



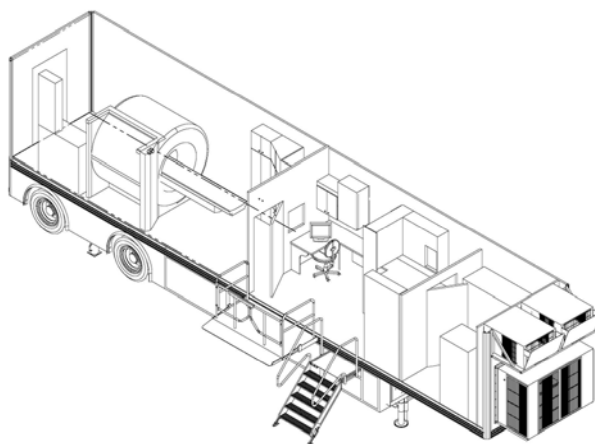
## SITE PLANNING GUIDE

### 48' MOBILE MRI SYSTEM

#### AVANTO

(Transportable at Field)

Manufactured by  
MEDICAL COACHES, INCORPORATED



Proper site preparation for special-purpose mobile units is critical to their successful operation. This guide has been assembled to provide you with detailed site planning and preparation data specifically for the SIEMENS MRI System installed in a Medical Coaches Mobile Unit.

The information compiled and provided should be sufficient to cover most site planning requirements. If additional questions do arise, please contact Medical Coaches directly. See page 1.

Medical Coaches continues to learn from our valued customers. We invite your comments and suggestions on any improvements to this document, and sincerely appreciate your past contributions.

The confidential information contained herein is the property of Medical Coaches, Inc. and may only be used by our customers.

January 31, 2006 123296 Rev F

# SITE PLANNING GUIDE REVISION SHEET

## 48' Mobile MRI System Avanto

<u>COVER REV</u>	<u>PAGE NO.</u>	<u>DESC RIPTION OF CHANGE:</u>	<u>Unit &amp; Date</u>
–	ALL	INITIAL RELEASE	6/7/04
A	8, 11 & 12	Changed Sales Drawing D20250 was D13262 also inserted 6385 revised Magnetic Field Level Grid, Ref D13265 Sheet 1, also revised D13263 Drawing to Rev. A	1/4/05 6385 +
B	5 13	In Section 4.0 Phone and Data service. Rewrote .sections covering Phone Lines #1, #2 & line specifically for Siemens remote diagnostics circuit. Also added description of Line #1 & Line #2 also Data #1, Data #2 & Data #3. Also Revised Drawing D20250 To Rev. A	7/10/05 6392 +
C	13	Revised drawing D20250 To Rev. B removed film viewer and changed cabinet to double doors.	6395 +
	11 & 12	Changed drawing on page #12 to D20500 showing Fringe Field Depiction, was D13265 Sheet 1 and also the section under 7.0 Magnetic Shielding was rewritten to describe Fringe Field Depiction in place of the grid method.	
D	3	Changer Voltage Variation in section 2.1 +/- 10% was +/-6%.	6397 +
E	3	Added (150 amps if Symphony is installed) in section 2.1	Symphony + Trailers
F	15	Revised Lettering Guide Drawing D13261 to Rev. B	6398+ 1/31/06

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## **1.0. SUPPORT PAD REQUIREMENTS:**

The following is a list of recommendations and requirements for a concrete support pad.

### **1.1. *MOBILE MRI TRAILER RECOMMENDED SUPPORT PAD***

A full pad measuring 43' long by 10' wide should be located as shown on the drawing on page 2. Minimum support pads (cross-hatched area on drawing) are also shown. The minimum pads are not recommended because they may not accommodate future mobile systems servicing the site.

### **1.2. *SUPPORT PAD DEPTH:***

Recommendations for length and width of pad are given above. However, the depth should be determined by a local contractor based upon weight distribution information given on drawing on page 2 and existing site conditions. If ferrous rebar is to be used in concrete pad, contact Siemens or Medical Coaches, Inc. about field setup specifications.

### **1.3. *SUPPORT PAD LEVELNESS:***

The SIEMENS' Mobile MRI System requires that the support pads be LEVEL FOR PROPER OPERATION. Pad must not exceed 0.25" deviation in 10' 0".

NOTE: A local licensed engineer or architect should determine actual site design. Site design is the responsibility of the purchaser or end users!

### **CAUTION!**

STRICT ATTENTION MUST BE PAID TO PAD LEVELNESS! FAILURE TO SUPPLY LEVEL PAD CAN CAUSE DIFFICULTIES IN MRI SYSTEM OPERATION.

### **1.4. *RECOMMENDED SERVICE PAD DIMENSIONS:***

A service pad measuring 20 feet by 54 feet should be located as shown on the drawing on page 2 for ease of service access (dotted line on drawing).

