



North Carolina Department of Health and Human Services  
Division of Health Service Regulation  
Certificate of Need Section

2704 Mail Service Center • Raleigh, North Carolina 27699-2704  
<http://www.ncdhhs.gov/dhsr/>

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October 26, 2012

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

**Exempt from Review - Replacement Equipment**

Facility: Presbyterian Imaging Center Ballantyne (PIC)  
Project Description: Replace an existing fixed MRI scanner relocating from Presbyterian Imaging Center South Park  
County: Mecklenburg

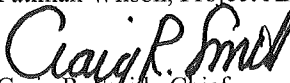
Dear Ms. Gunter:

In response to your letter of October 17, 2012 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 Espree 1.5T MRI scanner to replace the existing Phillips Infinion 1.5T MRI scanner, Serial # 301619. 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 Section with the serial number of the new equipment to update the inventory, if not already provided. In addition, you should contact the Construction Section to determine if they have any requirements for development of the proposed project.

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,

  
Fatimah Wilson, Project Analyst

  
Craig R. Smith, Chief  
Certificate of Need Section

cc: Acute and Home Care Licensure and Certification Section, DHSR  
Medical Facilities Planning Branch, DHSR  
Construction Section, DHSR



# Nelson Mullins

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October 17, 2012

## VIA HAND DELIVERY

Craig R. Smith, 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: Material Compliance and Replacement Equipment Exemption Request for  
Mecklenburg Diagnostic Imaging – Project I.D. No. F-5748-97, Charlotte,  
North Carolina, Health Service Area III

Dear Craig:

I am writing on behalf of Mecklenburg Diagnostic Imaging ("MDI") and its ultimate parent entity, Novant Health, Inc. ("Novant") to seek: (1) a material compliance determination that a change in location for the MRI scanner approved in Project I.D. No. F-5748-97 (the "Scanner") is in material compliance with the CON issued for that project; and (2) an exemption pursuant to N.C. Gen. Stat. § 131E-184(a)(7) to replace the Scanner, which is almost ten years old and nearing the end of its useful life. Each component of this request is addressed below.

### *Relocation*

The Scanner approved in Project I.D. No. F-5748-97 (FID No. 970309) is one of two MRI scanners located at Presbyterian Imaging Center ("PIC") South Park. PIC South Park is located at 6324 Fairview Rd., Ste. 120, Charlotte, North Carolina 28210. Novant Health, Inc., the ultimate parent entity of PIC, has determined that one MRI scanner is sufficient to meet the needs of the population served by PIC South Park. The Scanner has relatively low volumes and Novant has determined that it would be more efficiently used at another PIC location in Charlotte, PIC Ballantyne, which is located at 14215 Ballantyne Corporate Place,

Charlotte, North Carolina 28277. The distance between these two sites is approximately 9.4 miles and 18 minutes. See Mapquest map attached as Exhibit A.

As explained below in the context of the replacement, this proposal does not involve the offering of a "new institutional health service" as that term is defined in N.C. Gen. Stat. § 131E-183(a)(16). This proposal also does not violate any conditions that were placed on the CON for the Scanner. The Department has previously approved relocations of MRI scanners in Mecklenburg County that involved even greater distances than the one presented here. See Exhibits B and C. In Exhibit B, the Department allowed Presbyterian to move an MRI scanner 15.61 miles within Mecklenburg County, and in Exhibit C, the Department allowed a CMHA related entity, Carolinas Imaging Services, LLC to move an MRI scanner 31.75 miles within Mecklenburg County.

N.C. Gen. Stat. § 131E-181(a) states that a CON is valid only for the defined scope, physical location and person named in the application. The relocation of the Scanner does not change the scope or person named in the application. The location change, which is within the City of Charlotte and Mecklenburg County, is only 9.4 miles and therefore not a material change. Accordingly, MDI respectfully requests that the CON Section determine that the relocation is in material compliance with the CON issued for Project I.D. No. F-5748-97.

### ***Replacement***

The Scanner is a Philips 1.5T unit. It was acquired in July, 2003. As it nears the end of its useful life, it is experiencing increased incidents of downtime. The Phillips MRI is limited in the type of scans it can perform and, due to its dated software, older coil technology, and far less sophisticated gradient capabilities, scans can take longer to perform on the Phillips MRI than on a newer scanner. As of January 2012, the other scanner at PIC South Park, a Siemens unit, performed over 75% of PIC South Park's MRI volume.

MDI proposes to replace the Scanner with a new Siemens Espree MRI scanner. Total costs, including acquisition of equipment, construction and all other costs required to make the Siemens Espree operational total \$1,977,678. See Exhibits D, E and F.

This proposal meets the definition of "replacement equipment" as set forth in N.C. Gen. Stat. § 131E-176(22a) because:

- The cost of the equipment and the cost of all activities essential to acquiring and making operational the replacement equipment are less than \$2 million;
- The existing Scanner is currently in use;
- The existing Scanner will be removed from North Carolina when the Siemens Espree arrives in Charlotte and will not be brought back to North Carolina without CON approval; and
- The sole purpose of this proposal is to replace comparable medical equipment.

Further, this proposal meets the requirements of 10A NCAC 14C .0303(d) because:

- The Siemens Espree has the same technology as the existing Scanner although it may possess expanded capabilities due to technological improvements;
- The Siemens Espree is functionally similar and is used for the same diagnostic or treatment purposes as the existing Scanner and is not used to provide a new health service; and
- The use of the Siemens Espree will not result in more than a 10% increase in patient charges or per procedure operating expenses within the first twelve months after the replacement equipment is acquired.

None of the exclusions in 10A NCAC 14C .0303(e) applies here. *See also* Replacement Equipment comparison chart in Exhibit G documenting compliance with 10A NCAC 14C .0303(d).

Accordingly, MDI respectfully requests that the CON Section exempt the acquisition of the Siemens Espree from further CON review.

MDI would like to move ahead with the replacement and relocation as quickly as possible and would therefore appreciate your response by October 31, 2012.

Thank you for your time and attention. Please let me know if you have any questions.

With best personal regards.

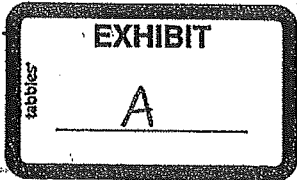
Sincerely,

*Denise M. Gunter*

Denise M. Gunter



Enclosures



Trip to:  
**14215 Ballantyne Corporate Pl**  
 Charlotte, NC 28277-3670  
 9.40 miles / 18 minutes

Notes

Exhibit B- Distance between PIC SouthPark and PIC Ballantyne



**6324 Fairview Road, Charlotte, NC 28210**

- **1. Start out going southeast on Fairview Rd toward South Park Dr.** [Map](#)

**0.2 Mi**  
0.2 Mi Total
- ➔

**2. Take the 1st right onto Sharon Rd.** [Map](#)  
 Sharon Rd is 0.1 miles past South Park Dr  
 Burger King is on the corner  
 If you are on Fairview Rd and reach Ashley Park Ln you've gone a little too far

**1.2 Mi**  
1.4 Mi Total
- ➔

**3. Turn right to stay on Sharon Rd.** [Map](#)  
 Sharon Rd is just past Brookfield Dr  
 If you are on Quail Hollow Rd and reach Quail Hill Apts Dr you've gone a little too far

**1.2 Mi**  
2.6 Mi Total
- ↶

**4. Turn left onto Park Rd.** [Map](#)

**1.9 Mi**  
4.4 Mi Total
- ➔

**5. Turn right to stay on Park Rd.** [Map](#)  
 Park Rd is 0.1 miles past Park Crossing Dr  
 If you are on Johnston Rd and reach Oakbrook Dr you've gone about 0.1 miles too far

**0.9 Mi**  
5.3 Mi Total
- ➔

**6. Turn right onto Pineville-Matthews Rd / Pineville Matthews Rd / NC-51.**  
51 Continue to follow Pineville-Matthews Rd / NC-51. [Map](#)  
 Pineville-Matthews Rd is 0.3 miles past Willow Ridge Rd  
 Starbucks Coffee is on the corner  
 If you reach Hunter Ridge Dr you've gone a little too far

**0.3 Mi**  
5.7 Mi Total
- RAMP

**7. Turn left to take the I-485 S ramp.** [Map](#)  
 If you reach Centrum Pky you've gone about 0.1 miles too far

**0.4 Mi**  
6.1 Mi Total
- ↗

**8. Merge onto I-485 E / US-521 S.** [Map](#)

**1.9 Mi**  
8.0 Mi Total
- EXIT 61

**9. Merge onto Johnston Rd / US-521 S via EXIT 61.** [Map](#)

**0.9 Mi**  
8.9 Mi Total
- ➔

**10. Turn right onto Ballantyne Commons Pky.** [Map](#)  
 Ballantyne Commons Pky is 0.2 miles past John J Delaney Dr  
 If you are on Johnston Rd and reach John J Delaney Dr you've gone about 0.1 miles too far

