hanging when mounting casework on partitions that are shielded for radiofrequency or radiation. Unintentional penetrations through shield assemblies may jeopardize the health and safety of building occupants, or may significantly impair the operation of mission-critical imaging equipment.

In all patient care areas, casework work surfaces are to be solid-surface countertops, except for PET Uptake Rooms where countertops will be stainless steel. Casework systems developed for work surfaces should provide for cable management (e.g., grommets and under-surface cable management) and ergonomic placement of computer workstations and flat screen monitors. Modify casework design, as indicated, when casework or countertops are used as tether point anchors for MRI & PET/MRI suites.

Consideration shall be given to sit-stand furniture for work surfaces in lieu of fixed countertops or casework systems for work surfaces, including in imaging control rooms.

#### 2.6.8 Infection Control

Infection prevention / infection control is a foundational obligation of all healthcare facility design and construction. Due to the increasing levels of patient acuity and intervention within Imaging Services, infection control measures are increasing in importance within Imaging Services.

### 2.6.8.1 Acuity Classification

Individually and collectively the modalities provided within Imaging Services were often referred to as "diagnostic imaging." With the increasing use of Imaging Services as a platform for intervention, a room classification system has been developed to tailor planning, design, and construction standards to the level of care being provided. The intervention / acuity classification directly affects the design and construction standards for many elements of the building (e.g., finishes, HVAC requirements, hand washing stations, etc.). (See Section 2.3, Imaging and Patient Acuities & Intervention)

### 2.6.8.2 Mycobacterium Tuberculosis

Radiology waiting rooms programed to hold patients who are waiting for chest x-rays for the diagnosis of respiratory disease shall be provided with a minimum air changes per hour per current requirements from the VA Task Force on Transmission of Mycobacterium Tuberculosis, TB criteria in **HVAC Design Manual** for Hospital Projects, and the latest edition of the CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Healthcare Settings.



## 2.6.8.3 Floor-Mounted Appurtenances / Conduit In Patient Care Areas

Within scanning rooms and patient care areas, floor-mounted cables, conduits, wireduct, and raceways represent both tripping hazards and obstacles to comprehensive cleaning. Project-provided conduit and cable management (apart from cable management provided by imaging equipment manufacturer) will be designed to facilitate comprehensive cleaning within patient care areas.

### 2.6.9 Security / Life Safety

Contact AHJ 007A2 (Re CFM PG 18-10, **Telecommunications**, and **Special Communications Systems Design Manual** (TDM 2016; Paragraph 1.3(a); https://www.cfm.va.gov/TIL/) for specific technical assistance contact information for each Security/Life Safety area.

Imaging Services impose unique requirements to facility security and life safety designs, due to the required access restrictions, and physical hazards particular to the imaging equipment and support infrastructure.

### 2.6.9.1 Security and Access Control

Security and access control requirements apply to Imaging Services suites. Areas and suites within Imaging Services, particularly MRI and Nuclear Medicine areas, require access restrictions / access control systems that are not standard in many other clinical areas of the medical center (see Sections 2.7.4.2, Access Control, 3.2.6.2, 4-Zones, and 0, Access Controls & Suite Security (PET/CT or PET/MRI)). Specific patient privacy and HIPPA requirements affect FMS and shared IT system components location, separation from non-secure components, and local staff screen or display orientation. PACS server rooms and other critical Imaging Services FMS and shared IT infrastructure areas require access control systems.

### 2.6.9.2 Life Safety

In addition to conventional life safety design considerations (e.g., exiting, smoke / fire detection, exit lighting, fire compartmentalization, etc...), Imaging Services also present additional fire and life safety considerations, including:

- MRI Zones and access controls,
- Magnetic fringe fields,
- Cryogen exhaust exclusion areas,
- Nuclear Medicine access controls, and
- Radioactive materials

The minimum width of corridors in areas used by Imaging Services inpatients is 8'-0".

#### 2.6.10 Sustainable Design

Comply with requirements shown in current edition of the VA **Sustainable Design Manual**.



### 2.6.11 Safe Patient Handling

Injuries of workers associated with manually moving patients is one of the largest sources of healthcare occupational injury. Where practical, room templates include enough space to facilitate safer patient transfers.

Additionally, most of the imaging rooms are shown with ceiling-mounted patient lift systems. It is expected that the first of the highest Class of any modality would be provided with a patient lift system. Imaging modalities provided at lower acuity Classes, or additional modalities of the same Class, should be provided with patient lift systems as the local need indicates.

Ceiling-mounted patient lift systems which are not tested and labeled as "MR Conditional" are not to be installed in MRI or PET/MRI rooms. Similarly, portable patient lifts which are not tested and labeled as "MR Conditional" are not to be brought to the MRI controlled-access areas (Zones 3 and 4). Patient lifts for these clinical services are to be provided in the Patient Holding Bay, either placing the patient directly onto 'dockable' MRI tables that may be rolled into the MRI Scanner Room and directly connected to the MRI scanner, or onto an MR Conditional transport table from which a horizontal transfer will be made to the MRI table within the MRI Scanner Room.

Consult VHA Directive 1611, **Safe Patient Handling and Mobility Program**, for specific direction and standards.

### 2.7 Imaging Modality Considerations

### 2.7.1 Equipment

Imaging clinical equipment has very specific siting requirements and should be thoughtfully planned and sited as integrated elements of a building to optimize equipment performance, and efficient workflows. Carefully coordinate with imaging equipment manufacturer siting guidance for site selection / preparation, power, HVAC, and structure. Additionally, planners shall consult with local VHA stakeholders on clinical use, criticality and acuity/intervention class determinations.

## 2.7.2 Shielding

Radiation shielding, the specifications for which must be developed by a health physicist or medical health physicist, is often necessary to protect adjacent occupancies. In some instances, conventional building materials may provide adequate levels of radiation shielding, depending on what occupancies are on the other side of the walls, floor, or ceiling. Floor depressions and / or door jamb reinforcement are sometimes necessary to accommodate shielding assemblies.

Radiation shielding assemblies may potentially add significantly to the structural loads of a building, so consider the weight of shielded partitions, doors, ceilings and floors. Structural designs must be informed by radiation shielding requirements. In retrofit situations,



structural design reviews must consider the increased structural burden of shielding. (See Section 2.6.1, Structural Design)

## 2.7.2.1 Shielding for Ionizing Radiation – Occupant Safety

Shielding for ionizing radiation sources must be designed based on site-specific criteria determined by an appropriately credentialed health physicist or a medical health physicist. For X-ray and radiopharmaceutical-based ionizing radiation sources, with the exception of PET/CT devices, shielding is to be designed to conform with National Council on Radiation Protection & Measurement (NCRP) Report No. 147. For PET/CT devices, shielding is to be designed to conform with American Association of Physicists in Medicine (AAPM) Task Group 108, PET and PET/CT Shielding Requirements. Planners must include VACO National health Physics Program in project reviews of ionizing radiation shielding.

Retrofitting supplemental shielding into existing operational imaging facilities is often difficult and expensive. As a result, VHA directs the shielding engineering and design to presume maximum usage (hours, duty cycle, and energy) and worst-case adjacent occupancies for design calculations for all ionizing shield assemblies.

As a general rule, VHA discourages the use of imaging device-disabling door-interlocks for X-ray based imaging suites, as they can disrupt an exam or procedure at a critical moment and may substantially increase the patient dose (if a study is interrupted partway through and needs to be repeated). Such inadvertent exposures represent a substantially lower risk to a person in the doorway than to the patient receiving the exam. If door-interlocks are required for a local code, standard, or accreditation requirement, it is recommended that the interlock disable exterior access hardware on a patient-side entrance to the imaging room upon X-ray tube activation. Such interlocks and door hardware systems should be designed such that at no time do they inhibit emergency egress from an imaging room, and only prevent ingress when an X-ray tube is active. (See Section 2.6.7.8, Interior Doors and Hardware)



Figure 2.7.2.1: Example of lead-shielded door with lead layer visible in the center of the door slab. (Image used with permission from RAD-Planning)

Appropriate ionizing radiation shielding materials, thicknesses, densities, assembly methods, and required locations vary significantly based on a variety of factors, including the type of radiation, intensity of radiation, adjacent occupancy type, and distances between the radiation source and nearby occupied areas.

Just as the ionizing shielded assemblies vary, so too do the requirements or best practices for penetrating ionizing radiation shielding for services (including electrical power, ductwork, piping, etc...). For many X-ray devices, radiation shielding in walls may only be required to extend to 7'-0" above the finished floor such that no special penetrations are required of walls above the height of the wall shielding. For other radiation sources, such as radiopharmaceuticals commonly used in PET imaging, radiation shielding requirements may require shielding of all surfaces in a room, potentially including ceilings and floors, such that penetrations may need to be of a special shielded construction. In all cases, conform to the shielding performance specifications defined by the project's health physicist or medical health physicist.

Accrediting bodies may require both documentation of credentialed health physicist's or a medical health physicist's prospective design for ionizing radiation shielding and documentation of post-construction shield integrity validation / acceptance-testing.

#### 2.7.2.2 Shielding for Ionizing Radiation – Detector Sensitivity

'Cross-talk' is the phenomenon where a sensitive imaging detector, such as those used in SPECT and PET imaging, may be able to 'see' a radioactive material source through the wall on the outside the scanning room, potentially corrupting the medical image and leading to misdiagnosis. Shielding designed for the safety of building occupants may not be sufficient to prevent 'cross-talk' between ionizing radiation sources and sensitive detectors. In many cases supplemental shielding to prevent 'cross-talk' will not be required if ionizing radiation sources (such as hot lab, uptake, stress test, hot-patient waiting, or corridors down which radiopharmaceuticals or hot patients may travel) are not positioned in the direction of the scanner's detection, and proximate to the scanner location.

Sometimes, however, site constraints necessitate placing a corridor along which radioactive materials will be transported next to a PET/CT scanner room, as an example. When this occurs, it is incumbent upon the credentialed health physicist or a medical health physicist to provide shielding design that not only meets the occupant safety criteria (see Section 2.7.2.1, Shielding for Ionizing Radiation – Occupant Safety), but also provides attenuation to prevent corruption of diagnostic images (and the potential for repeat patient exposure) from radiosource 'cross-talk.'

### 2.7.2.3 RF Shielding for MRI

The overwhelming majority of contemporary clinical MRI scanners (and PET/MRI scanners) require radiofrequency (RF) shielding installed in the room construction. This shielding is required to be continuous on all surfaces (including walls, ceiling and floor) of the MRI scanner room. Unlike common X-ray shielding, RF shielding does not contain any of the energies from the MRI scanner within the room. The exclusive purpose of RF shielding is to keep external radiofrequency noise from entering the MRI scanner room where it could corrupt the images produced by the MRI scanner.

In new construction the floor substrate for an MRI room must be depressed 1'' - 2'' (25 – 50 mm) from the adjacent areas (to allow for leveling layers, ground isolation, shielding materials, and protective overlayments) to allow for consistent finished floor elevations, reducing potential elevation changes at the threshold to the MRI scanner room.

Services entering / serving the MRI room (e.g., ductwork, lighting and power circuits, sprinkler piping, med gas piping, etc.) must pass through specific penetrations, called wave guides, as coordinated with the RF shield vendor and per the recommendation of the MRI system manufacturer.

RF shielding assemblies are frequently made from copper foil panels, bolted together; or galvanized sheet metal sandwiched on both sides of a particleboard substrate, joined by compression fittings. The material and assembly system must be warranted to meet the minimum RF attenuation criteria established by the MRI system manufacturer for the specific MRI machine that is being sited.

RF shielding for MRI will be erected in-place and tested for acceptance prior to the delivery of the MRI system and prior to the completion of interior finishes for the MRI scanner room. The RF shielding shall be designed with removable panels that will accommodate the delivery of the MRI system. The size and location of the removable panel must be coordinated with other building systems (i.e., not in a portion of the wall with plumbing, electrical, or HVAC obstructions), the intended delivery path of the MRI equipment traveling through the building, and the minimum dimensional clearances for the MRI equipment being purchased (See Section 2.6.1.2, Building Structure, and 3.2.6.4, Delivery Path). Following the delivery of the MRI scanner and the closure of the removable sections of the RF shield enclosure, the RF shield assembly must be tested for acceptance again, prior to the full closure of the finish wall and ceiling.

## 2.7.2.4 Passive Magnetic Shielding for MRI

MRI scanners produce a magnetic field that is three-dimensional. Levels of magnetic energy which may be disruptive to other equipment or that may pose potential dangers to the unscreened public must be contained. Most contemporary MRI scanners make use of active magnetic shielding, a feature built-in to the MRI scanner which restricts the spread of the magnetic field around the MRI scanner. Active shielding makes the size of the magnetic fringe field around an MRI scanner significantly smaller than it would otherwise be, but the reduction in size provided by active shielding, alone, may not be sufficient. In some instances, passive magnetic shielding built into the walls, ceiling, or floor of the MRI scanner room is needed, in addition to active magnetic shielding, to constrain magnetic field disruptions or hazards.

In general terms, passive magnetic shielding for MRI is similar to that of X-ray shielding in that its purpose is to contain the spread of the magnetic field that emanates from the MRI scanner.

Passive magnetic shielding is typically made of steel plate or sheets, assembled to achieve the mass and shape desired to provide the engineered level of magnetic field attenuation. Passive magnetic shielding may be applied on one part of an MRI scanner room (or immediately outside the MRI scanner room) to attenuate the magnetic field in that specific direction.

Whereas RF shielding must be on all sides of the MRI room, passive magnetic shielding can be localized in many circumstances. Passive magnetic shielding also does not require specialized penetration provisions, as does RF shielding (though cutting holes or interrupting the continuity of the magnetic shield may produce localized 'hot spots' of magnetic energy).

As described in Section 2.7.3, MRI Room / Suite Design, the presence of ferrous materials (of which MRI magnetic shielding is made) can have a disruptive effect on the magnetic field of the MRI scanner. In instances where significant quantities of passive magnetic shielding material are used on the 'right' side of an MRI scanner room, a similar quantity of 'compensating steel' may need to be placed on the 'left' side of the MRI scanner room in an attempt to counteract the disruptive effects of the passive

shield's ferromagnetic materials acting on the magnetic field of the MRI scanner. Most passive magnetic shielding installations do not rise to the level of needing compensating steel, but when they do, the cost and structural load can increase, dramatically. (See Section 2.6.1, Structural Design)

Generally speaking, the construction cost associated with increasing the size of an MRI Scanner Room (to include the magnetic field values determined to be disruptive to equipment or dangerous to people) is similar to the cost of the most modest passive magnetic shielding. While the use of passive magnetic shielding can obviate the need for an MRI Scanner Room to be increased in size to include a fringing magnetic field line, it does not usually result in any construction savings.

As with RF shielding, passive magnetic shielding must anticipate the delivery path of the MRI scanner, and – depending on the locations / surfaces to which passive magnetic shielding has been added – may require removable sections. (See Sections 2.6.1, Structural Design, and 3.2.6.4, Delivery Path)

While not always possible or practical, this Design Guide recommends planning and layout efforts to reduce or eliminate the necessity of passive magnetic shielding, including increasing the size of the MRI scanner room (or adjacent restricted areas) to keep sensitive equipment or unscreened persons out of the affected area.

## 2.7.3 MRI Room / Suite Design Considerations

In addition to the overall MRI suite planning and composition and specific shielding elements that are a part of MRI room construction (see Section 2.7.2.4, Passive Magnetic Shielding), there are planning and construction elements that are unique to MRI environments (applicable to PET/MRI, as well), that warrant additional attention and concern.

#### 2.7.3.1 Space planning for MRI.

The physical design of most MR scanners (long bore, close proximity of gantry walls) along with induced noise from the scanner can result in an intimidating environment for the patient. These issues are magnified in patients with claustrophobia or post-traumatic stress disorder. The designer must take these factors into account when planning MR spaces.

Including extra square-footage beyond the manufacturer's recommended minimums will go a long way towards creating an open, inviting space. Built-in storage with flush surfaces is another best practice to eliminate clutter from coils and other supplies and will enhance the overall impression of openness (and has the added benefit of making disinfection easier following exam of a patient with respiratory precautions).

Where feasible, natural lighting can greatly improve the patient experience. Patient selectable mood lighting schemes and large-scale electronic display panels displaying nature scenes are another strongly recommended best practice.

#### 2.7.3.2 Four Zone Planning

It is critical that the designer and planner be familiar with, and implement, the Four Zone safety model established by the American College of Radiology (ACR), and as further defined by VHA Directive 1105.05, Magnetic Resonance (MR) Safety. (See Sections 0, Magnetic Resonance (MR) Safety Directive, and 3.2.6.2, 4-Zones)

## 2.7.3.3 Magnetic Field Containment

The magnetic fields generated by MRI devices can be disruptive / damaging to the function of some medical devices. No person should have access into rooms or areas where the static magnetic field reaches potentially harmful levels, unless that person is appropriately screened for potential contraindications. This may often be accomplished by the composition or rooms (see Section 2.7.3.11, MRI System Component Room), or through the use of passive magnetic shielding (see Section 2.7.2.4, Passive Magnetic Shielding for MRI).

## 2.7.3.4 Quench Pipe

Most superconducting MRI systems require a dedicated quench pipe (sometimes referred to in manufacturer literature as cryogen vent or helium exhaust pipe) from the MRI scanner to exhaust the cryogenic coolant under certain fault conditions. For those superconducting MRI systems that so require, provide a dedicated quench pipe run as directly as possible to the outdoors. The quench pipe must meet the pressure specifications and is to be fully insulated from the MRI scanner to the point of exiting the building per the minimum requirements of the MRI system manufacturer. At the point of discharge, the vent pipe must provide a weather-head to prevent the introduction of horizontally driven precipitation.

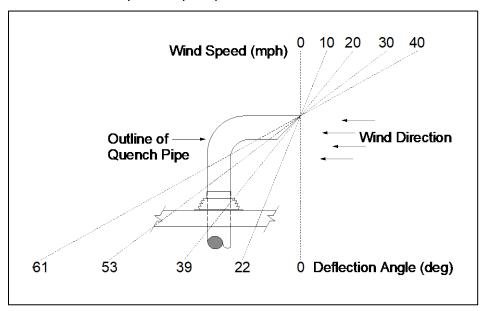


Figure 2.7.3.3-1: Diagrammatic illustration of how wind-driven rain can defeat a 90° quench pipe discharge with 45° chamfered end.

(Image used with permission from RAD-Planning)



Quench pipe minimum diameter increases with the running length of the pipe, with bends or turns, and may increase more rapidly for horizontal or low-slope runs, as compared to vertical runs. Verify minimum design and engineering designs for each MRI system, individually, from the MRI manufacturer's system-specific criteria.

With MRI equipment often located in lower building floors, vertical quench pipe runs in multistory buildings need to anticipate increasing pipe diameters as the pipe chase rises through the building. When the MRI is placed in a lower floor of a multi-story building, consideration should be given to the possibility of a horizontal quench pipe discharge, or a hybrid design where the quench pipe rises a floor or two, and then turns horizontal to discharge out a side wall.

Horizontal quench pipe runs should be positively draining such that any water that condenses or accumulates within the horizontal portion of the quench pipe drains away from the MRI scanner to an escape.

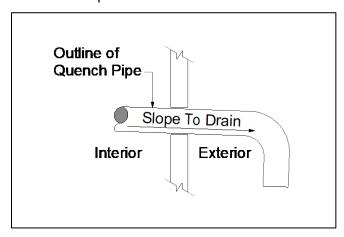


Figure 2.7.3.3-2: Diagrammatic illustration of a horizontally-discharging quench pipe sloped to drain liquid condensate towards the exterior.

(Image used with permission from RAD-Planning)

Cryogenic gas vent discharge shall be located away from air intakes or operable windows. Though quench vent discharge clearances vary by MRI system, many manufacturers call for up to a 25-foot (8 meter) horizontal radius exclusion zone, which should be clearly marked (vertical clearance requirements are more varied among MRI system manufacturers). Staff and contractor personnel must be restricted from working in exclusion zone(s) until they have been educated to the risks of cryogenic gases escaping the vent pipe. Barriers to prevent the close approach to the point of cryogenic gas discharge are required in any area of public access. Refer to MRI equipment manufactures site specific equipment drawing for sizing and connection details relating to the quench piping.

Warning signage should be provided alerting persons of the cryogen discharge risk. Signage placed at the quench pipe discharge should have text large enough to be read from outside the exclusion zone (text size minimum 2.25" / 60mm at 25 feet / 8m). Alternatively, multiple smaller signs may be placed at the perimeter barrier of the exclusion zone.



Figure 2.7.3.3-3: Example of warning signage text to be placed near quench pipe discharge or around the exclusion zone perimeter.

(Image used with permission from Rutke Signs)

When cryogenic gas vent discharges directly onto a portion of the building (e.g., pointing downward towards a roof surface), it is strongly advised that the design of the surface include protective, insulating, and/or sacrificial layers where the cryogen gas discharge would otherwise strike the building surface. The extraordinary low temperatures of discharging helium gas impart significant thermal stresses on all materials they encounter. When striking roofing materials, cracks in roofing membranes or separation of flashing / gasketing materials following exposure to helium discharge is a known risk. Protective barriers as simple as rigid insulating foam sheets ballasted and protected by a layer of concrete pavers can be low-cost means of mitigating roof damage resulting from exposure to cryogenic gases.

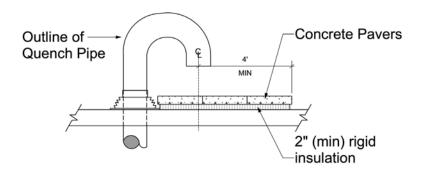


Figure 2.7.3.3-4: Diagrammatic illustration of a sacrificial roof protection assembly. (Image used with permission from RAD-Planning)

Sites with multiple MRI scanners must not tie multiple MRI quench pipes into a common discharge. Multiple quench pipes should be individually 'homerun' from the individual MRI scanner to the discharge point, though multiple independent quench pipes may share common shafts or chases, or may discharge in the same area.

Per manufacturer direction for MR systems requiring quench pipes, quench pipe assemblies, including building interface / penetrations, must be inspected annually for condition and immediately following any quench event. Additionally, any event that may result in compromise of the quench vent pathway (including building construction, building damage, or seismic event) should trigger a quench pipe inspection.

#### 2.7.3.5 HVAC

Provide a dedicated emergency exhaust system to exhaust the MRI Scanning Room in the event of a cryogen discharge into the room. The system shall be activated automatically by the MRI alarm panel (when MRI systems include an automatic quench alarm relay available to building control systems) and manual wall switches. One manual wall switch shall be located inside the MRI Scanning Room and another shall be located at the operator's console in the MRI Control Room. Where an oxygen sensor is used, the sensor shall be located in return ductwork serving the MRI room outside of the room shielding. Provide a duct access panel for maintenance and calibration. Locate the grille for the exhaust system in the ceiling to the rear of the MRI Scanner Room, opposite the location of the MRI Scanner Room door. The room supply terminal unit shall be set to operate at the required airflow to makeup the emergency exhaust airflow upon activation of the fan.

Return air duct serving the MRI Scanner Room shall be equipped with an electronically actuated damper, located outside of the MRI Scanner Room, to close whenever the MRI Scanner Room emergency exhaust fan is activated. AHU serving this space must have makeup air for when exhaust fan is running accounted for when evaluating outside air requirements of unit serving this space

Provide any and all room temperature sensors, smoke detectors, or humidistats within the return air duct serving the MRI or PET/MRI scanner room downstream of the wave

guide. Provide a duct access panel for maintenance and calibration from a location outside of the MRI Scanner Room.

As directed by MRI equipment vendor's requirements all ductwork, piping, fasteners, hangers and appurtenances within the radio frequency (RF) shield shall be non-ferrous. This non-ferrous requirement applies to all disciplines and trades. Ductwork penetrations must utilize RF wave guides at the shielding feed-through points. Verify that the diffusers and grilles are MRI rated by the manufacturers as some aluminum grilles contain steel brackets not allowed in the MRI room.

Terminal units cannot be located within shielding and should be located outside of MRI Scanner Room with access for maintenance. (See Section0 , Overhead / Plenum Services)

Many superconducting MRI systems require a form of overpressure relief in the event of a cryogen breach into the MRI Scanner Room. Consult the MRI equipment vendor and RF shield vendor for recommended details. It is strongly recommended that overpressure relief systems not open into occupied areas, and instead discharge to the exterior or typically unoccupied spaces (e.g. interstitial floors or large plenum spaces), whenever possible.

## 2.7.3.6 Equipment Cooling

Persistent equipment cooling is required for most MRI scanners, even when not scanning patients. MRI vendors may make available dedicated chillers. Coordinate MRI chiller design with the site-specific requirements. In some instances, medical center chilled water systems may be used in lieu of a dedicated equipment chiller for equipment cooling. This requires year-round daily consistency of temperature and flow of the building chilled water system, falling within very narrow specifications to be used for equipment cooling.

Extended power interruptions to an MRI system's refrigeration / cooling system will cause an MRI to lose liquid helium at an accelerating rate, ultimately resulting in an MRI system quench. Sites with multiple MRI scanners may be able to pipe crossover manifolds between MRI scanner equipment rooms and sustain more than one MRI's essential quench-preventing refrigeration system in the event one MRI's chiller fails.

If MRI is determined to be clinically critical and required for patient care in the event that equipment cooling chiller(s) are off-line, the manufacturer recommended method is domestic water backup with an automatic changeover when building chilled water system does not meet the MRI manufacturer's specification. If an automatic domestic water system is provided, appropriate alarms to the building control system must be provided. Coordinate the method of backup equipment cooling with the facility.



## 2.7.3.7 Overhead / Plenum Services

Because of tool and equipment safety restrictions when working around an energized MRI scanner, coupled with the time and cost associated with de-energizing an MRI scanner and disassembling ceiling shielded structures, it is strongly recommended to avoid running any piping or ductwork that could need servicing in the plenum directly over an MRI scanner room. Similarly, it is also recommended to minimize roof / floor penetrations immediately above the MRI RF shielded enclosure. Put any serviceable equipment (including duct detectors, access panels, dampers, VAV or reheat boxes, humidifiers, etc.) in locations where the servicing is accomplished outside the MRI scanner room.

## 2.7.3.8 MRI Scanner Ante-Space / Entry (Zone 3)

Access to the MRI Control Room should be strictly controlled to prevent individuals who have not either been screened for MRI safety risks or undergone MRI safety training from being able to gain access. Access restrictions must extend to maintenance, engineering, security, and emergency response personnel who have not received appropriate training.

Every entry to an MRI Scanner Room must be equipped with an illuminated sign facing into Zone 3 that indicates "Magnetic Field Always On" for all permanent or superconducting MRI scanners. The sign may be centered above the framed door opening, or placed on the latch-side of the door with the text at between 48 inches (1220 mm) and 60 inches (1525 mm) above the finished floor. The light source for the illuminated sign should either be placed on generator-supported power, or provided with a battery backup providing a minimum of two hours of illumination.

The entry to an MRI scanner room shall be provided with a single door from the Control Room. The MRI scanner room door can swing either into the MRI scanner room, or out from it. With most conventional MRI scanner room doors there is no meaningful safety benefit from an out-swinging door. With the use of ferromagnetic detection systems at an MRI scanner room door, an in-swinging door may provide benefits associated with reduced potential for interference with the ferromagnetic detection system. The MRI scanner room door shall be provided with a means of locking when not in use.

When supporting the use of non-MR Conditional portable equipment outside the MRI Scanner Room (Zone 4), such as horizontal patient transfer devices, infusion pumps, or patient monitors, planners shall provide anchoring tether-points to allow each individual portable piece of non-MR Conditional equipment to be tethered to prevent its inadvertent introduction into the MRI Scanner Room.

Patient care devices placed outside the MRI Scanner Room (e.g., infusion pumps, patient monitors) must have all leads, tubes, or connectors that enter the MRI Scanner Room pass through a special wave guide built-in to the RF shielded enclosure. Lines must not be pinched under a closed door, and MRI imaging should not take place with the RF shielded door left ajar for tubes or lines entering the MRI Scanner Room from the Control Room / ante-space. All equipment serving patient care needs within the MRI

Scanner Room must either be MR Conditional and appropriate to the use of the environment or, if located outside the MRI Scanner Room, must pass through wave guide apertures that do not compromise either the function of the patient care equipment or the integrity of the RF shielded enclosure. Planners shall provide for wave guides, either as a part of the RF doorway (preferred) or through special conduits through the RF shield, at locations provided with tether-points and from which a clinician could monitor the equipment, as needed.

# 2.7.3.9 Ferromagnetic Detection Systems

Ferromagnetic detectors are often required by governing design standards, VHA directives or policies, building codes, or accreditation requirements.

The MRI and PET/MRI Room Templates provided herein show a thickened wall at the entry into the MRI Scanner Room. This thickened entry, which increases the distance of the ferromagnetic detector to the MRI scanner room door to a minimum of 16 inches (400 mm), is specifically designed to facilitate the siting and function of entry-style ferromagnetic detection systems. By increasing the distance between a ferromagnetic detection device and the swinging door into the scanner room, spurious alarms from the ferromagnetic detection device resulting from the movement of the MRI room door will be substantially reduced. By extending the thickened wall and locating the near-edge of the observation window at least 36 inches (1 m) laterally from the door opening, spurious alarms from the ferromagnetic detection device resulting from movement at the operators' console, will be substantially reduced.

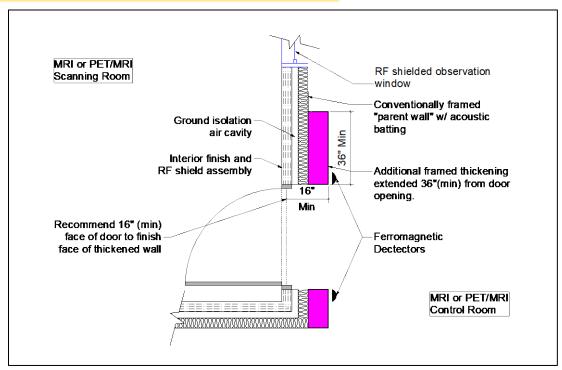


Figure 2.7.3.8-1: Plan detail of thickened wall at door to MRI or PET/MRI Scanning Room



from Control Room with ferromagnetic detection system flanking the doorway to Zone 4.

Ferromagnetic detection systems are also recommended to be used in patient preparation areas as a screening device to assure compliance with gowning / changing requirements. When used in Zone 2, it is recommended that the screening ferromagnetic detection device be located proximate to patient changing and locker areas, but that they be positioned where moving metal (e.g., door swings) will be a minimum of 36" (1 m) away from the screening device.

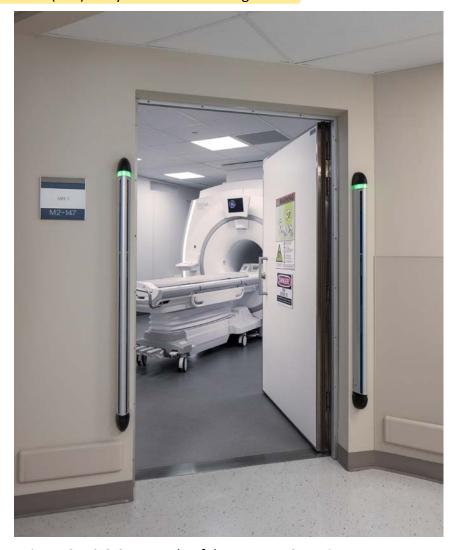


Figure 2.7.3.8-2: Example of door to MRI Scanning Room with ferromagnetic detection system flanking the doorway to Zone 4. (Image used with permission from RAD-Planning)

# 2.7.3.10 MRI Scanner Room (Zone 4)

The MRI Scanner Room is a very restrictive environment, in terms of specific elements of construction and in terms of equipment that can be safely brought into the room. The combinations of radiofrequency (RF) shielding, ground isolation, and finish materials frequently results in MRI room walls that are 10 - 16 inches thick (250 - 400 mm). The MRI scanner room must be designed with a demountable or removable wall or ceiling panel (9'-0" x 9'-0" or 2.75m x 2.75m, or sized per the MRI equipment manufacturer) that allows for MRI delivery (and future removal).



Figure 2.7.3.9: Example of an MRI Scanner Room (Image used with permission from RAD-Planning)

Though often preferable (and shown in all MRI room templates) the MRI scanner, itself, does not need to be placed orthogonal within the room. When rotating an MRI scanner's position remember that the magnetic field surrounding the MRI scanner rotates with the device, and that may result in a magnetic field that extends beyond the bounds of the MRI scanner room (see Section 2.7.3.3 Magnetic Field Containment),

adding either potential safety concerns or the need for passive magnetic shielding in addition to the requisite RF shielding (see Section 2.7.2.4, Passive Magnetic Shielding).

Standard infection prevention practices typically require hand-sinks in areas of direct patient contact. In MRI rooms, due to historical complications associated with plumbing penetrations into the RF shielded enclosures, these infection prevention practices have long been exempted. Hand-sinks within the MRI Scanner Room are feasible today. If placed within the MRI Scanner Room, it is recommended that hand-sinks be located where plumbing access panels allow water shut-off from outside the MRI scanner room.

Per VHA Directive 1105.05, Magnetic Resonance (MR) Safety, if MR Conditional patient monitoring or support equipment with fringe field conditions that require minimum distances from the MR scanner is to be used within the MRI Scanner Room, the design of the MRI Scanner Room must include anchoring tether-points within either the casework or in the wall / floor. This provides a mechanism to 'tie off' the movement of portable equipment from exceeding the allowable exposures identified by the equipment manufacturer.

Because of the continuity requirements of the RF shield assembly, the design of anchoring tether-points that are intended to be mounted directly into the floor or wall assemblies within Zone 4 must be coordinated with the RF shield vendor to maintain continuity of the RF shield assembly.

### 2.7.3.11 MRI System Component Room

While it is possible to position the MRI System Component Room in a location other than indicated on the illustrative room templates provided within this Design Guide, the indicated location is specifically proposed to provide the facility with an access-controlled room that may successfully contain the potentially hazardous portions of the magnetic field that surrounds the MRI scanner. If the MRI System Component Room is moved from the suggested position, or even substantially reduced in size (if permissible based on the system componentry associated with an individual MRI scanner), magnetic fields at or above thresholds of potential hazard may penetrate into areas where persons who are unscreened for MRI safety contraindications may be permitted. Passive magnetic shielding may be added to a project to help contain the MRI's magnetic field, but the costs of passive magnetic shielding frequently exceed incremental savings achieved by removing restricted rooms (such as the MRI system component room) from the position indicated in the design plates in this Design Guide.

## 2.7.3.12 MRI Patient Holding Bay

Unlike every other imaging modality, the magnetic field of MRI (and PET/MRI) precludes the use of ceiling lifts within the scanning room (See Section 2.6.11, Safe Patient Handling). Additionally, conventional hospital beds and transport gurneys have ferromagnetic materials that make them potentially life-threatening if brought into the MRI scanner room. Frequently, the Patient Holding Bay area would be located outside the MRI Control Room and the Patient Holding Bay would also serve as the final screening location for inpatients / non-ambulatory patients.



In some instances, a Patient Holding Bay may be sited as its own anteroom to the MRI Scanner Room and used both as a Holding Bay and an MRI undockable-table patient prep room, when the facility has two undockable-tables for a single MRI scanner. This allows the facility to 'hot-swap' patients prepared for exams and may significantly increase patient throughput.

### 2.7.4 PET/CT and PET/MRI Design Considerations

In addition to the overall PET suite planning and and ionizing radiation shielding elements that are a part of PET room construction (see Sections 2.7.2.1, Shielding for Ionizing Radiation – Occupant Safety, and 2.7.2.2, Shielding for Ionizing Radiation – Detector Sensitivity), there are planning and construction elements that are unique to each PET/CT and PET/MRI environments that warrant additional attention and concern.

### 2.7.4.1 Hybrid PET Device Usage

For hybrid PET suites, it is understood that PET/CT and PET/MRI devices will be selected based on the need for PET imaging, and that it is expected that the usage of the scanning devices will maximize nuclear / PET imaging. It is also understood that hybrid PET scanners may also serve as redundant or overflow scanners for conventional CT and MRI scanners.

When hybrid PET/CT and PET/MRI suites are planned, careful consideration should be paid to the potential operational model where the scanner is used for non-nuclear scans. Below is an illustration of one way in which a PET/MRI suite could be conceptually organized to allow the PET function to be effectively segregated from the MRI function for days for which the suite would be intended to serve exclusively MRI patients. A similar organizational division is recommended for PET/CT suites, as well.

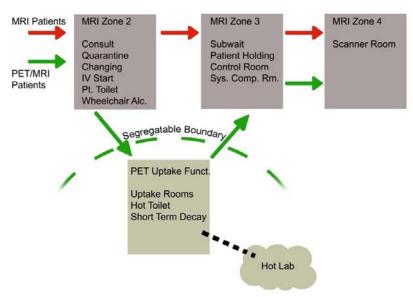


Figure 2.7.4.1: Illustration of segregated PET function for PET/MRI suites (PET/CT to be similar).



#### 2.7.4.2 Access Control

For safety and security reasons, nuclear medicine departmental areas (in particular, PET areas within nuclear medicine) need to be access controlled from the public and from VA personnel not cleared to work in these areas.

PET/MRI in particular requires careful access planning. Overlapping criteria for staff qualifications for entry (radiation safety training vs. MRI safety training) and secured areas (for ionizing radiation and ferromagnetic materials), coupled with MRI 4-zone layout requirements can result in inefficient or unsafe facilities if not careful considered during planning.

# 2.7.4.3 Hot Lab Proximity

Because of the higher energy of radioisotopes most frequently used in PET imaging, it is recommended that Hot Lab(s) serving PET Imaging Services be located to reduce the travel time / distance between dose preparation and calibration functions with the dose administration.

When a single Hot Lab supports both higher-energy PET imaging and lower-energy SPECT imaging, it is recommended that the Hot Lab be located closer to the PET function(s).



Figure 2.7.4.3: Detail Photo of Hot Lab (Image used with permission from RAD-Planning)

## 2.7.4.4 PET Shielding Requirements

With the higher energy of radioisotopes most frequently used in PET imaging, ionizing radiation shielding surrounding Patient Uptake Rooms, Hot Toilets, Decay Storage, and the PET Scanner Room, itself, is likely to be greater than in X-ray settings, both in quantity and, potentially, the surfaces that require shielding. Due to the energy and persistence of PET radiosources, conventionally-built structural decks above and below (designed specifically for the structural loading criteria, and not radiation shielding needs) may not have sufficient mass to provide the needed attenuation without supplemental shielding assemblies. (See Section 2.7.2, Shielding)

### 2.7.4.5 Inhalation Studies

If a facility anticipates the possibility of inhalation studies, special consideration should be given to the inhalation agents (heavier-than-air or lighter-than-air, gases or aerosols) that may be used. Inhalation studies using radiopharmaceutical agents will impose additional HVAC design requirements particular to the agent(s) being used. These additional requirements may include additional exhaust, additional airflow velocity / ACH, floor-level returns, and more. Refer to **HVAC Design Manual** (PG 18-10) for specific design criteria.

### 2.7.5 Hot Lab Design Considerations

Depending on the imaging equipment, radiopharmaceuticals, and clinical exams to be used at a facility, the functional requirements of the Hot Lab (space, equipment, pressurization, compounding, isolation requirements, etc.) have the potential to vary significantly. Facilities that make use of automated radiopharmaceutical delivery systems in lieu of manual hot lab functions may have substantially reduced space requirements. Facilities that engage in compounding of radiopharmaceuticals (either 'dirty' or 'clean' compounding), work with biohazardous blood compounding, or work with exotic radiopharmaceuticals (e.g., those used in inhalation studies, or those with very short half-lives), may have significantly greater space and equipment requirements.



Figure 2.7.5: Example of Hot Lab.
Photo: New Orleans VA Medical Center.

Facilities planning complex nuclear medicine clinical services, including services that use very short half-life isotopes, gaseous or aerosolized radiopharmaceuticals, or that compound radiopharmaceutical agents, may refer to DoD Chapter 540, "Radiology, Nuclear Medicine and Radiation Oncology" for additional information on Hot Lab planning and programming.

### 2.7.6 Cyclotron Design Considerations

Due to the cost and operational burden of operating cyclotron facilities, as well as the variation in cyclotron facility requirements based on equipment selected and the operational model employed, guidance for cyclotron facilities is not included in this Design Guide. The significant majority of VA nuclear medicine clinical services obtain their radiopharmaceuticals from commercial producers (eliminating the need for on-site production). In the event that a site requires the development of on-site cyclotron facilities, the space planning, equipment planning, and programming of such facilities will need to be developed on a case-by-case basis, as a result of the large potential variability.

VHA NHPP must be consulted and authorize cyclotron projects.

#### 3.0 FUNCTIONAL DIAGRAMS

#### 3.1 General

Within Imaging Services, individual modalities have distinct workflows, patient flow (pre-, during, and post-exam), equipment and supply needs, and different support infrastructures. In addition to the department-level functional diagram found in PG 18-9, what follows are functional diagrams for a number of representative modality areas / suites.

The figure on the following page represents modalities or clinical services which may be found in an overall department, and a potential layout of the different functional areas in which staff functions may be efficiently shared. Note the back-to-back shared work cores, which may contain spaces and functions such as:

- PACS 3D Workstations
- Automated Supply Dispensing Units (ASDUs) or Supply Closets
- Crash Cart Alcoves
- Mobile X-Ray Alcoves
- Mobile Ultrasound Alcoves
- Lead Apron Alcoves
- Clean and Soiled Linen Spaces
- Supervisor Offices
- Scheduler Workstations
- Chief Technologist Offices
- Radiation Safety Officer Offices
- Staff Radiologist Hotelling Offices
- Professional Non-Physician Workstation
- Trainee Workstations
- Teaching Reading / Consultation Rooms
- and staff circulation areas

The mix of staff, administrative, and support functions located within the work cores is anticipated to be resolved at the project level.

Imaging and patient preparation spaces depicted in the department-level functional diagram are shown in greater levels of detail in the suite-level functional diagrams that follow the department-level functional diagram.

The user may find it helpful to alternate among the department-level diagrams, suite-level diagrams, and the specific room templates, to obtain a more comprehensive understanding of the relationships at the different levels of facility planning and design.



Figure 3.1: Imaging Services Departmental Functional Diagram.

Note: This Departmental Functional Diagram is intended as a high-level conceptual overview of spaces and functions typically included in Imaging Services and does not represent an actual Imaging Department. Rooms and spaces are not to exact scale and do not necessarily represent recommended number of individual modalities or specific suite-level layouts. Space planning for interventional radiology is covered in the Surgical and Endovascular Services Design Guide, and is therefore not depicted here.



#### 3.2 Suites

Many individual imaging modalities function as more than just a single room where the exam / procedure is conducted. Compositions of imaging rooms, operational requirements such as control rooms or exposure-control alcoves, and system component rooms form the nucleus of imaging suites; and this nucleus requires proper configuration and the provision of the appropriate allied staff and patient support spaces.

Imaging rooms and the associated patient and staff support spaces can be composed in an infinite number of arrangements and combinations, but there are some essential guiding principles to composing imaging suites that are effective, efficient, safe to operate, and support the highest level of patient care. In general, the layout of the spaces within imaging suites should follow the sequence of operations for both staff and patient flow, minimizing travel distances and backtracking, and segregating patient and staff activities.

In addition to individual modality suites there are often benefits to gathering combinations of patient support spaces and several different types of Imaging Services in dedicated sub-suites within an Imaging department to serve patients with common needs. These groupings may include services such as those collectively identified as 'Women's Health.' It is important to note that imaging modalities that may more frequently be associated with one gender (i.e. mammography, or breast imaging) serve both male and female patients. When a sub-suite is created to specifically serve the needs of one patient sub-population, it is important that access to these services are not available exclusively via the sub-suite or the stigma may significantly discourage the patient from seeking appropriate diagnosis / treatment.

The suite diagrams on the following pages are not intended to be prescriptive templates, but are provided for illustrative purposes on one potential way to plan imaging suites and configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of all suites should respond to local station needs and operational demands.

## 3.2.1 General Radiology Suite

The General Radiology services (X-ray for body and chest) are some of the most widely and frequently used services within Imaging Services. Staff and resources within the General Radiology suite are often shared with Radiography / Fluoroscopy, and may be sited together or sharing common support services areas.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of General Radiology suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The General Radiology Functional Diagram is forthcoming.

Figure 3.2.1: Example of possible configuration of General Radiology suite.

## 3.2.2 Radiography / Fluoroscopy Suite

Radiography / Fluoroscopy services (continuous, realtime X-ray images) are common modalities within Imaging Services, frequently used for both diagnosis and image-guided procedures. Staff and resources within the Radiography / Fluoroscopy suite are often shared with General Radiology, and may be sited together and share common support services areas.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of Radiography / Fluoroscopy suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The Radiographic / Fluoroscopic Functional Diagram is forthcoming.

Figure 3.2.2: Example of possible configuration of Radiography / Fluoroscopy suite.

## 3.2.3 Breast Imaging Suite

Breast Imaging Suites may contain a variety of imaging modalities, from X-ray based mammography, to Automated Breast Ultrasound (ABUS), and ultrasound procedure rooms. Breast imaging typically includes patient population screening, disease diagnosis, and image-guided intervention for breast disease. These suites need to balance accessibility, high throughput, and a higher level of attention to patient privacy.

It is important to note that, while infrequent, male patients require breast imaging as well. While mammography may predominantly serve female patients, the configuration of a Breast Imaging suite should take into account all persons' privacy, regardless of gender.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of Breast Imaging Suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The Breast Imaging Functional Diagram is forthcoming.

Figure 3.2.3: Example of possible configuration of Breast Imaging suite.



#### 3.2.4 Ultrasound Suite

Ultrasound exams use non-ionizing sound waves to generate images for diagnosis and to guide therapy. Ultrasound can be used for imaging internal organs, blood vessels, and some cysts / tumors.

Because some ultrasound exams may be perceived as particularly sensitive (e.g., endovaginal or transrectal exams), planners shall give particular consideration to patient privacy for ultrasound suites that support these types of exams.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of Ultrasound suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The Ultrasound Functional Diagram is forthcoming.

Figure 3.2.4: Example of possible configuration of Ultrasound suite.

## 3.2.4.1 Enhanced Privacy Vestibule Entrance

Planners may also consider clustering Ultrasound rooms for enhanced patient privacy, when indicated by patient population / clinical service. Creating a vestibule entry serving a pair of Ultrasound rooms with dedicated Patient Dressing Rooms and semi-private waiting may reduce the potential for uncomfortable / embarrassing patient interactions, enhancing patient privacy. On the following page is a diagram

The Ultrasound Functional Diagram is forthcoming.

Figure 3.2.4.1: Plan illustration of enhanced privacy entry vestibule entrance.

Configurations similar to the diagram, above, may require deviation from space planning criteria.

## 3.2.5 CT Suite

Computed Tomography (CT) scanners use a series of X-ray images taken from different points around a patient to generate 3D images that allow for generation of specific 'slice' images. CT's clinical uses include imaging of all parts of the body as well as guidance for invasive procedures.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of CT suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The CT Functional Diagram is forthcoming.

Figure 3.2.5: Example of possible configuration of CT suite.



### 3.2.6 MRI Suite

Magnetic Resonance Imaging (MRI) scanners use a combination of applied magnetic fields to generate images that allow for generation of specific 'slice' images or 3D renderings. MRI's clinical uses include imaging internal organs, musculoskeletal structures, cardiac and brain imaging, for a variety of levels of urgency and patient acuity.

MRI suites, in addition to accommodating the siting of MRI equipment, must also provide sequential, secured access in compliance with VHA Directive on **Magnetic Resonance (MR) Safety** (VHA Directive 1105.05). (See Section 3.2.6.1)

When multiple MRI scanners are sited as a part of a single suite, planners should consider open or shared control room spaces.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. This suite diagram overlays the MRI zones, described below. Layouts of MRI suites should respond to local station needs and operational demands For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.



The MRI Functional Diagram is forthcoming.

Figure 3.2.6: Example of possible configuration of MRI suite. Access points illustrated.

## 3.2.6.1 Magnetic Resonance (MR) Safety Directive

The planning and design of the MRI suite must follow the specific direction of the VHA Directive on **Magnetic Resonance (MR) Safety** (VHA Directive 1105.05). None of the suite composition guidance in this document should be understood to contradict or supersede the requirements under VHA Directive 1105.05.

### 3.2.6.2 4-Zones

All MRI suites must be configured in accordance with the ACR 4-Zone model of sequential access restriction and supervision. While the specific provision and arrangement of spaces may have infinite permutations, the Zone Diagram, provided as Appendix A of VHA Directive 1105.05, Magnetic Resonance (MR) Safety, is an excellent illustration of the functional arrangement of spaces, and is shown on the following page. It should be understood that the default composition of an MRI clinical area should be in the form of a suite to facilitate the use of access control mechanisms required by the ACR 4-Zone, the VHA Directive on Magnetic Resonance (MR) Safety, accreditation requirements, and industry standards.



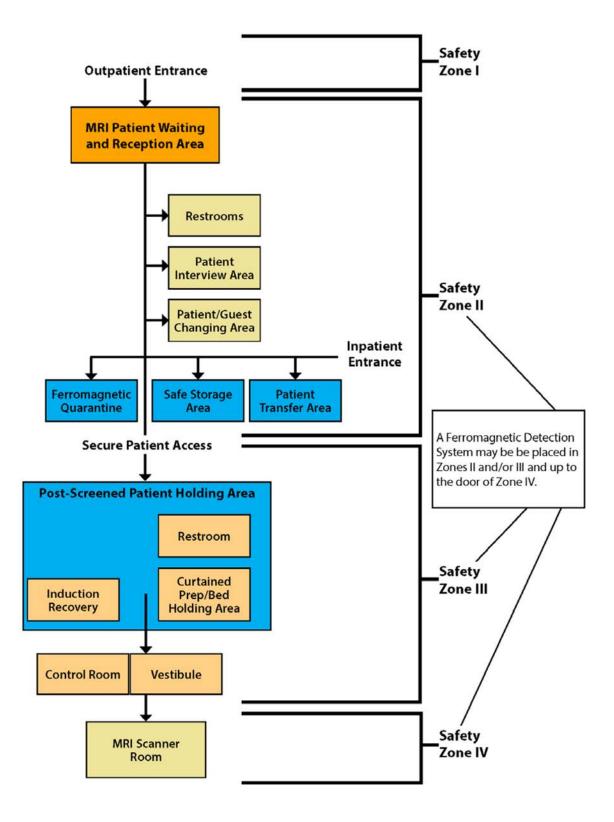


Figure 3.2.6.2: Illustration of the ACR 4-Zone Concept from VA Directive on Magnetic Resonance (MR) Safety



#### 3.2.6.3 Site Selection

Location of an MRI suite for constructability and functionality is important. MRI scanners are sensitive to environmental vibration (such as that produced by air handlers, fans, pumps, and rolling traffic), electromagnetic interference (such as high-amperage power lines, unbalanced three-phase power lines, and electrical transformers / switchgear), and perturbations of the magnetic field (such as from elevator cabs or vehicular traffic). Selection of the location of the MRI suite must be made with an awareness of the potential siting complications.

When considering areas for potential placement of an MRI or PET/MRI within existing, operational facilities, planners are advised to consider having vibrational and electromagnetic site testing conducted prior to executing development plans.

## 3.2.6.4 Delivery Path

While most medical equipment can be delivered to the site in components small enough to fit through standard corridors, doorways, and elevators, MRI (and PET/MRI) equipment typically requires clear widths and heights that are greater than standard double-width doorways. MRI scanners tend to exceed weight limits for service elevator cabs that might be large enough to accommodate the equipment. The weight of MRI equipment is frequently great enough that separate structural analysis (and often, temporary remedial structural support) is required for the path of travel of the MRI scanner from the point of delivery to the MRI scanner room (or, in the case of deinstallation, from the MRI scanner room to the point of removal from the building). Every part of the path of travel from the point at which an MRI (and PET/MRI) enters the building, to where it is ultimately placed, will need clear dimensions and structural capacity that may be greater than conventional construction typically accommodates, and must be considered by the designers.

The MRI Functional Diagram is forthcoming.

Figure 3.2.6.4: Illustration of delivery path planning. MRI (and PET/MRI) rooms must be provided with a removable 'knock-out' wall or ceiling / roof section (shown dashed orange) which will facilitate delivery or removal of the MRI device. The path of delivery through the buildings (green arrows) must be planned with minimum clear height and widths to outside the building.

The MRI suite (and PET/MRI suite) must be planned to facilitate the delivery path of each MRI scanner into the suite and anticipate the future need to remove the MRI scanner from the suite. Positioning the MRI suite at grade, and near an exterior wall is recommended, when feasible.

Anticipate minimum clear width and height requirements along path of travel as 8'-0" by 8'-0" through corridors (which may require removal of doorways / headers), and larger through wall / roof penetrations (See Section 0). Anticipate equipment weight of up to 25,000 lbs. for conventional bore-format MRI scanners of 3.0 Tesla or less.

## 3.2.7 Nuclear Medicine Suite

Nuclear Medicine (NM), sometimes referred to as molecular imaging, studies are typically performed using low-level radioactive materials injected, ingested, or inhaled, and then the energy from the radioactive materials is measured giving indications of concentration of physiologic function. Many Nuclear Medicine scanners are now dual-modality scanners, such as SPECT/CT, combining the function of Nuclear Medicine imaging and CT into a single scanner.

Because Nuclear Medicine makes use of radioactive materials, access controls and security are required for both occupant safety and radioactive material security.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of Nuclear Medicine suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The Nuclear Medicine Functional Diagram is forthcoming.

Figure 3.2.7: Example of possible configuration of Nuclear Medicine suite. Access points illustrated.



### 3.2.8 PET Suites

Similar to traditional Nuclear Medicine, Positron Emission Tomography (PET) studies are typically performed using higher-level radioactive materials injected and then the energy from the radioactive materials is measured giving indications of concentration and distribution of metabolic function. Contemporary PET scanners are now exclusively dual-modality scanners, such as PET/CT or PET/MRI, combining the function of PET imaging and either CT or MRI into a single scanner.

Because PET makes use of higher-level radioactive materials, access controls and security are required for both occupant safety and radioactive material security.

The suite diagram on the following page is not intended to be a prescriptive template, but is provided for illustrative purposes on one potential way to configure the arrangement of support functions in conjunction with the imaging spaces. Layouts of PET suites should respond to local station needs and operational demands. For dimensional layouts of rooms and spaces, please refer to Section 4, Room Templates.

The PET/CT & PET/MRI Functional Diagram is forthcoming.

Figure 3.2.8: Example of possible configuration of PET/CT & PET/MRI suite. (See Section 3.2.6.4, Delivery Path) Access points illustrated.



## 3.2.8.1 Access Controls & Suite Security (PET/CT or PET/MRI)

Similar to MRI suites, one of the governing principles of PET suite design (whether PET/CT or PET/MRI) is the need for access controls / restrictions. It should be understood that the default composition of a PET clinical area (PET/CT or PET/MRI) should be in the form of a suite to facilitate the use of access control mechanisms required by Radioactive Materials licensure, accreditation requirements, and industry standards.

Hot Lab functions, as well as Short Term Decay Storage functions should be secured. When serving multiple nuclear medicine modalities, shared Hot Lab spaces should generally be located closer to the modalities that use the higher-energy radioisotopes (PET/CT and PET/MRI), reducing travel time and distance.

Even common staff work areas, which may include physician working areas, medical physicist working areas, and lead technologist working areas, may need to be secured from work areas shared with non-nuclear medicine or non-PET modalities.

Suite planning should also accommodate the use of PET hybrid imaging modalities without the PET component, as indicated by the site's functional program. (See Section 2.7.4.1, Hybrid PET Device Usage)

PET Suites (both PET/CT and PET/MRI) must maintain restrictive access controls. Patient access must be strictly controlled, even from other patient care areas, when PET functions are in use.

PET/MRI areas, in addition to complying with access controls for radiological safety, must also comply with MRI safety and access controls as described in Section 3.2.6.1, Magnetic Resonance (MR) Safety, and Section 3.2.6.2, 4-Zones.

## 3.2.8.2 PET/MRI Delivery Path

See Section 3.2.6.4, Delivery Path.

## 3.3 Functional Relationships

Imaging Services have important relationships with other services throughout the hospital. For information on these relationships with other services and the rationales behind them, please see Imaging Services **Space Planning Criteria** (PG 18-9), Section 7: Functional Relationships.

## 4.0 ROOM TEMPLATES

### 4.1 General

The Room Templates are intended as general representations of typical space, furniture and equipment layout, as well as functional and utility supporting needs. The Room Templates were developed as a design tool to assist the Project Team in understanding the choices to be made during design, and to assist designers in understanding VA's space and functional requirements for Imaging Services. The Room Templates are not intended to be project specific and are not meant to limit design opportunities.

While this information is provided for a majority of spaces required, it is not possible to foresee all possible variations or future requirements. The project-specific space program shall be used as the basis for individual project design.

The Room Templates must be reviewed against project criteria and any special requirements. Users shall follow other VA criteria and standards as required by VA. Equipment manufacturers shall be consulted for the most current equipment information such as actual dimensions, weights and utility requirements.

## 4.2 Room Templates

- 4.2.1 Class 1 Radiology Imaging Room, Imgng Svcs (Cl011)
- 4.2.2 Class 2 Radiology Imaging Room, Imgng Svcs (CI016)
- 4.2.3 Chest Imaging Room, Imgng Svcs (Cl021)
- 4.2.4 Class 1 R/F Imaging Room, Imgng Svcs (Cl031)
- 4.2.5 Class 2 R/F Imaging Room, Imgng Svcs (Cl036)
- 4.2.6 Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (CI041)
- 4.2.7 Class 2 Prone Breast Imaging Room, Imgng Svcs (CI053)
- 4.2.8 Class 2 Standing Breast Imaging Room, Imgng Svcs (CI056)
- 4.2.9 Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063)
- 4.2.10 Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065)
- 4.2.11 ABUS Scanning Room, Imgng Svcs (Cl067)
- 4.2.12 Bone Densitometry Scanning Room, Imgng Svcs (CI076)
- 4.2.13 Class 1 CT Scanning Room, Imgng Svcs (Cl081)
- 4.2.14 Class 2 CT Scanning Room, Imgng Svcs (Cl086)
- 4.2.15 Class 1 MRI Scanning Room, Imgng Svcs (CI111)
- 4.2.16 Class 2 MRI Scanning Room, Imgng Svcs (CI121)
- 4.2.17 Class 1 NM Scanning Room, Imgng Svcs (Cl211)
- 4.2.18 Class 1 SPECT/CT Scanning Room, Imgng Svcs (Cl214)
- 4.2.19 Class 2 SPECT/CT Scanning Room, Imgng Svcs (Cl221)
- 4.2.20 NM Radiopharmacy / Hot Lab, Imgng Svcs (CI227)
- 4.2.21 Class 1 PET/CT Scanning Room, Imgng Svcs (Cl242)
- 4.2.22 Class 2 PET/CT Scanning Room, Imgng Svcs (CI251)
- 4.2.23 Class 1 PET/MRI Scanning Room, Imgng Svcs (CI271)



4.2.24	Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281)
4.2.25	Imaging Physician Reading Room, Imgng Svcs (CI401)
4.2.26	Teaching Reading/Consultation Room, Imgng Svcs (CI411)
4.2.27	Patient Holding Bay (Multiple Modality) (SC271)
4.2.28	[Location] Uptake Room, Imgng Svcs (CI256, CI291)
4.2.29	[Location] IV Start Room, Imgng Svcs (CI074, CI104, CI204, CI236, CI265)
4.2.30	Medication Preparation Room (Multiple Modality) (SC083)





## Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) DISCLAIMER

SKETCH TITLE 0' 4' 8' 16

SCALE: NTS

#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

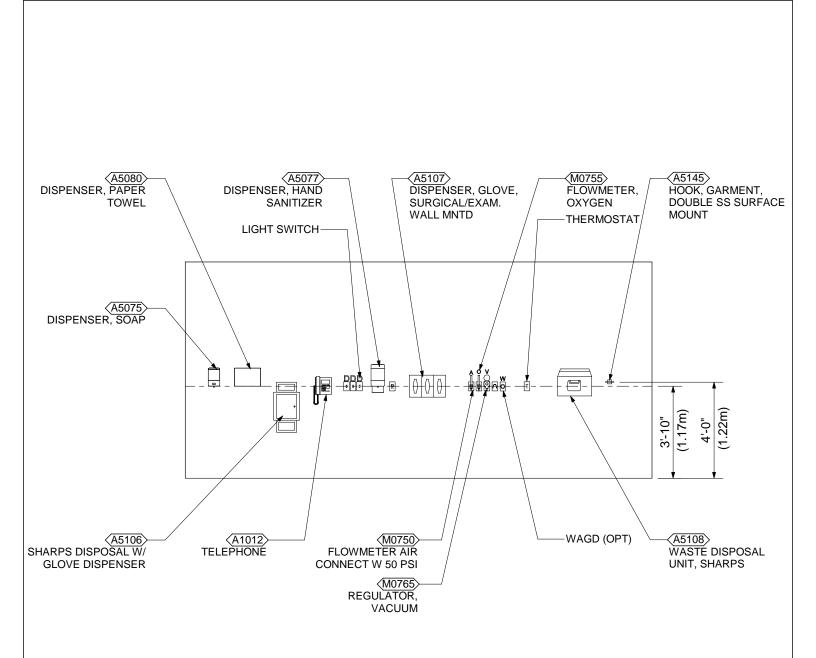
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

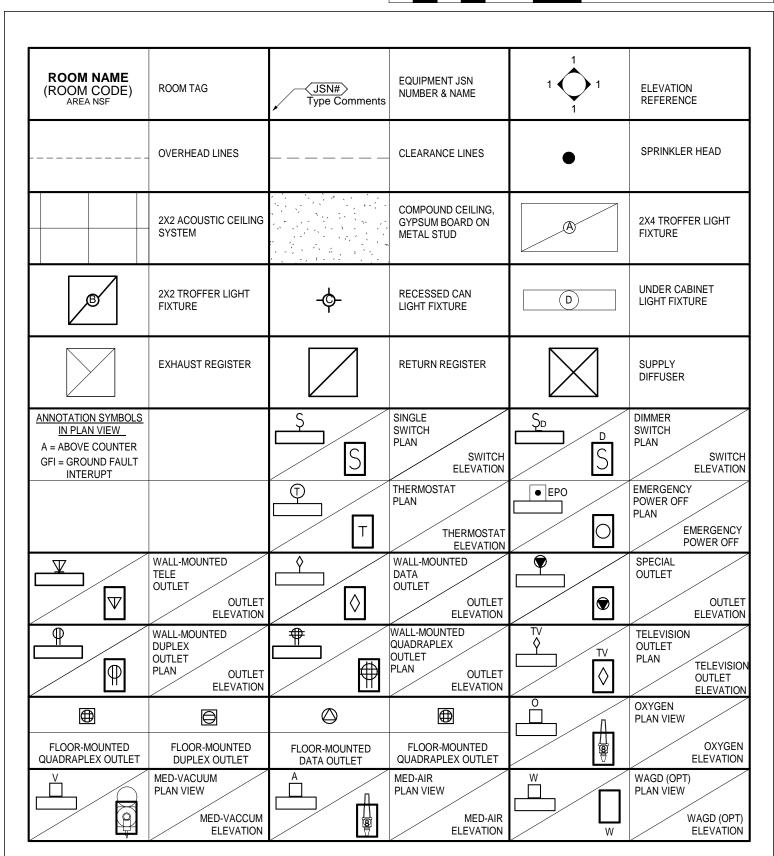
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



## Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

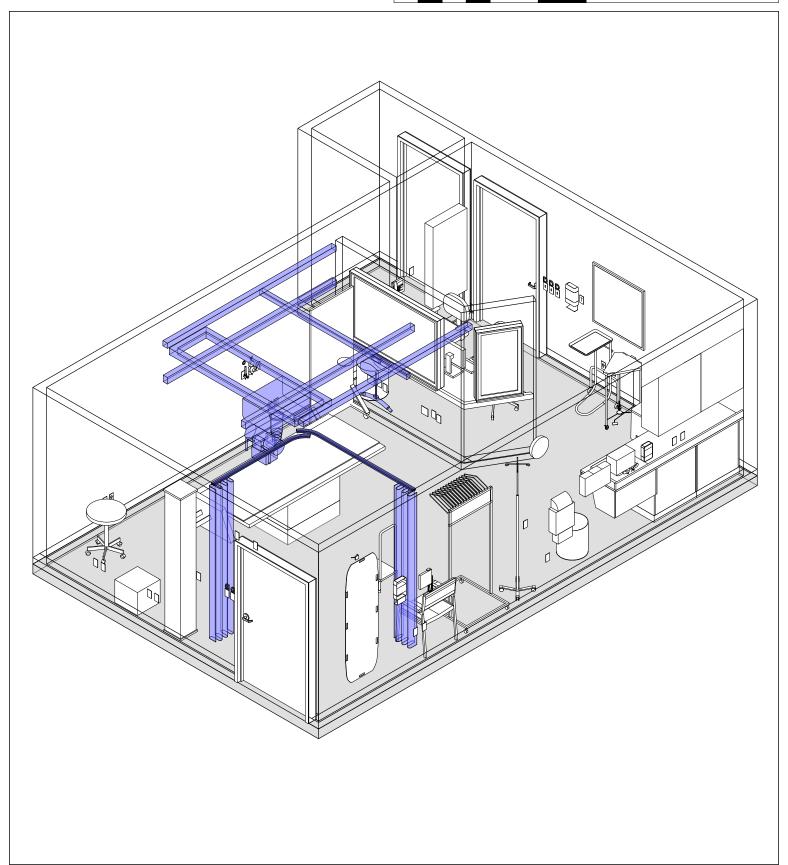




# Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) AXONOMETRIC

SKETCH TITLE 0' 4' 8' 1

SCALE: 1/4" = 1'-0"



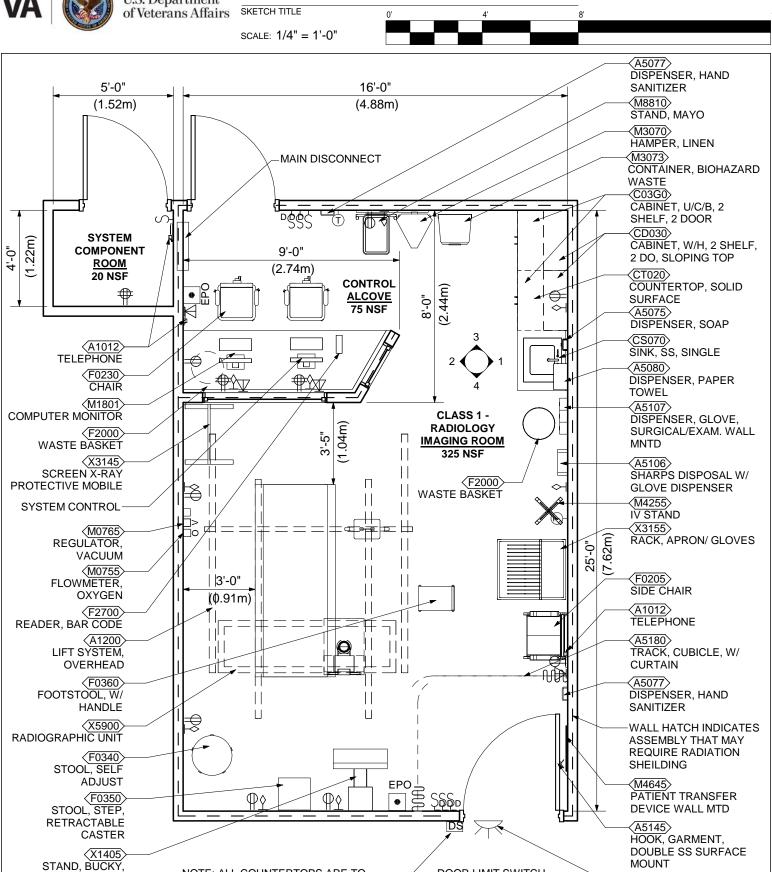


## Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) INTERACTIVE 3D PDF

VA	of Veterans Affairs	SKETCH TITLE 0' 4' 8'						16
		SCALE:						

## U.S. Department of Veterans Affairs

## Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) FLOOR PLAN



DOOR LIMIT SWITCH

NOTE: ALL COUNTERTOPS ARE TO

MATCH THE ROOM CONTENT LIST **UNLESS NOTED OTHERWISE** 

VERTICAL, TILT

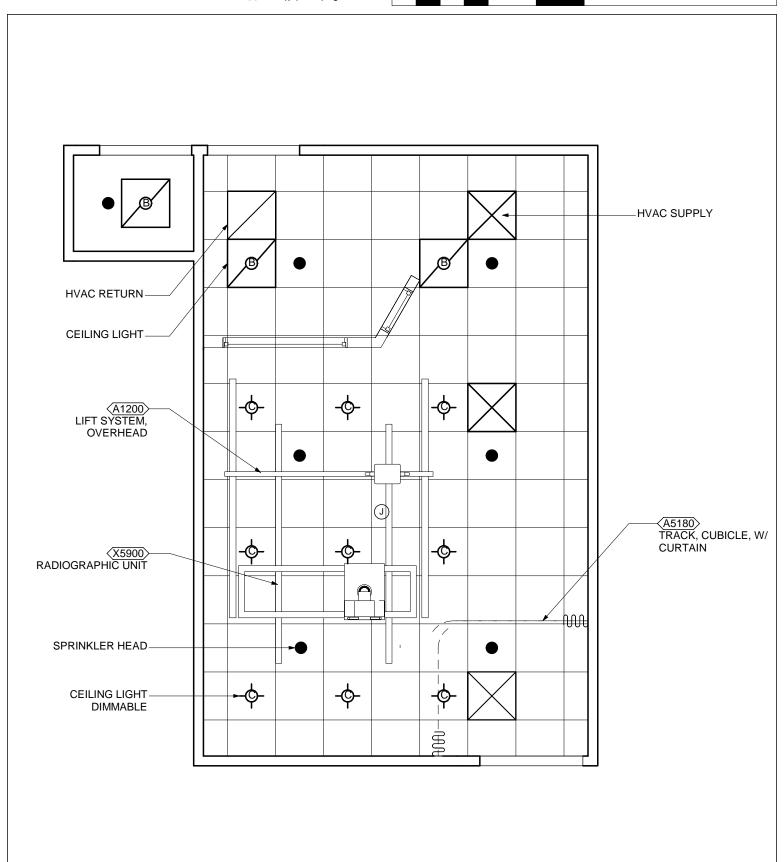
X-RAY IN USE LIGHT



# Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) REFLECTED CEILING PLAN

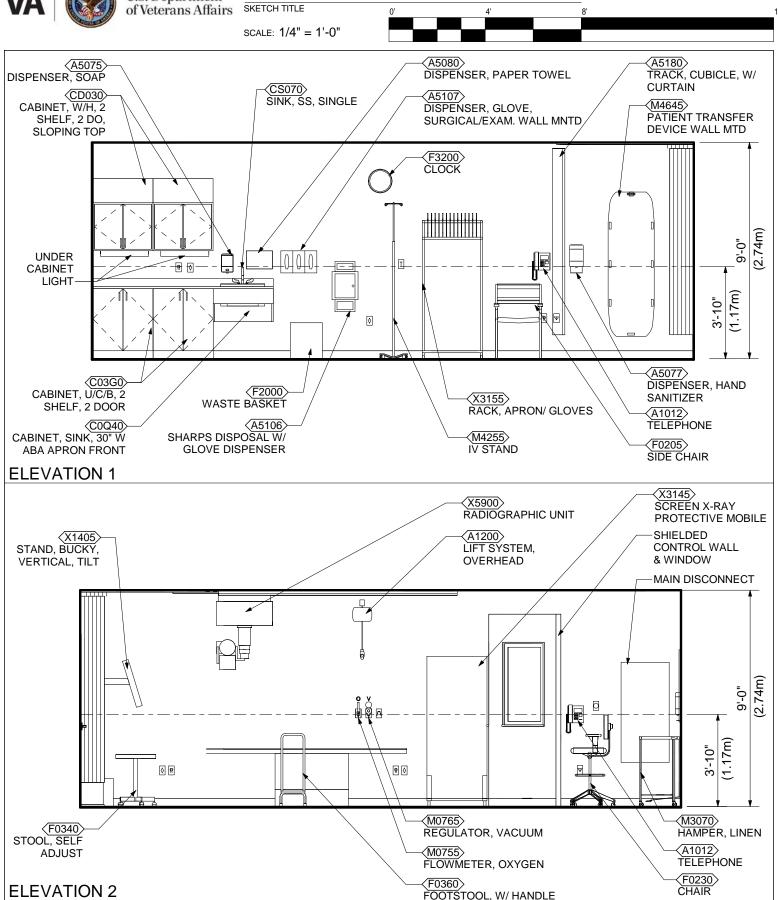
SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



## U.S. Department of Veterans Affairs

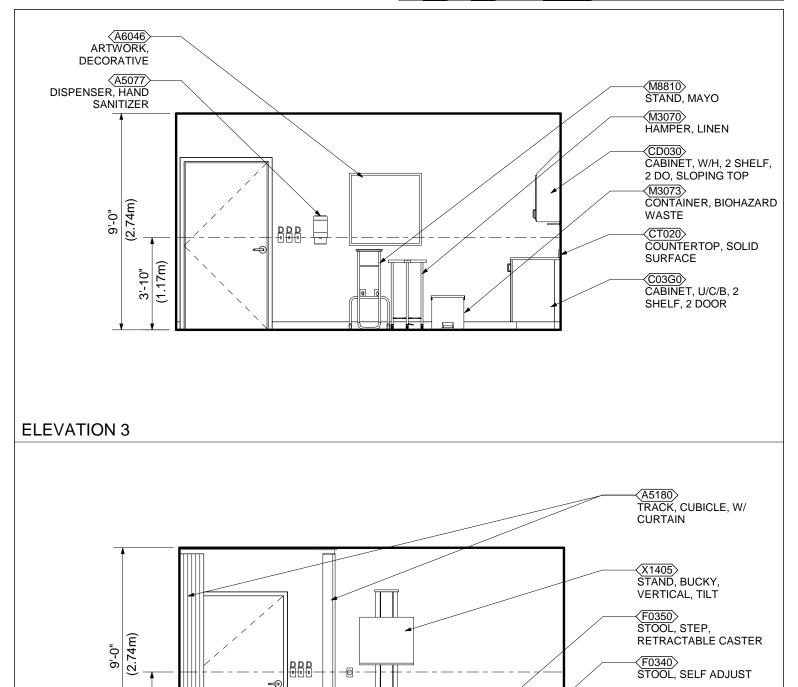
## Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) **ELEVATIONS**





# Class 1 Radiology Imaging Room, Imgng Svcs (Cl011) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



**Φ** 

**ELEVATION 4** 

3'-10" (1.17m) CHAPTER 295 - Class 1 Radiology Imaging Room, Imgng Svcs (CI011)

Room Data: Class 1 Radiology Imaging Room, Imgng Svcs (CI011)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: m: WSF / RSF at h: 4" (100mm) Base: Floor Finish: WSF / RSF Slab Depression: Sound Protection: STC 40

Doors: Notes:

1. Provide a 4'-0" wide shielded door into the Radiology Room Class 1.

m: Wood t: 7 dl: LEAD s: X

 Provide a shielded viewing window from the Control Alcove into the Radiology Room Class 1.

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

## **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

Notes:

 Coordinate electrical power requirements with specific vendor equipment.

### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Yes Code Blue Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

## Notes:

1. PACS: two 4-port telecommunication outlets per PACS station

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

## PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: --Sanitary Drain: Yes Reagent grade Water: Medical Air: Not Required Medical Vacuum: Minimum 1 outlets/room Oxygen: Minimum 1 outlets/room



Room Contents: Class 1 Radiology Imaging Room, Imgng Svcs (Cl011)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.

JSN	Content Name	Acq Code	Qty	Description
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	2	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.



JSN	Content Name	Acq Code	Qty	Description
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.



JSN	Content Name	Acq Code	Qty	Description
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
X1405	Stand, Bucky, Vertical, Tilt, Automatic	VC	1	Vertical and tilting bucky stand. This unit is mounted to the floor and wall to provide a vibration-free mounting platform for the universal bucky. The grid line free radiographs are produced at exposure times as short as two milliseconds. Characteristics and components include aluminum interspaced grid with a 36 inch (914 mm) to 40 inch (1016 mm) focal range. The unit's cassette size sensing tray accommodates all cassette sizes between 5 and 17 inches. The unit tilts at angles of +90/-20 degrees from the vertical position. The unit is used in X-ray facilities for processing radiography images.
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X5900	Radiographic Unit, 80 kW, Non-Tilt Table	VC	1	This system is specifically designed to perform radiographic examinations in the Radiology Department. This units characteristics and components include, 80kW micro-processor controlled X-ray generator, a non-tilting table with a floating table top and an adjustable bucky, a ceiling suspended 0.6/1.2 mm tube unit and vertical bucky stand.



Room Contents: Class 1 Radiology Control Alcove, Imgng Svcs (Cl012)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
F0230	Chair, Drafting, Rotary	VV	2	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.

Room Contents: Class 1 Radiology System Component Room, Imgng Svcs (Cl013)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



## Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) DISCLAIMER

SKETCH TITLE

SCALE: 1/4" = 1'-0"



#### **DISCLAIMER:**

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

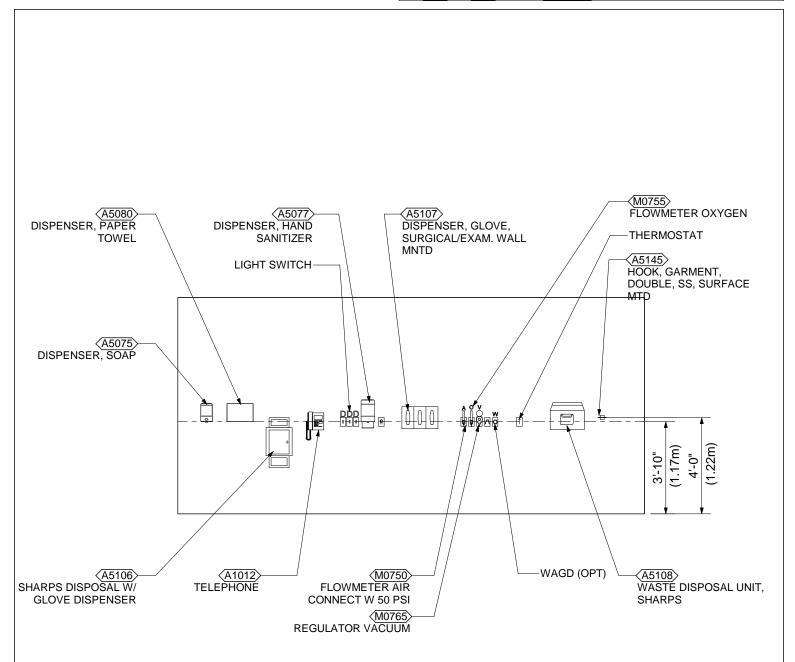
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

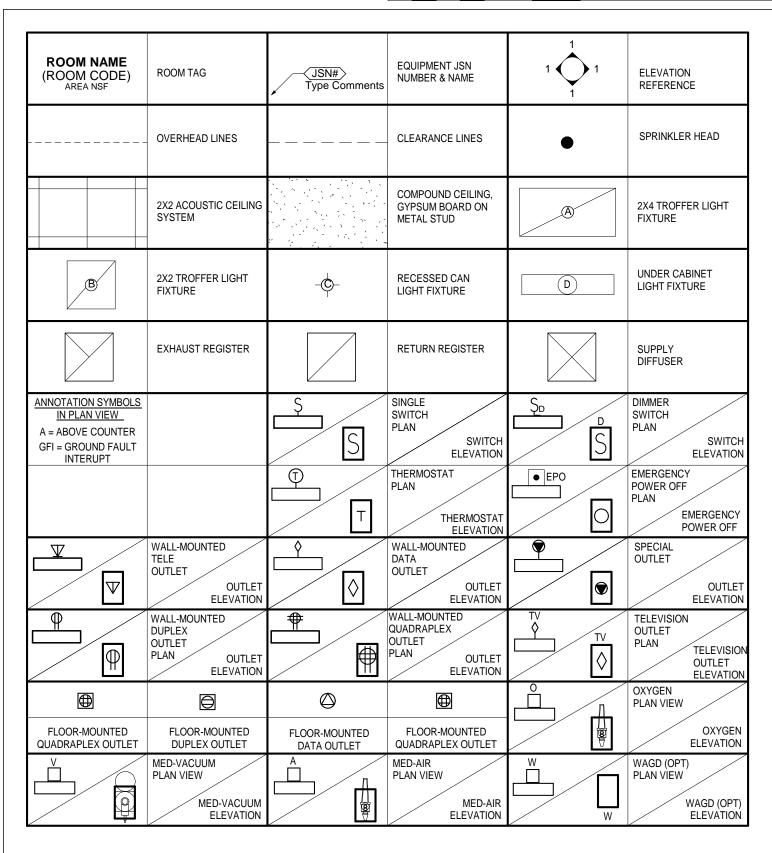
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



### Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

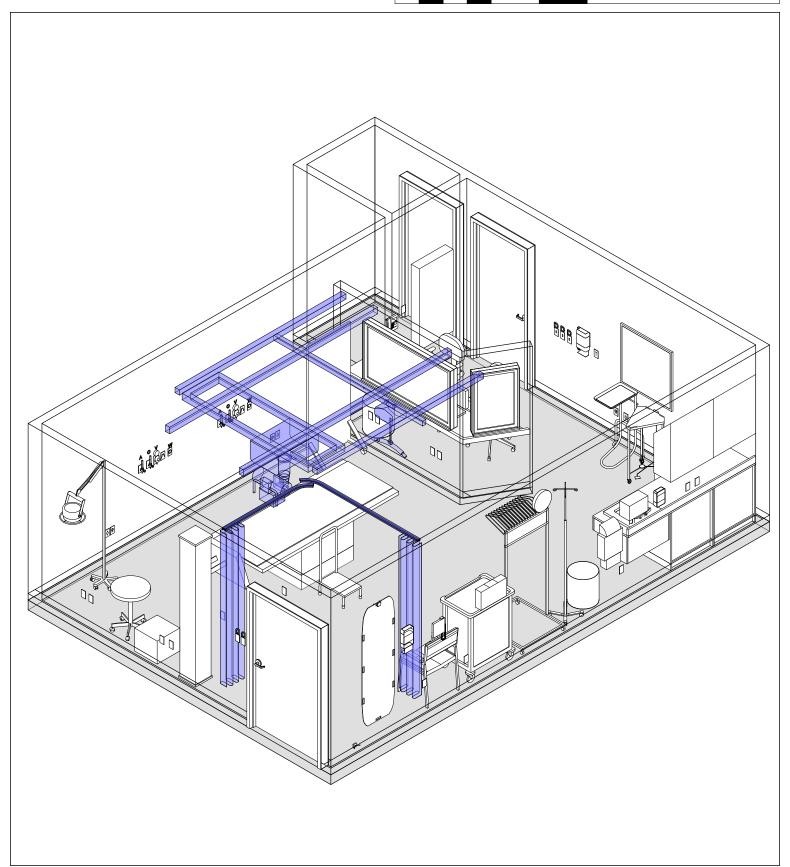




# Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





# Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) INTERACTIVE 3D PDF

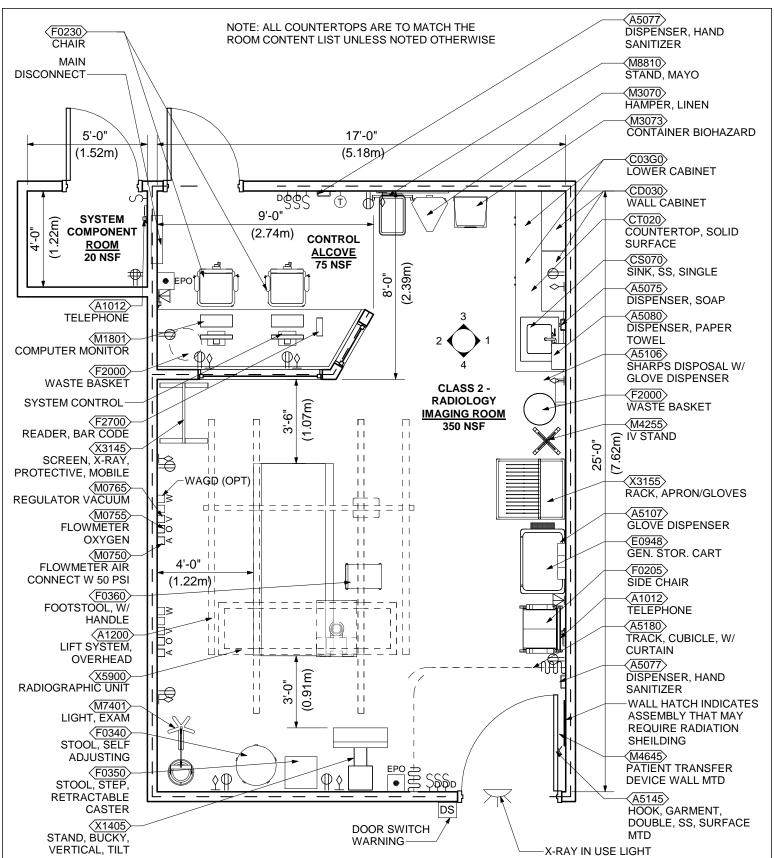
VA (C)		of Veterans Affairs	SKETCH TITLE 0' 4' 8'						
			SCALE:	0' 4' 8'					



### Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) FLOOR PLAN

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

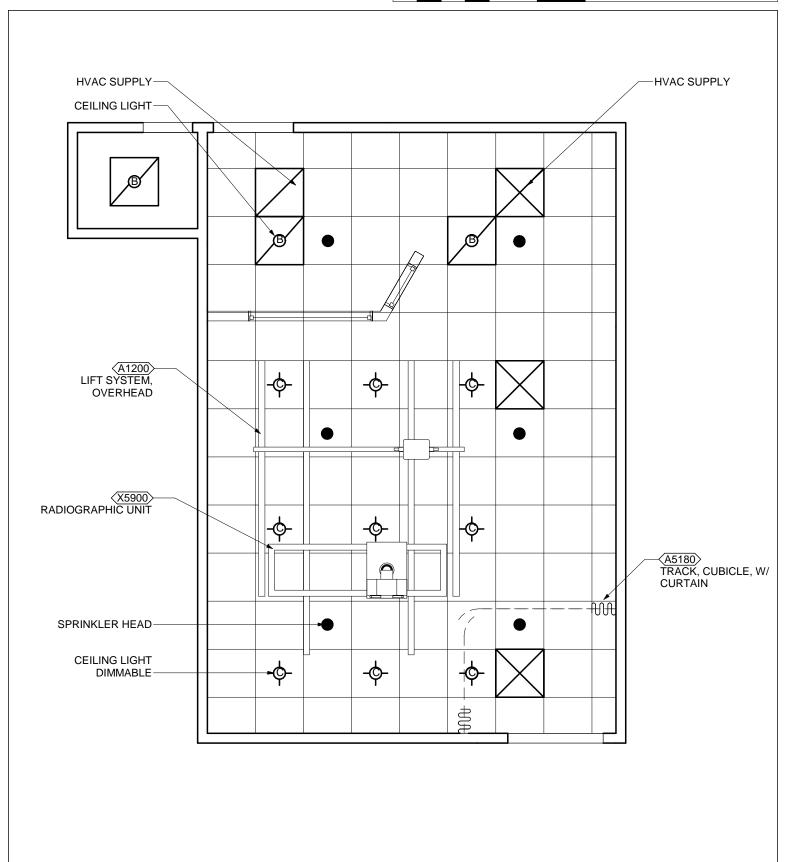




## Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) REFLECTED CEILING PLAN

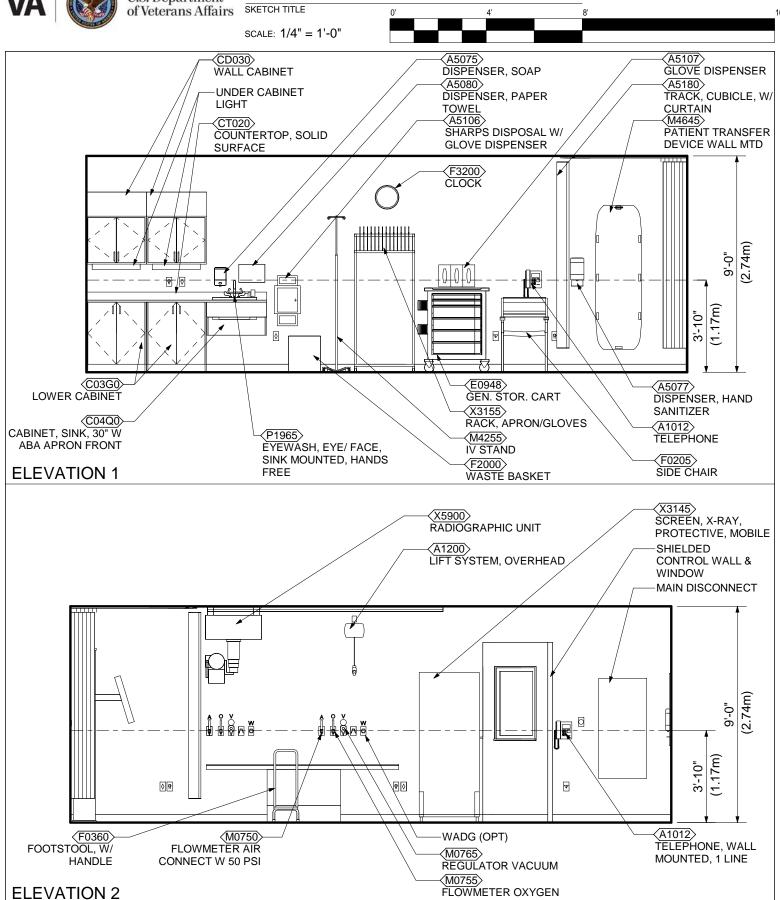
SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





### Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) **ELEVATIONS**

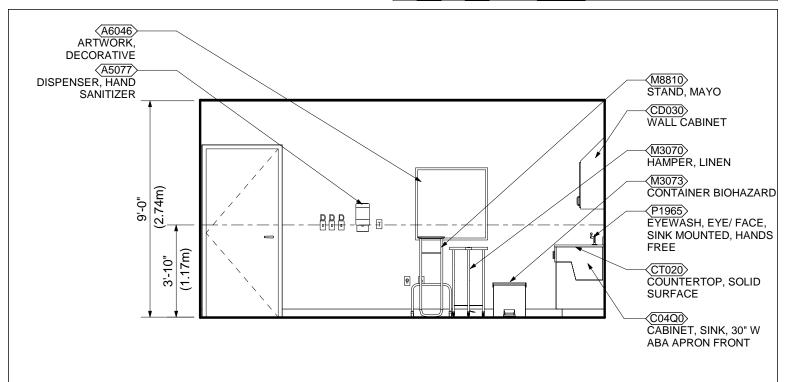




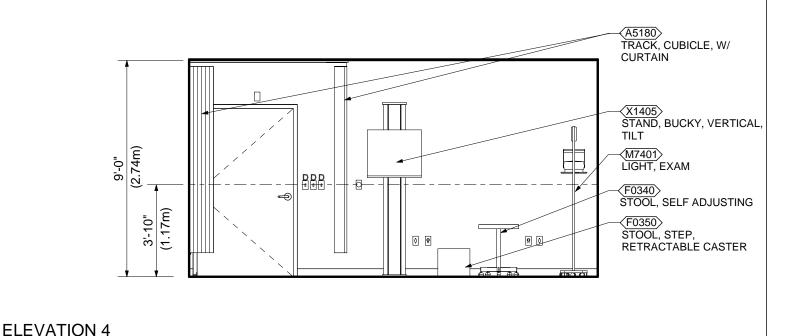
## Class 2 Radiology Imaging Room, Imgng Svcs (Cl016) ELEVATIONS

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"



### **ELEVATION 3**



CHAPTER 295 - Class 2 Radiology Imaging Room, Imgng Svcs (CI016)

Room Data: Class 2 Radiology Imaging Room, Imgng Svcs (CI016)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF / RSF at h: 4" (100mm) Floor Finish: WSF / RSF Slab Depression: Sound Protection: STC 40

#### Notes:

Doors:

1. Provide a 4'-0" wide shielded door into the Radiology Room Class 1.

m: Wood t: 7 dl: LEAD s: X

 Provide a shielded viewing window from the Control Alcove into the Radiology Room Class 1.

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected receptacles and equipment.

Emergency Power: Critical branch of the EES to be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Yes Code Blue Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

1. PACS: two 4-port telecommunication outlets per PACS station

### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Medical Air: Minimum 2 outlets/room Medical Vacuum: Minimum 2 outlets/room Oxygen: Minimum 2 outlets/room Waste Anesthetic Gas: Rec 2 outlets/room



### Room Contents: Class 2 Radiology Imaging Room, Imgng Svcs (Cl016)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
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JSN	Content Name	Acq Code	Qty	Description
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A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
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C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
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JSN	Content Name	Acq Code	Qty	Description
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
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F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.



JSN	Content Name	Acq Code	Qty	Description
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.



JSN	Content Name	Acq Code	Qty	Description
X1405	Stand, Bucky, Vertical, Tilt, Automatic	VC	1	Vertical and tilting bucky stand. This unit is mounted to the floor and wall to provide a vibration-free mounting platform for the universal bucky. The grid line free radiographs are produced at exposure times as short as two milliseconds. Characteristics and components include aluminum interspaced grid with a 36 inch (914 mm) to 40 inch (1016 mm) focal range. The unit's cassette size sensing tray accommodates all cassette sizes between 5 and 17 inches. The unit tilts at angles of +90/-20 degrees from the vertical position. The unit is used in X-ray facilities for processing radiography images.
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X5900	Radiographic Unit, 80 kW, Non-Tilt Table	VC	1	This system is specifically designed to perform radiographic examinations in the Radiology Department. This units characteristics and components include, 80kW micro-processor controlled X-ray generator, a non-tilting table with a floating table top and an adjustable bucky, a ceiling suspended 0.6/1.2 mm tube unit and vertical bucky stand.

Room Contents: Class 2 Radiology Control Alcove, Imgng Svcs (Cl017)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
F0230	Chair, Drafting, Rotary	VV	2	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.



JSN	Content Name	Acq Code	Qty	Description
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.