### **1.5. *ATTACHING TO BUILDING:***

If using a dock seal or similar inflatable seal to attach the Mobile Unit to a building, pages 2 and 9 can be used as guides.

If you require assistance, please contact us directly.

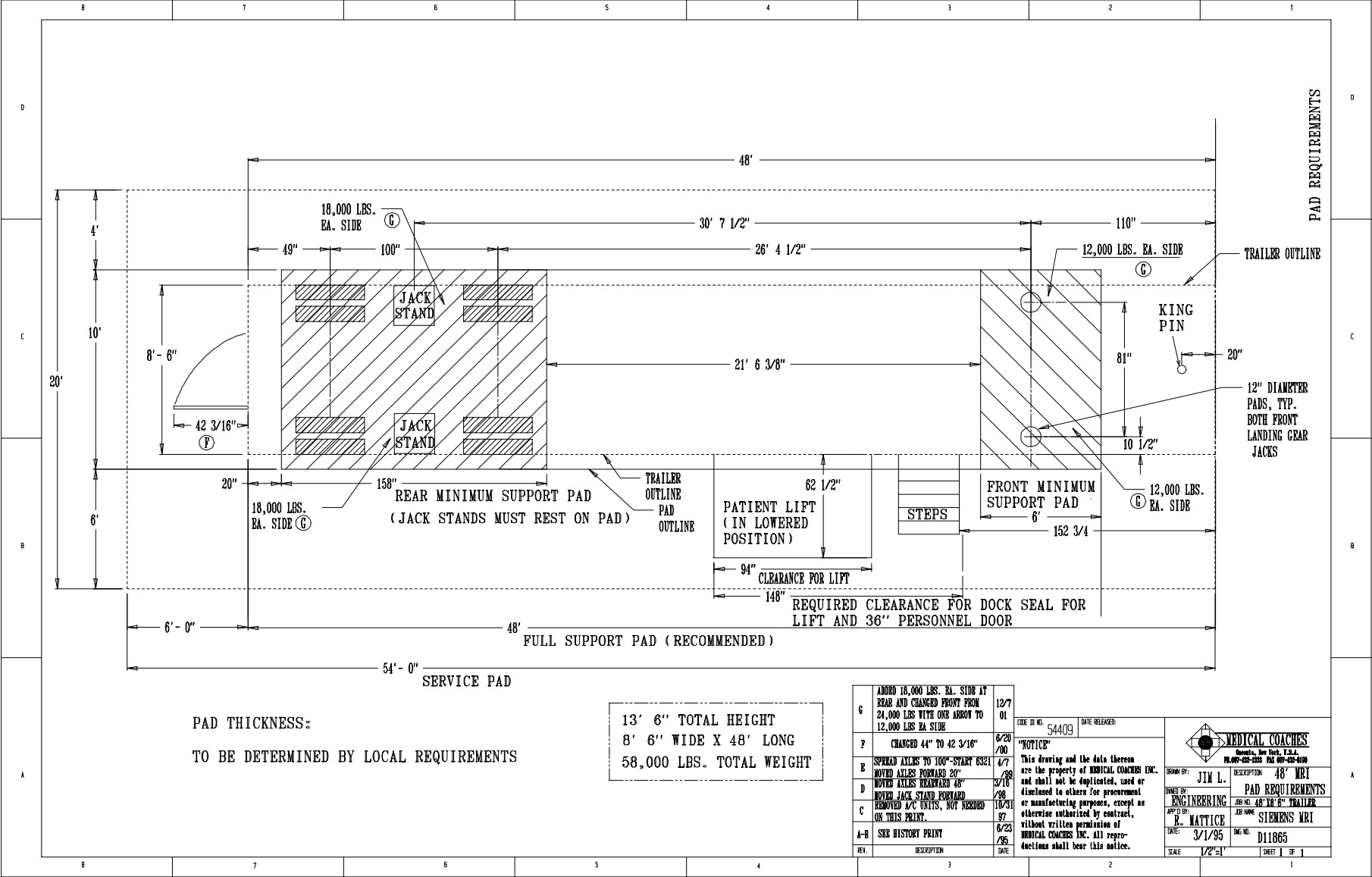
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Pad Requirements Drawing D11865



## **2.0. CUSTOMER POWER REQUIREMENTS:**

A single electrical power source is required for operation of the Mobile Siemens MRI System.

### **2.1. *ELECTRICAL SERVICE:***

480 VOLT, AC, 3-phase, fused 200 amps (150 amps if Symphony is installed). Maximum allowable line voltage variation is +/- 10 percent (432-528 VAC). Phase Balance should be within 2%. See page 11 for regulations.

### **2.2. *CONFIGURATION:***

Three-phase Delta or WYE connection with ground.

### **2.3. *FREQUENCY:***

60 hertz +/- 0.5 hertz.