**0.4 Mi**  
9.3 Mi Total
- ➔

**11. Turn right onto Ballantyne Corporate Pl.** [Map](#)  
 Ballantyne Corporate Pl is 0.1 miles past John J Delaney Dr  
 If you reach Rushmore Dr you've gone about 0.1 miles too far

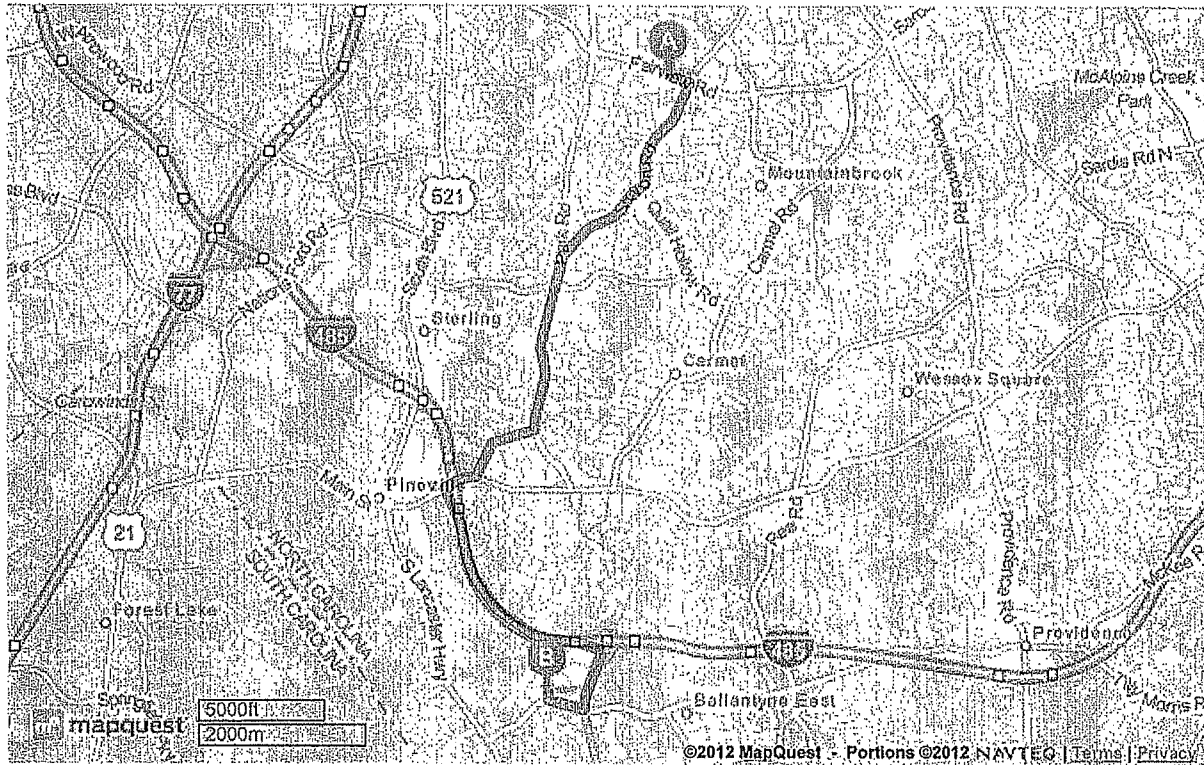
**0.08 Mi**  
9.4 Mi Total
- **12. 14215 BALLANTYNE CORPORATE PL is on the right.** [Map](#)  
 If you reach Harney Dr you've gone about 0.1 miles too far



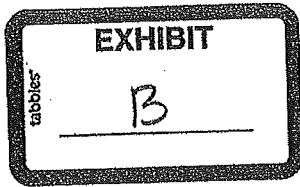
**14215 Ballantyne Corporate PI, Charlotte, NC 28277-3670**

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Total Travel Estimate: **9.40 miles - about 18 minutes**



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15.61 miles apart  
according to Mapquest

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES  
DIVISION OF FACILITY SERVICES  
RALEIGH, NORTH CAROLINA

IN RE: REQUEST FOR DECLARATORY )  
RULING BY THE PRESBYTERIAN HOSPITAL ) DECLARATORY RULING  
AND CAROLINAS INTEGRATED )  
HEALTHCARE, LLC )

I, Robert J. Fitzgerald, as Director of the Division of Facility Services, hereby issue this Declaratory Ruling to The Presbyterian Hospital ("Presbyterian Hospital"), and Carolinas Integrated Healthcare, LLC ("CIH") (collectively, "Petitioners"), pursuant to N.C.G.S. § 150B-4, 10A NCAC 14A.0108, and the authority delegated to me by the Secretary of the North Carolina Department of Health and Human Services (the "Department").

Petitioners have requested a declaratory ruling (the "Request") that:

(1) Presbyterian may acquire CIH, a diagnostic center that owns one open bore fixed MRI scanner ("the CIH Scanner") pursuant to N.C.G.S. § 131E-184(8); (2) Presbyterian may replace the CIH Scanner with a closed bore fixed MRI scanner (the "Replacement Scanner") pursuant to N.C.G.S. § 131E-184(a)(7); and (3) Presbyterian may relocate the Replacement Scanner to the Huntersville Campus of Presbyterian Hospital ("PHH"). For the reasons stated below, I have concluded that the transaction proposed by Petitioners may be conducted without a certificate of need ("CON") review.

This ruling will be binding on the Department and the person requesting it if the material facts stated herein are accurate and no material facts have been omitted from the request. This ruling pertains only to the matters referenced herein. Except as provided by N.C.G.S. § 150B-4, the Department expressly reserves the right to make a prospective change in the statutes and regulations at issue in this Declaratory Ruling. Denise M. Gunter of Nelson Mullins Riley &



Scarborough LLP has requested this ruling on behalf of Petitioners and has provided the material facts upon which this ruling is based. Petitioners submitted information in the original request dated 14 September 2006; in a response to a request for additional information dated 6 November 2006; and in another response dated 9 November 2006. Susan M. Fradenburg of Smith Moore LLP submitted comments by letter dated 24 October 2006 on behalf of Mooresville Hospital Management Associates, Inc. d/b/a Lake Norman Regional Medical Center ("Lake Norman"), requesting that the declaratory ruling be denied.

### STATEMENT OF THE FACTS

In 1999, CIH installed an open bore fixed MRI scanner at Midtown Medical Plaza ("MMP") located at 1918 Randolph Road in downtown Charlotte, on the main Presbyterian Hospital campus. Petitioners state that the MRI scanner was installed pursuant to a CON issued April 23, 1998 to CIH for Project I.D. # F-5580-97.

Petitioners now seek approval for Presbyterian to acquire CIH, to replace the CIH Scanner with the Replacement Scanner pursuant to N.C.G.S. § 131E-184(a)(7), and to relocate the Replacement Scanner to PHH.

#### **1. Acquisition of CIH**

Petitioners provide no details on the proposed acquisition of CIH by Presbyterian. The then-current relationship between CIH, Presbyterian, and PHH is described in the Declaratory Ruling issued on 24 April 2006 to Novant Health, Inc. ("Novant"), Novant Health Southern Piedmont Region, LLC ("NHSPR"), The Presbyterian Hospital ("Presbyterian Hospital"), The Presbyterian Hospital d/b/a Presbyterian Hospital Huntersville ("PHH"), Presbyterian Regional Healthcare Corp. ("PRHC"), and Carolinas Integrated Healthcare, LLC ("CIH"). That Declaratory Ruling is referred to hereinafter as the "Novant Ruling."

**2. Replacement of CIH Scanner**

Petitioners seek to replace the CIH Scanner with the Replacement Scanner. The CIH Scanner is described in Attachment C to the Request as an Hitachi .3T Open MRI Scanner. The proposed Replacement Scanner is a Siemens 1.4T MAGNETOM Avanto MRI Scanner. Petitioners state that the total capital cost of the project (including replacement and relocation) is \$1,985,769. Petitioners further state that this cost includes all activities essential to acquiring the equipment and making it operational. On the Architect's Certification proffered as Exhibit E to the Request, the Proposed Capital Costs are stated as:

Cost of Materials:	\$ 177,948.40
Cost of Labor:	\$ 266,922.60
Subtotal Construction Contract:	\$ 444,871
Fixed Equipment Purchase/Lease:	\$1,505,898
Architect and Engineering Fees:	\$ 35,000
Subtotal Miscellaneous Project Costs:	\$1,540,898
Total Capital Cost of Project:	\$1,985,769

Petitioners state that Siemens has agreed to honor the total price of the Replacement Scanner (\$1,505,898) until 29 December 2006.

