

#### North Carolina Department of Health and Human Services Division of Health Service Regulation

Pat McCrory Governor Aldona Z. Wos, M.D. Ambassador (Ret.) Secretary DHHS

> Drexdal Pratt Division Director

June 16, 2014

Denise M. Gunter Nelson, Mullins, Riley & Scarborough, LLP 380 Knollwood Street, Suite 530 Winston-Salem, NC 27103

**Exempt from Review - Replacement Equipment** 

Facility:

Foundation Health Mobile Imaging, LLC

Project Description:

Replace mobile MRI scanner

County:

Forsyth, Gaston, Iredell and Cabarrus counties

FID #:

040267

Dear Ms. Gunter:

In response to your letter of May 23, 2014, the above referenced proposal is exempt from certificate of need review in accordance with N.C.G.S 131E-184(a)(7). Therefore, you may proceed to acquire, without a certificate of need, the Siemens 1.5T Magnetom Espree mobile MRI scanner to replace the existing GE 1.5T Signa HDI mobile MRI scanner [Serial #R2193]. This determination is based on your representations that the existing unit will be removed from North Carolina and will not be used again in the State without first obtaining a certificate of need. Further please be advised that as soon as the replacement equipment is acquired, you must provide the CON Section and the Medical Facilities Planning Branch with the serial number of the new equipment to update the inventory, if not already provided.

It should be noted that this Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this Agency and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely, Illonia C. Hale

cc:

Gloria C. Hale Project Analyst

Medical Facilities Planning Branch, DHSR

Martha G. Frusdal
Martha J. Frisone, Interim Chief
Certificate of Need Section



Certificate of Need Section

www.ncdhhs.gov
Telephone: 919-855-3873 • Fax: 919-733-8139
Location: Edgerton Building • 809 Ruggles Drive • Raleigh, NC 27603
Mailing Address: 2704 Mail Service Center •Raleigh, NC 27699-2704
An Equal Opportunity/ Affirmative Action Employer

.

#### Nelson Mullins

Nelson Mullins Riley & Scarborough LLP

Attorneys and Counselors at Law 380 Knollwood Street / Suite 530 / Winston-Salem, NC 27103 Tel: 336.774.3300 Fax: 336.774.3372 www.nelsonmullins.com Denise M. Gunter Tel: 336.774.3322 Fax: 336.774.3372

denise.gunter@nelsonmullins.com

May 23, 2014

#### VIA HAND DELIVERY

Martha J. Frisone, Interim Chief Certificate of Need Section North Carolina Department of Health and Human Services Division of Health Service Regulation 809 Ruggles Drive Raleigh, North Carolina 27603



Re:

Notice Pursuant to N.C. Gen. Stat. § 131E-184(a)(7) of Replacement

Equipment

#### Dear Martha:

Pursuant to N.C. Gen. Stat. § 131E-184(a)(7), I am writing on behalf of Foundation Health Mobile Imaging, LLC ("Foundation") and Jacksonville Diagnostic Imaging, LLC ("JDI"), both subsidiaries of Novant Health, Inc. ("Novant") to provide prior written notice of the acquisition of two replacement mobile MRI scanners. Based on our telephone conversation on May 15, 2014, because these two projects are related, I am presenting both exemption notices in a single letter.

#### Foundation:

Foundation proposes to replace its existing grandfathered mobile MRI scanner, known internally as MQ 2. MQ 2 is a GE Signa HDI 1.5T mobile MRI scanner. It will be replaced by a Siemens Magnetom Espree 1.5T mobile MRI scanner, which will be known internally as MQ 23. An equipment comparison form is attached as Exhibit A. An equipment quote from Siemens is attached as Exhibit B. MQ 23 meets the requirements of both N.C. Gen. Stat. § 131E-176(22a) and 10A NCAC 14C.0303(d). The total cost to acquire and make MQ 23 operational is \$1,596,868, which is well below the \$2 million threshold in N.C. Gen. Stat. § 131E-176(22a). See Exhibit C, which is a capital cost form.

Martha J. Frisone May 23, 2014 Page 2

JDI:

JDI proposes to replace its existing mobile MRI scanner, known internally as MQ 16. MQ 16 is a GE Signa Horizon 1.5T mobile MRI scanner. MQ 16 will be replaced by MQ 2, which is the current Foundation mobile MRI scanner discussed above. An equipment comparison form is attached as <a href="Exhibit D">Exhibit D</a>. MQ 2 meets the requirements of both N.C. Gen. Stat. § 131E-176(22a) and 10A NCAC 14C.0303(d). MQ 2 was acquired in 2010 for \$748,320, and its current fair market value is \$650,000, so this replacement is also well below the \$2 million threshold in N.C. Gen. Stat. § 131E-176(22a). See <a href="Exhibit C">Exhibit C</a> and <a href="Exhibit E">Exhibit E</a>. Since MQ 2 is already in operation, there are no additional costs required to make the unit operational. Upon replacement, MQ 16 will be taken out of state and will not be brought back into North Carolina without CON approval.

The total inventory of mobile MRI scanners in North Carolina will not change as a result of these replacements.

Based on the foregoing, we respectfully request that the CON Section confirm in writing that these two replacements are exempt from CON review pursuant to N.C. Gen. Stat. § 131E-184(a)(7).

If you have any questions, please let me know.

Thank you for your time.

With best personal regards.

Sincerely,

Denise M. Gunter

Enclosures

# EQUIPMENT COMPARISON – MR REPLACEMENT FOUNDATION HEALTH MOBILE IMAGING MRI REPLACEMENT

-		
	EQUIPMENT	EQUIPMENT
Type of Equipment (List Each Component)	MRI Scanner	MRI Scanner
Manufacturer of Equipment	General Electric	Siemens
Tesla Rating for MRIs	1.5T	1.5T
Model Number	GE Signa HDI	Magnetom Espree
Serial Number	R2193	TBD
hod of Identifying Equipment	Internal ID (MQ 2)	Internal ID - will be
	Grandfathered Mobile	identified as MQ23
T.	ATOOTA	Mobile
Specify if Mobile or Fixed	Mobile	Mobile
Mobile Trailer Serial Number/VIN #	1S9FA482021182551	TBD
Mobile Tractor Serial Number/VIN #		
Date of Acquisition of Each Component	2010	2014
Does Provider Hold Title to Equipment or Have a Capital Lease?	Lease	Title
Specify if Equipment Was/Is New or Used When Acquired	Used	New or Certified
ject (Including Construction, etc.) < Use Attached Form>	\$748,320	\$1,596,868
	\$748,320	\$1,492,400
Fair Market Value of Equipment   \$	\$650,000	\$1,492,400
	Same	Same
Locations Where Operated	Novant Health Imaging –	Novant Health Imaging –
	Mooresville, IVC; INOValid	Mooresville, INC; INOVAIII
	Gastonia; Piedmont	Gastonia; Piedmont
H	Imaging -Winston Salem,	Imaging -Winston Salem,
	Cabarrus Diagnostic	Cabarrus Diagnostic
Number Days In Use/To Be Used in N.C. Per Year	365 (less any	365 (less any
	holidays)	holidays)
Percent of Change in Patient Charges (by Procedure)	NA	NA
Percent of Change in Per Procedure Operating Expenses (by Procedure)	NA	NA .
Type of Procedures Currently Performed on Existing Equipment	MRI Scans	MRI Scans
Type of Procedures New Equipment is Capable of Performing	MRI Scans	MRI Scans

d b

Siemens Medical Solutions USA, Inc. 51 Valley Stream Parkway, Malvern, PA 19355 Fax: (866) 309-6967