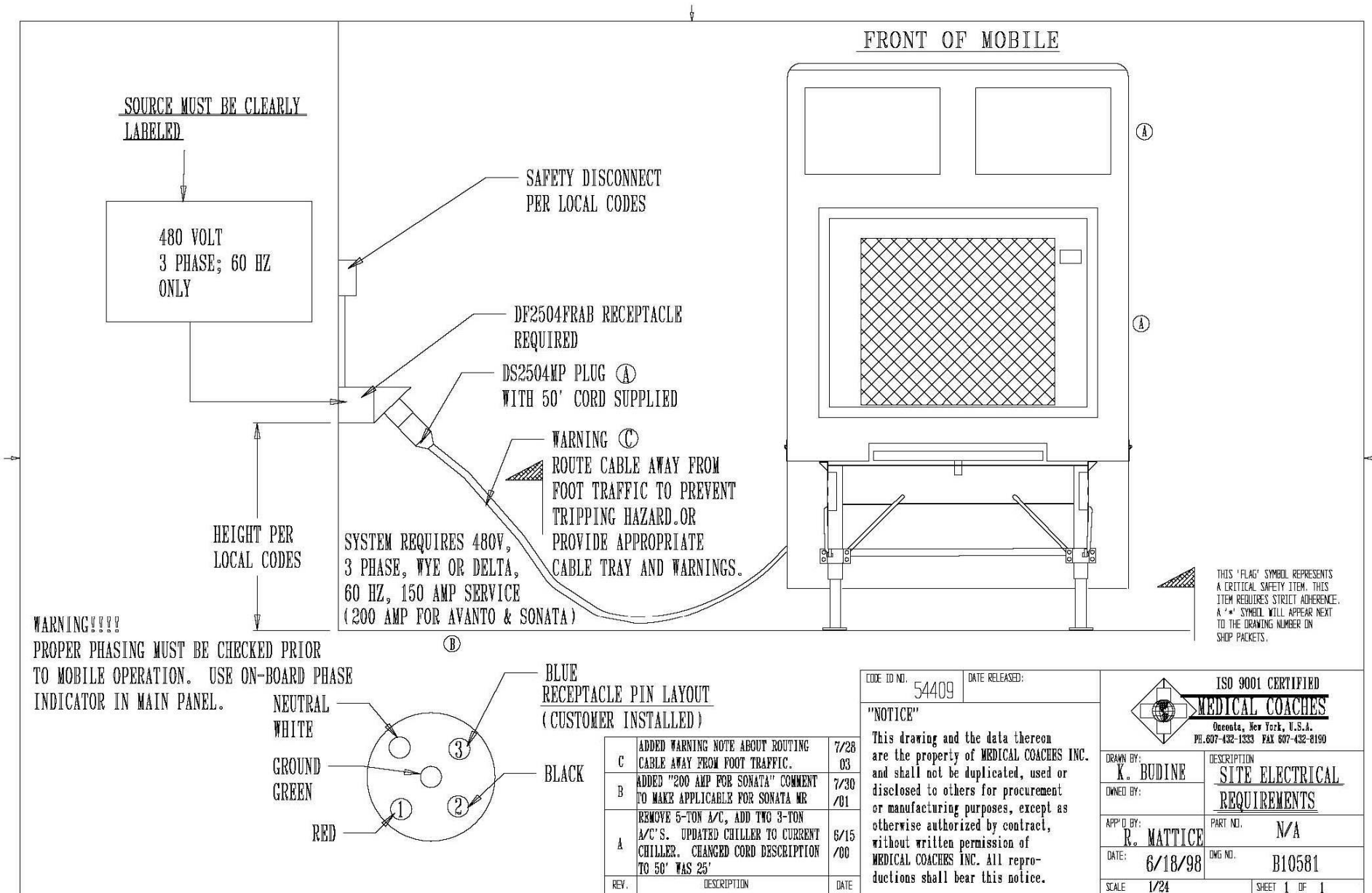
### **2.4. *SHORELINE CABLE:***

A 50 foot shoreline wired directly to trailer is provided for connecting the mobile unit to hospital power. The shoreline is located in the rear skirt compartment and may be drawn from either side of the trailer. The end has a Russell-Stoll DS2504MP to mate with the site receptacle.

### **2.5. *CUSTOMER RECEPTACLE:***

The facility must have the matching receptacle as specified by the drawing on page 4, customer must supply this receptacle. This receptacle is a Russell-Stoll DF2504FRAB, and is not provided with the trailer.

# Site Electrical Drawing B10581



### **3.0. WATER SUPPLY REQUIREMENTS:**

Only a 3/4-inch cold water garden hose is required. This unit can be operated either with water line connected and pressurized or disconnected, providing tank is refilled as needed. Connection is located in rear curbside compartment next to tank.

#### **3.1. *TRAILER:***

The water fill connection is in the curbside rear compartment. A special opening is provided in the bottom of the compartment.