Room Contents: Class 2 Radiology System Component Room, Imgng Svcs (Cl018)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



### Chest Imaging Room, Imgng Svcs (Cl021) DISCLAIMER

SKETCH TITLE

SCALE: 1/4" = 1'-0"



#### **DISCLAIMER:**

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CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

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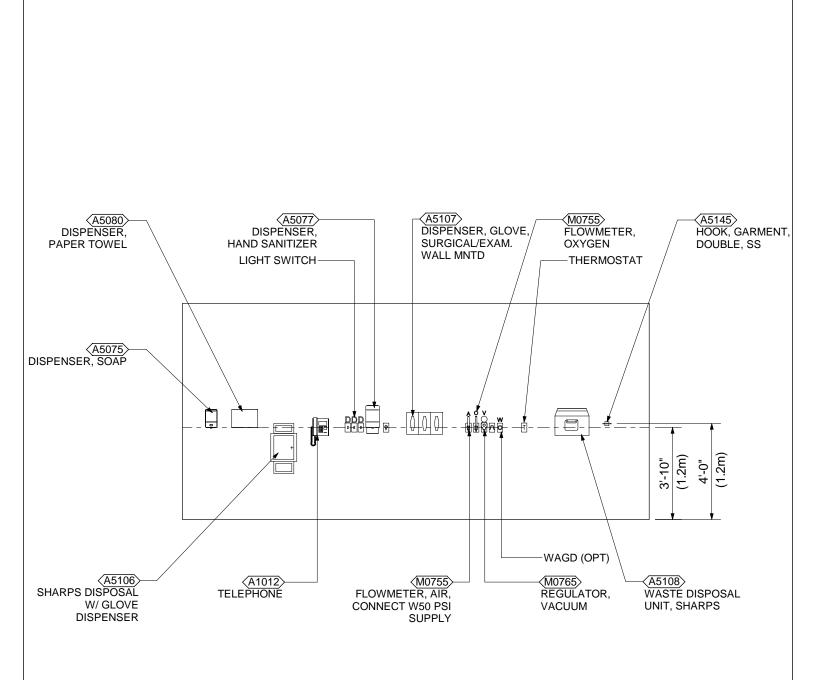
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### Chest Imaging Room, Imgng Svcs (Cl021) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

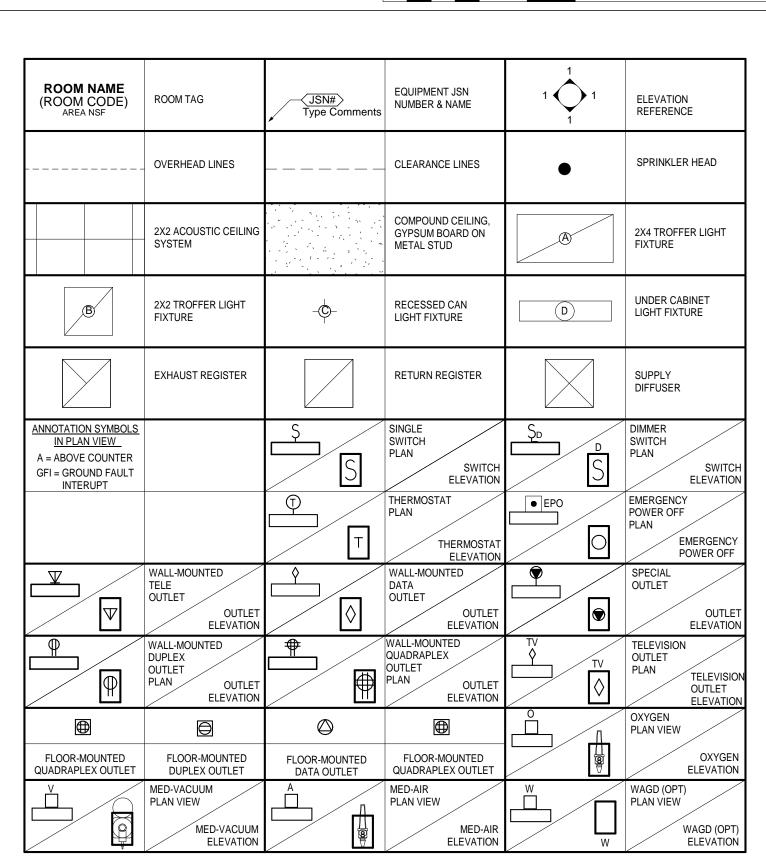
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



## Chest Imaging Room, Imgng Svcs (Cl021) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

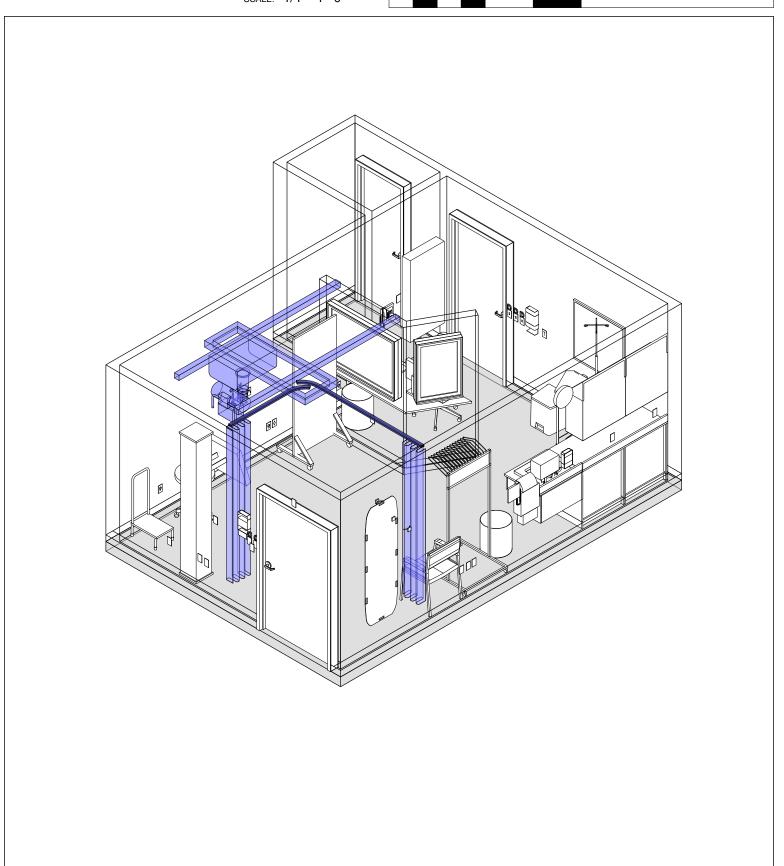




# Chest Imaging Room, Imgng Svcs (Cl021) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" - 1' -0"





# Chest Imaging Room, Imgng Svcs (Cl021) INTERACTIVE 3D PDF

SKETCH TITLE

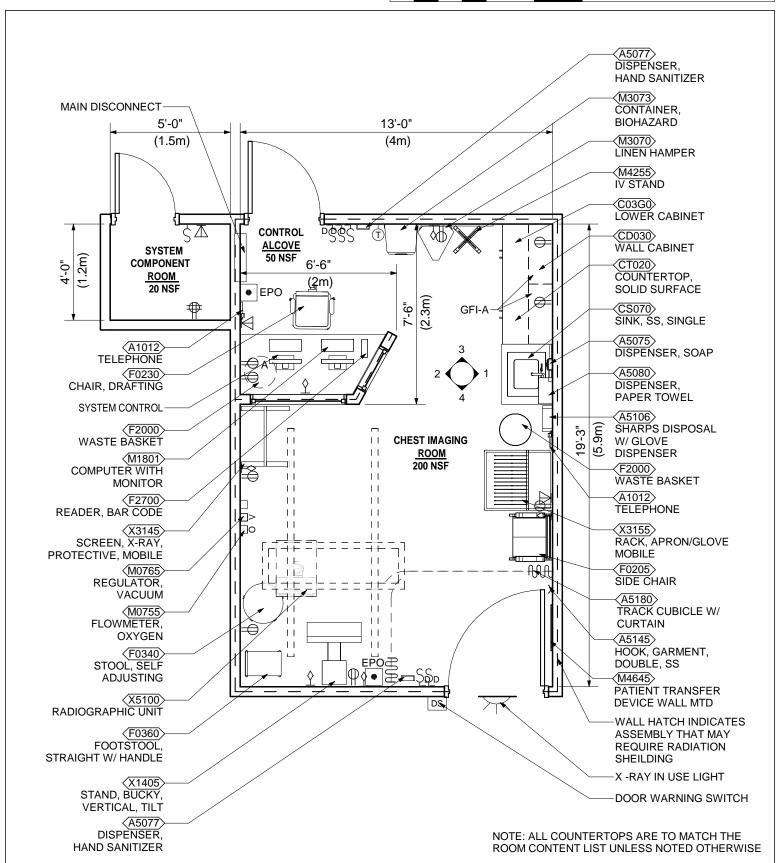
SCALE:		



### Chest Imaging Room, Imgng Svcs (Cl021) FLOOR PLAN

SKETCH TITLE 0' 4' 8'

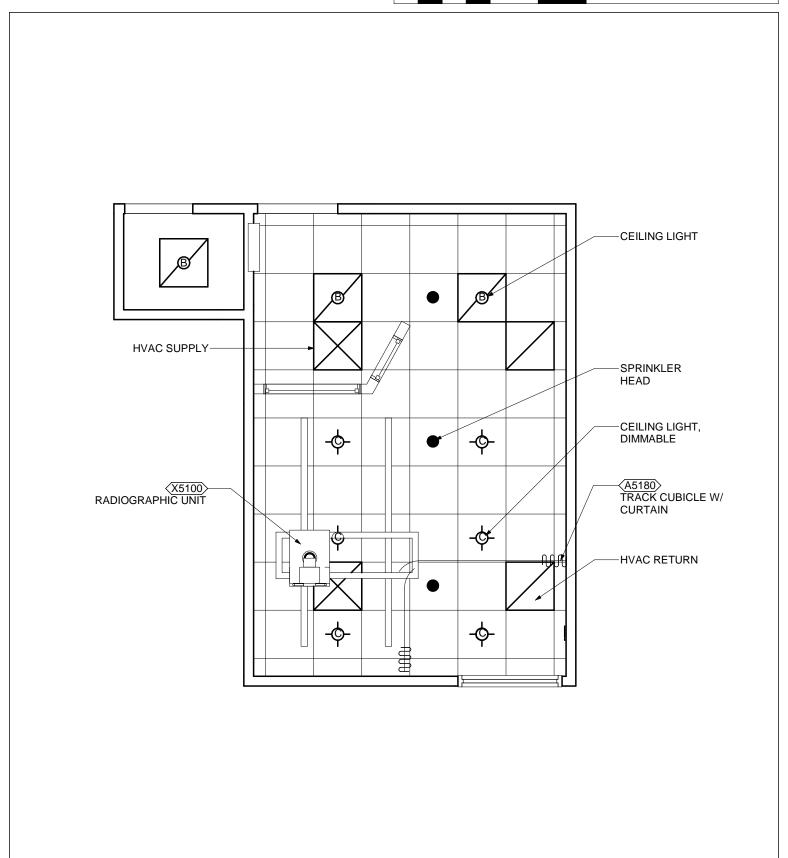
SCALE: 1/4" = 1'-0"





# Chest Imaging Room, Imgng Svcs (Cl021) REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"

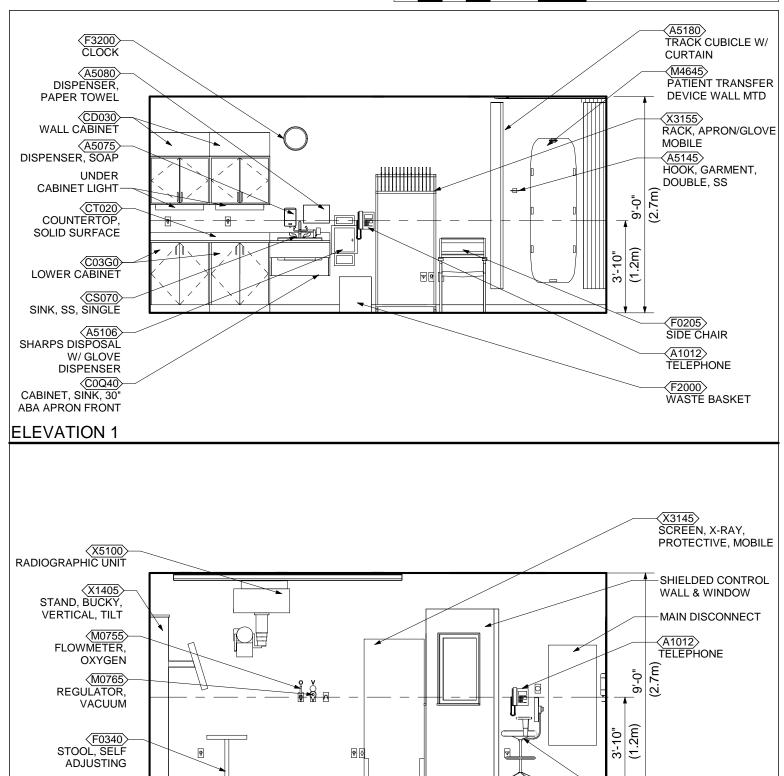




**ELEVATION 2** 

## Chest Imaging Room, Imgng Svcs (Cl021) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



CHAIR, DRAFTING

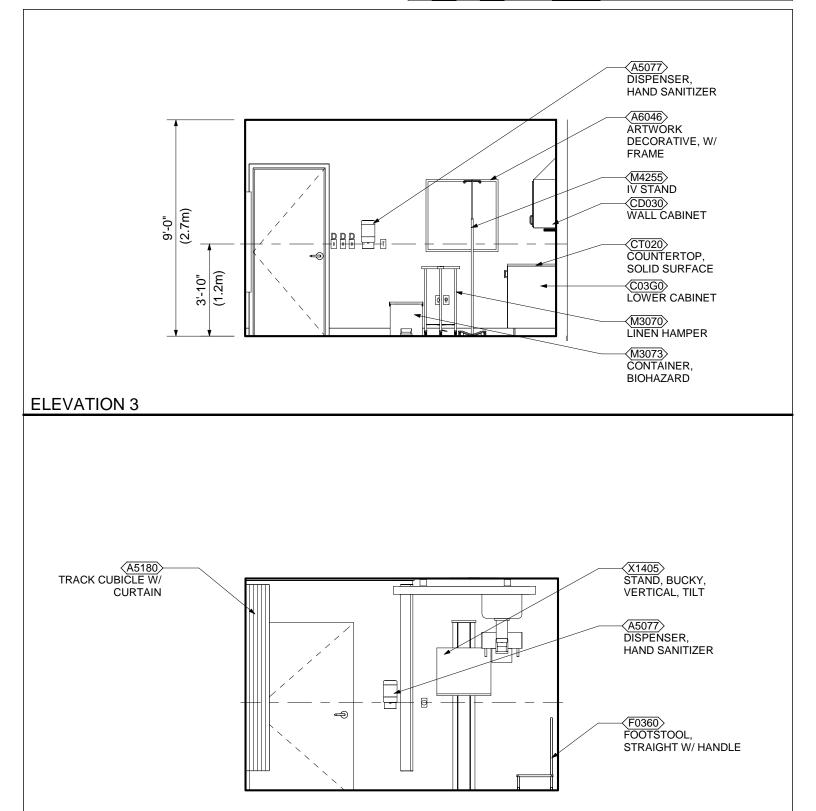
(F0230)



**ELEVATION 4** 

## Chest Imaging Room, Imgng Svcs (Cl021) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



Room Data: Chest Imaging Room, Imgng Svcs (CI021)

#### **ARCHITECTURAL & INTERIOR DESIGN**

ΑT Ceiling Type: 9'-0" (2700mm) Ceiling Height: Ceiling Finish: **ACT** Wall Finish: m: GWB f:P Wainscot: m: WSF / RSF at h: 4" (100mm) Base: Floor Finish: WSF / RSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD s: X

#### Notes:

- 1. Provide a 4'-0" wide shielded door into the Chest Imaging Room.
- 2. Provide a shielded viewing window from the Control Alcove into the Chest Imaging Room.

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Yes Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

1. PACS: two 4-port telecommunication outlets per PACS station

### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Minimum 1 outlet/room
Oxygen: Minimum 1 outlet/room



### Room Contents: Chest Imaging Room, Imgng Svcs (Cl021)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.

JSN	Content Name	Acq Code	Qty	Description
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).



JSN	Content Name	Acq Code	Qty	Description
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
X1405	Stand, Bucky, Vertical, Tilt, Automatic	VC	1	Vertical and tilting bucky stand. This unit is mounted to the floor and wall to provide a vibration-free mounting platform for the universal bucky. The grid line free radiographs are produced at exposure times as short as two milliseconds. Characteristics and components include aluminum interspaced grid with a 36 inch (914 mm) to 40 inch (1016 mm) focal range. The unit's cassette size sensing tray accommodates all cassette sizes between 5 and 17 inches. The unit tilts at angles of +90/-20 degrees from the vertical position. The unit is used in X-ray facilities for processing radiography images.



JSN	Content Name	Acq Code	Qty	Description
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X5100	Radiographic Unit, 80 kW, Chest, Digital	VC	1	Digital chest system designed solely for making x-ray exposures of the chest. Patients can be standing, seated or lying on their sides. Patient through put is approximately 60 exposures per hour. The configuration of the system consists of a detector subsystem, image processing system, 80 kW high frequency x-ray generator and ceiling suspension or floor mounted column for the x-ray tube. The system shall be DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations.

Room Contents: Chest Control Alcove, Imgng Svcs (CI022)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
F0230	Chair, Drafting, Rotary	VV	1	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.

Room Contents: Chest System Component Alcove, Imgng Svcs (Cl023)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



# Class 1 R/F Imaging Room, Imgng Svcs (Cl031) DISCLAIMER

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

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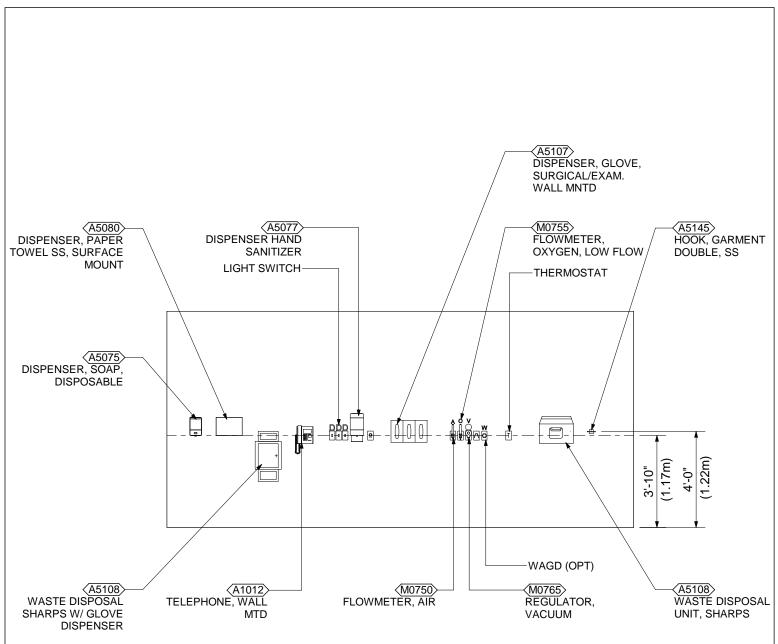
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS. AND UTILITY REQUIREMENTS.



# Class 1 R/F Imaging Room, Imgng Svcs (Cl031) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



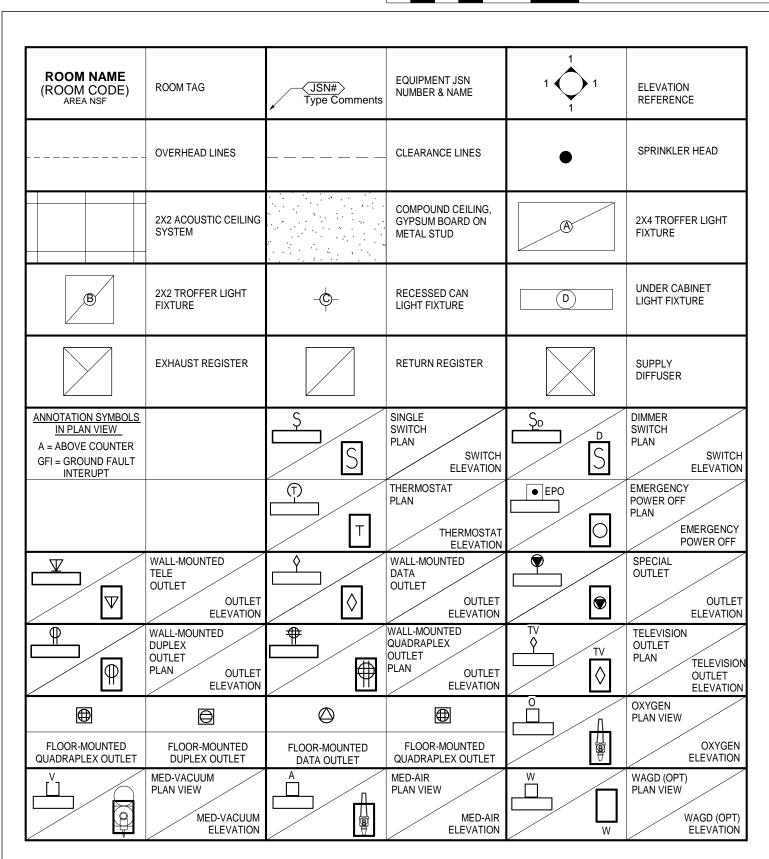
# **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance

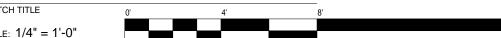
# LEGEND U.S. Department

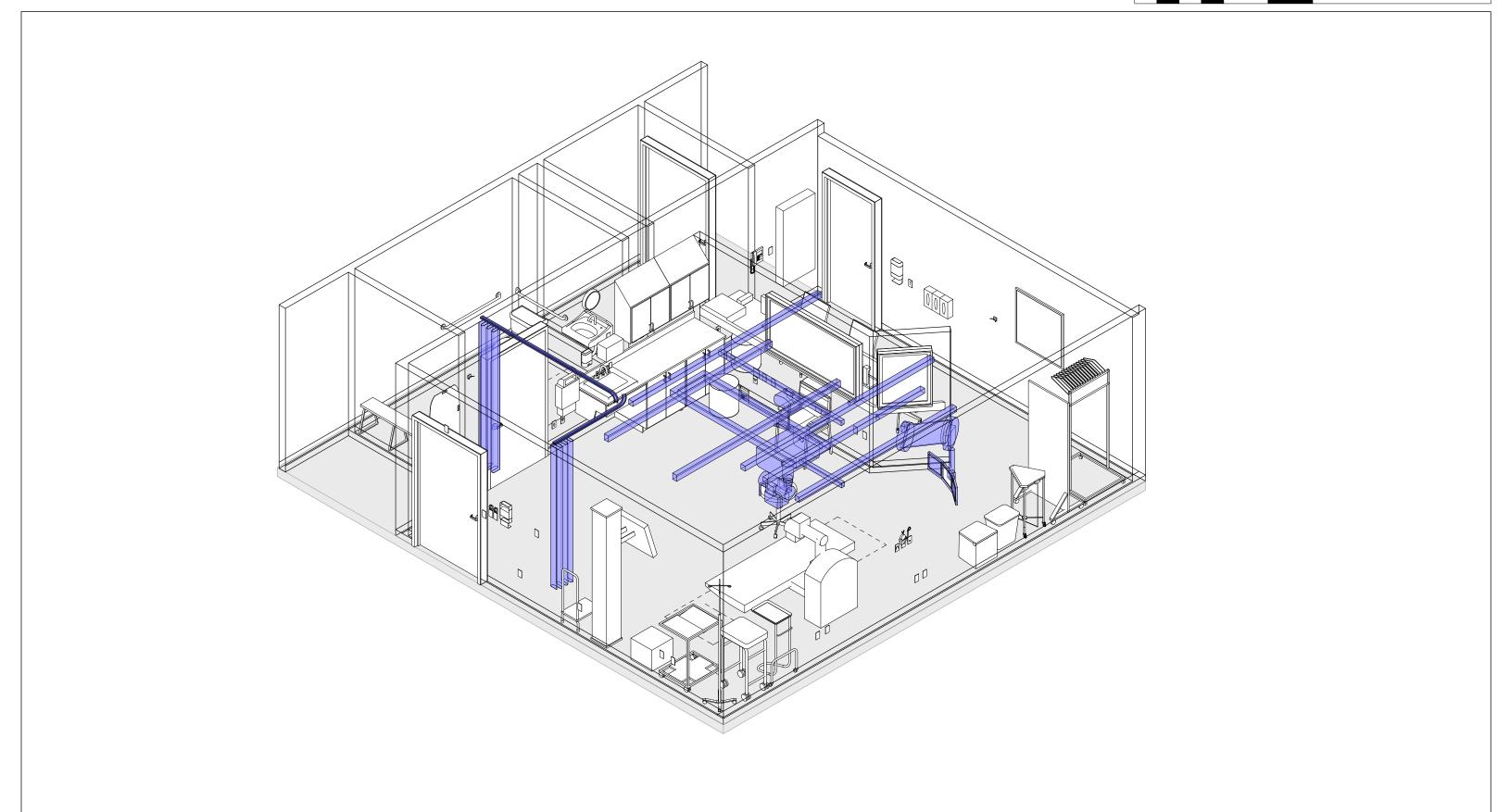






SCALE: 1/4" = 1'-0"





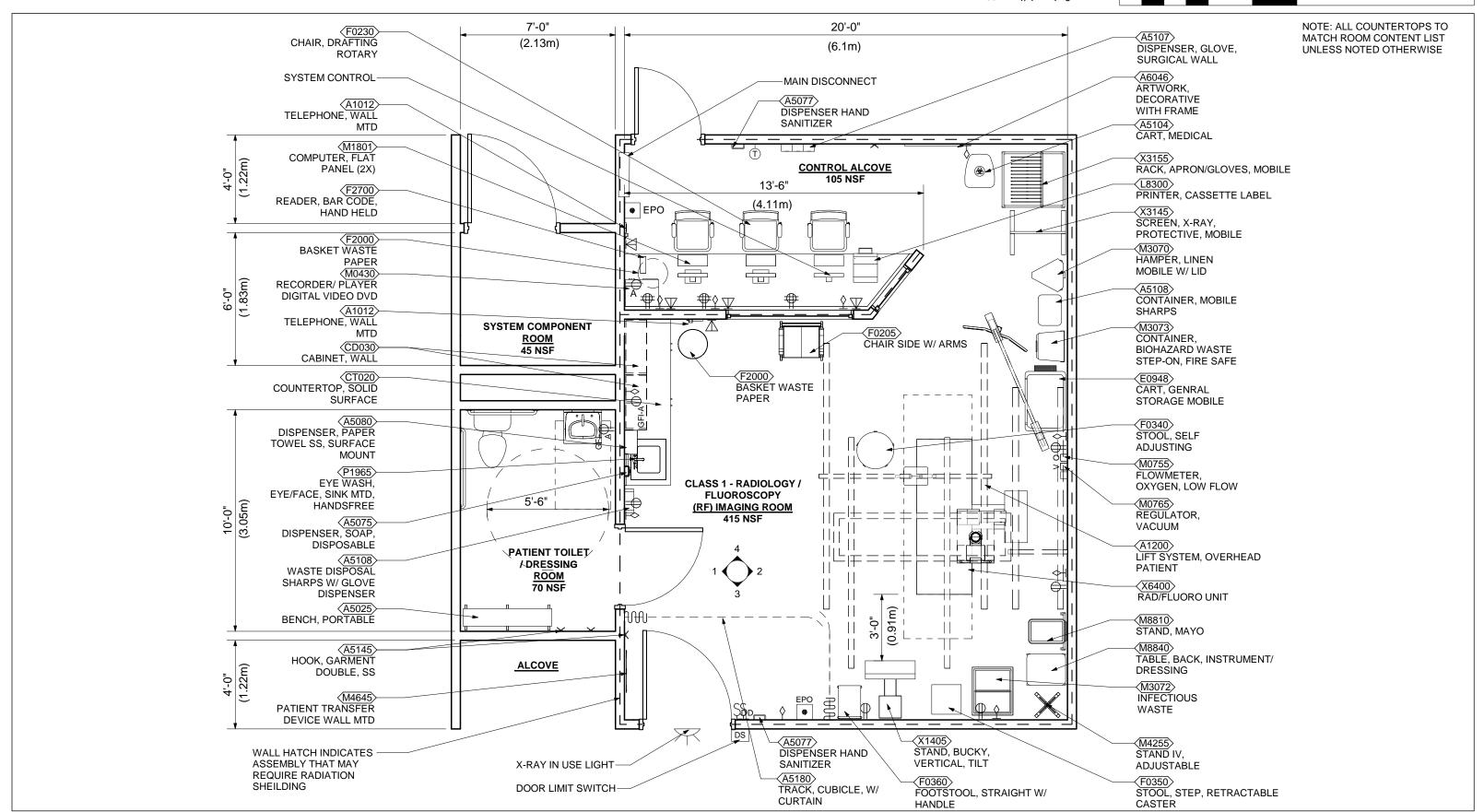


# Class 1 R/F Imaging Room, Imgng Svcs (Cl031) INTERACTIVE 3D PDF

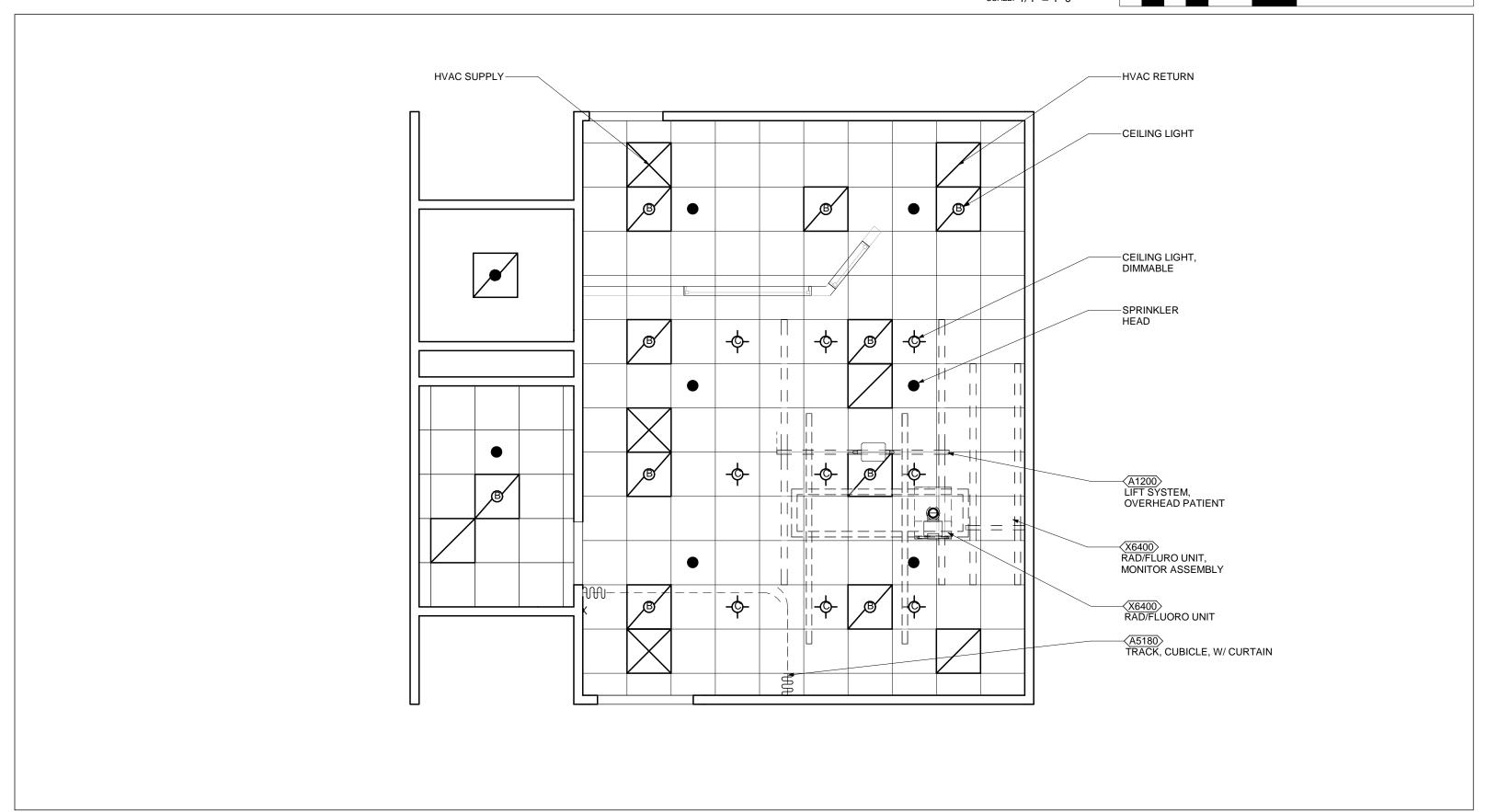
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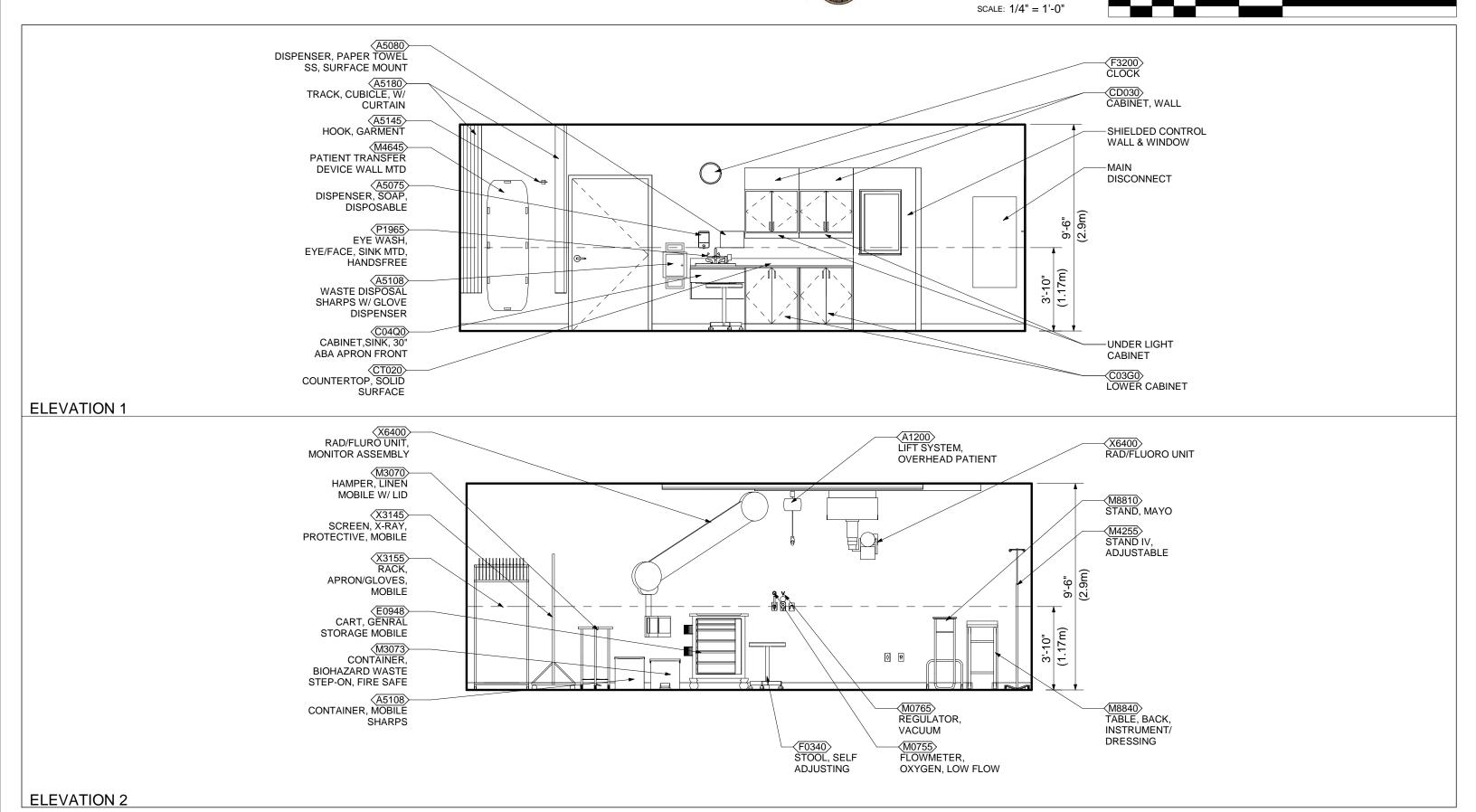








SKETCH TITLE 0' 4' 8'



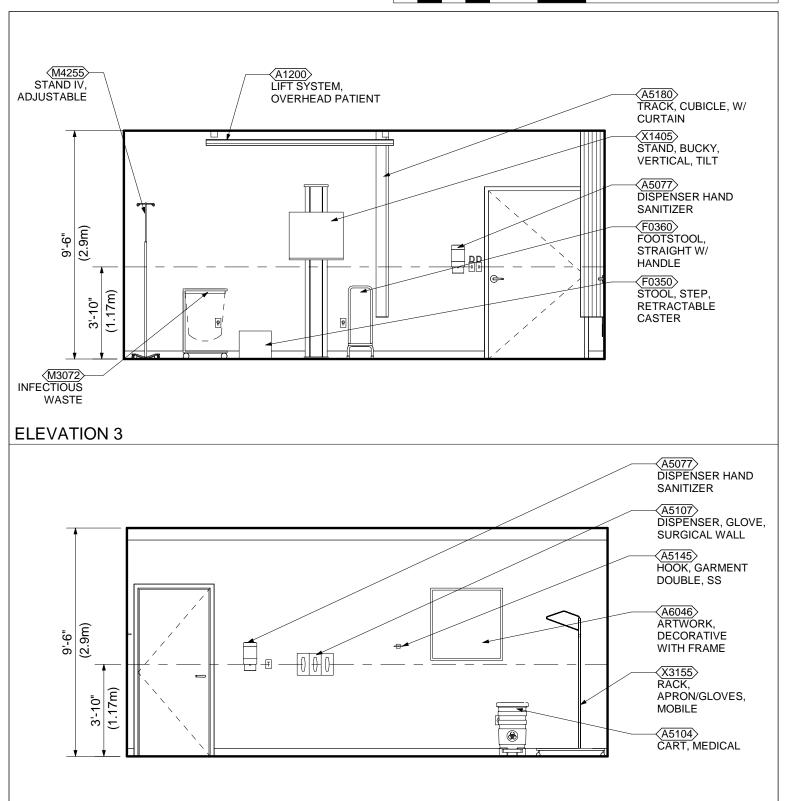


**ELEVATION 4** 

# Class 1 R/F Imaging Room, Imgng Svcs (Cl031) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



Room Data: Class 1 R/F Imaging Room, Imgng Svcs (Cl031)

# **ARCHITECTURAL & INTERIOR DESIGN**

ΑT Ceiling Type: 9'-6" (2900mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: m: WSF / RSF at h: 4" (100mm) Base: Floor Finish: WSF / RSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD s: X

- Notes:
  - Provide a 4'-0" wide shielded door into the Radiology/ Fluoroscopy Room – Class 1.
  - Provide a 4'-0" wide shielded door from the Radiology/ Fluoroscopy Room – Class 1 to the Patient Dressing/ Toilet Room.
  - Provide a shielded viewing window from the Control Alcove into the Radiology/ Fluoroscopy Room – Class 1.

# LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

# **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected receptacles and equipment.

Emergency Power: Critical branch of the EES to be connected to selected

receptacles and equipment.

### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

# COMMUNICATION/SPECIAL SYSTEMS

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

# Notes:

- Nurse call in Dressing/ Toilet Room to annunciate in Scanning Room and at Reception Desk.
- 2. PACS:two 4-port telecommunication outlets per PACS station



# HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

# PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: --Sanitary Drain: Yes Reagent grade Water: Medical Air: **Not Required** Medical Vacuum: Minimum 1 outlets/room Oxygen: Minimum 1 outlets/room

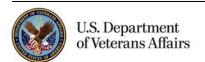
Room Contents: Class 1 R/F Imaging Room, Imgng Svcs (Cl031)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5104	Cart, Medical Waste Disposal, Mobile w/Foot Pedal	VV	1	Mobile molded cart with foot pedal, to house 18-24 gal sharps disposal container. Lid lift or slide opens easily with foot-operated pedal. Lid may remain closed when not in use to reduce exposure to contents. Ergonomic handle is telescopic. Heavy containers can be removed from the side with minimal lifting. Meets requirements of OSHA 29 CFR 1910.130.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.

JSN	Content Name	Acq Code	Qty	Description
A5108	Waste Disposal Unit, Sharps	VV	2	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	2	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
A6330	Intercom - Room To Room	VV	1	Intercom for local communication between rooms. May be used for areas such as a seclusion ante-room to the seclusion room or other areas such as the accelerator caves and the accelerator control area.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.



JSN	Content Name	Acq Code	Qty	Description
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8840	Table, Back, Instrument/Dressing	VV	1	A specialty back table for large cases such as orthopedics, spinal fusions, neuro and craniotomies. The table has a pneumatic tuckaway cantilevered shelf which can hold multiple trays and is angled for clear observation of instruments. It comes with 4" diameter heavy-duty ball bearing brake/swivel casters. Construction is all stainless steel.



JSN	Content Name	Acq Code	Qty	Description
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X1405	Stand, Bucky, Vertical, Tilt, Automatic	VC	1	Vertical and tilting bucky stand. This unit is mounted to the floor and wall to provide a vibration-free mounting platform for the universal bucky. The grid line free radiographs are produced at exposure times as short as two milliseconds. Characteristics and components include aluminum interspaced grid with a 36 inch (914 mm) to 40 inch (1016 mm) focal range. The unit's cassette size sensing tray accommodates all cassette sizes between 5 and 17 inches. The unit tilts at angles of +90/-20 degrees from the vertical position. The unit is used in X-ray facilities for processing radiography images.
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6400	Rad/Fluoro Unit, 80 kW, 15" I.I., 90/90 Table, DIG	VC	1	This system is specifically designed to perform radiographic/fluoroscopic examinations in the Radiology Department. On-line digital image processing will provide instant availability of images for review. The characteristics and components include a ceiling suspended 0.6/1.0 mm tube unit, 80 kW microprocessor controlled X-ray generator, 90/90 table with 15" multi-field Image Intensifier (I.I.). The system shall be DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations. It is recommended that the TV monitors be ceiling suspended.

Room Contents: Class 1 R/F Control Room, Imgng Svcs (Cl032)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
F0230	Chair, Drafting, Rotary	VV	3	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
L8300	Printer, Cassette Label, Laboratory	VV	1	Label maker for laboratory cassettes. The printer uses a heat-foil transfer process or indelible ink ribbons to permanently identify laboratory slide cassette boxes. The labels and printing resist being affected by processing reagents.
M0430	Recorder/ Player, Digital, Video, DVD	VV	1	Professional medical grade DVD video recorder/player. Approximately 5" high X 10" wide X 14" deep. Meets NTSC and PAL standards and employs MPEG2 video compression. Capable of high speed picture search, direct recording into available disc space and recording and playback on various DVD formats. Audio uses Dolby digital format. Convenience outlet required at point of use.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	2	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.

Room Contents: Class 1 R/F System Component Room, Imgng Svcs (Cl033)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



# Class 2 R/F Imaging Room, Imgng Svcs (Cl036) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR, NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

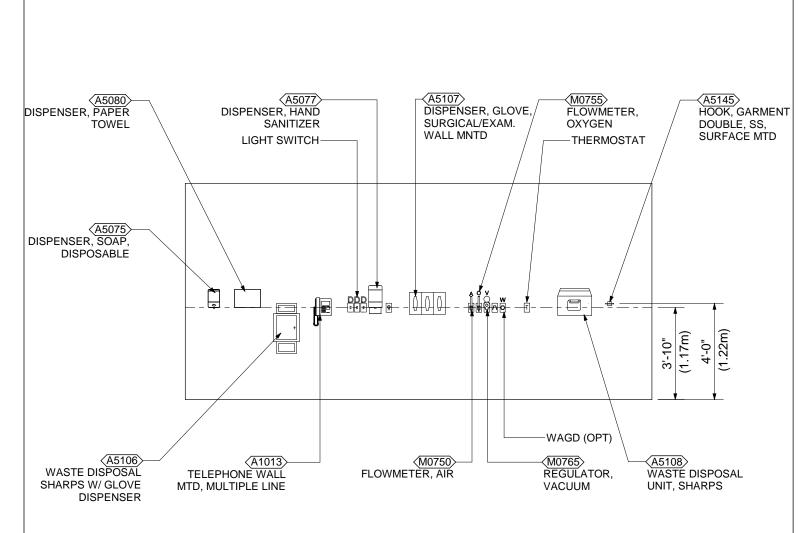
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS. AND UTILITY REQUIREMENTS.



# Class 2 R/F Imaging Room, Imgng Svcs (Cl036) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"



# Drawing Notes:

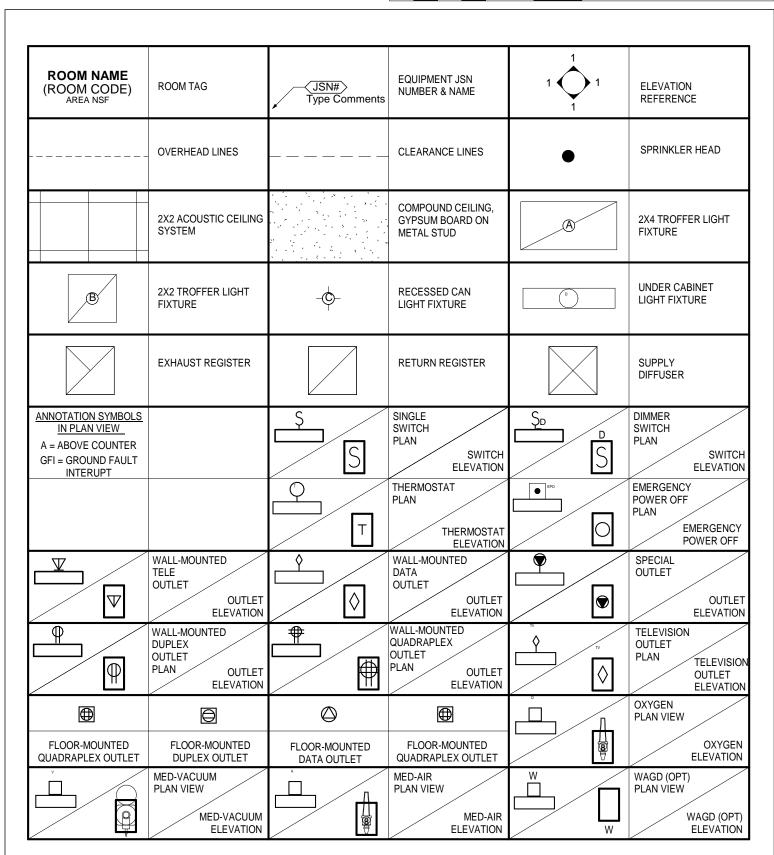
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



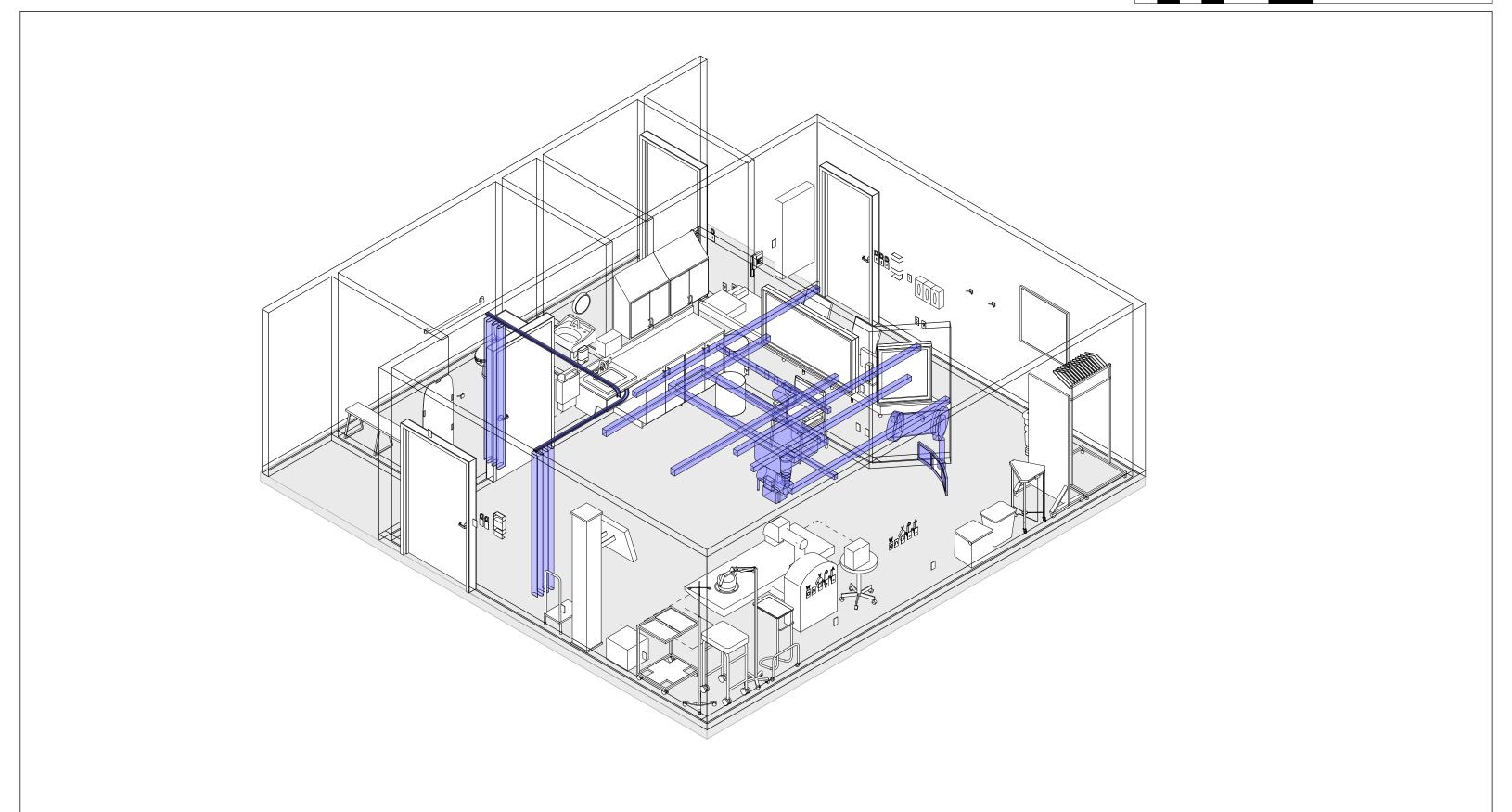
# Class 2 R/F Imaging Room, Imgng Svcs (Cl036) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





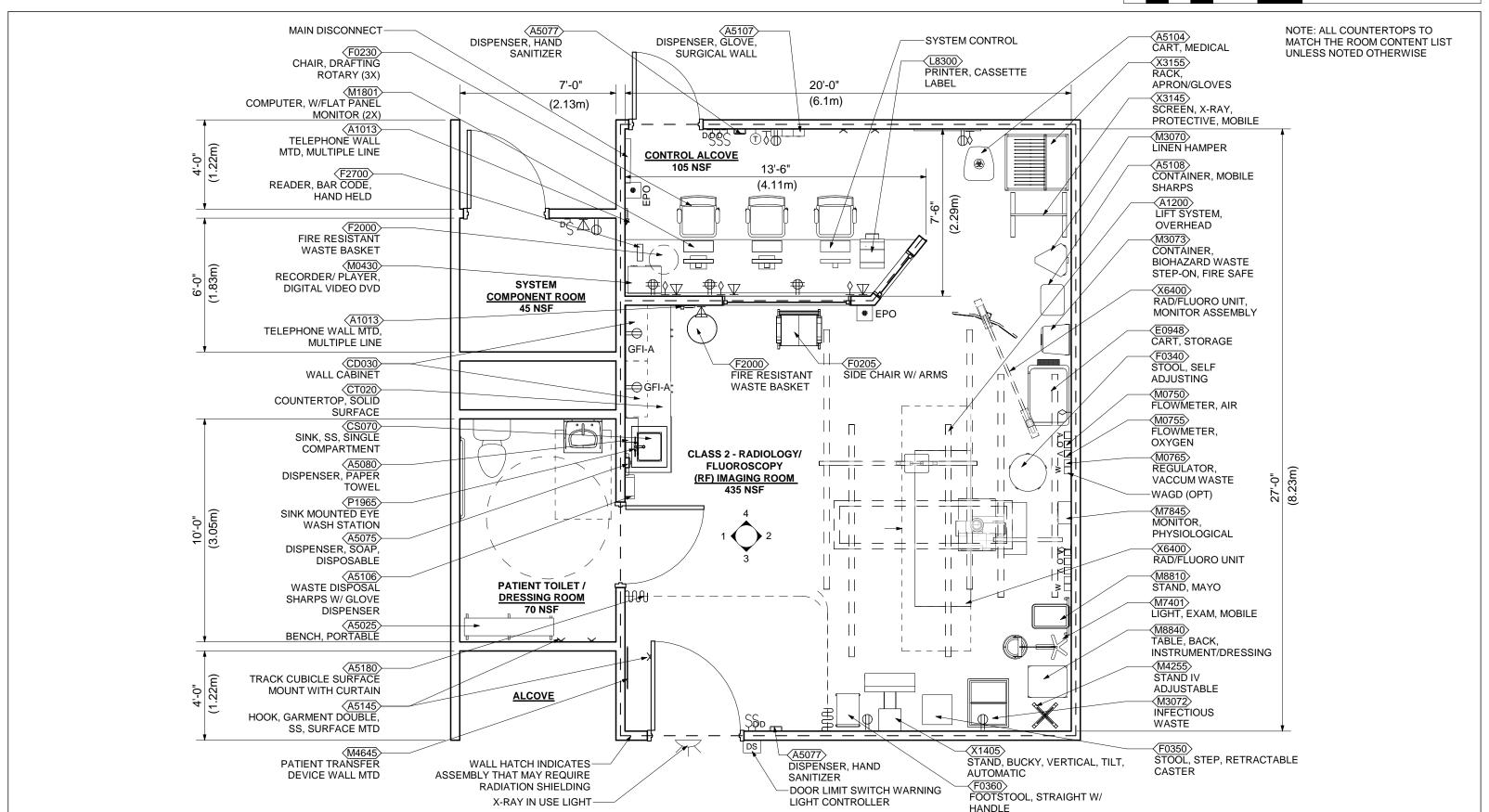


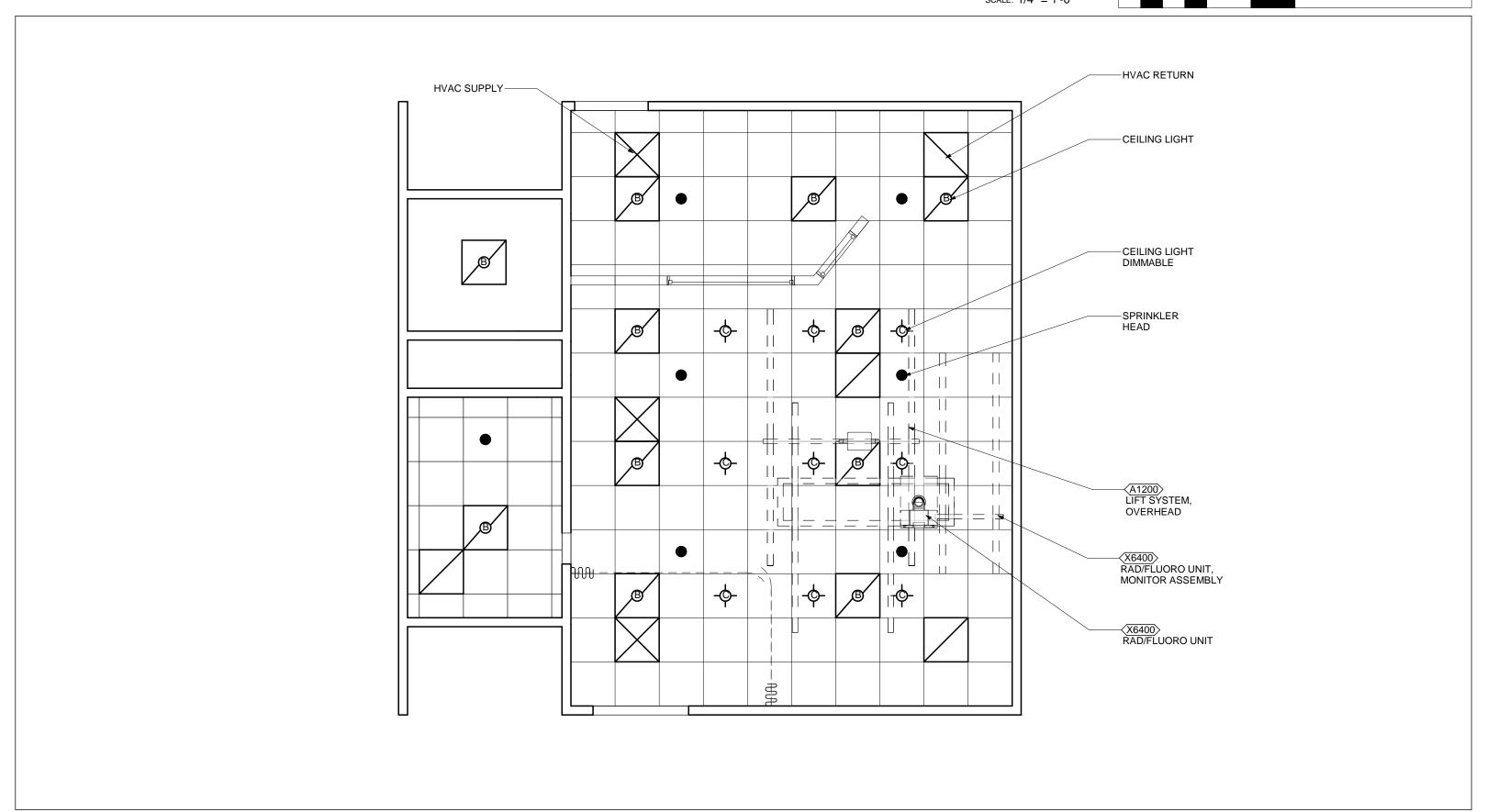


# Class 2 R/F Imaging Room, Imgng Svcs (Cl036) INTERACTIVE 3D PDF

U.S. Department of Veterans Affairs SKETCH TITLE SCALE:

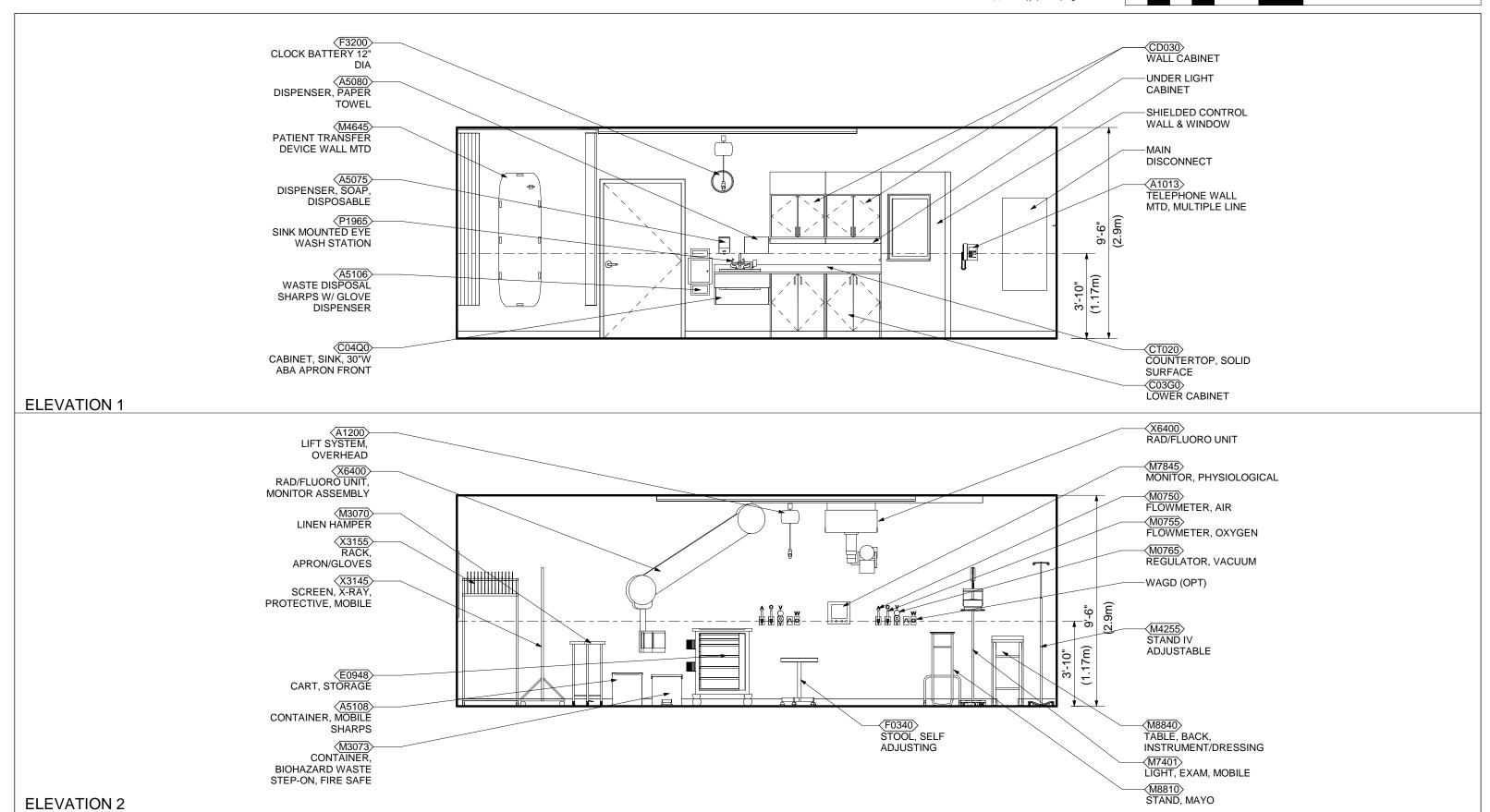
SCALE: 1/4" = 1'-0"



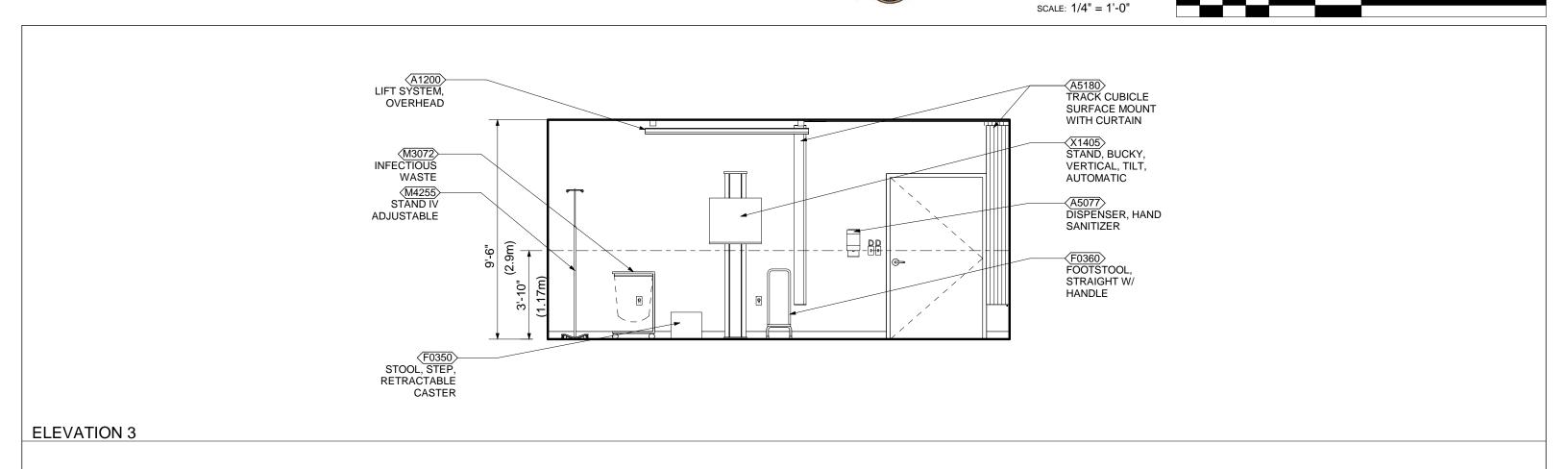


SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



CART, MEDICAL



# DISPENSER, GLOVE, SURGICAL WALL DISPENSER, HAND SANITIZER A5145) HOOK, GARMENT DOUBLE, SS, SURFACE MTD A6046) ARTWORK, DECORATIVE A6046) ARTWORK, DECORATIVE

REQUIREMENTS FOR SPACE, ROOM CONTENTS, AND ROOM SPECIFIC ENGINEERING SYSTEMS. THEY PROVIDE TYPICAL CONFIGURATIONS, PLANNING CRITERIA, AND GENERAL TECHNICAL GUIDANCE, AND ARE NOT INTENDED TO BE PROJECT SPECIFIC REQUIREMENTS.

Room Data: Class 2 R/F Imaging Room, Imgng Svcs (CI036)

### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: AT (SP) 9'-6" (2900mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD s: X

### Notes:

- Provide a 4'-0" wide shielded door into the Multipurpose Fluoroscopy (R/F) Room.
- Provide a 4'-0" wide shielded door from the Multipurpose Fluoroscopy (R/F) Room to the Patient Dressing/ Toilet Room.
- 3. Provide a shielded viewing window from the Control Alcove into the Multipurpose Fluoroscopy (R/F) Room.

# LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

# **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

# **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Note 1 Code Blue Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

### Notes:

- Nurse call in Dressing/ Toilet Room to annunciate in Scanning Room and at Reception Desk.
- 2. PACS: two 4-port telecommunication outlets per PACS station



# HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

# PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Minimum 2 outlets/room Medical Air: Medical Vacuum: Minimum 2 outlets/room Oxygen: Minimum 2 outlets/room Waste Anesthetic Gas: Rec 2 outlets/room

# Room Contents: Class 2 R/F Imaging Room, Imgng Svcs (Cl036)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1013	Telephone, Wall Mounted, Multiple Line	VV	1	Telephone, wall mounted, multiple line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.

JSN	Content Name	Acq	Qty	Description
		Code		·
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	2	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
A6330	Intercom - Room To Room	VV	1	Intercom for local communication between rooms. May be used for areas such as a seclusion ante-room to the seclusion room or other areas such as the accelerator caves and the accelerator control area.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	сс	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side  Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0430	Recorder/ Player, Digital, Video, DVD	VV	1	Professional medical grade DVD video recorder/player. Approximately 5" high X 10" wide X 14" deep. Meets NTSC and PAL standards and employs MPEG2 video compression. Capable of high speed picture search, direct recording into available disc space and recording and playback on various DVD formats. Audio uses Dolby digital format. Convenience outlet required at point of use.
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.



JSN	Content Name	Acq Code	Qty	Description
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.



JSN	Content Name	Acq Code	Qty	Description
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8840	Table, Back, Instrument/Dressing	VV	1	A specialty back table for large cases such as orthopedics, spinal fusions, neuro and craniotomies. The table has a pneumatic tuckaway cantilevered shelf which can hold multiple trays and is angled for clear observation of instruments. It comes with 4" diameter heavy-duty ball bearing brake/swivel casters. Construction is all stainless steel.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X1405	Stand, Bucky, Vertical, Tilt, Automatic	VC	1	Vertical and tilting bucky stand. This unit is mounted to the floor and wall to provide a vibration-free mounting platform for the universal bucky. The grid line free radiographs are produced at exposure times as short as two milliseconds. Characteristics and components include aluminum interspaced grid with a 36 inch (914 mm) to 40 inch (1016 mm) focal range. The unit's cassette size sensing tray accommodates all cassette sizes between 5 and 17 inches. The unit tilts at angles of +90/-20 degrees from the vertical position. The unit is used in X-ray facilities for processing radiography images.

JSN	Content Name	Acq Code	Qty	Description
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6400	Rad/Fluoro Unit, 80 kW, 15" I.I., 90/90 Table, DIG	VC	1	This system is specifically designed to perform radiographic/fluoroscopic examinations in the Radiology Department. On-line digital image processing will provide instant availability of images for review. The characteristics and components include a ceiling suspended 0.6/1.0 mm tube unit, 80 kW microprocessor controlled X-ray generator, 90/90 table with 15" multi-field Image Intensifier (I.I.). The system shall be DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations. It is recommended that the TV monitors be ceiling suspended.

Room Contents: Class 2 R/F Control Room, Imgng Svcs (Cl037)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1013	Telephone, Wall Mounted, Multiple Line	VV	1	Telephone, wall mounted, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
F0230	Chair, Drafting, Rotary	VV	3	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
L8300	Printer, Cassette Label, Laboratory	VV	1	Label maker for laboratory cassettes. The printer uses a heat-foil transfer process or indelible ink ribbons to permanently identify laboratory slide cassette boxes. The labels and printing resist being affected by processing reagents.
M0430	Recorder/ Player, Digital, Video, DVD	VV	1	Professional medical grade DVD video recorder/player. Approximately 5" high X 10" wide X 14" deep. Meets NTSC and PAL standards and employs MPEG2 video compression. Capable of high speed picture search, direct recording into available disc space and recording and playback on various DVD formats. Audio uses Dolby digital format. Convenience outlet required at point of use.

JSN	Content Name	Acq Code	Qty	Description
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	2	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.

## Room Contents: Class 2 R/F System Component Room, Imgng Svcs (Cl038)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



## Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (Cl041) DISCLAIMER

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR, NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

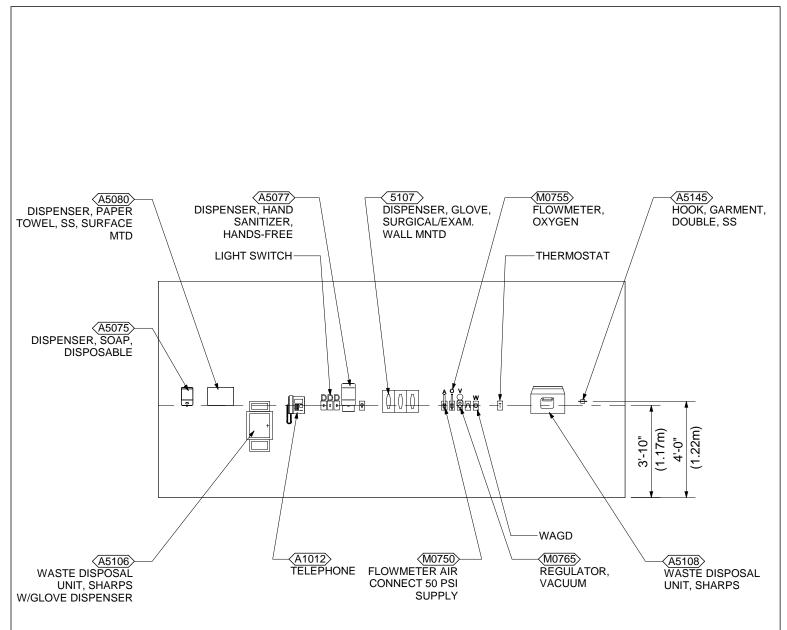
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS. AND UTILITY REQUIREMENTS.



## Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (Cl041) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

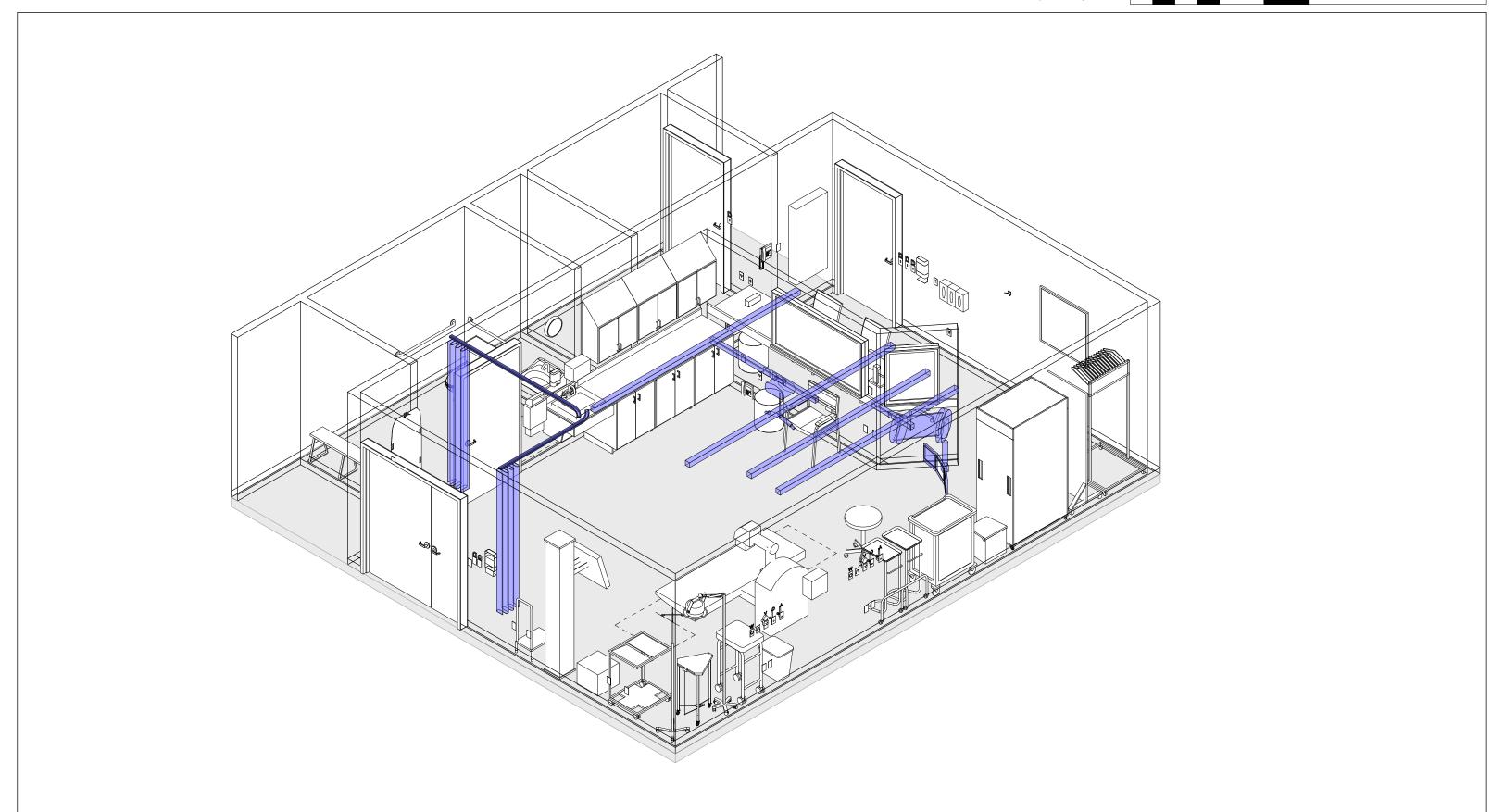
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (Cl041) LEGEND

ROOM NAME (ROOM CODE) AREA NSF	ROOM TAG	JSN# Type Comments	EQUIPMENT JSN NUMBER & NAME	1 1	ELEVATION REFERENCE
	OVERHEAD LINES		CLEARANCE LINES	•	SPRINKLER HEAD
	2X2 ACOUSTIC CEILING SYSTEM		COMPOUND CEILING, GYPSUM BOARD ON METAL STUD	<b>8</b>	2X4 TROFFER LIGHT FIXTURE
B	2X2 TROFFER LIGHT FIXTURE	-6-	RECESSED CAN LIGHT FIXTURE	(D)	UNDER CABINET LIGHT FIXTURE
	EXHAUST REGISTER		RETURN REGISTER		SUPPLY DIFFUSER
ANNOTATION SYMBOLS  IN PLAN VIEW  A = ABOVE COUNTER  GFI = GROUND FAULT INTERUPT		\$ S	SINGLE SWITCH PLAN SWITCH ELEVATION	\$ 5	DIMMER SWITCH PLAN SWITCH ELEVATION
		F	THERMOSTAT PLAN  THERMOSTAT ELEVATION	● EPO □	EMERGENCY POWER OFF PLAN EMERGENCY POWER OFF
$\nabla$	WALL-MOUNTED TELE OUTLET OUTLET ELEVATION		WALL-MOUNTED DATA OUTLET OUTLET ELEVATION		SPECIAL OUTLET  OUTLET  CUTLET  ELEVATION
	WALL-MOUNTED DUPLEX OUTLET PLAN OUTLET ELEVATION		WALL-MOUNTED QUADRAPLEX OUTLET PLAN OUTLET ELEVATION	TV V	TELEVISION OUTLET PLAN TELEVISIO OUTLET ELEVATIOI
			<b>(</b>		OXYGEN PLAN VIEW
FLOOR-MOUNTED QUADRAPLEX OUTLET	FLOOR-MOUNTED DUPLEX OUTLET	FLOOR-MOUNTED DATA OUTLET	FLOOR-MOUNTED QUADRAPLEX OUTLET		OXYGEN ELEVATION
V	MED-VACUUM PLAN VIEW  MED-VACUUM ELEVATION		MED-AIR PLAN VIEW  MED-AIR ELEVATION	*	WAGD (OPT) PLAN VIEW  WAGD (OPT ELEVATION

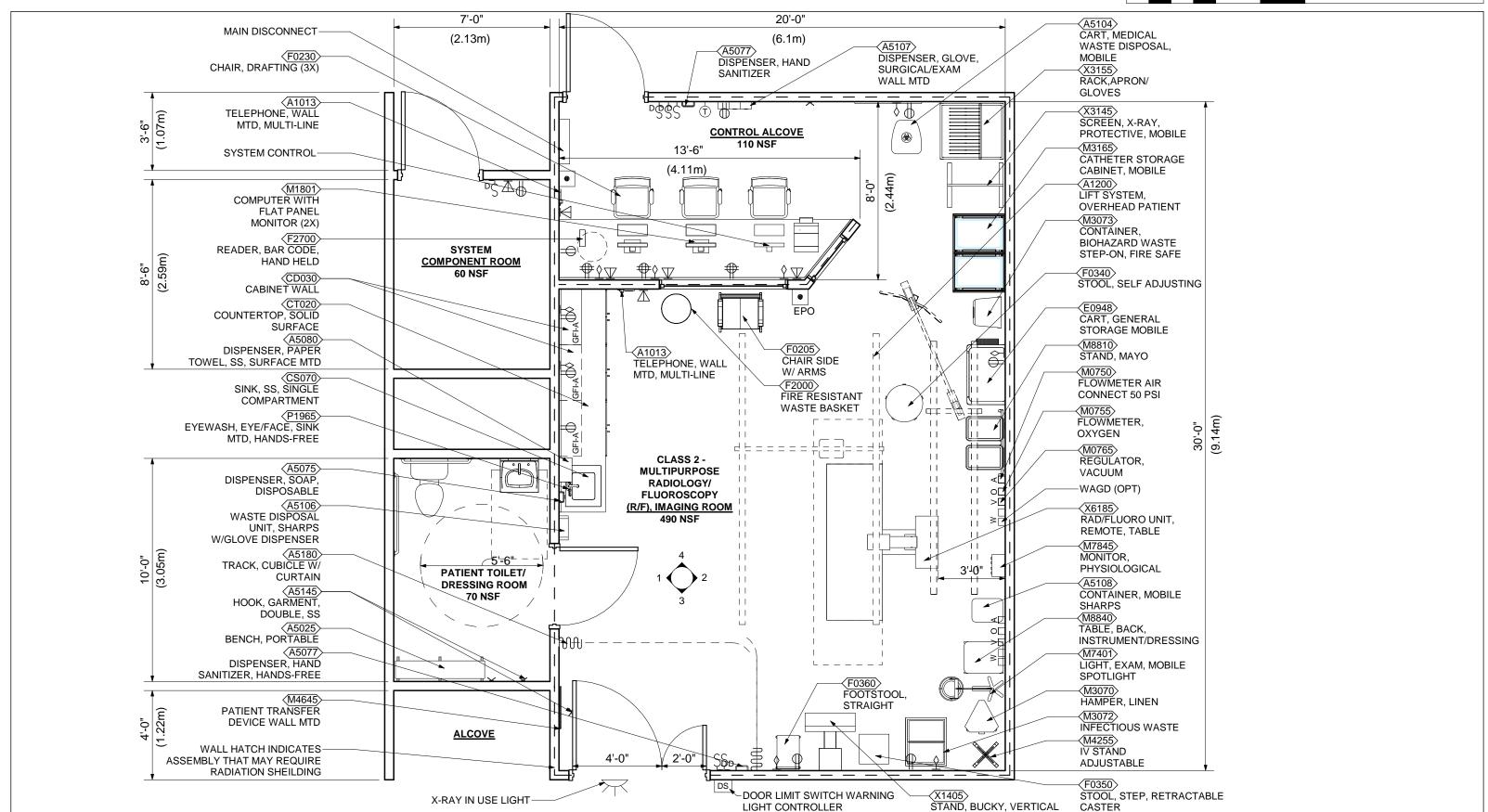


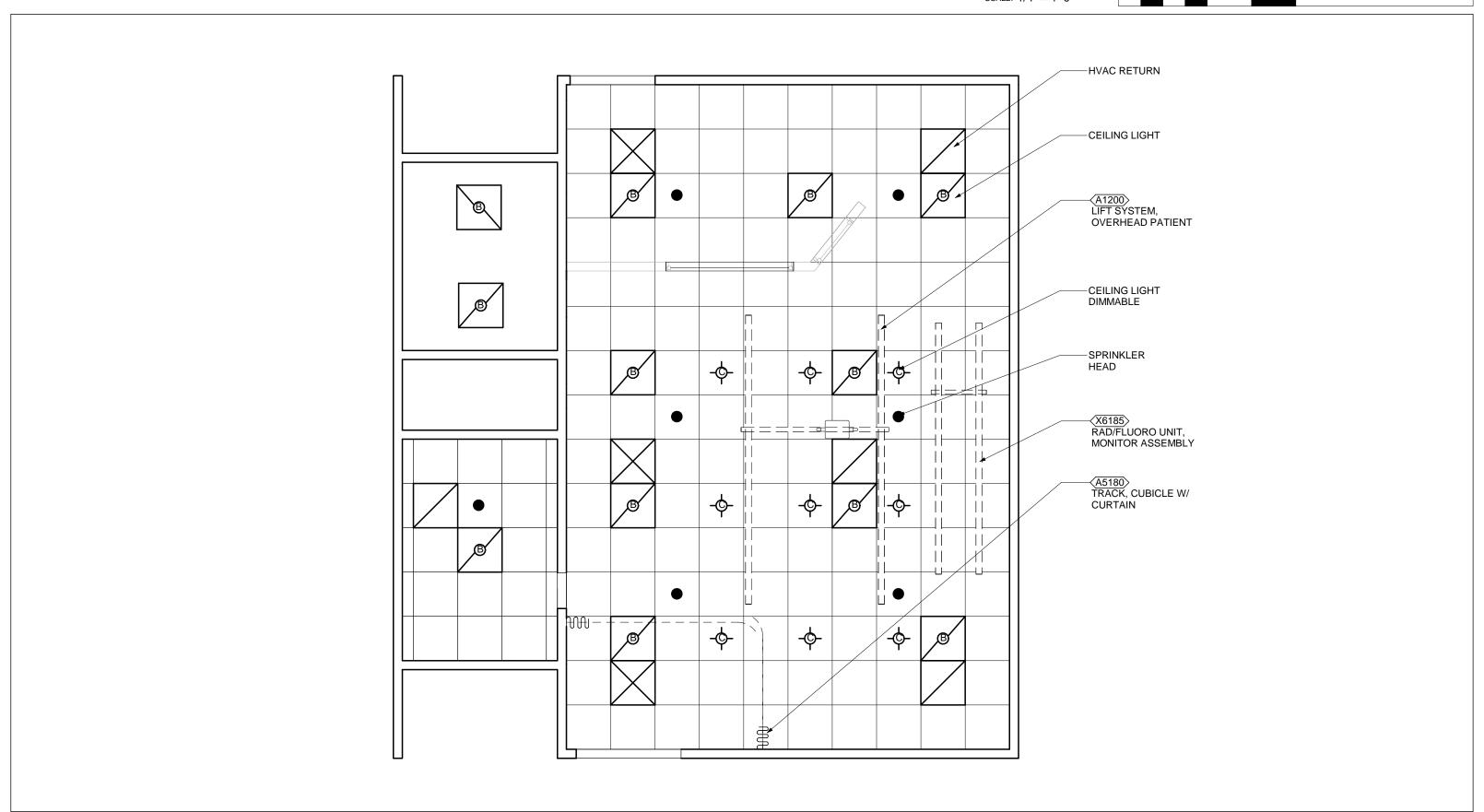


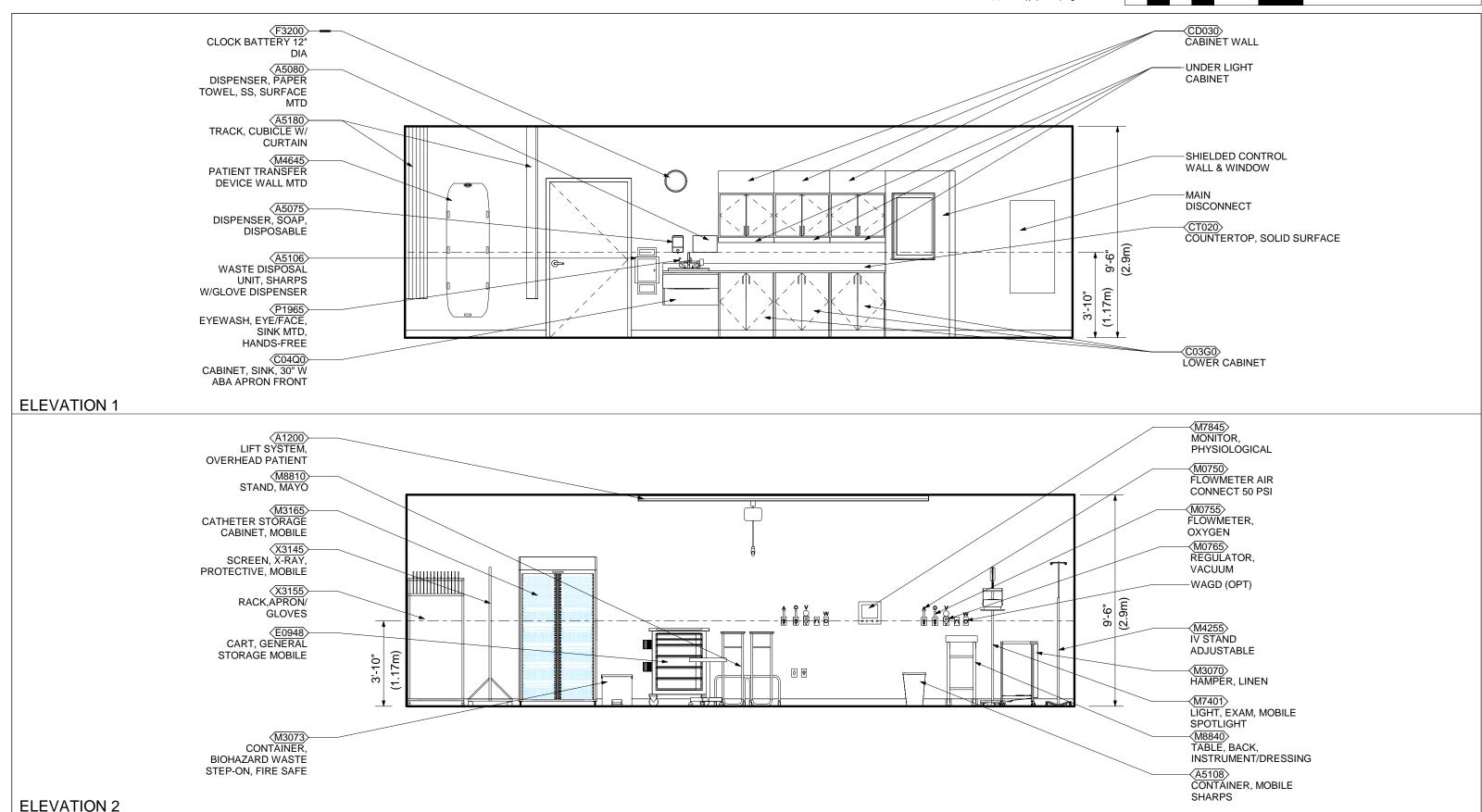


Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (Cl041) INTERACTIVE 3D PDF

SCALE:



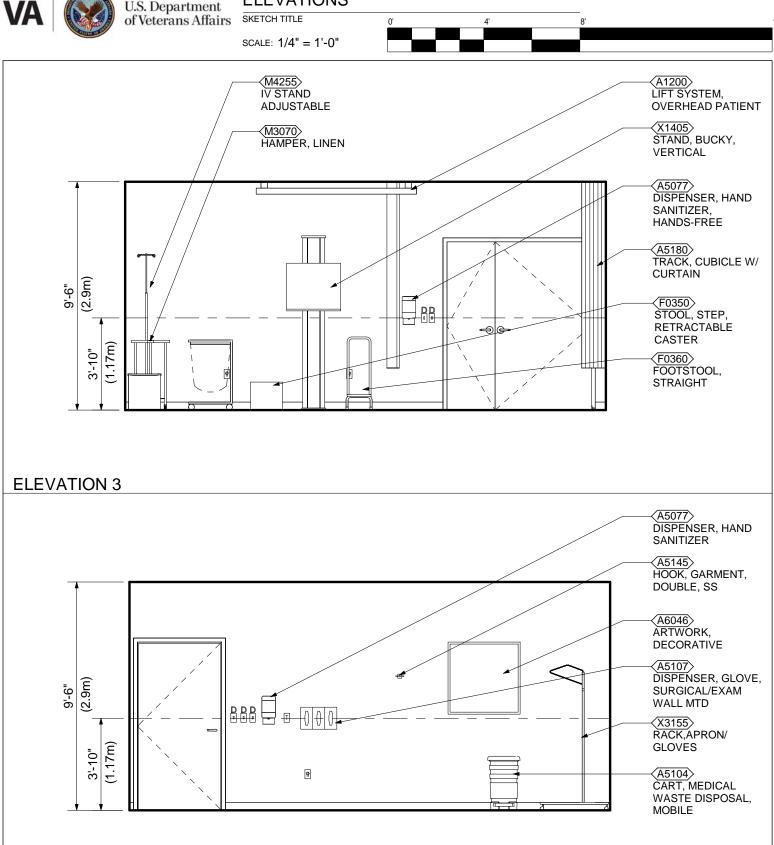






**ELEVATION 4** 

## Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (Cl041) **ELEVATIONS**



CHAPTER 295 - Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (CI041)

Room Data: Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (CI041)

### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: AT (SP) 9'-6" (2900mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD s: X

- 1. Provide a 6'-0" (4'-0 active & 2'-0 inactive) wide shielded door into the Multipurpose Fluoroscopy (R/F) Room.
- 2. Provide a 4'-0" wide shielded door from the Multipurpose Fluoroscopy (R/F) Room to the Patient Toilet/Dressing Room.
- 3. Provide a shielded viewing window from the Control Alcove into the Multipurpose Fluoroscopy (R/F) Room.

#### LIGHTING

Notes:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- Nurse call in Dressing/ Toilet Room to annunciate in Scanning Room and at Reception Desk.
- 2. Junction box for CCTV camera with conduit to Control area.
- 3. Junction box for CCTV monitor.
- 4. PACS: two 4-port telecommunication outlets per PACS station
- 5. Junction box above ceiling for data connection to modular ceiling service column.



## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

## PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: --

Medical Air: Minimum 2 outlets/room
Medical Vacuum: Minimum 2 outlets/room
Oxygen: Minimum 2 outlets/room
Waste Anesthetic Gas: Rec 2 outlets/room

Room Contents: Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (Cl041)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1013	Telephone, Wall Mounted, Multiple Line	VV	1	Telephone, wall mounted, multiple line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5104	Cart, Medical Waste Disposal, Mobile w/Foot Pedal	VV	1	Mobile molded cart with foot pedal, to house 18-24 gal sharps disposal container. Lid lift or slide opens easily with foot-operated pedal. Lid may remain closed when not in use to reduce exposure to contents. Ergonomic handle is telescopic. Heavy containers can be removed from the side with minimal lifting. Meets requirements of OSHA 29 CFR 1910.130.

JSN	Content Name	Acq Code	Qty	Description
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	2	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
A6330	Intercom - Room To Room	VV	1	Intercom for local communication between rooms. May be used for areas such as a seclusion ante-room to the seclusion room or other areas such as the accelerator caves and the accelerator control area.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet.  Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	сс	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	2	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).



JSN	Content Name	Acq Code	Qty	Description
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M3165	Cabinet, Catheter Storage	VV	1	A cabinet to be used for the hanging storage of catheters. Cabinet comes with adjustable laminate shelves, slide-out arms equipped with hangers to hold various size catheters, and doors. Door locks are an optional accessory.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.



JSN	Content Name	Acq Code	Qty	Description
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.
M8810	Stand, Mayo	VV	2	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8840	Table, Back, Instrument/Dressing	VV	1	A specialty back table for large cases such as orthopedics, spinal fusions, neuro and craniotomies. The table has a pneumatic tuckaway cantilevered shelf which can hold multiple trays and is angled for clear observation of instruments. It comes with 4" diameter heavy-duty ball bearing brake/swivel casters. Construction is all stainless steel.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.



JSN	Content Name	Acq Code	Qty	Description
X1405	Stand, Bucky, Vertical, Tilt, Automatic	VC	1	Vertical and tilting bucky stand. This unit is mounted to the floor and wall to provide a vibration-free mounting platform for the universal bucky. The grid line free radiographs are produced at exposure times as short as two milliseconds. Characteristics and components include aluminum interspaced grid with a 36 inch (914 mm) to 40 inch (1016 mm) focal range. The unit's cassette size sensing tray accommodates all cassette sizes between 5 and 17 inches. The unit tilts at angles of +90/-20 degrees from the vertical position. The unit is used in X-ray facilities for processing radiography images.
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6185	Rad/Fluoro Unit, Remote, 80 kW, 90/90 Table	VC	1	This system is specifically designed to perform radiographic/fluoroscopic examinations in the Radiology Department. On-line digital image processing will provide instant availability of images for review via infrared remote control. This units characteristics and components include, 80 kW micro-processor controlled X-ray generator, remote-controlled 90/90 table with 15" multi-field Image Intensifier and integrated tube support. The Digital Spot Imaging consists of a computer, keyboard with acquisition, viewing monitor and a slave monitor. The system shall be DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations. It is recommended that the TV monitors be ceiling suspended.