SIEMENS REPRESENTATIVE Karen Dixon - (865) 360-8644

#### PRELIMINARY PROPOSAL

Customer Number: 0000007799

Date: 5/12/2014

Foundation Health Mobile Imaging 3480 Preston Ridge Road, #600 Alpharetta, GA 30005

> Ship to address: SVSR, Attn: Ronnie Taylor – 852 Memorial Highway – Harmony, NC

28634

Service sites: Charlotte & Greensboro NC

Quote Nr:

1-8YLIN2 Rev. 0

#### **MAGNETOM** Espree eco

All items listed below are included for this system: (See Detailed Technical Specifications at end of Proposal.)

#### Qty Part No. Item Description

1 14413755

#### **RS MAGNETOM Espree - System**

The Slemens 1.5T MAGNETOM Espree, a Tim system, is the first Open Bore MR scanner. It uniquely supports revolutionary patient care through: - Revolutionary, CT-like bore design 70 cm patient diameter, 125 cm long system (cover to cover) for head out of the magnet in 60% of the anatomy scanned. - Tim (Total imaging matrix) technology, the tremendous innovative RF system and matrix coil technology, which provides up to 100% more SNR, streamlines positioning and opens the door to whole body imaging. - syngo(r), the Slemens unique multi modality software providing innovative applications and workflow automation features. The system including magnet, electronics and control room can be installed in 30 sqm (325 sq. ft). The basic system includes: - Unique ultra-short 120 cm long, whole-body superconductive 1.5T magnet with Zero Helium Boil-Off technology - Siemens exclusive Actively Shielded water-cooled gradient system - Digital RF Transmit and Receive System - RF Coils (Head, Neck, Spine and Body Matrix Coil, 4-channel Flex Coils large/ small) - Wireless physiological measuring unit (PMU) - High performance host computer and Image processor - syngo(r) MR SW Incl. Inline technology, 1D/2D PACE, iPAT, iPAT Extensions, syngo BLADE, CISS/DESS and Phoenix - Tim Application Suite including nine dedicated Suites: Neuro Suite, Anglo Suite, Cardiac Suite, Body Suite, Onco Suite, Breast Suite, Ortho Suite, Pediatric Suite and Scientific Suite. For system cooling either the predefined chiller option or the Separator is required.

#### 1 14434766

#### **RS ecoline MR System Delivery**

Siemens ecoline systems have already been in use and are equipped with current software and hardware versions via Siemens Refurbished Systems based on stringent quality standards. In terms of their appearance, functionality, safety and reliability, they are comparable to a new system. Therefore the warranty for ecoline systems is 12 month provided like new systems. Important note: This offer is non-binding, subject to prior sale to other interested parties.

#### 1 14401479

#### Mobile Configurator #Es

#### 1 14413897

#### RS I-class #Tim

I-class is the new generation of Tim-based MRI scanners, which enables innovative applications and workflow efficiency. The I-class package comprises: - 3D Distortion Correction - MPPS - ImageFilter SW - PhoenixZIP - DICOM Study Split

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#### PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
1	14413841	RS Tim [76x18] Z-engine #Es  Tim [76x18] Z-engine performance level Tim [76x18] is Total imaging matrix with 76 seamlessly integrated coil elements, combinable to 18 RF channels. It is for demanding high-end applications and optimized throughput. Tim [76x18] has flexibility in Parallel Imaging. PAT factors up to 4 (one direction) or 12 (in two directions, optional) help speed acquisitions, Maximum SNR is ensured through the new matrix coil technology. Z-engine Gradient System The Z-engine is designed combining high performance while minimizing acoustic noise.
1	14413789	RS PC Keyboard US english # Tim Standard PC keyboard with 101 keys.
1	14413918	RS NATIVE syngo #Tim  This package contains sequences and protocols for non-contrast 3D MR anglographic imaging with high spatial resolution. NATIVE allows imaging especially of abdominal and peripheral vessels and is an alternative to MR angiography techniques with contrast medium, especially for patients with severe renal insufficiency.
1	14442519	RS WARP syngo #Tim syngo WARP integrates different techniques tailored to reduce susceptibility artifacts caused by orthopedic MR-conditional metal implants.
1	14413876	RS Composing syngo #Tim  This application provides dedicated evaluation software for creating full-format images from overlapping MR volume data sets and MIPs (starting from syngo MR B13) acquired at multiple stages.
1	14413871	RS Inline Composing syngo #Tim  This Inline Package includes a dedicated software for the generation of full-format images from overlapping MR volume data sets and MIPs from several steps - fully automatic, directly after measurement.
1	14413869	RS SWI #Tim  Susceptibility Weighted Imaging is a high-resolution 3D imaging technique for the brain with ultra-high sensitivity for microscopic magnetic field inhomogeneities caused by deoxygenated blood, products of blood decomposition and microscopic iron deposits. Among other things, the method allows for the highly sensitive proof of cerebral hemorrhages and the high-resolution display of venous cerebral blood vessels.
1	14413770	RS Inline Diffusion #Tim  Automatic real-time calculation of trace-weighted images and ADC maps with Inline technology. Compatible to single-shot diffusion-weighted EPI.
1 .	14413783	RS Body Matrix Coil #Tim  The new multi-element Matrix coil technology is an essential part supplementing the most innovative Total imaging matrix. Matrix coils have multiple receive coil elements that can be clustered in groups. Each receive coil element is equipped with a low noise preamplifier to maximize signal-to-noise ratio. The Body Matrix Coil features: - 6-element design with 6 integrated preamplifiers, with 2 clusters of 3 elements each - Operated depending on the Matrix Coil Mode as a 2-channel coil (CP Mode), 4-channel coil (Dual Mode) or 6-channel coil (Triple Mode) - Operates in an integrated fashion with the Spine Matrix coil (2 rings of 6 elements each = 12-element design) - Can be combined with further Body Matrix coils for larger coverage - No coil tuning - iPAT-compatible Applications: - Thorax (Incl. heart) - Abdomen - Pelvis - Hip Can be combined with: - Head Matrix coil - Neck Matrix coil - Spine Matrix coil - Additional Body Matrix coils (typically 2-3 in total) for additional anatomical coverage - PA Matrix coil (Peripheral Angio Matrix; optional) - All flexible coils (e.g. CP Flex coil, small, CP Flex coil, large) - CP Head Array coil - Endorectal coils
1	14413795	RS Double Loop Array Coil #Tim  The Double Loop Array Coil consists of two flexible, anatomically adaptable 7 cm ring coils for simultaneous examination of both TMJs, the eyes or the wrists with optimized, excellent image quality.
1	14413838	RS Cable Set syngo 11/9 #Es Cable length inside the cabin 11 m, cable length outside the cabin 9 m. Inclusive Ethernet Twisted Pair Adapter and 10 m cable.
1	14413853	RS Venting Kit Sea Freight #Av,Es  Overpressure valve as a transport safety device for cold delivery of the magnet by sea (designed for atmospheric pressure conditions at sea level during ocean and land-borne transport).