#### **3.2. *COLD WATER PROTECTION:***

All on-board tanks and lines are weather protected. The site must provide for weather-protected supply line to prevent freeze up.

### **4.0. TELEPHONE AND DATA SERVICE:**

This mobile system is supplied with one (1) telephone handset; three (3) phone lines (Line 1, Line 2 and Remote Diagnostic line); and three (3) data lines (Data 1, Data 2, and Data 3).

#### **4.1. *PHONE LINES:RJ45***

Two (2) RJ45 inlet receptacles are located in the front curbside compartment. These receptacles are labeled “Line 1” and “Line 2”.

- Line 1 serves the Control Room main work station and the wall-mounted receptacle is located above the countertop.
- Line 2 serves the Control Room auxiliary work station and the wall-mounted receptacle is located above the countertop.

A third RJ45 inlet receptacle is located in the front curbside compartment. This receptacle is labeled “Remote Diags”.

- Remote Diags serves as the remote diagnostics circuit for the exclusive use of Siemens Medical Systems USA, Inc. personnel and the wall-mounted receptacle is located under the countertop of the main work station in the Control Room.

#### **4.2 *DATA LINES (RJ45 RECEPTACLES):***

Two (2) inlet receptacles are located in the front curbside compartment. These receptacles are labeled “Data 1” and “Data 2”

- Data 1 serves the Control Room main work station and the wall-mounted receptacle is located above the countertop.
- Data 2 also serves the Control Room main work station and the wall-mounted receptacle is located below the countertop.

A third data 3 line is provided for data transfer between the Control Room main and auxiliary work stations. The receptacles for this line are both located below the respective countertops and are both labeled “Data 3”.



#### 4.3 *PHONE AND DATA CONNECTION CABLES:*

Two 50 foot connecting phone cables with Hubbell PH6599 receptacles at both ends are supplied for use with Line 1 and Line 2. These cables can be stored on the cord tender also provided and mounted on the inside of the front curbside compartment door,

No connection cables are provided for Data Lines or for the Diagnostic Line. These cables are the responsibility of the customer.