Room Contents: Class 2 Multipurpose R/F Control Room, Imgng Svcs (CI042)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1013	Telephone, Wall Mounted, Multiple Line	VV	1	Telephone, wall mounted, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
F0230	Chair, Drafting, Rotary	VV	3	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
L8300	Printer, Cassette Label, Laboratory	VV	1	Label maker for laboratory cassettes. The printer uses a heat-foil transfer process or indelible ink ribbons to permanently identify laboratory slide cassette boxes. The labels and printing resist being affected by processing reagents.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	2	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.

CHAPTER 295 - Class 2 Multipurpose R/F Imaging Room, Imgng Svcs (CI041)

Room Contents: Class 2 Multipurpose R/F System Component Room, Imgng Svcs (Cl043)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



## Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) DISCLAIMER

SKETCH TITLE

SCALE: 1/4" = 1'-0"



#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

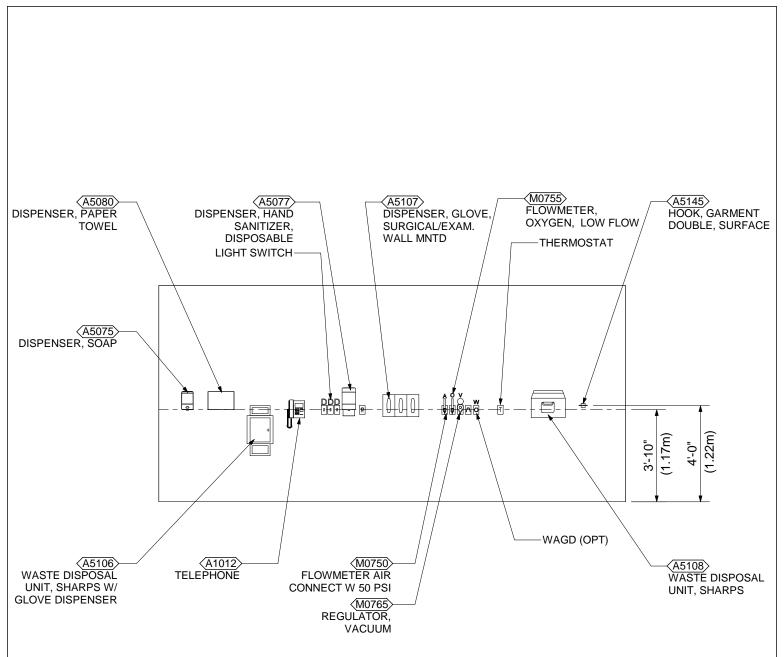
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

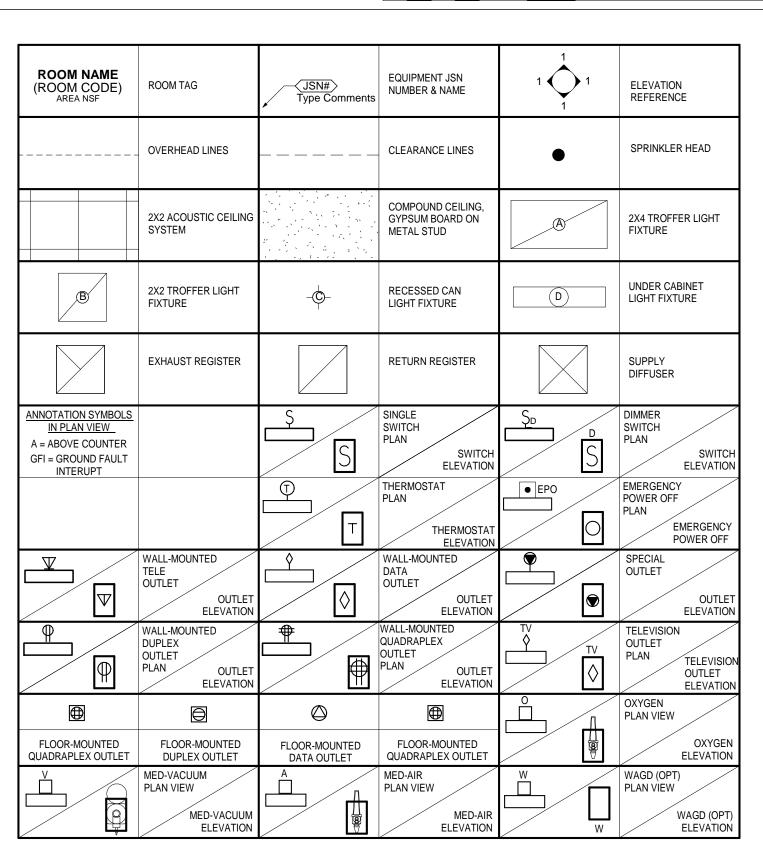


### **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance

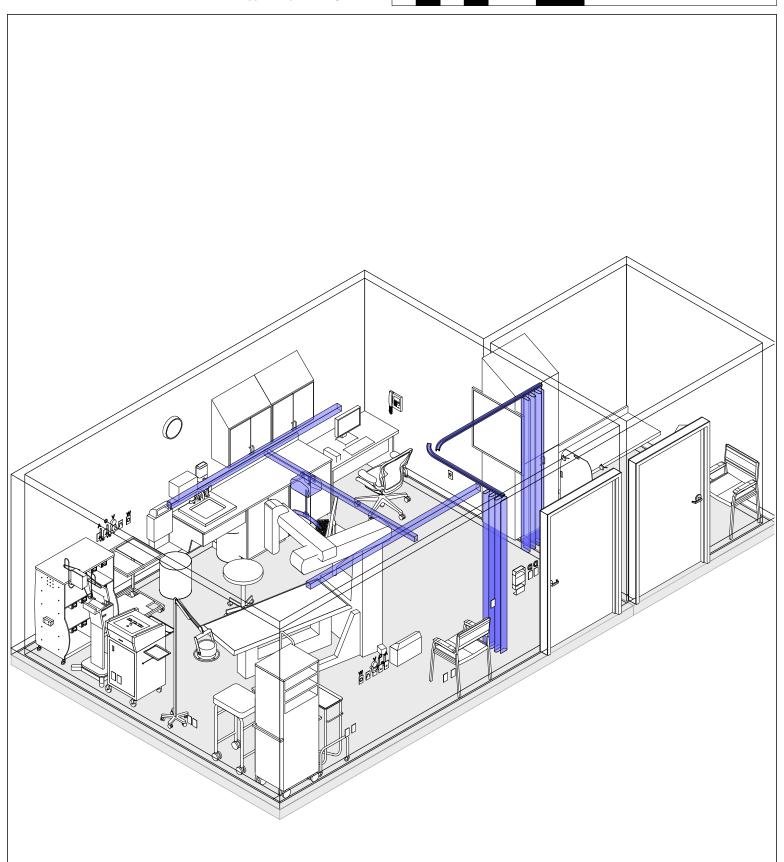


## Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) LEGEND





# Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) AXONOMETRIC





# Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) INTERACTIVE 3D PDF

VA	of Veterans Affairs	SCALE:	0' 4'	8'	16
					_

## U.S. Department of Veterans Affairs

**ASSISTED** 

X3150 RACK, APRON

## Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) FLOOR PLAN

SKETCH TITLE 4' SCALE: 1/4" = 1'-0"BENCH! M3070> 8'-0" (CR020) LINEN HAMPER CABINET, F/S 5 SHELF (2.44m)F205 (A6046) SIDE CHAIR ARTWORK, (M4645) **DECORATIVE WITH** PATIENT 44m) **FRAME** 8'-0" **TRANSFER** (F0280) DEVICE WALL MTD CHAIR, SWIVEL, ૃં (A5145) LOW BACK DRESSING HOOK, GARMENT **ROOM** (A1012) DOUBLE, SURFACE 65 NSF TELEPHONE 5.6 (E0042) TRACK, CUBICLE, WORK CENTER W/ CURTAIN (M1801) F0340 STOOL, SELF COMPUTER, MICROPROCESSING, **ADJUSTING** W/ FLAT PANEL (A1200) **MONITOR** LIFT SYSTEM, (F2700) Ф OVERHEAD, PATIENT READER, BAR CODE,  $\mathbb{H}$ HAND HELD (A5077) (CD030) DISPENSER, HAND WALL CABINET SANITIZER CS070 SINK, SS, SINGLE **CLASS 2 - PRONE IMAGING ROOM** (X5430/X5435) **BREAST IMAGING** XRAY / BREAST (A5075) **300 NSF BIOPSY SYSTEM** DISPENSER, SOAP F0205 CHAIR, SIDE WITH (A5080) DISPENSER, PAPER **ARMS** M) **TOWEL** F0360 F3200 0 FOOTSTOOL, CLOCK  $\mathbb{Z}/\mathbb{D}$ STRAIGHT W/ **HANDRAIL** (A5106) (6.1m)WASTE DISPOSAL 20'-0" (M0750) UNIT, SHARPS W/ FLOWMETER AIR **GLOVE DISPENSER** CONNECT W 50 PSI (F2000) (M0755) BASKET, FLOWMETER, WASTEPAPER OXYGEN, LOW FLOW (M0765) M0765 REGULATOR, VACUUM WAGD (OPT) REGULATOR, (M0755) **VACUUM** FLOWMETER, WAGD (OPT) OXYGEN, LOW FLOW  $\langle M0750 \rangle$ (M8810) FLOWMETER AIR STAND, MAYO **CONNECT W 50 PSI** (M3072)TABLE, INSTRUMENT FRAME INFECTIOUS DRESSING, MOBILE WASTEBAG W/ LID  $\langle M4545 \rangle$ (E0930) PADDLE STORAGE LOCKER, SUPPLY, 6 DRAWERS, MOBILE UNIT (UIE38) M7420 BREAST BIOPSY LIGHT, EXAM MOBILE 15'-0" SYSTEM, VACUUM

(4.57m)

\*ALL COUNTERTOPS ARE TO MATCH THE ROOM CONTENT LIST UNLESS NOTED OTHERWISE

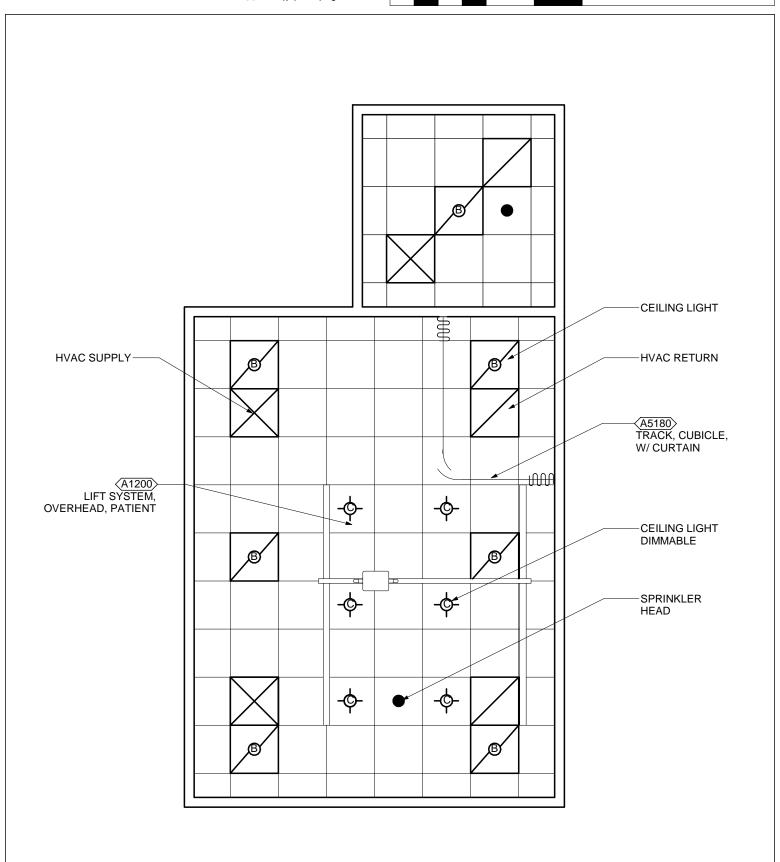
SPECIMEN, X-RAY

(UIE37)

**SYSTEM** 



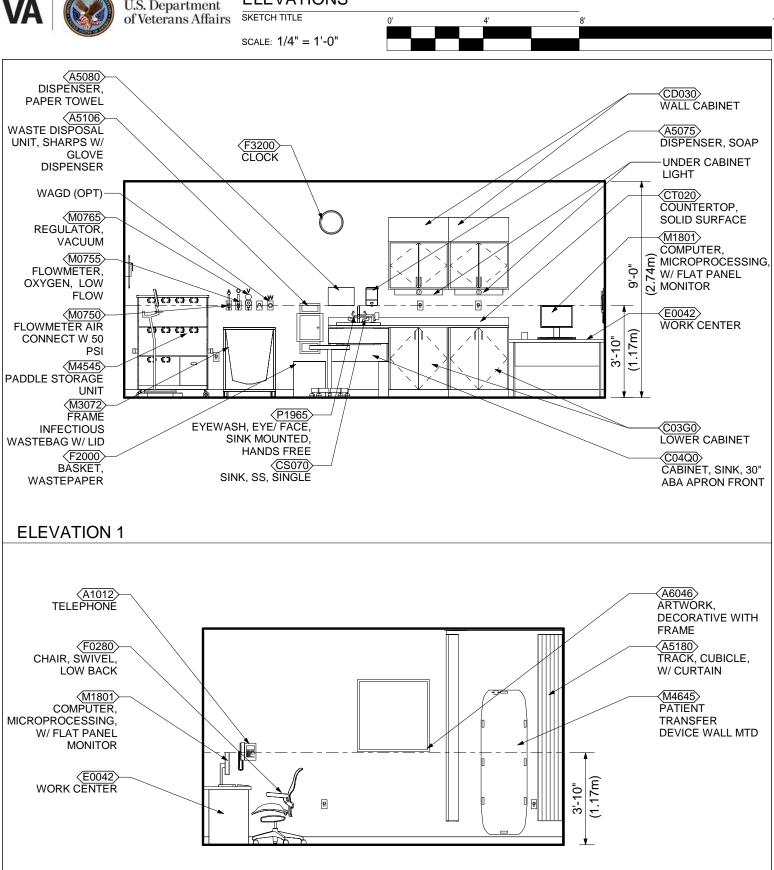
# Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) REFLECTED CEILING PLAN



## U.S. Department of Veterans Affairs

**ELEVATION 2** 

## Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) **ELEVATIONS**

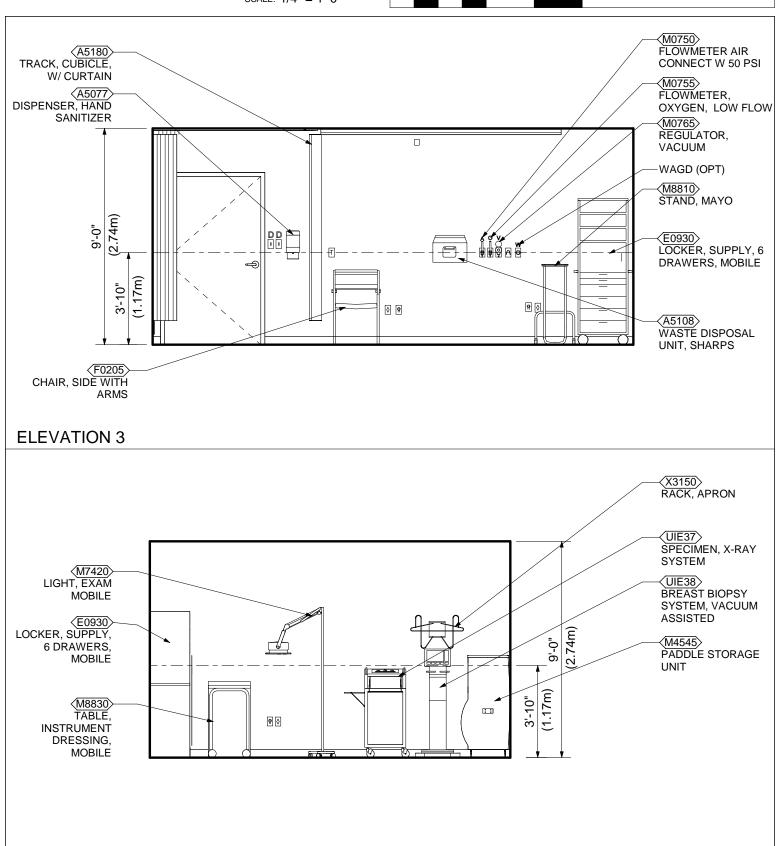




**ELEVATION 4** 

## Class 2 Prone Breast Imaging Room, Imgng Svcs (Cl053) ELEVATIONS





CHAPTER 295 - Class 2 Prone Breast Imaging Room, Imgng Svcs (CI053)

Room Data: Class 2 Prone Breast Imaging Room, Imgng Svcs (CI053)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD\* s: X

 Provide a 4'-0" wide door into the Mammography Room – Prone – Class 2.

### LIGHTING

Notes:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### COMMUNICATION/SPECIAL SYSTEMS

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV: Notes:

- Nurse call in Dressing/ Toilet Room to annunciate in Scanning Room and at
  - 2. PACS: two 4-port telecommunication outlets per PACS station

## HEATING, VENTILATING AND AIR CONDITIONING

Reception Desk.

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Medical Air: Minimum 2 outlets/room Medical Vacuum: Minimum 2 outlets/room Minimum 2 outlets/room Oxygen: Rec 2 outlets/room Waste Anesthetic Gas:



Room Contents: Class 2 Prone Breast Imaging Room, Imgng Svcs (CI053)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.

JSN	Content Name	Acq Code	Qty	Description
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0042	Workcenter, Computer, Free Standing, 48" W	VV	1	THIS TYPICAL INCLUDES:  1 Tool Rail  2 Paper Tray  1 Diagonal Tray  1 Freestanding Work Surface  1 Mobile Pedestal, Box/File  1 Adjustable Keyboard Tray
E0930	Locker, Supply, 6 Drawers, Mobile, 29"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Mobile Supply Locker  2 Tray/Shelf  4 Drawers, 3"H  2 Drawers, 6"H  Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.



JSN	Content Name	Acq Code	Qty	Description
F0280	Chair, Swivel, Low Back	VV	1	Low back contemporary swivel chair, 37" high X 25" wide X 31" deep with a five (5) caster swivel base, arms and foam padded seat and back upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	2	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	2	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.



JSN	Content Name	Acq Code	Qty	Description
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M7420	Light, Exam, Mobile	VV	1	Mobile examination light mounted on a floor stand with casters. Unit features colored corrected light, an air-cooled shade and a balanced floating arm. Unit may also have a center mount detachable and sterilizable control handle. Designed for examination, treatment, and emergency areas where cool, color-corrected light is needed.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8830	Table, Instrument/Dressing, Mobile	VV	1	Mobile instrument/dressing table, approximately 34" H x 20" W x 16" D Corrosion resistant stainless steel mobile table with sound-deadening shelf and drawer. Unit is mounted on 2" casters. Designed for all purpose use in the hospital or clinic.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
UIE37	X-Ray System, Specimen	VV	1	Self-contained shielded digital specimen radiography system. For stereotactic cores and intra-operative imaging of excised tissue. Provides real time imaging of a broad range of specimens directly in lab. Typically provides 50kV 1.0mA x-ray source, display and associated computer workstation for image processing and DICOM connections to PACS.



JSN	Content Name	Acq Code	Qty	Description
UIE38	Breast Biopsy System, Vacuum- Assisted	VV	1	Vacuum assisted breast biopsy system with handheld driver. For use in Ultrasound, Stereotactic and MRI procedures. Self-contained, touch screen interface, visual confirmation of needle activity.
M4545	Cabinet, Storage, Clinical, Supply/Accessory	VV	1	Clinical storage cabinet for mammography accessories. Holds paddles, mag stand, QC phantoms, cassette holders.
X3150	Rack, Apron/Gloves, Wall Mounted	СС	1	Apron and gloves rack. This is a wall unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum. The unit's convenient on wall storage will prolong the useful life of your protection aprons by helping prevent damage to internal components.
X5430	Radiographic Unit, Mammography, Digital	VC	1	This is a full-field digital mammography system for screening and diagnostic procedures for standing, seated or recumbent patients. The system is a computer controlled, menu-driven unit for exclusive use in mammography examination procedures. System shall provide superior imaging, maximum patient comfort and enhanced operating efficiency. Shall have stereotactic biopsy capability if this option is selected.
X5435	Breast Biopsy System, Stereotactic	VC	1	System used for performing breast biopsies using x-ray and computer imaging. System consists of a biopsy unit with needle guides and an integral computer for communicating lesion coordinates. These systems include stand-alone units as well as units that mount onto an existing mammographic radiographic unit.



## Class 2 Standing Breast Imaging Room, Imgng Svcs (Cl056) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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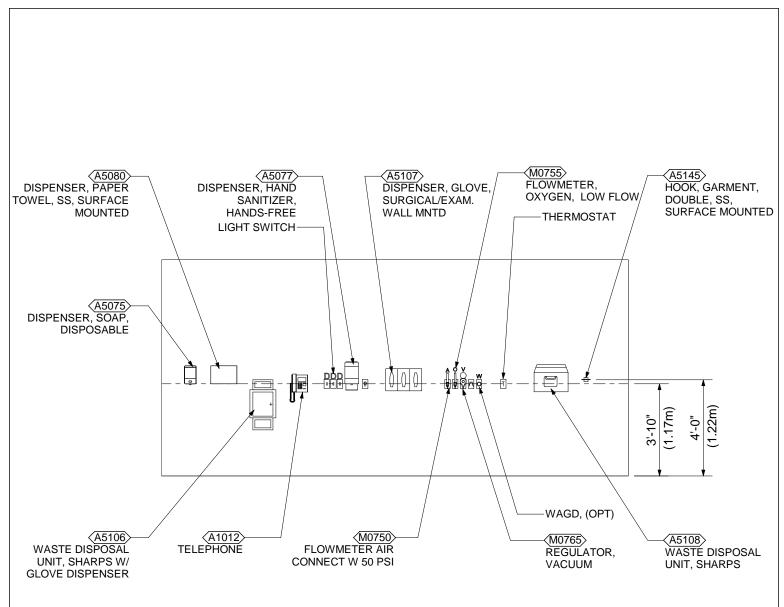
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### Class 2 Standing Breast Imaging Room, Imgng Svcs (Cl056) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



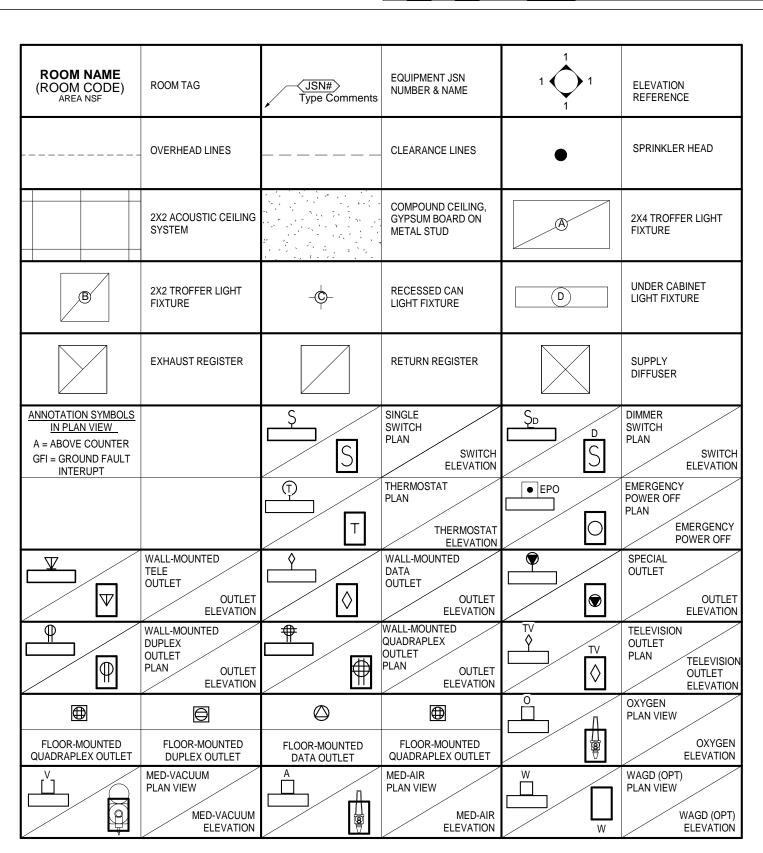
### **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance

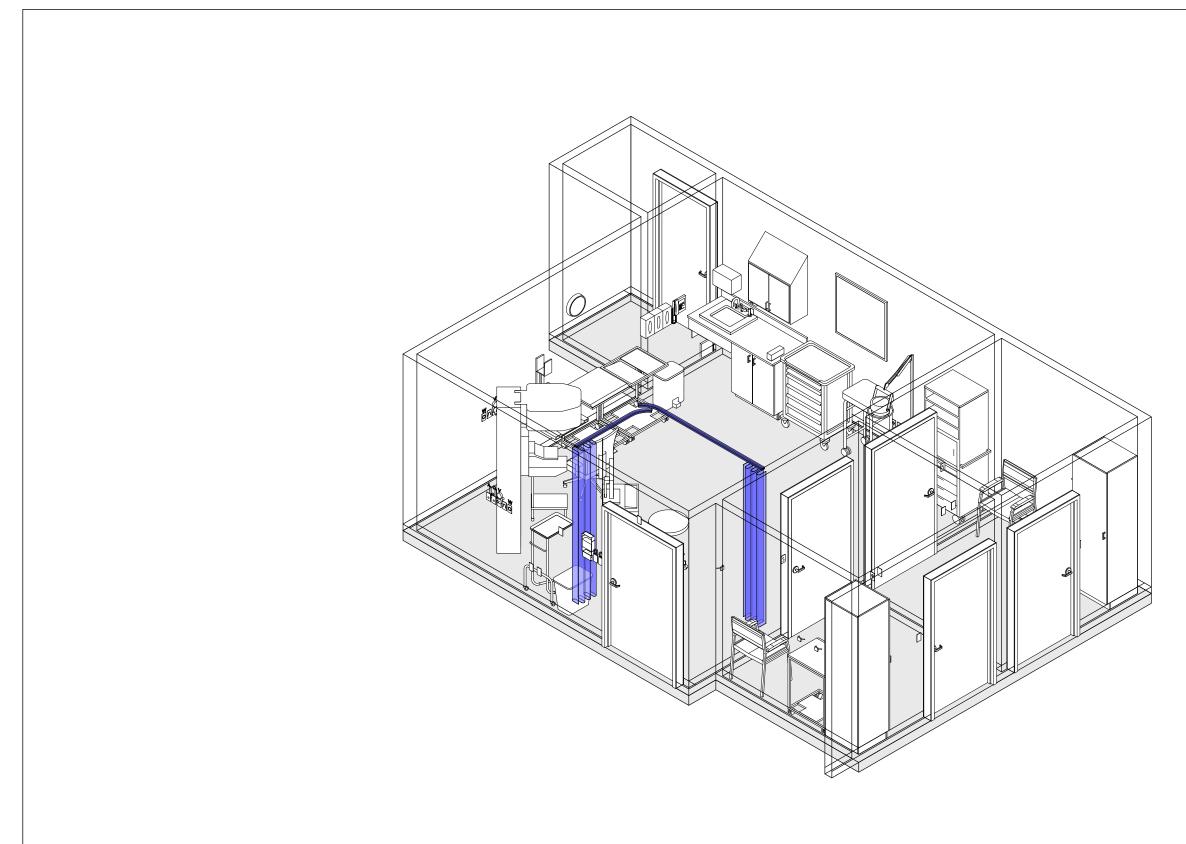


# Class 2 Standing Breast Imaging Room, Imgng Svcs (Cl056) LEGEND

SCALE: 1/4" = 1'-0"









# Class 2 Standing Breast Imaging Room, Imgng Svcs (CI056) INTERACTIVE 3D PDF

SKETCH TITLE SCALE:

FLOOR PLAN

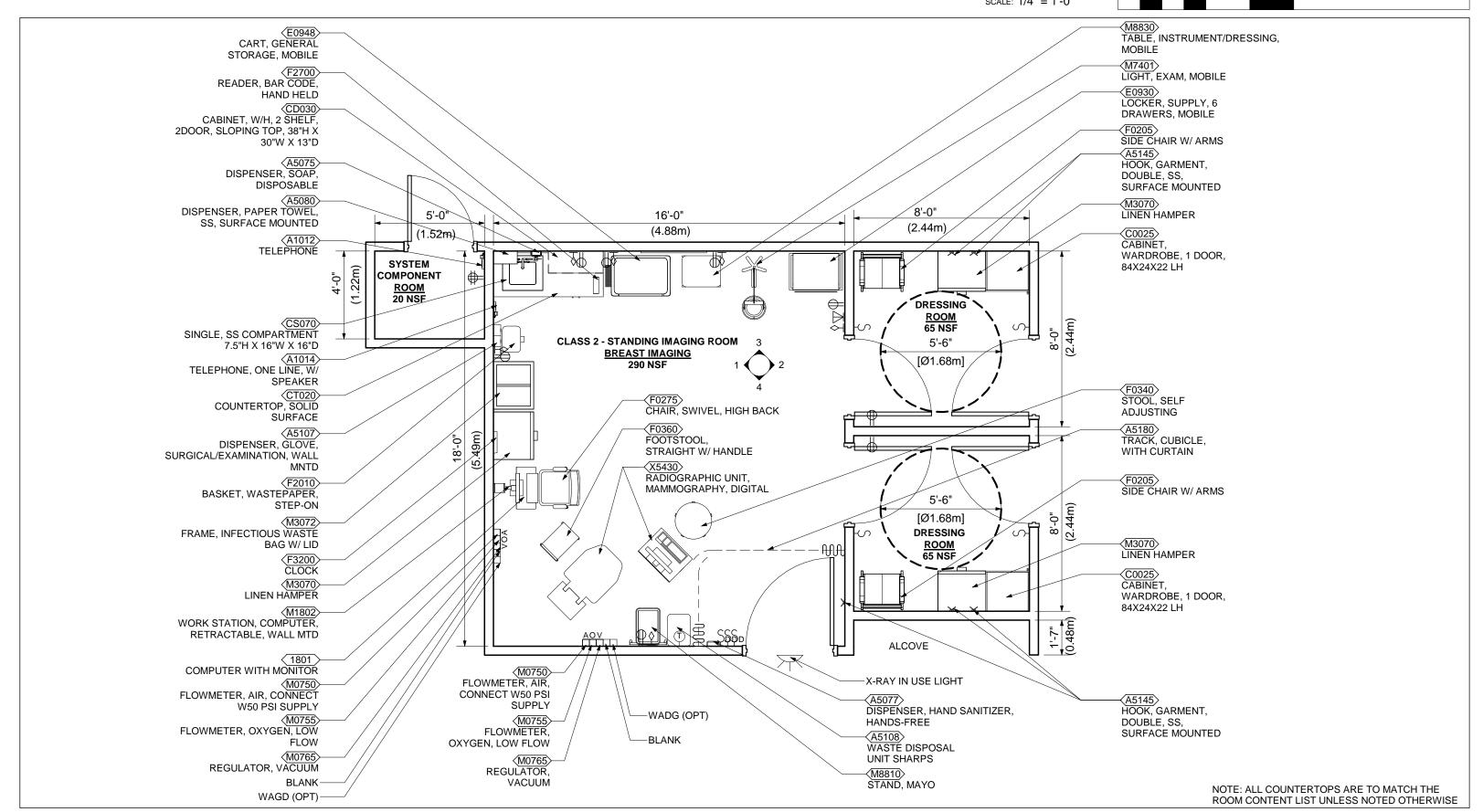
SKETCH TITLE

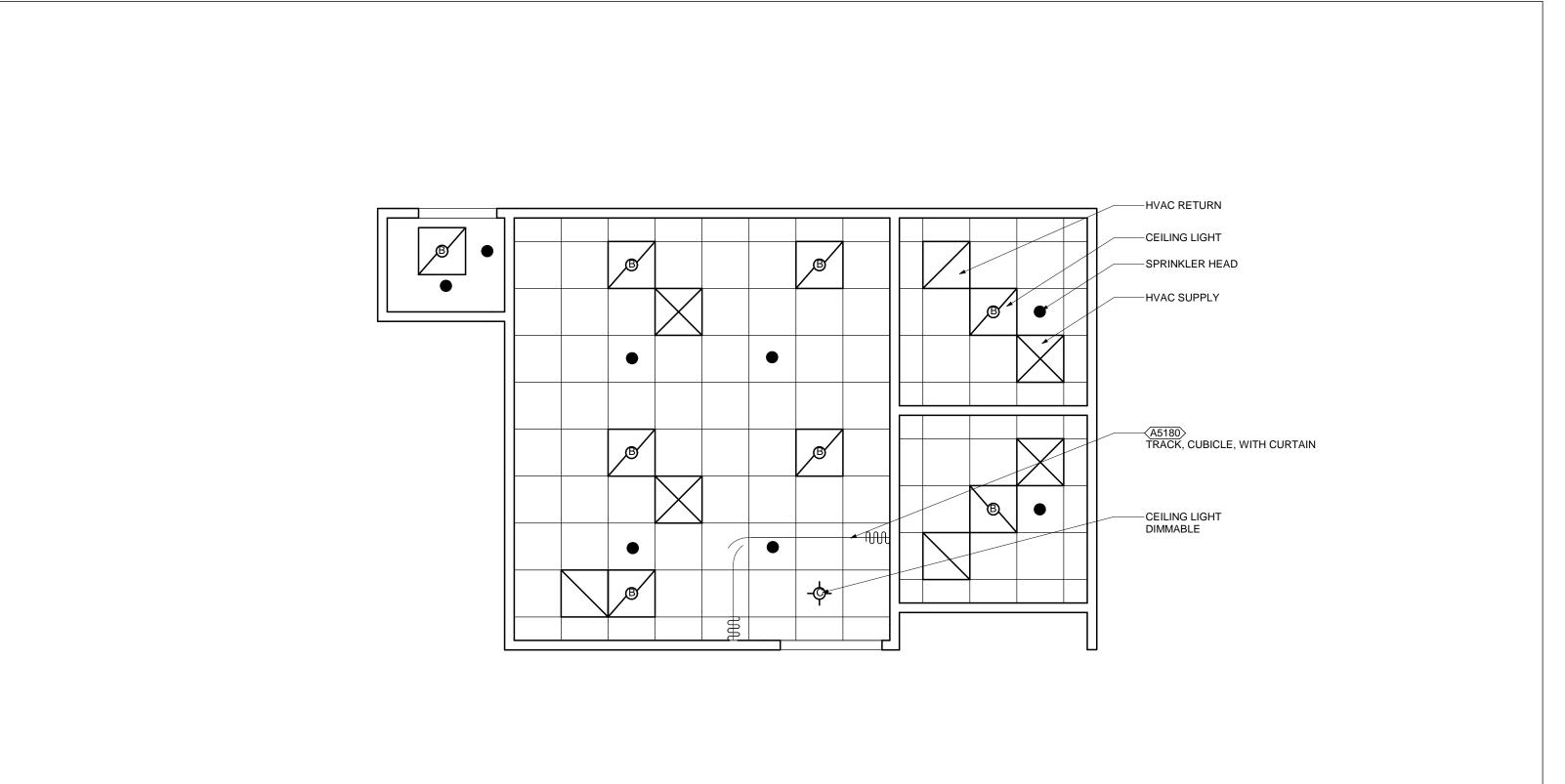
0'

4'

8'

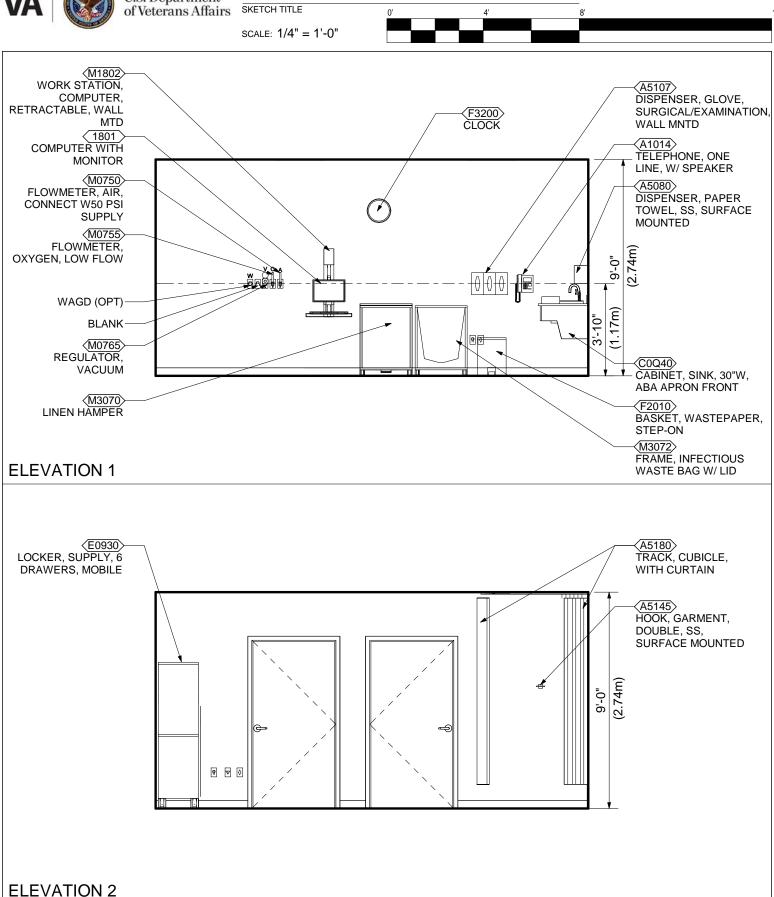
SCALE: 1/4" = 1'-0"





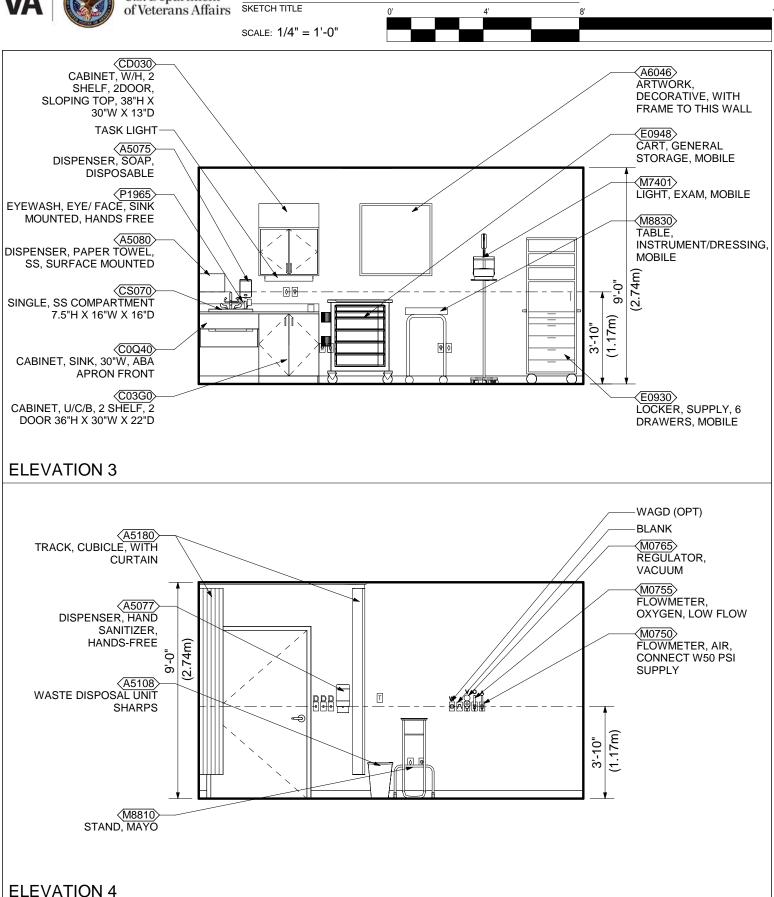
### U.S. Department of Veterans Affairs

### Class 2 Standing Breast Imaging Room, Imgng Svcs (Cl056) **ELEVATIONS**





### Class 2 Standing Breast Imaging Room, Imgng Svcs (Cl056) **ELEVATIONS**



Room Data: Class 2 Standing Breast Imaging Room, Imgng Svcs (CI056)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD\* s: X Notes:

 Provide a 4'-0" wide door into the Mammography Room, Standing – Class 2 (may require lead shielding, consult medical physicist).

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV: Notes:

- Nurse call in Dressing/ Toilet Room to annunciate in Scanning Room and at Reception Desk.
- 2. PACS: two 4-port telecommunication outlets per PACS station

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Medical Air: Minimum 2 outlets/room Medical Vacuum: Minimum 2 outlets/room Minimum 2 outlets/room Oxygen: Rec 2 outlets/room Waste Anesthetic Gas:



Room Contents: Class 2 Standing Breast Imaging Room, Imgng Svcs (Cl056)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	3	Telecommunication outlet location.
A1014	Telephone, Wall Mounted, 1 Line, With Speaker	VV	1	Telephone, wall mounted, 1 line, with speaker.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	1	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.

JSN	Content Name	Acq Code	Qty	Description
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	1	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0930	Locker, Supply, 6 Drawers, Mobile, 29"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Mobile Supply Locker  2 Tray/Shelf  4 Drawers, 3"H  2 Drawers, 6"H  Drawer Organizer Bins
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0275	Chair, Swivel, High Back	VV	1	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.



JSN	Content Name	Acq Code	Qty	Description
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2010	Basket, Wastepaper, Step-On	VV	1	"Step-on" wastepaper basket with inner liner and foot petal activated flip top.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	2	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	2	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.



JSN	Content Name	Acq Code	Qty	Description
M1802	Work Station, Computer, Retractable, Wall Mounted	VV	1	A wall mounted retractable work station. Work station is used as a computer station in treatment rooms, exam rooms and areas where physical space in limited.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8830	Table, Instrument/Dressing, Mobile	VV	1	Mobile instrument/dressing table, approximately 34" H x 20" W x 16" D Corrosion resistant stainless steel mobile table with sound-deadening shelf and drawer. Unit is mounted on 2" casters. Designed for all purpose use in the hospital or clinic.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X5430	Radiographic Unit, Mammography, Digital	VC	1	This is a full-field digital mammography system for screening and diagnostic procedures for standing, seated or recumbent patients. The system is a computer controlled, menu-driven unit for exclusive use in mammography examination procedures. System shall provide superior imaging, maximum patient comfort and enhanced operating efficiency. Shall have stereotactic biopsy capability if this option is selected.

Room Contents: Class 2 Standing System Component Alcove, Imgng Svcs (CI057)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) DISCLAIMER

SKETCH TITLE 0' 4'

SCALE: 1/4" = 1'-0"



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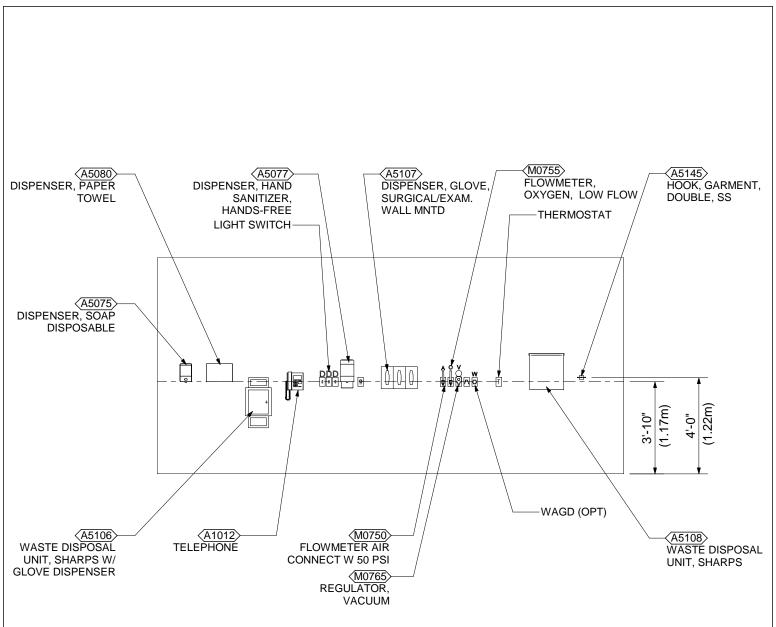
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# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

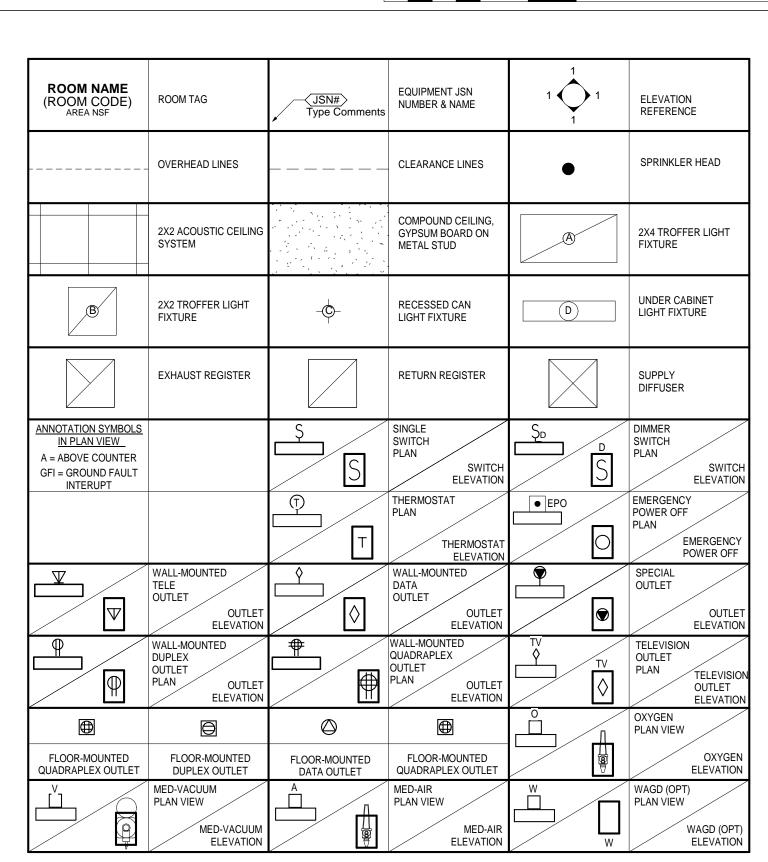
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) LEGEND

SKETCH TITLE 0' 4' 8'

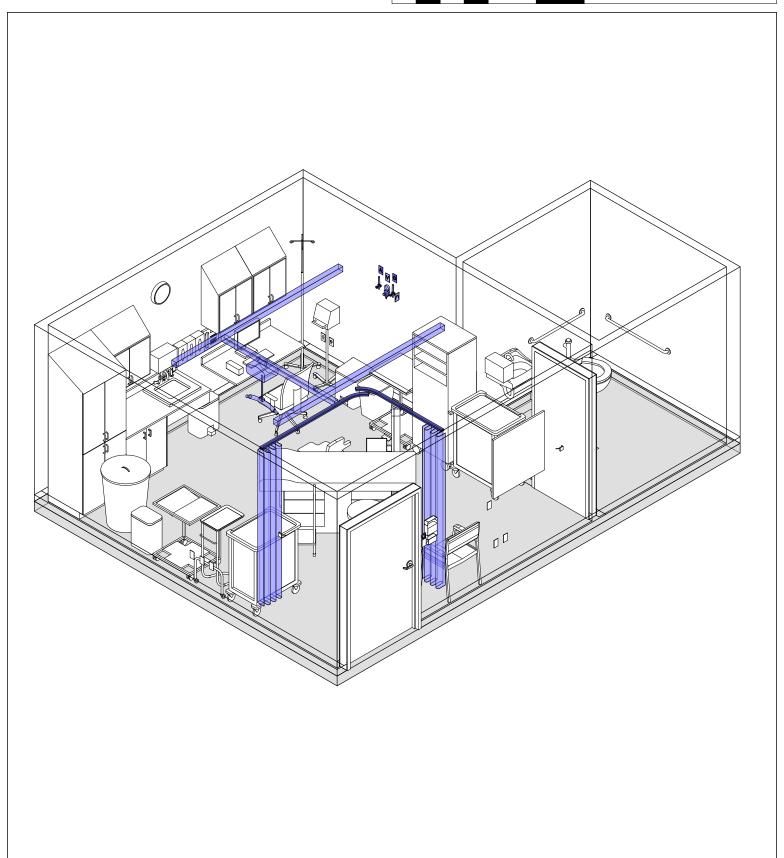
SCALE: 1/4" = 1'-0"





# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) AXONOMETRIC

SKETCH TITLE 0' 4' 8' 1
SCALE: 1/4" = 1'-0"





SKETCH TITLE

# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) INTERACTIVE 3D PDF

SCALE:	

### U.S. Department of Veterans Affairs

BASKET, WASTE

PAPER STEP-ON

### Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) FLOOR PLAN

SKETCH TITLE 4' SCALE: 1/4" = 1'-0"(F0540) CART, SCOPE, TRANSPORT (E0930) LOCKER, SUPPLY, 6 8'-0" DRAWERS, MOBILE (2.44m)(M3070) HAMPER LINEN MOBILE W/LID (A5108) WASTE DISPOSAL X1999 RACK, ULTRASOUND, UNIT, SHARPS **PROBE** (M3073) (2.29m)CONTAINER, TOILET ROOM \_9-,2 60 NSF **BIOHAZARD** WASTE STEP-ON X2100 (M4116) SCANNER MONITOR, VITAL **ULTRASOUND SIGNS** SCANNER GENERAL (M4255) **PURPOSE** STAND IV  $\overline{\text{M9007}}$ **ADJUSTABLE** CHAR, EXAM, F0680 **ULTRASOUND** WORKSTATION (F0300) A5145 CHAIR, TASK SWIVEL HOOK, GARMENT. W/ ARMS DOUBLE, SS (CD030) (A1200) CABINET W/H LIFT SYSTEM,  $\Diamond$ 2-SHELF, 2DO **OVERHEAD PATIENT**  $\triangleleft$ SLOPING TOP (M9005) 11 1 (F2700) TABLE ULTRASOUND, 1.1  $\bigcirc$ READER, BAR CODE MOBILE, GENERAL 1.1  $\ominus$ PURPOSE HAND HELD 1.1 √A5107 IIΞ 5'-0" DISPENSER, GLOVE 1.1 1.1 (4.57)EXAM, WALL MOUNT  $\mathbf{1}$ 1.1(F2010) (F0205) 1.1 /11 BASKET, WASTE CHAIR SIDE WITH П PAPER STEP-ON **ARMS** 1.1 CS070  $\mathbf{I}$ (A5077) SINK, SS, SINGLÉ Π DISPENSER, HAND COMPARTMENT 11 1.1 SANITIZER, (A5080) CLASS 1 -HANDS-FREE DISPENSER, PAPER **SCANNING ROOM** III1.1 TOWEL, SS, SURFACE (F0340) **ULTRASOUND** STOOL, SELF П (A5075) 255 NSF 1.1 **ADJUSTING** DISPENSER, SOAP Ш Ш **DISPOSABLE** (F0360) (CD030) FOOTSTOOL.  $\bar{\Xi}$ CABINET W/H STRAIGHT W/ HANDLE 2-SHELF, 2DO (A5180) SLOPING TOP TRACK, CUBICLE, 17'-0" (CT020) SURFACE W/ COUNTERTOP, SOLID (5.18m)**CURTAIN** SURFACE E0948 (CR020) CART GENRAL CABINET, F/S 5-SHELF STORAGE MOBILE 1 DO, SLOPING TOP (M8810) F2017 STAND, MAYO TRASH CAN (F2010) (M3072)

NOTE: ALL COUNTERTOPS ARE TO MATCH THE

ROOM CONTENT LIST UNLESS NOTED OTHERWISE

FRAME, INFECTIOUS

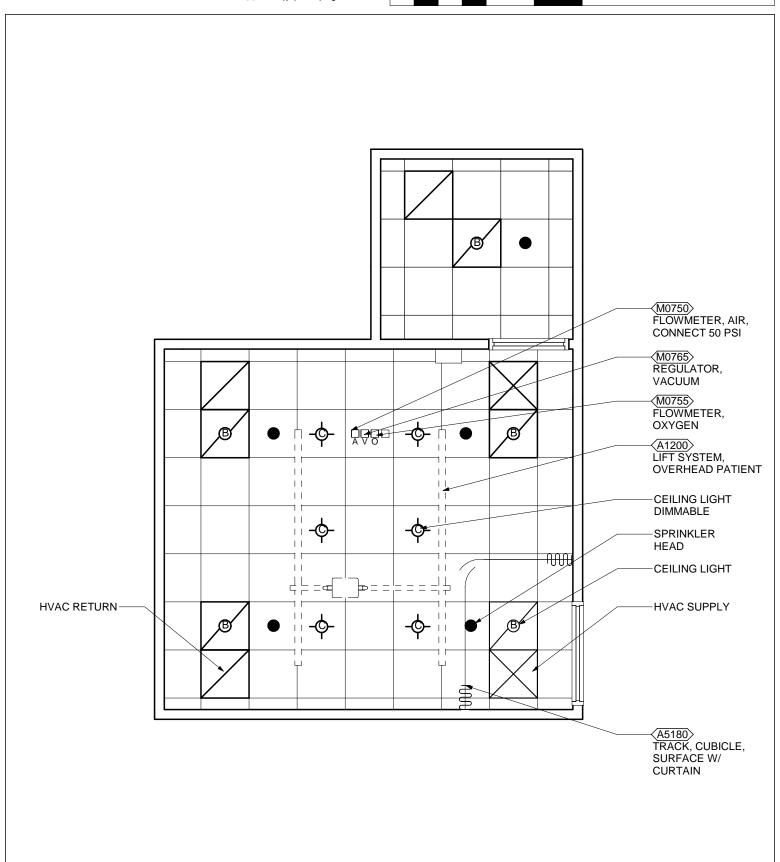
WASTE BAG W/LID



# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8'

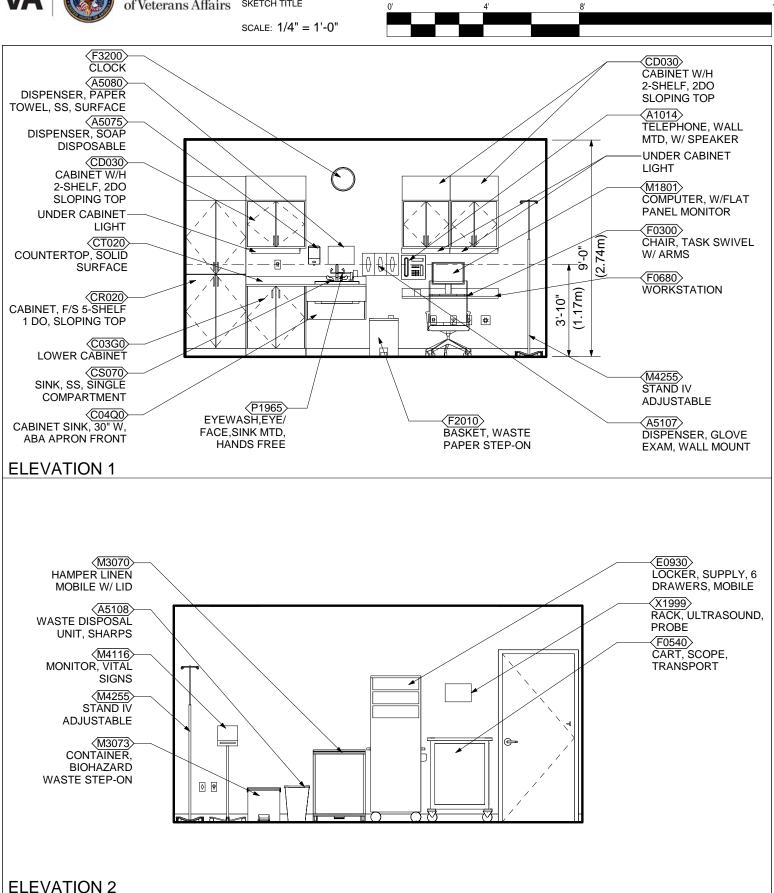
SCALE: 1/4" = 1'-0"



### U.S. Department of Veterans Affairs

SKETCH TITLE

### Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) **ELEVATIONS**

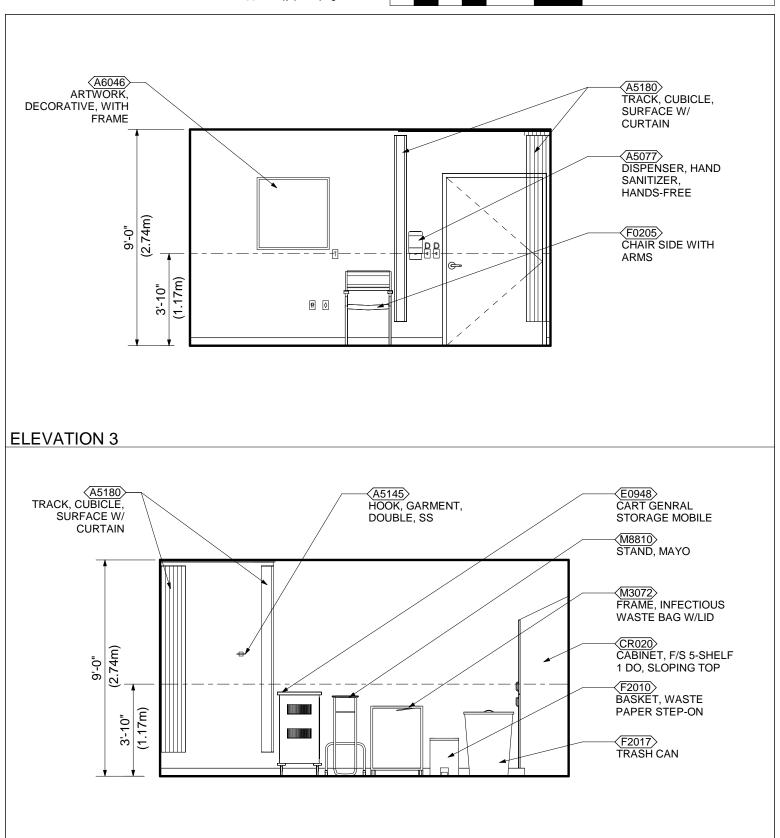




**ELEVATION 4** 

# Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



CHAPTER 295 - Class 1 Ultrasound Scanning Room, Imgng Svcs (CI063)

Room Data: Class 1 Ultrasound Scanning Room, Imgng Svcs (CI063)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT Ceiling Height: 9'-0" (2700mm) Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: m: WSF / RSF at h: 4" (100mm) Base: WSF / RSF Floor Finish: Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 2 dl: -- s: X

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- Nurse call in Toilet Room to annunciate at local reception desk and outside of the Toilet Room.
- 2. PACS:two 4-port telecommunication outlets per PACS station



## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: - Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min 1 outlet/room OVHD
Medical Vacuum: Min 1 outlet/room OVHD
Oxygen: Min 1 outlet/room OVHD

Room Contents: Class 1 Ultrasound Scanning Room, Imgng Svcs (Cl063)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1014	Telephone, Wall Mounted, 1 Line, With Speaker	VV	1	Telephone, wall mounted, 1 line, with speaker.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.

JSN	Content Name	Acq Code	Qty	Description
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	2	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	1	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CR020	Cabinet, F/S, 5 Shelf, 1 DO, Sloping Top, 92x24x13	СС	1	Floor standing storage cabinet with five adjustable shelves, a solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a tall case or a tall cabinet. For general purpose storage use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0930	Locker, Supply, 6 Drawers, Mobile, 29"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Mobile Supply Locker  2 Tray/Shelf  4 Drawers, 3"H  2 Drawers, 6"H  Drawer Organizer Bins
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0300	Chair, Task, Swivel, With Arms	VV	2	Task chair, approximately 34" H X 26" W X 22" D with adjustable arms and a five caster adjustable swivel base. Seat and back are foam padded and upholstered in woven fabric or vinyl.
F0340	Stool, Self Adjusting	VV	2	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F0540	Cart, Scope, Transport	VV	1	A cart designed specifically for the safe transport of endoscopy scopes. The cart will have a lightweight frame of a tubular welded construction. The sides and back panels will be of a foamed resin with a work top of seamless, raised edge plastic. The cart will have rectangle or round trays with lids and will have 4 casters with 2 locking. Cart may have a roll-top door with a key lock.
F0680	Workstation, PACS, Adjustable, Single- Monitor	VV	1	Mobile or free-standing computer work center for use as a single-monitor PACS workstation. Features include laminate work surface, keyboard arm, manual height adjustments, CPU holder and monitor arm.
F2010	Basket, Wastepaper, Step-On	VV	2	"Step-on" wastepaper basket with inner liner and foot petal activated flip top.



JSN	Content Name	Acq Code	Qty	Description
F2017	Waste Receptacle, 24 GAL	VV	1	Rectangular steel waste receptacle with step-on lid and 24 gallon capacity. The receptacle is used to collect and temporarily store small quantities of paper refuse. Can be used in restrooms, patient areas, laboratories, pharmacies, etc.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.



JSN	Content Name	Acq Code	Qty	Description
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M9005	Table, Ultrasound, Mobile, General Purpose	VV	1	A general purpose table dedicated to ultrasound procedures including OB/GYN. Table has an open frame design to allow sonographers to get close to the patient. Table height is adjustable from approximately 23" to 39". Table includes side rails and arm board.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
M9007	Chair, Exam, Ultrasound	VV	1	The Sonography Chair presents an ergonomic enhancement when scanning patients. Multiple adjustments for seat height, back height and backwards tilt tension adjustment with integrated seat slider allow for a variety of comfortable postures. A foot ring is standard for additional support and positioning.
X1999	Rack, Ultrasound Probe	VV	1	Universal probe rack used to hold/store ultrasound probes & transducers. Features include cable supports and capacity for five probes.
X2100	Scanner, Ultrasound, General Purpose	VV	1	High definition, diagnostic ultrasound system for Radiology, Cardiology, Vascular, ob-gyn, Perinatology, and Surgical imaging applications. The unit employs curved, phased and linear array imaging technology. The system supports colorflow, pulse and continuous wave imaging modalities. On board software measurement packages available for all imaging applications. The system is DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations. In addition, a full line of probes and conventional recording devices are available.





# Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065) DISCLAIMER

SKETCH TITLE 0' 4'

SCALE: 1/4" = 1'-0"



#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

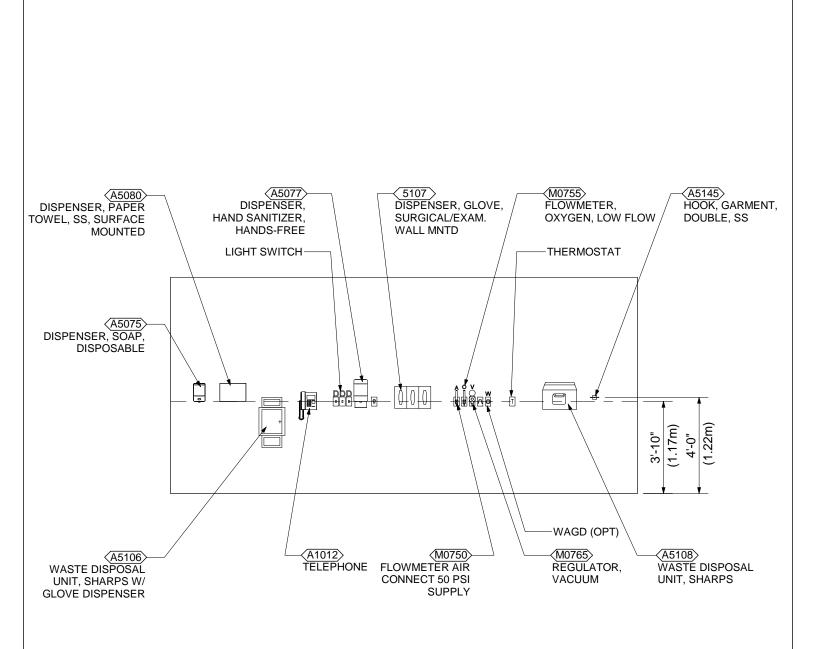
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

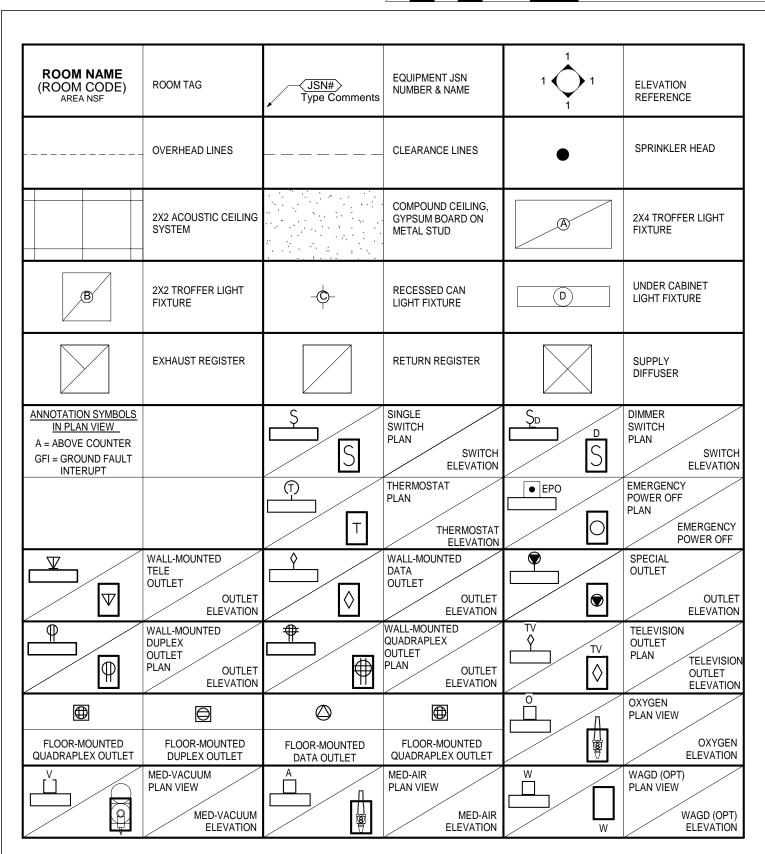
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



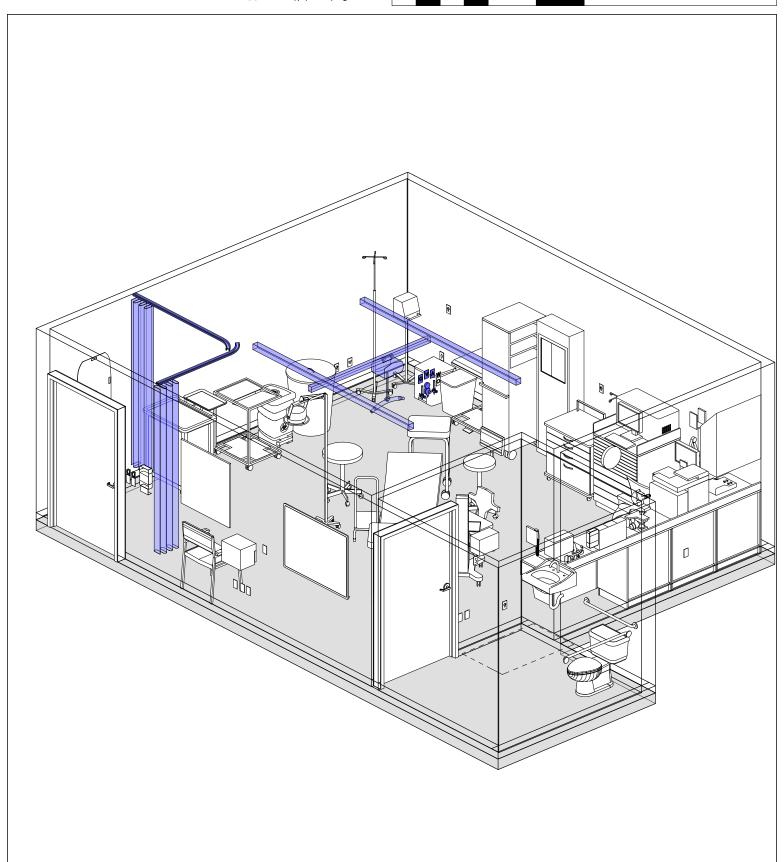


# Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065) AXONOMETRIC

SKETCH TITLE

SCALE: 1/4" = 1'-0"





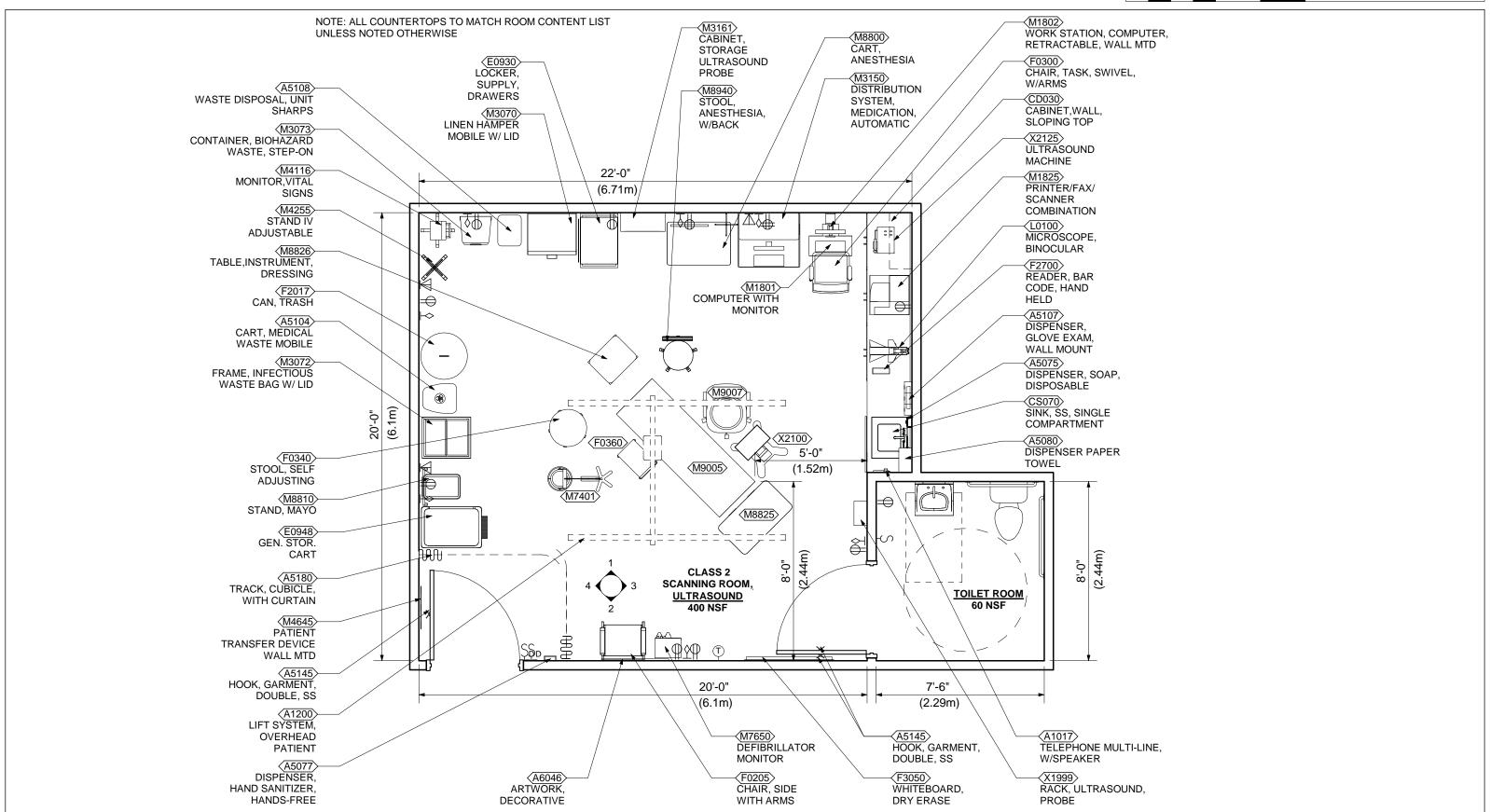


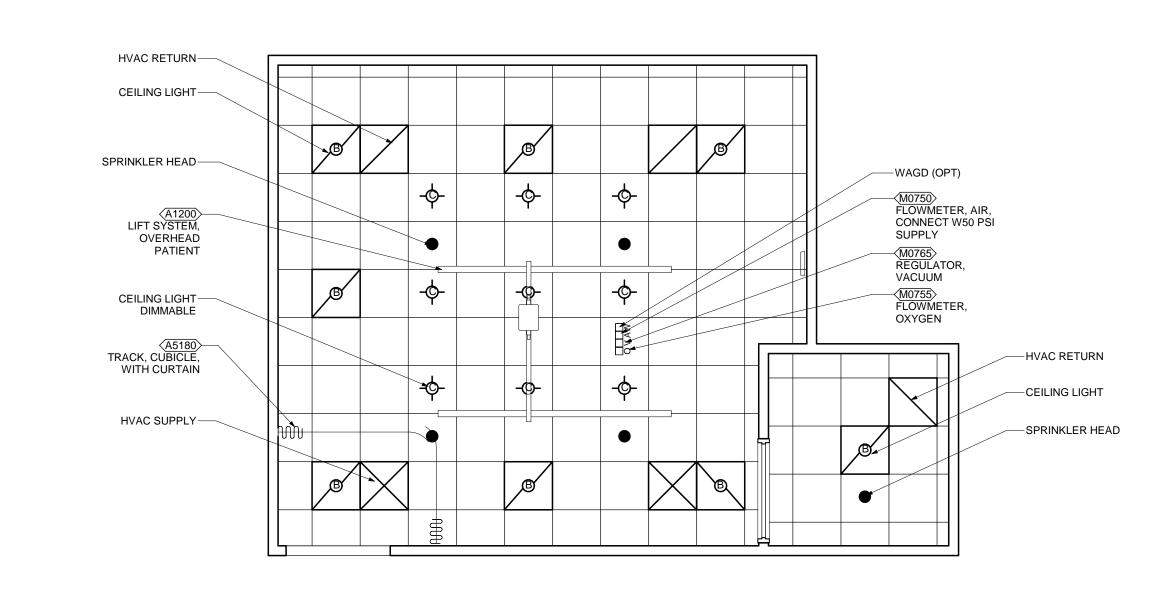
### Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065) INTERACTIVE 3D PDF

VA	of Veterans Affairs	SKETCH TITLE 0' 4' 8'							
1	of veterans Analis	SCALE:	4	0					

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

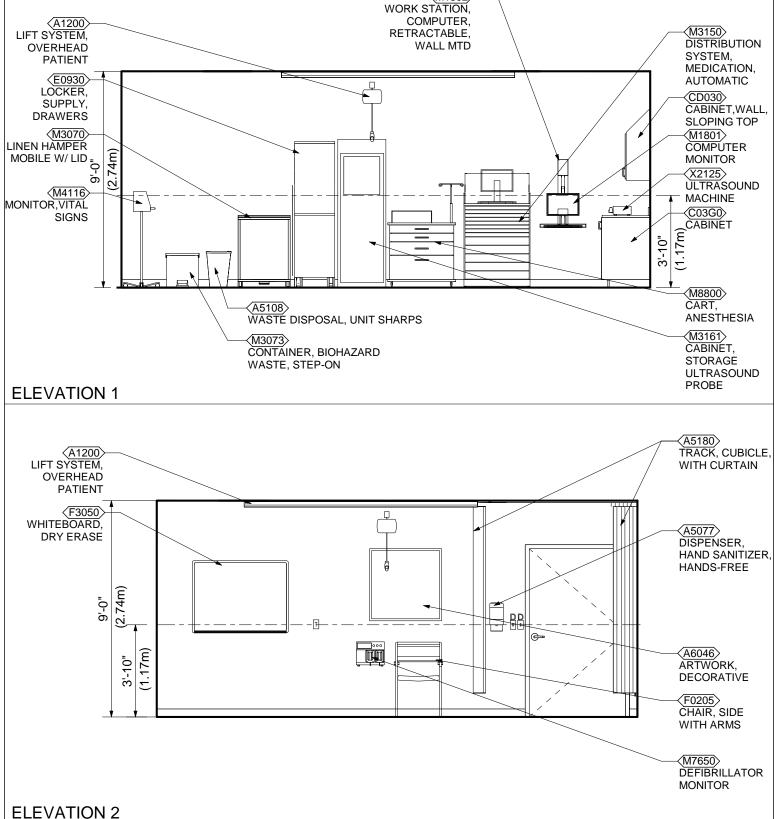






### Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065)

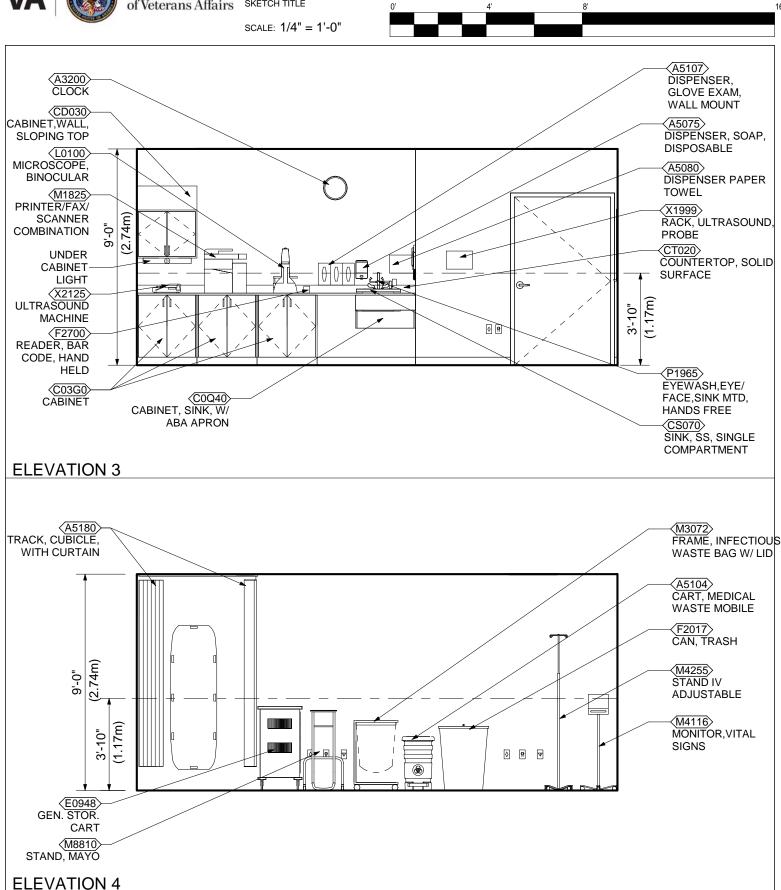
**ELEVATIONS** SKETCH TITLE 4' SCALE: 1/4" = 1'-0"M1802 WORK STATION, COMPUTER, (M3150)





SKETCH TITLE

### Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065) **ELEVATIONS**



Room Data: Class 2 Ultrasound Scanning Room, Imgng Svcs (CI065)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 2 dl: -- s: X

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- Nurse call in Toilet Room to annunciate at local reception desk and outside of the Toilet Room.
- 2. PACS:two 4-port telecommunication outlets per PACS station



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: - Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min 1 outlets/room OVHD
Medical Vacuum: Min 1 outlets/room OVHD
Oxygen: Min 1 outlets/room OVHD
Waste Anesth Gas: Rec 1 outlets/room OVHD

Room Contents: Class 2 Ultrasound Scanning Room, Imgng Svcs (Cl065)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1017	Telephone, Wall Mounted, Multi-Line, With Speaker	VV	1	Telephone, wall mounted, multi-line with speaker.
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A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	2	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5104	Cart, Medical Waste Disposal, Mobile w/Foot Pedal	VV	1	Mobile molded cart with foot pedal, to house 18-24 gal sharps disposal container. Lid lift or slide opens easily with foot-operated pedal. Lid may remain closed when not in use to reduce exposure to contents. Ergonomic handle is telescopic. Heavy containers can be removed from the side with minimal lifting. Meets requirements of OSHA 29 CFR 1910.130.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	2	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.

JSN	Content Name	Acq Code	Qty	Description
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	2	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	1	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0930	Locker, Supply, 6 Drawers, Mobile, 29"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Mobile Supply Locker  2 Tray/Shelf  4 Drawers, 3"H  2 Drawers, 6"H  Drawer Organizer Bins
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0300	Chair, Task, Swivel, With Arms	VV	2	Task chair, approximately 34" H X 26" W X 22" D with adjustable arms and a five caster adjustable swivel base. Seat and back are foam padded and upholstered in woven fabric or vinyl.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2017	Waste Receptacle, 24 GAL	VV	1	Rectangular steel waste receptacle with step-on lid and 24 gallon capacity. The receptacle is used to collect and temporarily store small quantities of paper refuse. Can be used in restrooms, patient areas, laboratories, pharmacies, etc.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3050	Whiteboard, Dry Erase	VV	1	Whiteboard unit, approximately 36" H x 48" W consisting of a white porcelain enamel writing surface with an attached chalk tray.  Magnetic surface available. Image can be easily removed with a standard chalkboard eraser. For use with water color pens. Unit is ready to hang.



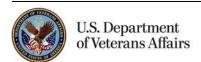
JSN	Content Name	Acq Code	Qty	Description
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
L0100	Microscope, Binocular	VV	1	Binocular microscope. Equipped with plan achromatic objectives to suit work in brightfield, phase contrast, darkfield, photomicrography, dual viewing and projection screen. Microscope has a high light intensity, 100 watt halogen lamp, for constant color temperature and illumination, a three step variable transformer, focusable aspheric abbe condenser system; heat absorbing glass; centerable field diaphragm; two built-in filter turrets permitting a combination of selective light balancing and color compensating filters. Other components/features include a swing-in condenser, 4X objective, quadruple nosepiece, 10X wide field eyepieces and a graduated stage. Other observation tubes can be added. It is used in laboratories for cell counting and other observation techniques.
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.



JSN	Content Name	Acq Code	Qty	Description
M1802	Work Station, Computer, Retractable, Wall Mounted	VV	1	A wall mounted retractable work station. Work station is used as a computer station in treatment rooms, exam rooms and areas where physical space in limited.
M1825	Printer, Computer	VV	1	High resolution computer printer with a variety of type styles and sheet/envelope feeder trays. Database information reflects network ready, medium duty office style laser printers. Other types of printers (bubble jet, dot matrix, line or plotter) as well as light or heavy use capabilities are available.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M3150	Distribution System, Medication, Automatic	VV	1	An automated dispensing system that provides controlled dispensing, inventory and security. Size and cost will vary dependent on number of modules selected.
M3161	Cabinet, Storage, Ultrasound Tee Probe	VV	1	The TEE Probe storage cabinet is a vertical storage cabinet for disinfected TEE Probes. Cabinet has a locking door with a large viewing window and a HEPA filter providing continuous filtered air. This storage cabinet is specifically made for TEE Probes.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.



JSN	Content Name	Acq Code	Qty	Description
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M7650	Defibrillator/Monitor, Acute Care	VV	1	Portable defibrillator/monitor for acute care includes biphasic defibrillator, pacing, SPO2, Interpretive 12-lead, NIBP monitoring, EtCO2 monitoring, Invasive pressure monitoring, Vital Sign monitoring, temperature probe, Fax transmission, PCMCIA Data Cards, Paddle accessories, and a color LCD.
M8800	Cart, Anesthesia	VV	1	Mobile anesthesia cart. The cart shall be built of stainless steel or other appropriate material and mounted on 4" casters for easy mobility. It shall be capable of being equipped with bottle holders, adjustable IV pole, storage drawers, shelves and a top bar/rail.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8825	Table, Instrument/Dressing, CRS, approx. 36x20x34	VV	1	Instrument and dressing table. Made of corrosion resistant stainless steel with a sound deadened top. Includes guard rail, shelf and two side-by-side drawers. The table is mounted on swivel, ball-bearing casters.
M8826	Table, Instrument/Dressing CRS 60x24x34	VV	1	Stainless steel instrument table with shelf and three inch casters made of rubber with double ball bearing casters. Dimensions are 60x24x34.
M8940	Stool, Anesthesia, With Back	VV	1	Anesthesia stool with back. All stainless steel with well-curved back panel and wide conductive seat. Designed for the anesthesiologist during surgical procedures.
M9005	Table, Ultrasound, Mobile, General Purpose	VV	1	A general purpose table dedicated to ultrasound procedures including OB/GYN. Table has an open frame design to allow sonographers to get close to the patient. Table height is adjustable from approximately 23" to 39". Table includes side rails and arm board.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
M9007	Chair, Exam, Ultrasound	VV	1	The Sonography Chair presents an ergonomic enhancement when scanning patients. Multiple adjustments for seat height, back height and backwards tilt tension adjustment with integrated seat slider allow for a variety of comfortable postures. A foot ring is standard for additional support and positioning.



JSN	Content Name	Acq Code	Qty	Description
X1999	Rack, Ultrasound Probe	VV	1	Universal probe rack used to hold/store ultrasound probes & transducers. Features include cable supports and capacity for five probes.
X2100	Scanner, Ultrasound, General Purpose	VV	1	High definition, diagnostic ultrasound system for Radiology, Cardiology, Vascular, ob-gyn, Perinatology, and Surgical imaging applications. The unit employs curved, phased and linear array imaging technology. The system supports colorflow, pulse and continuous wave imaging modalities. On board software measurement packages available for all imaging applications. The system is DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations. In addition, a full line of probes and conventional recording devices are available.
X2125	Scanner, Ultrasound, Portable	VV	1	A portable diagnostic ultrasound scanner system configured for various applications, ease-of-use and high performance for enhanced efficiency and accuracy. The scanner is applicable for use in a wide variety of hospital and office environments including ER, breast surgery, anesthesia, vascular, interventional radiology and critical care. The system features a high quality color doppler ultrasound for imaging.



### ABUS Scanning Room, Imgng Svcs (Cl067) DISCLAIMER

SKETCH TITLE

SCALE: 1/4" = 1'-0"



#### **DISCLAIMER:**

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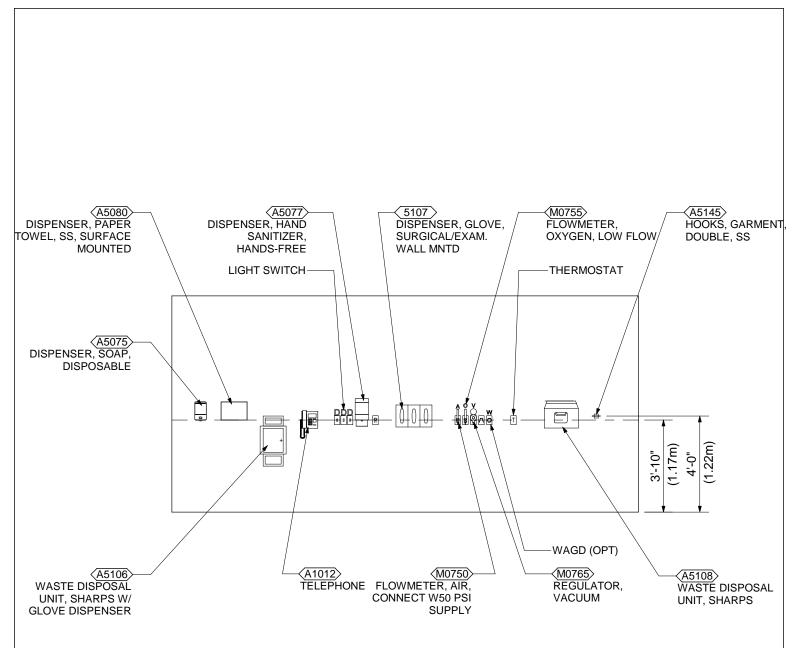
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### ABUS Scanning Room, Imgng Svcs (Cl067) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

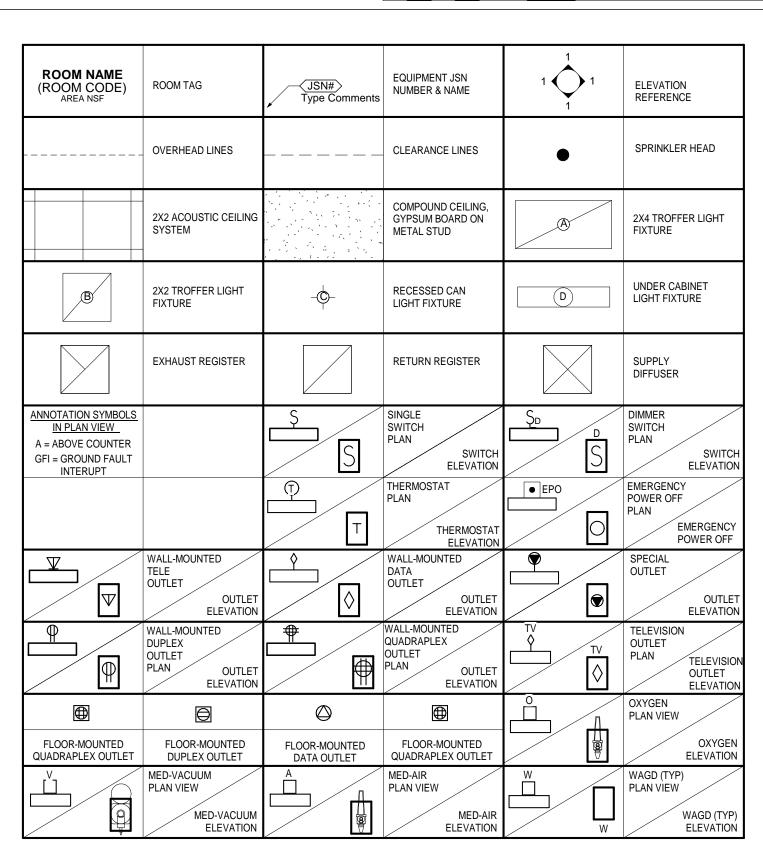
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



### ABUS Scanning Room, Imgng Svcs (Cl067) LEGEND

SKETCH TITLE 0' 4' 8' 1

SCALE: 1/4" = 1'-0"

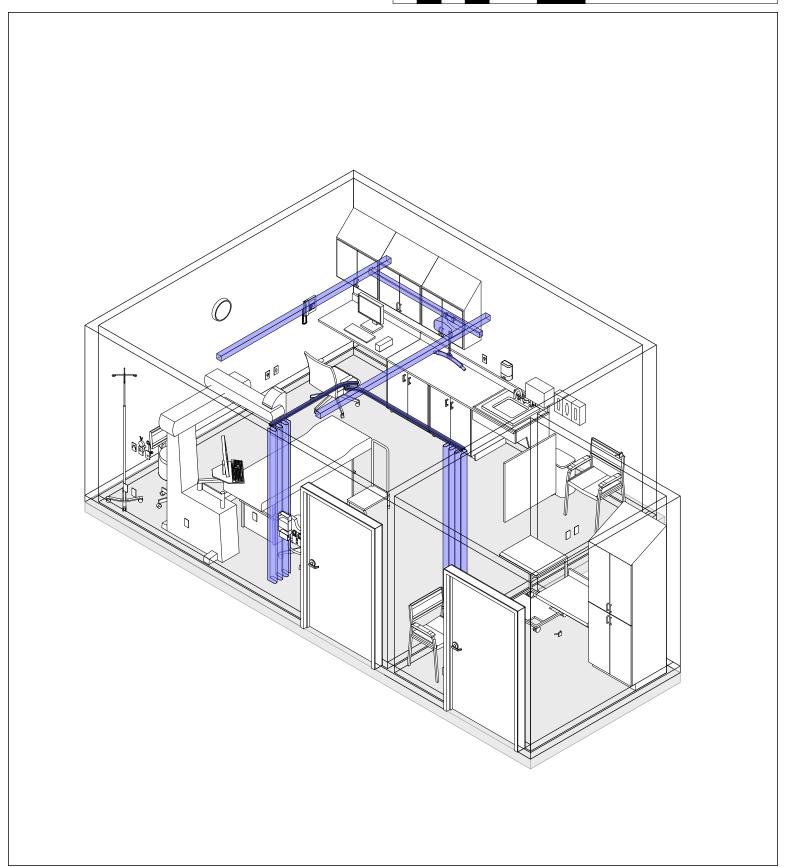




# ABUS Scanning Room, Imgng Svcs (Cl067) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





# ABUS Scanning Room, Imgng Svcs (Cl067) INTERACTIVE 3D PDF

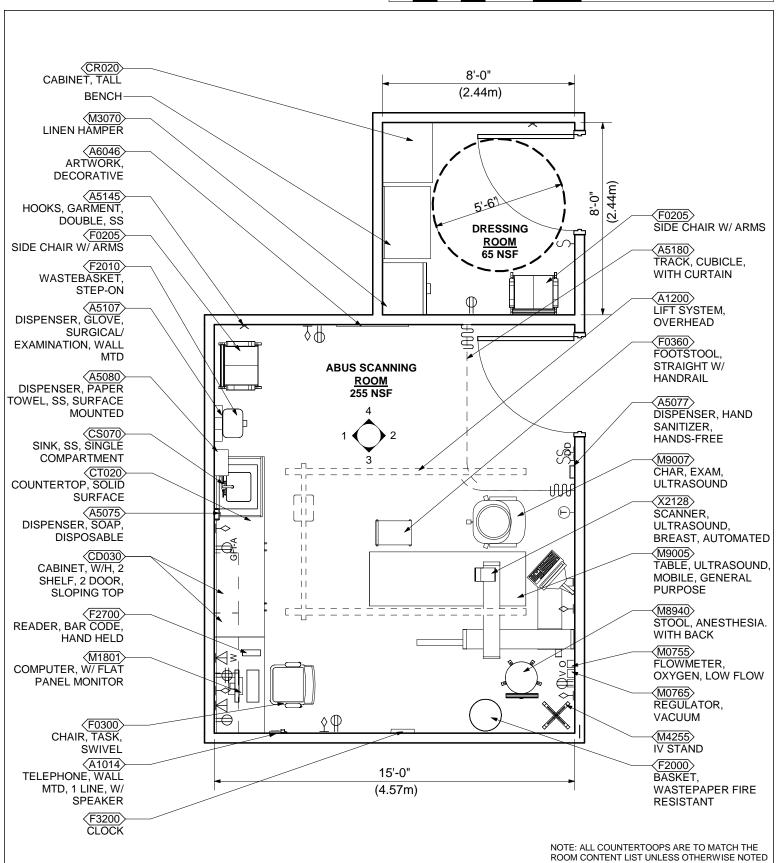
	of Veterans Affairs	SCALE:	0' 4'	8'	16
1					

# VA U.S. Department of Veterans Affairs

# Cl067 - ABUS Scanning Room, Ultrasound FLOOR PLAN

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"

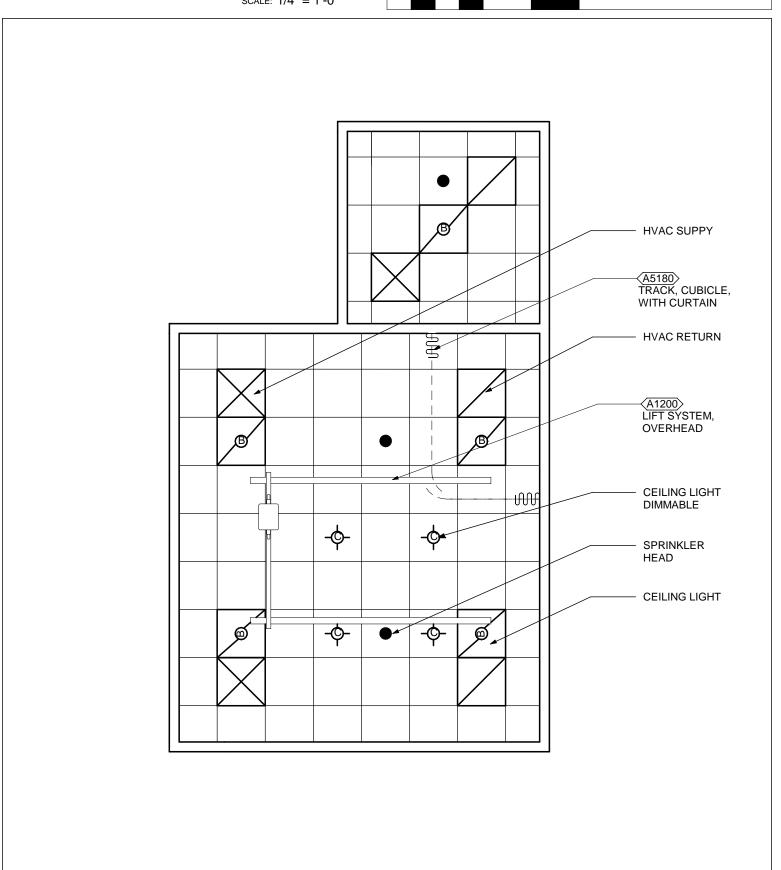




### ABUS Scanning Room, Imgng Svcs (Cl067) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8'

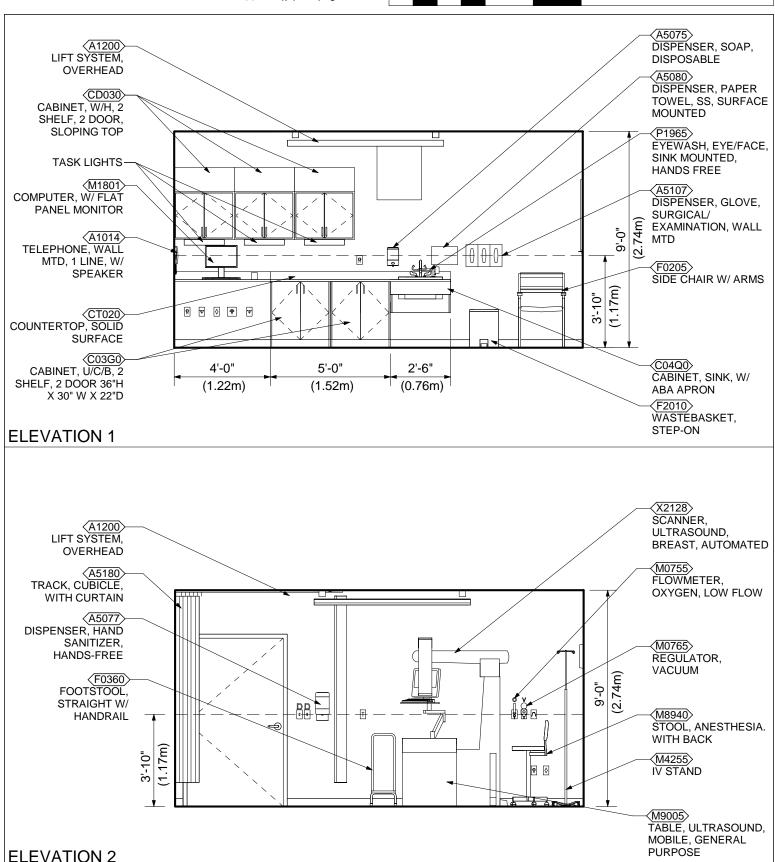
SCALE: 1/4" = 1'-0"





# ABUS Scanning Room, Imgng Svcs (Cl067) ELEVATIONS

SKETCH TITLE 0' 4' 8' 16' SCALE: 1/4" = 1'-0"



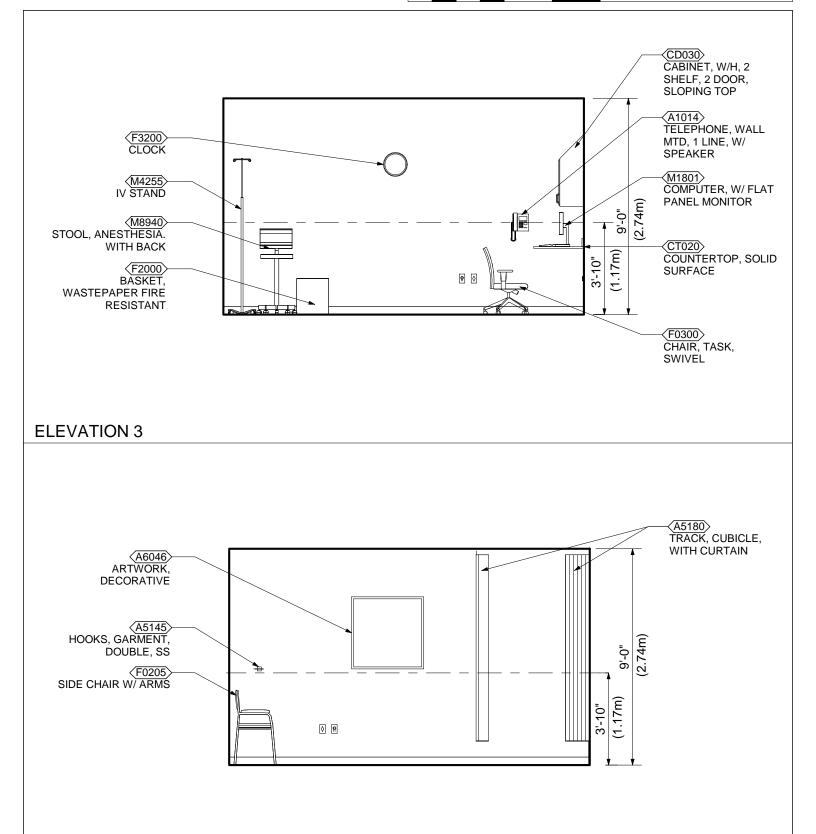


**ELEVATION 4** 

# ABUS Scanning Room, Imgng Svcs (Cl067) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



Room Data: ABUS Scanning Room, Imgng Svcs (Cl067)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 2 dl: -- s: X

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

### COMMUNICATION/SPECIAL SYSTEMS

ADP: Yes Data: Yes Telephone: Yes Intercom: Nurse Call: Note 1 Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- Nurse call in toilet room to annunciate at local reception desk and outside of the Toilet Room.
- 2. PACS:two 4-port telecommunication outlets per PACS station



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: - Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Minimum 1 outlet/room
Oxygen: Minimum 1 outlet/room

Room Contents: ABUS Scanning Room, Imgng Svcs (CI067)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	6	Telecommunication outlet location.
A1014	Telephone, Wall Mounted, 1 Line, With Speaker	VV	1	Telephone, wall mounted, 1 line, with speaker.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.