Created: 5/12/2014 9:11:00 AM PRO 1-8YLIVF

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**SIEMENS REPRESENTATIVE** 

Karen Dixon - (865) 360-8644

#### PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
1	14406340	RS Helium Fill 30/70 #S;Av;Es;TATS Helium Fill for cold delivery ex works.
1	14413807	RS Separator #Av;Es  The SEP (Separation cabinet) has to be used if a central hospital chilled water supply is available or if a chiller of any brand/type is already available. In theses cases, the primary water specifications must fulfill the requirements (e.g. 60kW heat dissipation; 90l/min flow; 6 to 12°C water temperature; ph value 6 to 8). Dimension: 1800mm x 650mm x 650mm (height x width x depth) Weight: 400kg
1	14413825	RS UPS Cable #Tim  Power cable for the UPS-system UPS Powerware PW 9125-3000i (8857810) at the ACC of the MAGNETOM Tim systems for backing up the computer. Standard cable length 9 m.
1	14417559	RS UPS system  UPS system Eaton PW9130-3000G-3000T-XLEU for MAGNETOM Tim and MAGNETOM Symphony systems for safeguarding computers. Power output: 3.0 kVA / 2.7 kW Bridge time: 5 min full load / 14 min half load Input voltage: 230 VAC
1	14417560	RS UPS Battery module  UPS battery module Eaton PW 9130N-3000T-EBM for all MAGNETOM Tim and MAGNETOM Symphony systems for safeguarding computers. Extension for: PW9130i-3000T Battery type: Closed, maintenance-free Extension of the bridge time to: 24 minutes with a module Dimensions (H x W x D): Battery module: 346 x 214 x 412 mm incl. bracket set Weight: approx. 50 kg
1	MR_MOB_RIG _INST	MR Mobile Rigging and Installation
1	MR_MEDCTRA ILER	MedicalCoaches Siemens CertifiedMRCoach  MR_MEDCTRAILER Medical Coaches (MEDC) mobile MR trailer for use with the Siemens (mobile ready)  MAGNETOM Symphony, Espree or Avanto - 1.5T MRI System. The standard Siemens certified MR trailer meets  Medical Coaches' specification #020706/6385, Drawing #D20250. Vehicle sizing and Power requirements prepared to USA Standards.
1	MR_PM	MR Project Management  A Siemens Project Manager (PM) will be the single point of contact for the implementation of your Siemen's equipment. The assigned PM will work with the customer's facilities management, architect or building contractor to assist you in ensuring that your site is ready for installation. Your PM will provide initial and final drawings and will coordinate the scheduling of the equipment, installation, and rigging, as well as the initiation of on-site clinical education.
1	MR_CRYO	Standard Cryogens
1	4MR5142869	Armrest #MR
1	MR_INITIAL_32	Initial onsite training 32 hrs  MR_INITIAL_32 Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1 .	MR_FOLLOWU P_24	Follow-up training 24 hrs  Up to (24) hours of follow-up on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

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SIEMENS REPRESENTATIVE Karen Dixon - (865) 360-8644

#### **PRELIMINARY PROPOSAL**

Qty Part No.

Item Description

MR\_INT\_SYN\_ BCLS

Basic syngo MR Class

MR\_INT\_SYNGO\_BCLS Tuition for (1) imaging professional to attend Classroom Course at Siemens Training Center. The objectives of this class are to introduce the user interface of the common syngo platform and instructions on building protocols, demonstration of software functions, and hands-on sessions. This class includes lunch, economy altrare, and lodging for (1) imaging professional. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

System Total:

\$1,492,400

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PRO 1-8YLIVF

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SIEMENS REPRESENTATIVE Karen Dixon - (865) 360-8644

#### PRELIMINARY PROPOSAL

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•		
OPTIONS on Quote Nr:	1-8YLIN2 Rev. 0	

**FINANCING:** The equipment listed above may be financed through Siemens. Ask us about our full range of financial products that can be tailored to meet your business and cash flow requirements. For further information, please contact your local Sales Representative.

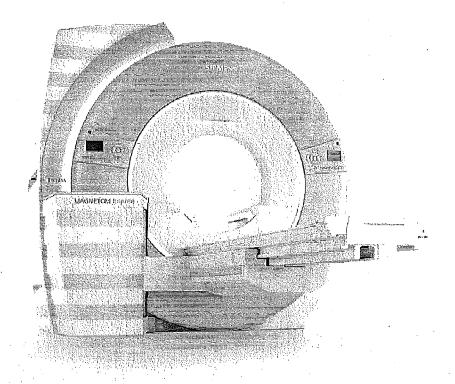
Siemens Healthcare is pleased to submit this Preliminary Pricing Proposal. A Preliminary Pricing Proposal is provided for planning purposes only; it is not contractually binding. To receive a contractually binding proposal for the Products listed above, inclusive of Terms, Conditions, and Warranty coverage, please contact your Siemens Healthcare Sales Representative.

Siemens Healthcare

Karen Dixon (865) 360-8644 karen.dixon@siemens.com

## MAGNETOM ESPREE TYPICAL ROOM PLAN

 $\mathsf{MR}$ 



The intended use for this Cut Sheet is to communicate the spatial requirements as well as the basic architectural, electrical, structural, and mechanical requirements for this piece of imaging equipment. The information provided in this document is for reference only, during the pre-planning stage, and therefore does not contain any site specific detailed requirements. This information is subject to change without notice. Federal, state and/or local requirements may impact the final placement of the components. It is the customer's responsibility to ensure that the final layout and placement of the equipment complies with all applicable requirements.

SIEMENS MEDICAL SOLUTIONS USA, INC.