In response to a request for additional information by counsel for the Department, Petitioners provided the following additional representations as to costs.

a. The project will go into existing space that was designed and built for a future MRI scanner when PHH was built. The space where the MRI scanner is to be located is 1602 square feet, and it will require very little structural renovation. It is currently used as a

conference room. Most of the construction cost is for electrical work required to install the equipment.

b. The CIH Scanner will be sold to a third party, which will be responsible for removal costs.

c. Freight costs for the Replacement Scanner are included in the total price quoted by Siemens.

d. The construction cost estimates include 5% contingency costs.

e. There are no Group Purchasing Organization fees to be paid for the purchase of the Replacement Scanner.

f. The electrical room exists at PHH. "Provisions were made" in the original design of the hospital to have the power requirements "for an MRI available in this electric room." The electrical room also feeds existing radiology equipment in the existing Radiology Department.

g. The subwait area and access corridors/vestibules are existing areas that will require no additional cost beyond that included in the construction cost submitted.

h. Travel, lodging, meals and other expenses for training will not exceed \$750.

i. As part of a nonprofit, tax-exempt organization, Presbyterian will receive a refund on any sales taxes, and therefore taxes are not included as part of the purchase price.

Lake Norman has submitted several additional facts in connection with the Request. It points out that Petitioners previously sought to replace and relocate the CIH Scanner, and their request was denied by the Novant Ruling. In the Request for the Novant Ruling ("the "Novant Ruling Request"), Petitioners stated that the price of the replacement MRI scanner in that case was \$1,504,869. The Novant Ruling noted that the replacement price did not include a \$135,000 Trade-In amount, and that when the Trade-In amount was added to the price, it increased the

total cost of the project beyond \$2,000,000. The equipment to be purchased for the Novant Ruling Request was a GE 1.5T EXCITE Echospeed+ fixed MRI scanner, to be purchased from GE Healthcare Technologies. Lake Norman also notes that the price quotation provided by Petitioners in this Request describes the price as “a special offer.” The quote by Siemens is described on page 2 of Exhibit D to the Request as “a confidential special offer extended to Novation Sole Source MR Group Buy Customers.” The quote is addressed to “Novant Health Inc.” Lake Norman argues that these facts show that the quote presented by Petitioners does not reflect the fair market value of the equipment.

Lake Norman also argues that the total capital cost figure presented by Petitioners does not include the requisite connectivity equipment, supplies or software. It points to a statement in the quote (Exhibit D to the Request, p. 49) regarding 10/100 Mbit Ethernet connectivity for the implication that some items are not included in the price.

Lake Norman argues that Petitioners failed to show that the Replacement Scanner and the CIH Scanner are “comparable” for purposes of the definition of replacement equipment in N.C.G.S. § 131E-179(22a) and 10A NCAC 14C .0303(d)(3). Lake Norman contends that the Petitioners had not sufficiently established that the increase in patient charges or per procedure operating expenses would not exceed 10% within the first 12 months after acquisition.

In response to a request for additional information from counsel for the Department, and to points raised by Lake Norman, Petitioners through counsel made several representations in materials submitted 9 November 2006. Petitioners provided a list of current patient charges on the CIH Scanner at MMP and the proposed patient charges on the Replacement Scanner at PHH for the fifteen most commonly performed scans at the CIH Scanner. The increase for the

proposed charges did not exceed 10% for any procedure, and exceeded 5% for only one procedure.

With respect to connectivity costs, Petitioners represented in their 9 November 2006 response that 10/100 Mbit Ethernet connectivity is the basic connectivity that exists at all Novant facilities, including PHH, and that there is no additional cost to this project for this connectivity.

In the Novant Ruling Request, Petitioners submitted as Attachment E a project capital cost estimate by McCulloch England Associates Architects and signed by Jerry W. Currie, AIA, Executive Vice President. The cover page estimated the total cost of construction to be \$444,871.00, which did "not include the MRI Unit, medical equipment, furniture, artwork, telecommunication equipment & reconnection of equipment."

As Exhibit E to this Request, Petitioners also have submitted a project capital cost estimate by McCulloch England Associates Architects and again signed by Jerry W. Currie, AIA, Executive Vice President. The cover page for this estimate estimated the total cost of construction to be \$444,871.00 (the same total amount as for the Novant Ruling Request), but it did not contain an exclusion for "the MRI Unit, medical equipment, furniture, artwork, telecommunication equipment & reconnection of equipment."

In response to a request for additional information on this point, Petitioners represented in their 9 November 2006 response that everything needed for this project is either included in the equipment quote, is already existing, or is covered in the construction quote. For example, Petitioners state that the equipment quote includes the MRI scanner, the contrast injector, the various coils, the computer, all the necessary software, the furniture, the rigging, and the installation. They represent that there is no artwork associated with this project, and there is no other medical equipment involved besides the MRI scanner.

### **3. Relocation of Replacement Scanner.**

Petitioners assert that the primary rationale for relocating the Replacement Scanner is to improve access to MRI diagnostic services for residents of the rapidly-growing Huntersville area. In support of their request, they provide a series of statistics that purport to show: (1) a substantial demand for MRI scanner services at PHH; (2) an overlap of service areas for the CIH Scanner and the Replacement Scanner at PHH; (3) population growth in North Mecklenburg County; (4) a disparity in the Fixed MRI Scanner to Population Ratio between the Huntersville area and central Charlotte; and (5) the availability of open MRI scanner services at other sites in what they describe as the Charlotte area. They also contend that in the approval of Project I.D. No. F-7062-04, the Agency acknowledged the need for MRI scanner services at PHH. Project I.D. No. F-7062-04 proposed to replace the CIH Scanner with a mobile MRI scanner that would provide four days of MRI scanner service per week at PHH.

### **ANALYSIS**

#### **1. Presbyterian's Acquisition Of CIH Does Not Require CON Review.**

N.C.G.S. § 131E-184(a) provides that the Department shall exempt from CON review certain new institutional health services if it receives in advance notice of the proposed project and explanation of why it is required for certain enumerated circumstances, including "(8) to acquire an existing health service facility, including equipment owned by the health service facility at the time of the acquisition." Presbyterian has provided the required notice of the acquisition of CIH and the CIH Scanner. Therefore, Presbyterian may acquire CIH, and the CIH Scanner, without a CON review.

**2. The Replacement Of The CIH Scanner With The Replacement Scanner Does Not Require CON Review.**

The next part of the transaction proposed by Petitioners, assuming that Presbyterian acquires ownership of the CIH Scanner as part of its acquisition of CIH, is to replace it with the Replacement Scanner to be operated at PHH. Petitioners contend that the proposed change in the equipment to be operated qualifies for an exemption from CON review as replacement equipment. N.C.G.S. § 131E-184(a)(7).

"Replacement equipment" is a specifically defined term in the CON law:

"Replacement equipment" means equipment that costs less than two million dollars (\$ 2,000,000) and is purchased for the sole purpose of replacing comparable medical equipment currently in use which will be sold or otherwise disposed of when replaced. In determining whether the replacement equipment costs less than two million dollars (\$ 2,000,000), the costs of equipment, studies, surveys, designs, plans, working drawings, specifications, construction, installation, and other activities essential to acquiring and making operational the replacement equipment shall be included. The capital expenditure for the equipment shall be deemed to be the fair market value of the equipment or the cost of the equipment, whichever is greater.

N.C.G.S. § 131E-176(22a).

The Department has adopted rules providing additional precision to the definition in the statute:

**10A NCAC 14C .0303 REPLACEMENT EQUIPMENT**

(a) The purpose of this Rule is to define the terms used in the definition of "replacement equipment" set forth in G.S. 131E-176(22a).

(b) "Activities essential to acquiring and making operational the replacement equipment" means those activities which are indispensable and requisite, absent which the replacement equipment could not be acquired or made operational.

(c) "Comparable medical equipment" means equipment which is functionally similar and which is used for the same diagnostic or treatment purposes.

(d) Replacement equipment is comparable to the equipment being replaced if:

(1) it has the same technology as the equipment currently in use, although it may possess expanded capabilities due to technological improvements; and

(2) it is functionally similar and is used for the same diagnostic or treatment purposes as the equipment currently in use and is not used to provide a new health service; and

(3) the acquisition of the equipment does not result in more than a 10% increase in patient charges or per procedure operating expenses within the first twelve months after the replacement equipment is acquired.

(e) Replacement equipment is not comparable to the equipment being replaced if:

(1) the replacement equipment is new or reconditioned, the existing equipment was purchased second-hand, and the replacement equipment is purchased less than three years after the acquisition of the existing equipment; or

(2) the replacement equipment is new, the existing equipment was reconditioned when purchased, and the replacement equipment is purchased less than three years after the acquisition of the existing equipment; or

(3) the replacement equipment is capable of performing procedures that could result in the provision of a new health service or type of procedure that has not been provided with the existing equipment; or

(4) the replacement equipment is purchased and the existing equipment is leased, unless the lease is a capital lease; or

(5) the replacement equipment is a dedicated PET scanner and the existing equipment is:

(A) a gamma camera with coincidence capability; or

(B) nuclear medicine equipment that was designed, built, or modified to detect only the single photon emitted from nuclear events other than positron annihilation.