JSN	Content Name	Acq Code	Qty	Description
CO4QO	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0300	Chair, Task, Swivel, With Arms	VV	1	Task chair, approximately 34" H X 26" W X 22" D with adjustable arms and a five caster adjustable swivel base. Seat and back are foam padded and upholstered in woven fabric or vinyl.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2010	Basket, Wastepaper, Step-On	VV	1	"Step-on" wastepaper basket with inner liner and foot petal activated flip top.



JSN	Content Name	Acq Code	Qty	Description
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M8940	Stool, Anesthesia, With Back	VV	1	Anesthesia stool with back. All stainless steel with well-curved back panel and wide conductive seat. Designed for the anesthesiologist during surgical procedures.
M9005	Table, Ultrasound, Mobile, General Purpose	VV	1	A general purpose table dedicated to ultrasound procedures including OB/GYN. Table has an open frame design to allow sonographers to get close to the patient. Table height is adjustable from approximately 23" to 39". Table includes side rails and arm board.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.



JSN	Content Name	Acq Code	Qty	Description
X2128	Scanner, Ultrasound, Breast, Automated	VV	1	An automated transducer arm, rather than the standard handheld probe, with a display workstation. The acquisition process allows the technologist to select individual diagnostic planes that are captured in an automated scan. The display workstation provides complete 3D renderings of transverse, sagittal, and coronal views. The coronal view is most unique because such an angle is not possible with 2D ultrasound.
M9007	Chair, Exam, Ultrasound	VV	1	The Sonography Chair presents an ergonomic enhancement when scanning patients. Multiple adjustments for seat height, back height and backwards tilt tension adjustment with integrated seat slider allow for a variety of comfortable postures. A foot ring is standard for additional support and positioning.



# Bone Densitometry Scanning Room, Imgng Svcs (Cl076) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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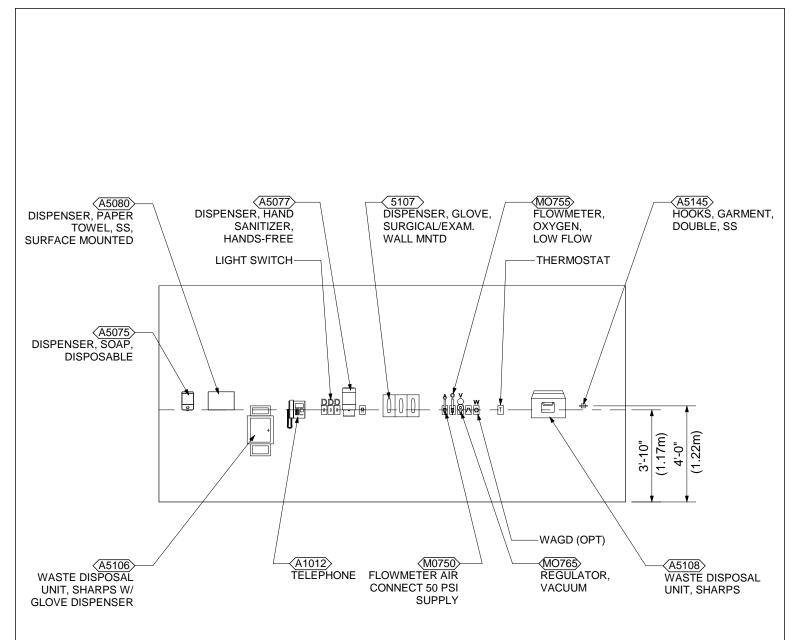
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### Bone Densitometry Scanning Room, Imgng Svcs (Cl076) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

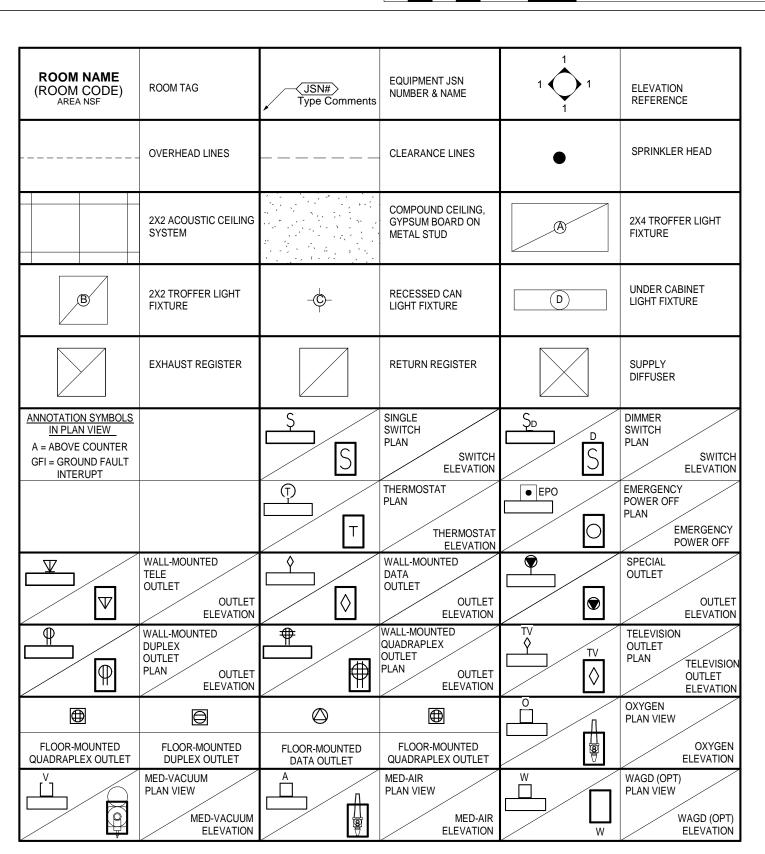
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



### Bone Densitometry Scanning Room, Imgng Svcs (Cl076) LEGEND

SKETCH TITLE 0' 4' 8'

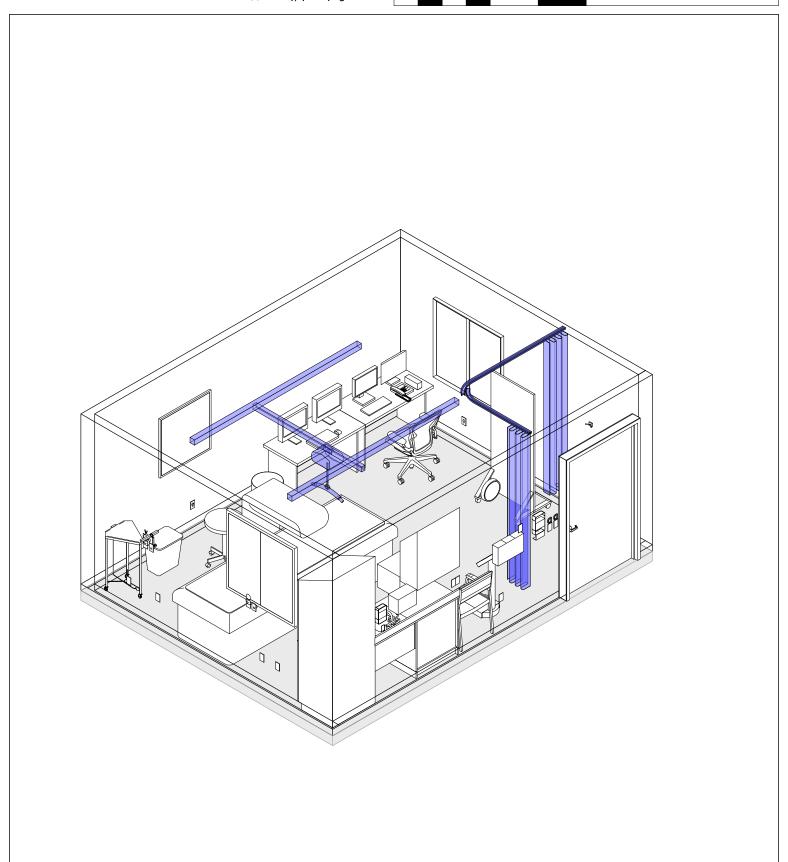
SCALE: 1/4" = 1'-0"





# Bone Densitometry Scanning Room, Imgng Svcs (Cl076) AXONOMETRIC

SCALE: 1/4" = 1'-0"





SKETCH TITLE

# Bone Densitometry Scanning Room, Imgng Svcs (Cl076) INTERACTIVE 3D PDF

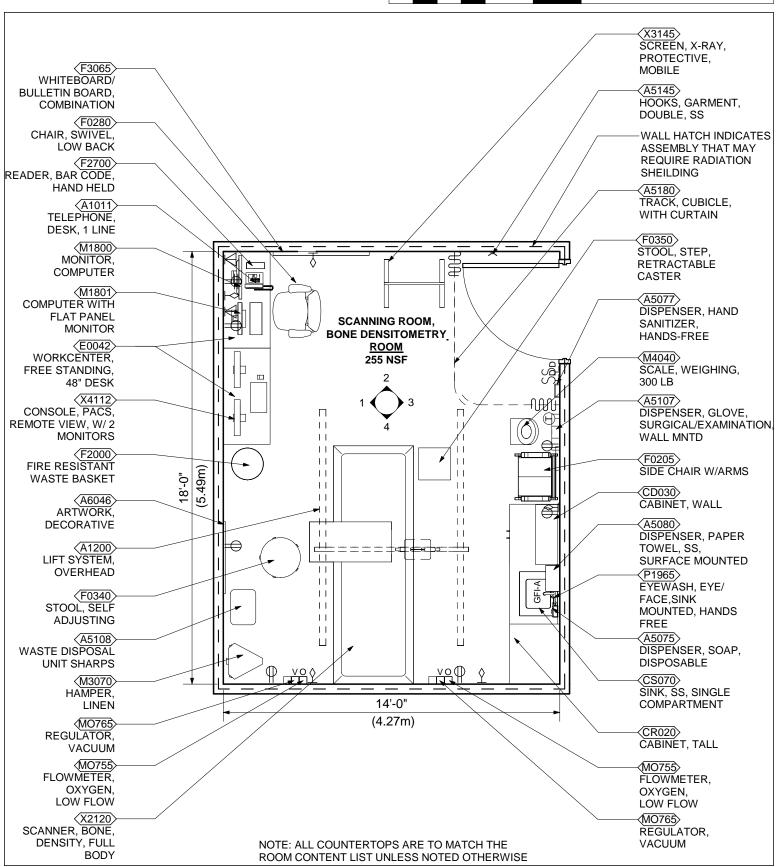
SCALE:	



### Bone Densitometry Scanning Room, Imgng Svcs (Cl076) FLOOR PLAN

SKETCH TITLE 0' 4' 8' 16

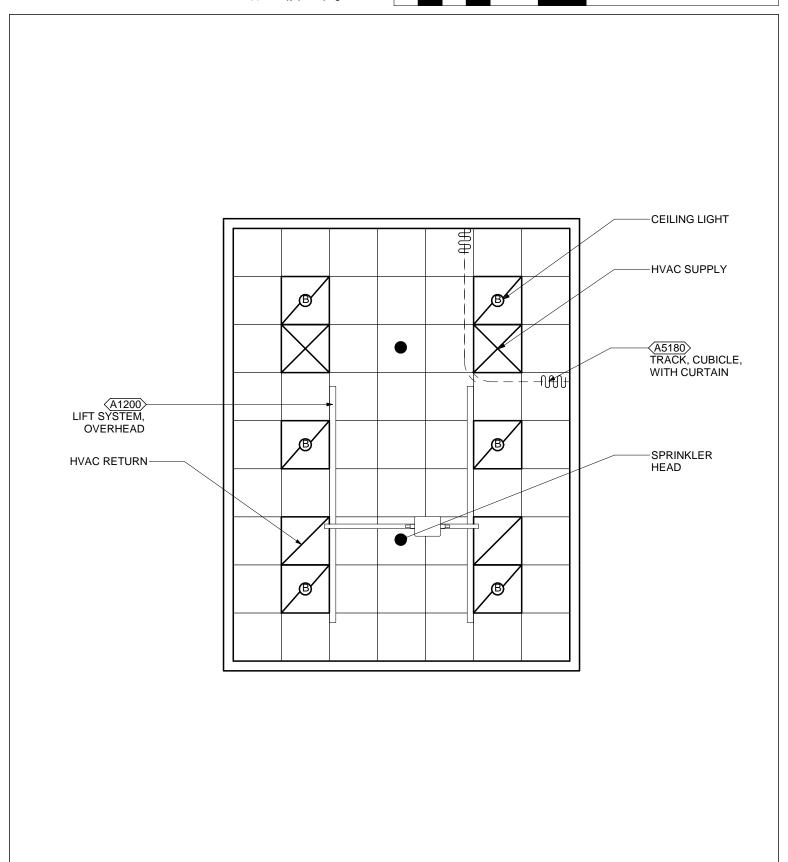
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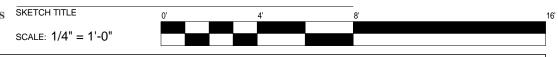
# Bone Densitometry Scanning Room, Imgng Svcs (Cl076) REFLECTED CEILING PLAN

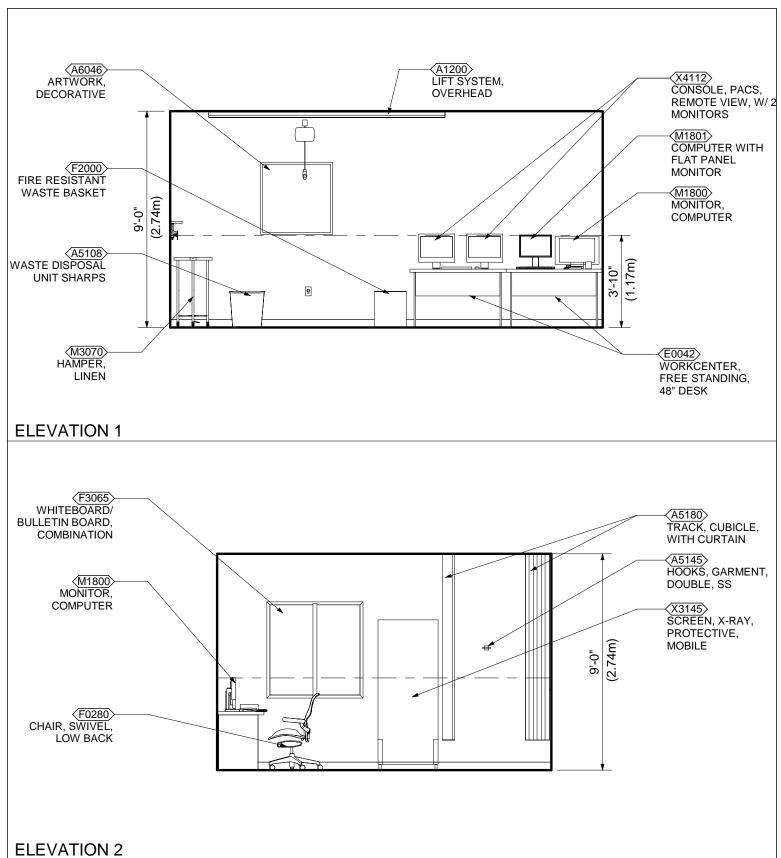
SCALE: 1/4" = 1'-0"





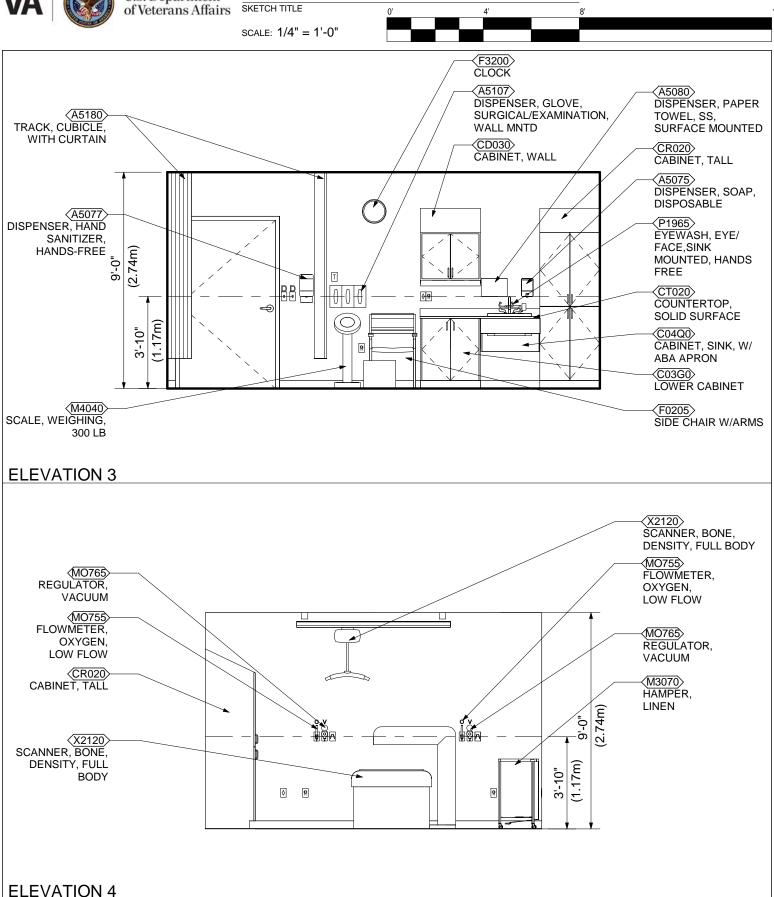
### Bone Densitometry Scanning Room, Imgng Svcs (Cl076) ELEVATIONS







### Bone Densitometry Scanning Room, Imgng Svcs (Cl076) **ELEVATIONS**



CHAPTER 295 - Bone Densitometry Scanning Room, Imgng Svcs (CI076)

Room Data: Bone Densitometry Scanning Room, Imgng Svcs (CI076)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RSF at h: 4" (100mm) Floor Finish: RSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD\* s: X

## Notes:

 Provide a 4'-0" wide door into the Bone Densitometry Room (may require lead shielding, consult medical physicist).

## LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

## **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

Notes:

 Coordinate electrical power requirements with specific vendor equipment.

## COMMUNICATION/SPECIAL SYSTEMS

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Yes Code Blue: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

### Notes:

 4-port telecommunication outlet for PACS station

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

## PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Minimum 2 outlet/room
Oxygen: Minimum 2 outlet/room



Room Contents: Bone Densitometry Scanning Room, Imgng Svcs (CI076)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1011	Telephone, Desk, 1 Line	VV	1	Telephone, desk, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.

JSN	Content Name	Acq Code	Qty	Description
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	3	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	1	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	1	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CR020	Cabinet, F/S, 5 Shelf, 1 DO, Sloping Top, 92x24x13	СС	1	Floor standing storage cabinet with five adjustable shelves, a solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a tall case or a tall cabinet. For general purpose storage use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0042	Workcenter, Computer, Free Standing, 48" W	VV	2	THIS TYPICAL INCLUDES:  1 Tool Rail  2 Paper Tray  1 Diagonal Tray  1 Freestanding Work Surface  1 Mobile Pedestal, Box/File  1 Adjustable Keyboard Tray
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0280	Chair, Swivel, Low Back	VV	1	Low back contemporary swivel chair, 37" high X 25" wide X 31" deep with a five (5) caster swivel base, arms and foam padded seat and back upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0755	Flowmeter, Oxygen, Low Flow	VV	2	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.



JSN	Content Name	Acq Code	Qty	Description
M0765	Regulator, Vacuum	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1800	Monitor, Computer	VV	1	A high definition LED computer monitor with minimum 1920 x 1080 resolution, 4ms response time, 25 inch class display size, compatible with desk or arm mounted. Monitor is VESA compatible and Energy Star compliant.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M4040	Scale, Weighing, 300 Pound Capacity	VV	1	Person weighing scale with 300 pound capacity. Unit consists of a rugged base frame of 3/32" thick steel with a non-slip surface and a speedometer dial with ultra sensitive registering mechanisms. Scale is designed for medical use.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X2120	Scanner, Bone Density, Full Body	VV	1	Full body scanner used to determine bone mineral density measurements and vertebral assessment associated with osteoporotic fracture risk.
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.



JSN	Content Name	Acq Code	Qty	Description
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.



## Class 1 CT Scanning Room, Imgng Svcs (Cl081) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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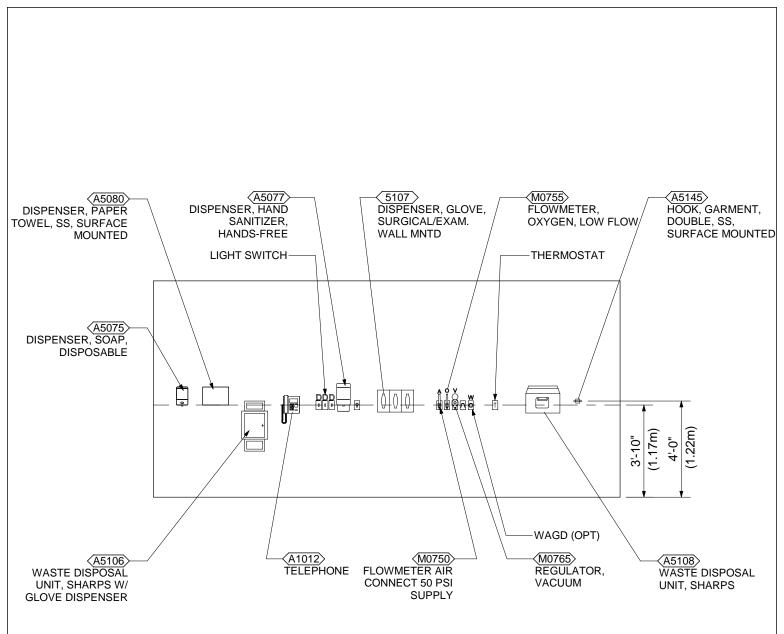
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## Class 1 CT Scanning Room, Imgng Svcs (Cl081) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



## **Drawing Notes:**

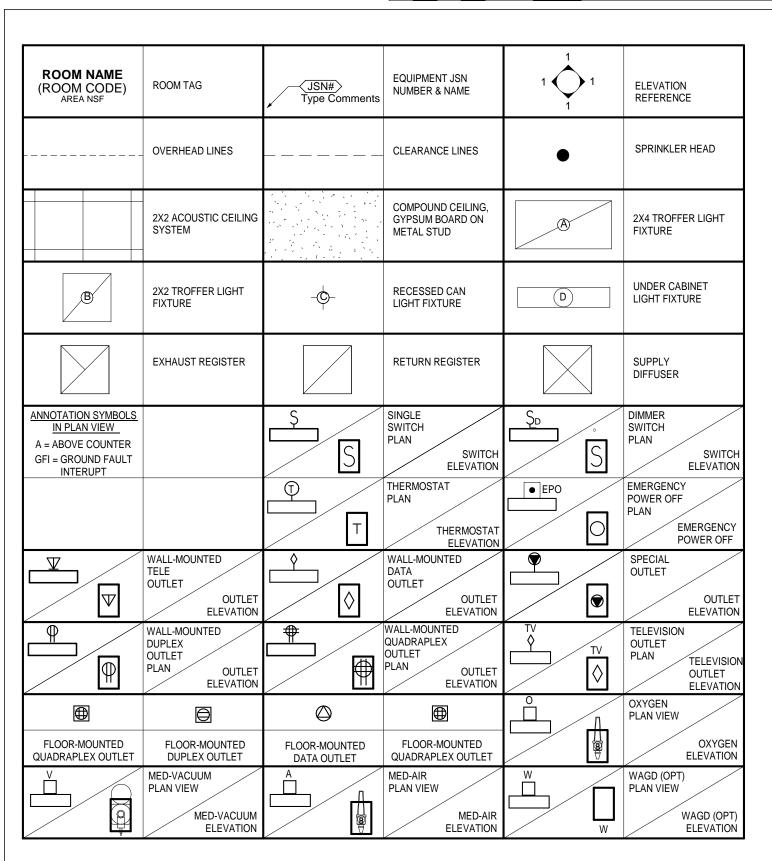
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance

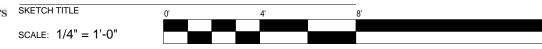


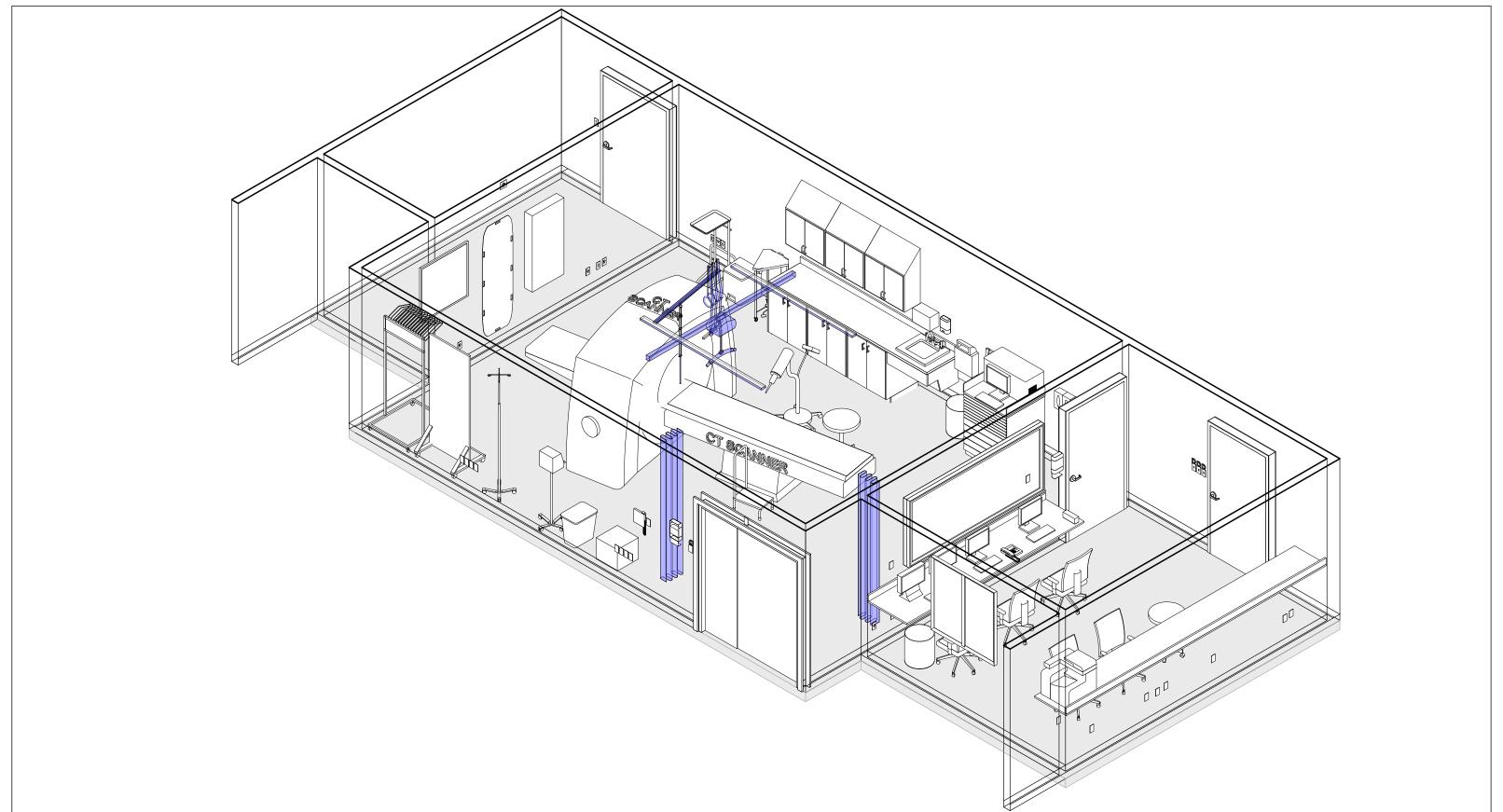
## Class 1 CT Scanning Room, Imgng Svcs (Cl081) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





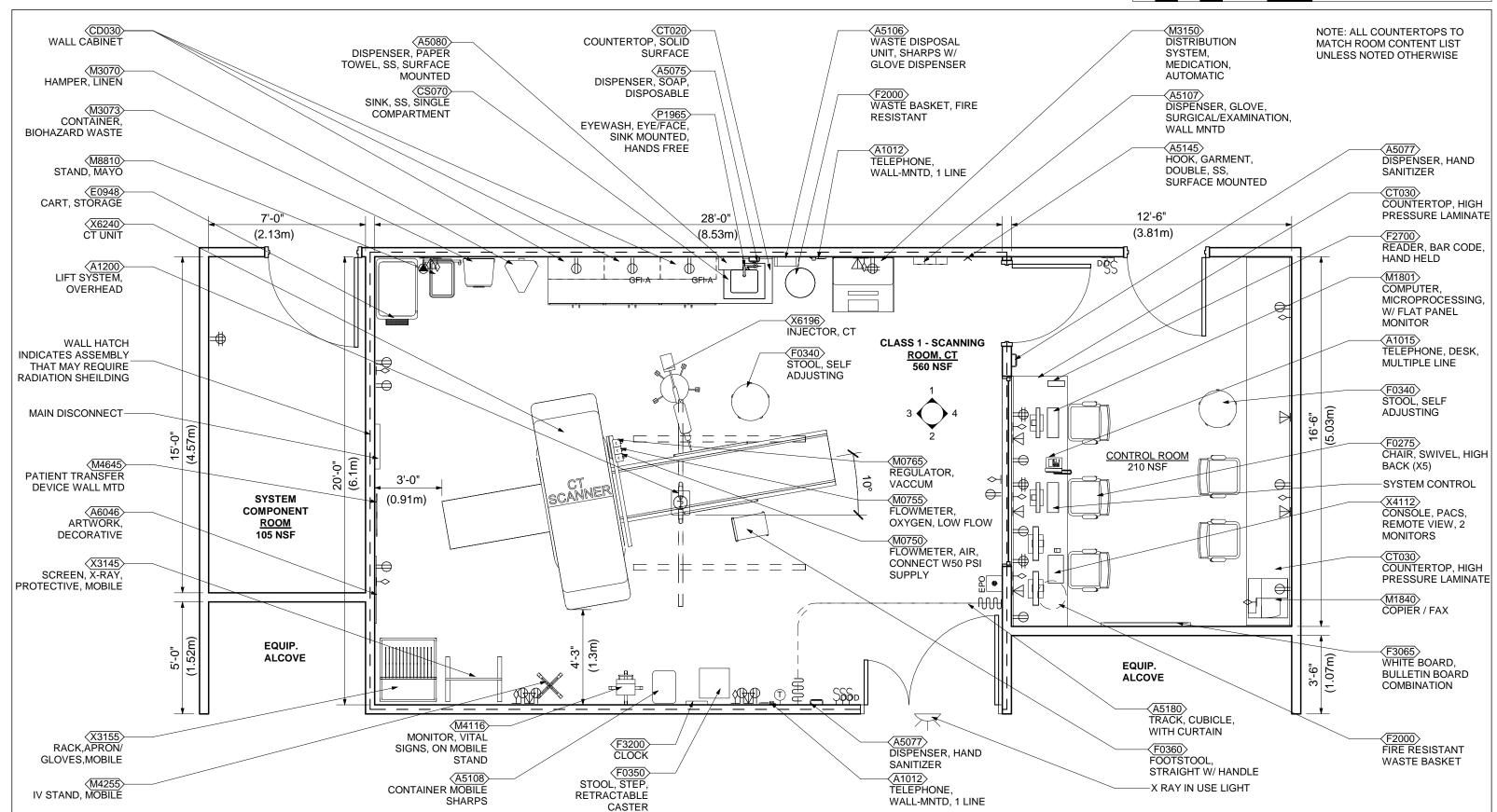


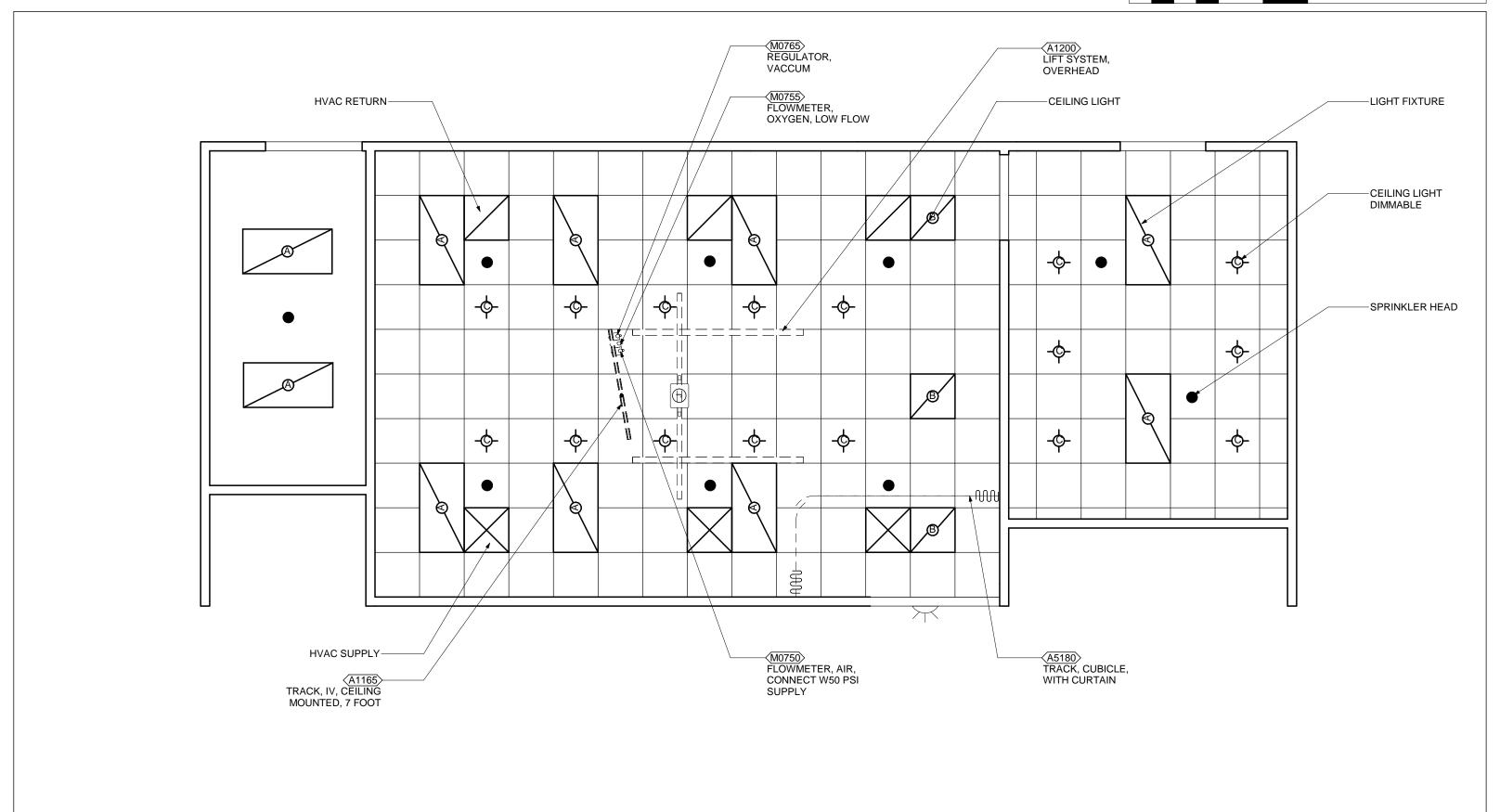


# Class 1 CT Scanning Room, Imgng Svcs (Cl081) INTERACTIVE 3D PDF

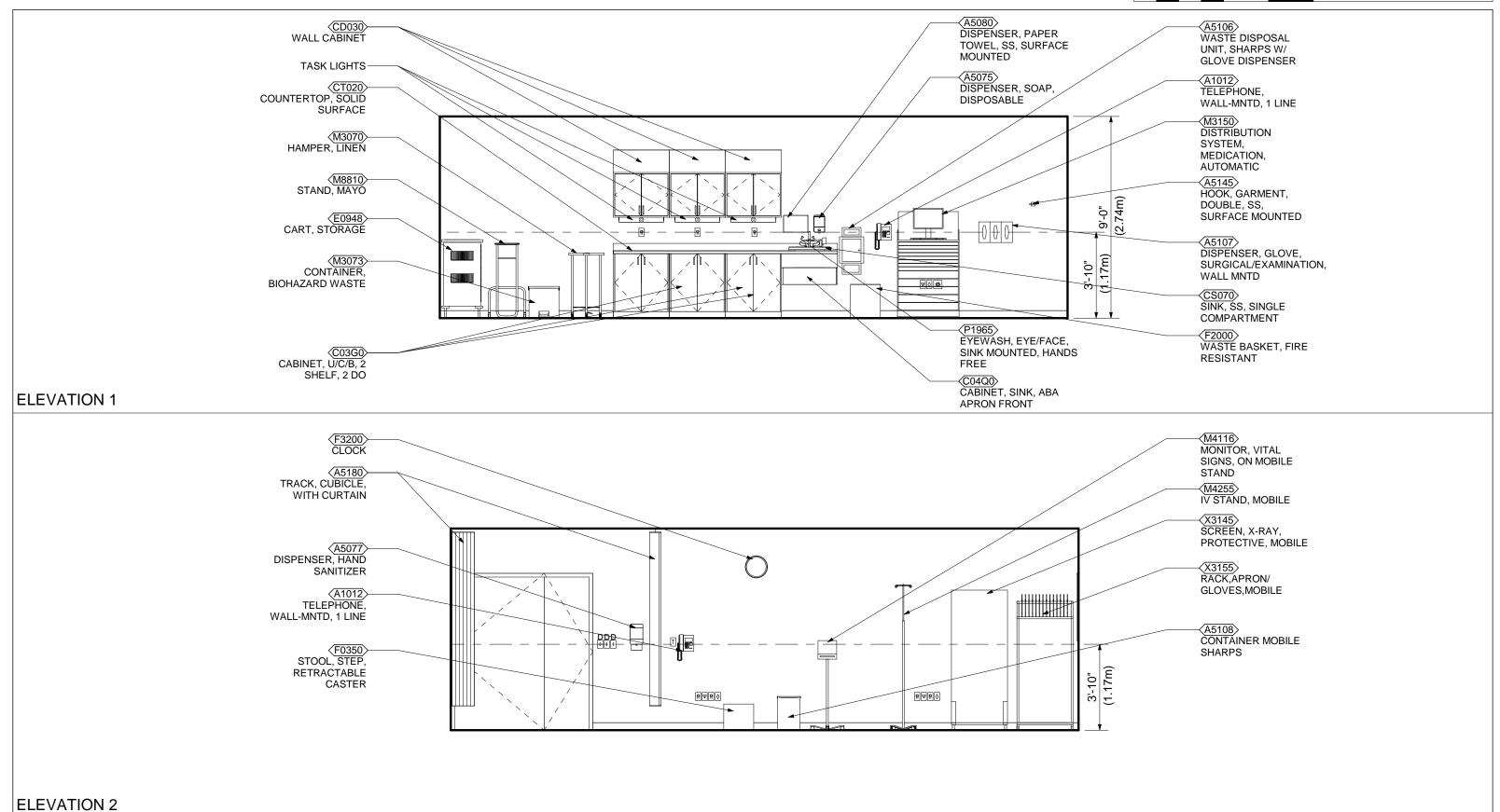
SCALE:

SCALE: 1/4" = 1'-0"





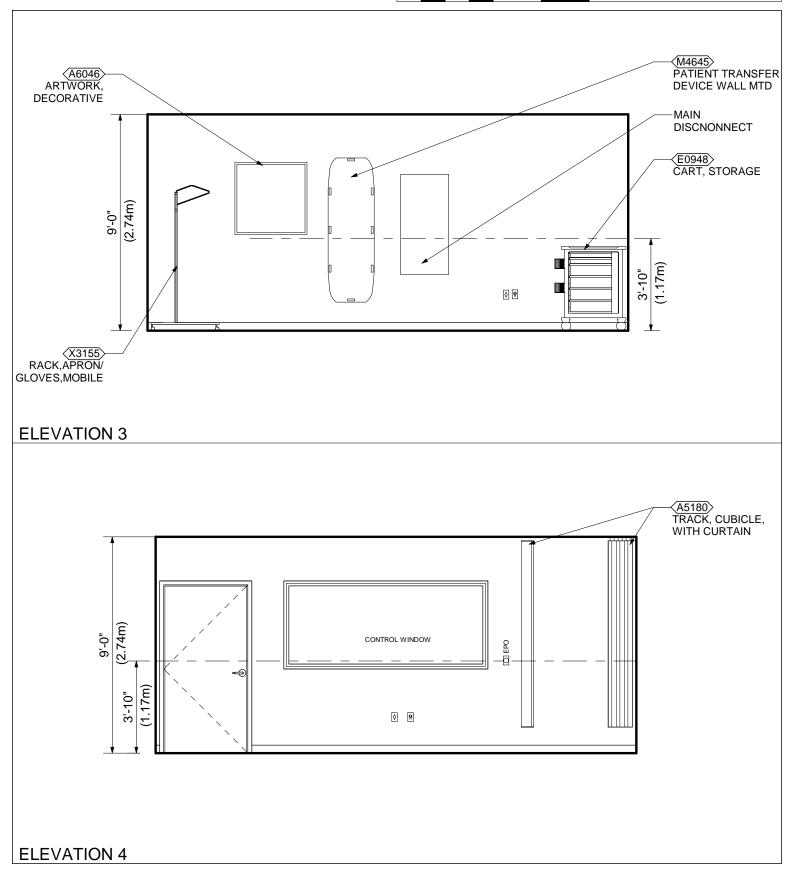
SCALE: 1/4" = 1'-0"





## Class 1 CT Scanning Room, Imgng Svcs (Cl081) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



Room Data: Class 1 CT Scanning Room, Imgng Svcs (Cl081)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF / RSF at h: 4" (100mm) WSF / RSF Floor Finish: Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 13 dl: LEAD s: SN

#### Notes:

- 1. Provide a 6'-0" (4'-0 active & 2'-0 inactive) wide shielded door pair into the Scanning Room, CT Class 1.
- 2. Provide a 3'-0" wide shielded door from the Scanning Room, CT Class 1 to the Control Room.
- Provide a shielded viewing window from the Control Room into the Scanning Room, CT Class 1.

## LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

## **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

## **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Public Address: Radio/Entertainment: MATV: CCTV: Yes, note 1 & 2. MID: Security/Duress: VTEL: VA Satellite TV:

### Notes:

- 1. Junction box for CCTV camera with conduit to Control area.
- 2. Junction box for CCTV monitor.
- 3. PACS: two 4-port telecommunication outlets per PACS station



## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

## PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min 1 outlet/room OVHD
Medical Vacuum: Min 1 outlet/room OVHD
Oxygen: Min 1 outlet/room OVHD

## Room Contents: Class 1 CT Scanning Room, Imgng Svcs (Cl081)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1165	Track, IV, Ceiling Mounted, 7 Foot	СС	1	7 ft. ceiling mounted IV track. Unit consists of a straight thick anodized aluminum track. It includes a carrier with self locking hinge, hook for attaching bottle hanger, and an adjustable pendant. Designed for dispensing IV solutions.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.

JSN	Content Name	Acq Code	Qty	Description
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.



JSN	Content Name	Acq	Qty	Description
3311	Sometive Hame	Code	4.7	Description
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M3150	Distribution System, Medication, Automatic	VV	1	An automated dispensing system that provides controlled dispensing, inventory and security. Size and cost will vary dependent on number of modules selected.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.



JSN	Content Name	Acq Code	Qty	Description
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6196	Injector, CT	VC	1	CT injector. This unit is a specialized radiographic system that provides sharp, well-defined visual images of the vascular anatomy. The injector introduces a vision radiopaque fluid (contrast medium) into an artery or vein through a small catheter, making vessels contrast with their more radiolucent surrounding. The unit incorporates an electromechanical or pneumatically driven syringe to deliver the contrast medium. The syringe assemblies consist of an electric motor connected to a jackscrew that moves the syringe piston into or out of the syringe barrel. The unit is used in hospitals with radiographic procedures. The unit can be ceiling, wall, or remote stand mounted.
X6240	Radiographic Unit, Computerized Tomography (CT)	VC	1	The CT Scanner System is an noninvasive radiographic technique that involves the reconstruction of a tomographic plane of the body from a large number of collected x-ray absorption measurements taken during a scan around the body's periphery. The CT System shall be a single gantry, whole body scanning system appropriate to support tertiary care facilities with an annual projected workload of less than 5,500 separate studies. System includes DICOM 3.0 or latest version software protocol. System to be procured with turnkey installation.



## Room Contents: Class 1 CT Control Room, Imgng Svcs (Cl082)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	VV	2	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1840	Printer/Copier/Fax Combination	VV	1	Multifunctional printer, fax, scanner and copier (PFC) all-in-one machine.

X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.
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Room Contents: Class 1 CT System Component Room, Imgng Svcs (Cl083)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



## Class 2 CT Scanning Room, Imgng Svcs (Cl086) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

## **DISCLAIMER:**

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

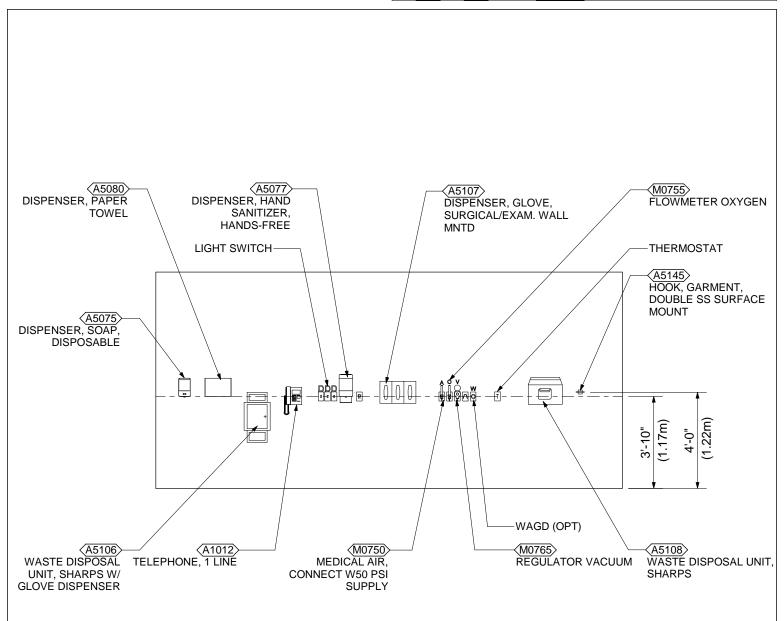
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 2 CT Scanning Room, Imgng Svcs (Cl086) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



## **Drawing Notes:**

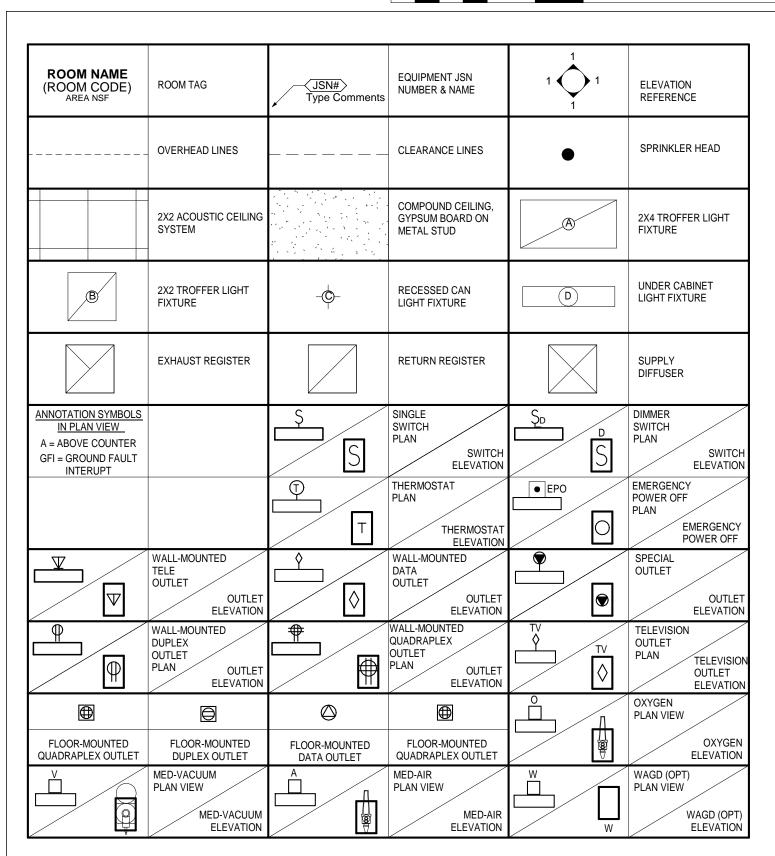
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



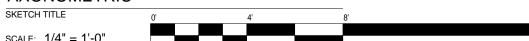
## Class 2 CT Scanning Room, Imgng Svcs (Cl086) LEGEND

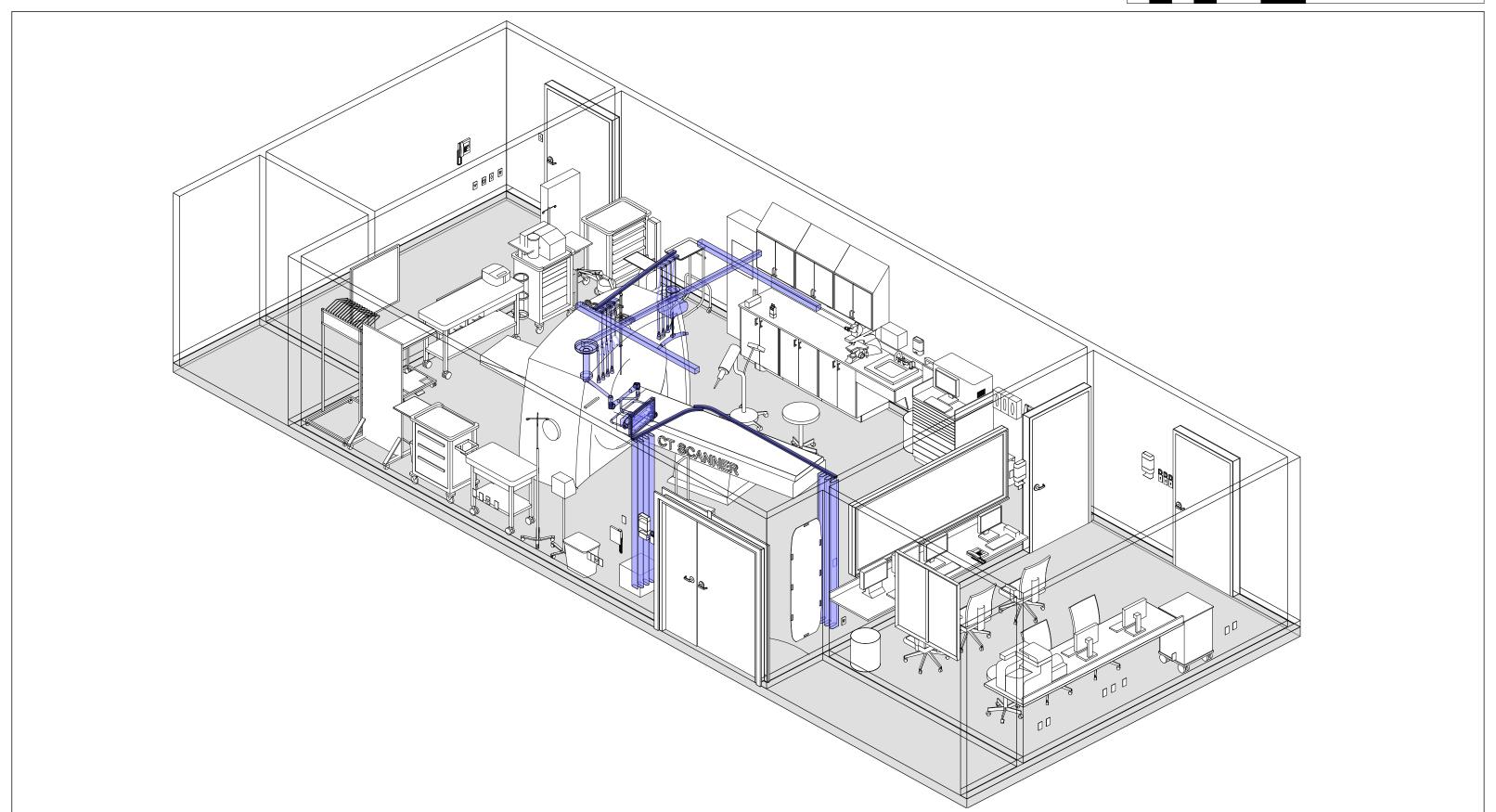
SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



SCALE: 1/4" = 1'-0"



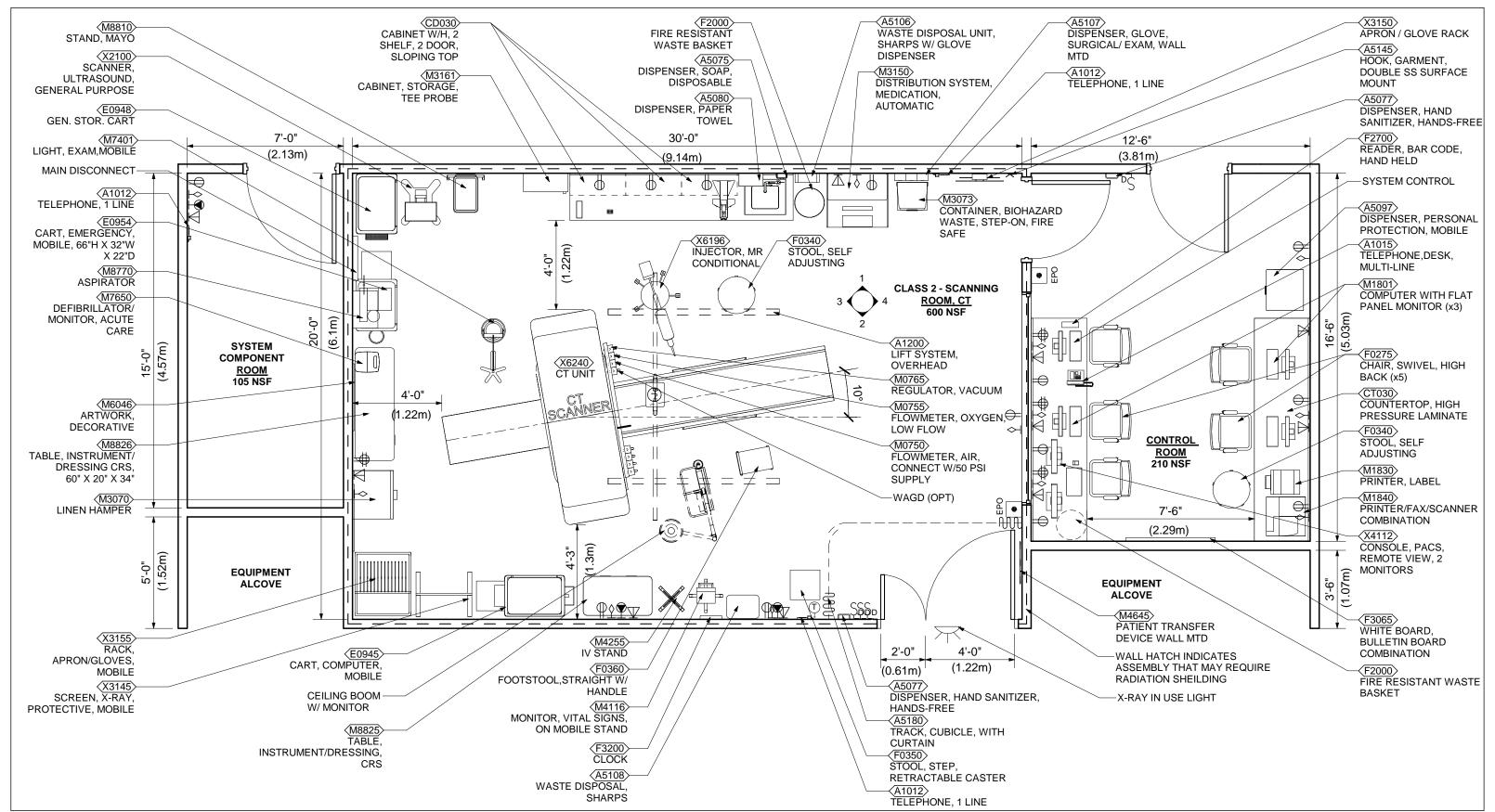




# Class 2 CT Scanning Room, Imgng Svcs (Cl086) INTERACTIVE 3D PDF

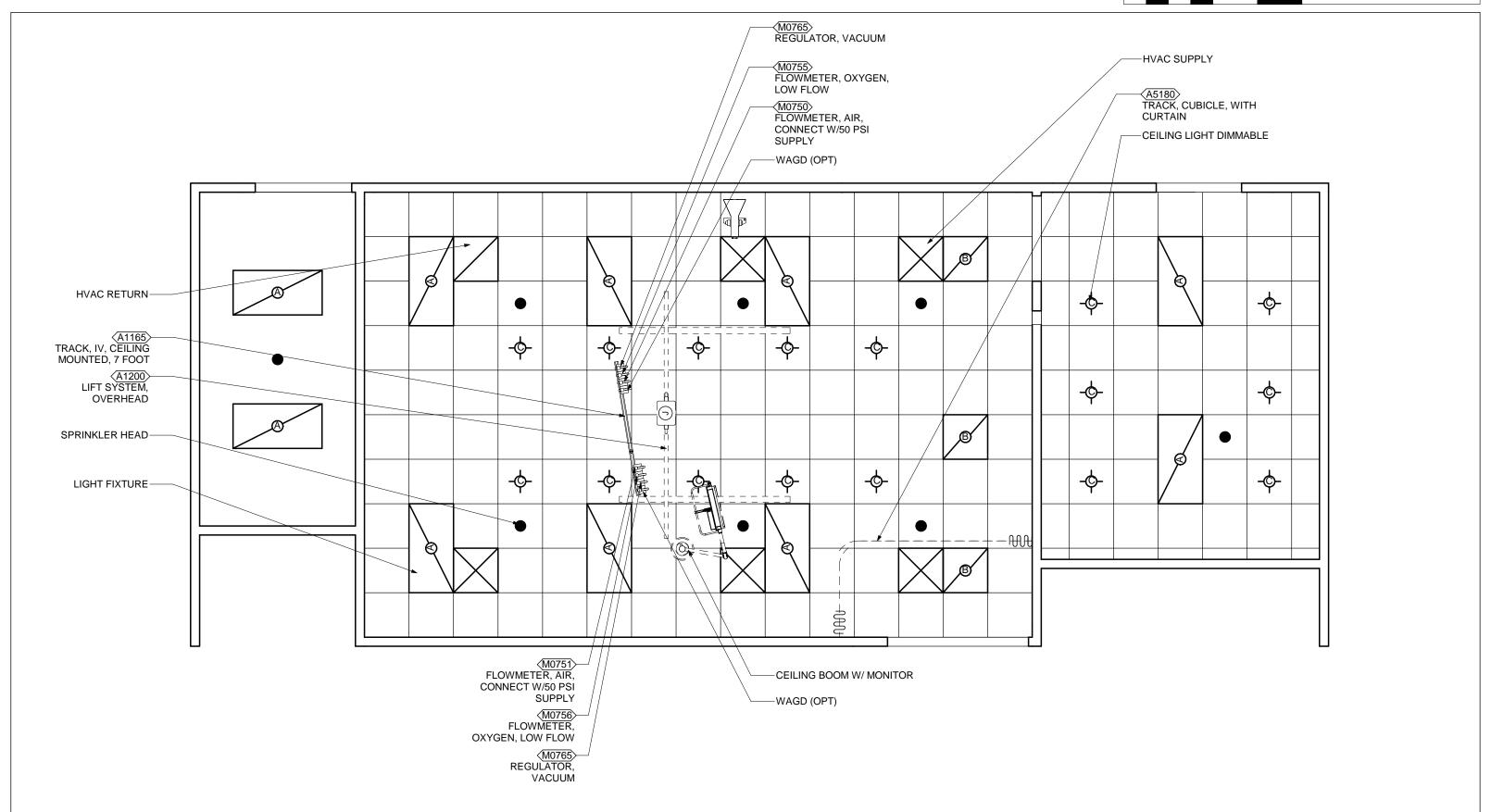
SCALE:

SCALE: 1/4" = 1'-0"



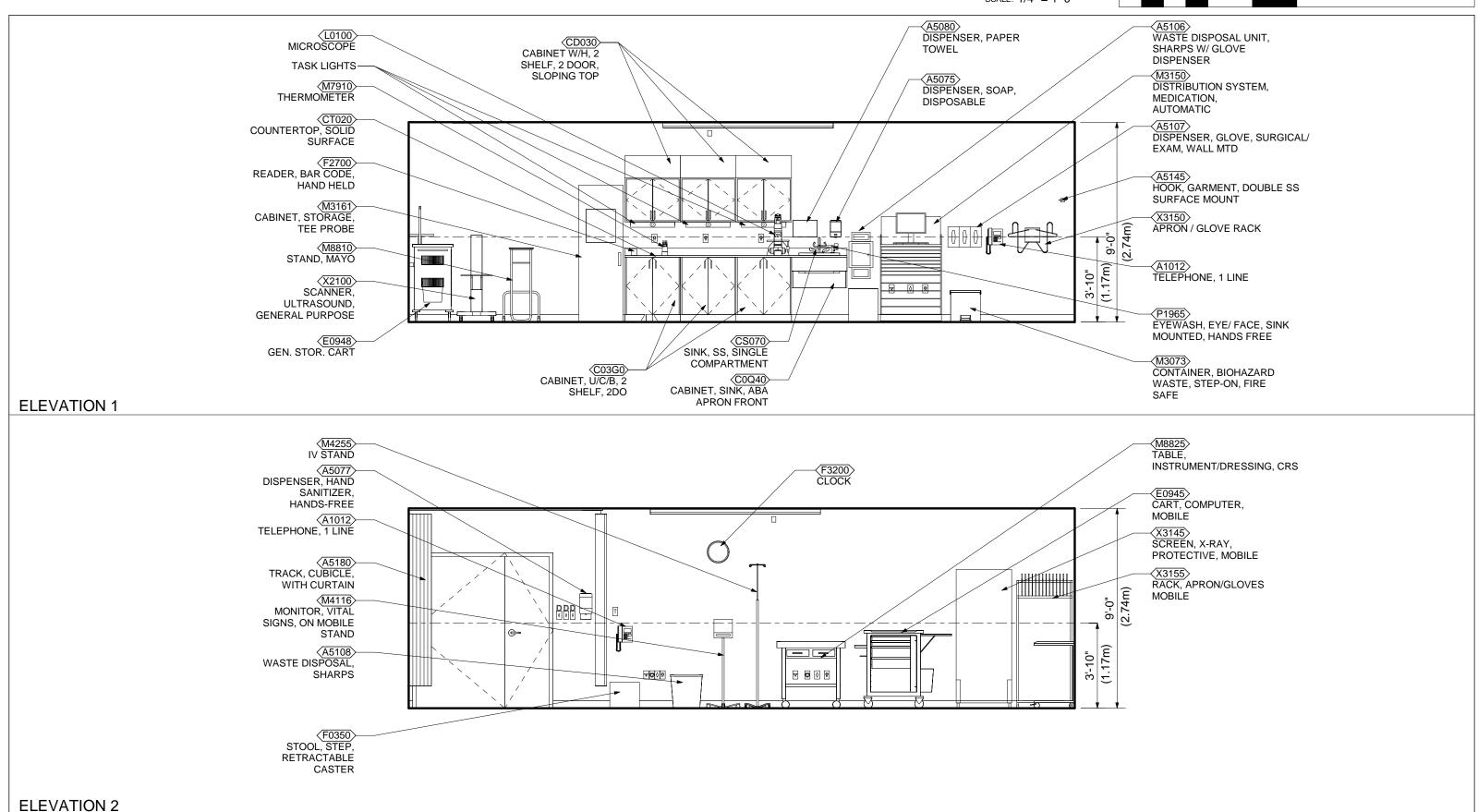
SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



fairs SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

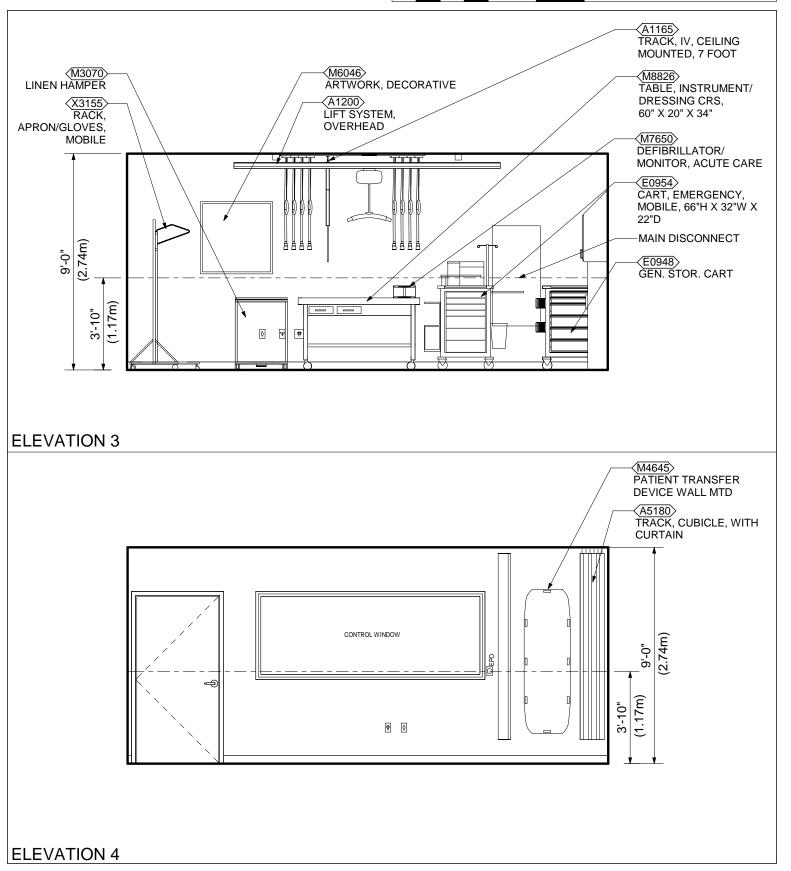




## Class 2 CT Scanning Room, Imgng Svcs (Cl086) ELEVATIONS

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



Room Data: Class 2 CT Scanning Room, Imgng Svcs (CI086)

## **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 13 dl: LEAD s: SN

#### Notes:

- 1. Provide a 6'-0" (4'-0 active & 2'-0 inactive) wide shielded door pair into the Scanning Room, CT Class 2.
- 2. Provide a 3'-0" wide shielded door from the Scanning Room, CT Class 2 to the Control Room.
- Provide a shielded viewing window from the Control Room into the Scanning Room, CT Class 2.

## LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

## **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

## **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Code Blue: Yes **Public Address:** Radio/Entertainment: MATV: CCTV: Yes, note 1 & 2. MID: Security/Duress: VTFL: VA Satellite TV:

## Notes:

- 1. Junction box for CCTV camera with conduit to Control area.
- 2. Junction box for CCTV monitor.
- 3. PACS:two 4-port telecommunication outlets per PACS station



## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

## PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min 2 outlets/Room OVHD
Medical Vacuum: Min 2 outlets/Room OVHD
Oxygen: Min 2 outlets/Room OVHD
Waste Anesth Gas: Rec 2 outlets/room OVHD

## Room Contents: Class 2 CT Scanning Room, Imgng Svcs (Cl086)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1165	Track, IV, Ceiling Mounted, 7 Foot	СС	1	7 ft. ceiling mounted IV track. Unit consists of a straight thick anodized aluminum track. It includes a carrier with self locking hinge, hook for attaching bottle hanger, and an adjustable pendant. Designed for dispensing IV solutions.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.

JSN	Content Name	Acq Code	Qty	Description
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	сс	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0945	Cart, Computer, Mobile	VV	1	A mobile computer cart for use throughout the facility. The cart dimensions will be approximately 45" H x 30" W x 22" D with casters. May include drawers and miscellaneous other accessories that will be determined at time of purchase. This Typical may include:  1 Cart Body, w/Computer Support, Style-A Narrow, w/Raised Edge Top  1 Flip-Up Shelf  1 Sharps Container Holder  1 Wastebasket  1 Chart Holder  2 Drawers, 3"H  2 Drawers, 6"H  3 Accessory Rail, Side Drawer Organizer Bins
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
E0954	Cart, Emergency, Mobile, 66"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart body, style-A narrow, w/raised edge top  1 Accessory rail, side  1 Accessory rail, back  1 Defibrillator tray  1 IV pole  1 Breakaway bar  1 Flip-up shelf  1 Wastebasket  1 Oxygen tank holder  1 Electrical box-4 outlet  1 Cord wrap  4 Drawer, 3"H  3 Drawer, 6"H  Drawer organizer bins.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.



JSN	Content Name	Acq Code	Qty	Description
F0350	Stool, Step, Retractable Caster	VV	1	Step stool, approximately 18" high X 16" diameter with three retractable casters, skid proof rings and ribbed treads.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
L0100	Microscope, Binocular	VV	1	Binocular microscope. Equipped with plan achromatic objectives to suit work in brightfield, phase contrast, darkfield, photomicrography, dual viewing and projection screen. Microscope has a high light intensity, 100 watt halogen lamp, for constant color temperature and illumination, a three step variable transformer, focusable aspheric abbe condenser system; heat absorbing glass; centerable field diaphragm; two built-in filter turrets permitting a combination of selective light balancing and color compensating filters. Other components/features include a swing-in condenser, 4X objective, quadruple nosepiece, 10X wide field eyepieces and a graduated stage. Other observation tubes can be added. It is used in laboratories for cell counting and other observation techniques.
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	2	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	2	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.



JSN	Content Name	Acq Code	Qty	Description
M0765	Regulator, Vacuum	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M3150	Distribution System, Medication, Automatic	VV	1	An automated dispensing system that provides controlled dispensing, inventory and security. Size and cost will vary dependent on number of modules selected.
M3161	Cabinet, Storage, Ultrasound Tee Probe	VV	1	The TEE Probe storage cabinet is a vertical storage cabinet for disinfected TEE Probes. Cabinet has a locking door with a large viewing window and a HEPA filter providing continuous filtered air. This storage cabinet is specifically made for TEE Probes.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.

JSN	Content Name	Acq Code	Qty	Description
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M7650	Defibrillator/Monitor, Acute Care	VV	1	Portable defibrillator/monitor for acute care includes biphasic defibrillator, pacing, SPO2, Interpretive 12-lead, NIBP monitoring, EtCO2 monitoring, Invasive pressure monitoring, Vital Sign monitoring, temperature probe, Fax transmission, PCMCIA Data Cards, Paddle accessories, and a color LCD.
M7910	Thermometer, Electronic	VV	1	Electronic thermometer. Pocket size unit with easy to read zero Fahrenheit or zero Centigrade LCD display in approximately 20 seconds. Battery operated and enclosed in a heavy duty plastic case. Unit is hand-held portable and may be stand or wall mounted. For patient body temperature readings.
M8770	Aspirator/Pressure Unit, General Purpose	VV	1	General purpose suction/pressure apparatus. Double stainless steel console unit with a 1/8 HP motor, stand-mounted. Stands include 2 1/2" casters with chemical resistant top. Pumps suction capacity: 22 LPM. Unit includes collection bottle, bacteria filter and suction regulating valve. Used for oral/nasal, tracheal suctioning and other emergency purposes.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8825	Table, Instrument/Dressing, CRS, approx. 36x20x34	VV	1	Instrument and dressing table. Made of corrosion resistant stainless steel with a sound deadened top. Includes guard rail, shelf and two side-by-side drawers. The table is mounted on swivel, ball-bearing casters.
M8826	Table, Instrument/Dressing CRS 60x24x34	VV	1	Stainless steel instrument table with shelf and three inch casters made of rubber with double ball bearing casters. Dimensions are 60x24x34.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
M1415	Locator, Vein	VV	1	A portable device using vein visualization technology designed to help locate and assess appropriate veins for safe and efficient IV access.



JSN	Content Name	Acq Code	Qty	Description
X2100	Scanner, Ultrasound, General Purpose	VV	1	High definition, diagnostic ultrasound system for Radiology, Cardiology, Vascular, ob-gyn, Perinatology, and Surgical imaging applications. The unit employs curved, phased and linear array imaging technology. The system supports colorflow, pulse and continuous wave imaging modalities. On board software measurement packages available for all imaging applications. The system is DICOM 3.0 compatible, for easy linkage to filmless image management systems and review stations. In addition, a full line of probes and conventional recording devices are available.
X3145	Screen, X-Ray, Protective, Mobile	VV	1	Mobile X-ray protective screen/barrier. The X-ray barrier provides optically-clear visibility while shielding medical personnel from scatter radiation. Its large clear Pb lead-plastic or acrylic window offers 0.5 mm lead-equivalent protection to the user's head and upper body. The unit is used for effective radiation protection of department personnel during vascular or other procedures. This unit can fit any application with its mobility. Adjustable screens are also available.
X3150	Rack, Apron/Gloves, Wall Mounted	СС	1	Apron and gloves rack. This is a wall unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum. The unit's convenient on wall storage will prolong the useful life of your protection aprons by helping prevent damage to internal components.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6196	Injector, CT	VC	1	CT injector. This unit is a specialized radiographic system that provides sharp, well-defined visual images of the vascular anatomy. The injector introduces a vision radiopaque fluid (contrast medium) into an artery or vein through a small catheter, making vessels contrast with their more radiolucent surrounding. The unit incorporates an electromechanical or pneumatically driven syringe to deliver the contrast medium. The syringe assemblies consist of an electric motor connected to a jackscrew that moves the syringe piston into or out of the syringe barrel. The unit is used in hospitals with radiographic procedures. The unit can be ceiling, wall, or remote stand mounted.
X6240	Radiographic Unit, Computerized Tomography (CT)	VC	1	The CT Scanner System is an noninvasive radiographic technique that involves the reconstruction of a tomographic plane of the body from a large number of collected x-ray absorption measurements taken during a scan around the body's periphery. The CT System shall be a single gantry, whole body scanning system appropriate to support tertiary care facilities with an annual projected workload of less than 5,500 separate studies. System includes DICOM 3.0 or latest version software protocol. System to be procured with turnkey installation.



## Room Contents: Class 2 CT Control Room, Imgng Svcs (Cl087)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork.  Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	3	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1830	Printer, Label, Pharmacy	VV	1	Label printer for use in pharmacy applications. The printer shall be bench top standing. It shall be flexible enough to accommodate label sizes up to 4 inches, with a minimum print speed of 6 inches per second and a minimum resolution of 203 dpi.

JSN	Content Name	Acq Code	Qty	Description
M1840	Printer/Copier/Fax Combination	VV	1	Multifunctional printer, fax, scanner and copier (PFC) all-in-one machine.
A5097	Dispenser, Personal Protection, Mobile	VV	1	The Mobile PPE Dispensing System is an all-in-one mobile solution for storing and dispensing Personal Protective Equipment (PPE) and hand sanitizer using a dispensing mechanism that helps prevent contamination throughout your facility.
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.

Room Contents: Class 2 CT System Component Room, Imgng Svcs (Cl088)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



## Class 1 MRI Scanning Room, Imgng Svcs (CI111) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1-0"

### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

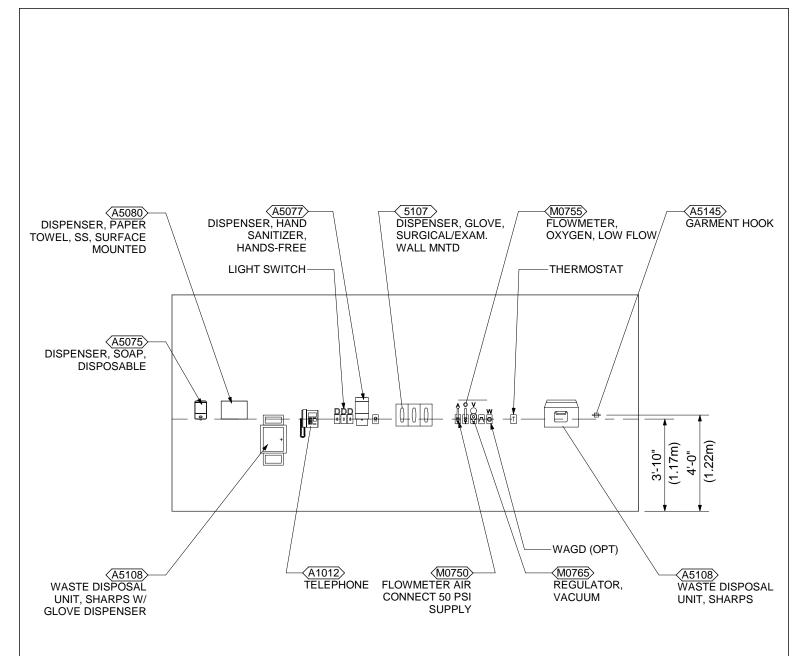
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



# Class 1 MRI Scanning Room, Imgng Svcs (CI111) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



## **Drawing Notes:**

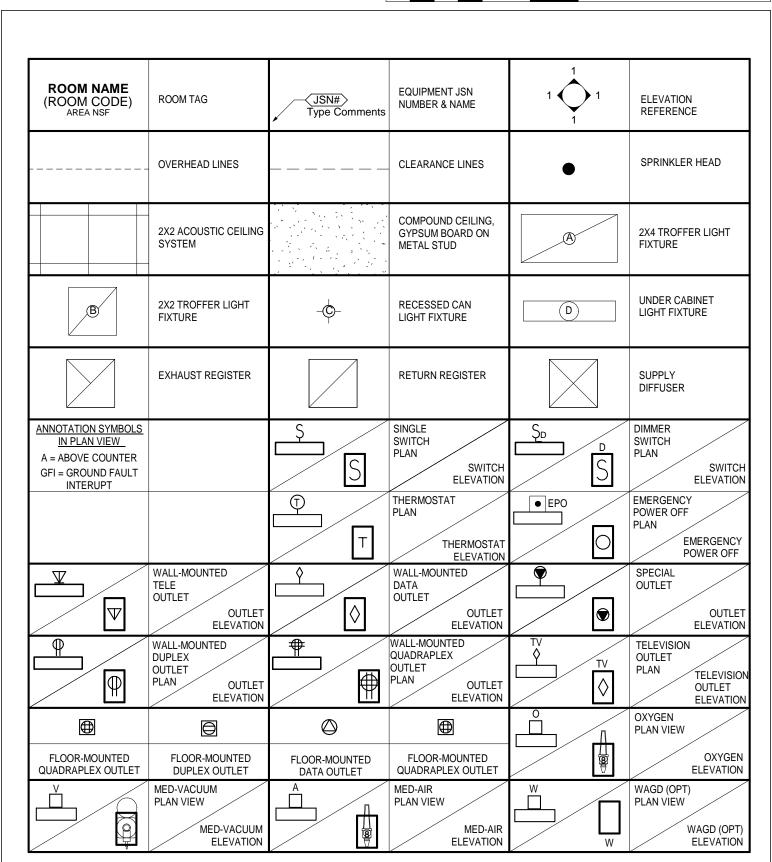
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



## Class 1 MRI Scanning Room, Imgng Svcs (CI111) LEGEND

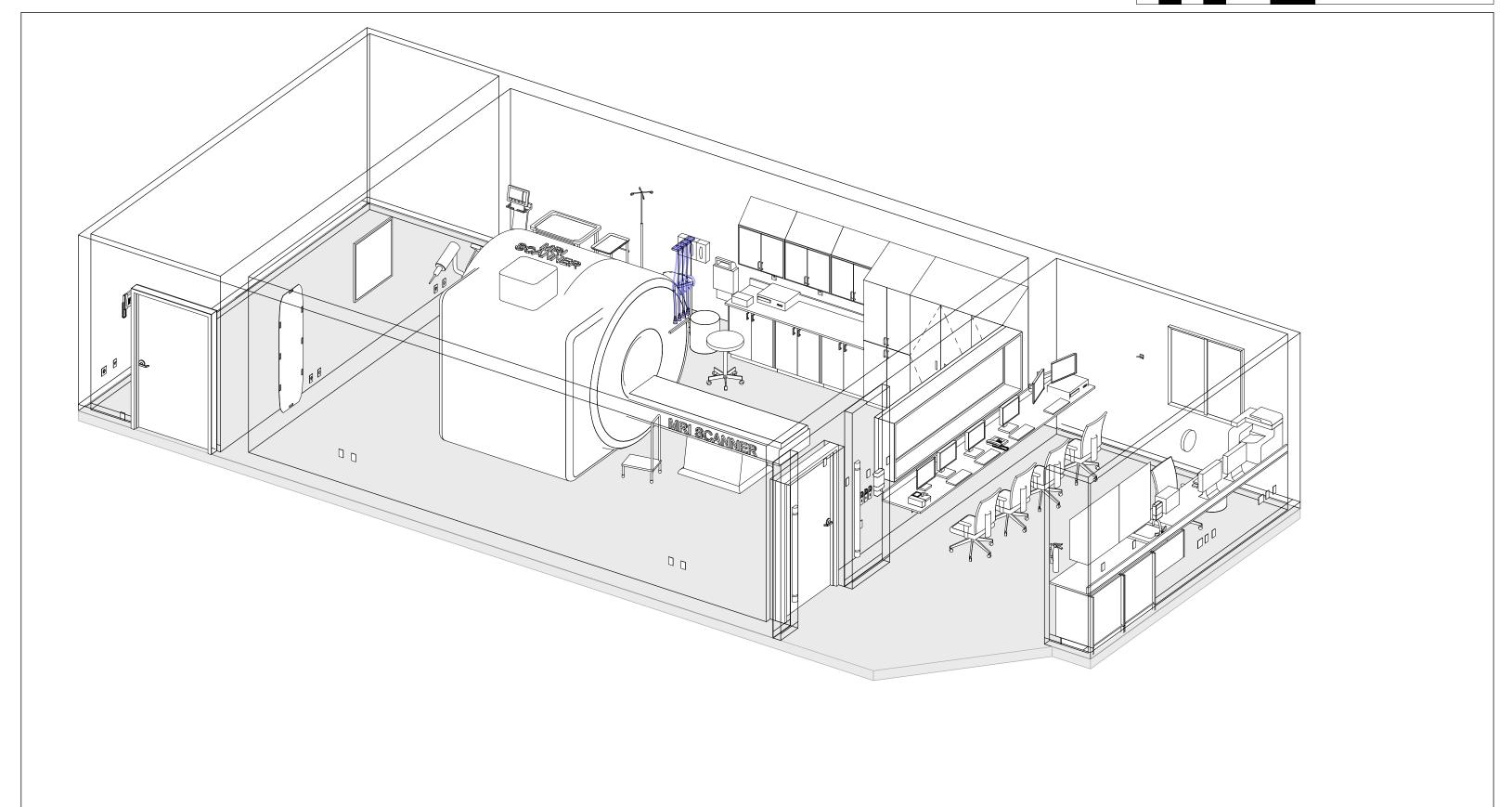
SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



SCALE: 1/4" = 1'-0"





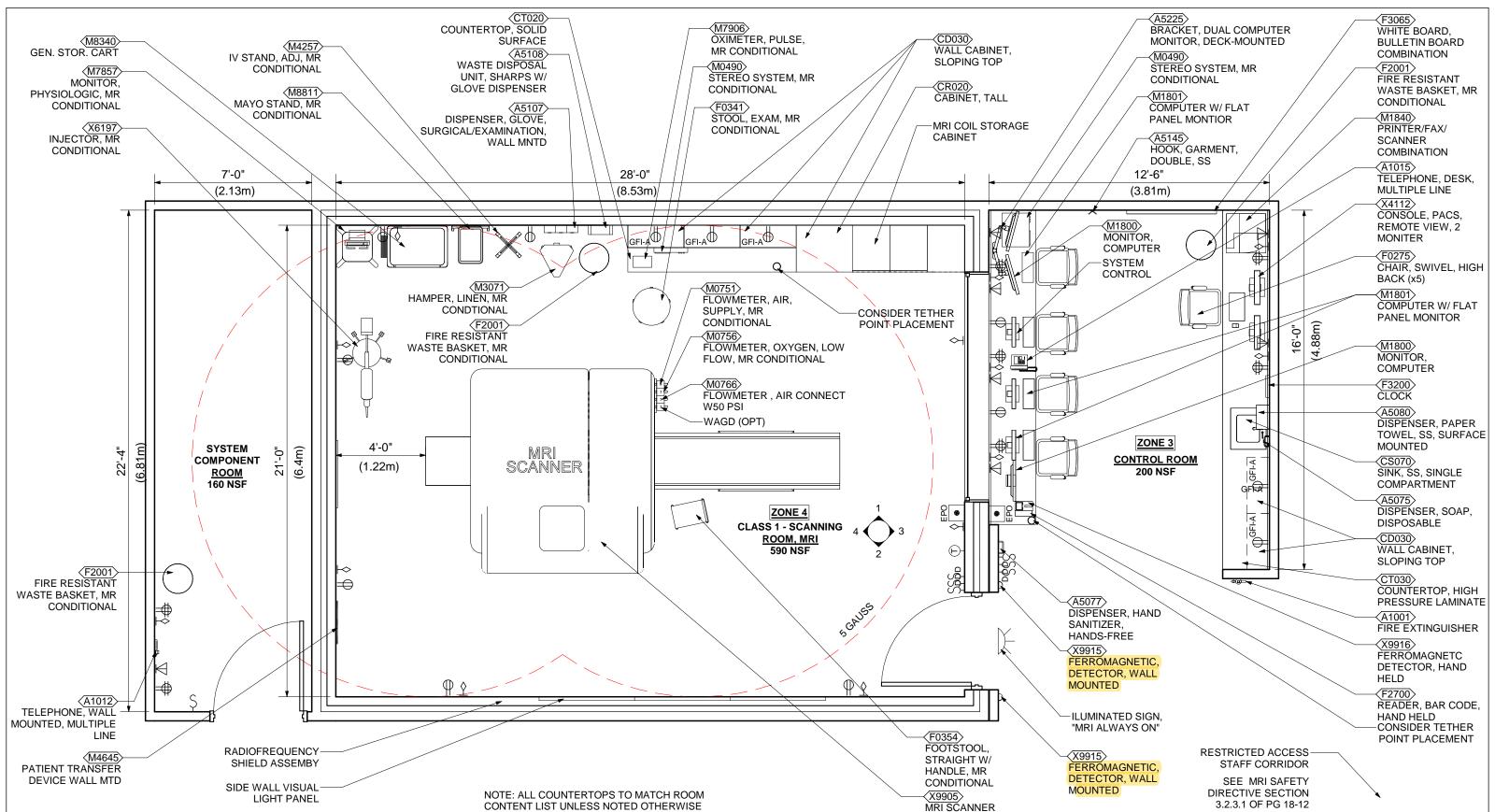


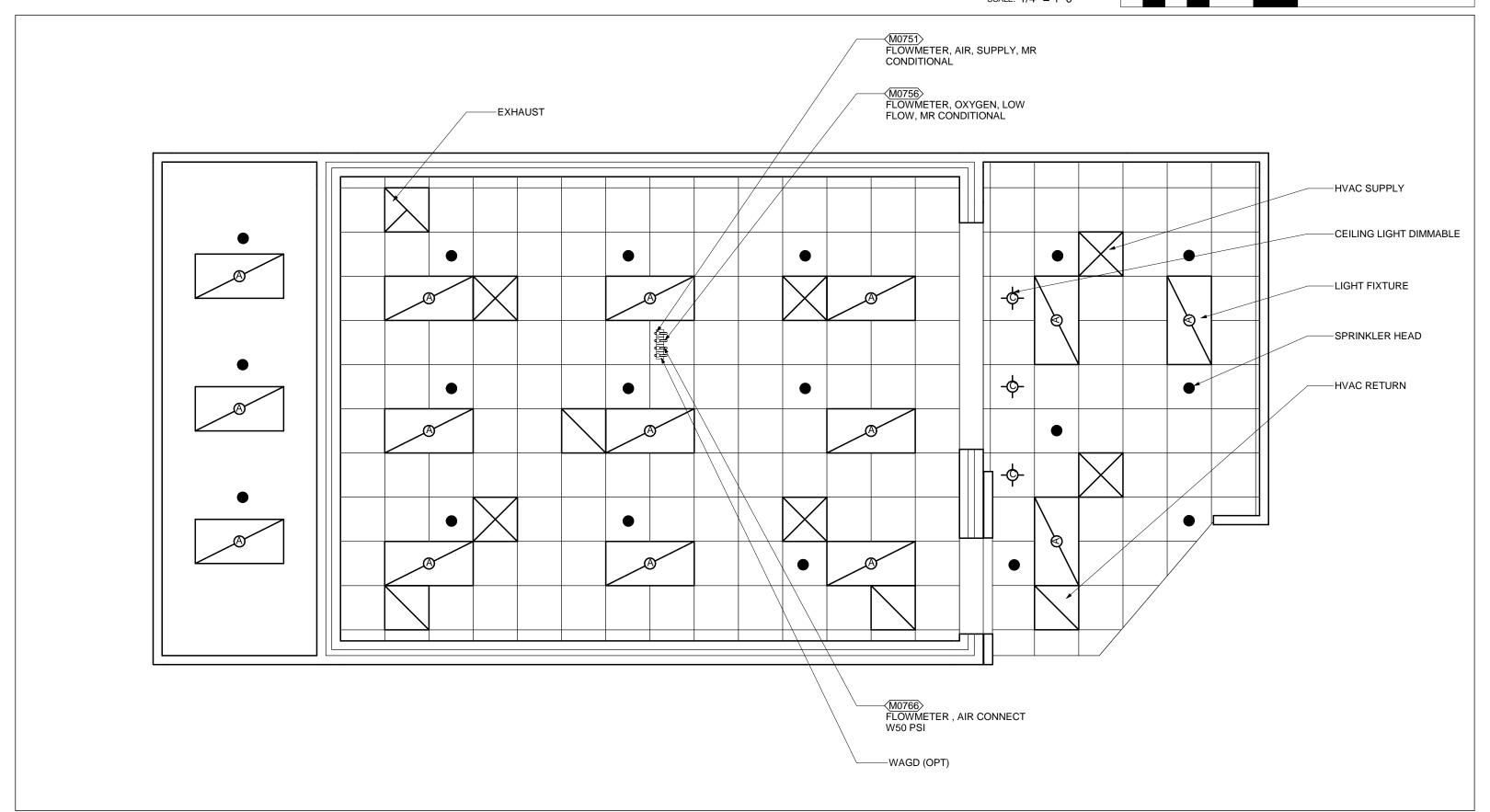
# Class 1 MRI Scanning Room, Imgng Svcs (CI111) INTERACTIVE 3D PDF

SCALE:

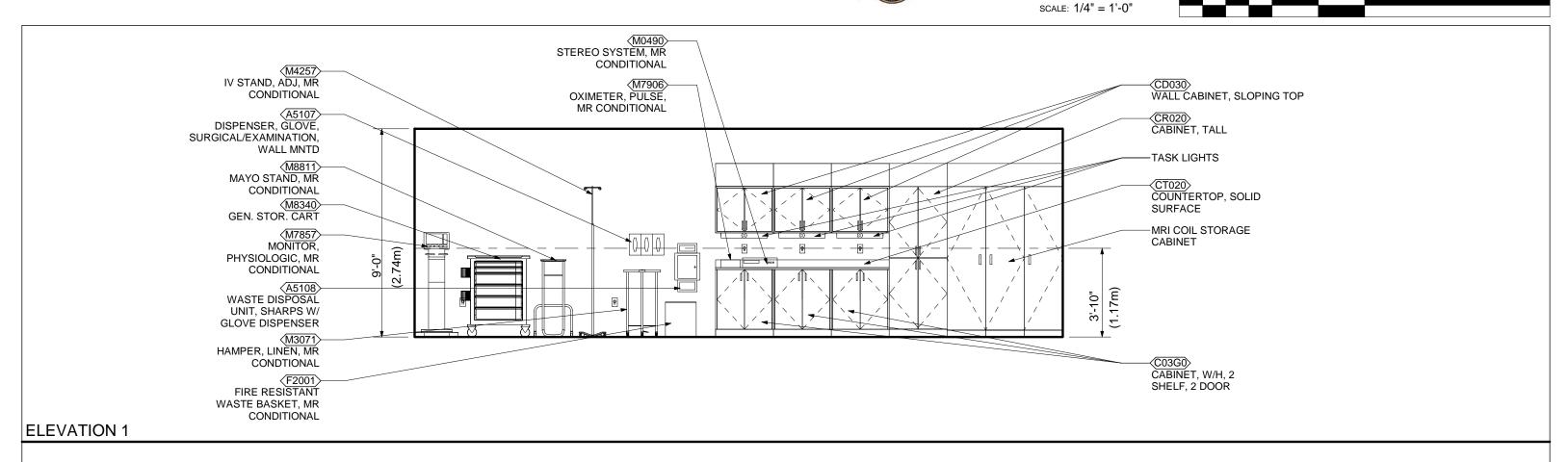
SKETCH TITLE 0' 4' 8' 16

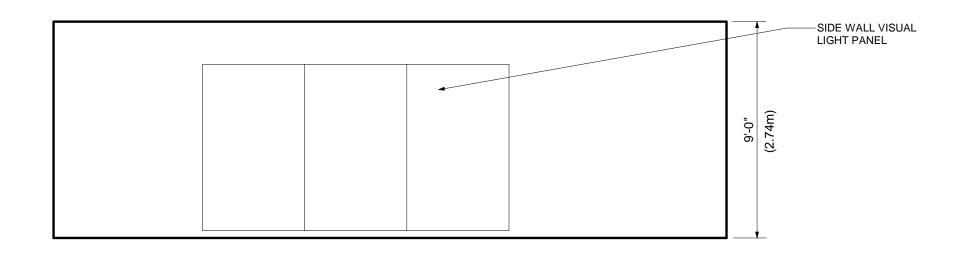
SCALE: 1/4" = 1'-0"





SKETCH TITLE 0' 4' 8'

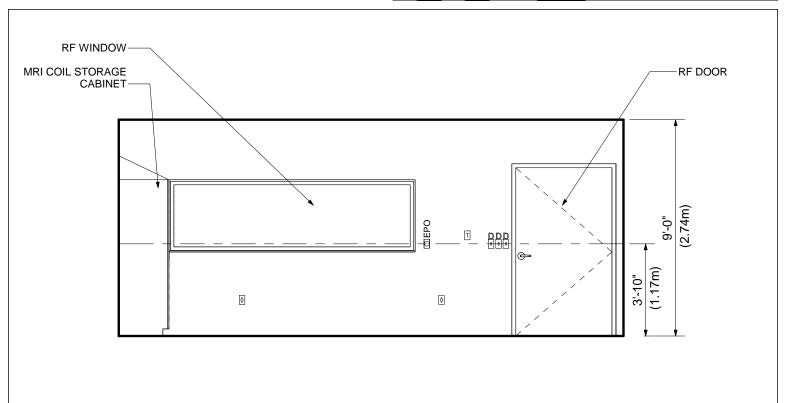




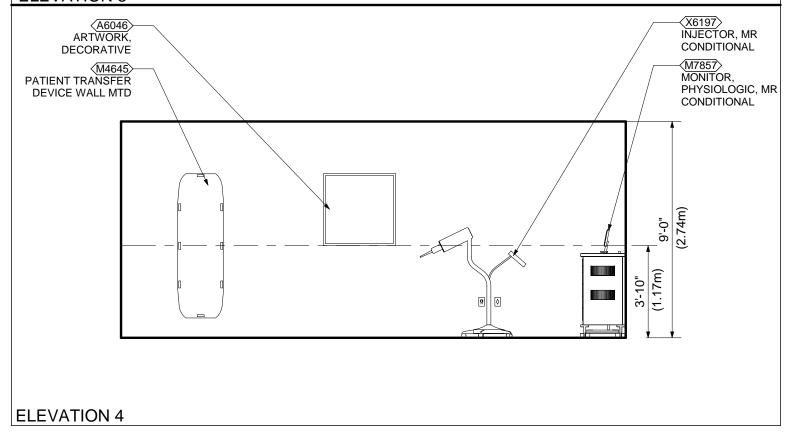


# Class 1 MRI Scanning Room, Imgng Svcs (CI111) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



## **ELEVATION 3**



Room Data: Class 1 MRI Scanning Room, Imgng Svcs (CI111)

### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: AT
Ceiling Height: 9'-0" (2700mm)
Ceiling Finish: ACT\*
Wall Finish: m: GWB f:P
Wainscot: -Base: m: WSF / RSF at h: 4" (100mm)
Floor Finish: WSF / RSF

Sound Protection: STC 40

Doors: m: Wood\* t: 7 dl: -- s: X

#### Notes:

- Interior finish systems / elements to be of non-ferromagnetic materials, to the extent practical. This includes ceiling systems, and casework hardware.
- Provide a 4'-0" wide radiofrequency shielded door into the Class 1 Scanning Room, MRI.
- 3. Provide a radiofrequency shielded viewing window from the Control Room into the Class 1 Scanning Room, MRI.