CUTSHEET FOR TYPICAL # 04103

REV. 10

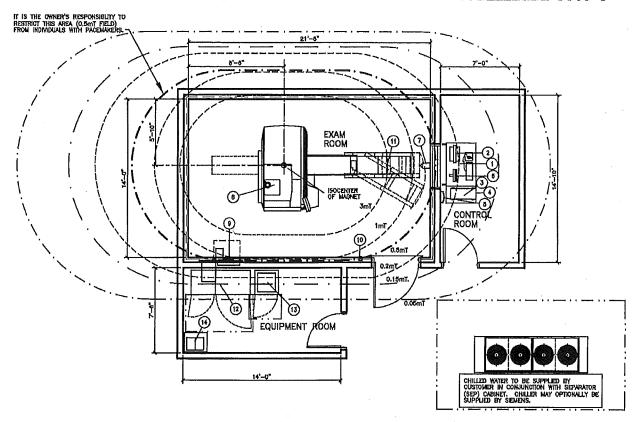
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PAGE 0 of 6

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## MAGNETOM ESPREE TYPICAL ROOM PLAN

MR



TYPICAL PLAN

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

	EQUIPMENT LEGEND							
NO	DESCRIPTION	SMS	WEIGHT	BTU/HR	DIMEN	ISIONS (INC	CHES)	REMARKS
		SYM	(LBS)	TO AIR	W	D	Н	
①	MRC OPERATING CONSOLE AND KEYBOARD	€6	132		45 11/16	35 1/4	28 3/8	
2	COLOR MONITOR FOR MRC	∂	22	239	18 5/16	16 15/16	4 3/4	ON CONSOLE/COUNTER
3	HOST PC MRC	<b>€</b>	49	2389	11	27	18 1/8	
<b>(</b> 6)	CONTAINER FOR HOST PC 450	Ð	230		17 3/4	31 1/2	27 5/8	
(5)	ALARM BOX	(B)	3		Ø	4	9	
	PATIENT MONITOR (OPTION)	€	10		13	7	12 1/2	
0	PATIENT SUPERVISION CAMERA (OPTION)	<b>(愛)</b>	8		3	6 5/8	5 3/4	
8	ESPREE MAGNET WITH COVERS AND PATIENT TABLE	<b>B</b>	11244	7508	90 5/8	149 5/8	90 5/8	
9	RF-FILTER PLATE	(f)	286	853	46 1/2	35 1/8	21 5/8	
(10)	MAGNET STOP	(KS)	. 1		3	5	3	
(1)	PATIENT TRANSPORT TROLLEY (OPTION)	彻	291		26 1/2	71 1/2	39 1/2	
12	ELECTRONICS CABINET (GPA, ACC & ACS)	<b>€</b>	2755	13649	63	25 5/8	77 1/2	TOTAL OF GPA, CCA, CCS
(13)	SEP CABINET	<b>₹</b>	750	3412	25 5/8	25 5/8	73 5/8	
(1)	POWERWARE 9130 UPS (OPTION)	<b>®</b>	78	1,257*	8 3/8	12 7/8	16 1/4	+1,755 ON BATTERIES
								-

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#### MAGNETOM ESPREE **SPECIFICATIONS**

MR

POWER REQUIREME	NTS
VOLTAGE RANGE; 480 VAC ±10% FOR ALL LINE AND VOLTAGE BALANCE: 2% MAXIMUM DIFFERENCE BETWEE	
FREQUENCY:	60 Hz ± 1.0 Hz
LINE IMPEDENCE:	< 95 mOhms
STAND BY POWER:	8.4/12.2 KW
HIGHEST AVERAGE POWER	37 KW
MAXIMUM POWER (LESS THAN 5 MINUTES)	85 KVA
MOMENTARY POWER (LESS THAN 5 SEC.)	100 KVA
MR SYSTEM FUSE RATING	125 A
RECOMMENDED UPS	120 KVA
UPS FUSE RATING	200 A
MAXIMUM ALLOWABLE VOLTAGE DROP AT MAXIMUM POWER, INCLUDING SOURCE IMPEDANCE, FEEDERS AND ANY TRANSFORMERS.	4.0%

POWER REQUIREM	ИEI	N 1 5
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DEMAND AND CAPACITY REQUIREMENTS NOTES

1) IF EQUIPMENT UPGRADE IS ANTICIPATED, INSTALLING ELECTRICAL POWER TO MEET THE REQUIREMENTS OF THE HIGHER POWER GRADIENT PACKAGE AT THE TIME OF INITIAL INSTALLATION WILL REDUCE THE COST TO UPGRADE THE ELECTRICAL SYSTEM LATER.

THE COST TO UPGRADE THE ELECTRICAL SYSTEM LATER.

2) RECOMMENDED TRANSFORMER SIZE (SYSTEM WITHOUT UPS) IS BASED ON INDUSTRY STANDARD ISOLATION TRANSFORMER KVA RATINGS. SOURCE IMPEDANCE FEEDING THE MAGNETOM SYSTEM, INCLUDING ANY ISOLATION TRANSFORMERS, MUST MEET EQUIPMENT REQUIREMENTS AS LISTED HERE. SIEMENS RECOMMENDS A TRANSFORMER WITH COPPER WINDINGS, AN ELECTRO-STATIC SHIELD, AND A LOW IMPEDANCE (<3%) TO ENSURE THAT SOURCE IMPEDANCE REQUIREMENTS ARE MET.

3) OVERCURRENT PROTECTION IS SPECIFIED FOR SYSTEMS WITHOUT AN UNINTERRUPTIBLE POWER SUPPLY (UPS). ADDITION OF A UPS REQUIRES A HIGHER CAPACITY MAINS CONNECTION (DEPENDENT UPON UPS MODEL AND SIZE).

MAXIMUM FAULT CURRENT IS DEPENDENT UPON THE IMPEDANCE OF THE FACILITY ELECTRICAL SYSTEM. CUSTOMER'S ARCHITECT OR ELECTRICAL CONTRACTOR TO SPECIFY AIC RATING OF OVERCURRENT PROTECTION BASED ON FACILITY IMPEDANCE CHARACTERISTICS.

4) MOMENTARY POWER IS BASED ON A MAXIMUM RMS VALUE FOR

4) MOMENTARY POWER IS BASED ON A MAXIMUM RMS VALUE FOR A PERIOD NOT TO EXCEED FIVE (5) SECONDS, AS DEFINED IN NEC 517.2. STAND-BY AND AVERAGE CURRENT ARE SUBSTANTIALLY

5) THE CONDUCTOR SIZE SHOULD BE SELECTED TO MEET THE VOLTAGE DROP REQUIREMENTS, TAKING INTO CONSIDERATION THE MAINS CAPACITY, RUN LENGTH, AND ANY ADDITIONAL TRANSFORMERS USED TO OBTAIN THE PROPER EQUIPMENT VOLTAGE LEVEL. NEMA STANDARD XR-9-1989 (R1994,R2000) PROVIDES GENERAL, GUIDELINES FOR SIZING CONDUCTORS, TRANSFORMERS, AND ELECTRICAL SYSTEMS FOR MEDICAL IMAGING SYSTEMS.