#### 4.4 *SITE REQUIREMENTS:*

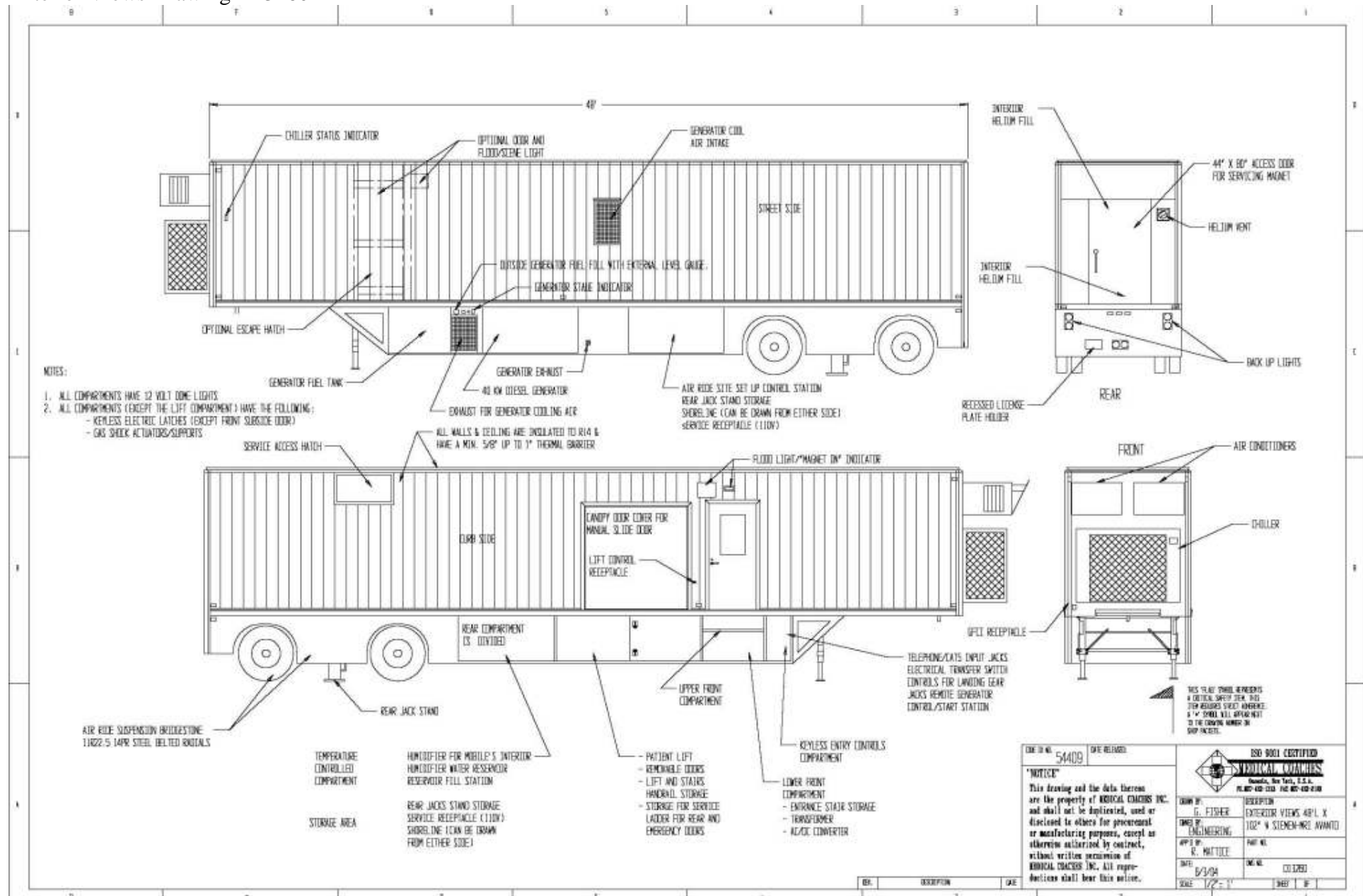
##### Phone Lines

Each phone line requires a RH45 weatherproof outlet mounted in a weatherproof box located within 50 feet of the mobile system.

##### Data Lines

Each data line requires a standard RJ45 connector mounted in a weatherproof box. Weatherproof data boxes should be located in the same general area as the phone weatherproof boxes.

## Exterior Views Drawing D13260



**5.0. SITE CLEARANCE REQUIREMENTS:****5.1. *MOBILE UNIT CLEARANCE REQUIREMENTS:***

Refer to illustration on page 9 depicting clearance required around the mobile unit.

**5.2. *SWING DIMENSIONS OF DOORS:***

Swing dimensions are shown for all compartment doors, entrance door and canopy door. Service access should be an additional 36 inches to all dimensions shown (indicated on D13025 on page 9). These dimensions must be considered when contemplating parking near a building or other obstruction. Patient and staff access and egress should also be convenient to the mobile unit site.

**5.3. *OFF-TRACKING OF UNIT:***

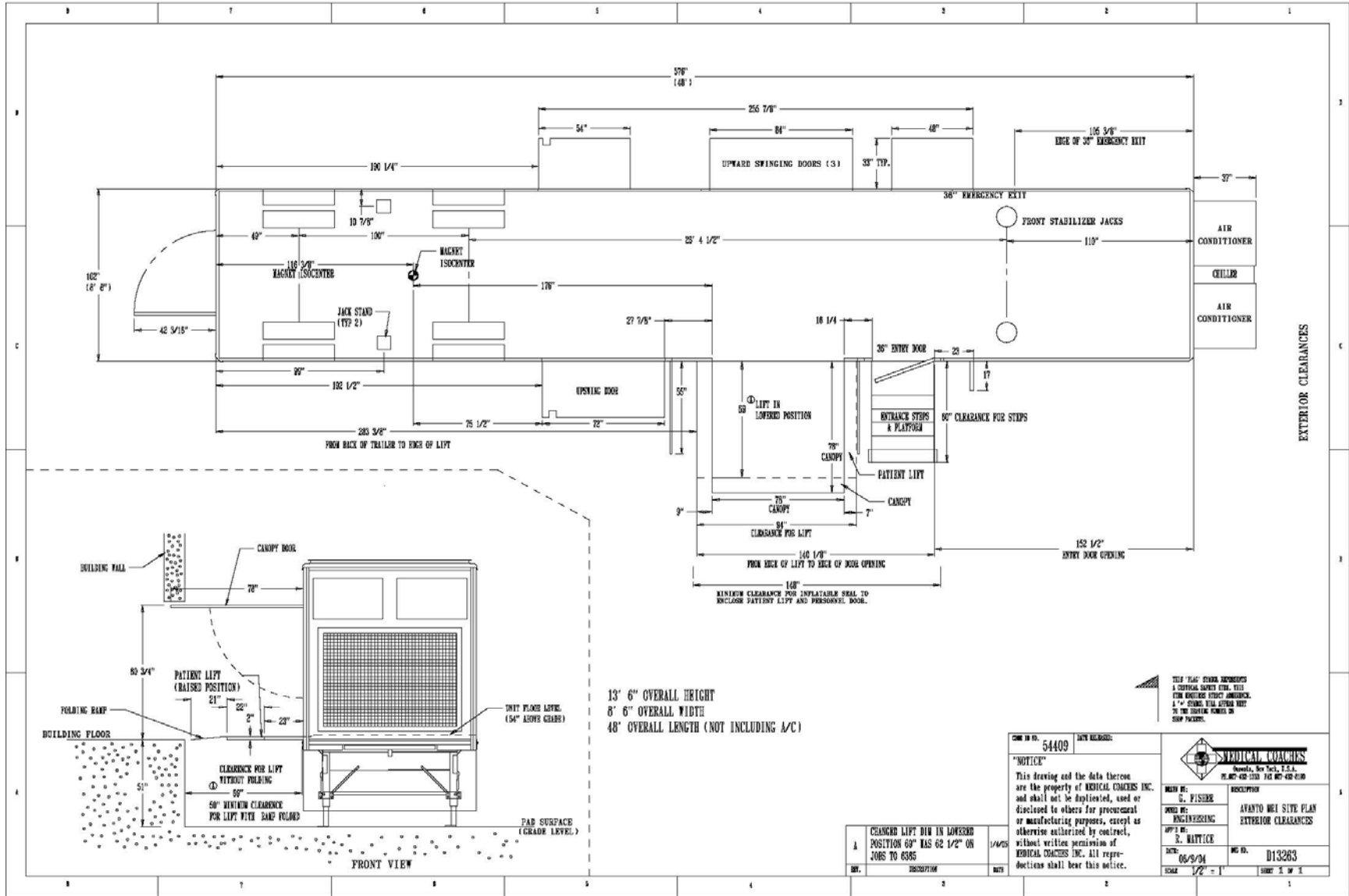
Adequate and convenient access also must be provided for movement in and out of site by the mobile unit with proper attention paid to swing and turn radii. Sharp dips, curbs, bumps, and other road surface conditions can affect the mobile unit ground clearance and must be considered. See D11536 on page 10.