## LIGHTING

MRI and Control Rooms:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

## Notes:

1. LED luminaires shall be rated for MRI environment.

System Component Room:

Refer to the current version of **Lighting Design Manual** section 7.10 for lighting design consideration.

## **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES

(Essential Electrical System) to be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

## **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Data: Telephone: Intercom: **MRI Scanning Room** and Control Room Via MRI Equipment Nurse Call: Yes Code Blue: Yes **Public Address:** Radio/Entertainment: As Required MATV: CCTV: **MRI Scanning** Room and Control Room. As Required MID: Security/Duress: VTEL:



VA Satellite TV:

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### Notes:

 All mechanical ductwork and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.

## PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Medical Air: Min. 1 outlet/room OVHD Medical Vacuum: Min. 1 outlet/room OVHD Oxygen: Min. 1 outlet/room OVHD Waste Anesth Gas: Rec 2 outlets/room OVHD

### Notes:

- All plumbing and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.
- All plumbing fixtures within the Scanning Room are recommended to have readily accessible supply shut-offs outside the Scanning Room.



## Room Contents: Class 1 MRI Scanning Room, Imgng Svcs (CI111)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	2	Telecommunication outlet location.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CR020	Cabinet, F/S, 5 Shelf, 1 DO, Sloping Top, 92x24x13	СС	1	Floor standing storage cabinet with five adjustable shelves, a solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a tall case or a tall cabinet. For general purpose storage use throughout the facility.

JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
F0354	Stool, Step, MRI Compatible, W/ Handrail	VV	1	MRI compatible safety step stool with handrail for use in the MRI scan room. Constructed of non-ferrous metal (stainless steel), deep platform with non-slip mat, grip cups on the bottom of each leg, with 34" minimum height handle rail. Minimum weight capacity is 500 pounds.
M4257	Stand, IV, Adjustable, MRI Compatible	VV	1	An adjustable non-magnetic IV stand with 4-hook arrangement and compatible with MRI equipment. Stand has an aluminum or plastic base with 5 casters. It adjusts from 59 inches to 88 inches.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8340	Table, Utility, 3 Drawers w/Shelf, MRI Safe	VV	1	A utility table approximately 20" W x 17" D x 36" H with 2 or 3 drawers and one shelf. The table will be MRI compatible and have 4 casters with 2 lockable.
X6197	Injector, MR Conditional	VV	1	Contrast media injectors are used to inject contrast media or contrast agents to enhance the blood and perfusion in tissues for MRI imaging. The MR Conditional Contrast media injector is designed to function the MRI magnetic field.
M0751	Flowmeter, Air, Connect w/50 PSI Supply, MR Conditional	VV	1	Air flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.
M0756	Flowmeter, Oxygen, Low Flow, MR Conditional	VV	1	Oxygen flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.
M7906	Oximeter, Pulse, MR Conditional	VV	1	MR Conditional Pulse oximeter for continuous surveillance of patient pulse and oxygen saturation rates. Instrument features LED display, audio and visual alarms, automatic calibration and battery operation in case of power failure. Other applications include sleep studies, exercise testing and monitoring certain patients in the home (e.g. infants or patients requiring respiratory therapy). Made safe for use in the MRI environment.



JSN	Content Name	Acq Code	Qty	Description
M0766	Regulator, Vacuum, MR Conditional	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in the MRI environment.
M3071	Hamper, Linen, Mobile, w/Lid, MR Conditional	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics. Specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
M7857	Monitor, Physiologic, MR Conditional	VV	1	MR Conditional Physiologic Monitor is a light weight, rugged patient monitor for use in the MRI area. Unit consists of a compact monitor with touchscreen display with up to 3 waveforms on a on a bright non-fading display. The unit measures ECG/respiration, NBP, SpO2, pressure, and temperature and CO2.
M8811	Stand, Mayo, MR Conditional	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in the MRI area.
F0341	Stool, Exam, MR Conditional	VV	1	Self-adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for use in the MRI environment.
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.
X9905	MRI System, Super Conductive	VC	1	Magnetic Resonance Imaging Units (MRI) use Superconducting strong magnetic fields (between 0.5 and 1.5 Tesla) and radio-frequency (RF) radiation to translate hydrogen nuclei distribution in body tissues into computer-generated images of anatomic structures. MRI is primarily used to identify diseases of the central nervous system, brain, and spine and to detect musculoskeletal disorders. It includes DICOM 3.0 or latest version software protocol. The unit is to be procured with turnkey installation.

Room Contents: Class 1 MRI Control Room, Imgng Svcs (Cl112)

JSN	Content Name	Acq Code	Qty	Description		
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.		
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.		
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.		
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.		
A5080	Dispenser, Paper Towel, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.		
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.		
A5225	Bracket, Dual Computer Monitor, Desk-Mounted	VV	1	Desk-mounted bracket that supports two LCD computer monitors, or laptop and monitor configuration. Extends LCD's or labtop up to 25" with an adjustment range of 18". Desk clamp attaches to edge up to 2.6" thick. Maximum combined weight supported not to exceed 50 lbs.		
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.		
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.		
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.		

JSN	Content Name	Acq Code	Qty	Description	
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.	
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.	
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.	
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).	
M1800	Monitor, Computer	VV	2	A high definition LED computer monitor with minimum 1920 x 1080 resolution, 4ms response time, 25 inch class display size, compatible with desk or arm mounted. Monitor is VESA compatible and Energy Star compliant.	
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	3	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.	
M1840	Printer/Copier/Fax Combination	VV	1	Multifunctional printer, fax, scanner and copier (PFC) all-in-one machine.	
A1001	Extinguisher, Fire, MR Conditional	VV	1	10 pound dry chemical fire extinguisher with charging gauge. Other types and sizes are available. MR Conditional Fire Extinguisher specifically designed to be utilized in areas where MRI equipment is used.	
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.	
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.	
X9916	Detector/Screener, Ferrous Metal, Hand Held	VV	1	A hand held ferromagnetic detector used as a safety scan of persons entering the MRI area to help prevent magnetic items from entering the scan room.	



JSN	Content Name	Acq Code	Qty	Description	
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside coutside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's office and the E.R. where a more comprehensive system is required. Consmust be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.	
X9915	Detector/Screener, Ferrous Metal	VV	1	A screening and detection system to identify potential ferromagnetic threats in the MRI workplace. The system provides real-time active monitoring 24hrs/day. Used to screen patients and staff before entering the MRI work space to reduce the chance of injury. System consists of sensors, screening devices, pre alarm indicators, motion detectors and alarms. System is custom designed to meet individual facility requirements.	

## Room Contents: Class 1 MRI System Component Room, Imgng Svcs (Cl113)

JSN	Content Name	Acq Code	Qty	Description	
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.	
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.	
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.	



# CI121-Class 2 MRI Scanning Room, Imgng Svcs (CI121) DISCLAIMER

SKETCH TITLE

SCALE: 1/4" = 1'-0"



### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

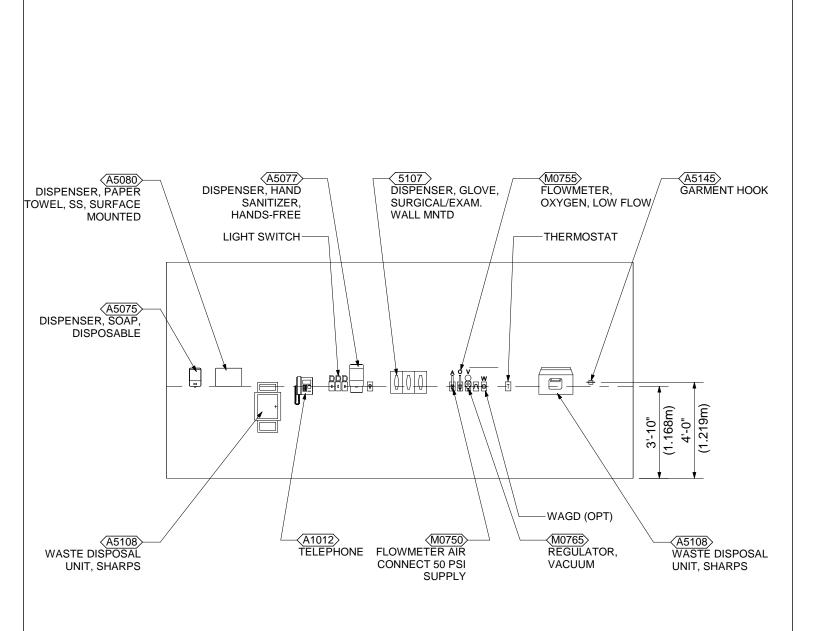
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



# CI121-Class 2 MRI Scanning Room, Imgng Svcs (CI121) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



## **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# CI121-Class 2 MRI Scanning Room, Imgng Svcs (CI121) LEGEND

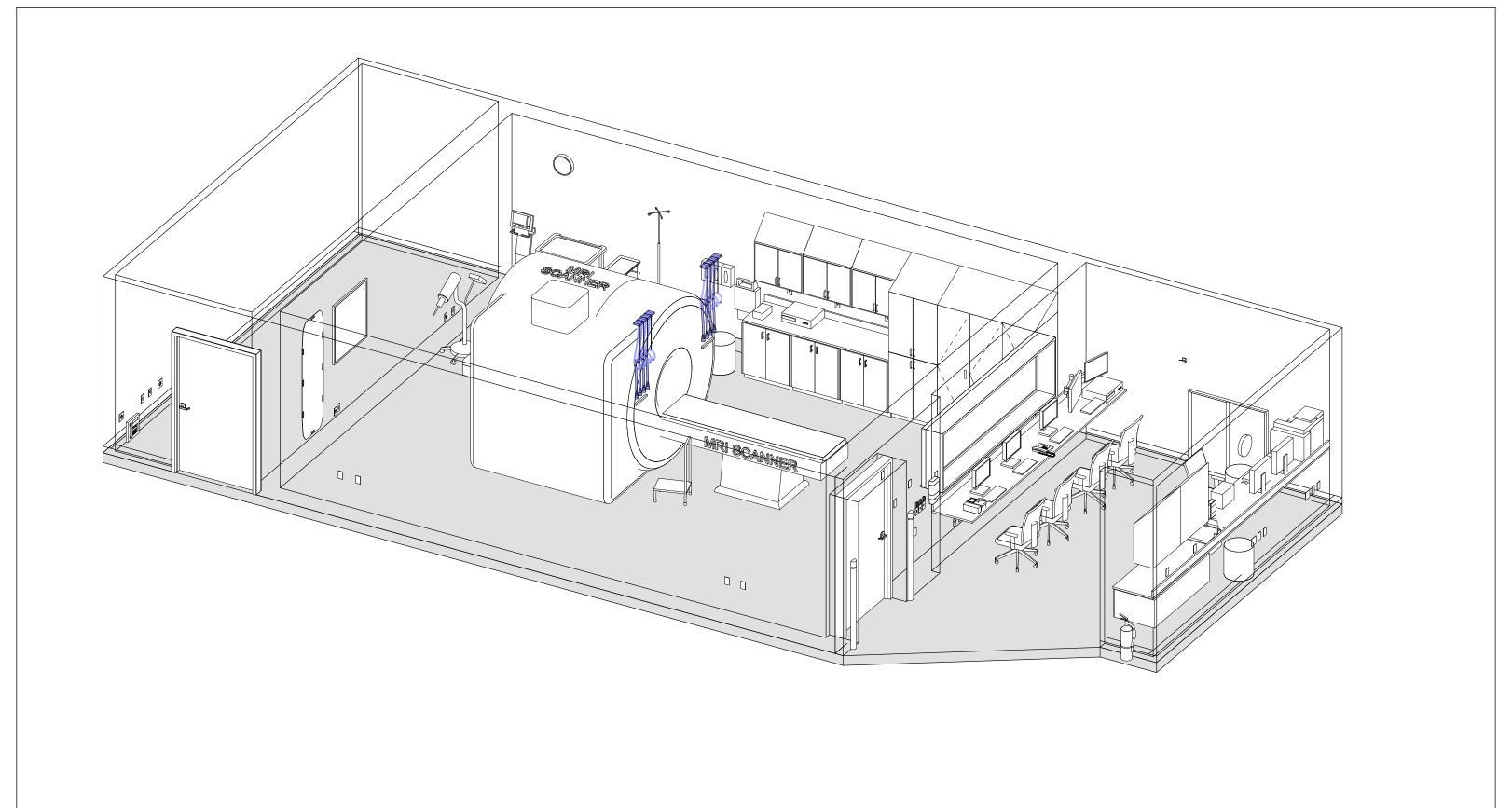
SKETCH TITLE 0' 4' 8' 1

SCALE: 1/4" = 1'-0"

ROOM NAME (ROOM CODE) AREA NSF	ROOM TAG	JSN# Type Comments	EQUIPMENT JSN NUMBER & NAME	1 1	ELEVATION REFERENCE
	OVERHEAD LINES		CLEARANCE LINES	•	SPRINKLER HEAD
	2X2 ACOUSTIC CEILING SYSTEM		COMPOUND CEILING, GYPSUM BOARD ON METAL STUD	<b>8</b>	2X4 TROFFER LIGHT FIXTURE
B	2X2 TROFFER LIGHT FIXTURE	-6-	RECESSED CAN LIGHT FIXTURE	D	UNDER CABINET LIGHT FIXTURE
	EXHAUST REGISTER		RETURN REGISTER		SUPPLY DIFFUSER
ANNOTATION SYMBOLS IN PLAN VIEW  A = ABOVE COUNTER GFI = GROUND FAULT INTERUPT		\$ S	SINGLE SWITCH PLAN SWITCH ELEVATION	\$ <sub>D</sub> B	DIMMER SWITCH PLAN SWITC ELEVATIO
			THERMOSTAT PLAN THERMOSTAT ELEVATION	• EPO	EMERGENCY POWER OFF PLAN EMERGENCY POWER OFF
$\nabla$	WALL-MOUNTED TELE OUTLET OUTLET ELEVATION		WALL-MOUNTED DATA OUTLET OUTLET ELEVATION		SPECIAL OUTLET OUTLE ELEVATIO
9	WALL-MOUNTED DUPLEX OUTLET PLAN OUTLET ELEVATION		WALL-MOUNTED QUADRAPLEX OUTLET PLAN OUTLET ELEVATION	TV TV	TELEVISION OUTLET PLAN TELEVISIO OUTLET ELEVATIO
			<b>•</b>		OXYGEN PLAN VIEW
FLOOR-MOUNTED QUADRAPLEX OUTLET	FLOOR-MOUNTED DUPLEX OUTLET	FLOOR-MOUNTED DATA OUTLET	FLOOR-MOUNTED QUADRAPLEX OUTLET		OXYGEI ELEVATIOI
V C	MED-VACUUM PLAN VIEW  MED-VACUUM ELEVATION		MED-AIR PLAN VIEW MED-AIR ELEVATION	w w	WAGD (OPT) PLAN VIEW  WAGD (OPT ELEVATION

SCALE: 1/4" = 1'-0"



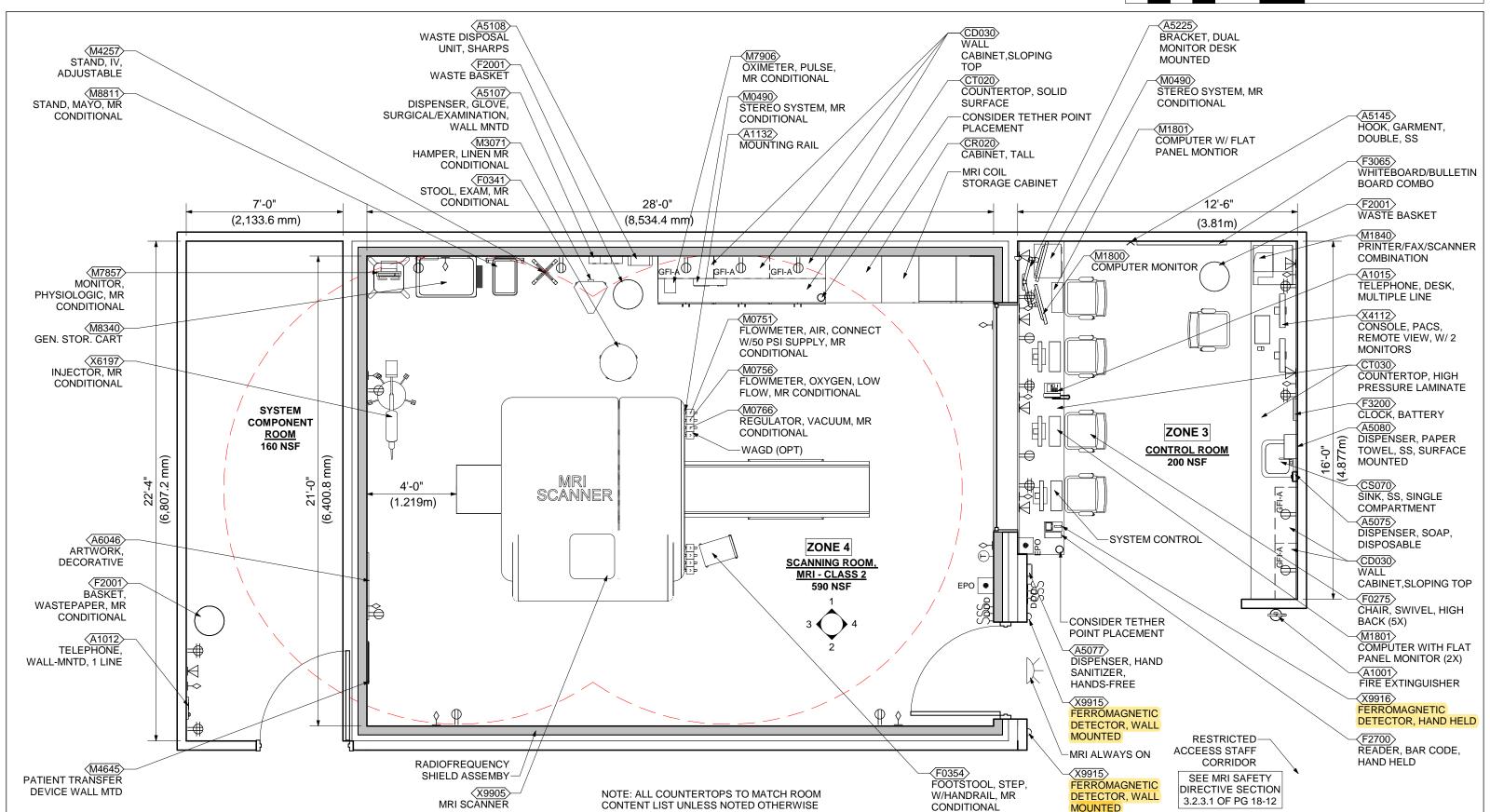




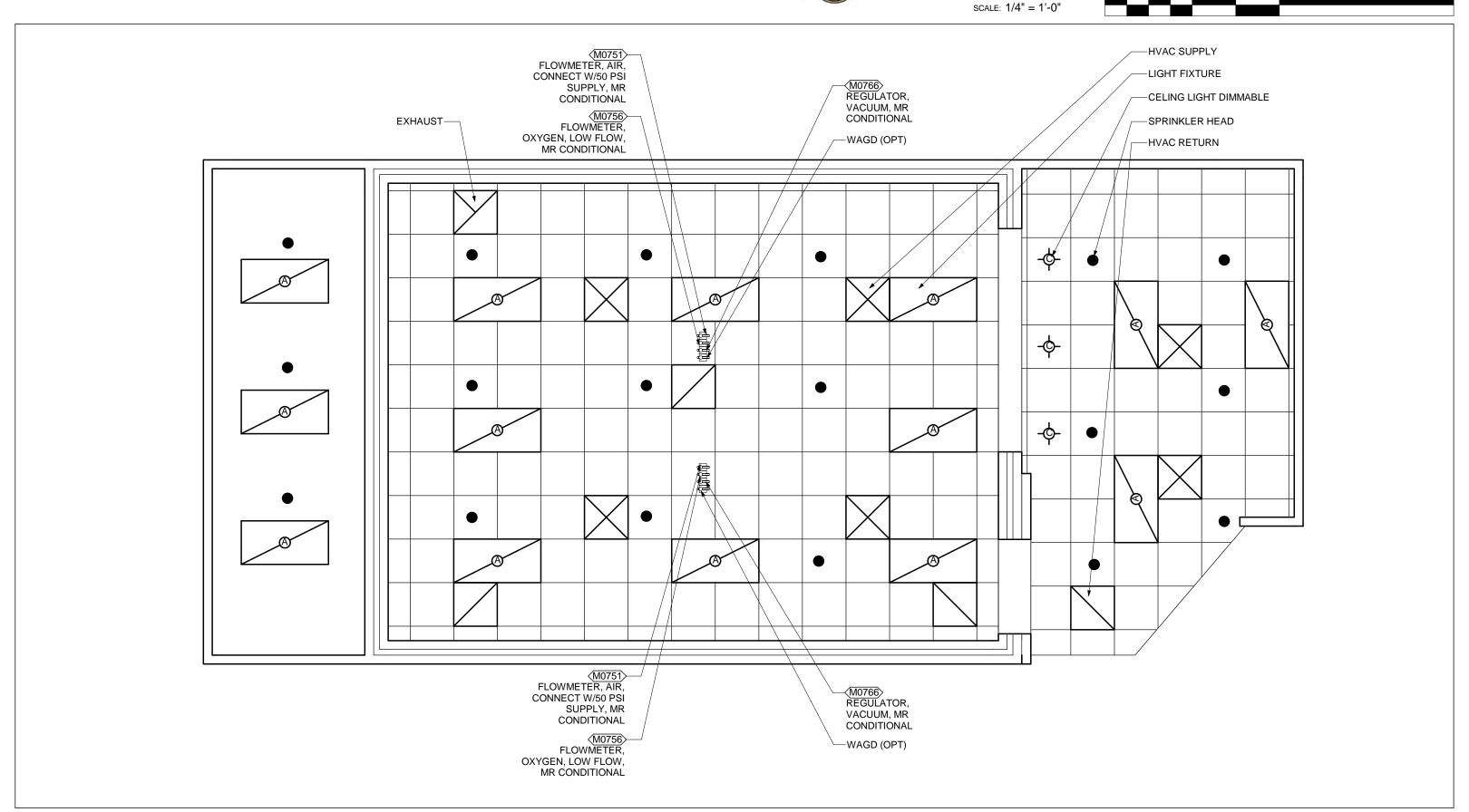
# CI121-Class 2 MRI Scanning Room, Imgng Svcs (CI121) INTERACTIVE 3D PDF

SKETCH TITLE SCALE:

SCALE: 1/4" = 1'-0"

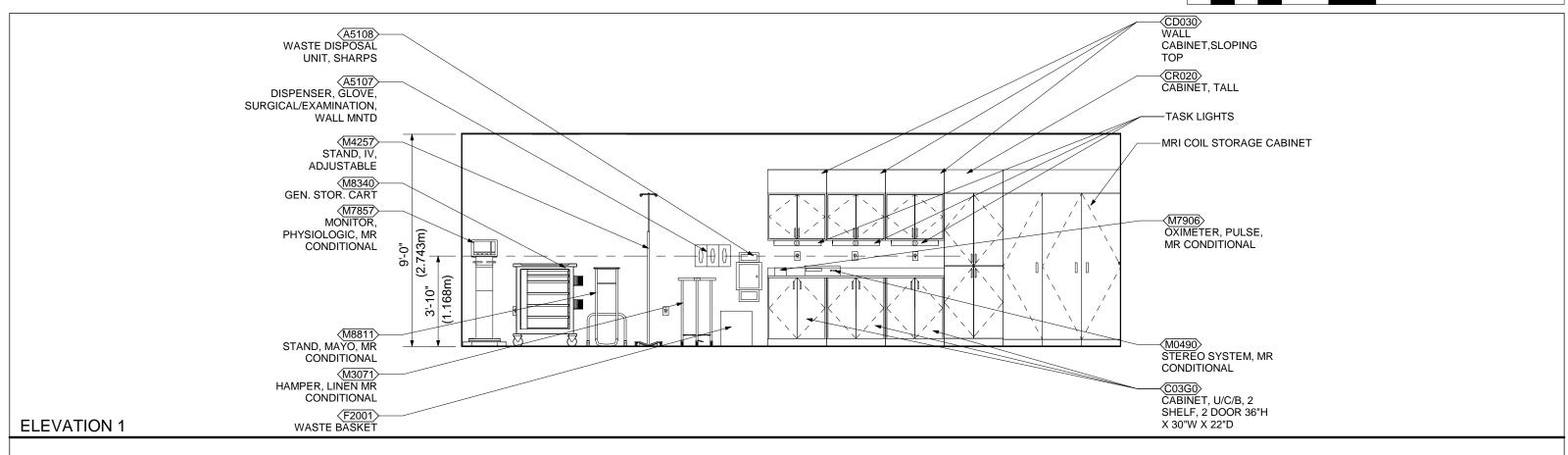


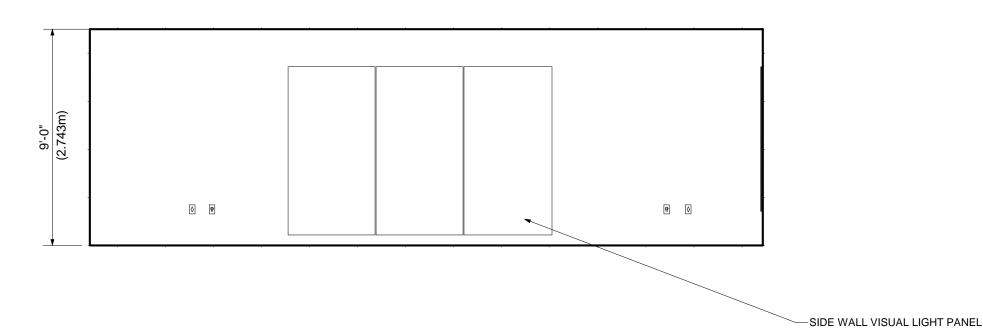
SKETCH TITLE 0' 4' 8'



SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



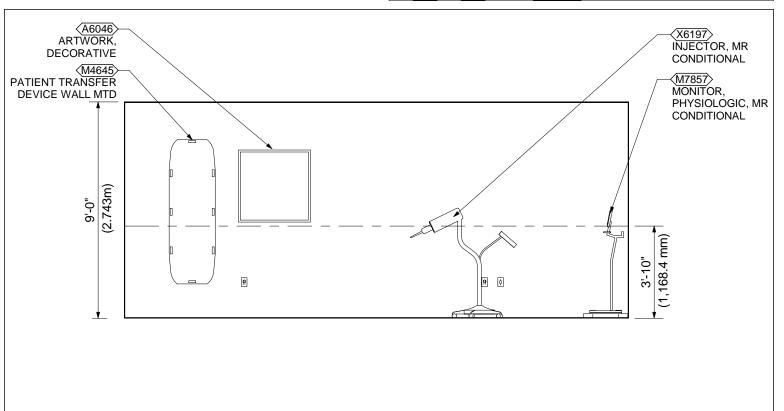


**ELEVATION 2** 

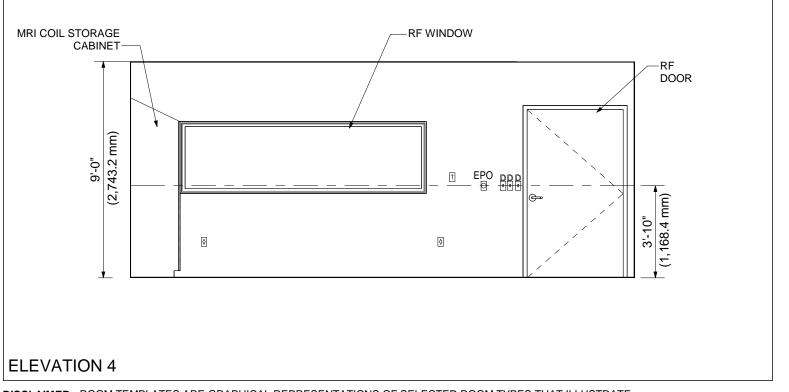


# CI121-Class 2 MRI Scanning Room, Imgng Svcs (CI121) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



## **ELEVATION 3**



Room Data: Class 2 MRI Scanning Room, Imgng Svcs (CI121)

### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT\* Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: 2" (50mm) Sound Protection: STC 40 Doors: m: Wood\* t: 7 dl: -- s: X Notes:

- Interior finish systems / elements to be of non-ferromagnetic materials, to the extent practical. This includes ceiling systems, and casework hardware.
- 2. Provide a 4'-0" wide radiofrequency shielded door into the Class 2 Scanning Room, MRI.
- 3. Provide a radiofrequency shielded viewing window from the Control Room into the Class 2 Scanning Room, MRI.

### LIGHTING

MRI and Control Rooms:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

### Notes:

1. LED luminaires shall be rated for MRI environment.

System Component Room:

Refer to the current version of **Lighting Design Manual** section 7.10 for lighting design consideration.

## **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES

(Essential Electrical System) to be connected to selected receptacles and equipment.

### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

## COMMUNICATION/SPECIAL SYSTEMS

ADP: Data: Telephone: Intercom: **MRI Scanning** Room and Control Room. Via MRI Equipment Nurse Call: Yes Code Blue: Yes **Public Address:** Radio/Entertainment: As Required MATV: CCTV: **MRI Scanning** Room and Control Room. As Required MID: Security/Duress: VTEL:



VA Satellite TV:

## **HEATING, VENTILATING AND AIR**

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### Notes:

 All mechanical ductwork and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and

### PLUMBING AND MEDICAL GASES

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min 2 outlets/room OVHD
Medical Vacuum: Min 2 outlets/room OVHD
Oxygen: Min 2 outlets/room OVHD
Waste Anesth Gas: Rec 2 outlets/room OVHD

## Notes:

- All plumbing and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.
- 2. All plumbing fixtures within the Scanning Room are recommended to have readily accessible supply shut-offs outside the Scanning Room.



Room Contents: Class 2 MRI Scanning Room, Imgng Svcs (Cl121)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	2	Telecommunication outlet location.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CR020	Cabinet, F/S, 5 Shelf, 1 DO, Sloping Top, 92x24x13	СС	1	Floor standing storage cabinet with five adjustable shelves, a solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a tall case or a tall cabinet. For general purpose storage use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.

JSN	Content Name	Acq Code	Qty	Description
F0354	Stool, Step, MRI Compatible, W/ Handrail	VV	1	MRI compatible safety step stool with handrail for use in the MRI scan room. Constructed of non-ferrous metal (stainless steel), deep platform with non-slip mat, grip cups on the bottom of each leg, with 34" minimum height handle rail. Minimum weight capacity is 500 pounds.
M4257	Stand, IV, Adjustable, MRI Compatible	VV	1	An adjustable non-magnetic IV stand with 4-hook arrangement and compatible with MRI equipment. Stand has an aluminum or plastic base with 5 casters. It adjusts from 59 inches to 88 inches.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8340	Table, Utility, 3 Drawers w/Shelf, MRI Safe	VV	1	A utility table approximately 20" W x 17" D x 36" H with 2 or 3 drawers and one shelf. The table will be MRI compatible and have 4 casters with 2 lockable.
X6197	Injector, MR Conditional	VV	1	Contrast media injectors are used to inject contrast media or contrast agents to enhance the blood and perfusion in tissues for MRI imaging. The MR Conditional Contrast media injector is designed to function the MRI magnetic field.
M0751	Flowmeter, Air, Connect w/50 PSI Supply, MR Conditional	VV	2	Air flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.
M0756	Flowmeter, Oxygen, Low Flow, MR Conditional	VV	2	Oxygen flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.
M7906	Oximeter, Pulse, MR Conditional	VV	1	MR Conditional Pulse oximeter for continuous surveillance of patient pulse and oxygen saturation rates. Instrument features LED display, audio and visual alarms, automatic calibration and battery operation in case of power failure. Other applications include sleep studies, exercise testing and monitoring certain patients in the home (e.g. infants or patients requiring respiratory therapy). Made safe for use in the MRI environment.
M0766	Regulator, Vacuum, MR Conditional	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in the MRI environment.



JSN	Content Name	Acq Code	Qty	Description
M3071	Hamper, Linen, Mobile, w/Lid, MR Conditional	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics. Specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
M7857	Monitor, Physiologic, MR Conditional	VV	1	MR Conditional Physiologic Monitor is a light weight, rugged patient monitor for use in the MRI area. Unit consists of a compact monitor with touchscreen display with up to 3 waveforms on a on a bright non-fading display. The unit measures ECG/respiration, NBP, SpO2, pressure, and temperature and CO2.
M8811	Stand, Mayo, MR Conditional	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in the MRI area.
F0341	Stool, Exam, MR Conditional	VV	1	Self-adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for use in the MRI environment.
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.
X9905	MRI System, Super Conductive	VC	1	Magnetic Resonance Imaging Units (MRI) use Superconducting strong magnetic fields (between 0.5 and 1.5 Tesla) and radio-frequency (RF) radiation to translate hydrogen nuclei distribution in body tissues into computer-generated images of anatomic structures. MRI is primarily used to identify diseases of the central nervous system, brain, and spine and to detect musculoskeletal disorders. It includes DICOM 3.0 or latest version software protocol. The unit is to be procured with turnkey installation.



Room Contents: Class 2 MRI Control Room, Imgng Svcs (Cl122)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5225	Bracket, Dual Computer Monitor, Desk-Mounted	VV	1	Desk-mounted bracket that supports two LCD computer monitors, or laptop and monitor configuration. Extends LCD's or labtop up to 25" with an adjustment range of 18". Desk clamp attaches to edge up to 2.6" thick. Maximum combined weight supported not to exceed 50 lbs.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.

JSN	Content Name	Acq Code	Qty	Description
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork.  Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1800	Monitor, Computer	VV	1	A high definition LED computer monitor with minimum $1920 \times 1080$ resolution, 4ms response time, 25 inch class display size, compatible with desk or arm mounted. Monitor is VESA compatible and Energy Star compliant.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	3	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1840	Printer/Copier/Fax Combination	VV	1	Multifunctional printer, fax, scanner and copier (PFC) all-in-one machine.
A1001	Extinguisher, Fire, MR Conditional	VV	1	10 pound dry chemical fire extinguisher with charging gauge. Other types and sizes are available. MR Conditional Fire Extinguisher specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.
X9916	Detector/Screener, Ferrous Metal, Hand Held	VV	1	A hand held ferromagnetic detector used as a safety scan of persons entering the MRI area to help prevent magnetic items from entering the scan room.



JSN	Content Name	Acq Code	Qty	Description
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.
X9915	Detector/Screener, Ferrous Metal	VV	1	A screening and detection system to identify potential ferromagnetic threats in the MRI workplace. The system provides real-time active monitoring 24hrs/day. Used to screen patients and staff before entering the MRI work space to reduce the chance of injury. System consists of sensors, screening devices, pre alarm indicators, motion detectors and alarms. System is custom designed to meet individual facility requirements.

Room Contents: Class 2 MRI System Component Room, Imgng Svcs (Cl123)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.



### Class 1 NM Scanning Room, Imgng Svcs (Cl211) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

#### **DISCLAIMER:**

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CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

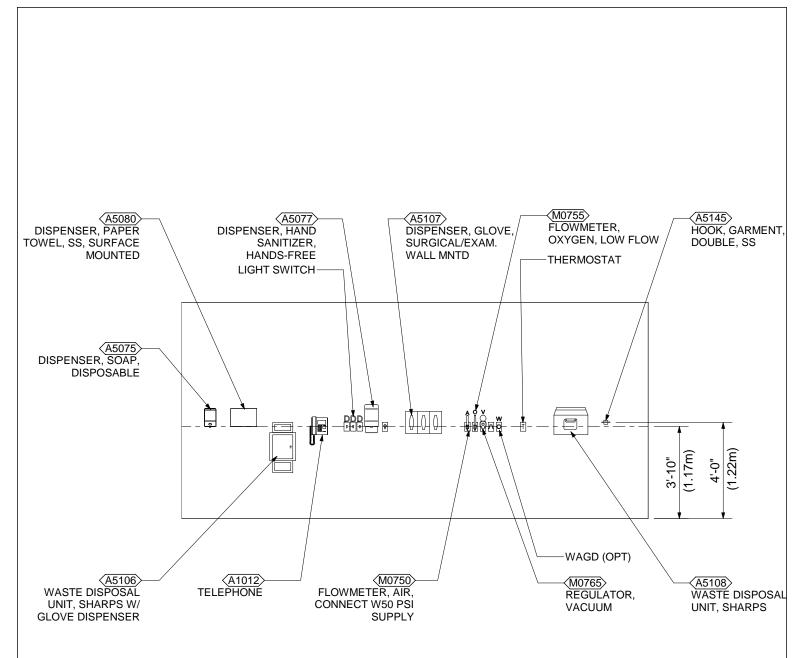
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 1 NM Scanning Room, Imgng Svcs (Cl211) ABA TYPICAL OPERABLE MOUNTING HEIGHT LEGENDS

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

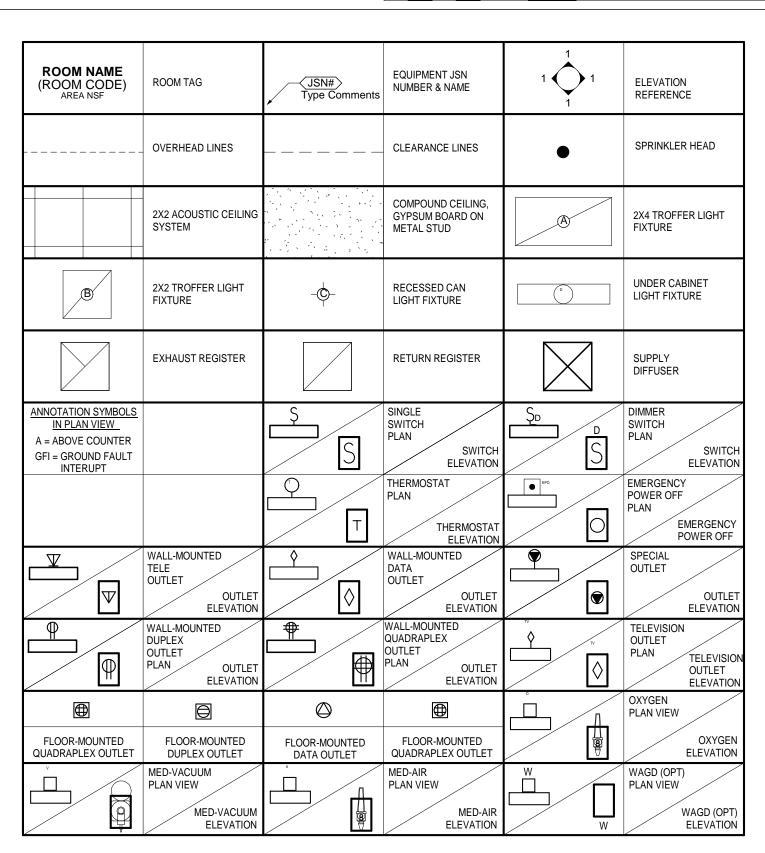
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



### Class 1 NM Scanning Room, Imgng Svcs (Cl211) LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"

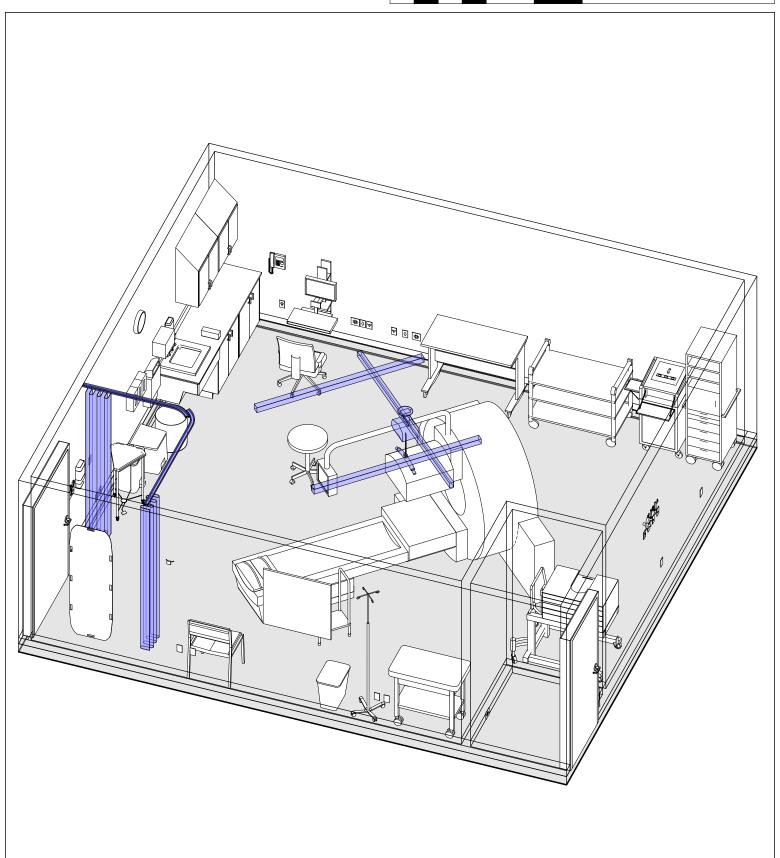




# Class 1 NM Scanning Room, Imgng Svcs (Cl211) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



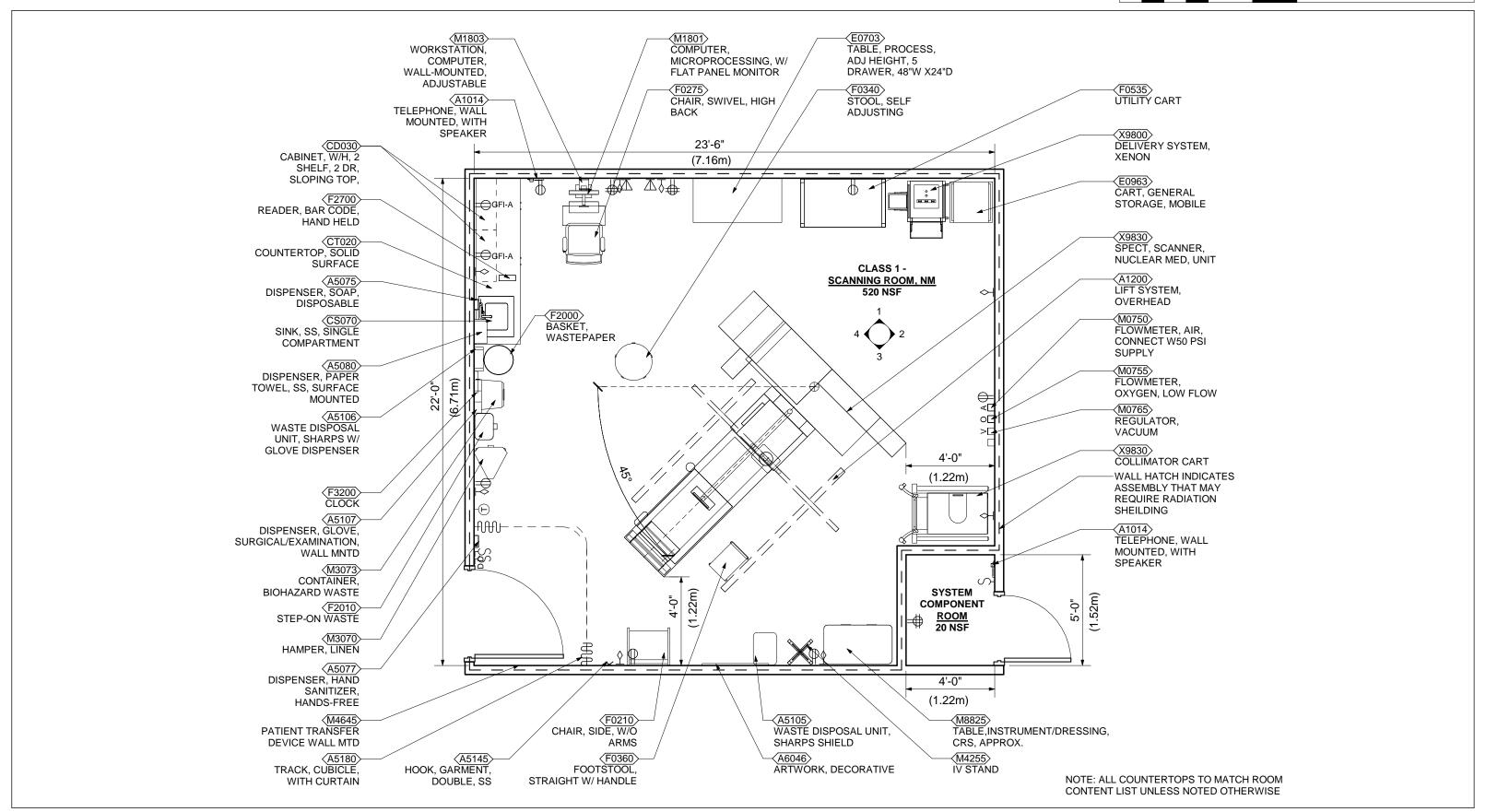


# Class 1 NM Scanning Room, Imgng Svcs (Cl211) INTERACTIVE 3D PDF

VA	of Veterans Affairs	SKETCH TITLE	0' 4'	8'	1
	or recording ringing	SCALE:			

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

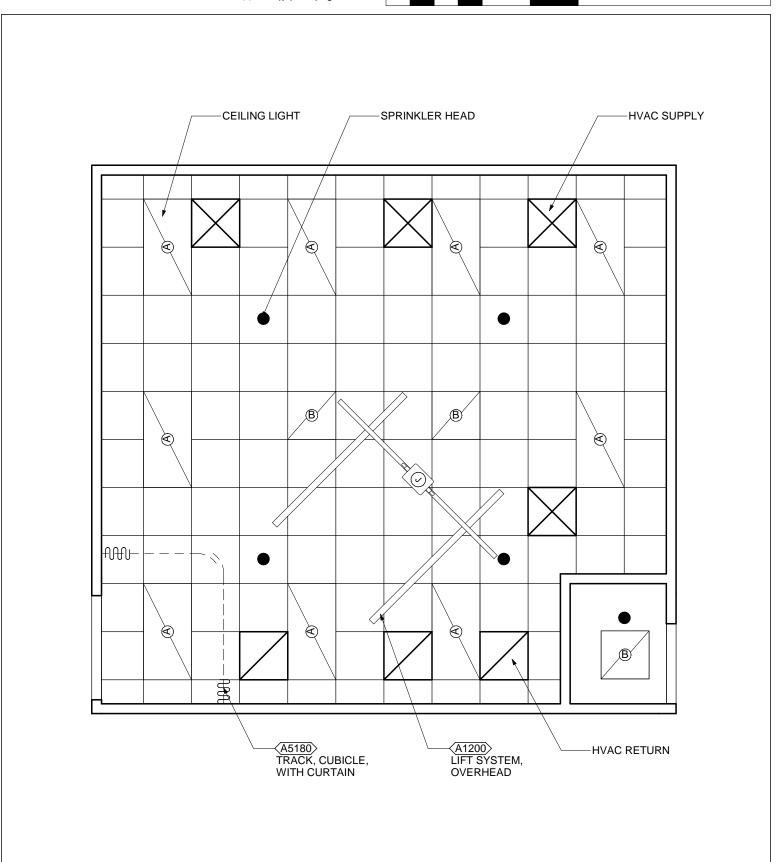




# Class 1 NM Scanning Room, Imgng Svcs (Cl211) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



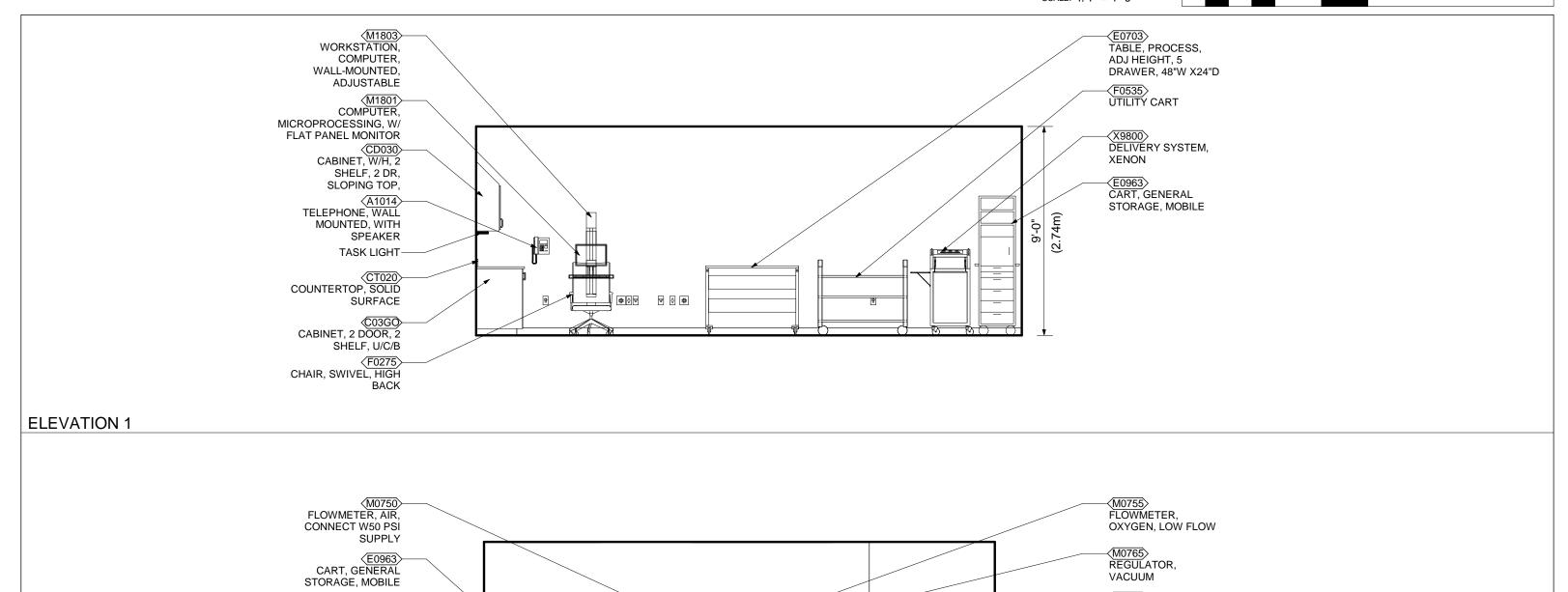
COLLIMATOR CART

CRS, APPROX.

M8825 TABLE,INSTRUMENT/DRESSING,

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



P

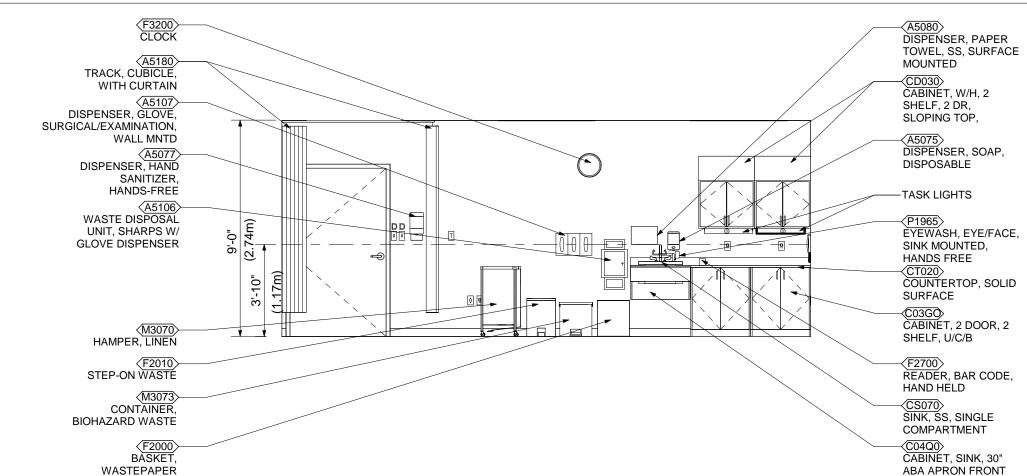
ELEVATION 2

ABA APRON FRONT

**ELEVATIONS** SKETCH TITLE



### WITH CURTAIN DECORATIVE IV STAND (A5145) HOOK, GARMENT, TABLE,INSTRUMENT/DRESSING, CRS, APPROX. DOUBLE, SS (M4645) PATIENT TRANSFER DEVICE WALL MTD 9'-0" √A5105> WASTE DISPOSAL X9830 COLLIMATOR CART 3'-10" (1.17m) UNIT, SHARPS SHIELD **♦ ELEVATION 3** F3200 CLOCK A5080 DISPENSER, PAPER TOWEL, SS, SURFACE TRACK, CUBICLE, MOUNTED



**ELEVATION 4** 

Room Data: Class 1 NM Scanning Room, Imgng Svcs (CI211)

<b>ARCHITECTUR</b>	AL & INTERIOR DESIGN	COMMUNICATION/SPECIAL SYSTEM	S
Ceiling Type:	AT	ADP:	Yes
Ceiling Height	9'-0" (2700mm)	Data:	Yes
Ceiling Finish:	ACT	Telephone:	Yes
Wall Finish:	m: GWB f:P	Intercom:	Yes
Wainscot:		Nurse Call:	Yes
Base:	m: WSF / RSF at h: 4" (100mm)	Code Blue:	Yes
Floor Finish:	WSF / RSF	Public Address:	
Slab Depression	on:	Radio/Entertainment:	
Sound Protect	ion: STC 40	MATV:	
Doors:	m: Wood t: 7 dl: LEAD s: X	CCTV:	
		MID:	
Notes:		Security/Duress:	
1. Provid	e a 4'-0" wide shielded door into	VTEL:	

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

the Class 1 Scanning Room, NM.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### Notes:

VA Satellite TV:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Minimum 1 outlet/room
Medical Vacuum: Minimum 1 outlet/room
Oxygen: Minimum 1 outlet/room

Room Contents: Class 1 NM Scanning Room, Imgng Svcs (CI211)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1014	Telephone, Wall Mounted, 1 Line, With Speaker	VV	1	Telephone, wall mounted, 1 line, with speaker.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5105	Waste Disposal Unit, Sharps, Container Shield	VV	1	Container shield for disposal of low-energy gamma radiation residue syringes. Constructed of steel with a minimum of .125" lead. Features include top with a sliding port and carrying handle.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.

JSN	Content Name	Acq Code	Qty	Description
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	2	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	сс	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0703	Table, Process, Adj Height, 5 Drawer, 48"W x 24"D	VV	1	Height adjustable table. The table top is available in a plastic laminate or chemical resistant material (Chem-Surf). Casters or glides are options with some tables. All tables will accept various storage components underneath. These work surfaces are available in 24" or 30" depth. THIS TYPICAL INCLUDES:  1 height adjustable table; 1 storage frame; 3 drawers, 3"H; 1 drawer, 6"H; 1 drawer, 9"H and drawer organizer bins.
E0963	Cart, General Storage, Mobile	VV	1	Mobile General Storage Cart, approximately 72"H x 23"W x 22"D. THIS TYPICAL INCLUDES:  1 Locker Storage Container on Wheels, w/Solid Door  3 Tray/Shelves  2 Drawers, 3"H  4 Drawers, 6"H  1 Tray/Shelf Divider Drawer Organizer Bins
F0210	Chair, Side, Without Arms	VV	1	Upholstered side chair approximately 32" high X 19" wide X 23" deep with floor glides. Seat is non-tilting and without arms.
F0275	Chair, Swivel, High Back	VV	1	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F0535	Cart, Utility	VV	1	Utility cart, 32-39" high X 36" wide X 24" deep, with 4 (four) heavy duty caster wheels.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.



JSN	Content Name	Acq Code	Qty	Description
F2010	Basket, Wastepaper, Step-On	VV	1	"Step-on" wastepaper basket with inner liner and foot petal activated flip top.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractica install a fully synchronized clock system. Battery operated, (batter) not included).	
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1803	Workstation, Computer, Wall Mounted, Adjustable	VV	1	A wall mounted computer workstation with height adjustable monitor and keyboard arms. Keyboard and monitor can be stored within 8" to 10" of wall. Fingertip adjustability for keyboard and monitor enable frequent position changes. Unit contains an integrated cable management system to hide wires. A separate wall-mounted CPU holder is included.



JSN	Content Name	Acq Code	Qty	Description
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform.  Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3073	Container, Biohazard Waste, Step-on, Fire Safe	VV	1	A biohazard waste container with a step-on lid. The container will have a capacity of approximately 12 gallons and be made of a fire safe material.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8825	Table, Instrument/Dressing, CRS, approx. 36x20x34	VV	1	Instrument and dressing table. Made of corrosion resistant stainless steel with a sound deadened top. Includes guard rail, shelf and two side-by-side drawers. The table is mounted on swivel, ball-bearing casters.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X9800	Delivery System, Xenon	VV	1	Xenon system is used to perform regional ventilation Nuclear Medicine studies. This mobile unit provides resistance free breathing and includes lead shielding for patient and operator safety.
X9830	Scanner, Nuclear, SPECT, Dual Head	VC	1	The system shall be a single plane or variable angle dual detector emission system, designed for fast data acquisition and high patient through put for Single Photo Emission Computed Tomography (SPECT), whole body and general purpose nuclear medicine procedures. It shall be designed to image at any energy range for any procedure. The unit detects and counts photons emanating from radiopharmaceuticals. Collimators available to suit full range applications. The system shall be DICOM 3.0 or latest version, compatible, for easy linkage to filmless image management systems and review stations.



Room Contents: Class 1 NM System Component Alcove, Imgng Svcs (CI212)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



### Class 1 SPECT/CT Scanning Room, Imgng Svcs (Cl214) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

ISCI		

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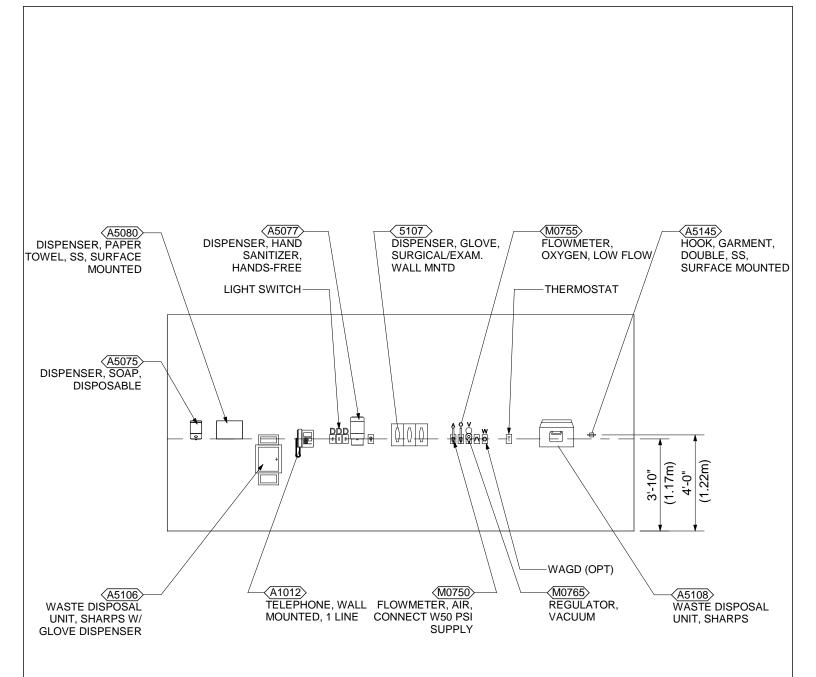
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 1 SPECT/CT Scanning Room, Imgng Svcs (Cl214) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

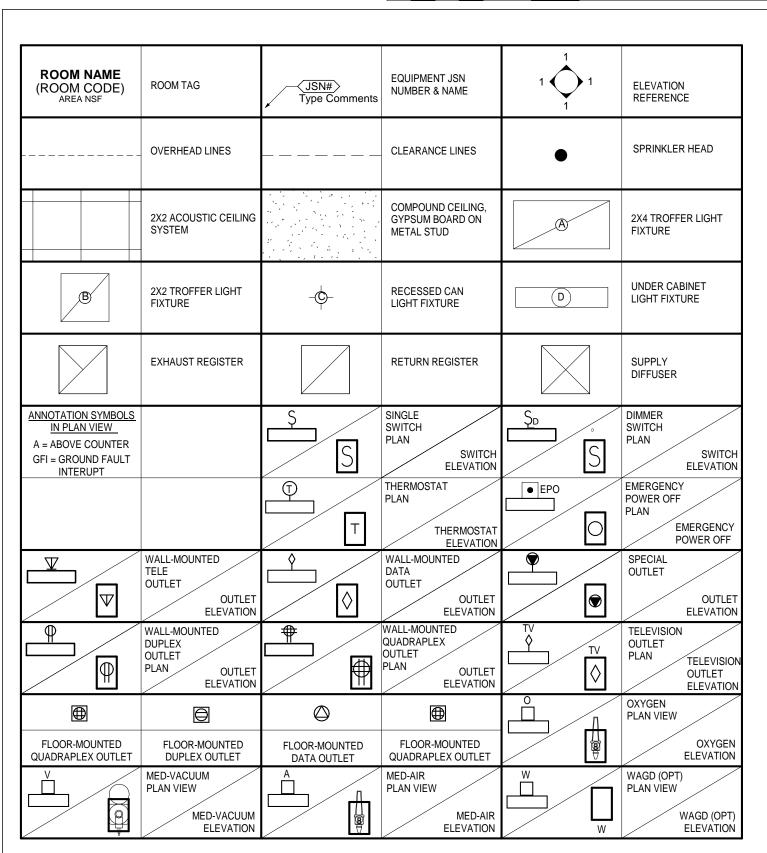
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



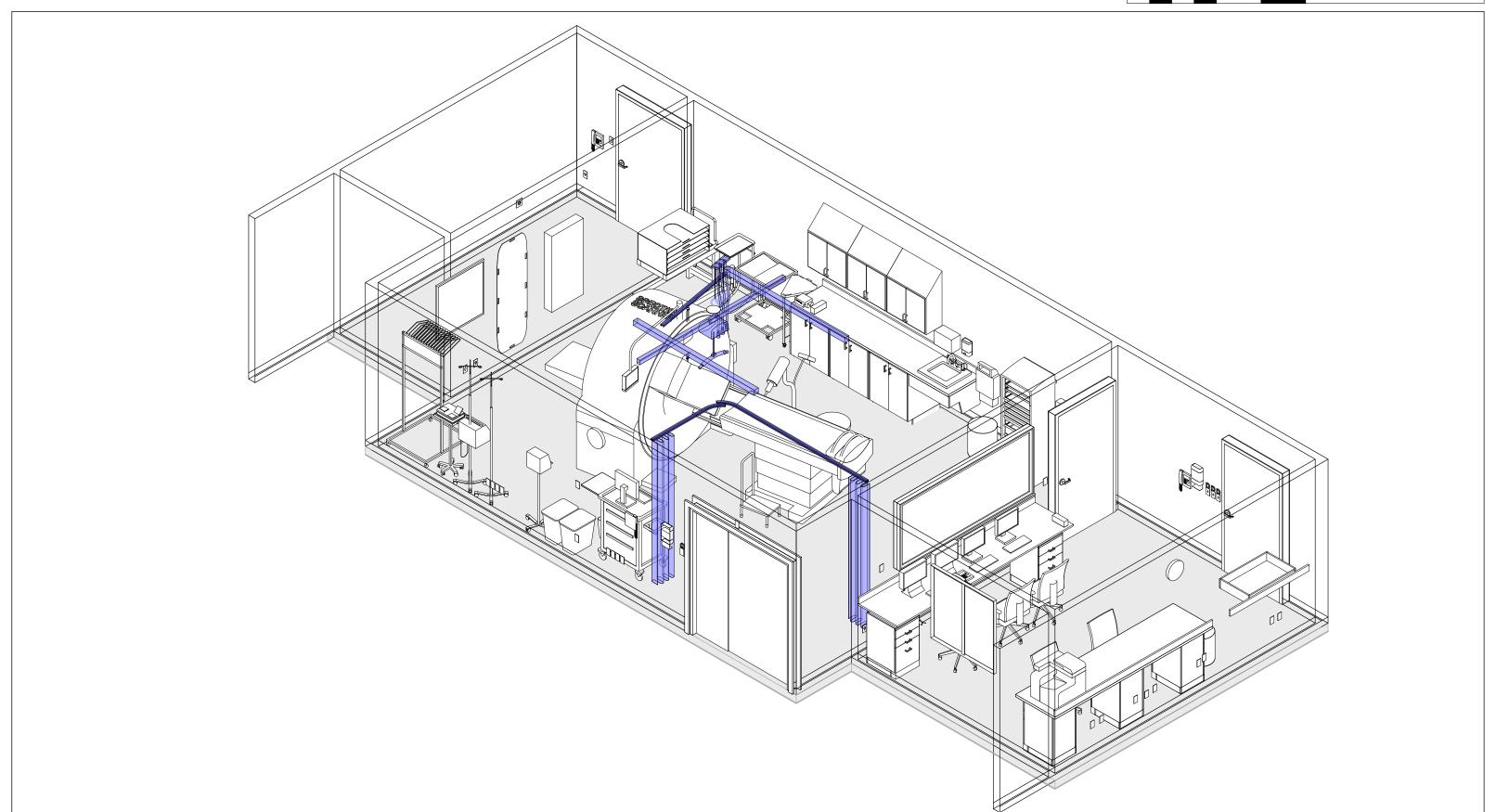
### Class 1 SPECT/CT Scanning Room, Imgng Svcs (Cl214) LEGEND

SKETCH TITLE 0' 4' 8' 1

SCALE: 1/4" = 1'-0"









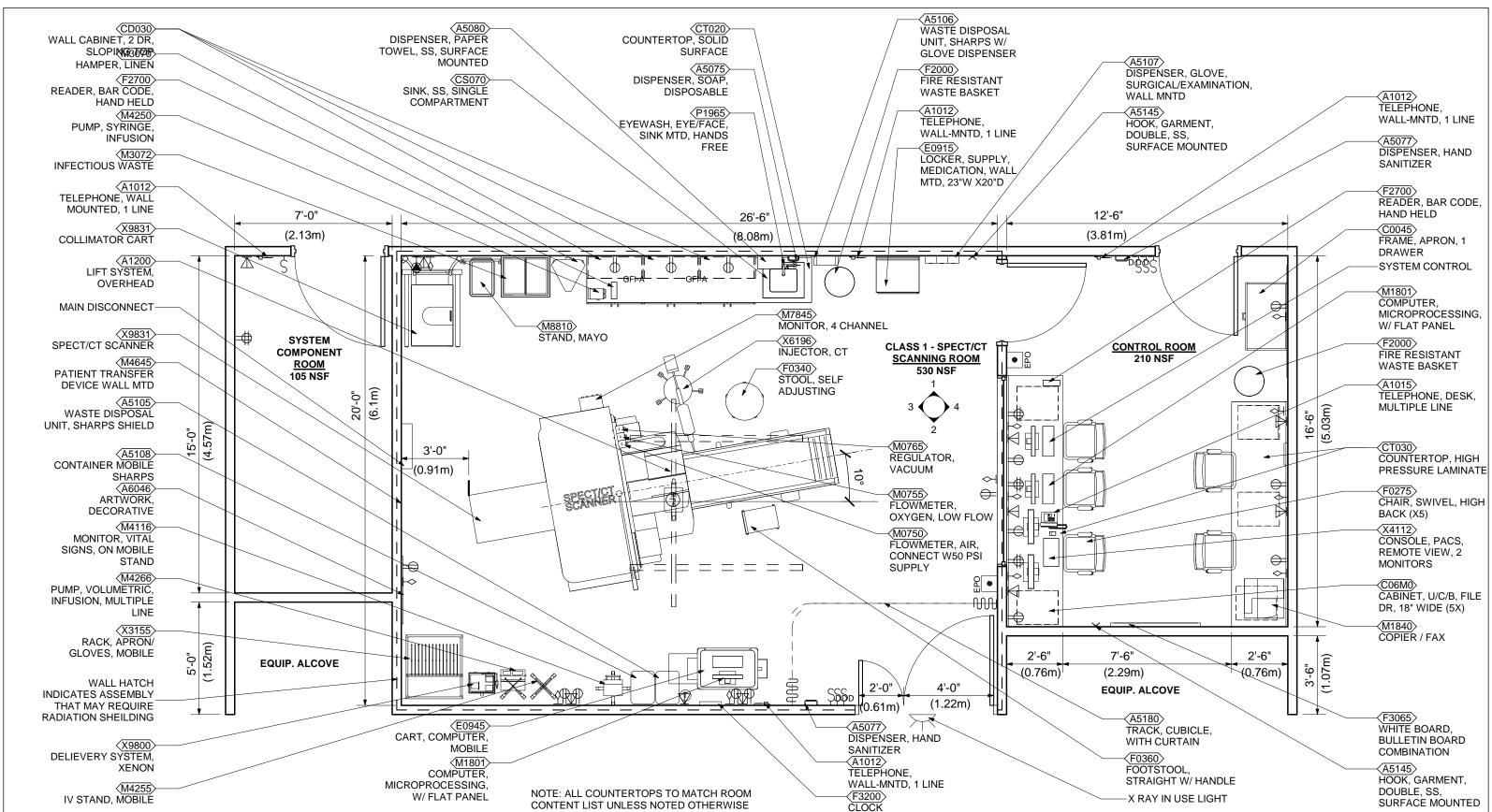
# Class 1 SPECT/CT Scanning Room, Imgng Svcs (Cl214) INTERACTIVE 3D PDF

SCALE:

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SCLAIMER: ROOM TEMPLATES ARE GRAPHICAL REPRESENTATIONS OF SELECTED ROOM TYPES THAT ILLUSTRATE VA PLANNING QUIREMENTS FOR SPACE, ROOM CONTENTS, AND ROOM SPECIFIC ENGINEERING SYSTEMS. THEY PROVIDE TYPICAL CONFIGURATIONS,	4-292

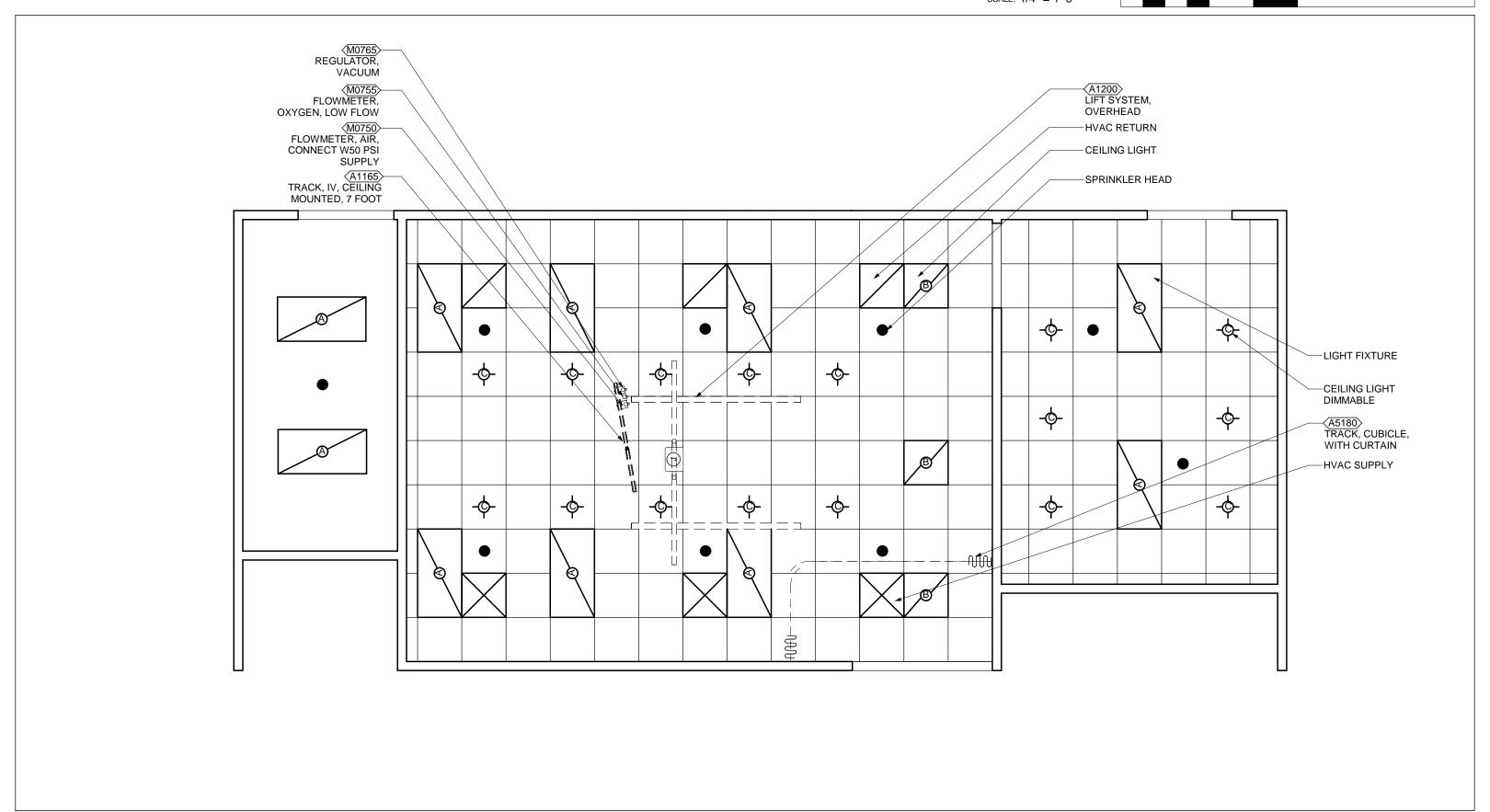
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SCALE: 1/4" = 1'-0"



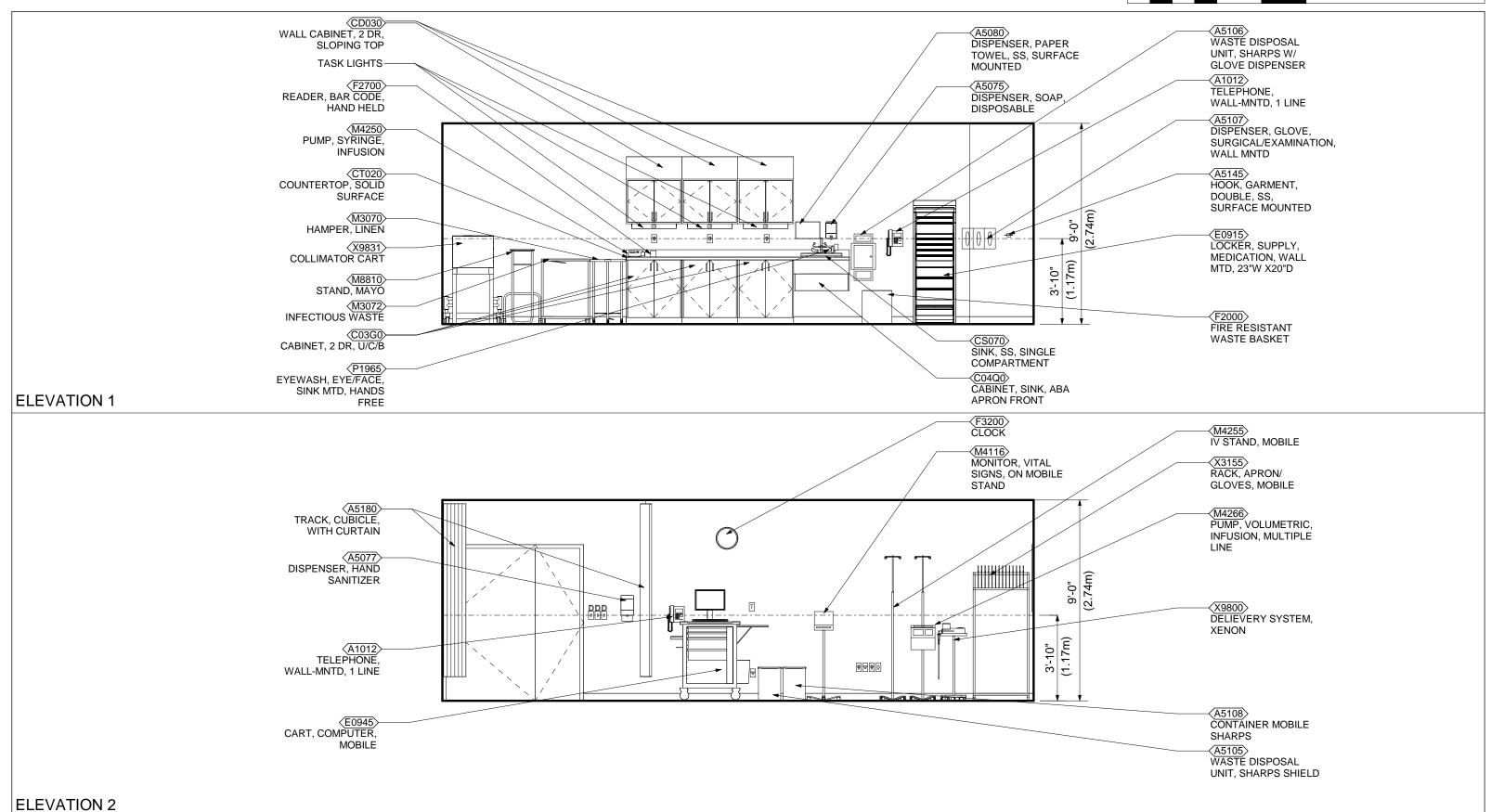
SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



**ELEVATIONS** 

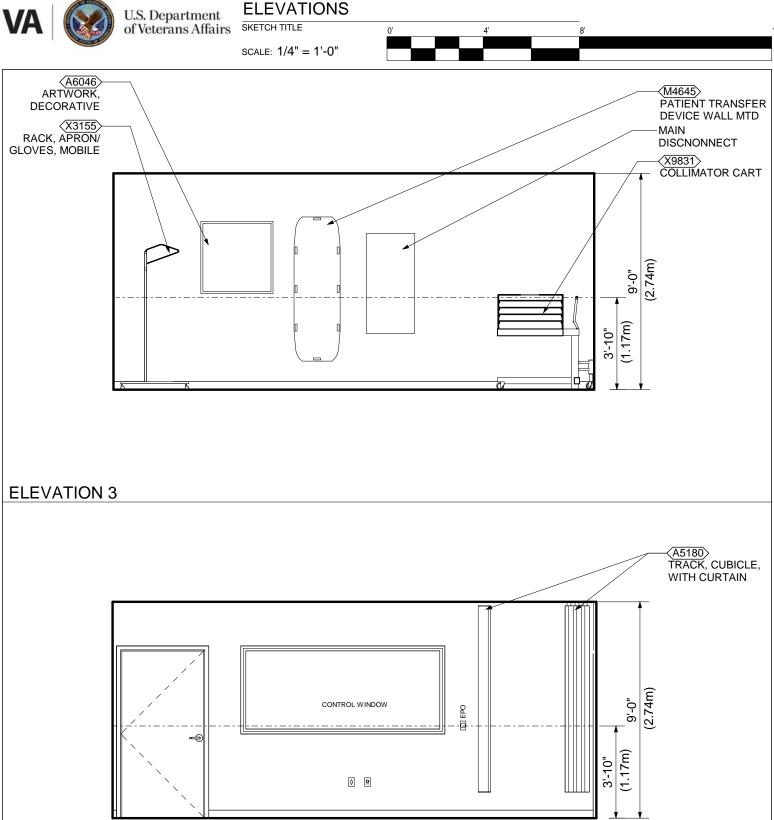
SKETCH TITLE SCALE: 1/4" = 1'-0"





**ELEVATION 4** 

### Class 1 SPECT/CT Scanning Room, Imgng Svcs (Cl214)



CHAPTER 295 - Class 1 SPECT/CT Scanning Room, Imgng Svcs (CI214)

Room Data: Class 1 SPECT/CT Scanning Room, Imgng Svcs (CI214)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF / RSF at h: 4" (100mm) Floor Finish: WSF / RSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD s: X

#### Notes:

- Provide a 4'-0" wide shielded door into the Class 1 SPECT/CT Scanning Room, NM.
- 2. Provide a 3'-0" wide shielded door into the Class 1 SPECT/CT Scanning Room, NM from the Control Room.
- Provide a shielded viewing window from the Control Room into the Class 1 SPECT/CT Scanning Room, NM.

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Yes Code Blue: Yes Public Address: Radio/Entertainment: --MATV: CCTV: Yes, note 1 & 2. MID: Security/Duress: VTEL:

#### Notes:

VA Satellite TV:

- 1. Junction box for CCTV camera with conduit to Control area.
- 2. Junction box for CCTV monitor.
- 3. PACS:two 4-port telecommunication outlets per PACS station



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min. 1 outlet/room OVHD
Medical Vacuum: Min. 1 outlet/room OVHD
Oxygen: Min. 1 outlet/room OVHD

### Room Contents: Class 1 SPECT/CT Scanning Room, Imgng Svcs (CI214)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	3	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1165	Track, IV, Ceiling Mounted, 7 Foot	СС	1	7 ft. ceiling mounted IV track. Unit consists of a straight thick anodized aluminum track. It includes a carrier with self locking hinge, hook for attaching bottle hanger, and an adjustable pendant. Designed for dispensing IV solutions.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5105	Waste Disposal Unit, Sharps, Container Shield	VV	1	Container shield for disposal of low-energy gamma radiation residue syringes. Constructed of steel with a minimum of .125" lead. Features include top with a sliding port and carrying handle.

JSN	Content Name	Acq Code	Qty	Description
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0915	Locker, Supply, Medication, Wall Mtd, 23"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  2 Tray/Shelves  1 Locked Drawer w/Locked Lid, 6"H  5 Drawers, 3"H  3 Drawers, 6"H  2 Tray/Shelves Divider Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.
E0945	Cart, Computer, Mobile	VV	1	A mobile computer cart for use throughout the facility. The cart dimensions will be approximately 45" H x 30" W x 22" D with casters. May include drawers and miscellaneous other accessories that will be determined at time of purchase. This Typical may include:  1 Cart Body, w/Computer Support, Style-A Narrow, w/Raised Edge Top  1 Flip-Up Shelf 1 Sharps Container Holder 1 Wastebasket 1 Chart Holder 2 Drawers, 3"H 2 Drawers, 6"H 3 Accessory Rail, Side Drawer Organizer Bins
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.



JSN	Content Name	Acq Code	Qty	Description
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.



JSN	Content Name	Acq Code	Qty	Description
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4250	Pump, Syringe, Infusion	VV	1	The infusion syringe pump ensures highly accurate volume delivery and consistent flow for small volumes (<50 ml) of pharmacologic agents or thick feeding solutions. It shall be small, lightweight construction, making it transportable. Shall have menu-driven programming capable of flow rates (e.g. 0.1 or 1.0 mL/hr) that are intended for long-term bedside use and/or critical care patient transport, plunger positioning sensor, LCD display for easy viewing, volume limit programming to serve as a convenient cue of volume or dose delivery completion and multiple delivery modes for all applications requiring precisely controlled infusion rates. The infusion pump shall have automatic syringe size sensing which will give the flexibility to accept a wide range of syringe sizes (up to 60 mL) from different manufacturers. Shall be battery powered/AC adapter.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4266	Pump, Volumetric, Infusion, Multiple Line	VV	1	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.



JSN	Content Name	Acq Code	Qty	Description
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X9831	Rad Unit, CT/ Single Photon Emission Tomography SPECT/CT	VC	1	In a SPECT/CT exam, information from two technologies, SPECT and computed tomography (CT), are combined to create images that pinpoint the location of an abnormality in the body. CT is a different kind of imaging procedure that uses X-ray radiation and computer technology to produce very detailed images of structures inside the body.
X9800	Delivery System, Xenon	VV	1	Xenon system is used to perform regional ventilation Nuclear Medicine studies. This mobile unit provides resistance free breathing and includes lead shielding for patient and operator safety.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6196	Injector, CT	VC	1	CT injector. This unit is a specialized radiographic system that provides sharp, well-defined visual images of the vascular anatomy. The injector introduces a vision radiopaque fluid (contrast medium) into an artery or vein through a small catheter, making vessels contrast with their more radiolucent surrounding. The unit incorporates an electromechanical or pneumatically driven syringe to deliver the contrast medium. The syringe assemblies consist of an electric motor connected to a jackscrew that moves the syringe piston into or out of the syringe barrel. The unit is used in hospitals with radiographic procedures. The unit can be ceiling, wall, or remote stand mounted.