FUN MEDICAL IMAGING SYSTEMS.

6) LONG—TIME POWER IS BASED ON THE HIGHEST AVERAGE RMS VALUES FOR A PERIOD EXCEEDING 5 MINUTES DURING CLINICAL SYSTEM OPERATION, AS DEFINED IN NEC 517.2.

7) A CIRCUIT BREAKER WITH A HIGH INRUSH RATING (>8x RATED CURRENT) IS REQUIRED TO PERMIT SWITCH—ON OF THE UPS SYSTEM WITHOUT SPURIOUS TRIPPING. CIRCUIT BREAKERS WITH AN ADJUSTABLE MAGNETIC TRIP (SIEMENS FD6 SERIES OR SIMILAR) ARE HIGHLY PERCONMENDED. RECOMMENDED.

NOISE LEVELS		
SYSTEM ROOM	NOISE LEVEL / dB(A)	
CONTROL ROOM	= 55 (AVERAGE VALUE)</td	
EXAMINATION ROOM	= 85.4 (8 HOUR AVERAGE)<br (+3dB(A) TOLERANCE = 92.9dB(A)	
EQUIPMENT ROOM	= 65 (AVERAGE VALUE)</td	

THE PHYSICAL CHARACTERISTICS OF THE MR SYSTEM GENERATE A CERTAIN AMOUNT OF NOISE, THIS TABLE HAS INFORMATION TO INSTALL NOISE ATTENUATION TO MEET ANY STATE/LOCAL/OSHA CODES.

#### **CEILING HEIGHTS**

MAGNET ROOM 7'-11" TECHNICAL MINIMUM MAGNET ROOM 8'-2" RECOMMENDED MINIMUM CONTROL ROOM 6'-11 MINIMUM EQUIPMENT ROOM 7'-3" MINIMUM

#### TRANSPORTING REQUIREMENTS

LARGEST ITEM WITHOUT PACKING MATERIAL: MAGNET-11,244 POUNDS MAGNET AS DELIVERED FROM FACTORY WITHOUT TRANSPORT DEVICE:
7'-4" H. (WITHOUT 90' ELBOW MOUNTED) x 7'-7" W. x 8'-10" L.

STANDARD ROOF OPENING - 9'-2" x 7'-11"

IF TRANSPORTING THE MAGNET UP A RAMP, A 15' MAXIMUM ANGLE MUST BE MAINTAINED.

TO TRANSPORT THE GPA/ACC CABINET (63" x 27" x 78" HIGH; 3307 POUNDS), A MINIMUM ROOM HEIGHT OF 6'-9" WITH TRANSPORT ROLLERS, OR 6'-5" WITHOUT ROLLERS IS REQUIRED.

#### REMOTE SYSTEM DIAGNOSTICS

SIEMENS REMOTE SERVICES (SRS) REQUIRES A CONNECTION BETWEEN THE SRS REMOTE SERVER AND SIEMENS SYSTEMS VIA REMOTE LOCAL AREA NETWORK ACCESS, TO ENSURE THE UPTIME OF YOUR SYSTEM.

THIS SERVICE REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:

1. (PREFERRED) VPN — WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE,

2. (OPTIONAL) \*SRS ROUTER\* — CONNECTED TO ANALOG PHONE LINE VIA \*ANALOG MODEM\*, ETHERNET CONNECTION TO CUSTOMER'S LAN, AND ADMINED OF THE TOWNS OF THE CONNECTION TO CUSTOMER'S LAN, AND ADMINED OF THE TOWNS OF THE TOW

POWER OUTLET. NOTE: = \*SUPPLIED BY SIEMENS\*

#### FOR MORE INFORMATION

FOR MORE DETAILED PLANNING REQUIREMENTS FOR THIS SYSTEM, SEE THE TYPICAL FINAL DRAWING SET NUMBER: 04103

FOR REFERENCE ONLY, NOT FOR CONSTRUCTION.

## MAGNETOM ESPREE SPECIFICATIONS

MR

#### CHILLED WATER SUPPLY

A CHILLED WATER SUPPLY IS REQUIRED TO THE MRI SYSTEM 24 HOURS A DAY, YEAR ROUND FOR HTE COLD HEAD AND GRADIENT SYSTEMS. THIS CAN BE PROVIDED BY A CENTRAL CHILLED WATER SUPPLY OR A SEPARATE STAND ALONE CHILLER THAT MEETS THE STATED REQUIREMENTS. THE CHILLED WATER CAN ALSO BE SUPPLIED BY A DEDICATED KRAUS KCC 215 CHILLER AND INTERFACE PANEL. WITHOUT THE USE OF A DEDICATED KRAUS CHILLER, A SEP (SYSTEM STANDARD AND AND AND AND A SEP AND AND A SEP (SYSTEM STANDARD AND ADDICATED AND ADDICATED AND ADDICATED AND AND ADDICATED ADDICATED AND ADDICATED AND ADDICATED ADDICATED AND ADDICATED AD

BY A DEDICATED KRAUS KCC 215 CHILLER AND INTERFACE PANEL.
WITHOUT THE USE OF A DEDICATED KRAUS CHILLER, A SEP (SYSTEM
SEPARATOR CABINET), MUST BE INCLUDED WITH THE SIEMENS ORDER,
THE PIPE SIZE BETWEEN THE KRAUS CHILLER AND INTERFACE PANEL,
OR BETWEEN THE WATER SUPPLY AND SEP MUST BE 2 INCH UP TO
82 FEET, 2-1/2 INCH UP TO 148 FEET, CONSULT FOR LONGER PIPE,
PERMISSIBLE MATERIALS THAT CAN BE USED FOR THE PIPING ARE;
STAINLESS STEEL (V2A, V4A), NON-FERROUS METAL (COPPER, BRASS),
SYNTHETIC MATERIAL, PLASTICS, BRAZING SOLDER, HARD SOLDER, OR
FITTING SOLDER TYPE 3 AND 4. THERE ARE MATERIALS THAT MAY
CAUSE DAMAGE TO THE COOLING SYSTEM AND CANNOT BE USED,
THESE MATERIALS ARE ALUMINUM, IRON, CARBON STEEL, ZINC,
ZINC PLATED STEEL, OR STANDARD STEEL PIPES.

THESE REQUIREMENTS ARE REQUIRED FOR NEW INSTALLATIONS, IF EXISTING WATER PIPES COMPLY WITH SIEMENS WATER SPECIFICATIONS, THEY DO NOT NEED TO BE REPLACED.