Petitioners represent that the total capital cost of the replacement equipment is \$1,985,769, and, as set out in the Statement of Facts, have addressed questions as to various components of those costs by representing that each of the components is either included in the cost calculations or is already existing. Petitioners have addressed the factual questions raised by Lake Norman in its comments and, assuming their representations to be accurate, have shown that the total capital expenditure for this project will be less than \$2,000,000. Petitioners also have demonstrated that the proposed equipment is to replace equipment currently in use and conforms to 10A NCAC 14C .0303. Although Lake Norman argues that the cost of the equipment shown by Petitioners is not the fair market value, Petitioners have explained the items of cost raised by Lake Norman, and the representations of Petitioners do not support a conclusion



that the cost shown is less than fair market value. The replacement equipment, therefore, is exempt from CON review.

**3. The Change in Location is Not a Material Change.**

N.C.G.S. § 131E-181(a) provides: "A certificate of need shall be valid only for the defined scope, physical location, and person named in the application."

Petitioners propose to relocate the MRI scanner services from downtown Charlotte to Huntersville. Charlotte and Huntersville are in the same single-county MRI scanner service area. The CIH Scanner will be taken out of service, and therefore the Replacement Scanner will not result in an increase in the MRI scanner inventory in Mecklenburg County.

Petitioners have provided data tending to demonstrate that the relocation will provide greater access to MRI scanner services in northern Mecklenburg County without adversely impacting patients by the elimination of the CIH Scanner.

The relocation of the site for the Replacement Scanner does not represent a material change in the physical location of the service.

**CONCLUSION**

For the foregoing reasons, assuming the statements of fact in the request to be true, I conclude that:

- (1) Presbyterian may acquire CIH without a CON review;
- (2) The Replacement Scanner is replacement equipment as defined by N.C.G.S. § 131E-176(22a) and therefore is exempt from CON review pursuant to N.C.G.S. § 131E-184(a)(7);
- (3) The relocation of the Replacement Scanner to PHH does not constitute a material change in the location of the project, and therefore does not require CON review.

This ruling is only applicable to the facts as represented by the party requesting this declaratory ruling.

This the 13<sup>th</sup> day of November 2006.

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Robert J. Fitzgerald, Director  
Division of Facility Services  
N.C. Department of Health and Human  
Services

**CERTIFICATE OF SERVICE**

I certify that a copy of the foregoing Declaratory Ruling has been served upon the nonagency party by certified mail, return receipt requested, by depositing the copy in an official depository of the United States postal service in a first class, postage prepaid envelope addressed as follows:

**CERTIFIED MAIL**

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

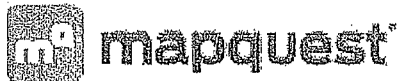
With a courtesy copy to:

Susan M. Fradenburg  
Smith Moore LLP  
Post Office Box 21927  
Greensboro, NC 27420

This 13th day of November, 2006.

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Jeff Horton  
Chief Operating Officer



Trip to:  
**1918 Randolph Rd**  
 Charlotte, NC 28207-1100  
 15.61 miles / 20 minutes

Notes

Distance between Presbyterian Hospital Huntersville and Midtown Medical Plaza



**10030 Gilead Rd, Huntersville, NC 28078-7545**

- 1. Start out going **northeast on Gilead Rd.** [Map](#)

**0.2 Mi**  
0.2 Mi Total
- 2. Merge onto **I-77 S** toward **Charlotte.** [Map](#)  
*If you reach Statesville Rd you've gone about 0.2 miles too far*

**11.3 Mi**  
11.6 Mi Total
- 3. Take the **I-277 / NC-16 / Brookshire Frwy** exit, **EXIT 11.** [Map](#)

**0.3 Mi**  
11.8 Mi Total
- 4. Merge onto **I-277 S / NC-16 S** via **EXIT 11A** on the **left.** [Map](#)

**2.6 Mi**  
14.5 Mi Total
- 5. Take the **NC-16** exit, **EXIT 2A**, toward **Fourth St / Third St.** [Map](#)

**0.2 Mi**  
14.6 Mi Total
- 6. Make a **U-turn** at **E 4th St** onto **ramp.** [Map](#)

**0.09 Mi**  
14.7 Mi Total
- 7. Turn **left** onto **E 3rd St / NC-16 S.** [Map](#)  
*If you reach I-277 S you've gone about 0.1 miles too far*

**0.4 Mi**  
15.1 Mi Total
- 8. Turn **left** onto **Independence Blvd / Charlottetowne Ave / E Independence Blvd.** [Map](#)  
*Independence Blvd is just past Cherry St  
 Bojangles' is on the corner  
 If you reach S Torrence St you've gone a little too far*

**0.07 Mi**  
15.2 Mi Total
- 9. Take the **1st right** onto **E 4th St.** [Map](#)  
*If you are on E Independence Blvd and reach Elizabeth Ave you've gone a little too far*

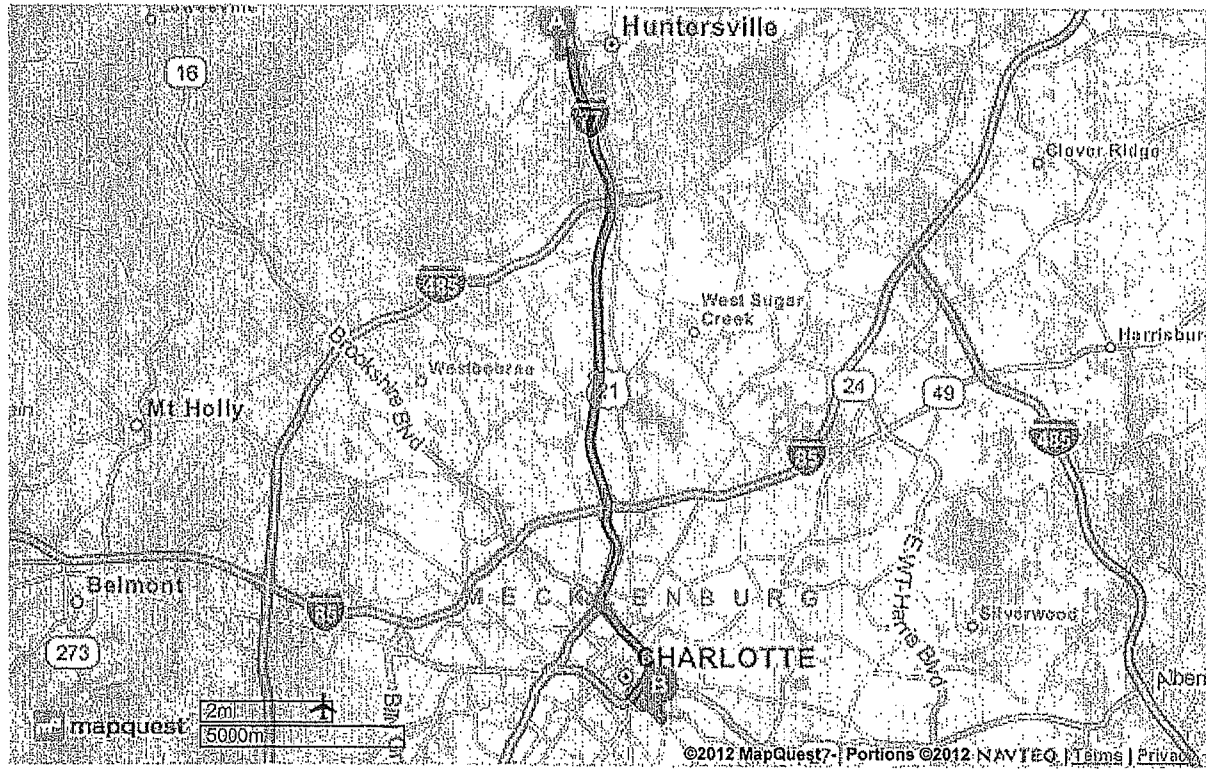
**0.4 Mi**  
15.6 Mi Total
- 10. **E 4th St** becomes **Randolph Rd.** [Map](#)

**0.03 Mi**  
15.6 Mi Total
- 11. **1918 RANDOLPH RD** is on the **right.** [Map](#)  
*If you reach N Colonial Ave you've gone about 0.1 miles too far*



**1918 Randolph Rd, Charlotte, NC 28207-1100**

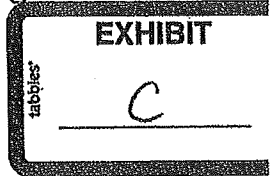
Total Travel Estimate: 15.61 miles - about 20 minutes



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31.75 miles apart according to  
Mapquest

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES  
DIVISION OF HEALTH SERVICE REGULATION  
RALEIGH, NORTH CAROLINA



IN RE: REQUEST FOR DECLARATORY RULING )  
BY CAROLINAS IMAGING SERVICES, LLC ) DECLARATORY RULING  
Project I.D. Nos. F-7040-04 and F-7167-04 )

I, Robert J. Fitzgerald, as Director of the Division of Health Service Regulation, North Carolina Department of Health and Human Services ("Department" or "Agency"), do hereby issue this Declaratory Ruling pursuant to North Carolina General Statute § 150B-4 and 10A NCAC 14A .0103 under the authority granted me by the Secretary of the Department of Health and Human Services.