Room Contents: Class 1 SPECT/CT Control Room, Imgng Svcs (CI216)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
C0041	Rail, Apron, 4x60x1	СС	1	Apron rail. Also referred to as an apron front, apron panel, or knee space rail. Used to close in front knee space area and/or provide work surface support between two base cabinets or a base cabinet and wall. Apron rails should be ordered in pairs to provide both front and rear work surface support.
C0045	Frame, Apron, 1 Drawer, 4x36x22	CC	1	Apron frame with one standard drawer. Also referred to as a drawer frame or table frame. Used for a knee space as a combination frame and drawer to support a top between base cabinets or a base cabinet and a wall. Constructed of steel.
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	5	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.

JSN	Content Name	Acq Code	Qty	Description
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1840	Printer/Copier/Fax Combination	VV	1	Multifunctional printer, fax, scanner and copier (PFC) all-in-one machine.
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.

Room Contents: Class 1 SPECT/CT System Component Room, Imgng Svcs (CI217)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.





## Class 2 SPECT/CT Scanning Room, Imgng Svcs (Cl221) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR, NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

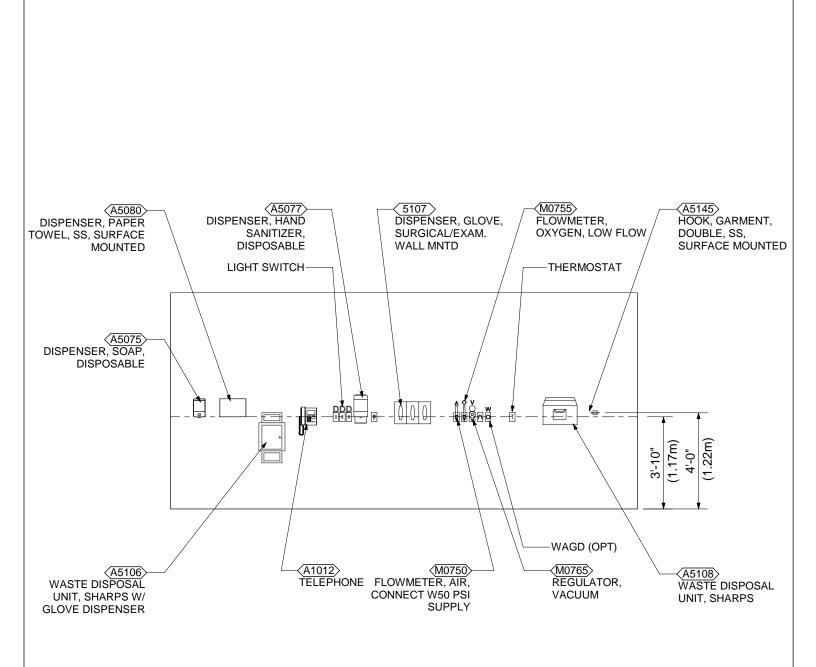
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS. AND UTILITY REQUIREMENTS.



## Class 2 SPECT/CT Scanning Room, Imgng Svcs (Cl221) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



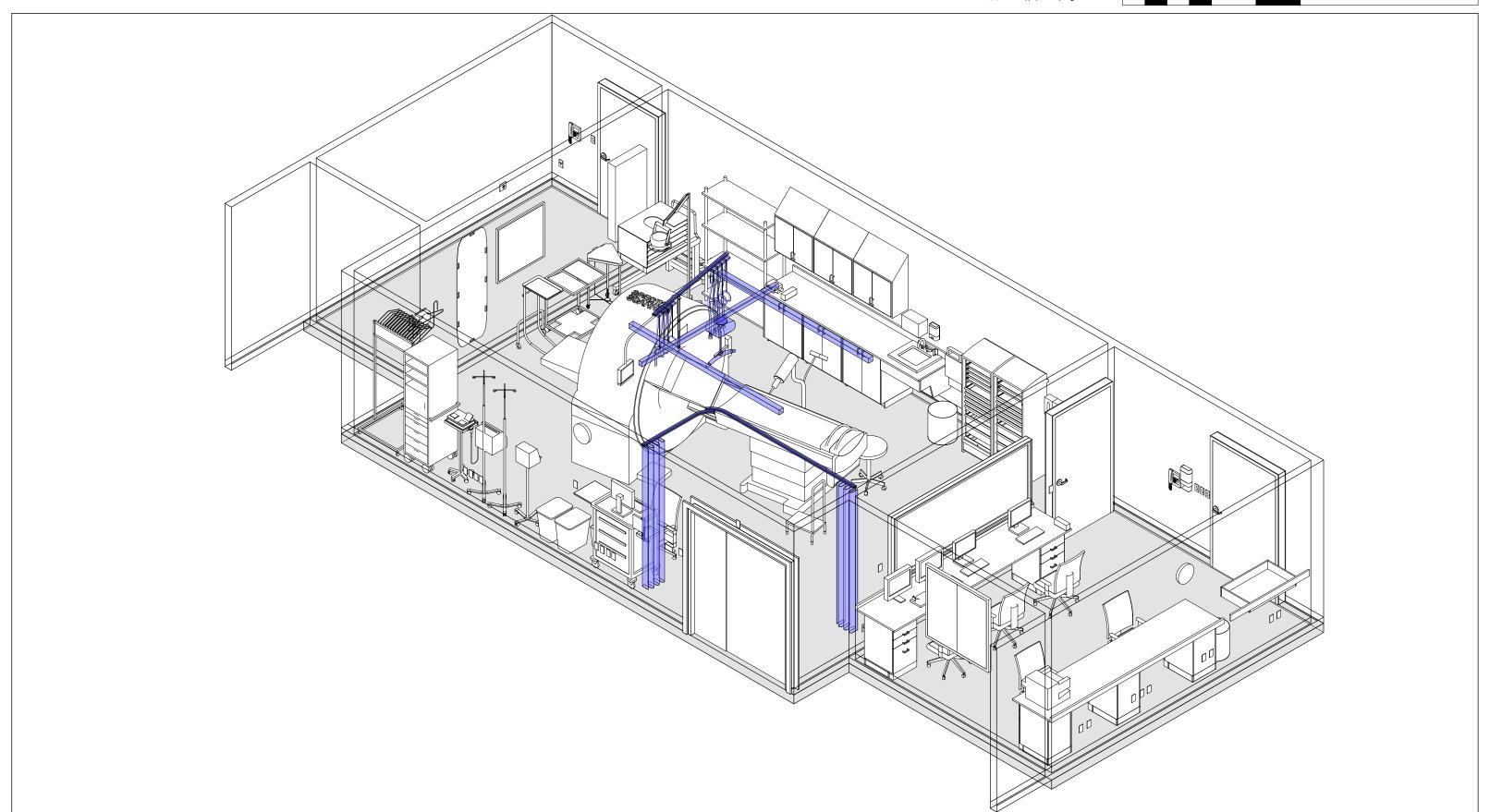
## Class 2 SPECT/CT Scanning Room, Imgng Svcs (Cl221) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

				1	
ROOM NAME (ROOM CODE) AREA NSF	ROOM TAG	JSN# Type Comments	EQUIPMENT JSN NUMBER & NAME	1 1	ELEVATION REFERENCE
	OVERHEAD LINES		CLEARANCE LINES	•	SPRINKLER HEAD
	2X2 ACOUSTIC CEILING SYSTEM		COMPOUND CEILING, GYPSUM BOARD ON METAL STUD	<b>B</b>	2X4 TROFFER LIGHT FIXTURE
B	2X2 TROFFER LIGHT FIXTURE		RECESSED CAN LIGHT FIXTURE	0	UNDER CABINET LIGHT FIXTURE
	EXHAUST REGISTER		RETURN REGISTER		SUPPLY DIFFUSER
ANNOTATION SYMBOLS IN PLAN VIEW  A = ABOVE COUNTER GFI = GROUND FAULT INTERUPT		\$ S	SINGLE SWITCH PLAN SWITCH ELEVATION	\$ <sub>D</sub> B	DIMMER SWITCH PLAN SWITC ELEVATIO
		T	THERMOSTAT PLAN  THERMOSTAT ELEVATION	• ero	EMERGENCY POWER OFF PLAN EMERGENCY POWER OFF
$\overline{\mathbb{V}}$	WALL-MOUNTED TELE OUTLET OUTLET ELEVATION		WALL-MOUNTED DATA OUTLET OUTLET ELEVATION		SPECIAL OUTLET OUTLE ELEVATIO
9	WALL-MOUNTED DUPLEX OUTLET PLAN OUTLET ELEVATION		WALL-MOUNTED QUADRAPLEX OUTLET PLAN OUTLET ELEVATION	N TV	TELEVISION OUTLET PLAN TELEVISIO OUTLET ELEVATIO
		$\bigcirc$	<b>(</b>		OXYGEN PLAN VIEW
FLOOR-MOUNTED QUADRAPLEX OUTLET	FLOOR-MOUNTED DUPLEX OUTLET	FLOOR-MOUNTED DATA OUTLET	FLOOR-MOUNTED QUADRAPLEX OUTLET		OXYGEN ELEVATION
, D	MED-VACUUM PLAN VIEW  MED-VACUUM ELEVATION	Â	MED-AIR PLAN VIEW MED-AIR ELEVATION	W	WAGD (OPT) PLAN VIEW WAGD (OPT ELEVATION







# Class 2 SPECT/CT Scanning Room, Imgng Svcs (Cl221) INTERACTIVE 3D PDF

SCALE:

SKETCH TITLE

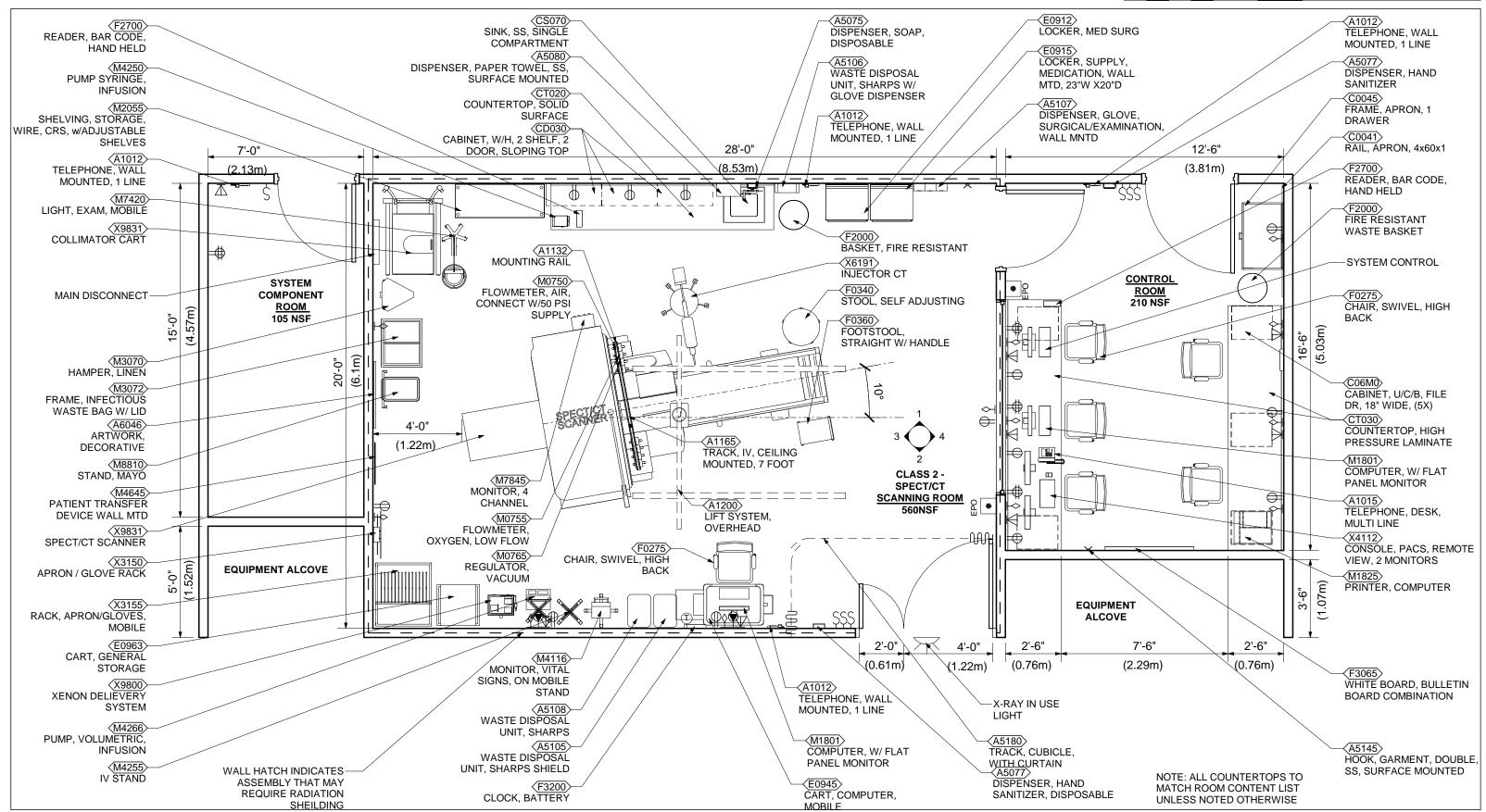
0'

4'

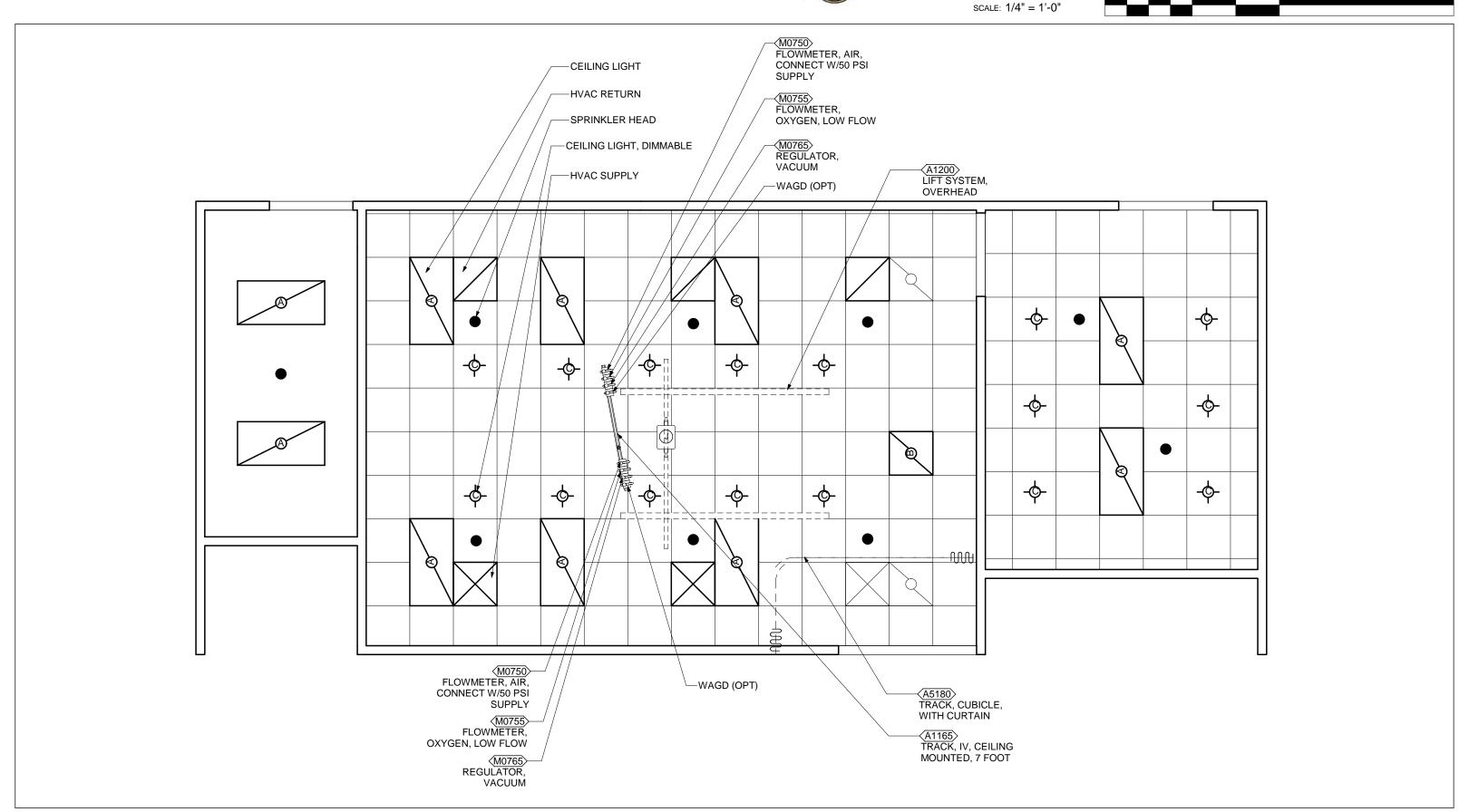
8'

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

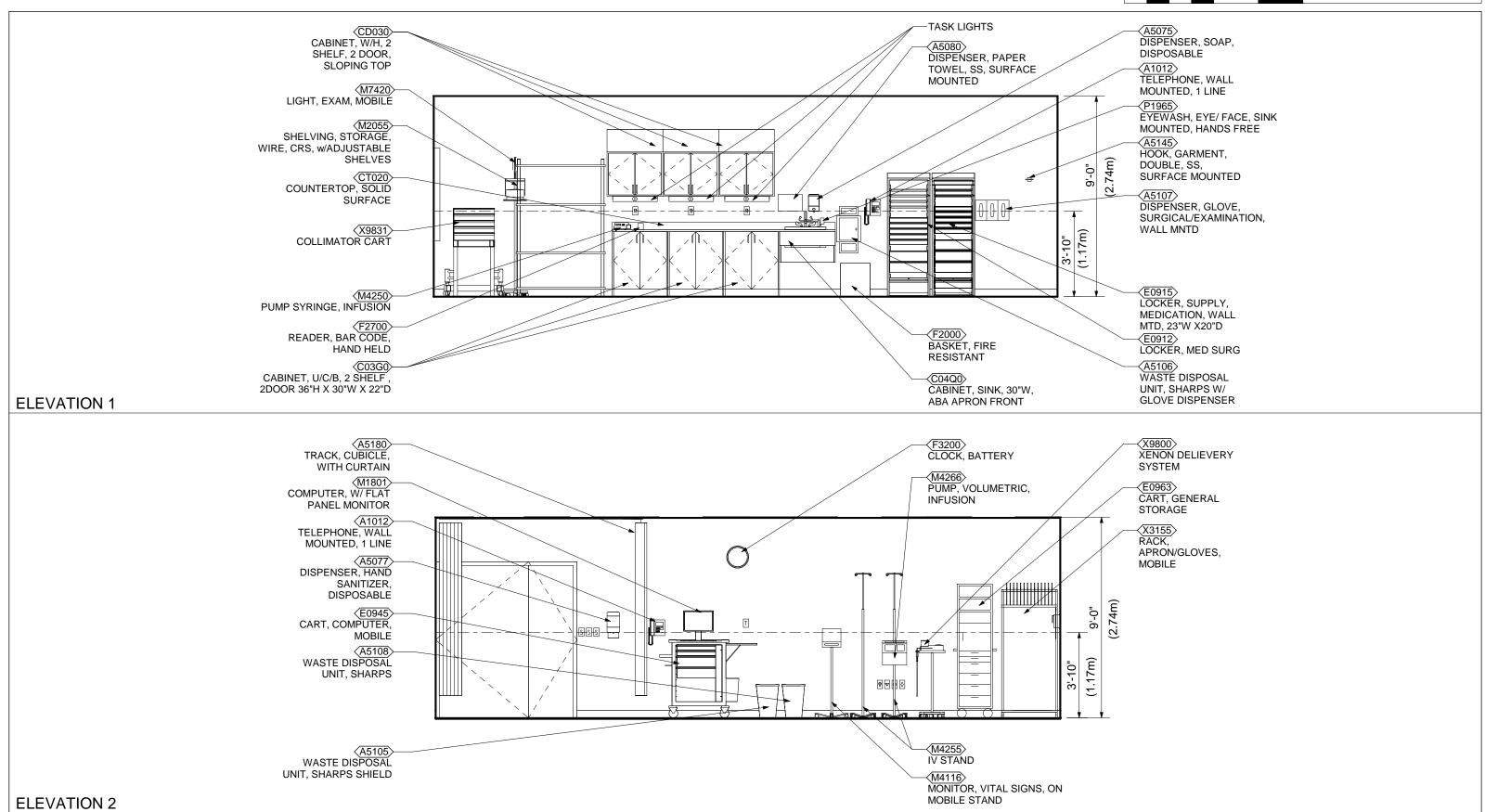


SKETCH TITLE 0' 4' 8'



SCALE: 1/4" = 1'-0"

8'

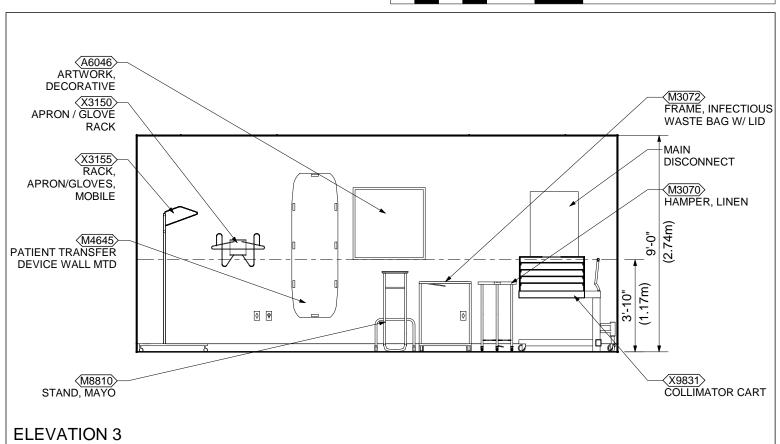


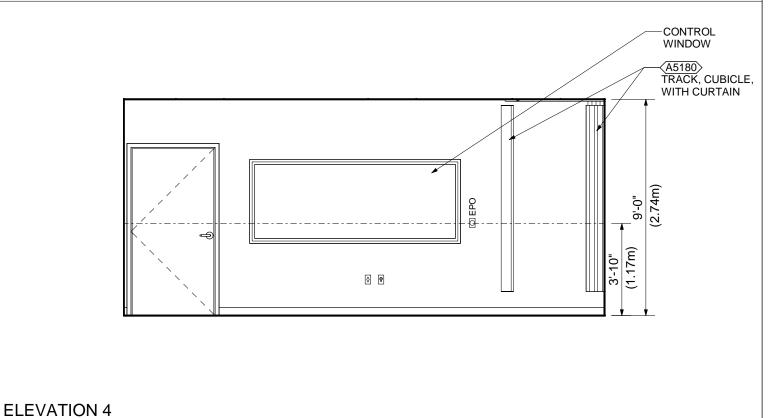


## Class 2 SPECT/CT Scanning Room, Imgng Svcs (Cl221) ELEVATIONS

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"





CHAPTER 295 - Class 2 SPECT/CT Scanning Room, Imgng Svcs (CI221)

Room Data: Class 2 SPECT/CT Scanning Room, Imgng Svcs (CI221)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF at h: 4" (100mm) Floor Finish: WSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 7 dl: LEAD s: X

### Notes:

- Provide a 4'-0" wide shielded door into the Class 2 SPECT/CT Scanning Room, NM.
- 2. Provide a 3'-0" wide shielded door into the Class 2 SPECT/CT Scanning Room, NM from the Control Room.
- 3. Provide a shielded viewing window from the Control Room into the Class 2 SPECT/CT Scanning Room, NM.

### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Yes Code Blue: Yes Public Address: Radio/Entertainment: --MATV: CCTV: Yes, note 1 & 2. MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- 1. Junction box for CCTV camera with conduit to Control area.
- 2. Junction box for CCTV monitor.
- 3. PACS:two 4-port telecommunication outlets per PACS station



## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min 2 outlets/Room OVHD
Medical Vacuum: Min 2 outlets/Room OVHD
Oxygen: Min 2 outlets/Room OVHD
Waste Anesth Gas: Rec 2 outlets/room OVHD

### Room Contents: Class 2 SPECT/CT Scanning Room, Imgng Svcs (CI221)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	2	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1165	Track, IV, Ceiling Mounted, 7 Foot	СС	1	7 ft. ceiling mounted IV track. Unit consists of a straight thick anodized aluminum track. It includes a carrier with self locking hinge, hook for attaching bottle hanger, and an adjustable pendant. Designed for dispensing IV solutions.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5105	Waste Disposal Unit, Sharps, Container Shield	VV	1	Container shield for disposal of low-energy gamma radiation residue syringes. Constructed of steel with a minimum of .125" lead. Features include top with a sliding port and carrying handle.

JSN	Content Name	Acq Code	Qty	Description
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0912	Locker, Supply, Med Surg, Wall Mtd	VV	1	Medical/Surgical Supply locker, Wall Mounted, approximately 23"W x 20"D. THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  4 Tray/Shelves  5 Drawers, 3"H  2 Drawers, 6"H  2 Tray/Shelf Dividers Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.
E0915	Locker, Supply, Medication, Wall Mtd, 23"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  2 Tray/Shelves  1 Locked Drawer w/Locked Lid, 6"H  5 Drawers, 3"H  3 Drawers, 6"H  2 Tray/Shelves Divider Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.



JSN	Content Name	Acq Code	Qty	Description
E0945	Cart, Computer, Mobile	VV	1	A mobile computer cart for use throughout the facility. The cart dimensions will be approximately 45" H x 30" W x 22" D with casters. May include drawers and miscellaneous other accessories that will be determined at time of purchase. This Typical may include:  1 Cart Body, w/Computer Support, Style-A Narrow, w/Raised Edge Top  1 Flip-Up Shelf 1 Sharps Container Holder 1 Wastebasket 1 Chart Holder 2 Drawers, 3"H 2 Drawers, 6"H 3 Accessory Rail, Side Drawer Organizer Bins
E0963	Cart, General Storage, Mobile	VV	1	Mobile General Storage Cart, approximately 72"H x 23"W x 22"D. THIS TYPICAL INCLUDES:  1 Locker Storage Container on Wheels, w/Solid Door  3 Tray/Shelves  2 Drawers, 3"H  4 Drawers, 6"H  1 Tray/Shelf Divider Drawer Organizer Bins
E1500	Rail, MOD, W/MNTD, HX144XD	VV	1	Wall mounted rail used for hanging (mounting) lockers, shelves and drawers on a wall.
F0275	Chair, Swivel, High Back	VV	1	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.



JSN	Content Name	Acq Code	Qty	Description
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	2	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	2	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M2055	Shelving, Storage, Wire, CRS, w/Adjustable Shelves	VV	1	Stationary, wire, shelving unit. Unit has fully adjustable shelves constructed of stainless steel. For use in general purpose storage areas. Shelving is provided in various sizes and configurations. Price provided is for a unit approximately 74"H x 18"D x 48"W with four shelves.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.



JSN	Content Name	Acq Code	Qty	Description
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4250	Pump, Syringe, Infusion	VV	1	The infusion syringe pump ensures highly accurate volume delivery and consistent flow for small volumes (<50 ml) of pharmacologic agents or thick feeding solutions. It shall be small, lightweight construction, making it transportable. Shall have menu-driven programming capable of flow rates (e.g. 0.1 or 1.0 mL/hr) that are intended for long-term bedside use and/or critical care patient transport, plunger positioning sensor, LCD display for easy viewing, volume limit programming to serve as a convenient cue of volume or dose delivery completion and multiple delivery modes for all applications requiring precisely controlled infusion rates. The infusion pump shall have automatic syringe size sensing which will give the flexibility to accept a wide range of syringe sizes (up to 60 mL) from different manufacturers. Shall be battery powered/AC adapter.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4266	Pump, Volumetric, Infusion, Multiple Line	VV	1	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M7420	Light, Exam, Mobile	VV	1	Mobile examination light mounted on a floor stand with casters.  Unit features colored corrected light, an air-cooled shade and a balanced floating arm. Unit may also have a center mount detachable and sterilizable control handle. Designed for examination, treatment, and emergency areas where cool, color-corrected light is needed.



JSN	Content Name	Acq Code	Qty	Description
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
X9831	Rad Unit, CT/ Single Photon Emission Tomography SPECT/CT	VC	1	In a SPECT/CT exam, information from two technologies, SPECT and computed tomography (CT), are combined to create images that pinpoint the location of an abnormality in the body. CT is a different kind of imaging procedure that uses X-ray radiation and computer technology to produce very detailed images of structures inside the body.
X9800	Delivery System, Xenon	VV	1	Xenon system is used to perform regional ventilation Nuclear Medicine studies. This mobile unit provides resistance free breathing and includes lead shielding for patient and operator safety.
X3150	Rack, Apron/Gloves, Wall Mounted	СС	1	Apron and gloves rack. This is a wall unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum. The unit's convenient on wall storage will prolong the useful life of your protection aprons by helping prevent damage to internal components.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.

### Room Contents: Class 2 SPECT/CT Control Room, Imgng Svcs (CI222)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	7	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.



JSN	Content Name	Acq Code	Qty	Description			
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.			
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.			
C0041	Rail, Apron, 4x60x1	СС	1	Apron rail. Also referred to as an apron front, apron panel, or knee space rail. Used to close in front knee space area and/or provide work surface support between two base cabinets or a base cabinet and wall. Apron rails should be ordered in pairs to provide both front and rear work surface support.			
C0045	Frame, Apron, 1 Drawer, 4x36x22	СС	1	Apron frame with one standard drawer. Also referred to as a drawer frame or table frame. Used for a knee space as a combination frame and drawer to support a top between base cabinets or a base cabinet and a wall. Constructed of steel.			
С06М0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	5	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.			
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.			
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.			
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.			
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.			
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.			
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).			



JSN	Content Name	Acq Code	Qty	Description
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1825	Printer, Computer	VV	1	High resolution computer printer with a variety of type styles and sheet/envelope feeder trays. Database information reflects network ready, medium duty office style laser printers. Other types of printers (bubble jet, dot matrix, line or plotter) as well as light or heavy use capabilities are available.
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.

Room Contents: Class 2 SPECT/CT System Component Room, Imgng Svcs (CI223)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.



## NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"			

#### DISCLAIMER:

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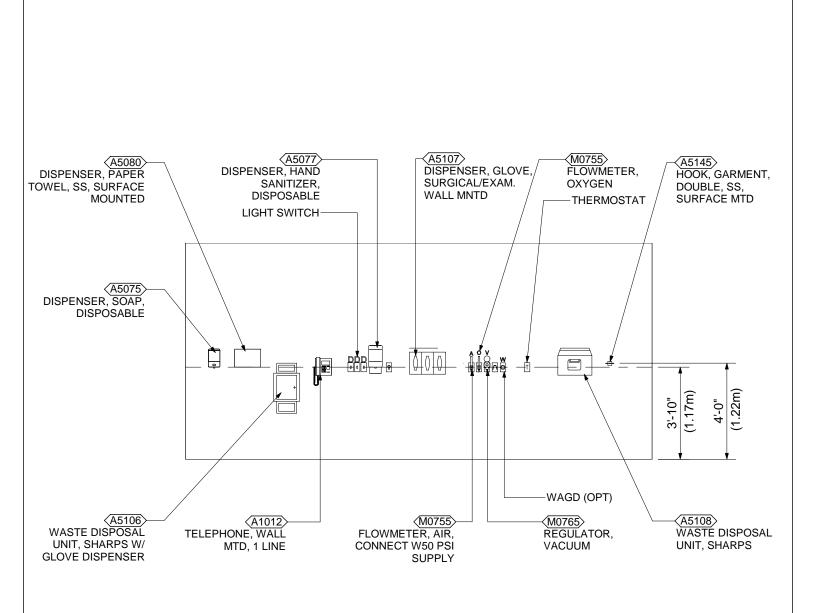
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## NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) LEGEND

SCALE: 1/4" = 1'-0" 8' 16

ROOM NAME (ROOM CODE) AREA NSF	ROOM TAG	JSN# Type Comments	EQUIPMENT JSN NUMBER & NAME	1 1	ELEVATION REFERENCE
	OVERHEAD LINES		CLEARANCE LINES	•	SPRINKLER HEAD
	2X2 ACOUSTIC CEILING SYSTEM		COMPOUND CEILING, GYPSUM BOARD ON METAL STUD	A	2X4 TROFFER LIGHT FIXTURE
B	2X2 TROFFER LIGHT FIXTURE	- <b>©</b> -	RECESSED CAN LIGHT FIXTURE	(D)	UNDER CABINET LIGHT FIXTURE
	EXHAUST REGISTER		RETURN REGISTER		SUPPLY DIFFUSER
ANNOTATION SYMBOLS IN PLAN VIEW  A = ABOVE COUNTER GFI = GROUND FAULT INTERUPT		\$ S	SINGLE SWITCH PLAN SWITCH ELEVATION	Ş <sub>D</sub> B	DIMMER SWITCH PLAN SWITCH ELEVATION
			THERMOSTAT PLAN  THERMOSTAT ELEVATION	■ EPO	EMERGENCY POWER OFF PLAN EMERGENCY POWER OFF
$\overline{\mathbb{V}}$	WALL-MOUNTED TELE OUTLET OUTLET ELEVATION		WALL-MOUNTED DATA OUTLET OUTLET ELEVATION		SPECIAL OUTLET OUTLET CUTLET ELEVATION
	WALL-MOUNTED DUPLEX OUTLET PLAN OUTLET ELEVATION		WALL-MOUNTED QUADRAPLEX OUTLET PLAN OUTLET ELEVATION	TV TV	TELEVISION OUTLET PLAN TELEVISION OUTLET ELEVATION
<b>(</b>					OXYGEN PLAN VIEW
FLOOR-MOUNTED QUADRAPLEX OUTLET	FLOOR-MOUNTED DUPLEX OUTLET	FLOOR-MOUNTED DATA OUTLET	FLOOR-MOUNTED QUADRAPLEX OUTLET	39	OXYGEN ELEVATION
Ľ ( )	MED-VACUUM PLAN VIEW MED-VACUUM ELEVATION	A	MED-AIR PLAN VIEW MED-AIR ELEVATION	W	WAGD (OPT) PLAN VIEW WAGD (OPT) ELEVATION

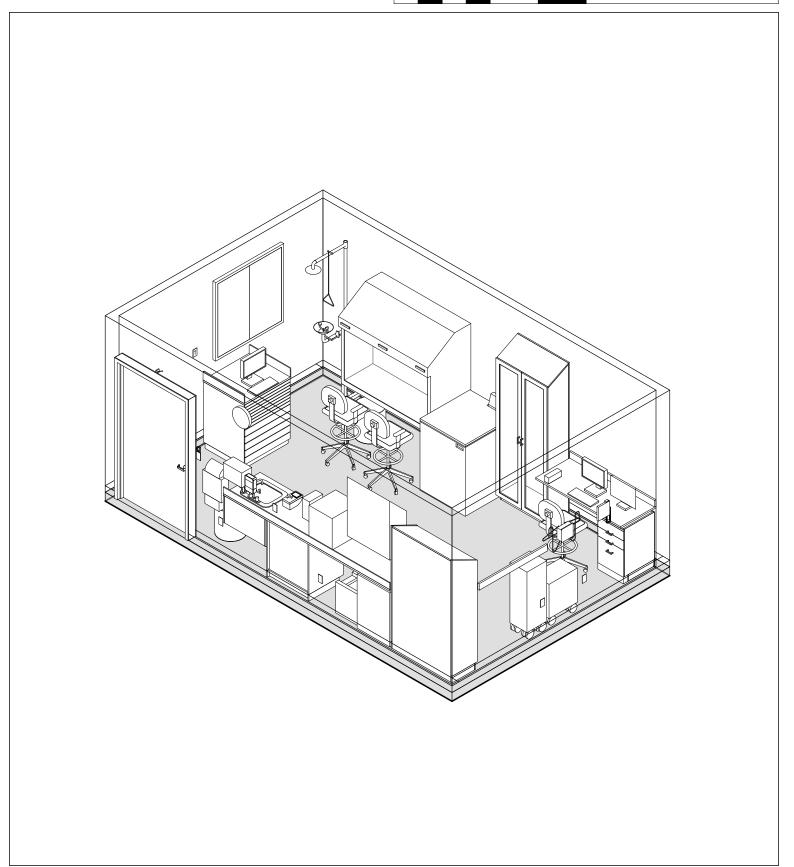


# NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) AXONOMETRIC

SKETCH TITLE

SCALE: 1/4" = 1'-0"







### NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) INTERACTIVE 3D PDF

VA		of Veterans Affairs	SKETCH TITLE 0' 4' 8'					16	
	The same of the sa		SCALE:						



DISPENSER, SOAP

**DISPOSABLE** 

### NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) FLOOR PLAN

SKETCH TITLE 4' SCALE: 1/4" = 1'-0"(CW090) CABINET, FLOOR (L1670) STANDING CENTRITUGE, RADIOISOTOPE. (F2700) LEAD-LINED READER, BAR CODE HAND HELD (M1801) (L2275 COMPUTER, HOOD, FUME, MICROPROCESSING. **RADIOISOTOPE** W/ FLAT PANEL BENCH, W/ **MONITOR GLOVEBOX** M1800> (F2030) MONITOR. WASTE COMPUTER RECEPTACLE. 20'-0" (C06M0) RADIOISOTOPE, CABINET, U/C/B, FILE LEAD LINE (6.1m)3'-6" DR, 30"X18"X22" (P5210) (1.07m)SHOWER, SAFETY, FREESTANDING. WITH EYE/FACE  $\Delta \sqrt{\Delta}$ ΄Ш  $\oplus$ WASH A1012 TELEPHONE, WALL (F0230) MTD, 1 LINE CHAIR, DRAFTING, ROTARY (x3) X3150 RACK. F3065 APRON/GLOVES, WHITE  $\Theta$ WALL MOUNTED BOARD/BULLETIN **RADIOPHARMACY** BOARD, COMBO X9305 (3.66m)**HOT LAB** CABINET, STORAGE, 240 NSF **LEAD LINED** X9310> X9925  $\bigcirc$ CABINET, STORAGE, NUCLEAR MED LEAD LINED **ROBOT** (C0039) (CT050) RAIL. APRON COUNTERTOP, (M2015) STAINLESS STEEL CABINET, STORAGE. FLAMMABLE, (A5145) **FREESTANDING** HOOK, GARMENT, DOUBLE, SS, (R6900) Set REFRIGERATOR, BIO SURFACE MTD RADIO/PHARM (F2000) FIRE RESISTANT (M2000) CABINET, W/H, 2 WASTE BASKET SHELF, 2 DOOOR, SINK, SS, SINGLE SLOPING TOP COMPARTMENT, X9315 10X19X16 ID SAFE, STORAGE, (A5106) **RADIUM** WASTE DISPOSAL (X9320) UNIT, SHARPS W/ SHIELD, L BLOCK, GLOVE DISPENSER **RADIUM HANDLING** (L2191) (A5080) CALIBRATOR, DISPENSER, **RADIOISOTOPE** PAPER TOWEL. T0025 SS, SURFACE METER RADIATION, MOUNTED SURVEY

NOTE: ALL COUNTERTOPS TO MATCH ROOM

CONTENT LIST UNLESS NOTED OTHERWISE

HANDS-FREE

EYE/FACE, SINK-MTD

P1965 EYE WASH,



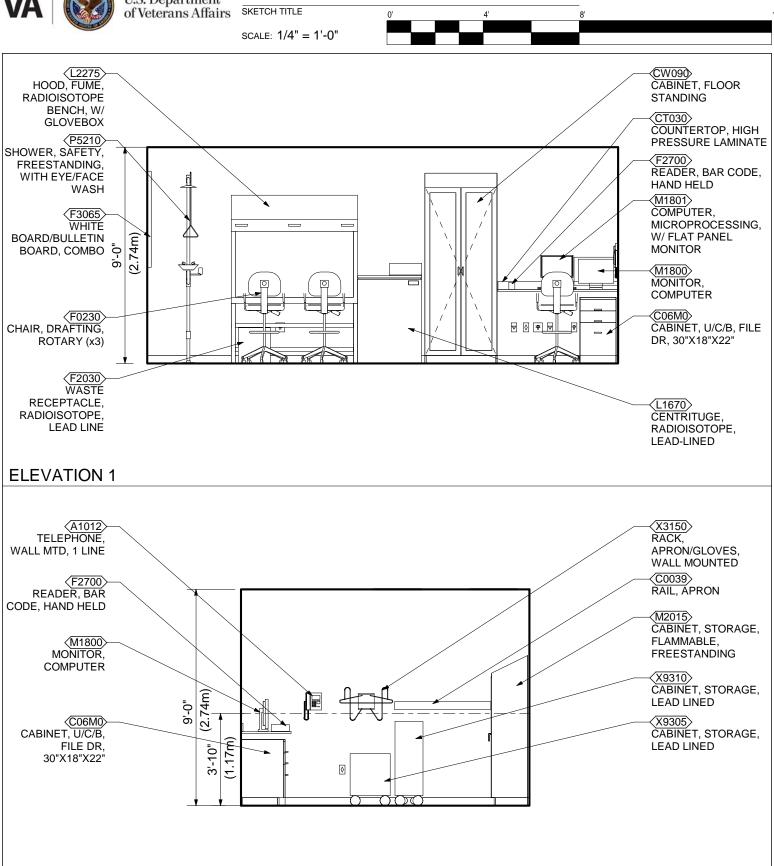
### NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) REFLECTED CEILING PLAN

SKETCH TITLE SCALE: 1/4" = 1'-0"X9845 MONITOR, RADIATION, AREA **CEILING LIGHT** B HVAC SUPPLY SPRINKLER **HEAD** B B B HVAC RETURN

## U.S. Department of Veterans Affairs

**ELEVATION 2** 

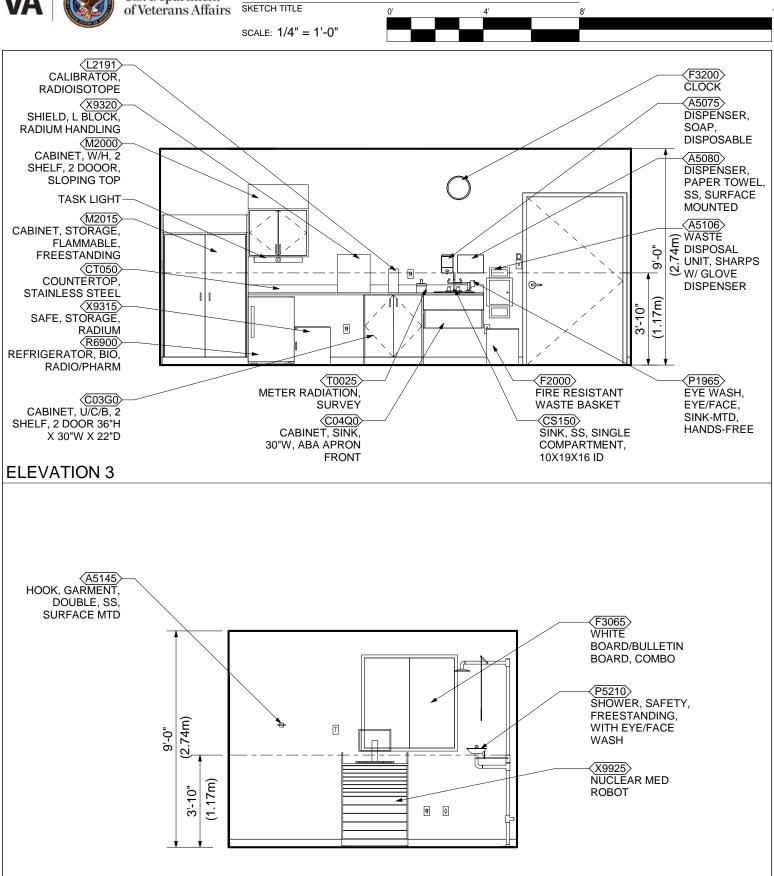
### NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) **ELEVATIONS**



### U.S. Department of Veterans Affairs

**ELEVATION 4** 

### NM Radiopharmacy / Hot Lab, Imgng Svcs (Cl227) **ELEVATIONS**



Room Data: NM Radiopharmacy/Hot Lab, Imgng Svcs (CI227)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: GWB
Ceiling Height: 9'-0" (2700mm)
Ceiling Finish: P
Wall Finish: m: GWB f:P
Wainscot: -Base: m: RES-3 at h: 4" (100mm)
Floor Finish: RES-3
Slab Depression: \*
Sound Protection: STC 40

#### Notes:

Doors:

 Depending on adjacencies, radioisotope handling processes, and isotopes used, structural floor depth, alone, may not provide sufficient shielding from areas above or below. Thickened slab and/or a slab depression for shielding materials may be indicated. Consult with a medical physicist.

m: Wood t: 15 dl: LEAD s: X

- 2. Provide a 4'-0" wide shielded door into the Radiopharmacy Hot Lab.
- Consider substantial weight in rolling loads when selecting flooring materials and substrates.

### LIGHTING

Refer to the current version of **Lighting Design Manual** section 6 – Administrating Areas
Lighting Guidelines for lighting design
consideration.

### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### COMMUNICATION/SPECIAL SYSTEMS

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	
Code Blue:	Yes
Public Address:	
Radio/Entertainment:	
MATV:	
CCTV:	
MID:	
Security/Duress:	
VTEL:	
VA Satellite TV:	

#### Notes:

4-port telecommunication outlet for PACS station



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Note 1
Medical Vacuum: Note 1
Oxygen: Note 1

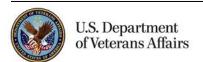
#### Notes:

- 1. Consult with Station on specific medical gas requirements
- 2. Safety shower with eye / face wash and floor drain.

#### Room Contents: NM Radiopharmacy/Hot Lab, Imgng Svcs (CI227)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	8	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
C0039	Rail, Apron, 4x48x1	СС	1	Apron rail. Also referred to as an apron front, apron panel, or knee space rail. Used to close in front knee space area and/or provide work surface support between two base cabinets or a base cabinet and wall. Apron rails should be ordered in pairs to provide both front and rear work surface support.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	1	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	1	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.

JSN	Content Name	Acq Code	Qty	Description
CS150	Sink, SS, Single Compartment, 10x19x16 ID	сс	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ030	Countertop, High Pressure Laminate	СС	1	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.
СТ050	Countertop, Stainless Steel	СС	1	Stainless steel countertop (composition of heavy-gauge Type No. 304 stainless steel) having a smooth satin finish and integral 4" backsplash/curb. Also referred to as a corrosion-resistant steel work surface or work top. Available in various depths. Used in areas where excellent ease of cleaning, abrasion resistance, bacteria resistance, impact resistance, load capacity and moisture resistance, are of concern. Pricing based upon a 24" depth.
CW090	Cabinet, Floor Standing, 5 SH, 2 GDO, ST, 95"x36"	СС	1	Floor standing storage cabinet approximately 95" H x 36" W x 16" D with five adjustable shelves, framed glass hinged doors, and sloping top. Also referred to as a framed glass hinged double door case. For general purpose use throughout the facility.
F0230	Chair, Drafting, Rotary	VV	3	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2030	Waste Receptacle, Radioisotope, Lead Line	VV	1	Disposal unit for low-level radioactive waste. Constructed of a minimum of 18-guage stainless steel and lined with .125" (3mm) lead. Approximately 20 quart capacity.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.



JSN	Content Name	Acq Code	Qty	Description
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
L1670	Centrifuge, Refrigerated, Floor Model	VV	1	Refrigerated centrifuge. This is a floor standing unit with a solid state speed control system that has speeds ranging from approximately 150 to 6000 RPM. Other characteristics include a temperature range of -9 to +39 degrees C., dual range digital timer, rotor imbalance detection, a programmable memory and a dynamic brake with three deceleration rates. The unit also has a refrigeration system that consists of a low maintenance compressor and a coil wrapped insulated guard bowl. Used in laboratories for processing heat sensitive samples.
L2191	Calibrator, Radioisotope	VV	1	Radioisotope dose calibrator. The characteristics/components include a self test feature that verifies the operation of the entire unit, continuous or on demand activity measurement, 0.1-199.9 micro Curie resolution range, response time less than 5 seconds, a hermetically sealed pressurized argon ionization chamber and an accuracy of plus or minus 0.5%. Used to ensure the dose rate of the radioisotope prescribed.
L2275	Hood, Fume, Radioisotope, Bench, w/Glovebox	СС	1	Bench type radioisotope fumehood. Characteristics/components include a glove-box, a 75 cfm. blower with indicating switch and variable speed power stat and manometer mounted on box front to indicate air flow, 1/4" safety glass viewing panel, three polarized and grounded electrical outlets with indicating switches, a 24 inch fluorescent light with fixtures and switch, two 8 inch double grooved glove ports and neoprene gloves, an inlet filter, two absolute filters with connecting hoses and 40 inches of 2 inch spiral exhaust hose with clamps and a variable height mobile bench, 30-37"H. Unit is customized to fit the specified use requirements.
M1800	Monitor, Computer	VV	1	A high definition LED computer monitor with minimum 1920 x 1080 resolution, 4ms response time, 25 inch class display size, compatible with desk or arm mounted. Monitor is VESA compatible and Energy Star compliant.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M2000	Cabinet, Wall / Counter Mounted,Spill Containment	VV	1	Storage cabinet for holding spill cleanup components. Features include construction of 18 gauge steel, flush-mounted locking handle, galvanized steel shelving, continuous piano hinge and in a variety of colors. Available options not priced include additional shelves, cabinet venting and cabinet grounding / bonding.



JSN	Content Name	Acq Code	Qty	Description
M2015	Cabinet, Storage, Flammable, Freestanding	VV	1	Freestanding flammable safety storage cabinet. Size as required. Unit is of all welded steel wall construction with vented grounding attachments, raised leak proof door sill and adjustable shelving. Equipped with swinging doors and built-in key lock. Designed for storage of flammable fluids. Complies with OSHA standards, is FM approved and designed IAW NFPA 30.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
P5210	Shower, Safety, Freestanding, With Eye/Face Wash	СС	1	Deluge safety shower. This is a complete, maximum protection safety station consisting of a free-standing emergency shower and an eye/face wash fixture. Used anywhere exposure to hazardous substances may occur.
R6900	Refrigerator, Bio, Radio/Pharm, Approx. 5 CuFt	VV	1	Radiopharmaceutical and biological refrigerator with key-lock door. This unit is lead-lined with 1/8 inch lead on all sides for radiopharmaceuticals, biologicals and other radioactive materials. Freezer compartment and refrigerator eliminates thermal lag placement of cooling units inside the shielding. This unit is used as a storage unit in hospitals and laboratories that handle radioactive materials.
Т0025	Meter, Radiation Survey	VV	1	Radiation survey meter. Characteristics/components include hand held and battery operated with a built-in detector; and ability to detect alpha, beta, gamma and x-ray radiation. This unit is used for spot-checking laboratories and other work areas for contamination of equipment, counter tops and floors. The unit is also well suited for detecting accidental exposures to personnel clothes, checking x-ray equipment for possible leakage or locating small spills.
X9925	Injector, PET Infusion	VV	1	PET Infusion system that automatically measures and delivers patient-specific FDG doses on demand. Utilizing a fully shielded mobile design, the system infuses accurate, repeatable, patient-specific doses from multidose vials, all managed through a simple touchscreen. Includes HIS/RIS/PACS connectivity.
X3150	Rack, Apron/Gloves, Wall Mounted	СС	1	Apron and gloves rack. This is a wall unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum. The unit's convenient on wall storage will prolong the useful life of your protection aprons by helping prevent damage to internal components.
X9305	Cabinet, Storage, Lead Lined	VV	1	Lead lined storage cabinet. This unit is constructed of rigid steel walls with a 1/16" lead liner between each wall. The lead liner is formed into the cover so that when closed, positive x-ray protection is assured. Designed to hold cassettes up to the 14" X 17" size. This unit is used in nuclear medicine and radioisotope lab.



JSN	Content Name	Acq Code	Qty	Description
X9310	Cart, Transport, Radium	VV	1	Radium transport cart. The cart is a rugged, enameled-steel and equipped with two wheels, a caster and a long handle. It is designed for safety and convenience when transporting radioactive material between a permanent storage safe and the patient's bedside.
X9315	Safe, Storage, Radium	VV	1	Radium storage safe. The unit assures optimum shielding against exposure to radioisotopes . It is made of steel (CRS) with a minimum of 2 inches of lead lining, has a door key-lock and is fire-proof.
X9320	Shield, L Block, Radium Handling	VV	2	L-block solid lead shield. 5 cm thick shield to protect the head and torso from radiation while working with radium and other implant seeds. Provides tilted 5 cm thick leaded glass window which is at least 10 cm high by 20 cm wide with a density of 6.2 gm per cubic cm. Overall size is 22 inches high, 14 inches wide and 16.5 inches deep. Designed to sit on a work table in front of a radium safe to provide protection while working with the seeds.
X9346	Phantom, CT Performance	VV	1	Meets guidelines in AAPM Report #1 For Performance Evaluation and Quality Assurance of CT Scanners. Consists of an 8.5" diameter acrylic tank that contains a beam width insert, a spatial resolution and linespread block, a high-contrast insert and a means for inserting alignment pins and/or TLD holders. Measures nine separate performance parameters: routine standardization of alignment, beam width, spatial uniformity, linearity/contrast, spatial resolution, linespread, noise, size independence and adsorbed dose. All components of the phantom are housed in a compact, transparent tank which holds the system together in the correct orientation.
X9845	Monitor, Radiation, Area	VV	1	Area radiation monitor. This unit has a 3 decade logarithmic meter ranging from 0.1 mR/hr to 100 mR/hr. When the radiation dose rate exceeds the predetermined alarm level, a loud two-tone alarm and a flashing red light are activated. The detector and circuitry can withstand high levels of radiation. The unit assures that persons working in and around radiation areas are adequately alerted to hazardous levels of gamma- and x-rays.



#### Class 1 PET/CT Scanning Room, Imgng Svcs (Cl242) DISCLAIMER

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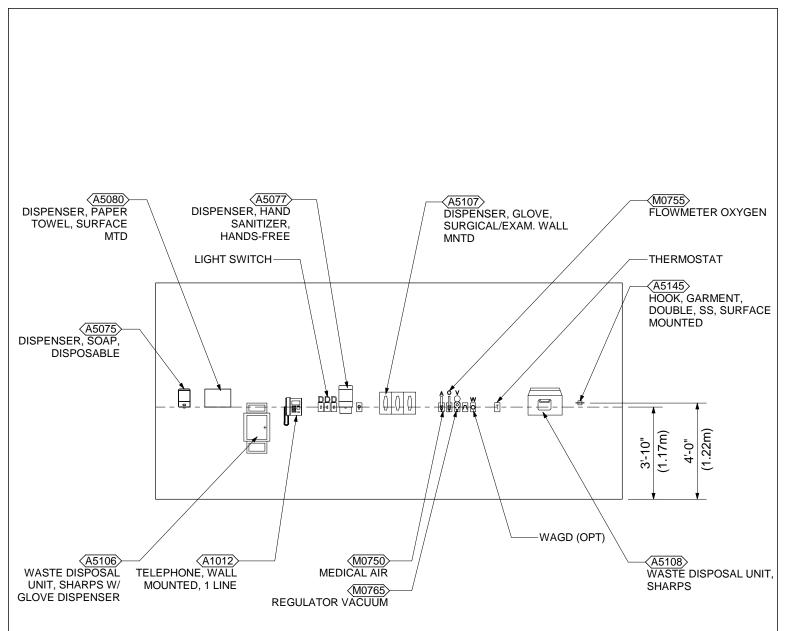
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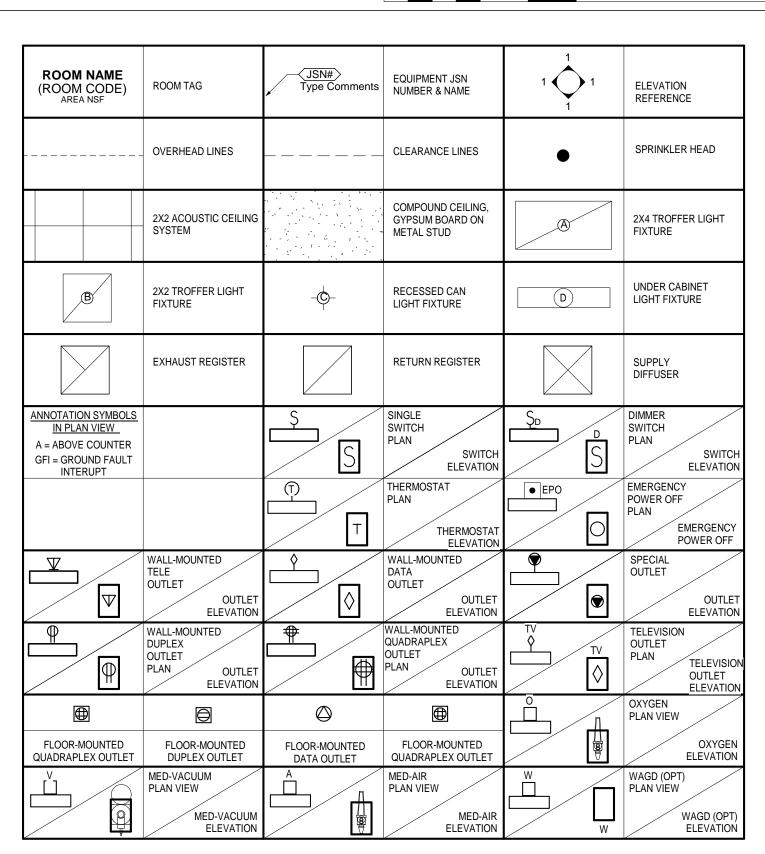


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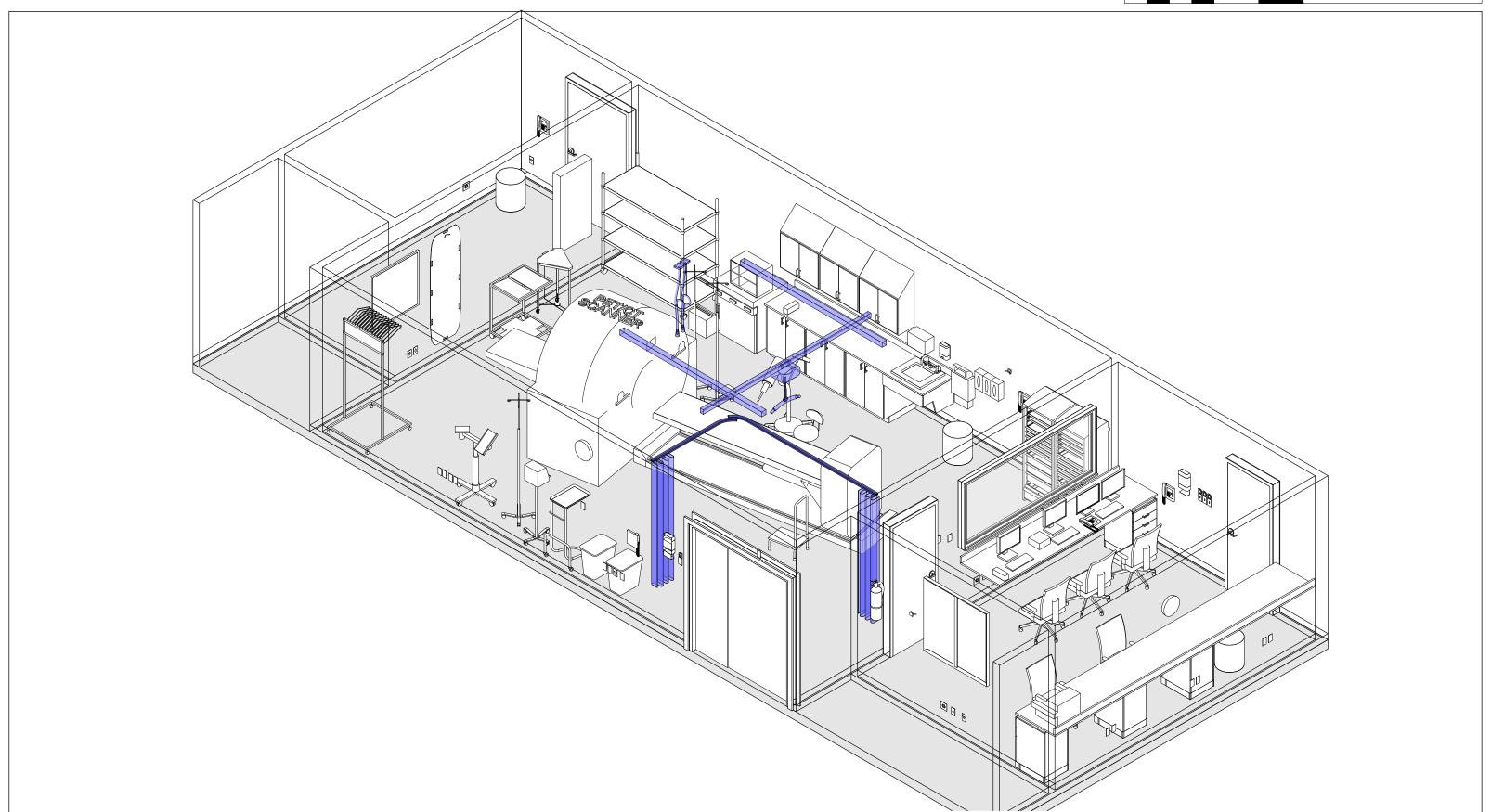
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### Class 1 PET/CT Scanning Room, Imgng Svcs (Cl242) LEGEND



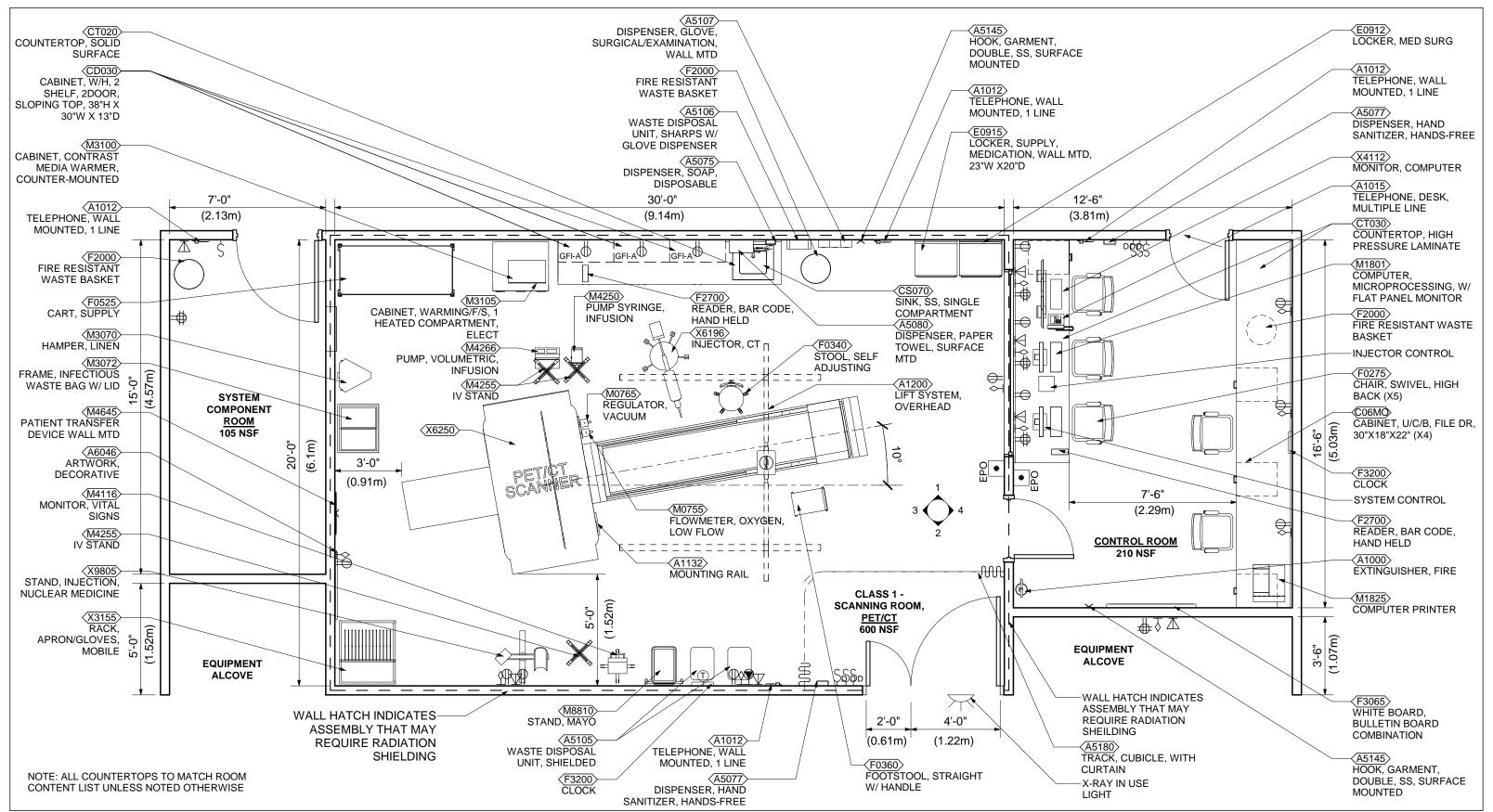


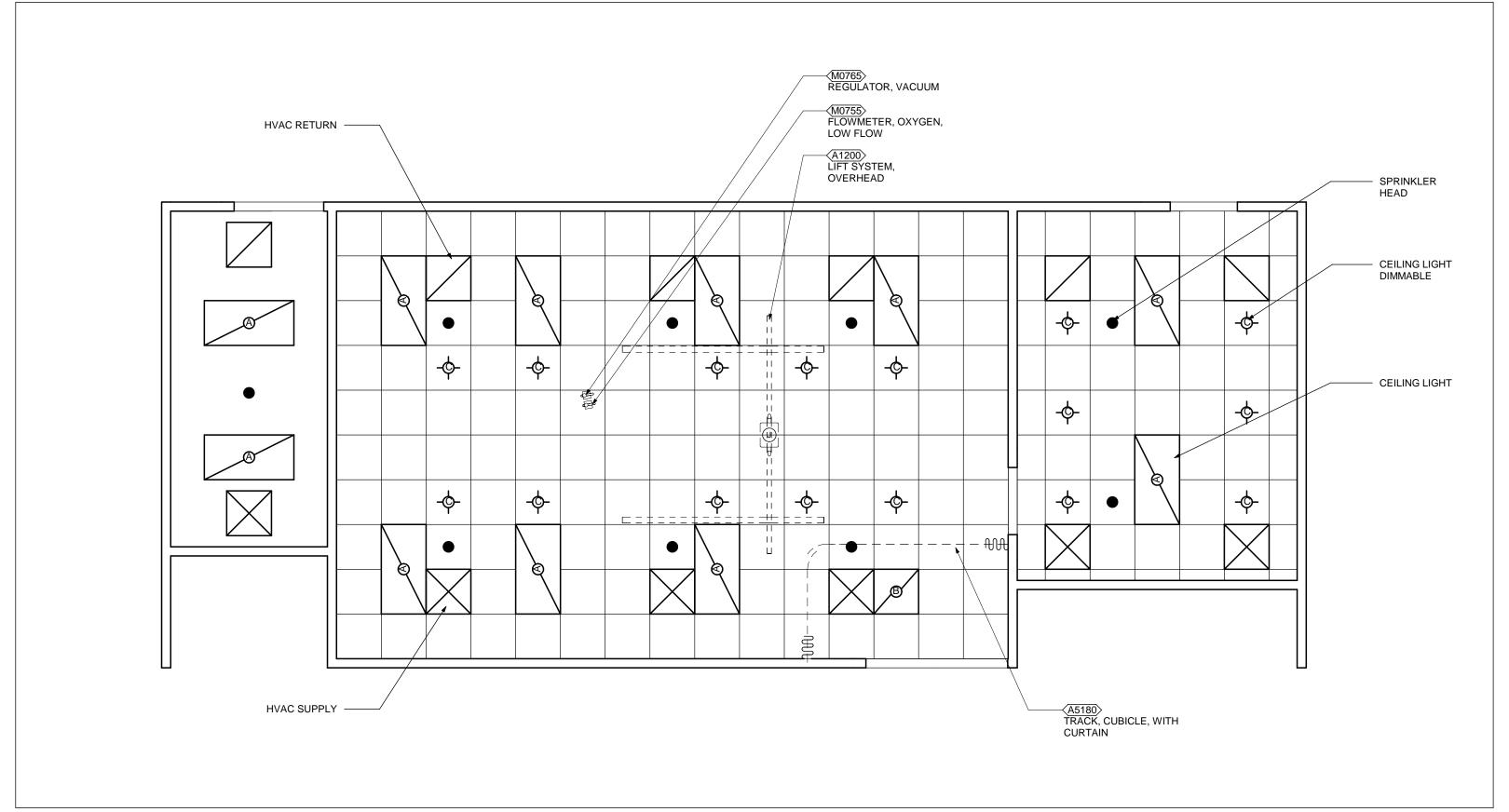




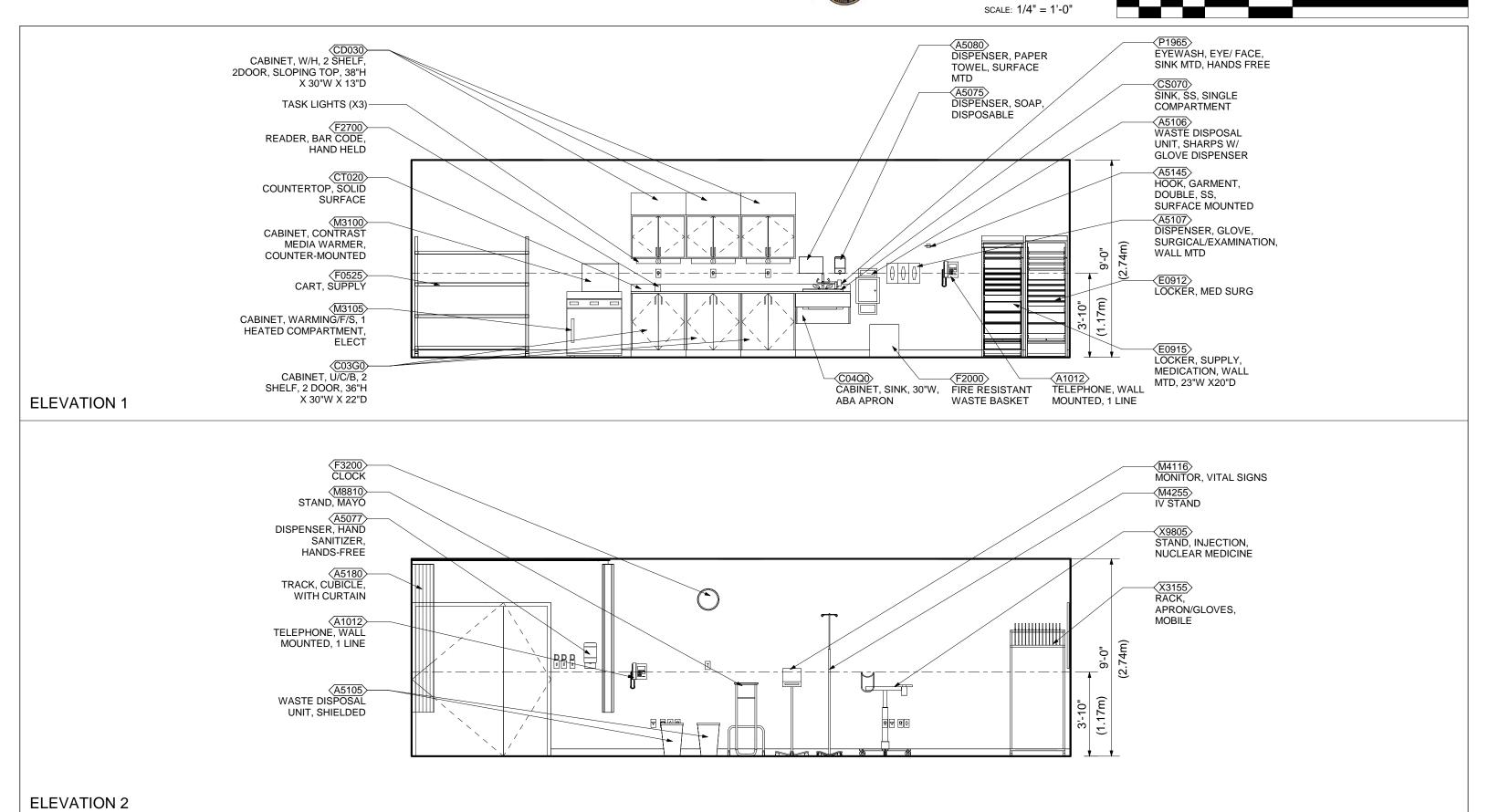
# Class 1 PET/CT Scanning Room, Imgng Svcs (Cl242) INTERACTIVE 3D - PDF

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of veterans Ana	SCALE:	





ELEVATIONS
SKETCH TITLE 0' 4' 8'

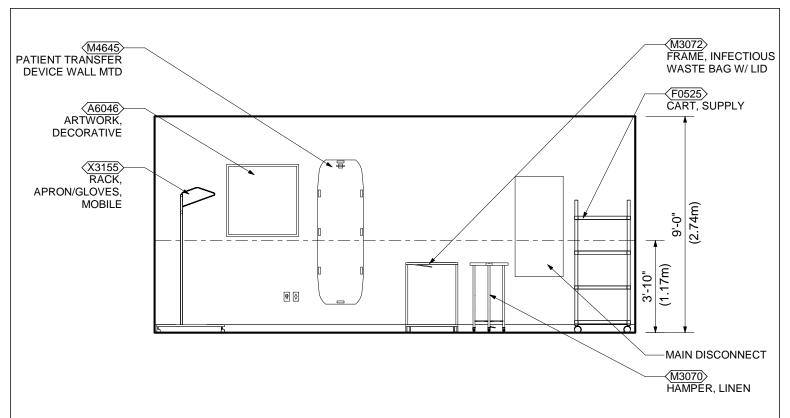




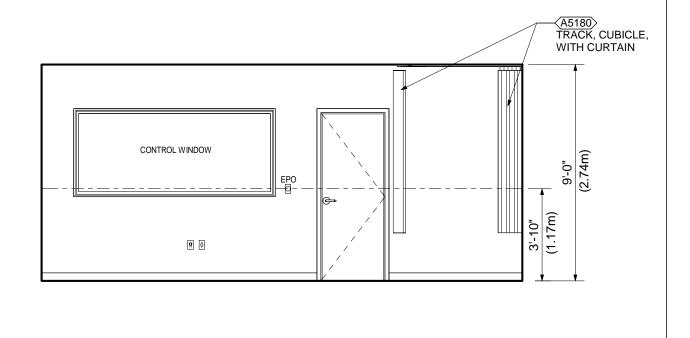
# Class 1 PET/CT Scanning Room, Imgng Svcs (Cl242) ELEVATIONS

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"



#### **ELEVATION 3**



**ELEVATION 4** 

Room Data: Class 1 PET/CT Scanning Room, Imgng Svcs (CI242)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RES-3 at h: 4" (100mm) Floor Finish: RES-3 Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD s: X

#### Notes:

- Depending on adjacencies, radioisotope handling processes, and isotopes used, structural floor depth, alone, may not provide sufficient shielding from areas above or below. Thickened slab and/or a slab depression for shielding materials may be indicated. Consult with a medical physicist.
- 2. Provide a 6'-0" (4'-0 active & 2'-0 inactive) wide shielded door into the Scanning Room, PET/CT.
- 3. Provide a 3'-0" wide shielded door from the Class 1 Scanning Room, PET/CT to the Control Room.
- Provide a shielded viewing window from the Control Room into the Class 1 Scanning Room, PET/CT.

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	Yes
Code Blue:	Yes
Public Address:	
Radio/Entertainment:	
MATV:	
CCTV:	
MID:	
Security/Duress:	
VTEL:	
VA Satellite TV:	

#### Notes:

- 4-port telecommunication outlet per
   PACS station
- 2. Junction box above ceiling for data connection to modular ceiling service column.



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Min. 1 outlet/room OVHD
Oxygen: Min. 1 outlet/room OVHD

#### Room Contents: Class 1 PET/CT Scanning Room, Imgng Svcs (Cl242)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5105	Waste Disposal Unit, Sharps, Container Shield	VV	2	Container shield for disposal of low-energy gamma radiation residue syringes. Constructed of steel with a minimum of .125" lead. Features include top with a sliding port and carrying handle.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.

JSN	Content Name	Acq Code	Qty	Description
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	сс	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0912	Locker, Supply, Med Surg, Wall Mtd	VV	1	Medical/Surgical Supply locker, Wall Mounted, approximately 23"W x 20"D. THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  4 Tray/Shelves  5 Drawers, 3"H  2 Drawers, 6"H  2 Tray/Shelf Dividers Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.
E0915	Locker, Supply, Medication, Wall Mtd, 23"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  2 Tray/Shelves  1 Locked Drawer w/Locked Lid, 6"H  5 Drawers, 3"H  3 Drawers, 6"H  2 Tray/Shelves Divider Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F0525	Cart, Supply	VV	1	Medical/surgical supply cart with swivel or combination swivel and rigid non-marking rubber tire casters, and from two (2) to five (5) adjustable shelves. Unit designed to accept a variety of function related accessories (drawers, shelves). Note: Carts are typically made to specification to accommodate the facility's transport system. Covers are available as accessories for the carts.



JSN	Content Name	Acq Code	Qty	Description
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3100	Cabinet, Contrast Media Warmer, Counter-Mounted	VV	1	Countertop storage for contrast media, for use in radiography imaging. Features include locking door and a minimum of two shelves.

JSN	Content Name	Acq Code	Qty	Description
M3105	Cabinet, Warming, F/S, 1 Heated Compartment, Elect	СС	1	Freestanding, single or double door warming cabinet with 1 compartment. Compartment and exterior walls are made of stainless steel. Thick fiberglass insulation maintains the interior temperature and prevents the exterior surface from becoming too hot. Equipped with a sealing door, thermostatic temperature control, status display, heat indicating light, over temperature protection, alarms and an air circulating fan. Unit may have an optional temperature recorder. Manufacturer recommends using a fused disconnect switch in the electrical power circuit. Cabinet may also be installed in a recess. Designed for heating and storing of solutions and blankets used in patient care areas.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4250	Pump, Syringe, Infusion	VV	1	The infusion syringe pump ensures highly accurate volume delivery and consistent flow for small volumes (<50 ml) of pharmacologic agents or thick feeding solutions. It shall be small, lightweight construction, making it transportable. Shall have menu-driven programming capable of flow rates (e.g. 0.1 or 1.0 mL/hr) that are intended for long-term bedside use and/or critical care patient transport, plunger positioning sensor, LCD display for easy viewing, volume limit programming to serve as a convenient cue of volume or dose delivery completion and multiple delivery modes for all applications requiring precisely controlled infusion rates. The infusion pump shall have automatic syringe size sensing which will give the flexibility to accept a wide range of syringe sizes (up to 60 mL) from different manufacturers. Shall be battery powered/AC adapter.
M4255	Stand, IV, Adjustable	VV	3	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4266	Pump, Volumetric, Infusion, Multiple Line	VV	1	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.



JSN	Content Name	Acq Code	Qty	Description
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6196	Injector, CT	VC	1	CT injector. This unit is a specialized radiographic system that provides sharp, well-defined visual images of the vascular anatomy. The injector introduces a vision radiopaque fluid (contrast medium) into an artery or vein through a small catheter, making vessels contrast with their more radiolucent surrounding. The unit incorporates an electromechanical or pneumatically driven syringe to deliver the contrast medium. The syringe assemblies consist of an electric motor connected to a jackscrew that moves the syringe piston into or out of the syringe barrel. The unit is used in hospitals with radiographic procedures. The unit can be ceiling, wall, or remote stand mounted.
X6250	Rad Unit, CT/ Positron Emission Tomography PET/CT	VC	1	Positron emission tomography with computed tomography (PET/CT) is a medical imaging technique using a device that combines in a single gantry system both a Positron Emission Tomography (PET) and an x-ray Computed Tomography (CT). Images acquired from both devices can be taken sequentially, in the same session from the patient and combined into a single superposed (co-registered) image. Functional imaging obtained by PET, depicts the spatial distribution of metabolic or biochemical activity in the body can be more precisely aligned or correlated with anatomic imaging obtained by CT scanning. Two- and three-dimensional image reconstruction may be rendered as a function of a common software and control system. The unit will be an OpenView gantry design for enhanced patient experience for claustrophobic and pediatric patients and patient access for clinicians. See PDF for preferred room layout.
x9805	Stand, Injection, Nuclear Medicine	VV	1	An injection stand designed for arm positioning for radionuclide injections. The arm rest holds the patient's arm firmly in place. A utility tray sits adjacent to the armrest to hold supplies and includes a lead-lined multi syringe holder. The stand height is adjustable approximately from 29" to 44." Casters allow the stand to be rolled into position or out of the way for storage. It is structurally balanced so that it won't tip over.



Room Contents: Class 1 PET/CT Control Room, Imgng Svcs (CI243)

JSN	Content Name	Acq Code	Qty	Description
A1000	Extinguisher, Fire	VV	1	10 pound dry chemical fire extinguisher with charging gauge. Other types and sizes are available.
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	4	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.

JSN	Content Name	Acq Code	Qty	Description
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1825	Printer, Computer	VV	1	High resolution computer printer with a variety of type styles and sheet/envelope feeder trays. Database information reflects network ready, medium duty office style laser printers. Other types of printers (bubble jet, dot matrix, line or plotter) as well as light or heavy use capabilities are available.
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.

#### Room Contents: Class 1 PET/CT System Component Room, Imgng Svcs (CI244)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.





### Class 2 PET/CT Scanning Room, Imgng Svcs (Cl251) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

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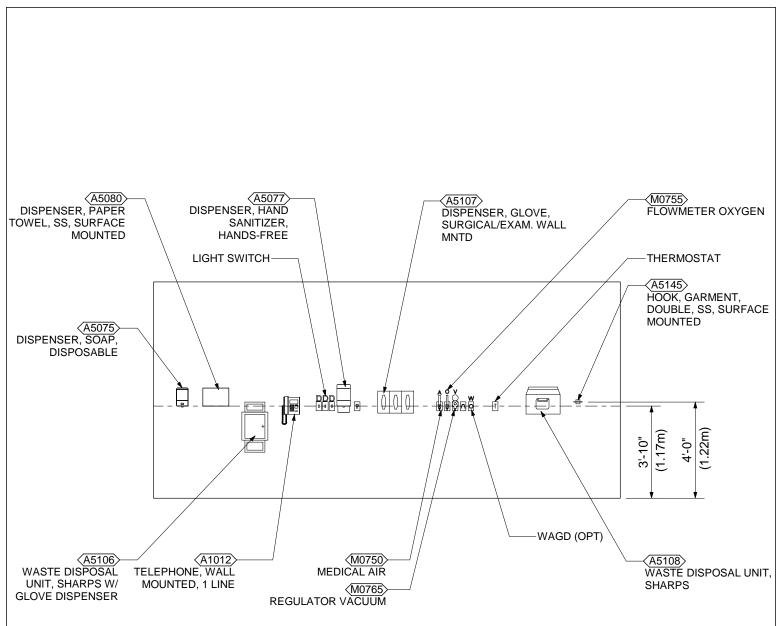
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 2 PET/CT Scanning Room, Imgng Svcs (Cl251) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"

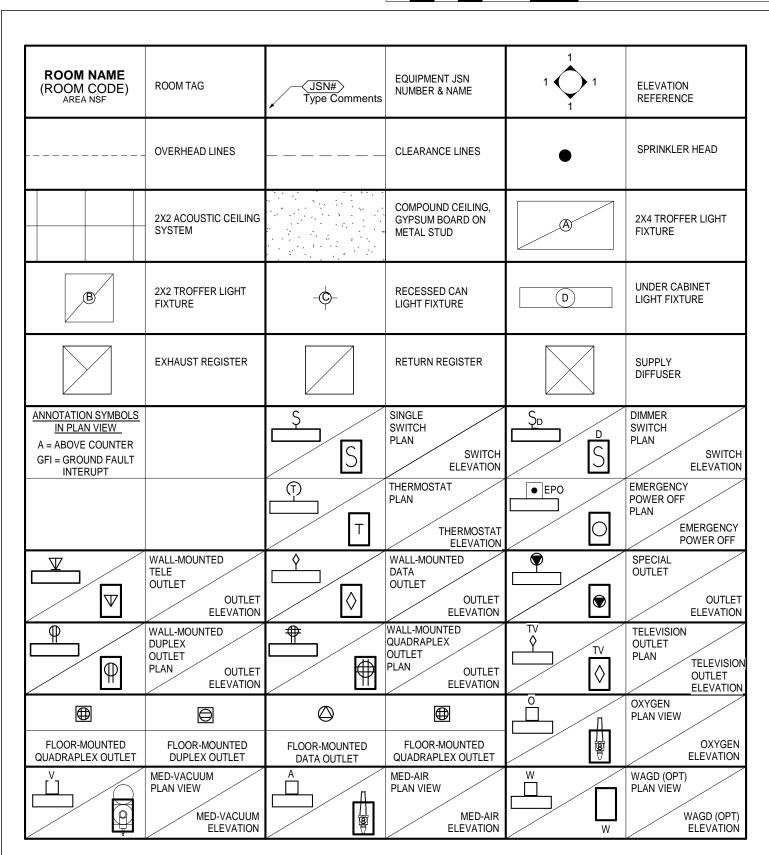


#### **Drawing Notes:**

- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



### Class 2 PET/CT Scanning Room, Imgng Svcs (Cl251) LEGEND



SCALE: 1/4" = 1'-0"



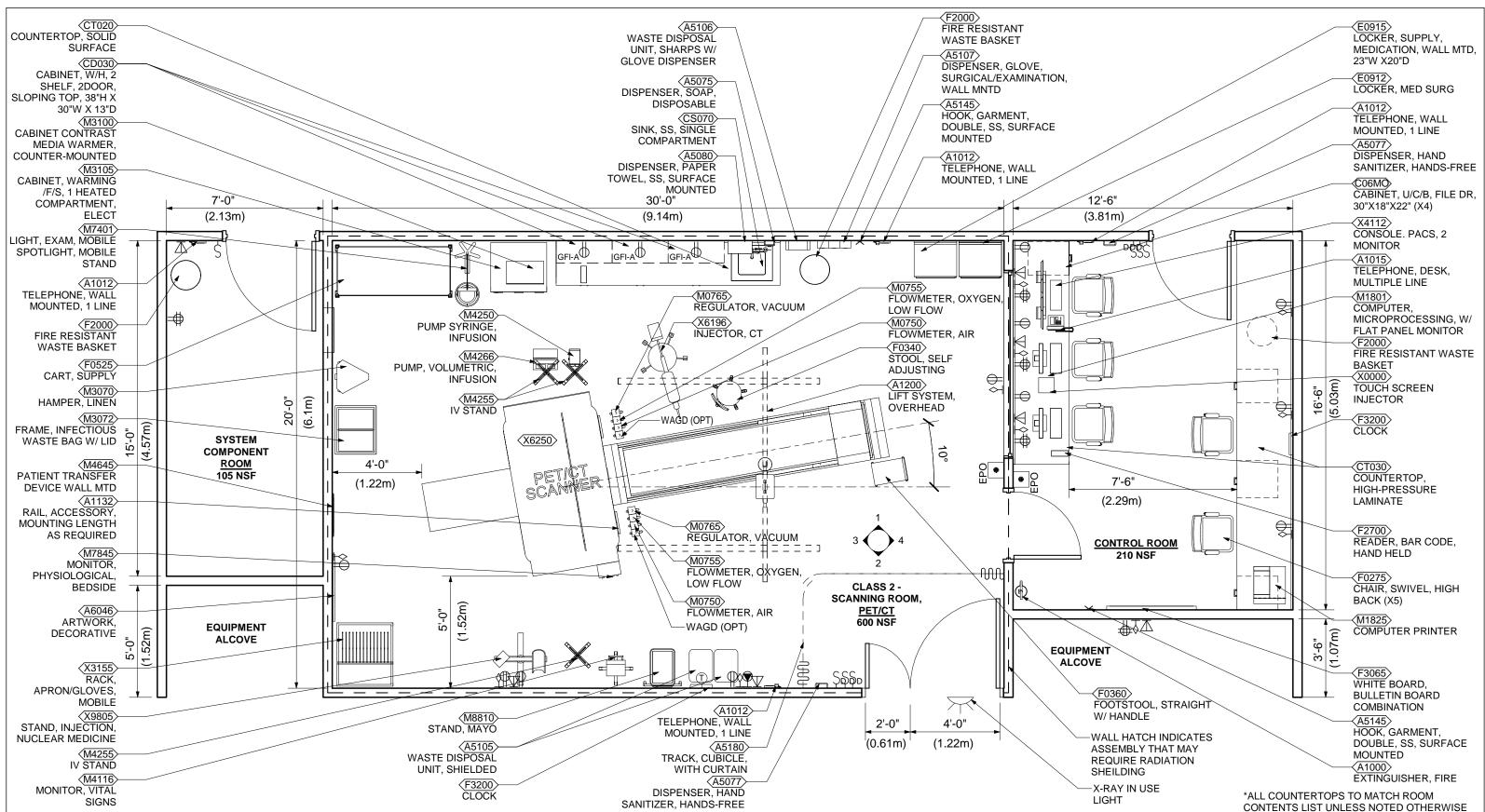


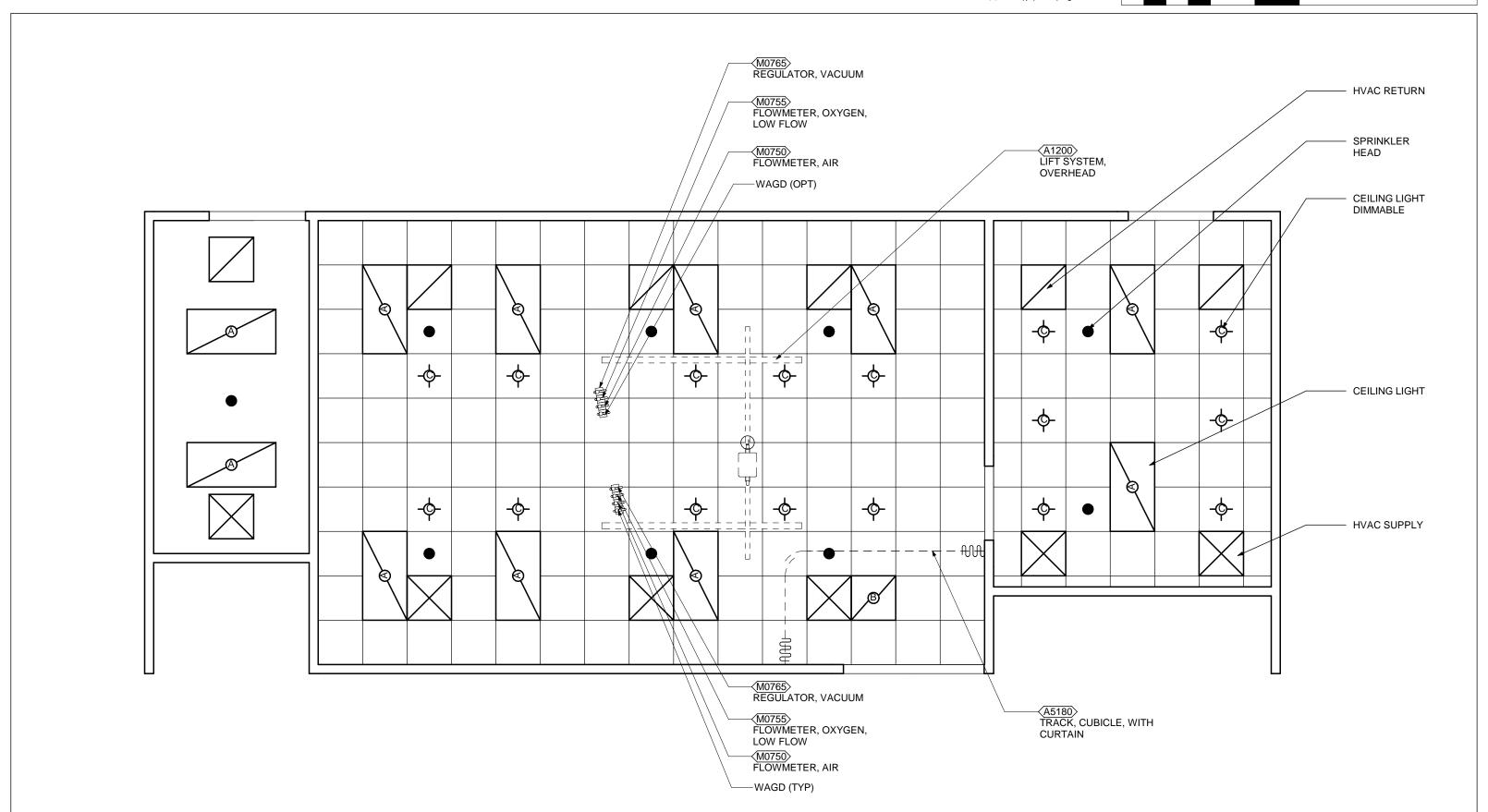


# Class 2 PET/CT Scanning Room, Imgng Svcs (Cl251) INTERACTIVE 3D PDF

U.S. Department of Veterans Affairs

INTERAC SCALE:

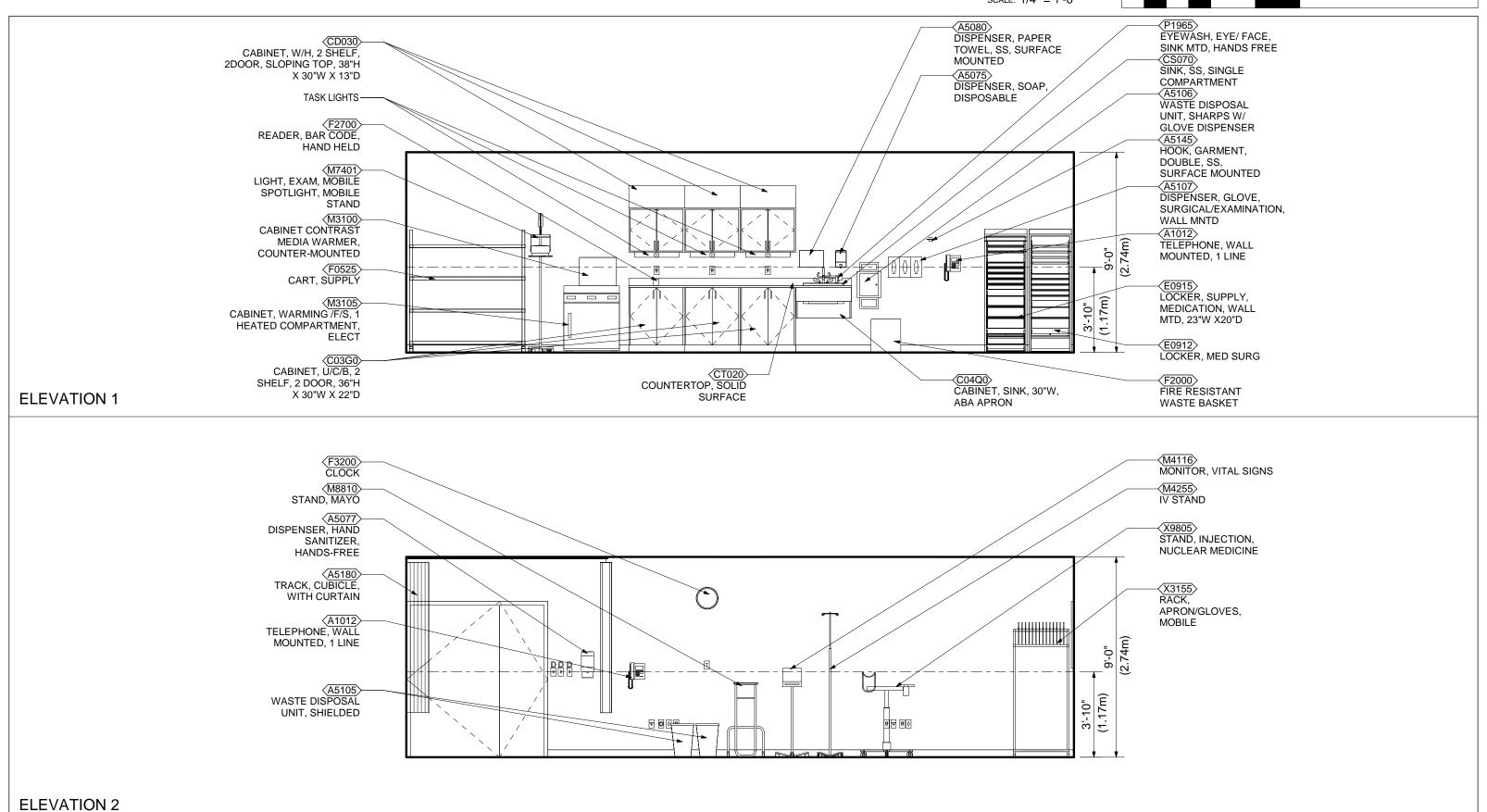




ELEVATIONS
SKETCH TITLE

SCALE: 1/4" = 1'-0"

8'

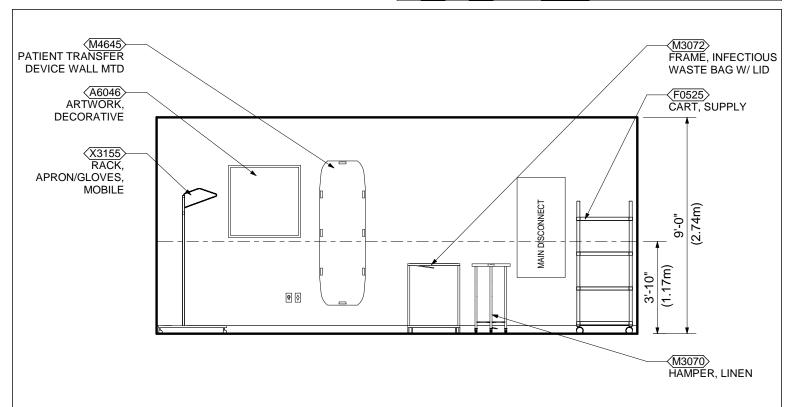




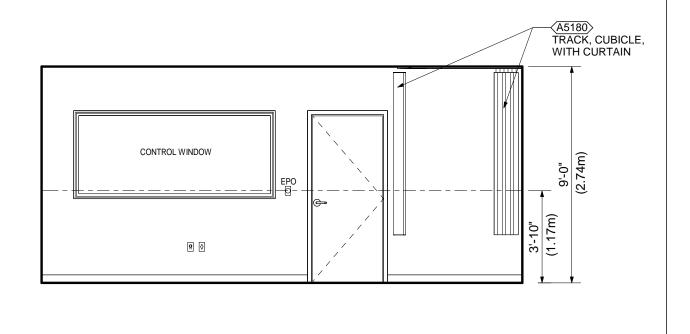
# Class 2 PET/CT Scanning Room, Imgng Svcs (Cl251) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **ELEVATION 3**



**ELEVATION 4** 

Room Data: Class 2 PET/CT Scanning Room, Imgng Svcs (CI251)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RES-3 at h: 4" (100mm) Floor Finish: RES-3 Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD s: X

- Depending on adjacencies, radioisotope handling processes, and isotopes used, structural floor depth, alone, may not provide sufficient shielding from areas above or below. Thickened slab and/or
  - a slab depression for shielding materials may be indicated. Consult with a medical physicist.
- Provide a 6'-0" (4'-0 active & 2'-0 inactive) wide shielded door into the Scanning Room, PET/CT.
- 3. Provide a 3'-0" wide shielded door from the Scanning Room, PET/CT to the Control Room.
- Provide a shielded viewing window from the Control Room into the Scanning Room, PET/CT.