NORMAL TAP WATER MUST BE AVAILABLE FOR FILLING THE SECONDARY WATER CIRCUIT. THERE SHALL BE A HOSE BIB LOCATED WITHIN 65' OF THE SEP, IFP, ACC OR THE KRAUS CHILLER,

THE SUPPLY AND RETURN CHILLED WATER PIPES MUST BE LABELED.
THE LOCATION OF THE LABELS MUST BE AT ALL CONNECTION AND
REFILLING POINTS AND MUST CONTAIN FLOW DIRECTION AND CONTENTS.

#### **ENVIRONMENTAL REQUIREMENTS**

- 1) AIR CONDITIONING IS TO PROVIDE A TEMPERATURE OF 70°F ±5°F IN THE EXAM ROOM, 70°F±10°F IN THE EQUIPMENT & CONTROL AREAS, RELATIVE HUMIDITY OF 40-60% (NON-CONDENSING) IS REQUIRED EXAMINATION ROOM AND 40-80% (NON-CONDENSING) IN ALL OTHER AREAS WHERE SIEMENS EQUIPMENT IS INSTALLED. THESE CONDITIONS ARE TO BE MET AT ALL TIMES; 24 HOURS A DAY, 7 DAYS A WEEK.
- 2) A DEDICATED AIR CONDITIONING AND HUMIDIFICATION SYSTEM IS RECOMMENDED FOR THE EXAM ROOM. A MINIMUM FRESH AIR EXCHANGE RATE OF 6 TIMES PER HOUR FOR THE EXAM ROOM IS REQUIRED. AIR SUPPLY AND RETURN ABOVE THE FINISHED CEILING IN THE EXAM ROOM IS RECOMMENDED, EACH ROOM SHOULD HAVE A DEDICATED CONTROL AND SENSOR TO MONITOR AND ADJUST THE AIR.
- 3) THE HEAT INTO THE EXAM ROOM IS LESS THAN 10,238 BTU/HR. THE HEAT INTO THE EQUIPMENT ROOM IS TYPICALLY 8,530 BTU/HR, MAXIMUM 17,080 BTU/HR. THIS HEAT DISSIPATION IS FROM THE SIEMENS EQUIPMENT ONLY. AUXILIARY SUPPORT EQUIPMENT (10 UPS) AND LIGHTING MUST BE CONSIDERED FOR TOTAL HEAT LOADS.
- 4) IT IS IMPORTANT FOR FRESH AIR INTAKE SYSTEMS TO EXHAUST AIR DIRECTLY OUT OF THE BUILDING. THE EXHAUST AIR MUST NOT BE DEFLECTED INTO ANOTHER ROOM. THE MAGNET ROOM EXHAUST AIR SHOULD BE INSTALLED AT LEAST 6'-6" ABOVE FINISHED FLOOR.
- 5) THE AIR INTAKE OF THE AIR CONDITIONING SYSTEM MUST NOT BE LOCATED IN THE VICINITY OF THE QUENCH VENT EXHAUST.
- 6) IF THE INPUT DRAWS UPON AIR FROM OUTSIDE THE BUILDING, IT IS RECOMMENDED TO INSTALL AN ON-SITE FILTER TO REMOVE DUST PARTICLES GREATER THAN 10 MICRONS.

#### CHILLED WATER REQUIREMENTS

WATER REQUIREMENTS TO BE MEASURED AT THE SEP CABINET.

FLOW RATE;	23.78-29.05 GPM
WATER TEMPERATURE:	48"F ±4"F
BTU DISCHARGE TO THE WATER	163,793 BTU/ĤR
WATER PRESSURE	MAXIMUM 87 PSI
LOSS OF PRESSURE FOR SEP CABINET	14.5 PSI MAXIMUM
CHILLED WATER ACIDITY RANGE	6 pH TO 8 pH
CHILLED WATER HARDNESS	<250 ppm CALCIUM CARBONATE
CHLORINE GAS CONCENTRATION	<200 ppm
FILTRATION	mu, 003

FOR INSTALLATION OF A KRAUS KCC 215 CHILLER, IT IS THE RESPONSIBILITY OF THE CUSTOMER/MECHANICAL CONTRACTOR TO FLUSH PROVIDE A MIXTURE OF WATER WITH 35%-38% ETHYLENE GLYCOL PRIOR TO CHILLER START UP. DO NOT USE PROPYLENE GLYCOL OR AUTOMOTIVE ANTI-FREEZE,

THE AMOUNT OF THE MIXTURE MUST FILL THE CHILLER, MR SYSTEM AND PIPING (SUPPLY AND RETURN), SEE EXAMPLES BELOW,

(1) GALLON OF UNDILLUTED GLYCOL, OR (2) GALLONS OF WATER/GLYCOL MIXTURE MUST REMAIN ON SITE FOR USE AFTER START UP.

MIXTURE VOLUME INCLUDING SUPPLY & RETURN+15 GAL, CHILLER & MR					
PIPE DIAMETER	TOTAL LENGTH	MIXTURE VOLUME	GLYCOL NEEDED		
2*	100'	31.3 GALLONS	11.9 GALLONS		
2*	200'	47.6 GALLONS	18.1 GALLONS		
2.5"	100'	40.5 GALLONS	15.4 GALLONS		
2.5"	200'	66.0 GALLONS	25.1 GALLONS		

MIXTURE VOLUME =  $3.14 \times (\text{PIPE RADIUS})^2 \times \text{PIPE LENGTH} + 15 GALLONS. GLYCOL AMOUNT = <math>35-38\%$  OF MIXTURE VOLUME.

#### **BUILDING VIBRATIONS**

EXTERNAL VIBRATIONS OR SHOCKS AFFECTING THE MAGNET MAY DEGRADE IMAGE QUALITY. VIBRATIONAL ACCELERATION Q<sub>max</sub> TRANSFERRED THROUGH BUILDING VIBRATIONS TO THE MAGNET MAY NOT BE EXCEEDED IN THE THREE SPATIAL ORIENTATIONS IN THE FREQUENCY RANGE FROM 0 TO 70 Hz.

BUILDING VIBRATION SPECIFICATION: Q<sub>max</sub> = -70dB g

THE REQUIREMENT FOR CI MOST IS — 70dB g MEASURED AS MAXIMUM RMS VALUE PER FREQUENCY COMPONENT <0.5Hz IN THE FOURIER TRANSFORMATION OF THE RECORDED SIGNAL SPECTRUM.