Carolinas Imaging Services, LLC ("CIS") has requested a declaratory ruling allowing for a change in host sites for Project I.D. No. F-7040-04, and a relocation of its fixed MRI scanner for Project No. F-7167-04 on the grounds that these changes do not constitute a material change in physical location or a failure to materially comply with the representations made by CIS in its Certificate of Need ("CON") applications for its projects. N.C.G.S. §§ 131E-181(a) and (b). This ruling will be binding upon the Department and the entity requesting it, as long as the material facts stated herein are accurate. This ruling pertains only to the matters referenced herein. Except as provided by N.C.G.S. § 150B-4, the Department expressly reserves the right to make a prospective change in the interpretation of the statutes and regulations at issue in this Declaratory Ruling. Robert V. Bode, of Bode, Call & Stroupe, L.L.P., has requested this ruling on behalf of CIS and has provided the material facts upon which this ruling is based. Some of the facts are based on information from the files of the Department.

## STATEMENT OF THE FACTS

CIS seeks a declaratory ruling related to two separate MRI scanners authorized pursuant to two separate CONs. One of these scanners is a mobile MRI scanner to be acquired for Project ID No. F-7040-04 (the "Mobile Unit"); the other is a fixed MRI scanner acquired for Project I.D. No. F-7167-04 (the "Fixed Unit").

The Mobile Unit was approved in 2004 to provide mobile MRI services to three locations: Ashe Memorial Hospital in Jefferson, Carolinas Medical Center-University in Charlotte and Cleveland Regional Medical Center in Shelby. Subsequently, in connection with a contested case arising from another Project, CIS advised the Department that Ashe Memorial Hospital had committed by contract to another mobile provider for the foreseeable future and that Cleveland Regional Medical Center had determined it no longer required CIS's mobile services because of internal solutions to the MRI need in addition to the impending commencement of fixed MRI services in nearby Kings Mountain. In a Global Settlement Agreement executed for that litigation in August, 2005, the Department approved CIS to provide mobile MRI services (with either the Mobile Unit or another CIS mobile MRI scanner) at all of the following locations: NorthCross Imaging Center, Carolinas Medical Center ("CMC"), CMC-Pineville, CMC-University and CMC-Mercy. CIS now proposes to serve NorthCross Imaging Center with the Mobile Unit.

On December 4, 2007, the CON Section gave CIS notice of its consideration of withdrawal of the CON for the Mobile Unit. As part of its response to that notice, CIS advised the Section of its intention to apply for this declaratory ruling.

The Fixed Unit is located at NorthCross Imaging Center ("NorthCross"), 16455 Statesville Road, Huntersville, Mecklenburg County. CIS represents that NorthCross is owned

and operated by CIS. The CON for the Fixed Unit, which is Project No. F-7167-04, was issued to CIS effective 25 January 2006. CIS now seeks to relocate the Fixed Unit to an existing diagnostic imaging center at its Ballantyne site. CIS was issued a CON effective December 1, 2005, for Project L.D. No. F-7315-05 to develop the diagnostic imaging center at the Ballantyne site, which is located at 15110 John J. Delaney Drive, Suite 130, Charlotte, Mecklenburg County. CIS states that the purpose of this relocation is to meet growth in demand at the Ballantyne site. CIS states that the cost of relocation is approximately \$186,185. It represents that it intends to meet the remaining need at the NorthCross site with the Mobile Unit.

### ANALYSIS

#### **The Mobile Unit**

In the Global Agreement, the Department specifically approved the NorthCross site as a site for the Mobile Unit. CIS does not, therefore, require the requested declaratory ruling for the Mobile Unit, and it is not aggrieved by the absence of such a ruling. *See* N.C.G.S. § 150B-4(a). I will therefore decline to issue a ruling with respect to the Mobile Unit.

#### **The Fixed Unit**

The CON law would require a full review of CIS's proposed change of site for the Fixed Unit if that change were to represent a material change in the physical location or scope of the project. N.C.G.S. § 131E-181(a). The proposed change of the site for the Fixed Unit to Ballantyne does not constitute a material change in the physical location of the proposed project because the Fixed Unit will still be located in Mecklenburg County. It will not constitute a material change in the scope of the project so long as CIS continues to materially comply with all conditions in its CON application. In addition, there is no proposed change in the person named in the application that would result in a violation of N.C.G.S. § 131E-181(a).



N.C.G.S. § 131E-189(b) allows the Agency to withdraw CIS's CON if CIS fails to develop the service in a manner consistent with the representations made in the application or with any conditions that were placed on the CON. CIS will not be developing its project in a manner that is materially different from the representations made in its application, nor will it be developing its project in a manner that is inconsistent with any of the conditions that were placed on its CON.

### CONCLUSION

For the foregoing reasons, assuming the statements of fact in the request to be true, I decline to issue a declaratory ruling with respect to the Mobile Unit. I also specifically make no ruling with respect to the CON Section's consideration of withdrawal of the CON for Project I.D. No. F-7040-04.

I conclude that the relocation of the Fixed Unit from the NorthCross site to the Ballantyne site will not constitute a material change in the physical location or scope of the project, will not violate N.C.G.S. § 131E-181, and will not constitute a failure to satisfy a condition of the CON in violation of N.C.G.S. § 131E-189(b) so long as CIS continues to materially comply with all conditions of the original CON for Project I.D. No. F-7167-04.

This ruling is not intended, and should not be interpreted, to authorize any increases in the approved capital expenditure for this project, a change in the approved timetable, a change in the conditions placed on the certificate of need, or any other change in the approved project.

This the \_\_\_\_\_ day of \_\_\_\_\_, 2008.

---

Robert J. Fitzgerald, Director  
Division of Health Service Regulation  
N.C. Department of Health and Human Services

**CERTIFICATE OF SERVICE**

I certify that a copy of the foregoing Declaratory Ruling has been served upon the nonagency party by certified mail, return receipt requested, by depositing the copy in an official depository of the United States Postal Service in first-class, postage pre-paid envelope addressed as follows:

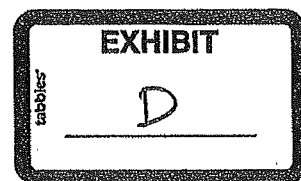
**CERTIFIED MAIL**

Robert V. Bode  
Bode, Call & Stroupe, LLP  
3105 Glenwood Avenue, Suite 300  
Raleigh, NC 27612

This the \_\_\_\_\_ day of \_\_\_\_\_, 2008.

---

Jeff Horton  
Chief Operating Officer



September 10, 2012

Mr. Craig Smith, Chief  
Certificate of Need Section  
Division of Health Service Regulation  
701 Barbour Drive  
Raleigh, NC 27603

Re: Presbyterian Imaging Center – Ballantyne - MRI Scanner

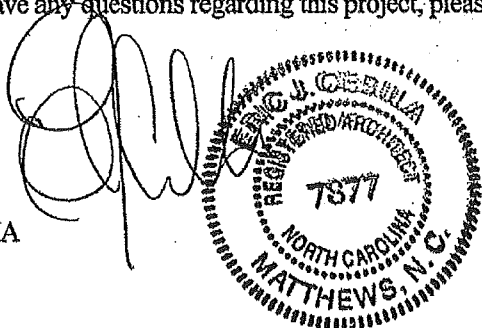
Dear Mr. Smith:

Ec,a Architecture has reviewed the proposal submitted by A Team for the remedial construction of a 850 square foot MR suite in an existing medical office building in Charlotte, North Carolina.

It is our opinion, that the scope of the work is adequate to complete the project as discussed and outlined by this proposal. Furthermore, the construction estimate of \$350,000 is reasonable, for the proposed scope of work for the project, when compared to other similar projects in North Carolina.