#### LIGHTING

Notes:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	Yes
Code Blue:	Yes
Public Address:	
Radio/Entertainment:	
MATV:	
CCTV:	
MID:	
Security/Duress:	
VTEL:	
VA Satellite TV:	

#### Notes:

- 1. 4-port telecommunication outlet per PACS station
- 2. Junction box above ceiling for data connection to modular ceiling service column.



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### **PLUMBING AND MEDICAL GASES**

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Min. 2 outlets/room OVHD
Medical Vacuum: Min. 2 outlets/room OVHD
Oxygen: Min. 2 outlets/room OVHD
Waste Anesth Gas: Rec 2 outlets/room OVHD

### Room Contents: Class 2 PET/CT Scanning Room, Imgng Svcs (CI251)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	2	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5105	Waste Disposal Unit, Sharps, Container Shield	VV	2	Container shield for disposal of low-energy gamma radiation residue syringes. Constructed of steel with a minimum of .125" lead. Features include top with a sliding port and carrying handle.
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	VV	1	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.

JSN	Content Name	Acq Code	Qty	Description
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0912	Locker, Supply, Med Surg, Wall Mtd	VV	1	Medical/Surgical Supply locker, Wall Mounted, approximately 23"W x 20"D. THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  4 Tray/Shelves  5 Drawers, 3"H  2 Drawers, 6"H  2 Tray/Shelf Dividers Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.
E0915	Locker, Supply, Medication, Wall Mtd, 23"W x 20"D	VV	1	THIS TYPICAL INCLUDES:  1 Wall Mounted Rail  1 Locked Storage Container  2 Tray/Shelves  1 Locked Drawer w/Locked Lid, 6"H  5 Drawers, 3"H  3 Drawers, 6"H  2 Tray/Shelves Divider Drawer Organizer Bins Consider the need for an E0921 to transport the locker from place to place.
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
F0525	Cart, Supply	VV	1	Medical/surgical supply cart with swivel or combination swivel and rigid non-marking rubber tire casters, and from two (2) to five (5) adjustable shelves. Unit designed to accept a variety of function related accessories (drawers, shelves). Note: Carts are typically made to specification to accommodate the facility's transport system. Covers are available as accessories for the carts.

JSN	Content Name	Acq Code	Qty	Description
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	2	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	2	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M3100	Cabinet, Contrast Media Warmer, Counter-Mounted	VV	1	Countertop storage for contrast media, for use in radiography imaging. Features include locking door and a minimum of two shelves.



JSN	Content Name	Acq Code	Qty	Description
M3105	Cabinet, Warming, F/S, 1 Heated Compartment, Elect	СС	1	Freestanding, single or double door warming cabinet with 1 compartment. Compartment and exterior walls are made of stainless steel. Thick fiberglass insulation maintains the interior temperature and prevents the exterior surface from becoming too hot. Equipped with a sealing door, thermostatic temperature control, status display, heat indicating light, over temperature protection, alarms and an air circulating fan. Unit may have an optional temperature recorder. Manufacturer recommends using a fused disconnect switch in the electrical power circuit. Cabinet may also be installed in a recess. Designed for heating and storing of solutions and blankets used in patient care areas.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4250	Pump, Syringe, Infusion	VV	1	The infusion syringe pump ensures highly accurate volume delivery and consistent flow for small volumes (<50 ml) of pharmacologic agents or thick feeding solutions. It shall be small, lightweight construction, making it transportable. Shall have menu-driven programming capable of flow rates (e.g. 0.1 or 1.0 mL/hr) that are intended for long-term bedside use and/or critical care patient transport, plunger positioning sensor, LCD display for easy viewing, volume limit programming to serve as a convenient cue of volume or dose delivery completion and multiple delivery modes for all applications requiring precisely controlled infusion rates. The infusion pump shall have automatic syringe size sensing which will give the flexibility to accept a wide range of syringe sizes (up to 60 mL) from different manufacturers. Shall be battery powered/AC adapter.
M4255	Stand, IV, Adjustable	VV	3	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4266	Pump, Volumetric, Infusion, Multiple Line	VV	1	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.



JSN	Content Name	Acq Code	Qty	Description
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
X3155	Rack, Apron/Gloves, Mobile	VV	1	Apron and gloves rack. This is a mobile unit which holds aprons and gloves. The body is heavy gauge steel finish in gray or green baked enamel, glove and apron holding arms are aluminum.
X6196	Injector, CT	VC	1	CT injector. This unit is a specialized radiographic system that provides sharp, well-defined visual images of the vascular anatomy. The injector introduces a vision radiopaque fluid (contrast medium) into an artery or vein through a small catheter, making vessels contrast with their more radiolucent surrounding. The unit incorporates an electromechanical or pneumatically driven syringe to deliver the contrast medium. The syringe assemblies consist of an electric motor connected to a jackscrew that moves the syringe piston into or out of the syringe barrel. The unit is used in hospitals with radiographic procedures. The unit can be ceiling, wall, or remote stand mounted.



JSN	Content Name	Acq Code	Qty	Description
X6250	Rad Unit, CT/ Positron Emission Tomography PET/CT	VC	1	Positron emission tomography with computed tomography (PET/CT) is a medical imaging technique using a device that combines in a single gantry system both a Positron Emission Tomography (PET) and an x-ray Computed Tomography (CT). Images acquired from both devices can be taken sequentially, in the same session from the patient and combined into a single superposed (co-registered) image. Functional imaging obtained by PET, depicts the spatial distribution of metabolic or biochemical activity in the body can be more precisely aligned or correlated with anatomic imaging obtained by CT scanning. Two- and three-dimensional image reconstruction may be rendered as a function of a common software and control system. The unit will be an OpenView gantry design for enhanced patient experience for claustrophobic and pediatric patients and patient access for clinicians. See PDF for preferred room layout.
X9805	Stand, Injection, Nuclear Medicine	VV	1	An injection stand designed for arm positioning for radionuclide injections. The arm rest holds the patient's arm firmly in place. A utility tray sits adjacent to the armrest to hold supplies and includes a lead-lined multi syringe holder. The stand height is adjustable approximately from 29" to 44." Casters allow the stand to be rolled into position or out of the way for storage. It is structurally balanced so that it won't tip over.

Room Contents: Class 2 PET/CT Control Room, Imgng Svcs (CI252)

JSN	Content Name	Acq Code	Qty	Description
A1000	Extinguisher, Fire	VV	1	10 pound dry chemical fire extinguisher with charging gauge. Other types and sizes are available.
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.



JSN	Content Name	Acq Code	Qty	Description
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	4	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1825	Printer, Computer	VV	1	High resolution computer printer with a variety of type styles and sheet/envelope feeder trays. Database information reflects network ready, medium duty office style laser printers. Other types of printers (bubble jet, dot matrix, line or plotter) as well as light or heavy use capabilities are available.



JSN	Content Name	Acq Code	Qty	Description
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.

### Room Contents: Class 2 PET/CT System Component Room, Imgng Svcs (CI253)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.



## Class 1 PET/MRI Scanning Room, Imgng Svcs (Cl271) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

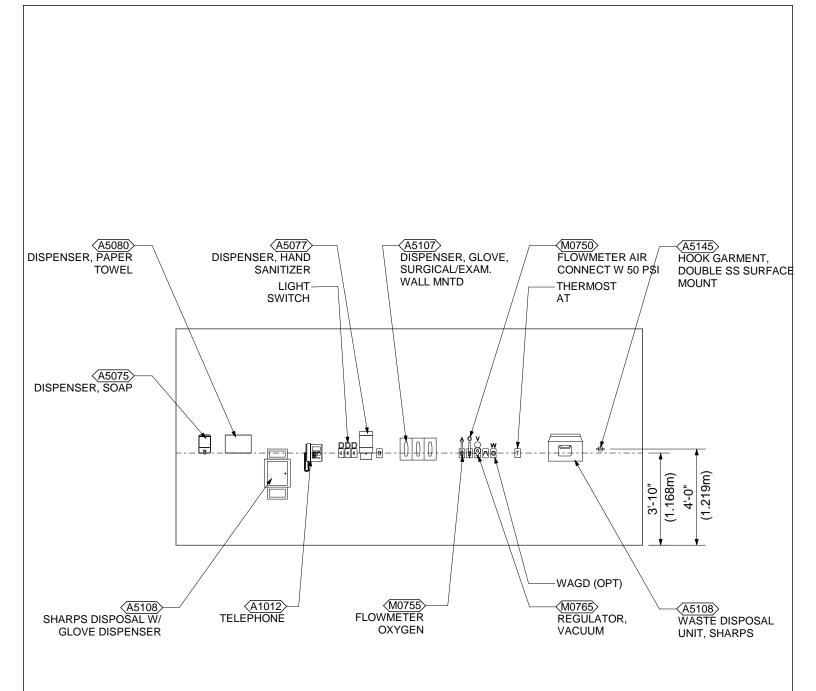
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## Class 1 PET/MRI Scanning Room, Imgng Svcs (Cl271) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

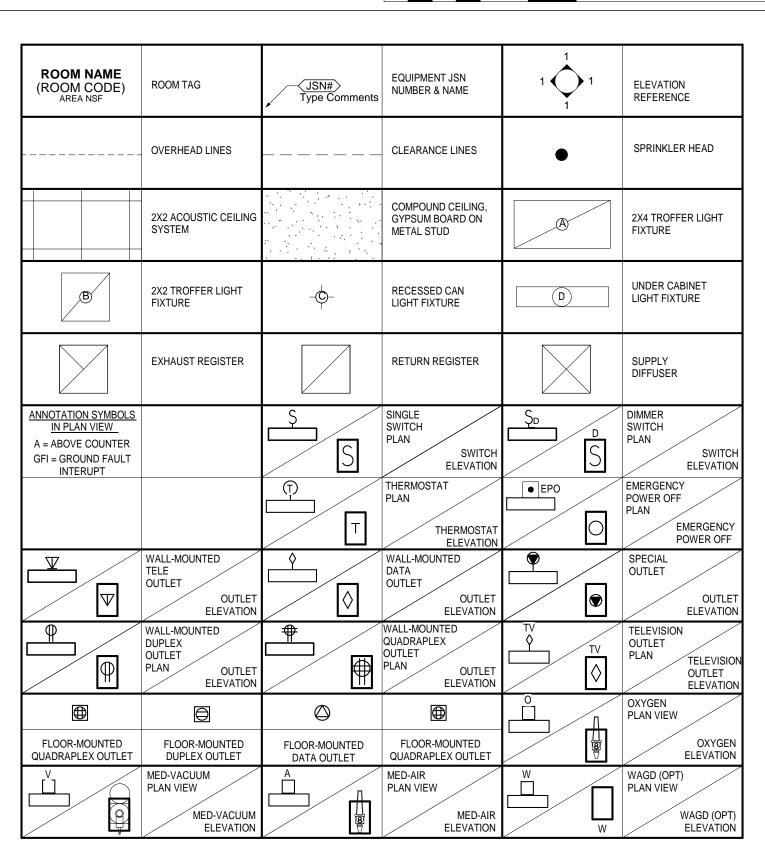
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance

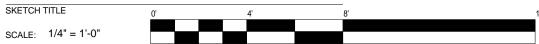


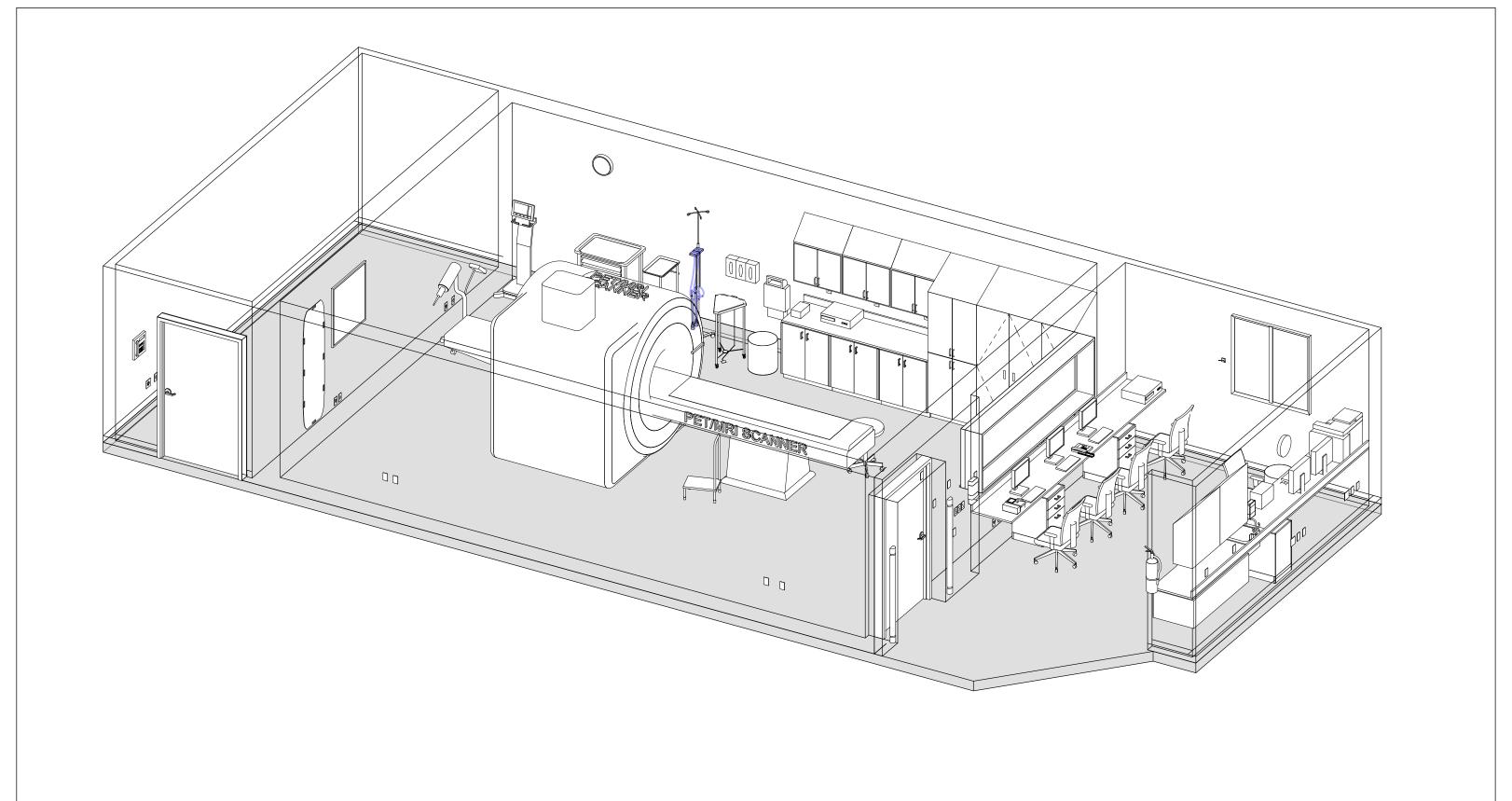
## Class 1 PET/MRI Scanning Room, Imgng Svcs (Cl271) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





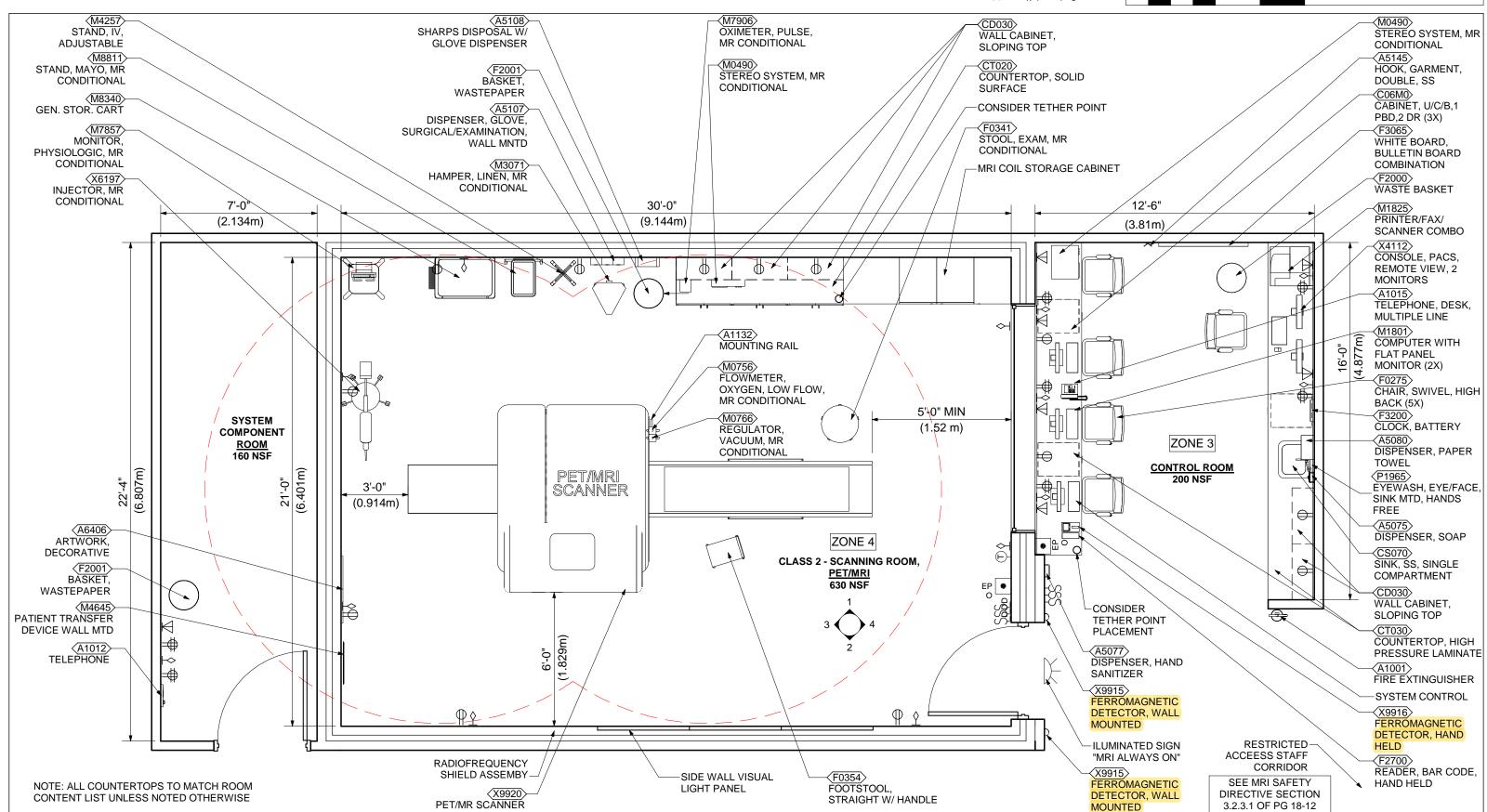


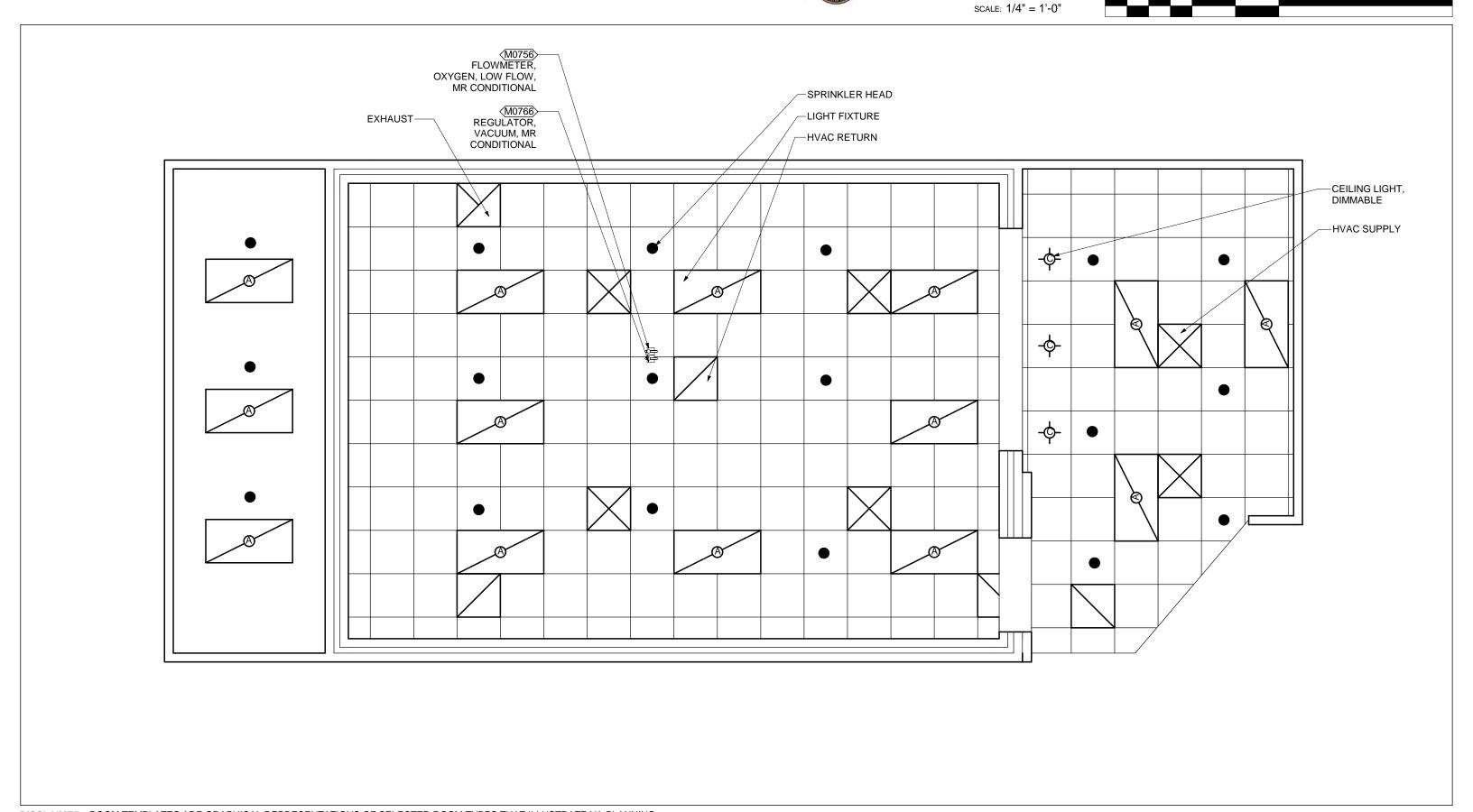


# Class 1 PET/MRI Scanning Room, Imgng Svcs (Cl271) INTERACTIVE 3D PDF

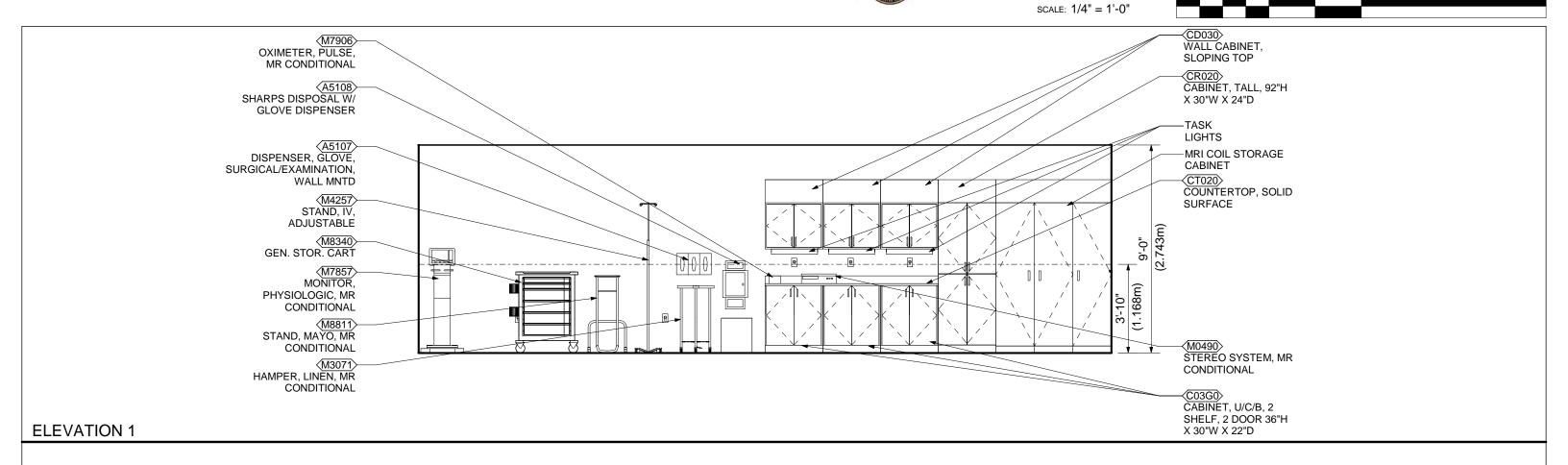
U.S. Department of Veterans Affairs SKETCH TITLE SCALE:

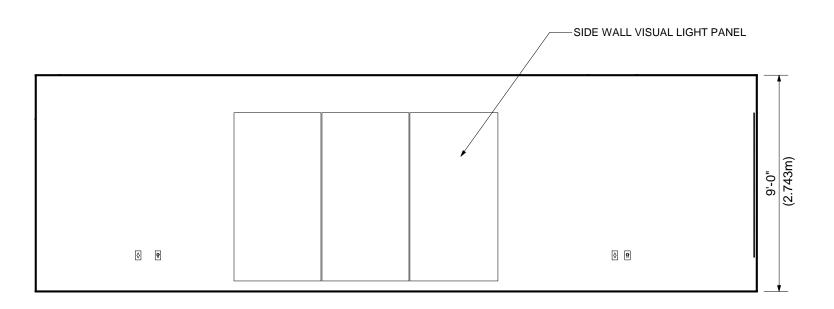
SCALE: 1/4" = 1'-0"





ELEVATIONS
SKETCH TITLE
0' 4' 8'



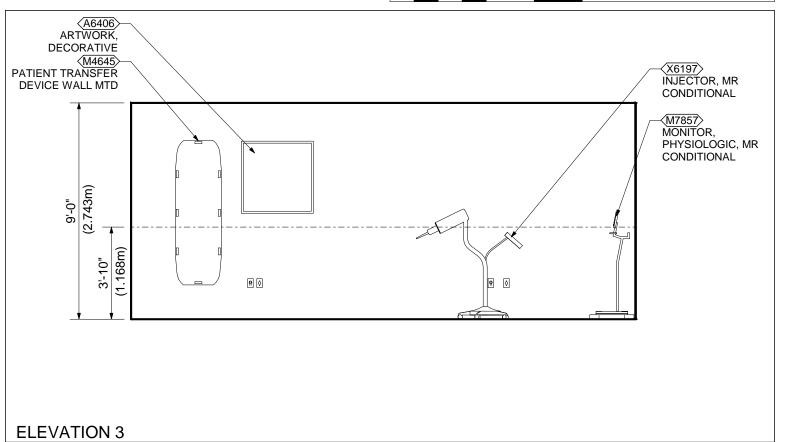


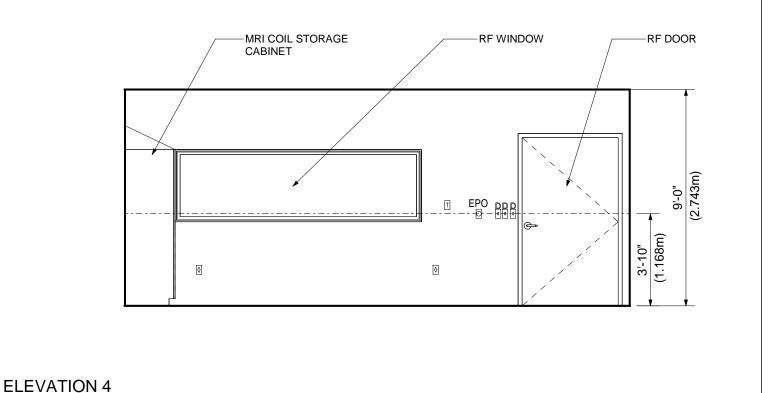


# Class 1 PET/MRI Scanning Room, Imgng Svcs (Cl271) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





Room Data: Class 1 PET/MRI Scanning Room, Imgng Svcs (CI271)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: m: RES-3 at h: 4" (100mm) Base: Floor Finish: RES-3 Slab Depression: 2" (50mm) Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD\* s: X

#### Notes:

- Depending on adjacencies, radioisotope handling processes, and isotopes used, structural floor depth, alone, may not provide sufficient radiation shielding from areas above or below. Thickened slab and/or additional slab depression for radiation shielding materials may be indicated. Consult with a medical physicist.
- 2. Provide a 4'-0" wide shielded door into the Class 1 Scanning Room, PET/MRI, shielded for both radiofrequency and radiation.
- Provide a shielded viewing window from the Control Room into the Class 1 Scanning Room, PET/MRI, shielded for both radiofrequency and radiation.

#### LIGHTING

MRI and Control Rooms:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### Notes:

LED luminaires shall be rated for MRI environment.

System Component Room:
Refer to the current version of **Lighting Design** 

**Manual** section 7.10 for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Data: Telephone: Intercom: **MRI Scanning Room** and Control Room. Via MRI Equipment Nurse Call: Yes Code Blue: Yes Public Address: Radio/Entertainment: As Required MATV: CCTV: **MRI Scanning** Room and Control Room. As Required MID: Security/Duress: VTEL:



VA Satellite TV:

### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### Notes:

 All mechanical ductwork and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Min 1 outlet/room OVHD
Oxygen: Min 1 outlet/room OVHD

#### Notes:

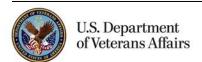
- All plumbing and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.
- All plumbing fixtures within the Scanning Room are recommended to have readily accessible supply shut-offs outside the Scanning Room.



### Room Contents: Class 1 PET/MRI Scanning Room, Imgng Svcs (Cl271)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CR020	Cabinet, F/S, 5 Shelf, 1 DO, Sloping Top, 92x24x13	СС	1	Floor standing storage cabinet with five adjustable shelves, a solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a tall case or a tall cabinet. For general purpose storage use throughout the facility.

JSN	Content Name Acq Code		Qty	Description			
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.			
F0354	Stool, Step, MRI Compatible, W/ Handrail	VV	1	MRI compatible safety step stool with handrail for use in the MRI scan room. Constructed of non-ferrous metal (stainless steel), deep platform with non-slip mat, grip cups on the bottom of each leg, with 34" minimum height handle rail. Minimum weight capacity is 500 pounds.			
M4257	Stand, IV, Adjustable, MRI Compatible	VV	1	An adjustable non-magnetic IV stand with 4-hook arrangement and compatible with MRI equipment. Stand has an aluminum or plastic base with 5 casters. It adjusts from 59 inches to 88 inches.			
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.			
M8340	Table, Utility, 3 Drawers w/Shelf, MRI Safe	VV	1	A utility table approximately 20" W $\times$ 17" D $\times$ 36" H with 2 or 3 drawers and one shelf. The table will be MRI compatible and have 4 casters with 2 lockable.			
X9920	PET/MRI System VV		1	A PET/MRI scan is a two-in-one test that combines images from a positron emission tomography (PET) scan and a magnetic resonance imaging (MRI) scan. This hybrid technology harnesses the strengths of PET and MRI to produce some of the most highly detailed pictures currently available. Doctors use those pictures to diagnose medical conditions and plan their treatment. For example, PET/MRI scans of the brain are useful in the care of Alzheimer's disease, epilepsy, and brain tumors.			
X6197	Injector, MR Conditional	VV	1	Contrast media injectors are used to inject contrast media or contrast agents to enhance the blood and perfusion in tissues for MRI imaging. The MR Conditional Contrast media injector is designed to function the MRI magnetic field.			
M0751	Flowmeter, Air, Connect w/50 PSI Supply, MR Conditional	VV	2	Air flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.			
M0756	Flowmeter, Oxygen, Low Flow, MR Conditional	VV	2	Oxygen flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.			



JSN	Content Name	Acq Code	Qty	Description
M7906	Oximeter, Pulse, MR Conditional	VV	1	MR Conditional Pulse oximeter for continuous surveillance of patient pulse and oxygen saturation rates. Instrument features LED display, audio and visual alarms, automatic calibration and battery operation in case of power failure. Other applications include sleep studies, exercise testing and monitoring certain patients in the home (e.g. infants or patients requiring respiratory therapy). Made safe for use in the MRI environment.
M0766	Regulator, Vacuum, MR Conditional	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in the MRI environment.
M3071	Hamper, Linen, Mobile, w/Lid, MR Conditional	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics. Specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
M7857	Monitor, Physiologic, MR Conditional	VV	1	MR Conditional Physiologic Monitor is a light weight, rugged patient monitor for use in the MRI area. Unit consists of a compact monitor with touchscreen display with up to 3 waveforms on a on a bright non-fading display. The unit measures ECG/respiration, NBP, SpO2, pressure, and temperature and CO2.
M8811	Stand, Mayo, MR Conditional	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in the MRI area.
F0341	Stool, Exam, MR Conditional	VV	1	Self-adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for use in the MRI environment.
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.



Room Contents: Class 1 PET/MRI Control Room, Imgng Svcs (Cl272)

JSN	Content Name	Acq Code	Qty	Description	
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.	
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.	
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.	
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.	
A5080	Dispenser, Paper Towel, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.	
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	
С06М0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	3	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.	
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.	
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.	
СТ030	Countertop, High Pressure Laminate	СС	2	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.	

JSN	Content Name	Name Acq Code Q		Description
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
F3200	Clock, Battery, 12" Diameter		1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1825	Printer, Computer	VV	1	High resolution computer printer with a variety of type styles and sheet/envelope feeder trays. Database information reflects network ready, medium duty office style laser printers. Other types of printers (bubble jet, dot matrix, line or plotter) as well as light or heavy use capabilities are available.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	CC	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
A1001	Extinguisher, Fire, MR Conditional	VV	1	10 pound dry chemical fire extinguisher with charging gauge. Other types and sizes are available. MR Conditional Fire Extinguisher specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
X9916	Detector/Screener, Ferrous Metal, Hand Held	VV	1	A hand held ferromagnetic detector used as a safety scan of persons entering the MRI area to help prevent magnetic items from entering the scan room.



JSN	Content Name	Acq Code	Qty	Description	
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	' I I I		Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Consol must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.	
X9915	Detector/Screener, Ferrous Metal	VV	1	A screening and detection system to identify potential ferromagnetic threats in the MRI workplace. The system provides real-time active monitoring 24hrs/day. Used to screen patients and staff before entering the MRI work space to reduce the chance of injury. System consists of sensors, screening devices, pre alarm indicators, motion detectors and alarms. System is custom designed to meet individual facility requirements.	

Room Contents: Class 1 PET/MRI System Component Room, Imgng Svcs (Cl273)

JSN	Content Name	Acq Code	Qty	Description		
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.		
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.		
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.		



## Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281) DISCLAIMER

SKETCH TITLE

SCALE: 1/4" = 1'-0"

0'		4'	8'		1

#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

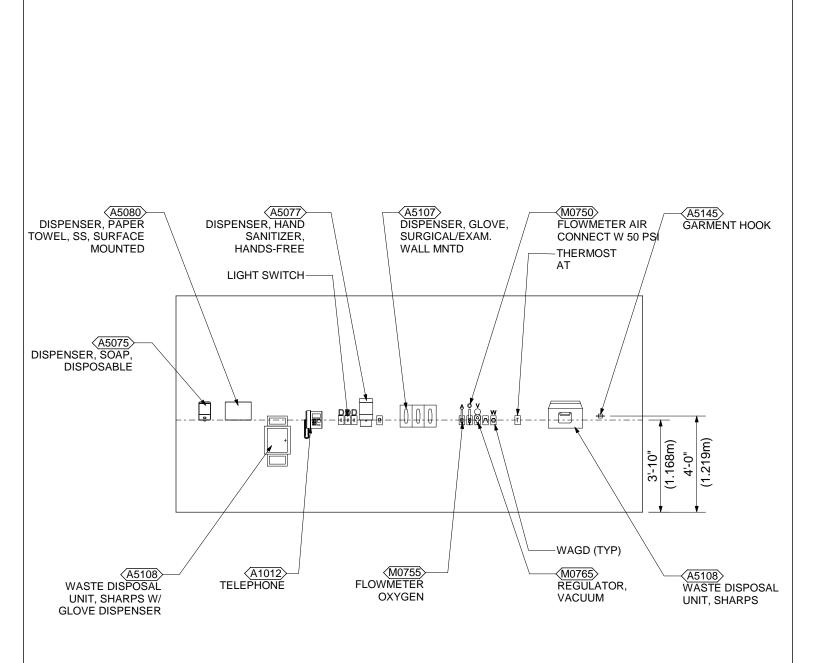
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



### Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



#### **Drawing Notes:**

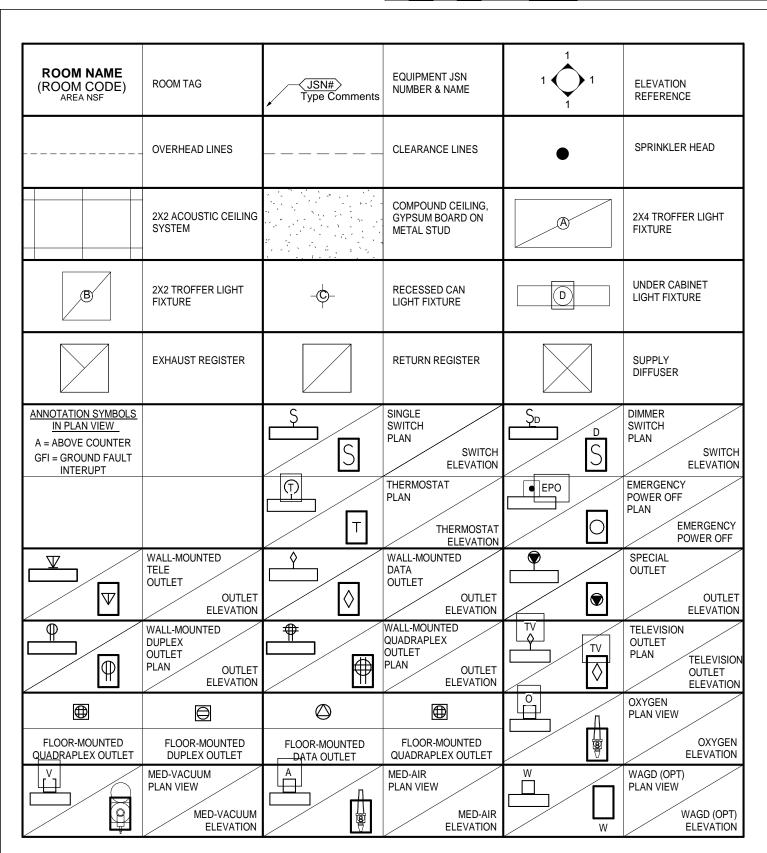
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



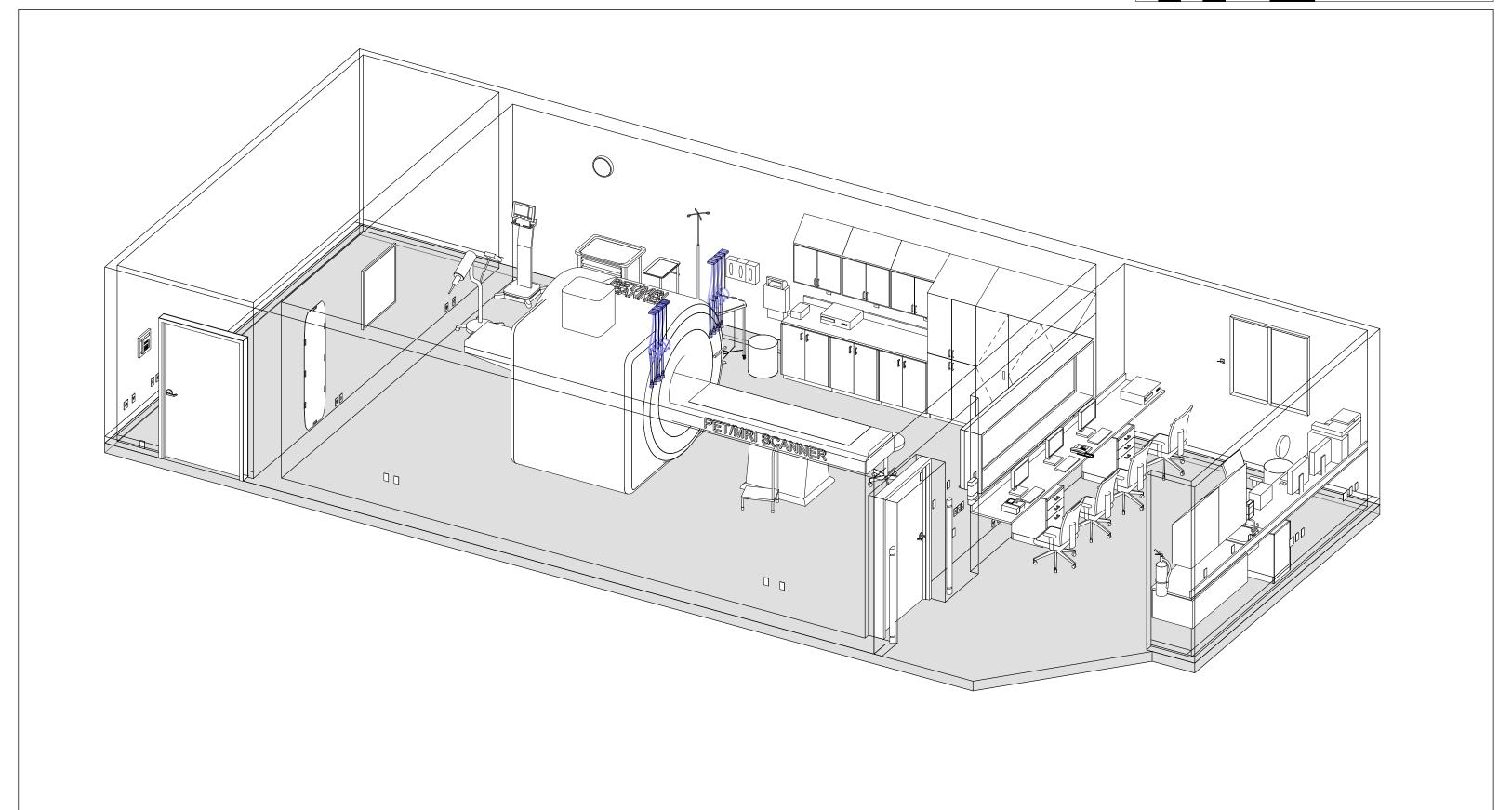
## Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"









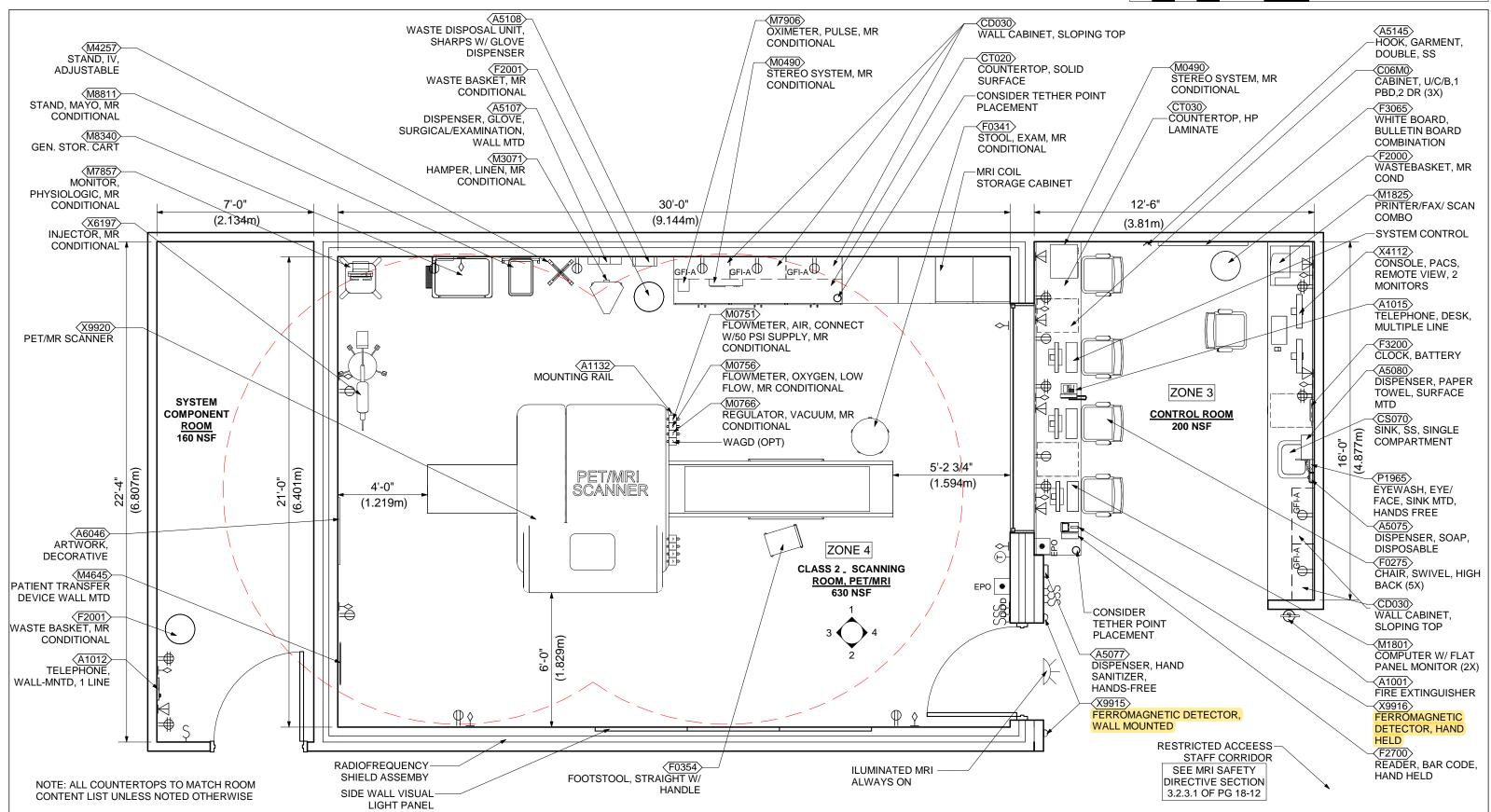
# Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281) INTERACTIVE 3D PDF

SKETCH TITLE SCALE:

SCALE: 1/4" = 1'-0"

8'

1

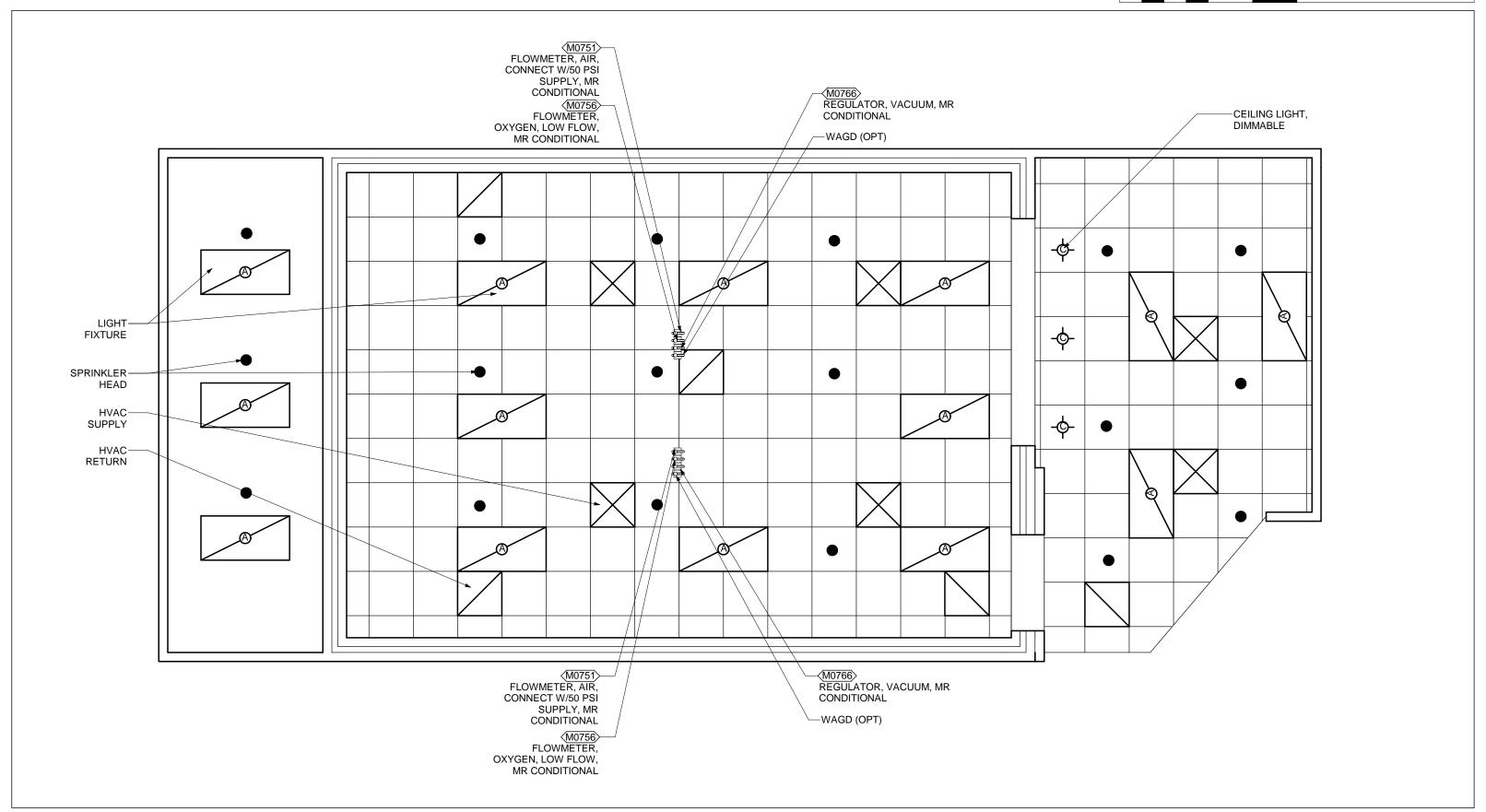


SCALE: 1/4" = 1'-0"

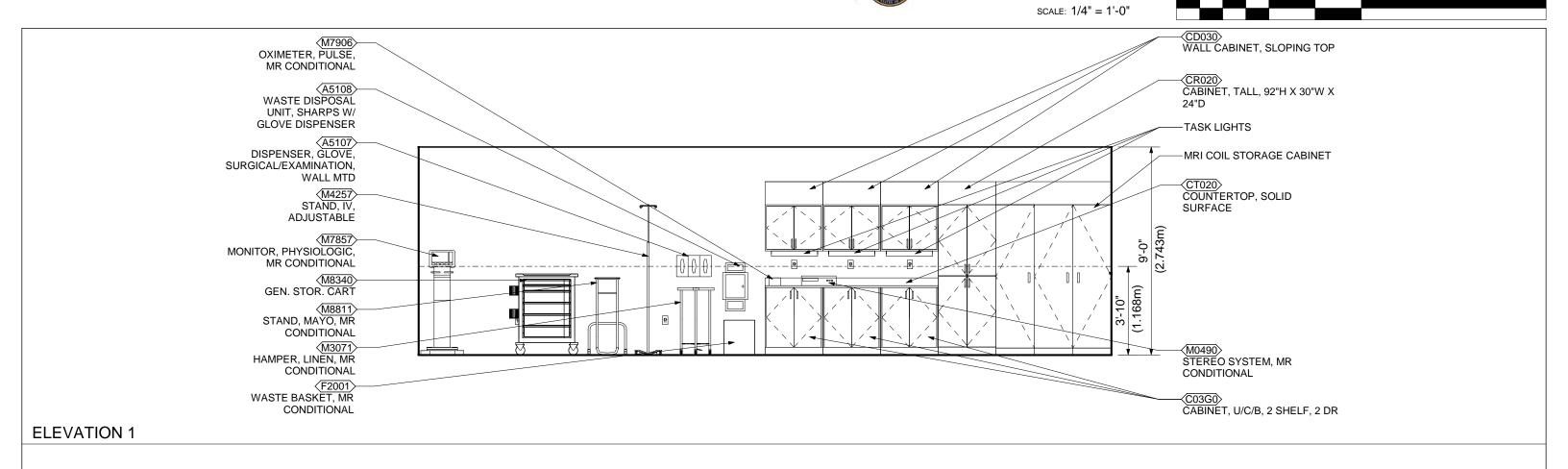
REPLECTED CEILING PLAN

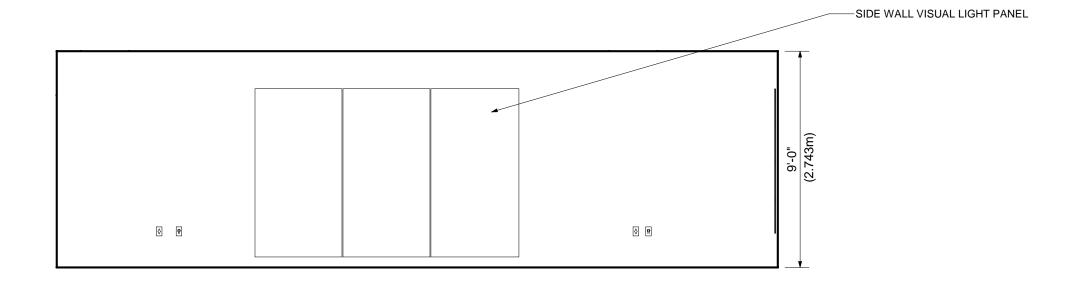
8'

8'



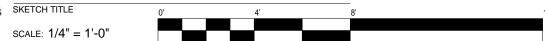
**ELEVATIONS** SKETCH TITLE

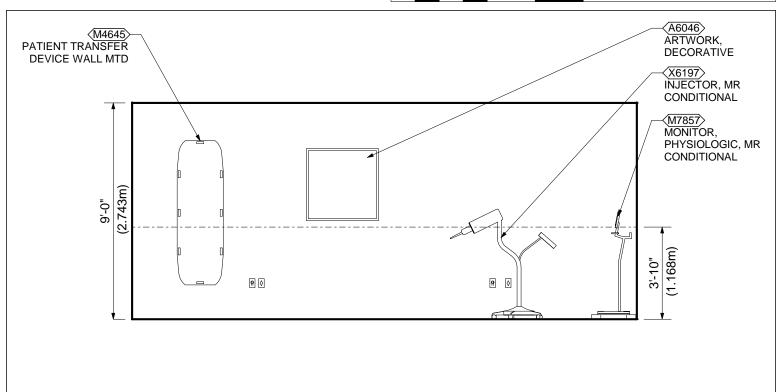




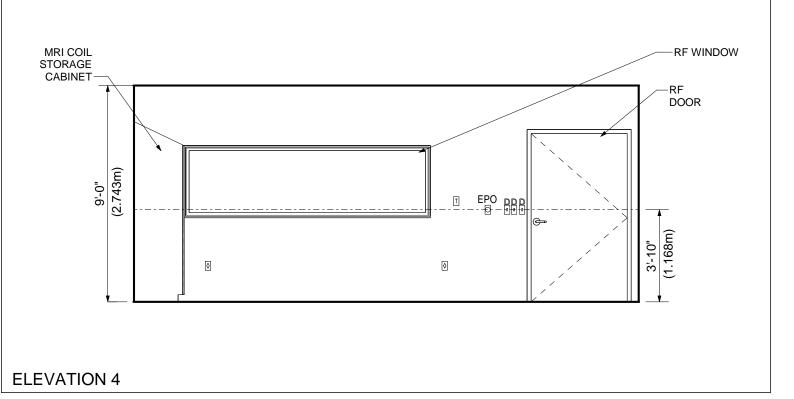


# Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281) ELEVATIONS





### **ELEVATION 3**



Room Data: Class 2 PET/MRI Scanning Room, Imgng Svcs (CI281)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RES-3 at h: 4" (100mm) Floor Finish: RES-3 Slab Depression: 2" (50mm) Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD\* s: X

#### Notes:

- Depending on adjacencies, radioisotope handling processes, and isotopes used, structural floor depth, alone, may not provide sufficient radiation shielding from areas above or below. Thickened slab and/or additional slab depression for radiation shielding materials may be indicated. Consult with a medical physicist.
- 2. Provide a 4'-0" wide shielded door into the Class 2 Scanning Room, PET/MRI, shielded for both radiofrequency and radiation.
- Provide a shielded viewing window from the Control Room into the Class 2 Scanning Room, PET/MRI, shielded for both radiofrequency and radiation.

#### LIGHTING

MRI and Control Rooms:

Refer to the current version of **Lighting Design Manual** section 4.2.6 – Diagnostic Imaging
Room for lighting design consideration.

#### Notes:

1. LED luminaires shall be rated for MRI environment.

System Component Room: Refer to the current version of **Lighting Design Manual** section 7.10 for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### Notes:

 Coordinate electrical power requirements with specific vendor equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Data: Telephone: Intercom: **MRI Scanning** Room and Control Room. Via MRI Equipment Nurse Call: Code Blue: Yes **Public Address:** Radio/Entertainment: As Required MATV: CCTV: **MRI Scanning** Room and Control Room. As Required MID: Security/Duress: VTEL: VA Satellite TV:



### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### Notes:

 All mechanical ductwork and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Dain: Yes
Reagent grade Water: --

Medical Air: Min. 2 outlets/room OVHD Medical Vacuum: Min. 2 outlets/room OVHD Oxygen: Min. 2 outlets/room OVHD Waste Anesth Gas: Rec 2 outlets/room OVHD Notes:

- All plumbing and piping serving the Scanning Room must be coordinated with the radiofrequency shield vendor and MRI system vendor for acceptable materials and penetration points.
- All plumbing fixtures within the Scanning Room are recommended to have supply shut-offs outside the Scanning Room.

Room Contents: Class 2 PET/MRI Scanning Room, Imgng Svcs (Cl281)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	3	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	3	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CR020	Cabinet, F/S, 5 Shelf, 1 DO, Sloping Top, 92x24x13	СС	1	Floor standing storage cabinet with five adjustable shelves, a solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a tall case or a tall cabinet. For general purpose storage use throughout the facility.

JSN	Content Name	Acq Code	Qty	Description
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
F0354	Stool, Step, MRI Compatible, W/ Handrail	VV	1	MRI compatible safety step stool with handrail for use in the MRI scan room. Constructed of non-ferrous metal (stainless steel), deep platform with non-slip mat, grip cups on the bottom of each leg, with 34" minimum height handle rail. Minimum weight capacity is 500 pounds.
M4257	Stand, IV, Adjustable, MRI Compatible	VV	1	An adjustable non-magnetic IV stand with 4-hook arrangement and compatible with MRI equipment. Stand has an aluminum or plastic base with 5 casters. It adjusts from 59 inches to 88 inches.
M4645	Patient Transfer Device	VV	1	A patient transfer board designed to make lateral patient transfers safer for staff and be more comfortable for the patients. The board uses a smooth, low friction and static free surface to eliminate the need for metal rollers. The board has a soft foam core that makes them lightweight for ease of use and storage. The long board device also enables the transfer of a patient in the seated or Fowler position. The boards come in three sizes with the long board being foldable. The dimensions and price are for the long wide board.
M8340	Table, Utility, 3 Drawers w/Shelf, MRI Safe	VV	1	A utility table approximately 20" W x 17" D x 36" H with 2 or 3 drawers and one shelf. The table will be MRI compatible and have 4 casters with 2 lockable.
X9920	PET/MRI System	VV	1	A PET/MRI scan is a two-in-one test that combines images from a positron emission tomography (PET) scan and a magnetic resonance imaging (MRI) scan. This hybrid technology harnesses the strengths of PET and MRI to produce some of the most highly detailed pictures currently available. Doctors use those pictures to diagnose medical conditions and plan their treatment. For example, PET/MRI scans of the brain are useful in the care of Alzheimer's disease, epilepsy, and brain tumors.
X6197	Injector, MR Conditional	VV	1	Contrast media injectors are used to inject contrast media or contrast agents to enhance the blood and perfusion in tissues for MRI imaging. The MR Conditional Contrast media injector is designed to function the MRI magnetic field.
M0751	Flowmeter, Air, Connect w/50 PSI Supply, MR Conditional	VV	2	Air flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.
M0756	Flowmeter, Oxygen, Low Flow, MR Conditional	VV	2	Oxygen flow meters have a flow rate from 0-15 LPM and are designed to function in the MRI magnetic field.



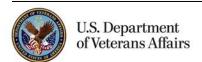
JSN	Content Name	Acq Code	Qty	Description
M7906	Oximeter, Pulse, MR Conditional	VV	1	MR Conditional Pulse oximeter for continuous surveillance of patient pulse and oxygen saturation rates. Instrument features LED display, audio and visual alarms, automatic calibration and battery operation in case of power failure. Other applications include sleep studies, exercise testing and monitoring certain patients in the home (e.g. infants or patients requiring respiratory therapy). Made safe for use in the MRI environment.
M0766	Regulator, Vacuum, MR Conditional	VV	2	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in the MRI environment.
M3071	Hamper, Linen, Mobile, w/Lid, MR Conditional	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics. Specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
M7857	Monitor, Physiologic, MR Conditional	VV	1	MR Conditional Physiologic Monitor is a light weight, rugged patient monitor for use in the MRI area. Unit consists of a compact monitor with touchscreen display with up to 3 waveforms on a on a bright non-fading display. The unit measures ECG/respiration, NBP, SpO2, pressure, and temperature and CO2.
M8811	Stand, Mayo, MR Conditional	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in the MRI area.
F0341	Stool, Exam, MR Conditional	VV	1	Self-adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for use in the MRI environment.
F2001	Basket, Wastepaper, MR Conditional	VV	1	Wastepaper basket, fire resistant, approximately 40-quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in the MRI area. Size and shape varies depending on the application and manufacturer selected.



Room Contents: Class 2 PET/MRI Control Room, Imgng Svcs (Cl282)

		Acq		
JSN	Content Name	Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands- Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	СС	3	Sitting height under counter base cabinet with a pullboard above two drawers and file drawer. Also referred to as a drawer cabinet. For general purpose use throughout the facility.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ030	Countertop, High Pressure Laminate	СС	1	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.

JSN	Content Name	Acq Code	Qty	Description
F0275	Chair, Swivel, High Back	VV	5	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3065	Whiteboard/Bulletin Board, Combination	VV	1	A combination whiteboard and bulletin board, half LCS and half cork. Available with either aluminum or wood frame. It can be used in patient rooms or in any appropriate space in the facility.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	2	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1825	Printer, Computer	VV	1	High resolution computer printer with a variety of type styles and sheet/envelope feeder trays. Database information reflects network ready, medium duty office style laser printers. Other types of printers (bubble jet, dot matrix, line or plotter) as well as light or heavy use capabilities are available.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
A1001	Extinguisher, Fire, MR Conditional	VV	1	10 pound dry chemical fire extinguisher with charging gauge. Other types and sizes are available. MR Conditional Fire Extinguisher specifically designed to be utilized in areas where MRI equipment is used.
M0490	Stereo System, MR Conditional	VV	1	Stereo Audio system to provide music for the MRI patient during an MRI imaging procedure. Specifically designed to be utilized in areas where MRI equipment is used.
X9916	Detector/Screener, Ferrous Metal, Hand Held	VV	1	A hand held ferromagnetic detector used as a safety scan of persons entering the MRI area to help prevent magnetic items from entering the scan room.



JSN	Content Name	Acq Code	Qty	Description
X4112	Console, PACS, Remote View, w/Two 2MP Monitors	VV	1	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1200 x 1600 image display monitors. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.
X9915	Detector/Screener, Ferrous Metal	VV	1	A screening and detection system to identify potential ferromagnetic threats in the MRI workplace. The system provides real-time active monitoring 24hrs/day. Used to screen patients and staff before entering the MRI work space to reduce the chance of injury. System consists of sensors, screening devices, pre alarm indicators, motion detectors and alarms. System is custom designed to meet individual facility requirements.

Room Contents: Class 2 PET/MRI System Component Room, Imgng Svcs (CI283)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.



# Imaging Physician Reading Room, Imgng Svcs (CI401) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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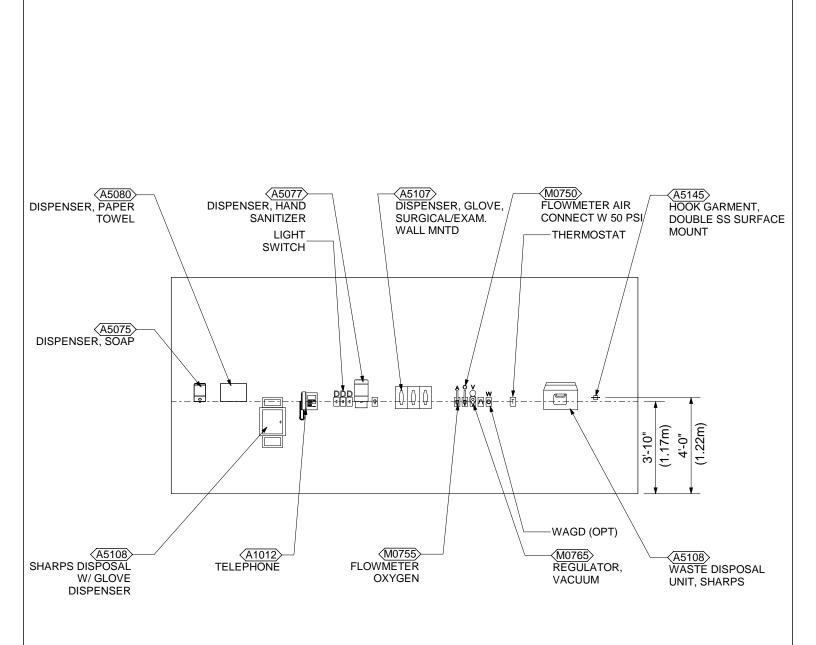
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



# Imaging Physician Reading Room, Imgng Svcs (CI401) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

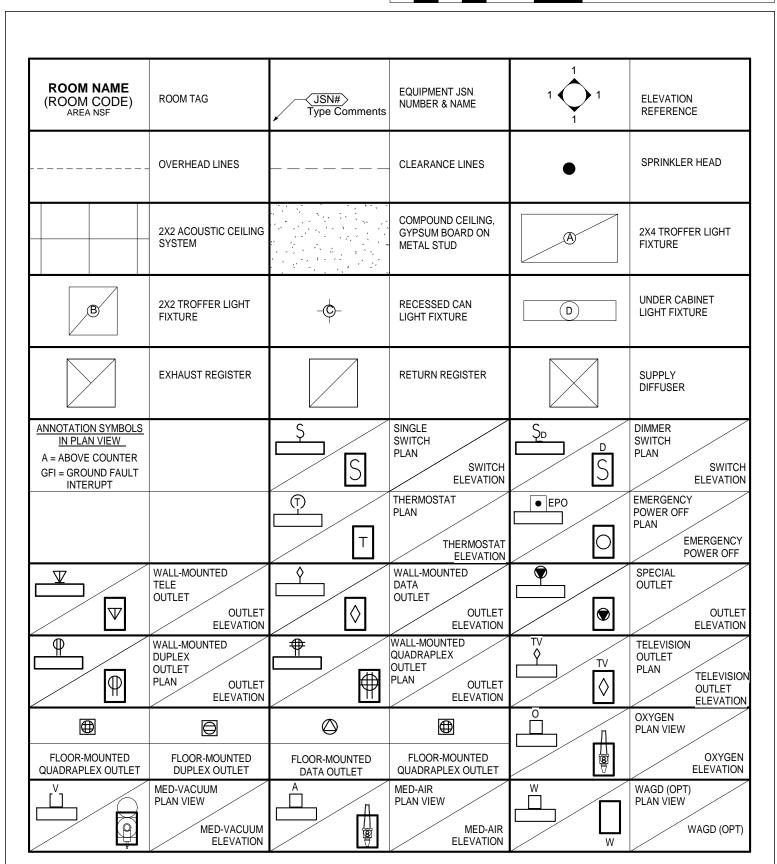
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# Imaging Physician Reading Room, Imgng Svcs (CI401) LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

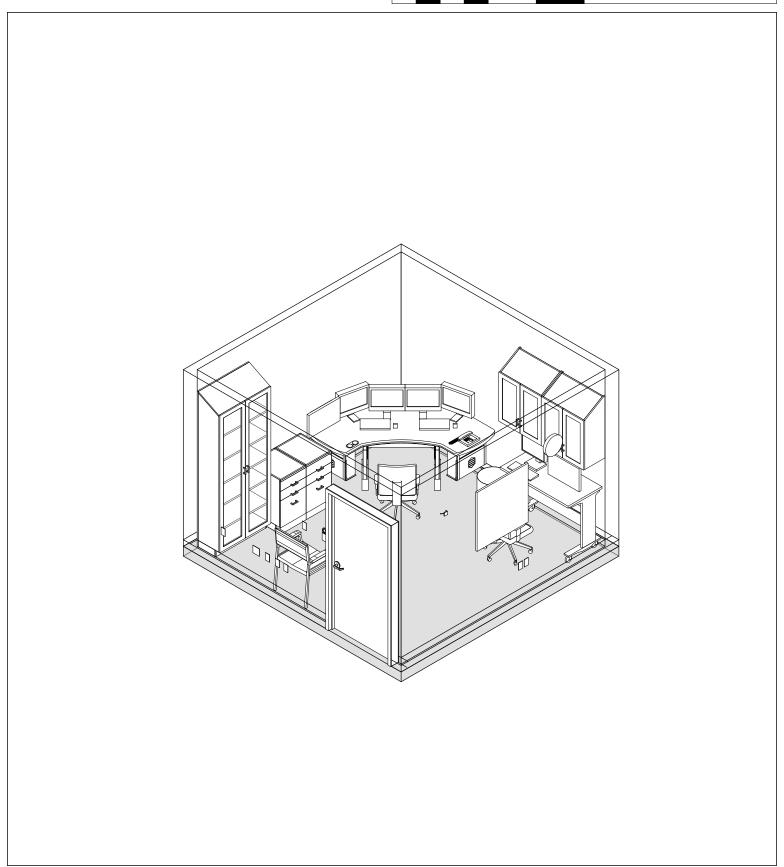




# Imaging Physician Reading Room, Imgng Svcs (Cl401) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





SKETCH TITLE

# Imaging Physician Reading Room, Imgng Svcs (CI401) INTERACTIVE 3D PDF

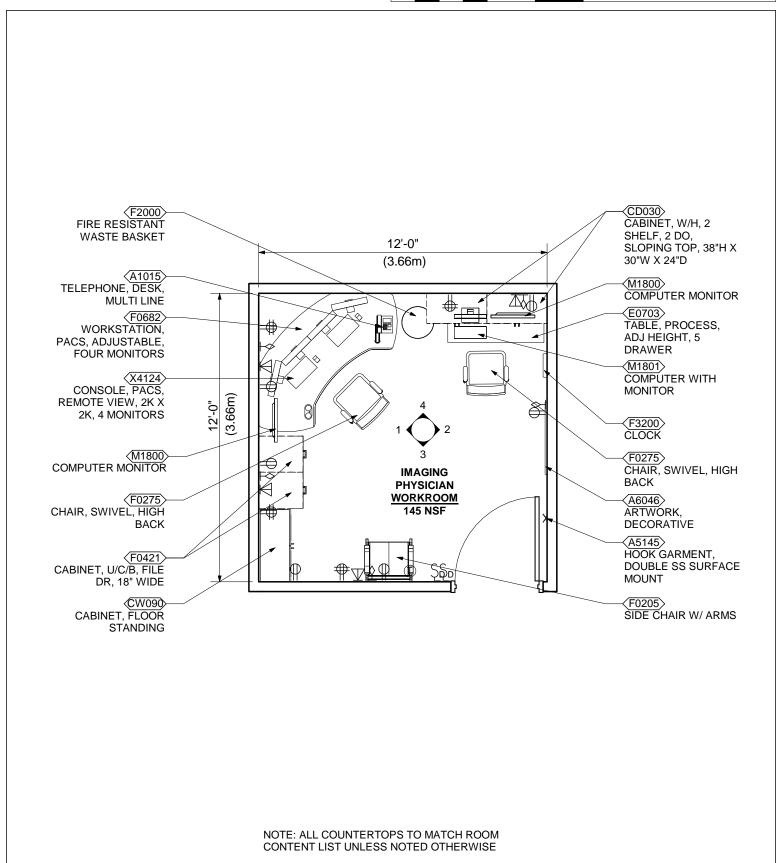
SCALE:		



### Imaging Physician Reading Room, Imgng Svcs (Cl401) FLOOR PLAN

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

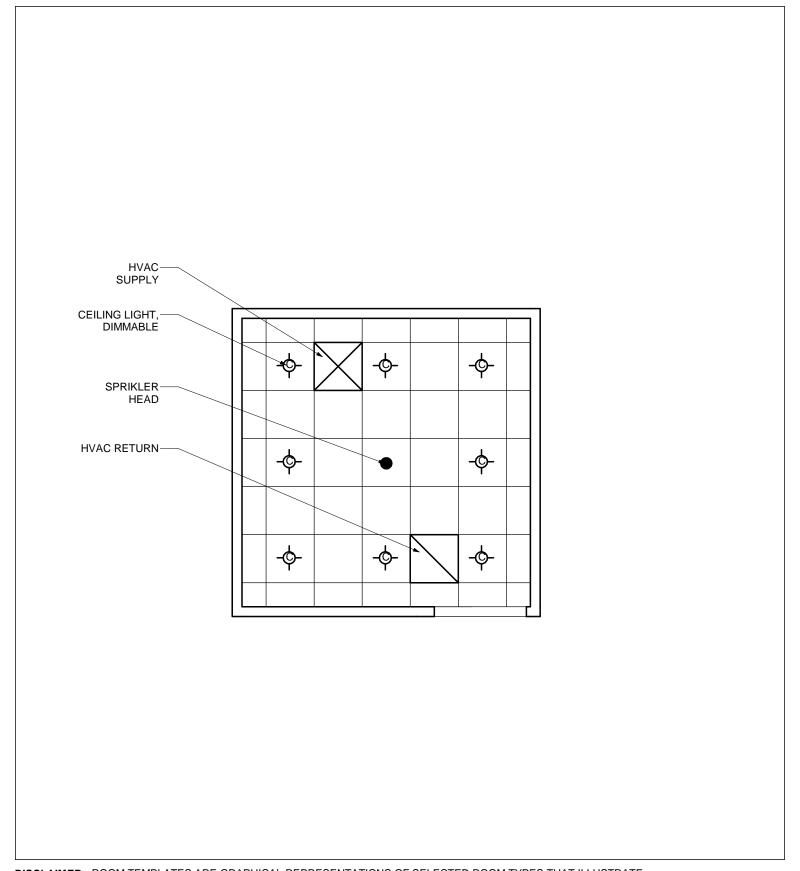




# Imaging Physician Reading Room, Imgng Svcs (CI401) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

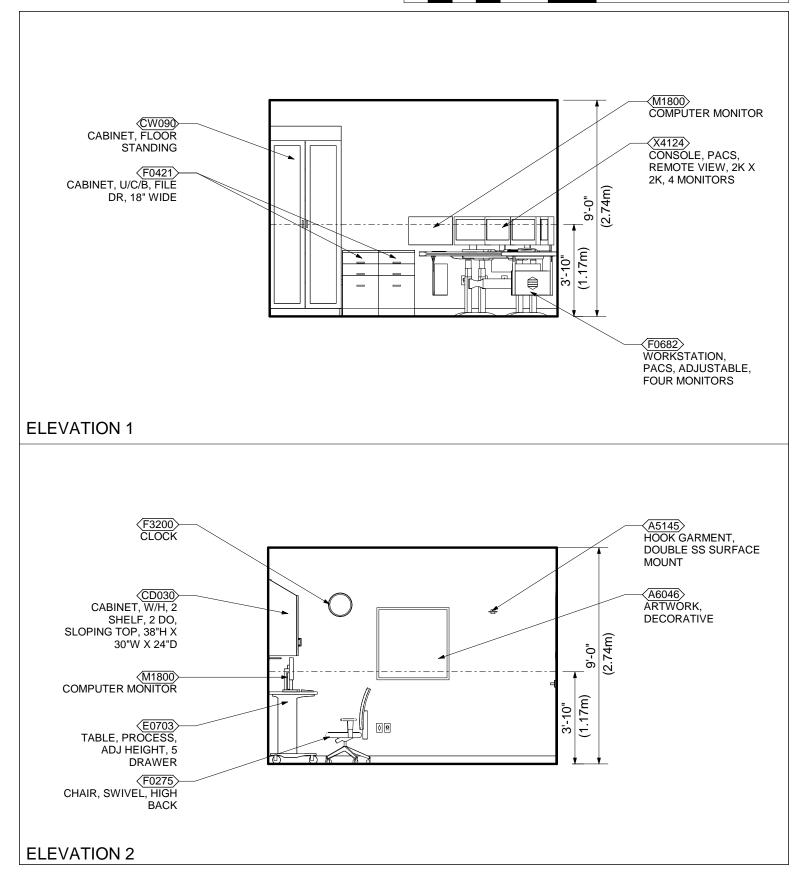




# Imaging Physician Reading Room, Imgng Svcs (CI401) ELEVATIONS

SKETCH TITLE 0' 4' 8' 16'

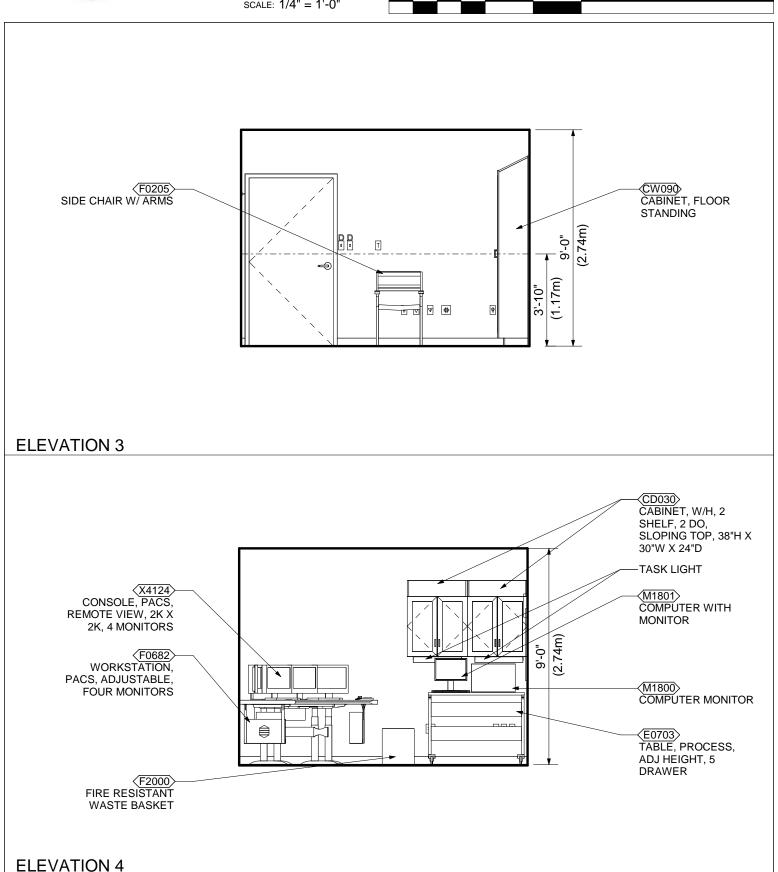
SCALE: 1/4" = 1'-0"





# Imaging Physician Reading Room, Imgng Svcs (CI401) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



CHAPTER 295 - Imaging Physician Reading Room, Imgng Svcs (CI401)

Room Data: Imaging Physician Reading Room, Imgng Svcs (CI401)

### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RB at h: 4" (100mm) Floor Finish: Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 3 dl: -- s: H

### LIGHTING

Refer to the current version of **Lighting Design Manual** section 6 – Administrating Areas
Lighting Guidelines for lighting design
consideration.

### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Yes Data: Telephone: Yes Intercom: Yes Nurse Call: Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

### Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: No
Hot Water: No
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: No
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Not Required
Oxygen: Not Required



### Room Contents: Imaging Physician Reading Room, Imgng Svcs (CI401)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1015	Telephone, Desk, Multiple Line	VV	1	Telephone, desk, multiple line.
A5145	Hook, Garment, Double, SS, Surface Mounted	CC	2	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A6046	Artwork, Decorative, With Frame	VV	1	This JSN is to be used for determining and defining location of decorative artwork.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CW090	Cabinet, Floor Standing, 5 SH, 2 GDO, ST, 95"x36"	СС	1	Floor standing storage cabinet approximately 95" H $\times$ 36" W $\times$ 16" D with five adjustable shelves, framed glass hinged doors, and sloping top. Also referred to as a framed glass hinged double door case. For general purpose use throughout the facility.
E0703	Table, Process, Adj Height, 5 Drawer, 48"W x 24"D	VV	1	Height adjustable table. The table top is available in a plastic laminate or chemical resistant material (Chem-Surf). Casters or glides are options with some tables. All tables will accept various storage components underneath. These work surfaces are available in 24" or 30" depth. THIS TYPICAL INCLUDES:  1 height adjustable table; 1 storage frame; 3 drawers, 3"H; 1 drawer, 6"H; 1 drawer, 9"H and drawer organizer bins.
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0275	Chair, Swivel, High Back	VV	2	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0421	Pedestal File, Mobile	VV	2	A steel mobile pedestal file with three drawers and casters. Choice of finishes, handle style and with or without locking mechanism.

JSN	Content Name	Acq Code	Qty	Description
F0682	Workstation, PACS, Adjustable, Four- Monitor	VV	1	Mobile or free-standing computer work center for use as a four-monitor PACS workstation. Features include laminate work surface, electronic height/tilt adjustment of work surface, CPU holder, and monitor support array (up to 50 pounds each monitor).
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M1800	Monitor, Computer	VV	2	A high definition LED computer monitor with minimum 1920 x 1080 resolution, 4ms response time, 25 inch class display size, compatible with desk or arm mounted. Monitor is VESA compatible and Energy Star compliant.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
X4124	Console, PACS, Remote View, w/Four 2MP Monitors	VV	1	Four monitor remote viewing station for picture and retrieval (DIN/PACS) system. This station is for use by providers inside or outside radiology to review images. Station includes local image storage, image manipulation and simultaneous display of multiple images on four 1260 X 1600 monitors. Images are stored on a resident memory and roll off to long term storage as more recent images are sent to the station. Provider may request images from the PACS by LAN for image and result receipt. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.