#### QUENCH VENT NOTES

LIQUID AND GASSEOUS HELIUM ARE USED IN THE OPERATION OF A SUPERCONDUCTING MRI SYSTEM. THE MECHANICAL CONTRACTOR SHALL, PROVIDE A VENT, ACCORDING TO SIEMENS SPECIFICATIONS, TO EXHAUST GASSEOUS HELIUM FROM THE MACNET TO OUTSIDE THE BUILDING. PLEASE SEE THE SIEMENS TYPICAL DRAWINGS FOR DETAILS,

10/31/00

FOR REFERENCE ONLY, NOT FOR CONSTRUCTION.

### MAGNETOM ESPREE SPECIFICATIONS

MR

#### PROTECTING THE ENVIRONMENT

PROTECTING THE IMMEDIATE ENVIRONMENT FROM THE EFFECT OF THE MAGNETIC FIELD REQUIRES CONSIDERATION, INFORMATION STORED ON MAGNETIC DATA CARRIERS SUCH AS DISKS, TAPES, AND CREDIT CARDS MAY BE ERASED IF IN CLOSE PROXIMITY, CAUTION WITH REGARD TO HEART PACEMAKERS MUST BE EXERCISED, MOST PACEMAKER UNITS EMPLOY A REED RELAY WHICH MAY CHANGE OPERATING MODE WHEN EXPOSED TO AN EXTERNAL MAGNETIC FIELD. THEREFORE, PACEMAKER USERS MUST BE KEPT AT A SPECIFIED DISTANCE FROM THE MAGNET WHICH IS DETERMINED BY THE MAGNETIC FIELD STRENGTH.

#### MAGNETIC FRINGE FIELDS

MAGNETIC FIELDS MAY AFFECT THE FUNCTION OF DEVICES IN THE VICINITY OF THE MAGNET, THESE DEVICES MUST BE OUTSIDE CERTAIN MAGNETIC FIELDS. THE DISTANCES LISTED ARE FROM THE MAGNET ISOCENTER AND DO NOT CONSIDER ANY MAGNETIC ROOM SHIELDING.

X/Y AND Z AXIS	DEVICES			
6'-2" / 9'-3" 3.0mT	SMALL MOTORS, WATCHES, CAMERAS, CREDIT CARDS, MAGNETIC DATA CARRIERS (SHORT— TERM EXPOSURE)			
7'-7" / 11'-6" 1.0mT	COMPUTERS, MAGNETIC DISK DRIVES, OSCILLOSCOPES, PROCESSORS			
8'-3" / 13'-2" 0.5mT	CARDIAC PACEMAKERS, X-RAY TUBES, INSULIN PUMPS, B/W MONITORS, MAGNETIC DATA CARRIERS (LONG-TERM STORAGE)			
10'-3" / 16'-9" 0.2mT	SIEMENS CT SCANNERS			
10'-10" / 17'-9" 0.15mT	COLOR MONITORS, SIEMENS LINEAR ACCELERATORS			
14'-2" / 23'-8" 0.05mT	X-RAY IMAGE INTENSIFIERS, GAMMA CAMERAS, PET/CYCLOTRON, ELECTRON MICROSCOPES, LINEAR ACCELERATORS			
THE OWNER/USER IS AND ENSURE THAT IT	TO VERIFY THE LOCATION OF THE 0.5mT FIELD IS MAINTAINED AS A RESTRICTED AREA.			

#### MAXIMUM CABLE LENGTH

THERE ARE 6 DIFFERENT CABLE SETS THAT ARE AVAILABLE FOR THE MRI SYSTEM DIFFERENTIATED BY MAXIMUM LENGTHS FROM THE MAGNET TO THE FILTER PANEL (INSIDE) AND FROM THE FILTER PANEL TO THE ELECTRONICS (OUTSIDE).

	INSIDE	OUTSIDE
SET 1	20'	4'
SET 2	20'	32'
SET 3	20'	39'
SET 4	30'	4'
SET 5	30'	29'
SET 6	46'	13'

THE VERTICAL DISTANCE FOR CABLE TRAVEL FROM THE FILTER PANEL TO THE CABLE TRAY, AND FROM THE CABLE TRAY TO THE MAGNET MUST BE CONSIDERED.

THE MAXIMUM DISTANCE FROM THE ACC CABINET TO THE CONTROL CONSOLE IS 75 FEET.

#### PROTECTING THE MAGNETIC FIELD

THE SIEMENS MAGNETOM UTILIZES A SUPERCONDUCTIVE MAGNET WITH AN EXTREMELY HOMOGENEOUS FIELD WITHIN THE MAGNET TO PROVIDE DISTORTION—FREE IMAGING. THE PRESENCE OF FERROMAGNETIC MATERIAL WITHIN THE VICINITY OF THE MAGNET CAN ADVERSELY AFFECT THE UNIFORMITY OF THE USEFUL, MAGNETIC FIELD, THIS APPLIES TO STATIONARY FERROUS MATERIAL (STRUCTURAL STEEL) WHICH IS TO BE MINIMIZED, STATIONARY STEEL COMPENSATION MAY BE ACHIEVED BY MAGNET POSITIONING AND SELECTIVE USE OF SHIMS, FIELD DISTORTION ENCOUNTERED BY MOVING FERROMAGNETIC OBJECTS IS MORE DIFFICULT TO COMPENSATE AND MAY REQUIRE THE USE OF MAGNETIC SHIELDING.

#### MAGNET SITING REQUIREMENTS

IT MUST BE ENSURED THAT THE MAGNET IS LOCATED SO THAT THE STABILITY AND HOMOGENEITY OF THE MAGNETIC FIELD ARE NOT ADVERSELY AFFECTED BY EXTRANEOUS FIELDS AND STATIC OR DYNAMIC FERROMAGNETIC OBJECTS.

DITUMNO PENNOMAGNETI	O ODUEO131
X/Y AND Z AXIS	SOURCE OF INTERFERENCE
3'-6"	FLOOR STEEL REINFORCEMENT<20 LBS./ FT* IRON BEAMS < 68 LBS./FT.
16'-1" / 19'-1"	STRETCHERS UP TO 110 LBS.
13'-2*	A/C CHILLERS
17'-5" / 21'-4"	TRANSPORT DEVICES UP TO 440 LBS.
18'-1 / 24'-8"	VEHICLES UP TO 2,000 LBS.
20'-5" / 29'-7"	ELEVATORS, TRUCKS UP TO 10,000 LBS.
39'-5"/26'-3"	AC TRANSFORMERS LESS THAN 100 KVA
41'-1"/32'-10"	AC TRANSFORMERS LESS THAN 250 KVA
42'-8"/39'-5"	AC TRANSFORMERS LESS THAN 650 KVA
46'-0"/49'-3"	AC TRANSFORMERS LESS THAN 1600 KVA
9'11"/6'7"	AC CABLES, MOTORS LESS THAN 100 AMPS
23'-0"/9'-11"	AC CABLES, MOTORS LESS THAN 250 AMPS
131'-2"	ELECTRIC RAILWAY SYSTEMS

FOR IRON OBJECTS LOCATED UP TO 45' FROM THE Z AXIS, THE DISTANCES FOR THE Z AXIS MUST BE USED, REDUCTION IS POSSIBLE WITH STEEL SHIELDING,

#### RF SHIELDING

THE EXAMINATION AREA MUST BE SHIELDED TO PROVIDE A REDUCTION OF RADIO FREQUENCY WAVES EMANATING FROM EXTERNAL TRANSMITTERS. THE REQUIRED ATTENUATION IS 90dB IN THE FREQUENCY RANGE OF 15-128 MHz. IF CO-STING TWO SYSTEMS EACH ROOM SHOULD BE 100 dB. THE RF SHIELD MUST BE TESTED BEFORE AND AFTER MAGNET PLACEMENT IN THE RF ROOM AND AFTER THE SIEMENS RF FILTER PANEL IS INSTALLED.