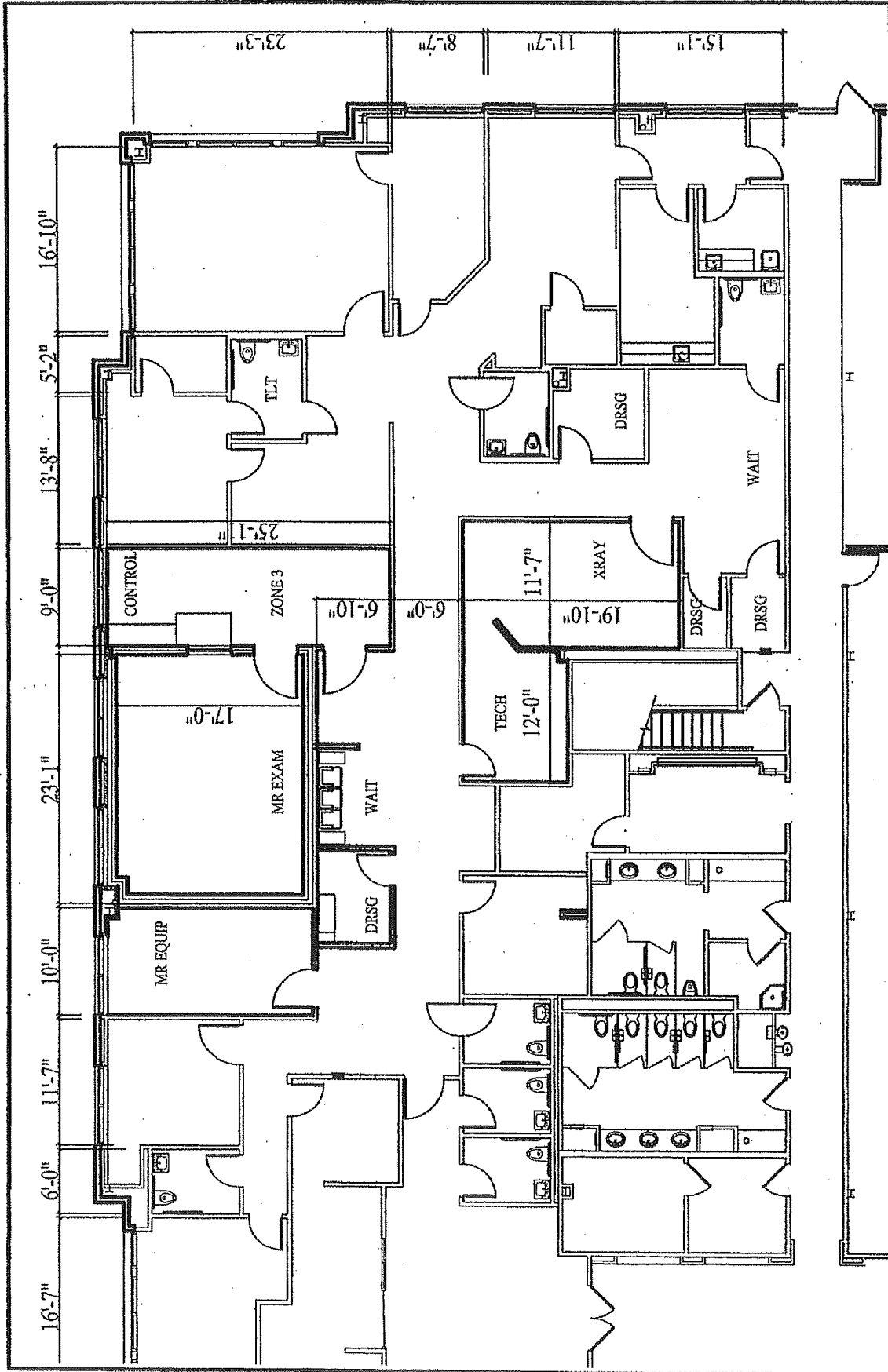
If you should have any questions regarding this project, please do not hesitate to contact me. Thank you.

Sincerely,



Eric Cebula, AIA

**Ec,a Architecture, PC**  
Eric J. Cebula, AIA PO Box 30183 Charlotte, NC 28230  
704.849.6748 (tel) 800.652.0689 (fax) 704.906.6752 (cell) eca-cebula@carolina.rr.com



ADDENDUM - REVISION  
**080612**  
**SKA-1**  
 DATE - SKETCH ARCH.

## PRESBYTERIAN IMAGING CENTER

14215 BALLANTYNE CORPORATE PLACE CHARLOTTE, NC  
 NEW UPFIT & EQUIPMENT INSTALLS FOR MRI & XRAY

704.849.6748 (TEL)  
 704.708.9756 (FAX)  
 704.906.6752 (CELL)  
 PO Box 17014  
 Charlotte, NC 28227  
 ECA-cebula@carolina.rr.com

**E.C.A.**  
 Architecture, PC

## PROJECT CAPITAL COST

Project Name: Presbyterian Imaging Center – Ballantyne MRI Replacement  
 Proponent: Presbyterian Imaging Center -Ballantyne

<b>A. Site Costs</b>		
(1)	Full purchase price of land	\$Not Applicable
	# Acres _____ Price per Acre \$ _____	
(2)	Closing costs	\$Not Applicable
(3)	Site Inspection and Survey	\$Not Applicable
(4)	Legal fees and subsoil investigation	\$Not Applicable
(5)	Site Preparation Costs [Include]	
	Soil Borings	
	Clearing and Grading	
	Roads and Parking	
	Sidewalks	
	Water and Sewer	
	Excavation and Backfill	
	Termitite Treatment	
	Sub-Total Site Preparation Costs	\$Not Applicable
(6)	Other (Specify)	\$Not Applicable
(7)	Sub-Total Site Costs	\$ Not Applicable
<b>B. Construction Contract</b>		
(8)	Cost of Materials [Include]	
	General Requirements	
	Concrete/Masonry	
	Woods/Doors & Windows/Finishes	
	Thermal & Moisture Protection	
	Equipment/Specialty Items	
	Mechanical/Electrical	
	Sub-Total Cost of Materials	\$ _____
(9)	Cost of Labor	\$ _____
(10)	Other	\$ _____
(11)	Sub-Total Construction Contract (MRI construction, Shielding, Mechanical, Electrical, Plumbing, Shielding)	\$350,000
<b>C. Miscellaneous Project Costs</b>		
(12)	Building Purchase	\$ _____
(13)	Fixed Equipment Purchase/Lease	\$1,514,965 (includes tax)
(14)	Movable Equipment Purchase/Lease	\$37,713 (includes tax)
(15)	Furniture	\$15,000
(16)	Landscaping	\$ _____
(17)	Consultant Fees	
	Architect/Engineering Fees	\$35,000
	Legal Fees	\$ _____
	Market Analysis	\$ _____
	Other	
	Total Consultant Fees	\$35,000
(18)	Financing Costs (e.g. Bond, Loan, etc.)	\$Not Applicable
(19)	Interest During Construction	\$Not Applicable
(20)	Other (Contingency)	\$ 25,000
(21)	Sub-Total Miscellaneous	\$1,627,678
D.	Total Capital Cost of Project (Sum A-C above)	\$1,977,678

I certify that to the best of my knowledge, the above construction related costs of the proposed project named above are complete and correct.

(Signature of Licensed Architect or Engineer)

I assure that, to the best of my 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 described.

(Proponent – signature of officer)

VP OF DEVELOPMENT  
 (Title of officer)

# SIEMENS

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



SIEMENS REPRESENTATIVE  
Shawn Elliott - (615) 517-5699

## PRELIMINARY PROPOSAL

Customer Number: 0000055728

Date: 8/26/2012

PRESBYTERIAN IMAGING CENTER  
14125 BALLANTYNE CORPORATE PLACE  
CHARLOTTE, NC 28277

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Quote Nr: 1-4MOMTK Rev. 0

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### MAGNETOM Espree

All items listed below are included for this system:

Qty	Part No.	Item Description
1	14418555	<b>MAGNETOM Espree - System</b> The Siemens 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 Siemens 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 new 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, Angio 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	14405343	<b>I-class #Tim</b> 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
1	08464872	<b>PC Keyboard US english #Tim</b> Standard PC keyboard with 101 keys.
1	14405224	<b>Composing syngo #Tim</b> This application provides dedicated evaluation software for creation of full-format images from overlapping MR volume data sets and MIPs (starting from syngo MR B13) acquired at multiple stages.
1	14402592	<b>Inline Composing syngo #Tim</b> Automatic anatomical or angiographic composing of multiple adjacent coronal or sagittal images for presentation and further evaluation. Composed images can be automatically loaded into Graphical Slice Positioning for scan planning purposes.
1	07820074	<b>Inline Diffusion #Tim</b> Automatic real-time calculation of trace-weighted images and ADC maps with Inline technology. Compatible to single-shot diffusion-weighted EPI.