**NOTES:**

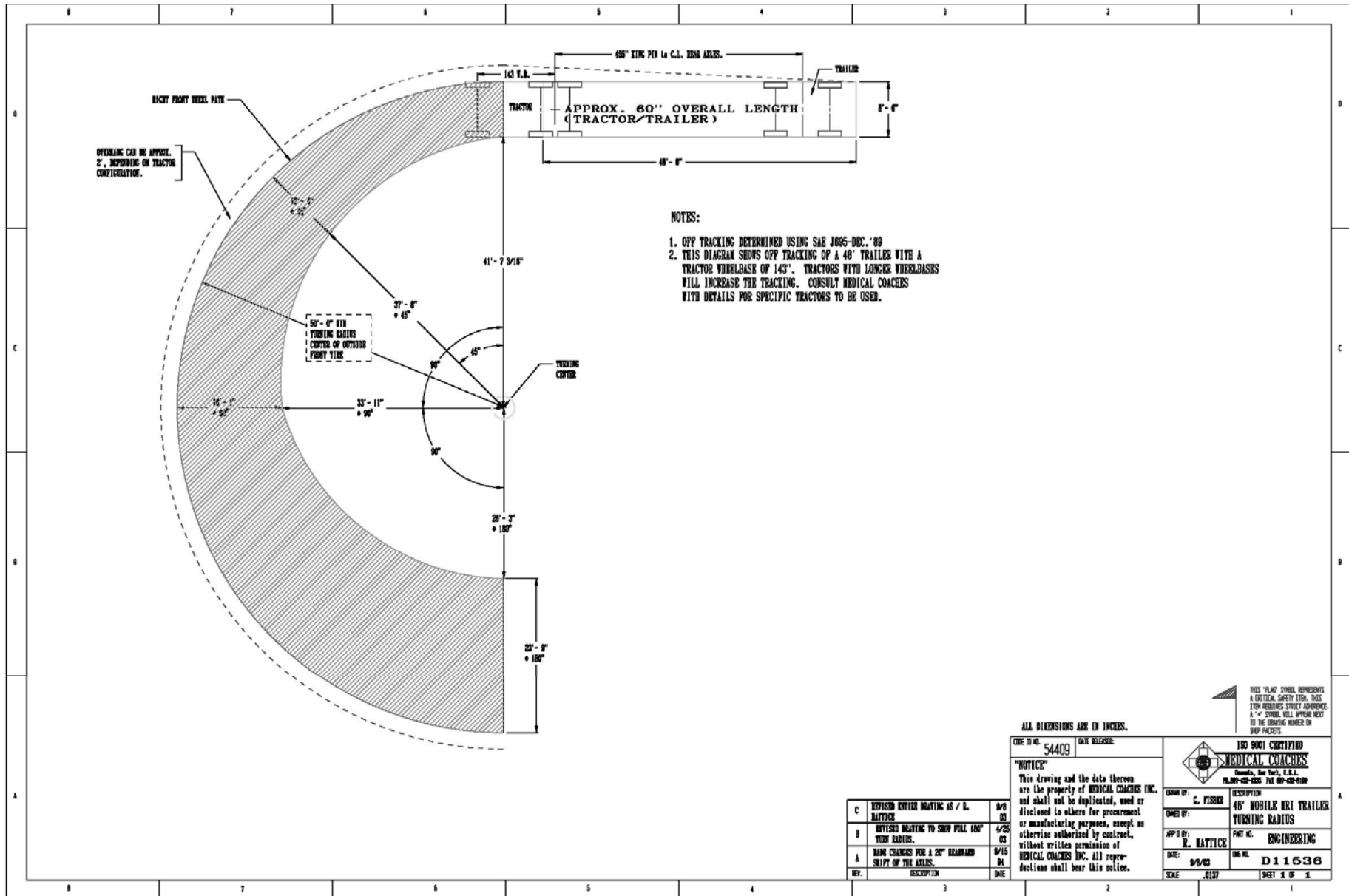
Lift compartment doors (center compartment on curbside, see page 7) are easily removable.