THE RF-SHIELDING MUST BE INSULATED FROM ALL GROUNDS SUCH THAT THE ONLY GROUND IS THE SINGLE POINT GROUND ON THE OUTSIDE OF THE RF-ROOM WALL,

ALL ELECTRICAL LINES INTO THE RF ROOM MUST BE ROUTED THROUGH RF FILTERS (PROVIDED BY RF SHIELDING SUPPLIER). ALL ELECTRICALLY NON-CONDUCTIVE SUPPLY LINES (E.G. DXYGEN) INTO THE RF ROOM MUST BE ROUTED THROUGH RF SEALED WAVE GUIDES (PROVIDED BY RF SHIELDING SUPPLIER).

FOR PRESSURE EQUALIZATION PURPOSES THE RF DOOR SHOULD OPEN TO THE OUTSIDE OF THE RF ROOM. AS AN ALTERNATIVE A 24"X24" OPENING IN THE RF ROOM FOR PRESSURE EQUALIZATION IS REQUIRED.

**REV. 10** 

#### PROPOSED CAPITAL COSTS

Project Name FHMI Mobile MRI Upgrade

D	021 . A.C. H 1
Proponent:	Kings Medical

A.	Site C	OSIS .
	(1)	Full purchase price of land\$
	(2)	Acres Price per Acre \$  Closing costs
	(3)	Closing cosis.
	(4)	Site Inspection and Survey
	(5)	Legal fees and subsoil investigation\$
		Site Preparation Costs
		Soil Borings\$\$
		Clearing-Earthwork \$\$ Fine Grade For Slab \$
		Roads-Paving \$
		Concrete Sidewalks
		Water and Sewer\$
		Footing Excavation\$
		Footing Backfill \$
		Ternite Treatment \$
		Other (Specify) \$
		Sub-Total Site Preparation Costs\$
	(6)	Other (Specify) \$
	(7)	Sub-Total Site Costs
	(8)	Construction Contract
	(9)	Cost of Materials
	(/)	General Requirements
		Concrete/Masonry
		Woods/Doors & Windows/Finishes
		Thermal & Moisture Protection
		Equipment/Specialty Items
		Mechanical/Electrical
		Other (Specify)
		Sub-Total Cost of Materials
	(10)	Cost of Labor\$
	(11)	Other (Specify)\$N/A
	(12)	Sub-Total Construction
В.	Misce	llaneous Project Costs
	(13)	Building Purchase\$
	(14)	Fixed Equipment Purchase/Lease (MR, Coach, Injector, Printer, Coils)
	(15)	Movable Equipment Purchase/Lease
	(16)	Furniture
	(17)	Landscaping\$
	(18)	Consultant Fees
		Architect and Engineering Fees
		Legal Fees
		***************************************
		,
	(10)	Sub-Total Consultant Fees (All Inclusive)\$\$ Financing Costs (e.g. Bond, Loan, etc.)\$\$
•	(19) (20)	Interest During Construction
	(21)	Other (taxes and shipping)
	(22)	Sub-Total Miscellaneous \$1,596,868
	(23)	Total Capital Cost of Project (Sum A-C above)
	(23)	Total Capital Cost of Project Cost 7 Cost Cost Project Pro
I certify that, to	the best of m	y knowledge, the above construction related costs of the proposed project named above are complete and correct.
•		
Not Applicable	2	
(Signature of L	icensed Archi	tect or Engineer)
Language that A	d. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	knowledge, the above capital costs for the proposed project are complete and correct and that it is my intent to carry out the proposed
project as desc		
An!	11/1	ELC / Acrouser in fact
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(Proponent - s	gnature of off	icer) (Title of officer)

## EQUIPMENT COMPARISON - MR REPLACEMENT JACKSONVILLE DIAGNOSTIC IMAGING REPLACEMENT

	EXISTING	REPLACEMENT
	EQUIPMENT	EQUIPMENT
Type of Equipment (List Each Component)	MRI Scanner	MRI Scanner
Manufacturer of Equipment	General Electric	General Electric
Tesla Rating for MRIs	1.5T	1.5T
Model Number	Signa Horizon	GE Signa HDI
Serial Number	R3980	R2193
Provider's Method of Identifying Equipment	MQ 16	MQ 2
	COIN # F-0020-02	
Specify if Mobile or Fixed	Mobile	Mobile
Mobile Trailer Serial Number/VIN#	1S9FA482351182791	1S9FA482021182551
Mobile Tractor Serial Number/VIN #		
Date of Acquisition of Each Component	2008	2010
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Lease
Specify if Equipment Was/Is New or Used When Acquired	Used	Used
Total Capital Cost of Project (Including Construction, etc.) < Use Attached Form>	\$1,000,000	\$650,000
Total Cost of Equipment	\$1,000,000	\$650,000
Fair Market Value of Equipment	\$149,000	\$650,000
Net Purchase Price of Equipment	Same	Same
Locations Where Operated	Novant Health Imaging -	Novant Health Imaging -
	University Charlotte,	University Charlotte,
	Normant Health Imaging	Normat Hoolth Imaging
	Steel Creek, Charlotte,	Steel Creek, Charlotte,
	NC	NC
Number Days In Use/To Be Used in N.C. Per Year	Anticipated to be 365	Anticipated to be 365
	(not including	(not including
	holidays)	holidays)
Percent of Change in Patient Charges (by Procedure)	NA	NA
Percent of Change in Per Procedure Operating Expenses (by Procedure)	NA	NA
Type of Procedures Currently Performed on Existing Equipment	MRI Scans	MRI Scans
Type of Procedures New Equipment is Capable of Performing	MRI Scans	MRI Scans

#### PROPOSED CAPITAL COSTS

Project Name JDI Mobile MRI Upgrade

\$
\$
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\$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$\$  \$
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