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## PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
1	14405244	<b>Shoulder Array Coil #Es</b> This IPAT compatible coil for examinations of the left or right shoulder consists of a base plate and two receive array coil attachments available in different sizes, these will be attached and can be relocated on the basis plate.
1	14401443	<b>Cable Set syngo 11/9 #Es</b> Cable length inside the cabin 11 m, cable length outside the cabin 9 m. Inclusive Ethernet Twisted Pair Adapter and 10 m cable.
1	14401493	<b>Venting Kit #Av,Es</b> Overpressure valve as a transport safety device for cold delivery of the magnet by air and sea freight. Designed for: - atmospheric pressure conditions at sea level during land and sea transport, as well as - low pressure during air transport.
1	05672105	<b>Helium Fill 30/70 #S,Tim</b>
1	08857828	<b>UPS Cable #Tim</b> Power cable for connecting the UPS Powerware PW 9130-3000I (14413662) to the ACC of MAGNETOM Tim and MAGNETOM Tim+Dot systems for backing up the computer. Standard cable length: 9 m.
1	14413662	<b>UPS Powerware PW9130G-3000T-XLEU</b> UPS system Eaton PW9130G-3000T-XLEU for MAGNETOM Tim, MAGNETOM Tim+Dot 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	MR_CRYO	<b>Standard Cryogens</b>
1	4MR5142869	<b>Armrest #MR</b>
1	MR_PM	<b>MR Project Management</b> A Siemens Project Manager (PM) will be the single point of contact for the implementation of your Siemens 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_INITIAL_32	<b>Initial onsite training 32 hrs</b> 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	<b>Follow-up training 24 hrs</b> 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.
1	MR_INT_SYNGO BCLS	<b>Basic syngo MR Class</b> 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 airfare, 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.

# SIEMENS

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

SIEMENS REPRESENTATIVE  
Shawn Elliott - (615) 517-5699

## PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
1	MR_ADD_32	<b>Additional onsite training 32 hours.</b> 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 if applicable. 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_STD_RIG_INST	<b>MR Standard Rigging and Installation</b> MR Standard Rigging and Installation. This quotation includes standard rigging and installation of your new MAGNETOM system. Standard rigging into a room on ground floor level of the building during standard working hours (Mon. - Fri./ 8 a.m. to 5 p.m.) It remains the responsibility of the Customer to prepare the room in accordance with the SIEMENS planning documents. Any rigging requiring a crane over 80 tons and/or special site requirements (e.g. removal of existing systems, etc.) is an incremental cost and the responsibility of the Customer. All other "out of scope" charges (not covered by the standard rigging and installation) will be identified during the site assessment and remain the responsibility of the Customer.
1	MR_BTL_INST_ALL	<b>MR Standard Rigging &amp; Install</b>
1	CHILINST_AVT	<b>Chiller Start-up and Warranty for TIM</b>
1	14402527	<b>SWI #Tim</b> 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	07820082	<b>Inline Perfusion #Tim</b> Automatic real-time calculation of Global Bolus Plot (GBP), Percentage of Baseline at Peak map (PBP), and Time-to-Peak map (TTP) with Inline technology.
1	08464948	<b>CP Extremity Coil #Tim</b> Circularly Polarized no-tune transmit/receive coil for joint examinations in the region of the lower extremities.
1	MR_BUDG_AD_DL_RIG	<b>Budgetary Add'l/Out of Scope Rigging</b>
1	14401446	<b>Tim [76x18] Z-engine #Es</b> 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	14401447	<b>Label Tim [76x18] #Es</b> Label on the front cover displaying the Tim level of the system.
1	08465481	<b>Chiller, 60 Hz #Av, Es</b>
1	14401434	<b>Cover Satin White #Es</b> The color of the main face plate cover with integrated control panel and table display is Translucent Teal. The table elevator cover and adjoining upper left cover are presented in an optically appealing Satin White design.
1	14401451	<b>Standard Patient Matrix Table #Es</b> The patient table is mounted directly to the magnet assembly. The table can support up to 250 kg (550 lbs) patients with unrestricted vertical and horizontal movement.
1	08464955	<b>Double Loop Array Coil #Tim</b> 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.

**System Total: \$1,406,000**



# SIEMENS

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

**SIEMENS REPRESENTATIVE**  
Shawn Elliott - (615) 517-5699

## PRELIMINARY PROPOSAL

**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.

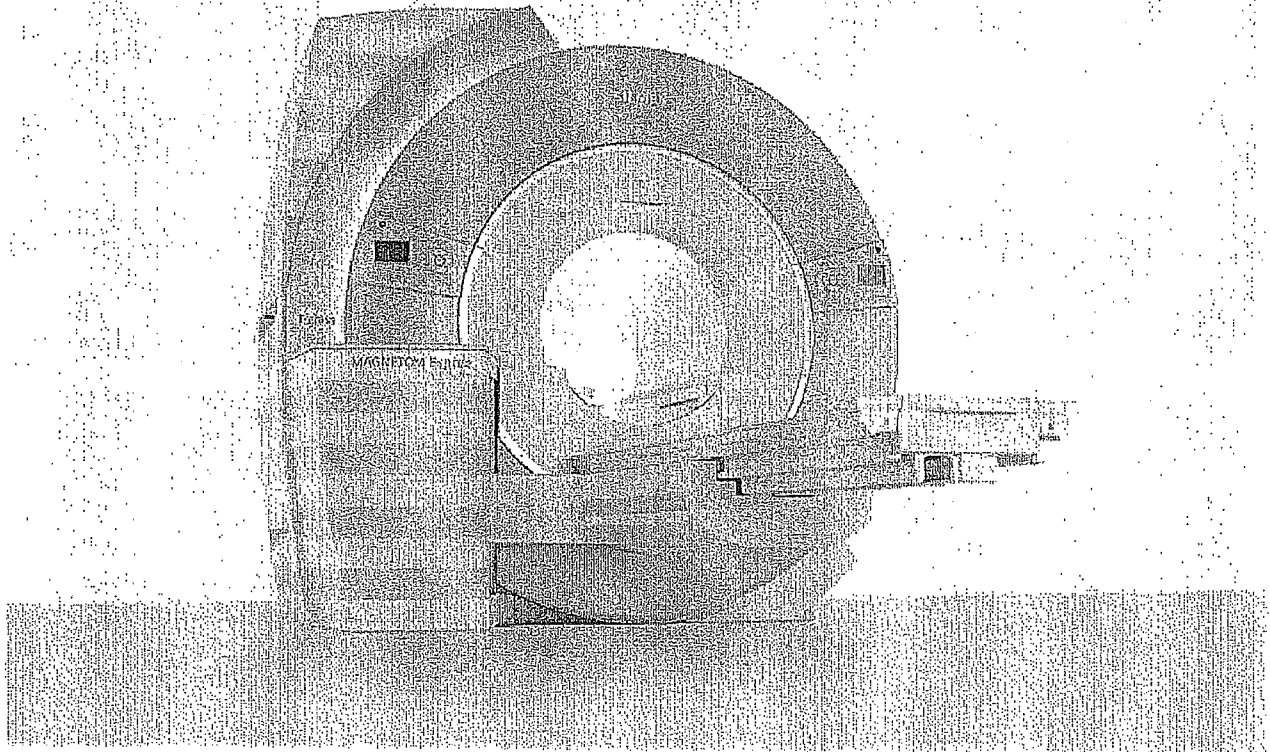
Siemens Healthcare

Shawn Elliott  
(615) 517-5699  
shawn.d.elliott@siemens.com

# SIEMENS

## MAGNETOM ESPREE TYPICAL ROOM PLAN

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.