Special hinging arrangements are possible for the canopy. Please contact Medical Coaches if the standard arrangement is inconvenient.

# Exterior Clearances Drawing D13263



## Trailer Turning Radius D11536



## **6.0 REGULATIONS:**

This mobile unit has been designed to comply with Federal regulations in existence at time of manufacture. Local and State regulations may differ from site to site. It is the responsibility of each site to ensure that these regulations are met and encumber any costs associated with unique alterations or additional equipment required.

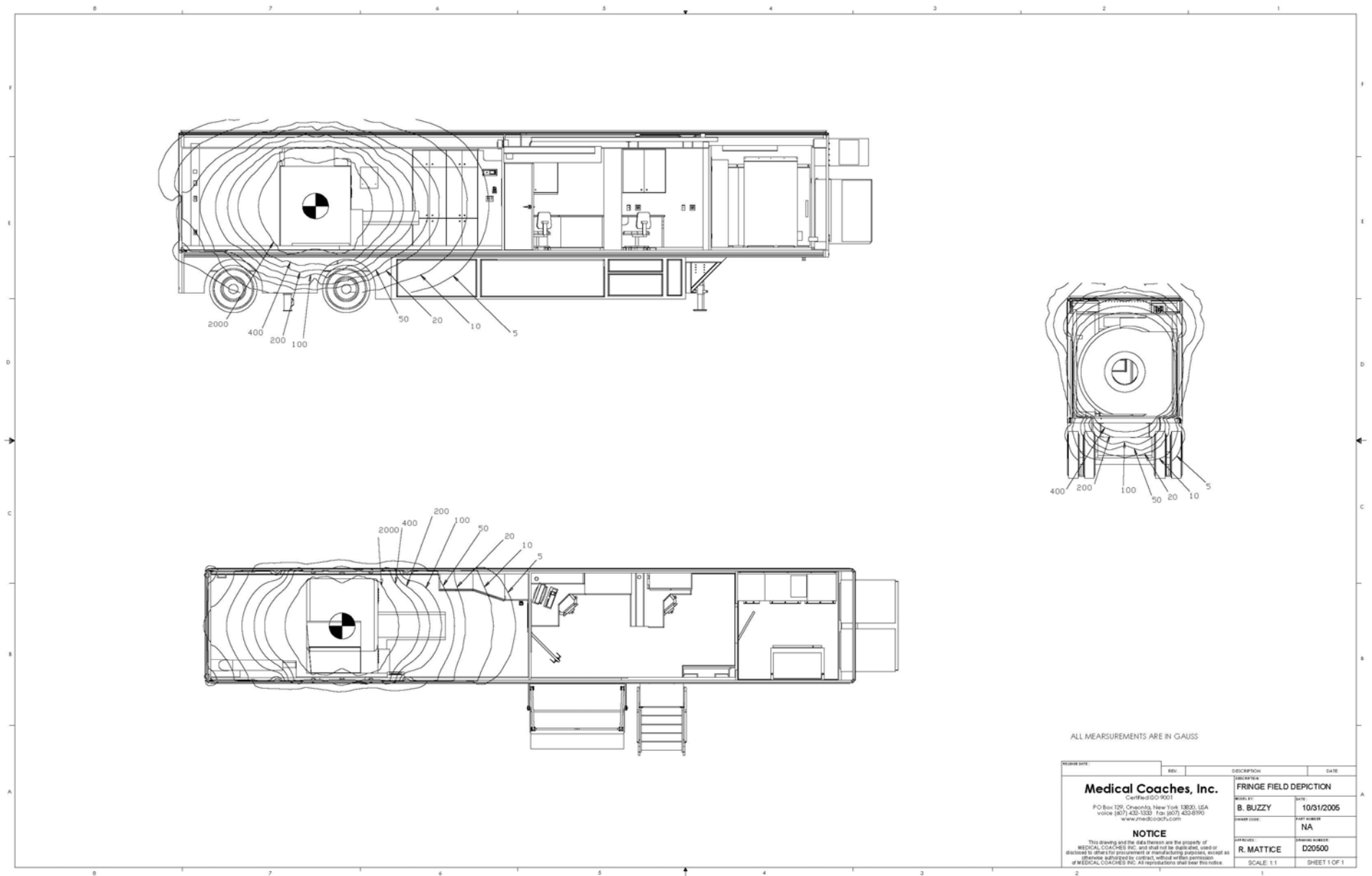
## **7.0 MAGNETIC SHIELDING:**

Magnetic shielding is contained within the side walls of the mobile unit. This mobile unit can be transported “at field”. See the Fringe Field Depiction Drawing D20500 for, fringe field depiction, as a result of magnetic shielding. The 5 gauss line is within 8" of the trailer exterior to a height of 8' above grade.