## Teaching Reading / Consultation Room, Imgng Svcs (CI411) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0

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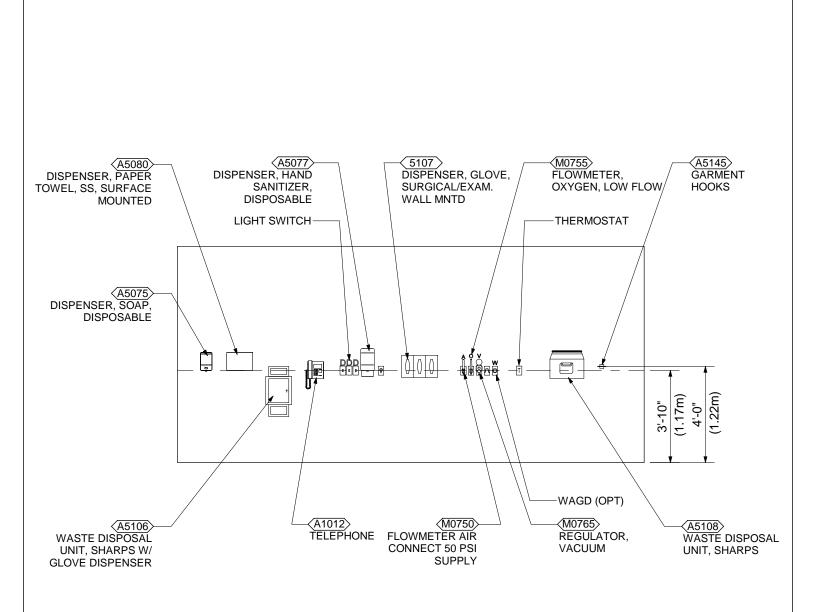
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# Teaching Reading / Consultation Room, Imgng Svcs (CI411) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

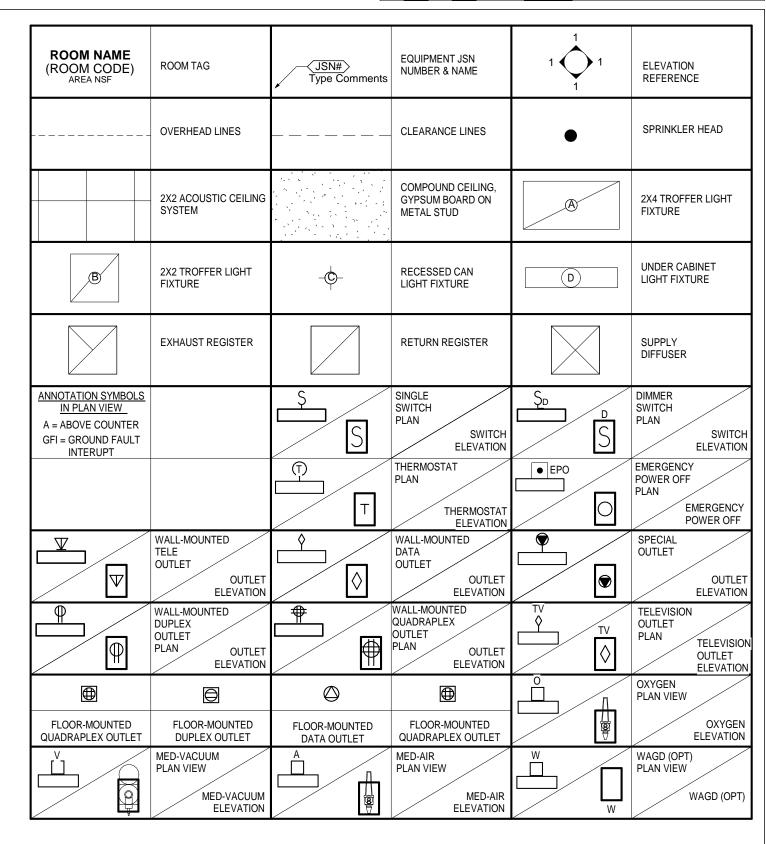
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



## Teaching Reading / Consultation Room, Imgng Svcs (CI411) LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

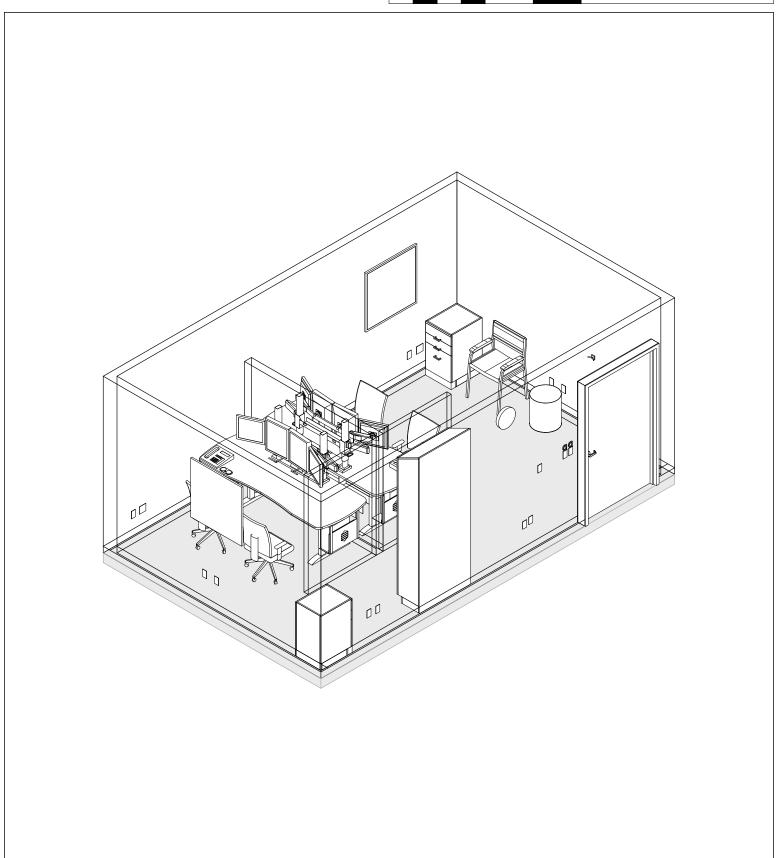




# Teaching Reading / Consultation Room, Imgng Svcs (CI411) AXONOMETRIC

SKETCH TITLE 0' 4' 8' 1

SCALE: 1/4" = 1'-0"





# Teaching Reading / Consultation Room, Imgng Svcs (Cl411) INTERACTIVE 3D PDF

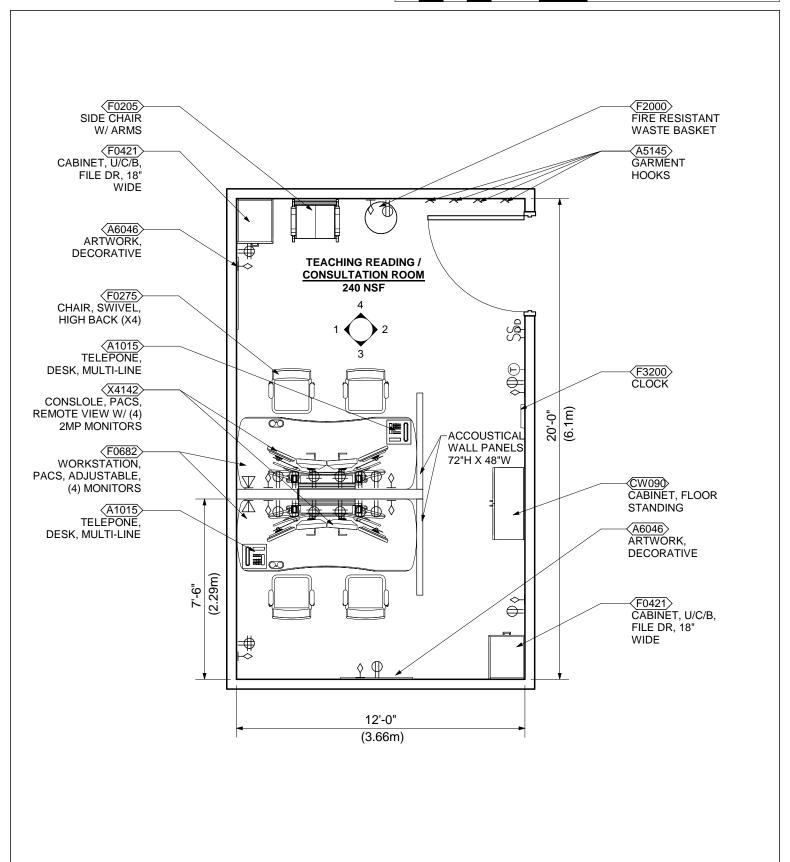
VA	of Veterans Affairs	SKETCH TITLE	0'	4'	8'		16
		SCALE:					



# Teaching Reading / Consultation Room, Imgng Svcs (Cl411) FLOOR PLAN

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

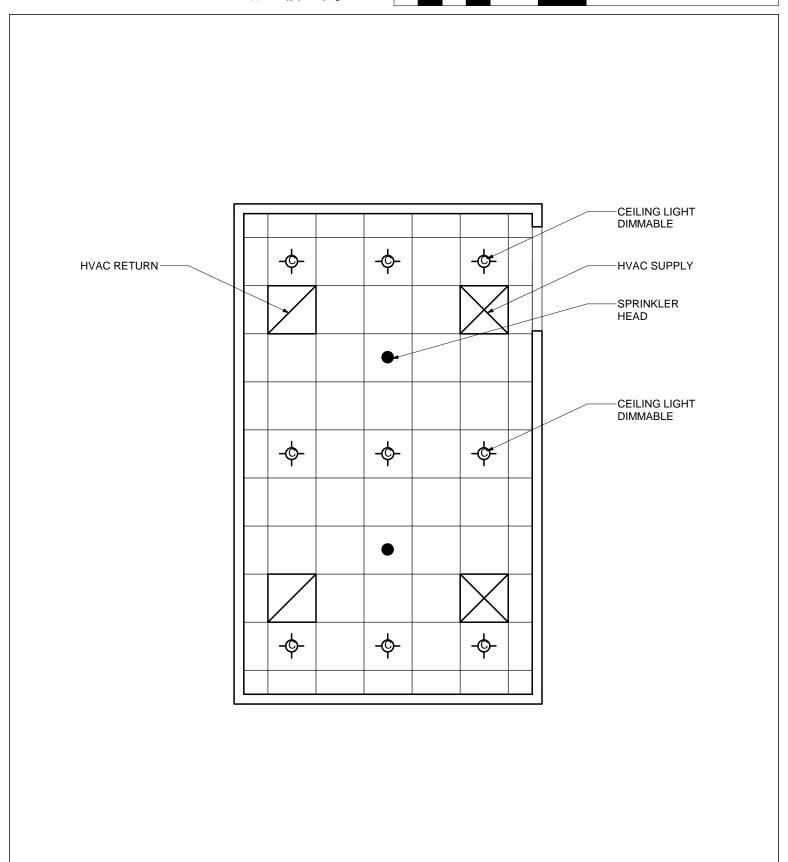




# Teaching Reading / Consultation Room, Imgng Svcs (CI411) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

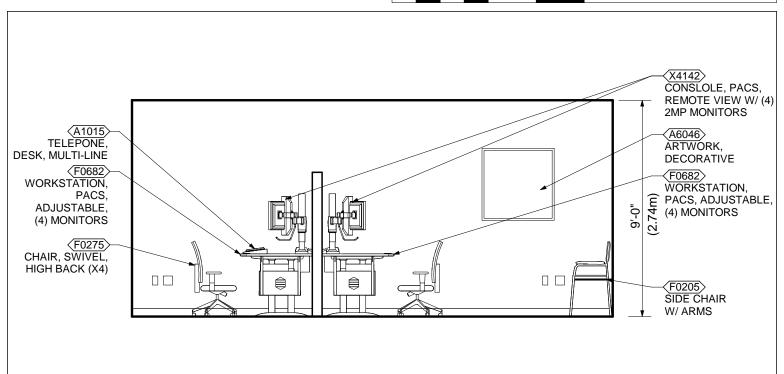




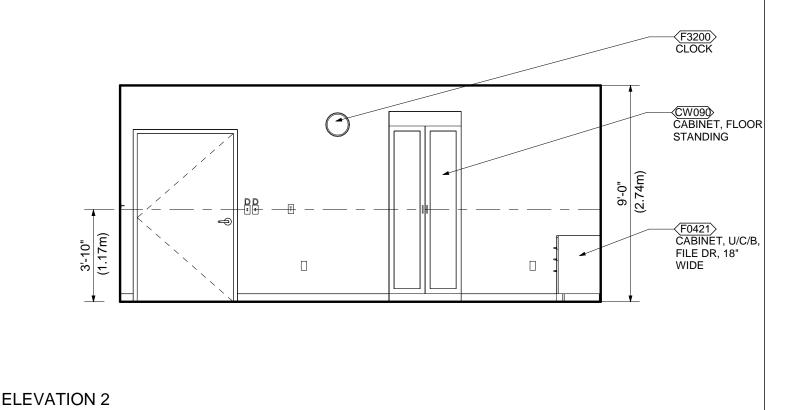
# Teaching Reading / Consultation Room, Imgng Svcs (CI411) ELEVATION

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



### **ELEVATION 1**

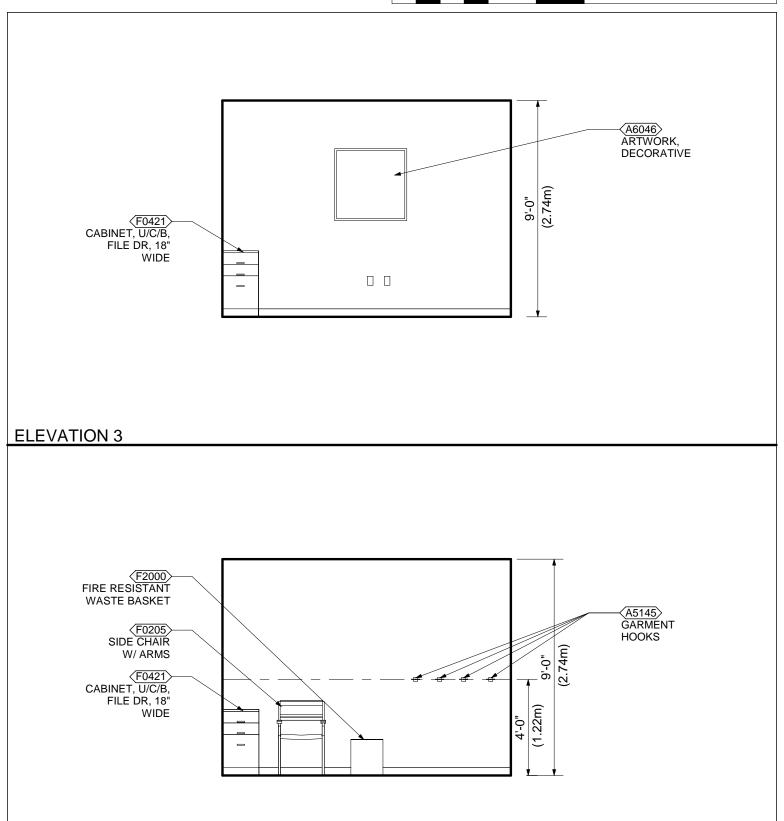




**ELEVATION 4** 

# Teaching Reading / Consultation Room, Imgng Svcs (CI411) ELEVATION

SCALE: 1/4" = 1'-0"



CHAPTER 295 - Teaching Reading/Consultation Room, Imgng Svcs (CI411)

Room Data: Teaching Reading/Consultation Room, Imgng Svcs (CI411)

### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RB at h: 4" (100mm) Floor Finish: Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 3 dl: -- s: H

### LIGHTING

Refer to the current version of **Lighting Design Manual** section 6 – Administrating Areas
Lighting Guidelines for lighting design
consideration.

### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

### COMMUNICATION/SPECIAL SYSTEMS

ADP: Yes Yes Data: Telephone: Yes Intercom: Yes Nurse Call: Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

### Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: No
Hot Water: No
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: No
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Not Required
Oxygen: Not Required



Room Contents: Teaching Reading/Consultation Room, Imgng Svcs (CI411)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	4	Telecommunication outlet location.
A1015	Telephone, Desk, Multiple Line	VV	2	Telephone, desk, multiple line.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	4	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
A6046	Artwork, Decorative, With Frame	VV	2	This JSN is to be used for determining and defining location of decorative artwork.
CW090	Cabinet, Floor Standing, 5 SH, 2 GDO, ST, 95"x36"	CC	1	Floor standing storage cabinet approximately 95" H x 36" W x 16" D with five adjustable shelves, framed glass hinged doors, and sloping top. Also referred to as a framed glass hinged double door case. For general purpose use throughout the facility.
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0275	Chair, Swivel, High Back	VV	4	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0421	Pedestal File, Mobile	VV	2	A steel mobile pedestal file with three drawers and casters. Choice of finishes, handle style and with or without locking mechanism.
F0682	Workstation, PACS, Adjustable, Four- Monitor	VV	2	Mobile or free-standing computer work center for use as a four-monitor PACS workstation. Features include laminate work surface, electronic height/tilt adjustment of work surface, CPU holder, and monitor support array (up to 50 pounds each monitor).
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).

JSN	Content Name	Acq Code	Qty	Description
X4124	Console, PACS, Remote View, w/Four 2MP Monitors	VV	2	Four monitor remote viewing station for picture and retrieval (DIN/PACS) system. This station is for use by providers inside or outside radiology to review images. Station includes local image storage, image manipulation and simultaneous display of multiple images on four 1260 X 1600 monitors. Images are stored on a resident memory and roll off to long term storage as more recent images are sent to the station. Provider may request images from the PACS by LAN for image and result receipt. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.



### [Modality] Patient Holding Bay, Clncl Sprt (SC291) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

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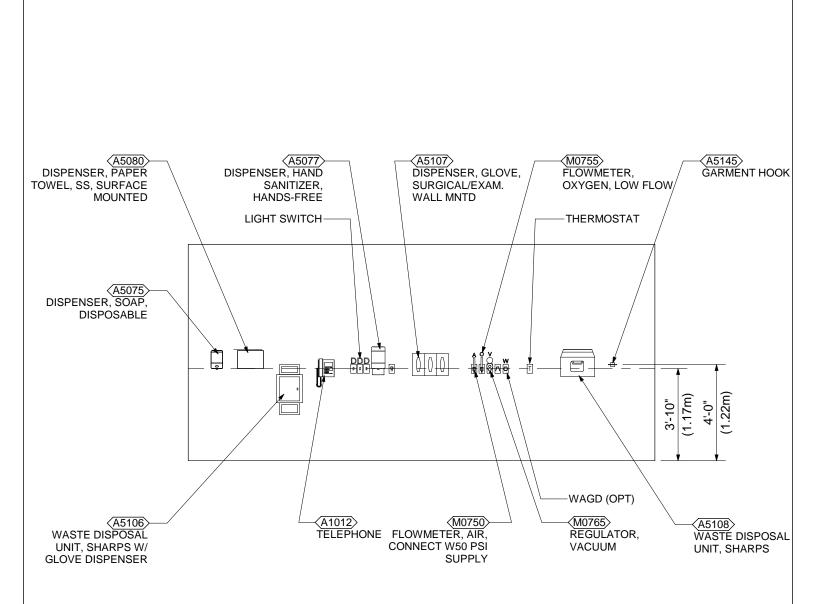
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# [Modality] Patient Holding Bay, Clncl Sprt (SC291) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

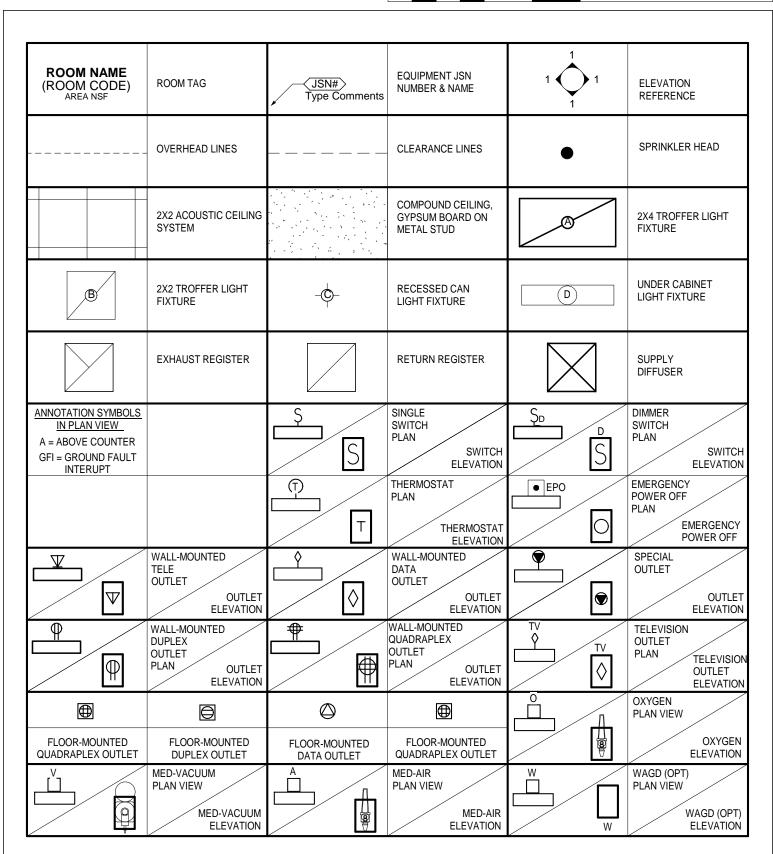
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



# [Modality] Patient Holding Bay, Clncl Sprt (SC291) LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

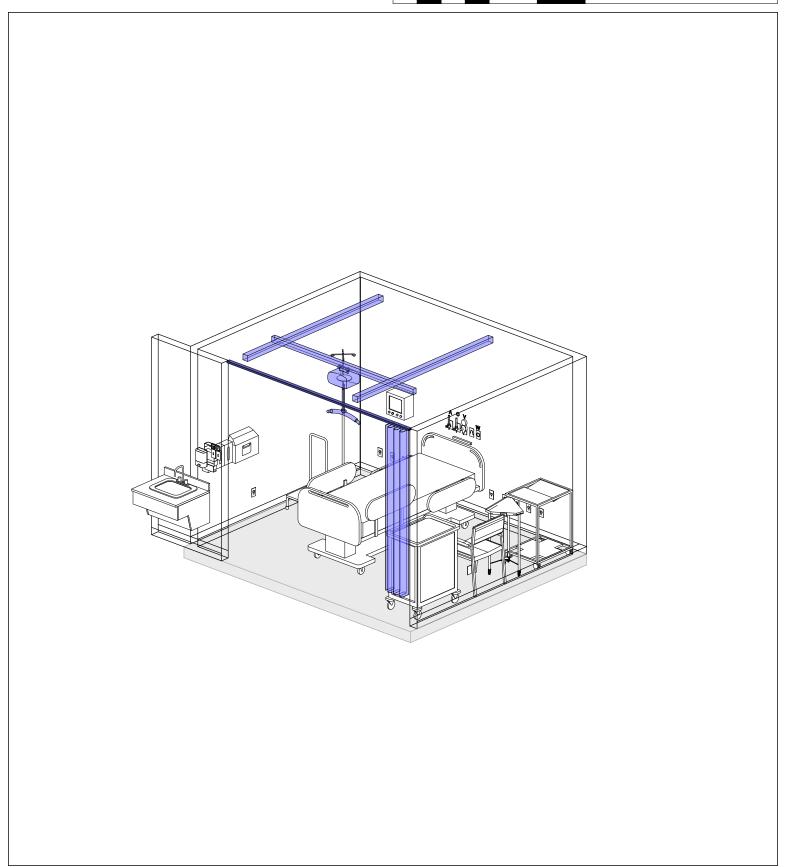




# [Modality] Patient Holding Bay, Clncl Sprt (SC291) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





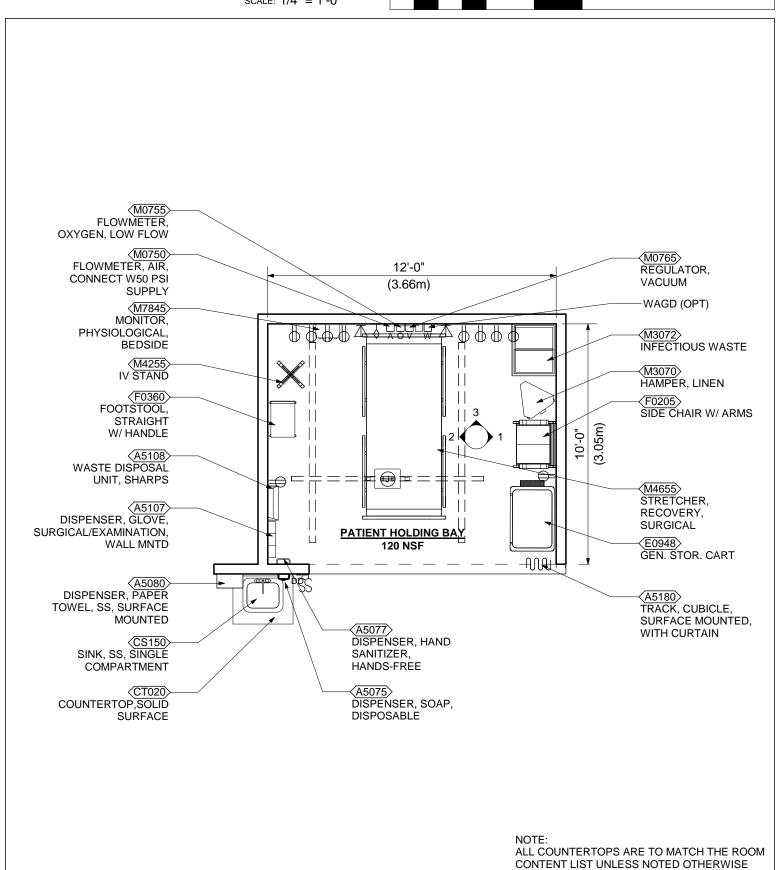
# [Modality] Patient Holding Bay, Clncl Sprt (SC291) INTERACTIVE 3D PDF

VA		of Veterans Affairs	SKETCH TITLE 0' 4' 8'					16	
			SCALE:						
l									



# [Modality] Patient Holding Bay, Clncl Sprt (SC291) FLOOR PLAN

SCALE: 1/4" = 1'-0" 8' 16

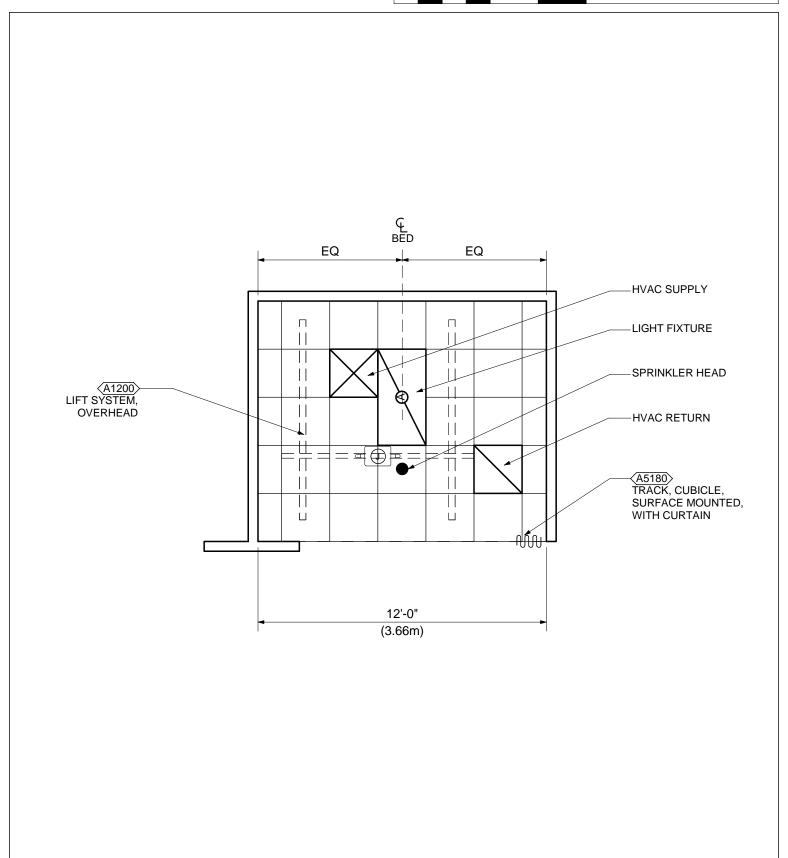




# [Modality] Patient Holding Bay, Clncl Sprt (SC291) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"

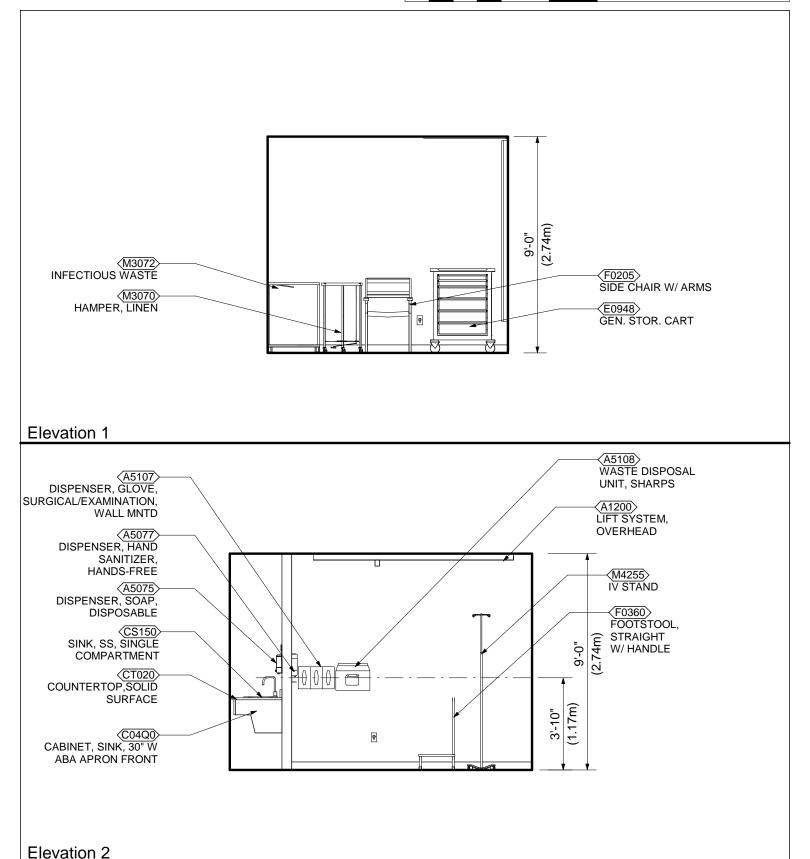




# [Modality] Patient Holding Bay, Clncl Sprt (SC291) ELEVATIONS

SKETCH TITLE 0' 4' 8'

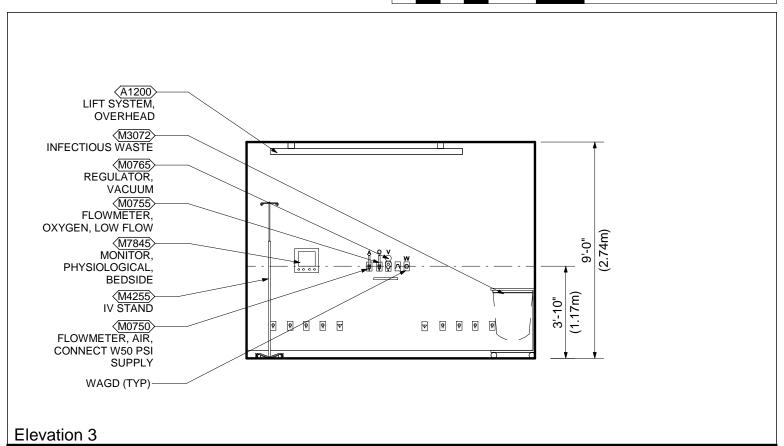
SCALE: 1/4" = 1'-0"





# [Modality] Patient Holding Bay, Clncl Sprt (SC291) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



Room Data: [Modality] Patient Holding Bay, Clncl Sprt (SC291)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RSF at h: 4" (100mm) Floor Finish: RSF Slab Depression: Sound Protection: STC 40 Doors: m: -- t: 15 dl: -- s: --

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 4.2.15 – Pre-Operative and
Post-Anesthetic Care (PACU) for lighting design consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Yes Data: Telephone: Yes Intercom: Yes Nurse Call: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Medical Air: Minimum 1 outlet/room Medical Vacuum: Minimum 1 outlet/room Minimum 1 outlet/room Oxygen: Rec 1 outlet/room Waste Anesthetic Gas:



## Room Contents: [Modality] Patient Holding Bay, Clncl Sprt (SC291)

JSN	Content Name	Acq Code	Qty	Description
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1200	Lift System, Overhead, Patient Room	VC	1	An overhead rail system specifically designed for patient lifting and movement for a single bed patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with rolling carriage, patient harness or seat, and a hand controller or control box with charger. System will facilitate lifting and movement of patient to and from bed to gurney, chair or other requirement. Minimum lift capability is 550 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.

JSN	Content Name	Acq Code	Qty	Description
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
CS150	Sink, SS, Single Compartment, 10x19x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0948	Cart, General Storage, Mobile, 42"H x 32"W x 22"D	VV	1	THIS TYPICAL INCLUDES:  1 Cart Body, Style-A Narrow, w/Raised Edge Top  2 Drawers, 3" H  4 Drawers, 6" H  1 Accessory Rail, Side Drawer Organizer Bins
F0205	Chair, Side With Arms	VV	1	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.
F0360	Footstool, Straight w/Handle	VV	1	A footstool used to assist patients getting on and off exam or surgical tables. Fitted with a handrail for added security and balance of the patient.
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.



JSN	Content Name	Acq Code	Qty	Description
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M3070	Hamper, Linen, Mobile, w/Lid	VV	1	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4655	Stretcher, Mobile, CRS, 9 Position	VV	1	Mobile stretcher. All corrosion resistant stainless steel construction. It consists of a tubular frame with side rails, a 9-position hydraulic base with pneumatic fowler adjustment, and a 2" pad. Unit is mounted on 8" conductive casters. Designed for patient transport as well as for minor surgical procedures.
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.





## [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) DISCLAIMER

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

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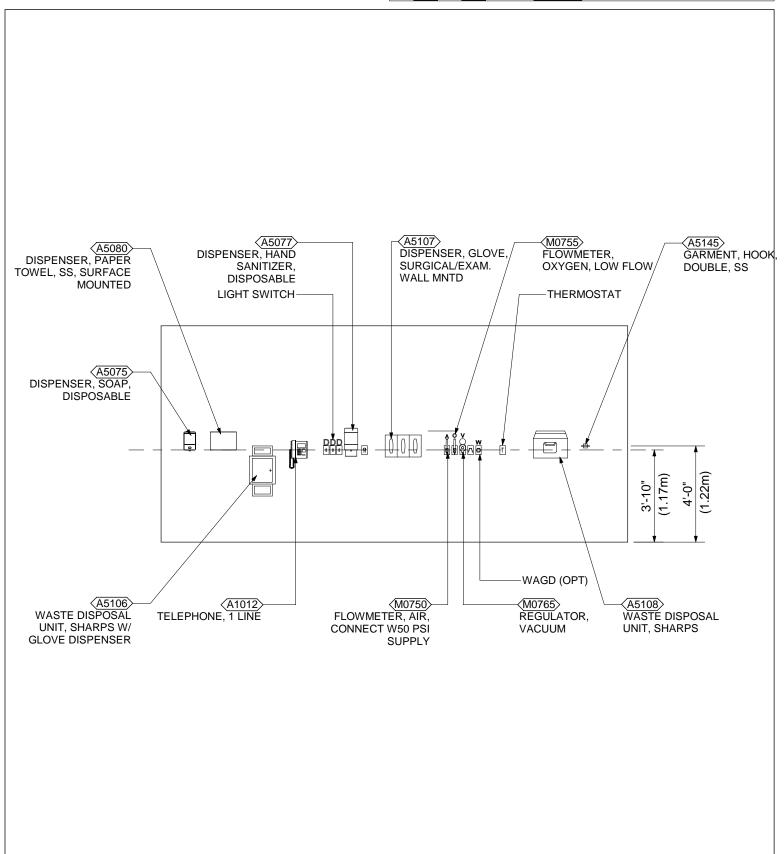
# [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SCALE: 1/4" = 1'-0"

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8'

16'

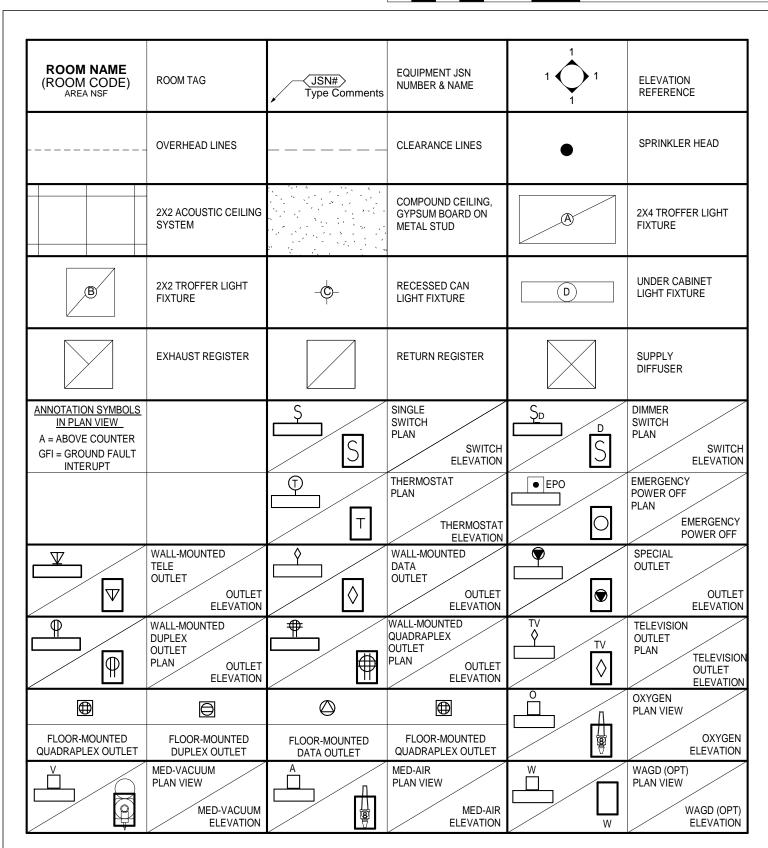




## [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) LEGEND

SKETCH TITLE 0' 4' 8'

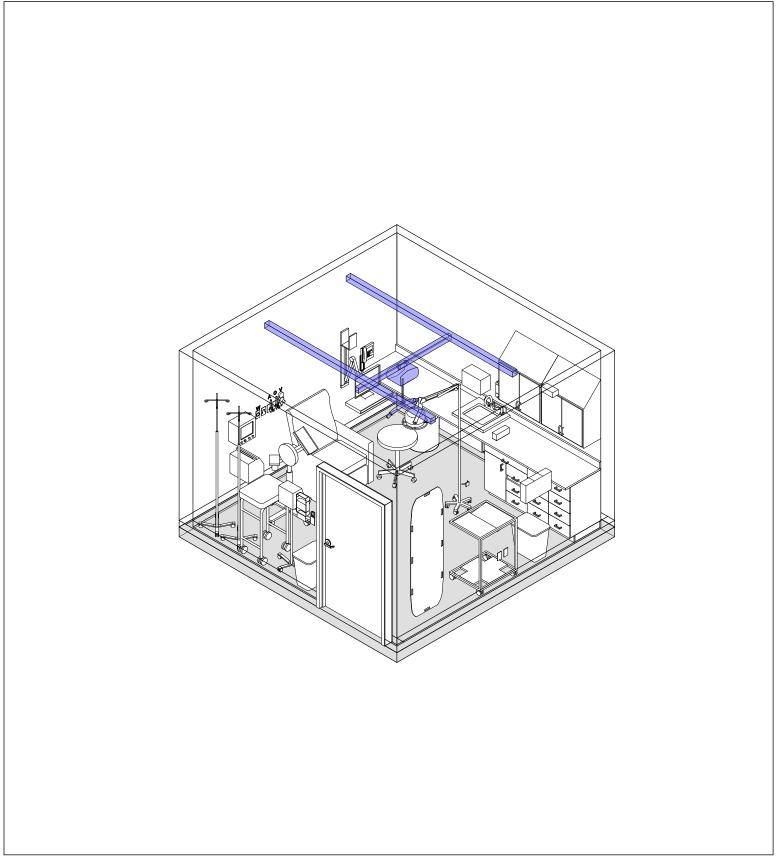
SCALE: 1/4" = 1'-0"





# [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) AXONOMETRIC

SCALE: 1/4" = 1'-0"





## [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) **INTERACTIVE 3D PDF**

VA	of Veterans Affairs	SKETCH TITLE	0'	4'	8'	 16
		SCALE:				



### [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) FLOOR PLAN

SKETCH TITLE SCALE: 1/4" = 1'-0" (A5075) DISPENSER, SOAP, **DISPOSABLE** (CS070) (A5080) SINK, SS, SINGLE DISPENSER, PAPER COMPARTMENT TOWEL, SS, SURFACE MOUNTED F2700> READER, BAR CODE, (F2000) BASKET, HAND HELD **WASTEPAPER** (M5030) CABINET, W/H, 2 STOOL, SURGEON, SHELF, 2DO, SLOPING REVOLVING TOP, 38"H X 30"W X (A1012) TELEPHONE, 1 LINE 22"D (M7401)  $\langle M1801 \rangle$ LIGHT, EXAM, MOBILE COMPUTER W/ SPOTLIGHT, MOBILE 12'-0" FLAT-PANEL **STAND MONITOR** (3.66m)(CT050) COUNTERTOP. (M1803) STAINLESS STEEL WORK STATION. ≬₩ COMPUTER. F2245> RETRACTABLE, WALL CAMERA, HD MTD A5107 (M1400) DISPENSER, GLOVE, INFUSION RECLINER SURGICAL/EXAM. (M0765) WALL MNTD TIPI REGULATOR, (A5105) PET **VACUUM** (3.66m) WASTE DISPOSAL **UPTAKE ROOM** (M0755) 12'-0" 145 NSF UNIT. SHARPS FLOWMETER, CONTAINER SHIELD OXYGEN, LOW FLOW Į II į  $\langle M0750 \rangle$ FLOWMETER, AIR, 11 CONNECT W50 PSI ш SUPPLY (M3072) **BLANK** FRAME, INFECTIOUS WAGD (OPT) WASTE BAG W/ LID (A1203) LIFT SYSTEM, **OVERHEAD** \$\$b **BARIATRIC** (A5145) (M7845) GARMENT, HOOK. MONITOR, DOUBLE, SS PHYSIOLOGICAL, BEDSIDE 4 CHANNEL (A5105) WASTE DISPOSAL UNIT, SHARPS STAND, INJECTION. **CONTAINER SHIELD NUCLEAR MEDICINE** (A5077) (M4255) DISPENSER, HAND IV STAND SANITIZER, **DISPOSABLE** (M4266) PUMP, VOLUMETRIC, (F3200) **INFUSION MULTIPLE CLOCK** LINE (M4116) (M8830) MONITOR, VITAL TABLE, INSTRUMENT/ SIGNS, ON MOBILE DRESSING, MOBILE STAND

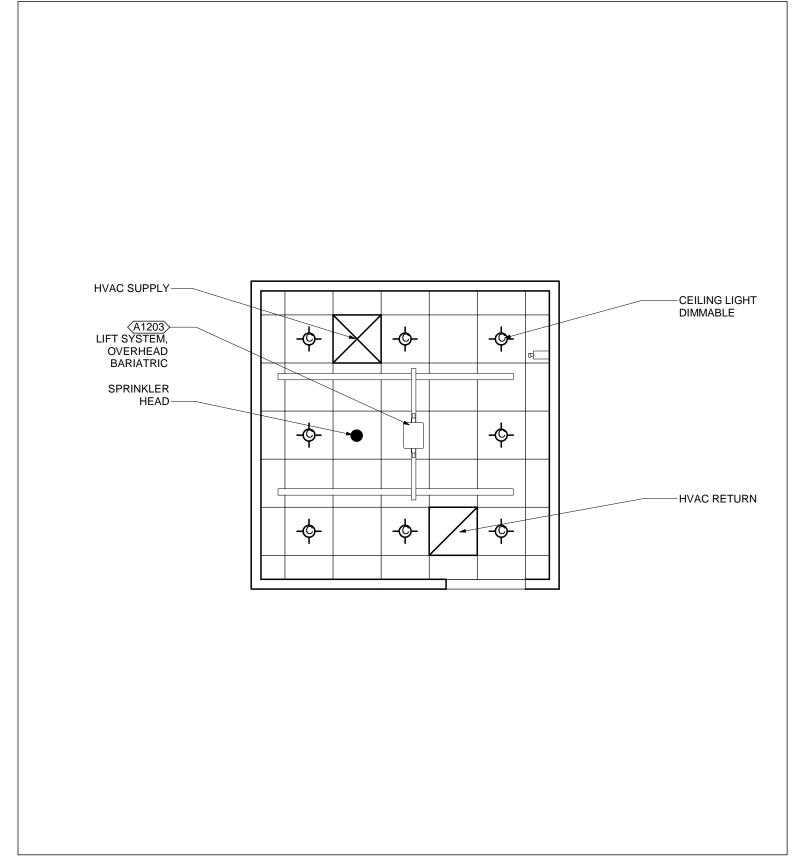
NOTE: ALL COUTNERTOPS TO MATCH ROOM CONTENT LIST UNLESS NOTED OTHERWISE



# [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) REFLECTED CEILING PLAN

S SKETCH TITLE 0' 4' 8' 1

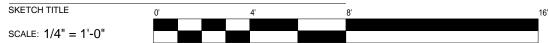
SCALE: 1/4" = 1'-0"

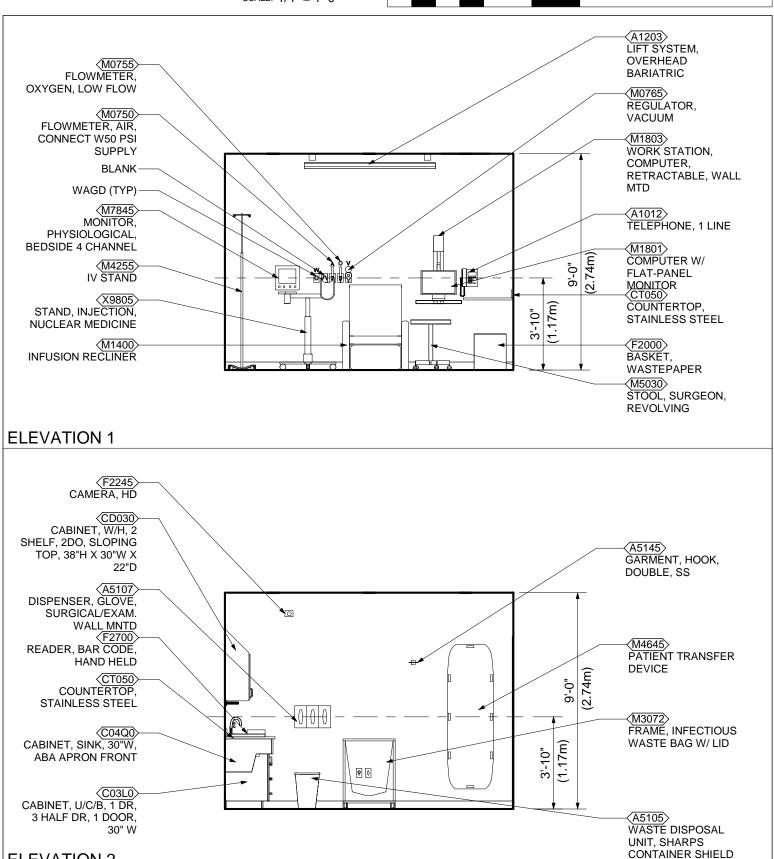




**ELEVATION 2** 

### [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) **ELEVATIONS**



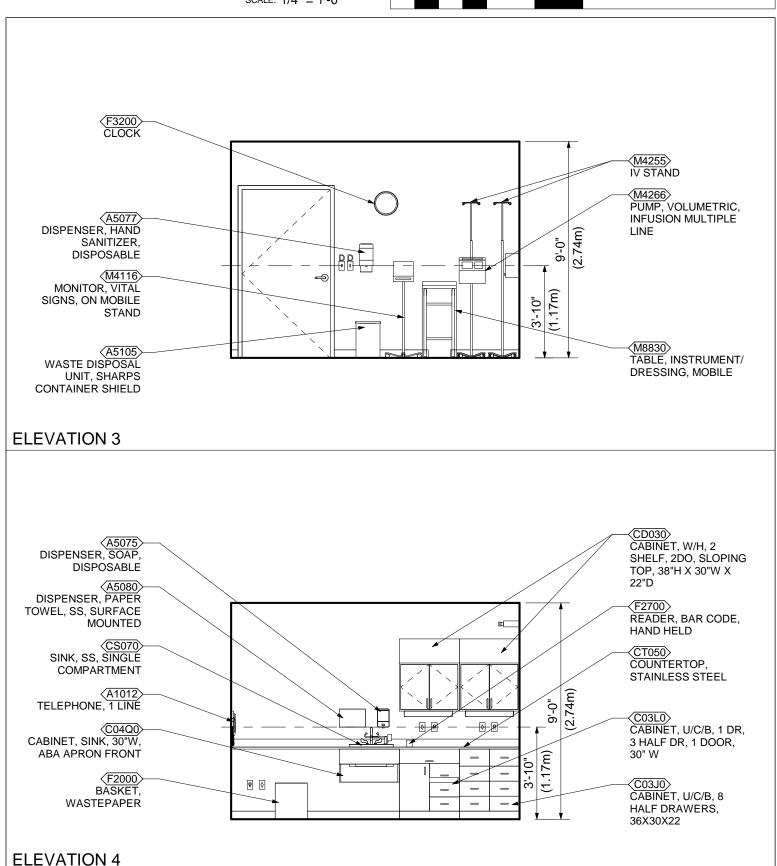




## [Location] Uptake Room, Imgng Svcs (Cl256, Cl291) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



Room Data: [Location] Uptake Room, Imgng Svcs (CI256, CI291)

#### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: AT (SP) 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RES-3 at h: 4" (100mm) Floor Finish: RES-3 Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 15 dl: LEAD s: X

#### Notes:

- Depending on adjacencies, radioisotope handling processes, and isotopes used, structural floor depth, alone, may not provide sufficient shielding from areas above or below. Thickened slab and/or a slab depression for shielding materials may be indicated. Consult with a medical physicist.
- 2. Provide a 4'-0" wide shielded door into the Uptake Room, PET.
- Consider substantial weight in rolling loads when selecting flooring materials and substraits.

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 6 – Administrating Areas
Lighting Guidelines for lighting design
consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### COMMUNICATION/SPECIAL SYSTEMS

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Note 1 Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes Hot Water: Yes Laboratory Air: Laboratory Vacuum: Sanitary Drain: Yes Reagent grade Water: Medical Air: Minimum 1 outlet/room Medical Vacuum: Minimum 1 outlet/room Minimum 1 outlet/room Oxygen: Rec 2 outlet/room Waste Anesthetic Gas:



## Room Contents: [Location] Uptake Room, Imgng Svcs (CI256, CI291)

JSN	Content Name	Acq Code	Qty	Description
A1012	Telephone, Wall Mounted, 1 Line	VV	1	Telephone, wall mounted, 1 line.
A1132	Rail, Accessory Mounting, Length As Required	VC	1	Horizontal equipment mounting rail with lock mounting devices capable of; supporting up to 75 pounds each, being repositioned, and mounting and dismounting of equipment without the use of tools (special tools may be required to unlock adapter that was previously locked to the rail). The rail must be capable of supporting medical equipment and accessories normally found in exam or patient rooms. The rail system must be capable of mounting and dismounting equipment without leaving or creating new holes in the finished surface of the wall. The rail system utilizes a series of mounting plates and adapters specific to the device being mounted to the rail. The plate and adapter rail mounting kit must be specified to match the equipment being mounted to the equipment rail.
A1203	Lift System, Overhead, Bariatric	СС	1	An overhead ceiling mounted rail system specifically designed for bariatric patient lifting and movement within a patient room. The system will consist of recessed or ceiling mounted primary and secondary rails, lift motor with carriage, patient harness or seat, and a hand controller or control box with charger (other charging options may be available). System will facilitate lifting and movement of patient to and from bed, to stretcher, chair, bathroom or other requirements. Lifting capacity is 1000 pounds. Custom design of track layout by manufacturer is essential to meet individual facility requirements.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5105	Waste Disposal Unit, Sharps, Container Shield	VV	2	Container shield for disposal of low-energy gamma radiation residue syringes. Constructed of steel with a minimum of .125" lead. Features include top with a sliding port and carrying handle.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.

JSN	Content Name	Acq Code	Qty	Description
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
C03J0	Cabinet, U/C/B, 8 Half Drawers, 36x30x22	СС	1	Standing height under counter base cabinet with eight half width drawers of equal height. Also referred to as a drawer cabinet. For general purpose use throughout the facility.
C03L0	Cabinet, U/C/B, 1 DR, 3 Half DR, 1 Door, 30" W	СС	1	Standing height under counter base cabinet, 34" H x 30" W x 22" D with a full width drawer above three half width drawers alongside a solid right or left door/cupboard (appropriate door/cupboard configuration to be indicated on equipment elevation drawings). Also referred to as a combination cabinet or a drawer and cupboard cabinet. For general purpose use throughout the facility.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
CT050	Countertop, Stainless Steel	СС	1	Stainless steel countertop (composition of heavy-gauge Type No. 304 stainless steel) having a smooth satin finish and integral 4" backsplash/curb. Also referred to as a corrosion-resistant steel work surface or work top. Available in various depths. Used in areas where excellent ease of cleaning, abrasion resistance, bacteria resistance, impact resistance, load capacity and moisture resistance, are of concern. Pricing based upon a 24" depth.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2245	Camera, Video Surveillance, HD, IP Powered	VV	1	A high definition, full functional video surveillance camera. The camera is capable of full 1080p resolution at 30 frames per second while optimizing network usage with H.264, MPEG-4 and JPEG compression formats. Camera will have an open, standards-based design providing a platform for integration and operation as an independent device or as part of a surveillance network.



JSN	Content Name	Acq Code	Qty	Description
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).
M0750	Flowmeter, Air, Connect w/50 PSI Supply	VV	1	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1400	Chair, Blood Donor, Recliner, Manual or Pneumatic	VV	1	Blood donor recliner chair constructed from wear and chemical resistant upholstery. Chair features extra-wide arm rests and a contoured back for lumbar and lateral support. Used for blood donor and pheresis procedures.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1803	Workstation, Computer, Wall Mounted, Adjustable	VV	1	A wall mounted computer workstation with height adjustable monitor and keyboard arms. Keyboard and monitor can be stored within 8" to 10" of wall. Fingertip adjustability for keyboard and monitor enable frequent position changes. Unit contains an integrated cable management system to hide wires. A separate wall-mounted CPU holder is included.



JSN	Content Name	Acq Code	Qty	Description
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M4116	Monitor, Vital Signs	VV	1	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.
M4255	Stand, IV, Adjustable	VV	1	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4266	Pump, Volumetric, Infusion, Multiple Line	VV	1	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.
M5030	Stool, Surgeon, Revolving	VV	1	Revolving stool. Consists of a padded upholstered seat with height adjustment. Unit rotates and is mounted on ball bearing swivel casters. Designed for use in examinations, treatment, and surgical procedures.
M7401	Light, Exam, Mobile, Spotlight, Mobile Stand	VV	1	The exam light shall be a mobile floor unit. The light will be a halogen bulb or LED that can produce a continuous and homogeneous spot of light adjustable from 5 to 9 inches in diameter from a set distance. The light intensity shall be a minimum of 750 foot-candles at a distance of 16 inches and have a color temperature of 3,200 degrees Kelvin. The unit will consist of an arm or sleeve of approximately 45 inches in length to allow for easy arm rotation and arm movement up and down. The unit shall be mounted on a caster base for easy movement.,
M7845	Monitor, Physiological, Bedside, 4 Channel	VV	1	4 channel bedside physiological monitor. The unit consist of a four-channel non-fade monochrome display monitor, an alarm system and printer-recording capabilities. The monitor has color coded controls and automatic calibration. The unit displays up to four waveforms simultaneously. The parameters to be monitored are user selectable. The monitor may be connected to a central monitoring station. The unit monitors patients in most acute care areas, step-down units, procedure rooms and emergency rooms.
M8830	Table, Instrument/Dressing, Mobile	VV	1	Mobile instrument/dressing table, approximately 34" H x 20" W x 16" D Corrosion resistant stainless steel mobile table with sound-deadening shelf and drawer. Unit is mounted on 2" casters. Designed for all purpose use in the hospital or clinic.



JSN	Content Name	Acq Code	Qty	Description
X9805	Stand, Injection, Nuclear Medicine	VC	1	An injection stand designed for arm positioning for radionuclide injections. The arm rest holds the patient's arm firmly in place. A utility tray sits adjacent to the armrest to hold supplies and includes a lead-lined multi syringe holder. The stand height is adjustable approximately from 29" to 44." Casters allow the stand to be rolled into position or out of the way for storage. It is structurally balanced so that it won't tip over.



# [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) DISCLAIMER

SKETCH TITLE 0'

SCALE: 1/4" = 1'-0"

0'	4	1'	8' 1

#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

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EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.

## U.S. Department of Veterans Affairs

## [Location] IV Start Room, Imgng Svcs (CI074, CI104, CI204, CI236, CI265) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

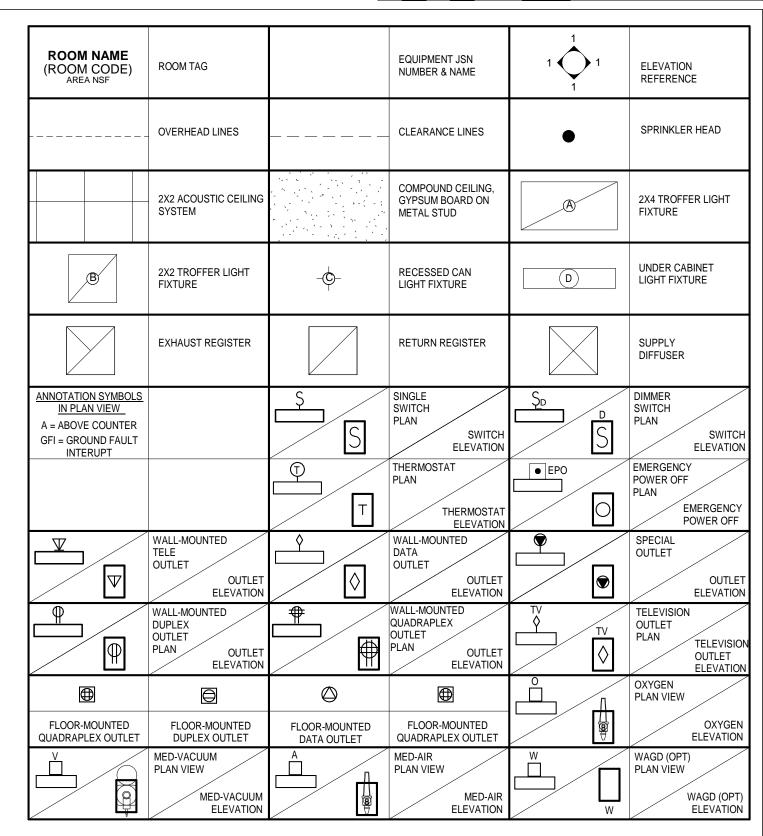
SKETCH TITLE SCALE: 1/4" = 1'-0"(A5107) (A5077) DISPENSER, GLOVE, DISPENSER, HAND SANITIZER, (M0755) (A5145) (A5080) FLOWMETER, SURGICAL/EXAM. **GARMENT HOOK** DISPENSER, PAPER WALL MNTD OXYGEN, LOW FLOW, HANDS-FREE TOWEL, SS, SURFACE MOUNTED LIGHT SWITCH-THERMOSTAT A5075 DISPENSER, SOAP **DISPOSABLE** WAGD (OPT) (A5106) (A1012) (M0750) (M0765) (A5108) WASTE DISPOSAL FLOWMETER, AIR. WASTE DISPOSAL TELEPHONE REGULATOR, UNIT, SHARPS CONNECT W50 PSI UNIT, SHARPS **VACUUM** W/GLOVE DISPENSER **SUPPLY** 



### [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) LEGEND

SKETCH TITLE 0' 4' 8' 16'

SCALE: 1/4" = 1'-0"

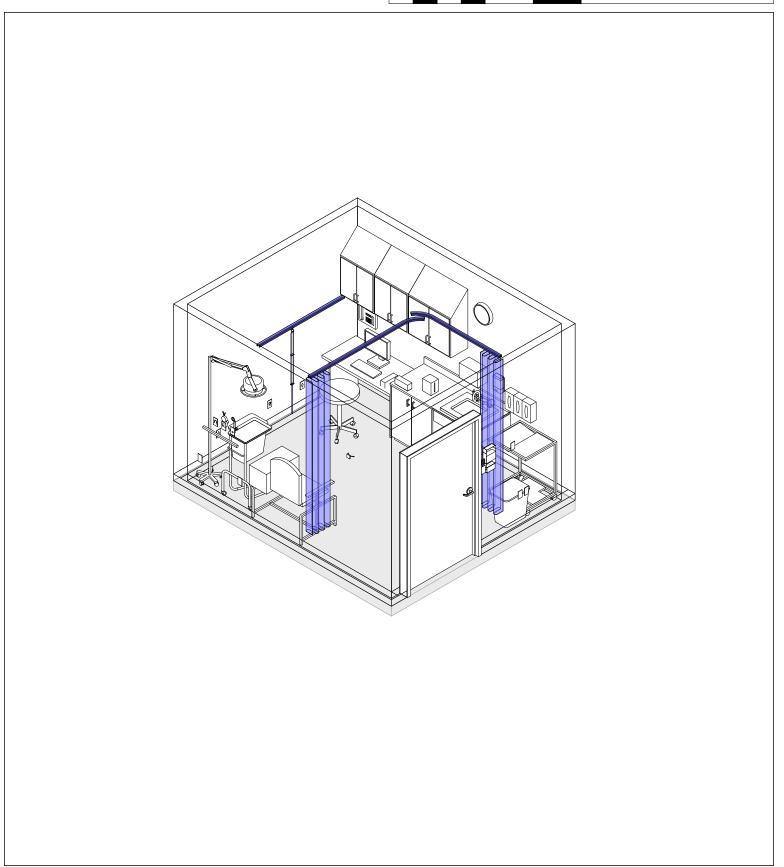




# [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





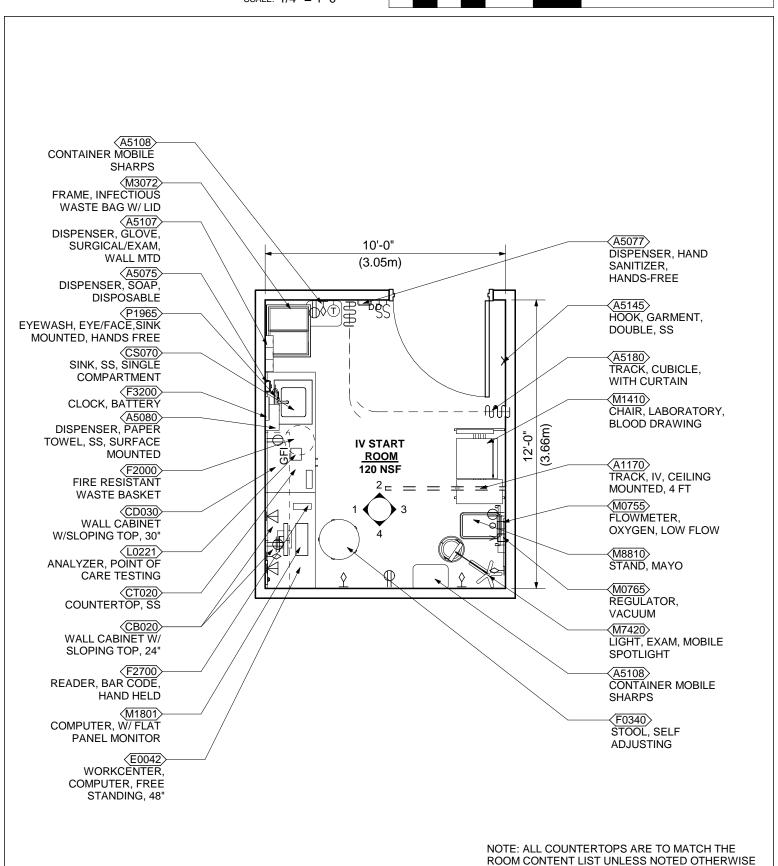
## [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) **INTERACTIVE 3D PDF**

VA	of Veterans Affairs	SKETCH TITLE	0'	4'	8'	 1
		SCALE:				
						1



## [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) FLOOR PLAN

SCALE: 1/4" = 1'-0" 8' 16

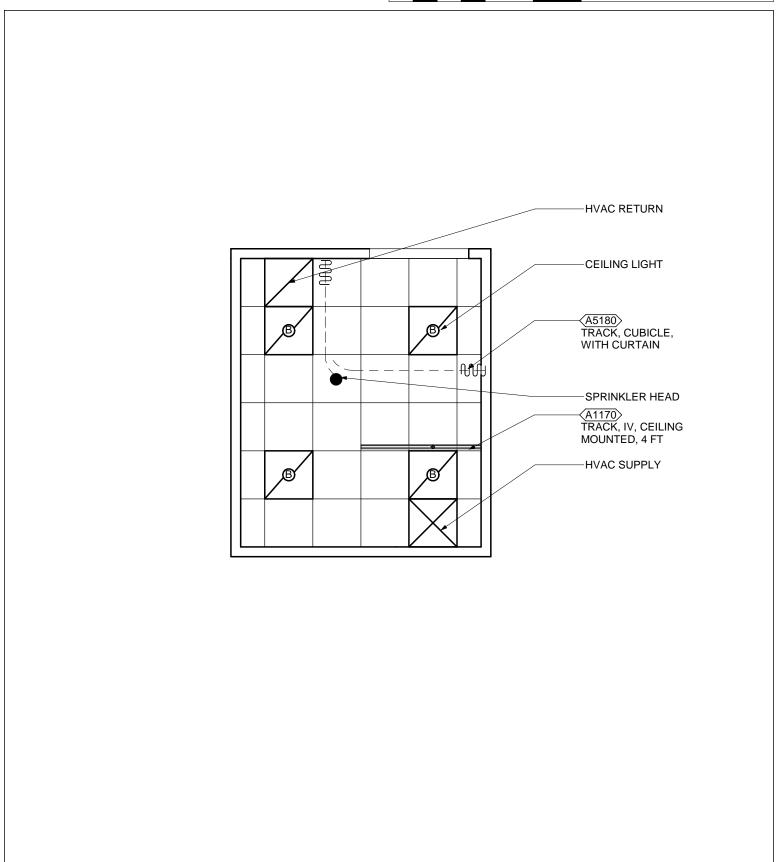




## [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) REFLECTED CEILING PLAN

SKETCH TITLE 0' 4' 8' 16'

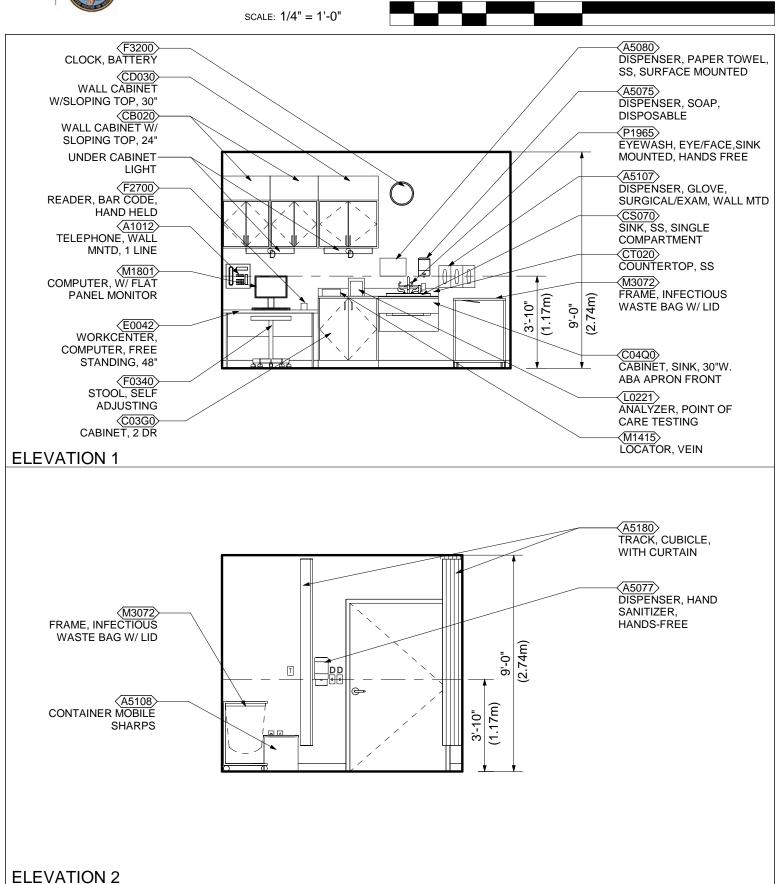
SCALE: 1/4" = 1'-0"





## [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) ELEVATIONS

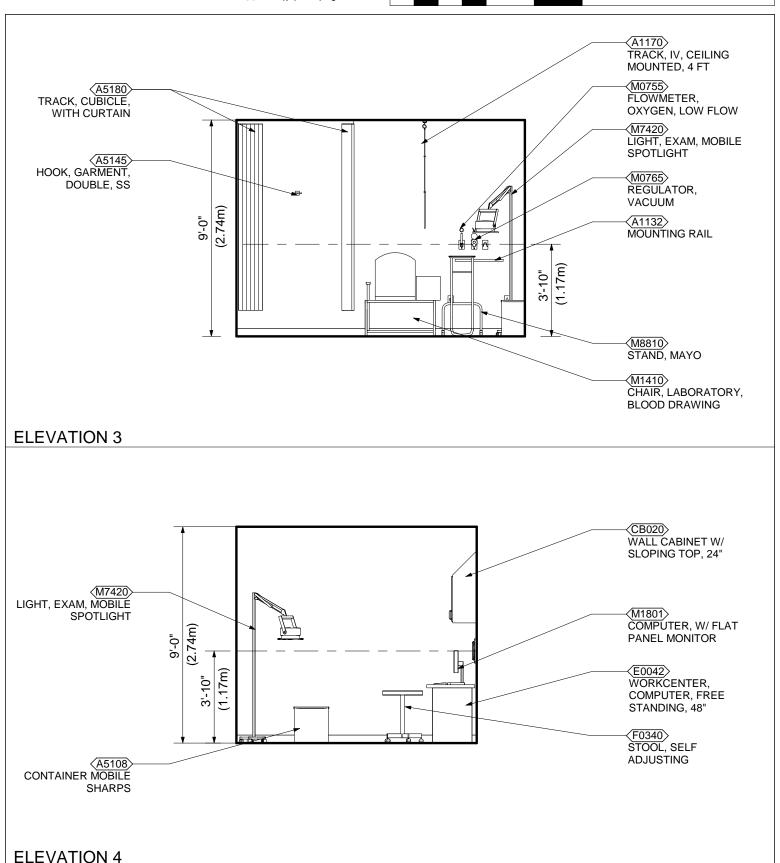
SKETCH TITLE





# [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265) ELEVATIONS

SCALE: 1/4" = 1'-0" 8' 16



CHAPTER 295 - [Location] IV Start Room, Imgng Svcs (CI074, CI104, CI204, CI236, CI265)

Room Data: [Location] IV Start Room, Imgng Svcs (Cl074, Cl104, Cl204, Cl236, Cl265)

#### ARCHITECTURAL & INTERIOR DESIGN

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: WSF / RSF at h: 4" (100mm) Floor Finish: WSF / RSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 5 dl: -- s: X

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 6 – Administrating Areas
Lighting Guidelines for lighting design
consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

## HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.



CHAPTER 295 - [Location] IV Start Room, Imgng Svcs (CI074, CI104, CI204, CI236, CI265)

#### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Minimum 1 outlet/room
Oxygen: Minimum 1 outlet/room

#### Notes:

1. Eyewash station at handwashing sink.

Room Contents: [Location] IV Start Room, Imgng Svcs (CI074, CI104, CI204, CI236, CI265)

JSN	Content Name	Acq Code	Qty	Description
A1170	Track, IV, Ceiling Mounted, 4 Foot	СС	1	4 ft. ceiling mounted IV track. Unit consists of an anodized aluminum track. Equipped with a carrier, with self locking hinge, hook and bottle pendant. Designed for dispensing IV solutions.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5080	Dispenser, Paper Towel, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	2	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5180	Track, Cubicle, Surface Mounted, With Curtain	VV	1	Surface mounted cubicle track, with curtain. Track constructed of thick extruded aluminum. Equipped with self lubricating carriers, beaded drop chain hooks, and flame resistant curtain. To include removable end caps. Designed to be suspended around patient areas where privacy is needed. Price listed is per foot of the track, curtains to be priced per quote.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	1	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CB020	Cabinet, W/H, 2 Shelf, 1 DO, Sloping Top, 38x24x13	СС	2	Wall hung cabinet with two adjustable shelves, solid right or left-hinged door (appropriate door hinge configuration to be indicated on equipment elevation drawings), and sloping top. Also referred to as a solid hinged single door case. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	СС	1	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	СС	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0042	Workcenter, Computer, Free Standing, 48" W	VV	1	THIS TYPICAL INCLUDES: 1 Tool Rail 2 Paper Tray 1 Diagonal Tray 1 Freestanding Work Surface 1 Mobile Pedestal, Box/File 1 Adjustable Keyboard Tray
F0340	Stool, Self Adjusting	VV	1	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F2000	Basket, Wastepaper, Fire Resistant	VV	1	Wastepaper basket, fire resistant, approximately 40 quart capacity. This unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations. Size and shape varies depending on the application and manufacturer selected.
F2700	Reader, Bar Code, Hand Held, With Interface	VV	1	Hand held laser bar code reader with computer interface. Used for automated inventory, using bar code stickers / labels. Convenience outlet required at point of use.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).



		A 2 22		
JSN	Content Name	Acq Code	Qty	Description
L0221	Analyzer, Blood, Portable, Hand Held	VV	1	Handheld point-of-care testing analyzer. Utilizes single-use, disposable cartridges for diagnostic testing to include: Blood gases, electrolytes and chemistries, lactate, coagulation, hematology, and cardiac markers.
M0755	Flowmeter, Oxygen, Low Flow	VV	1	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.
M0765	Regulator, Vacuum	VV	1	Vacuum pressure regulator for connection to central piped vacuum system. Standard display scale is graduated at least from 0 to 200 mm Hg of vacuum. Displays on specialized regulators may cover other vacuum ranges. Regulator type (continuous, intermittent, continuous/intermittent, surgical, pediatric, thoracic, etc.) as required. To be used in delivery, neonatal, pediatrics or any area where suction is required. Database pricing reflects continuous regulators graduated to 200 mm Hg with a full line vacuum selection switch and DISS configured inlets and outlets.
M1410	Chair, Laboratory, Blood Drawing, w/Storage	VV	1	Laboratory blood drawing chair with storage. Chair has built-in storage cabinet(s) and locking arm assembly that may be positioned on either side of the fiberglass chair.
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M3072	Frame, Infectious Waste Bag w/Lid	VV	1	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M7420	Light, Exam, Mobile	VV	1	Mobile examination light mounted on a floor stand with casters.  Unit features colored corrected light, an air-cooled shade and a balanced floating arm. Unit may also have a center mount detachable and sterilizable control handle. Designed for examination, treatment, and emergency areas where cool, color-corrected light is needed.
M8810	Stand, Mayo	VV	1	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.



## PG 18-12 – IMAGING SERVICES DESIGN GUIDE September 1, 2020 CHAPTER 295 - [Location] IV Start Room, Imgng Svcs (CI074, CI104, CI204, CI236, CI265)

JSN	Content Name	Acq Code	Qty	Description
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
M1415	Locator, Vein	VV	1	A portable device using vein visualization technology designed to help locate and assess appropriate veins for safe and efficient IV access.



## [Modality] Medication Preparation Room, Clncl Sprt (SC083) DISCLAIMER

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

#### DISCLAIMER:

ROOM TEMPLATES ARE A CRITICAL COMPONENT TO VA TECHNICAL INFORMATION LIBRARY (TIL) WHICH PROVIDES STANDARDS FOR ALL VA PLANNING, DESIGN, AND CONSTRUCTION PROJECTS. ROOM TEMPLATES ARE DEPARTMENT AND ROOM ALIGNED CRITERIA DESCRIBING SPACE, ROOM CONTENTS, AND OTHER TECHNICAL REQUIREMENTS FOR THE DEVELOPMENT OF VA PROJECTS. ROOM TEMPLATES COMMUNICATE THE BASIS OF DESIGN (BOD) AND ARE REQUIRED TO BE UTILIZED BY PROJECT TEAMS WORKING ON NEW CONSTRUCTION AND RENOVATIONS OF EXISTING FACILITIES. THE MATERIAL CONTAINED IN THE ROOM TEMPLATE CONSTITUTES A STANDARD FOR VA PLANNING, DESIGN, AND CONSTRUCTION. ANY SUBSTANTIAL VARIANCE FROM STANDARDS SHALL BE CONSIDERED ONLY AS REQUIRED TO ACCOMMODATE SPECIFIC SITE, FUNCTIONAL, AND OPERATIONAL CONDITIONS. EACH SUBSTANTIAL VARIANCE SHALL HAVE A BASIS OF RATIONALE AND BE DOCUMENTED IN THE PROJECT RECORD.

CLINICIANS, PROVIDERS, PRIMARY USERS, AND OTHER STAKEHOLDERS SHALL BE INVOLVED IN PROJECT SPECIFIC DEVELOPMENT OF ROOM TEMPLATES AND BIM TEST-FITS TO BEST ADAPT STANDARDS FOR SPECIFIC FUNCTIONAL, OPERATIONAL, AND SITE CONDITIONS AND TO PROVIDE OPTIMUM SERVICES ENVIRONMENTS FOR VETERANS. STAKEHOLDER INVOLVEMENT AND REQUIREMENTS SHALL BE DOCUMENTED IN THE PROJECT RECORD.

ROOM TEMPLATES ARE NOT PROJECT-SPECIFIC. SITE SPECIFIC ISSUES MUST BE ADDRESSED WITH THE CONTEXT OF VA STANDARDS AND APPLIED TO EACH INDIVIDUAL PROJECT. USE OF THIS ROOM TEMPLATE DOES NOT PRECLUDE THE NEED FOR , NOR ABSOLVE PLANNERS, DESIGNERS, AND CONSTRUCTORS OF THEIR RESPONSIBILITY TO PROVIDE COMPLETE, FUNCTIONAL, SAFE, AND SECURE DESIGNS SUITED TO THE UNIQUE REQUIREMENTS OF EACH PROJECT.

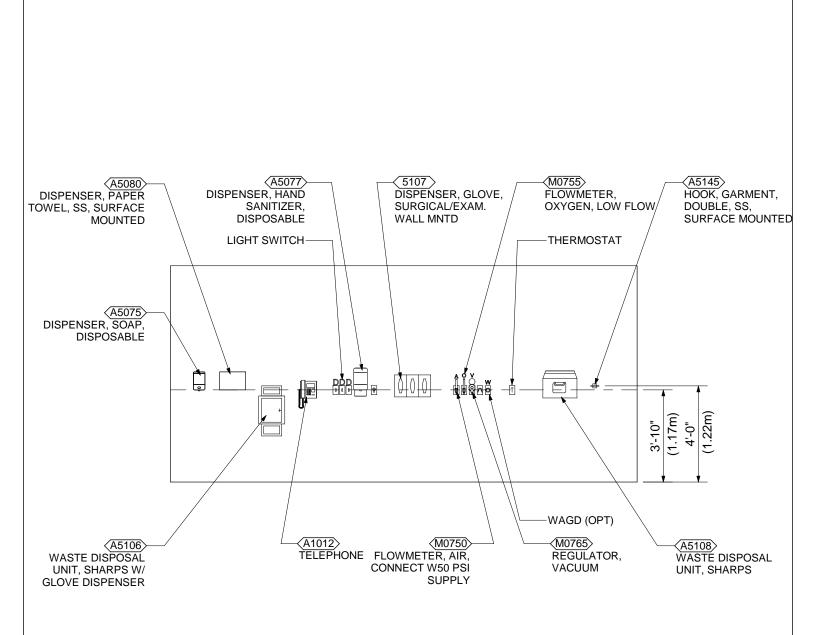
EQUIPMENT AND SYSTEMS ARE SHOWN IN AN ILLUSTRATIVE, PERFORMANCE-BASED FORMAT AND ARE NOT INTENDED TO DEPICT, SUGGEST, OR OTHERWISE CONSTITUTE ENDORSEMENT OF ANY SPECIFIC PRODUCT OR MANUFACTURER. MANUFACTURERS SHOULD BE CONSULTED FOR ACTUAL DIMENSIONS, CONFIGURATIONS, AND UTILITY REQUIREMENTS.



## [Modality] Medication Preparation Room, Clncl Sprt (SC083) ABA TYPICAL OPERABLE MOUNTING HEIGHTS LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"



### **Drawing Notes:**

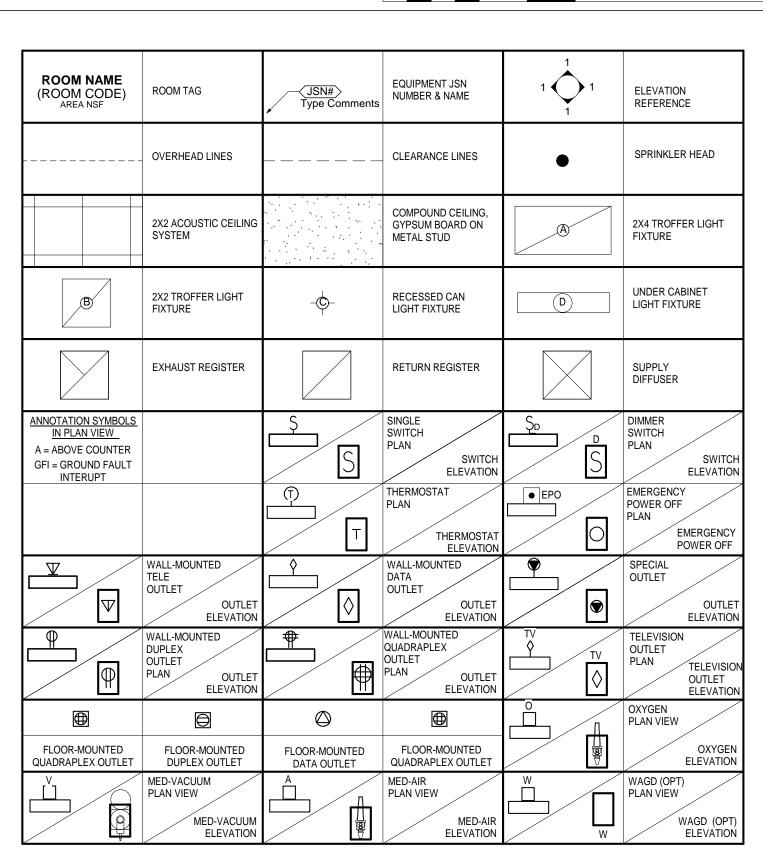
- 1. Comply with ABA and governing accessibility codes and standards.
- 2. For ceiling-dropped medical gases, attach mounting rail on medical equipment within allowable mounting heights in accordance with medical equipment manufacturer's guidance



## [Modality] Medication Preparation Room, Clncl Sprt (SC083) LEGEND

SKETCH TITLE 0' 4' 8' 16

SCALE: 1/4" = 1'-0"

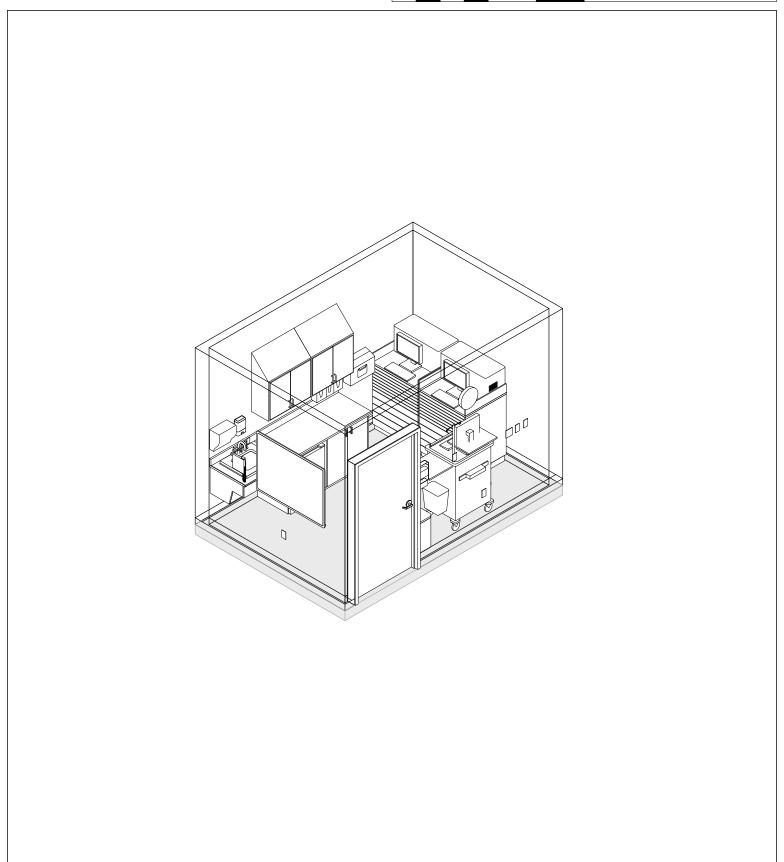




# [Modality] Medication Preparation Room, Clncl Sprt (SC083) AXONOMETRIC

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"





### [Modality] Medication Preparation Room, Clncl Sprt (SC083) **INTERACTIVE 3D PDF**

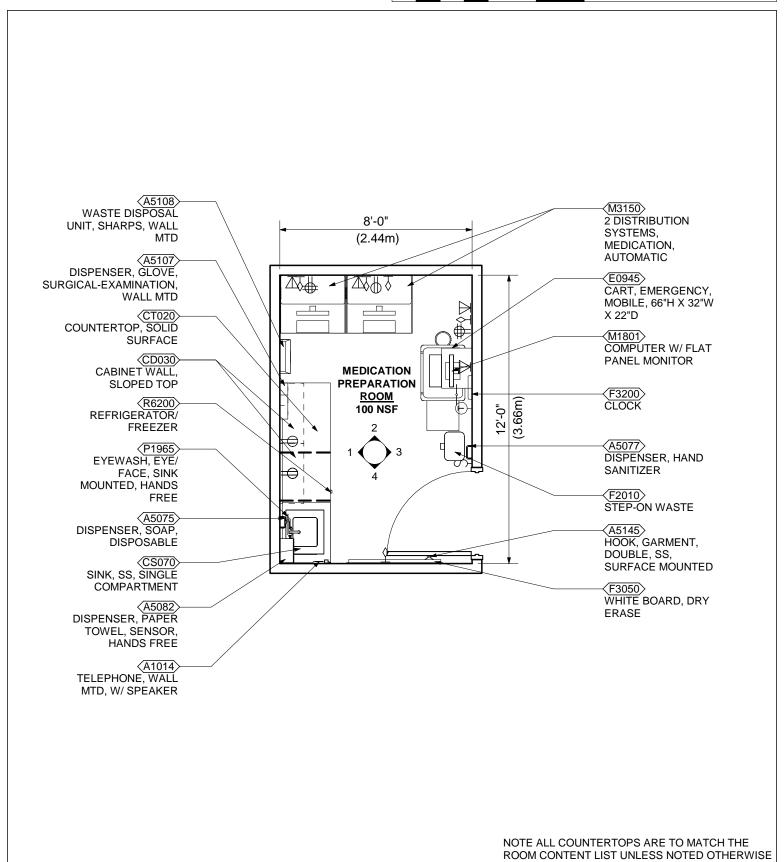
VA	of Veterans Affairs	SKETCH TITLE	0'	4'	8'	1
		SCALE:				



## [Modality] Medication Preparation Room, Clncl Sprt (SC083) FLOOR PLAN

SKETCH TITLE 0' 4' 8'

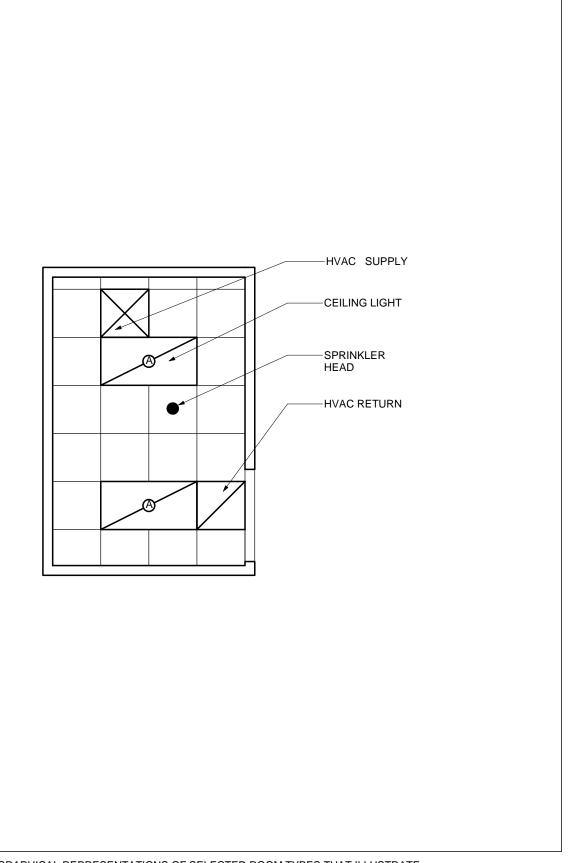
SCALE: 1/4" = 1'-0"





# [Modality] Medication Preparation Room, Clncl Sprt (SC083) REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"



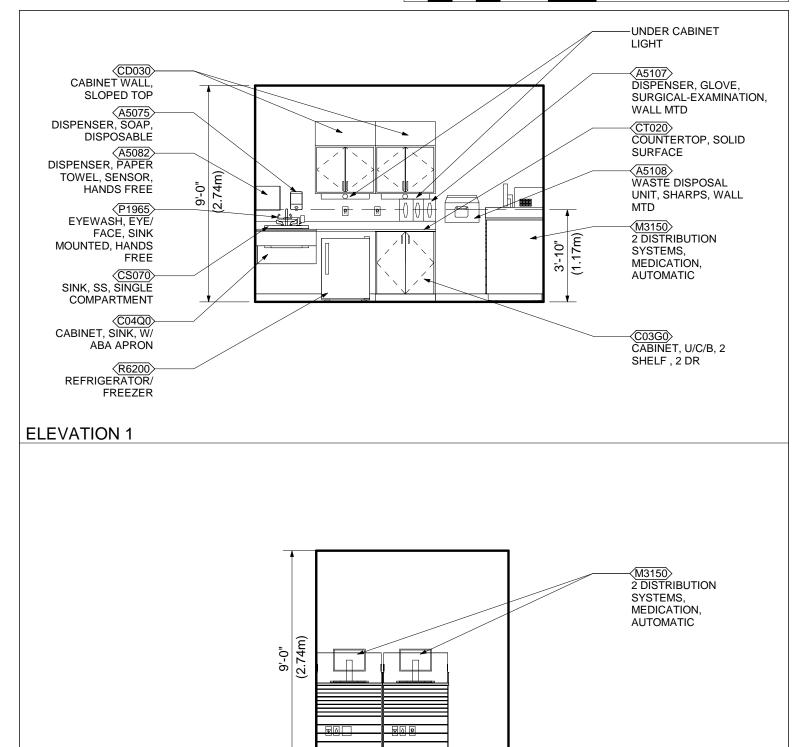


**ELEVATION 2** 

## [Modality] Medication Preparation Room, Clncl Sprt (SC083) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"

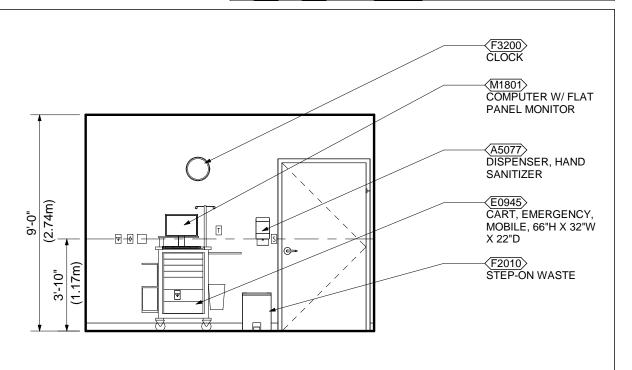




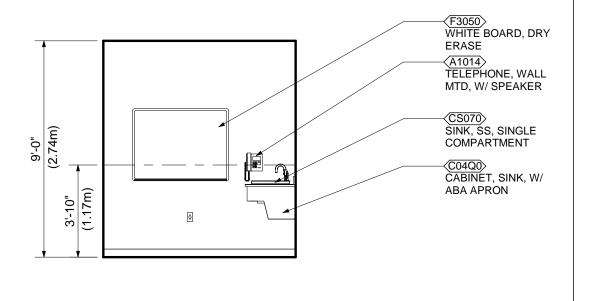
# [Modality] Medication Preparation Room, Clncl Sprt (SC083) ELEVATIONS

SKETCH TITLE 0' 4' 8'

SCALE: 1/4" = 1'-0"



### **ELEVATION 3**



**ELEVATION 4** 

Room Data: [Modality] Medication Preparation Room, Clncl Sprt (SC083)

### **ARCHITECTURAL & INTERIOR DESIGN**

Ceiling Type: ΑT 9'-0" (2700mm) Ceiling Height: Ceiling Finish: ACT Wall Finish: m: GWB f:P Wainscot: Base: m: RSF at h: 4" (100mm) Floor Finish: RSF Slab Depression: Sound Protection: STC 40 Doors: m: Wood t: 5 dl: -- s: X

#### LIGHTING

Refer to the current version of **Lighting Design Manual** section 6 – Administrating Areas
Lighting Guidelines for lighting design
consideration.

#### **POWER**

Refer to the current version of **Electrical Design Manual** section 2.1.5 for general electrical requirement for radiology rooms.

Normal Power: To be connected to selected

receptacles and equipment.

Emergency Power: Critical branch of the EES to

be connected to selected receptacles and equipment.

#### **COMMUNICATION/SPECIAL SYSTEMS**

ADP: Yes Data: Yes Telephone: Yes Intercom: Yes Nurse Call: Yes Public Address: Radio/Entertainment: MATV: CCTV: MID: Security/Duress: VTEL: VA Satellite TV:

#### Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

### HEATING, VENTILATING AND AIR CONDITIONING

Design in accordance with project requirements.

Refer to the current version of HVAC Design Manual, Section 6 – "Mechanical Room Data Sheets" for the following room information: temperature, relative humidity, air change per hour, noise level, pressurization, and other miscellaneous requirements.

### PLUMBING AND MEDICAL GASES/VACUUM

Cold Water: Yes
Hot Water: Yes
Laboratory Air: -Laboratory Vacuum: -Sanitary Drain: Yes
Reagent grade Water: -Medical Air: Not Required
Medical Vacuum: Not Required
Oxygen: Not Required



### Room Contents: [Modality] Medication Preparation Room, Clncl Sprt (SC083)

JSN	Content Name	Acq Code	Qty	Description
A1010	Telecommunication Outlet	VV	2	Telecommunication outlet location.
A1014	Telephone, Wall Mounted, 1 Line, With Speaker	VV	1	Telephone, wall mounted, 1 line, with speaker.
A5075	Dispenser, Soap, Disposable	VV	1	Disposable soap dispenser. One-handed dispensing operation.  Designed to accommodate disposable soap cartridge and valve.
A5077	Dispenser, Hand Sanitizer, Hands-Free	VV	1	A touch free wall-mounted hand sanitizer dispenser. For use throughout a healthcare facility. Unit does not include the sanitizing liquid. Units are battery operated.
A5082	Dispenser, Paper Towel, Sensor, Hands Free	СС	1	A surface mounted, sensor activated, automatic, roll paper towel dispenser. The unit dispenses a paper towel automatically only when hands are place in position below the dispenser for maximum sanitation and hygiene. May include adjustable settings for sheet length, time delay, and sensor range. Unit is battery operated or with optional AC power adapter.
A5107	Dispenser, Glove, Surgical/Examination, Wall Mntd	VV	1	Examination three (Small Medium, Large) glove dispenser box for wall mounting. Fabricated of either cold rolled steel with a white baked enamel finish, plastic or acrylic. Hardware not included, Option 3 powder coated steel.
A5108	Waste Disposal Unit, Sharps	VV	1	A container for collecting and transporting syringes and other sharps for decontamination and disposal. Available in 2 gallon and 8 gallon with locking rotor. Complies with OSHA regulations for handling sharps.
A5145	Hook, Garment, Double, SS, Surface Mounted	СС	1	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.
C03G0	Cabinet, U/C/B, 2 Shelf, 2 Door, 36x30x22	СС	1	Standing height under counter base cabinet with two adjustable shelves and two solid hinged doors. Also referred to as a cupboard cabinet. For general purpose use throughout the facility.
C04Q0	Cabinet, ADA Sink, Wall-Mounted	СС	1	Wall mounted sink support cabinet for drop-in sink with vertical fascia and angled ADA profile, also referred to as ADA sink cabinet. Removable front panel to permit access to plumbing. Medium density M-3 particle board core construction faced with high pressure vertical grade decorative plastic laminate on exposed surfaces and melamine on semi-exposed and concealed surfaces; plastic laminate edge banding. Includes all attaching hardware including support rail.
CD030	Cabinet, W/H, 2 Shelf, 2 DO, Sloping Top, 38x30x13	CC	2	Wall hung steel cabinet with two adjustable shelves, solid hinged doors, and sloping top. Also referred to as a solid hinged double door wall case. For general purpose use throughout the facility.



JSN	Content Name	Acq Code	Qty	Description
CS070	Sink, SS, Single Compartment, 7.5x16x16 ID	сс	1	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.
СТ020	Countertop, Solid Surface	СС	1	A solid, nonporous countertop with a smooth seamless appearance. Easy to clean and maintain and with proper cleaning does not support the growth of mold. An acrylic-based solid surface product. Standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab and other hospital areas requiring optimum physical and chemical resisting properties.
E0945	Cart, Computer, Mobile	VV	1	A mobile computer cart for use throughout the facility. The cart dimensions will be approximately 45" H x 30" W x 22" D with casters. May include drawers and miscellaneous other accessories that will be determined at time of purchase. This Typical may include:  1 Cart Body, w/Computer Support, Style-A Narrow, w/Raised Edge Top  1 Flip-Up Shelf 1 Sharps Container Holder 1 Wastebasket 1 Chart Holder 2 Drawers, 3"H 2 Drawers, 6"H 3 Accessory Rail, Side Drawer Organizer Bins
F2010	Basket, Wastepaper, Step-On	VV	1	"Step-on" wastepaper basket with inner liner and foot petal activated flip top.
F3050	Whiteboard, Dry Erase	VV	1	Whiteboard unit, approximately 36" H x 48" W consisting of a white porcelain enamel writing surface with an attached chalk tray. Magnetic surface available. Image can be easily removed with a standard chalkboard eraser. For use with water color pens. Unit is ready to hang.
F3200	Clock, Battery, 12" Diameter	VV	1	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).



JSN	Content Name	Acq Code	Qty	Description
M1801	Computer, Microprocessing, w/Flat Panel Monitor	VV	1	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; 1.44MB network interface card; video 32 MB NVIDIA; a 18 inch flat panel monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M3150	Distribution System, Medication, Automatic	VV	2	An automated dispensing system that provides controlled dispensing, inventory and security. Size and cost will vary dependent on number of modules selected.
P1965	Eyewash, Eye/Face, Sink Mounted, Hands-free	СС	1	A sink mounted eyewash station. The unit is designed for emergency eye and face rinsing from soft flow dual spray-heads. The Flow must be activated by the single momentary action and remain on until terminated.
R6200	Refrigerator, U/C or F/S, 5 Cu Ft	VV	1	Utility refrigerator approximately 35" H x 24" W x 26" D. The unit has a two tray ice cube cooling system. The refrigerator fits standard architectural dimensions for undercounter installation. The unit is perfect for use in nurses' station, wards, and laboratories, pharmacies or wherever space is limited.