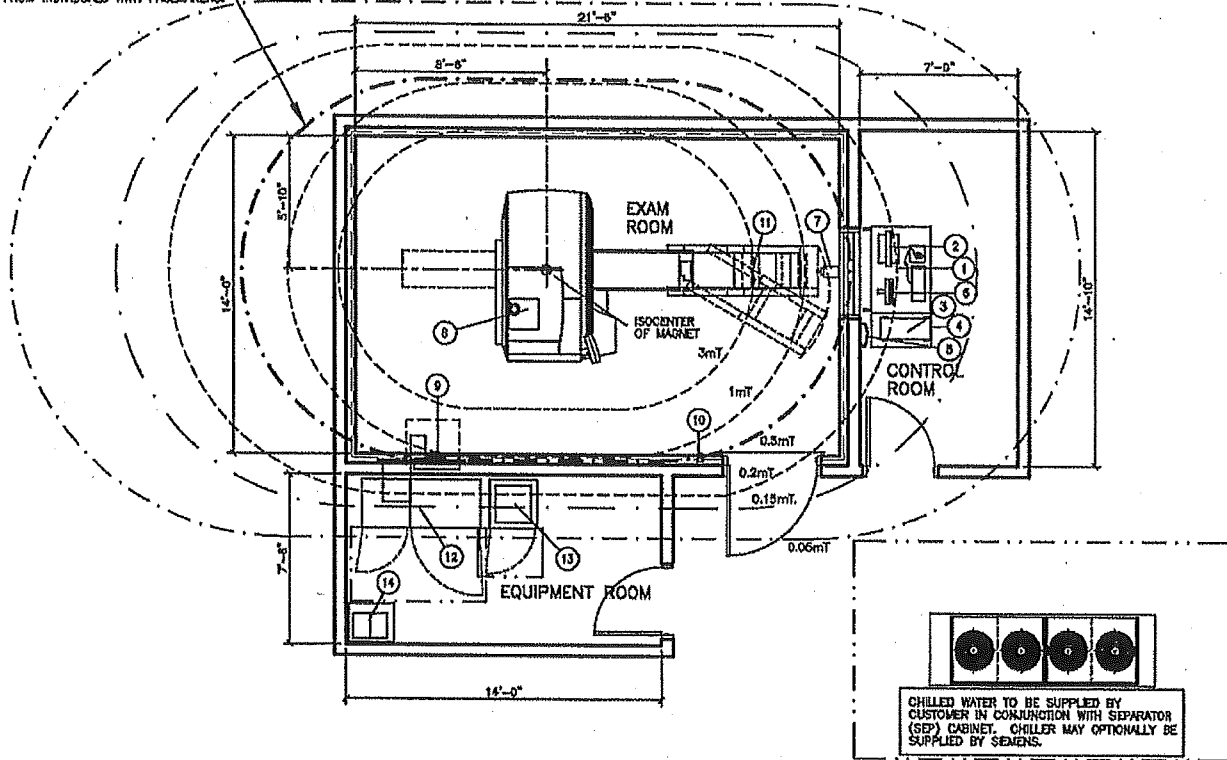
# SIEMENS

FOR REFERENCE ONLY,  
NOT FOR CONSTRUCTION.

## MAGNETOM ESPREE TYPICAL ROOM PLAN

# MR

IT IS THE OWNER'S RESPONSIBILITY TO RESTRICT THIS AREA (0.5mT FIELD) FROM INDIVIDUALS WITH PACEMAKERS



**TYPICAL PLAN**

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

### EQUIPMENT LEGEND

NO	DESCRIPTION	SMS SYM	WEIGHT (LBS)	BTU/HR TO AIR	DIMENSIONS (INCHES)			REMARKS
					W	D	H	
①	MRC OPERATING CONSOLE AND KEYBOARD	Ⓚ	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	Ⓛ	49	2389	11	27	18 1/8	
④	CONTAINER FOR HOST PC 450	Ⓛ	230	----	17 3/4	31 1/2	27 5/8	
⑤	ALARM BOX	Ⓛ	3	----	9	4	9	
⑥	PATIENT MONITOR (OPTION)	Ⓛ	10	----	13	7	12 1/2	
⑦	PATIENT SUPERVISION CAMERA (OPTION)	Ⓛ	8	----	3	6 5/8	5 3/4	
⑧	ESPREE MAGNET WITH COVERS AND PATIENT TABLE	Ⓛ	11244	7506	90 5/8	149 5/8	60 5/8	
⑨	RF-FILTER PLATE	Ⓛ	286	853	46 1/2	35 1/8	21 5/8	
⑩	MAGNET STOP	Ⓛ	1	----	3	5	3	
⑪	PATIENT TRANSPORT TROLLEY (OPTION)	Ⓛ	291	----	26 1/2	71 1/2	39 1/2	
⑫	ELECTRONICS CABINET (GPA, ACC & ACS)	Ⓛ	2755	13649	63	25 5/8	77 1/2	TOTAL OF GPA, CCA, CCS
⑬	SEP CABINET	Ⓛ	750	3412	25 5/8	25 5/8	73 5/8	
⑭	POWERWARE 9130 UPS (OPTION)	Ⓛ	76	1,257*	8 3/8	12 7/8	16 1/4	*1,755 ON BATTERIES

# SIEMENS

FOR REFERENCE ONLY,  
NOT FOR CONSTRUCTION.

## MAGNETOM ESPREE SPECIFICATIONS

# MR

### POWER REQUIREMENTS

VOLTAGE RANGE: 480 VAC ±10% FOR ALL LINE AND LOAD CONDITIONS. VOLTAGE BALANCE: 2% MAXIMUM DIFFERENCE BETWEEN PHASES	
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 REQUIREMENTS

#### DEMAND AND CAPACITY REQUIREMENTS NOTES

- 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.
- 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.
- 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.
- 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 LOWER.
- 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.
- 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.
- 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 RECOMMENDED.

### NOISE LEVELS

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

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:

- (PREFERRED) VPN - WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE.
  - (OPTIONAL) \*SRS ROUTER\* - CONNECTED TO ANALOG PHONE LINE VIA \*ANALOG MODEM\*, ETHERNET CONNECTION TO CUSTOMER'S LAN, AND A 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

# SIEMENS

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## MAGNETOM ESPREE SPECIFICATIONS

# MR

### CHILLED WATER SUPPLY

A CHILLED WATER SUPPLY IS REQUIRED TO THE MRI SYSTEM 24 HOURS A DAY, YEAR ROUND FOR THE 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 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, IFF, 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 40-80% (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 10,236 BTU/HR. THE HEAT INTO THE EQUIPMENT ROOM IS TYPICALLY 8,530 BTU/HR, MAXIMUM 17,060 BTU/HR. THIS HEAT DISSIPATION IS FROM THE SIEMENS EQUIPMENT ONLY. AUXILIARY SUPPORT EQUIPMENT (I/O 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.

### QUENCH VENT NOTES

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

### 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/HR
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 <sup>1</sup> CALCIUM CARBONATE
CHLORINE GAS CONCENTRATION	<200 ppm
FILTRATION	500 μm

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 UNDILUTED 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 = 35-38% OF MIXTURE VOLUME.

### BUILDING VIBRATIONS

EXTERNAL VIBRATIONS OR SHOCKS AFFECTING THE MAGNET MAY DEGRADE IMAGE QUALITY. VIBRATIONAL ACCELERATION  $a_{max}$  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:  $a_{max} = -70\text{dB } g$

THE REQUIREMENT FOR  $a_{max}$  IS  $-70\text{dB } g$  MEASURED AS MAXIMUM RMS VALUE PER FREQUENCY COMPONENT <0.5Hz IN THE FOURIER TRANSFORMATION OF THE RECORDED SIGNAL SPECTRUM.

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## 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.

### 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.

### 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
8'-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 TO VERIFY THE LOCATION OF THE 0.5mT FIELD AND ENSURE THAT IT IS MAINTAINED AS A RESTRICTED AREA.

### 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.

X/Y AND Z AXIS	SOURCE OF INTERFERENCE
3'-6"	FLOOR STEEL REINFORCEMENT < 20 LBS./ FT <sup>2</sup> IRON BEAMS < 86 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.

### 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 AGC CABINET TO THE CONTROL CONSOLE IS 75 FEET.

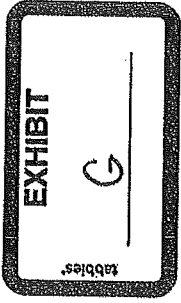
### RF SHIELDING

THE EXAMINATION AREA MUST BE SHIELDED TO PROVIDE A REDUCTION OF RADIO FREQUENCY WAVES EMANATING FROM EXTERNAL TRANSMITTERS. THE REQUIRED ATTENUATION IS 80dB IN THE FREQUENCY RANGE OF 15-128 MHz. IF CO-SITING 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. OXYGEN) 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.



**PIC - BALLANTYNE  
EQUIPMENT COMPARISON -- MR**

	EXISTING EQUIPMENT	REPLACEMENT EQUIPMENT
Type of Equipment (List Each Component)	MRI	MRI
Manufacturer of Equipment	Philips	Siemens
Tesla Rating for MRIs	1.5	1.5
Model Number	Infinion	Espreo
Serial Number	301619	
Provider's Method of Identifying Equipment	SID# 225277	Serial #
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/VIN #	NA	NA
Mobile Tractor Serial Number/VIN #	NA	NA
Date of Acquisition of Each Component	July 2003	Proposed- Jan 2013
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Title
Specify if Equipment Was/Is New or Used When Acquired	New	New
Total Capital Cost of Project (Including Construction, etc.) < Use Attached Form >	\$1,489,213	\$1,514,965 (includes tax)
Total Cost of Equipment	\$	\$
Fair Market Value of Equipment	\$	\$
Net Purchase Price of Equipment		
Locations Where Operated	6324 Fairview Road Charlotte NC	14215 Ballantyne Corporate Place Charlotte NC*
Number Days In Use/To Be Used in N.C. Per Year	255	255
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	General Outpatient MR Scans of the	General Outpatient MR Scans of the

	Body/ Extremities	Body/ Extremities + MRA Carotid, Renal, Faster Acquisition Times
Type of Procedures New Equipment is Capable of Performing.	General Outpatient MR Scans of the Body/ Extremities	General Outpatient MR Scans of the Body/ Extremities + MRA Carotid, Renal, Faster Acquisition Times