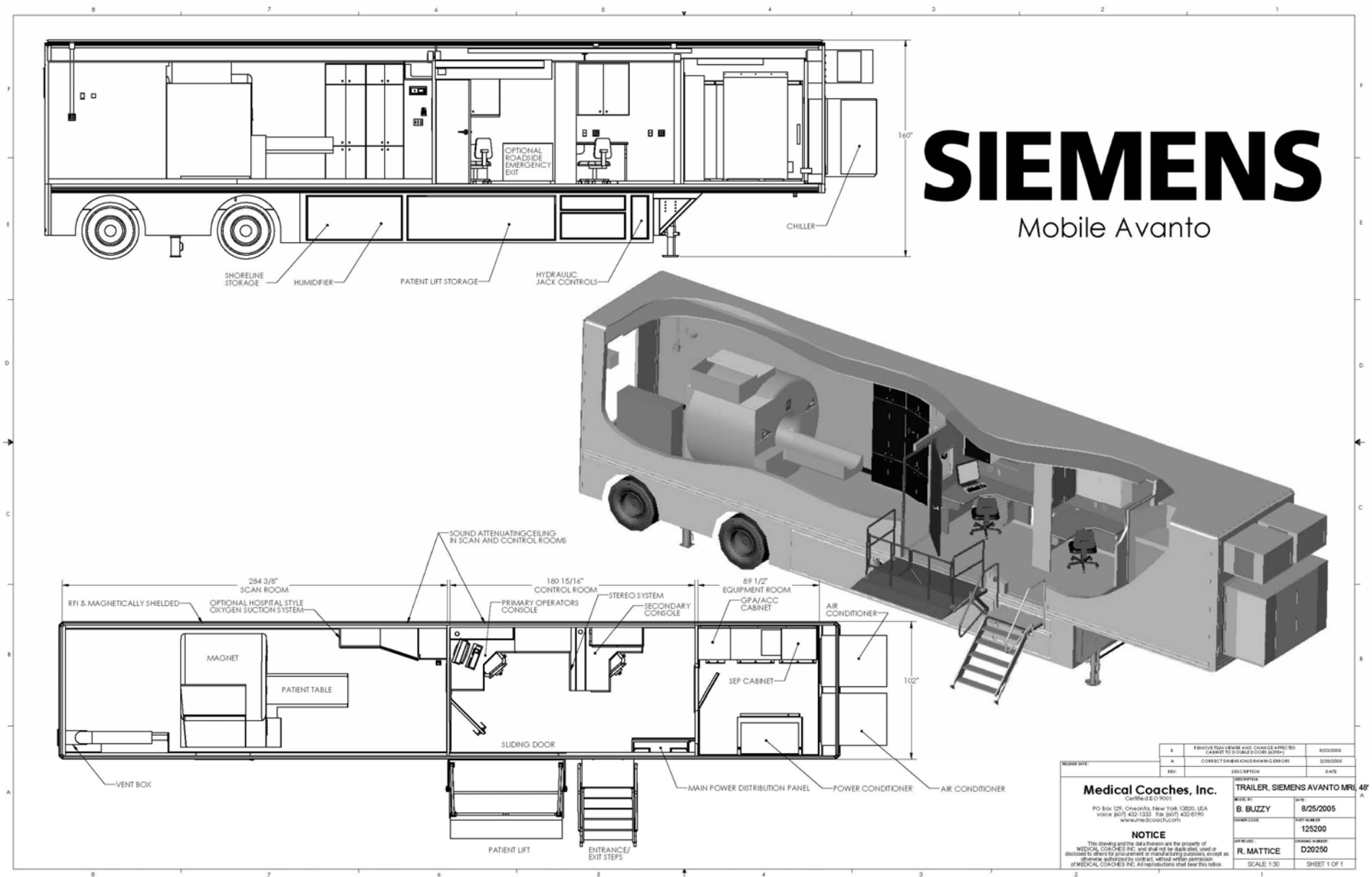
Extreme Caution must be followed when using or accessing the space above and below the trailer. This space is restricted for many uses and it is recommended to contact Siemens or Medical Coaches Inc. with specific questions about access to this space.

Image quality is directly related to stationary objects within a certain range of the magnet ISO center. For example, vehicle traffic, high power lines, etc. Contact Siemens for specific details.

## Fringe Field Depiction Drawing D20500



# Interior Views Drawing 20250





## Lettering Guide Drawing D13261

