

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/

Drexdal Pratt, Director

Beverly Eaves Perdue, Governor Albert A. Delia, Acting Secretary Craig R. Smith, Section Chief Phone: (919) 855-3873 Fax: (919) 733-8139

April 23, 2012

Kyle McDermott Senior Administrative Director Support Services Johnston Memorial Hospital Authority P.O. Box 1376 Smithfield NC 27577

RE:

Exempt from Review - Replacement Equipment / Johnston Memorial Hospital / Replace existing GE Echospeed magnetic resonance imaging (MRI) scanner with a new GE Optima MRI scanner / Johnston County

FID # 943290

Dear Mr. McDermott:

In response to your letters of March 5, 2012 and April 6, 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 GE Optima MRI scanner to replace the existing GE Echospeed magnetic resonance imaging (MRI) scanner [Serial # R3679; Model # 2226300]. 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,

Michael J. McKillip, Project Analyst

Craig R Smith, Chief Certificate of Need Section

Construction Section, DHSR



Location: 809 Ruggles Drive, Dorothea Dix Hospital Campus, Raleigh, N.C. 27603 An Equal Opportunity/Affirmative Action Employer 4-6-2012 Michael J. McKillip, Project Analyst Certificate of Need Section Division of Health Services Regulations 809 Ruggles Drive, Raleigh, NC 27603 2704 Mail Service Center Raleigh, NC 27699-2704



RE: Information Request for Replacement Equipment/ Johnston Memorial Hospital / Replace existing GE Echospeed magnetic resonance imaging (MRI) scanner with a new GE Optima MRI scanner / Johnston County

FID # 943290

Dear Mr. McKillip

Per your correspondence

- 1. Evidence to demonstrate conformance with each criterion in 10A NCAC 14C.0303.
 - a. Listed below in document.
- 2. A comparison of the existing and replacement equipment, using in the format in the attached Table. Exhibit #1
- 3. A Description of the basic technology and functions of the existing and replacement equipment:

The 1.5T GE features a superconducting magnet operating at 1.5 Tesla. The data acquisition system accommodates independent receive channels in various increments, and multiple independent coil elements per channel during a single acquisition series. The system uses a combination of time-varying magnetic fields (gradients) and RF transmissions to obtain information regarding the density and position of elements exhibiting magnetic resonance. The system can image in the sagittal, coronal, axial. oblique and double oblique planes, using various pulse sequences and reconstruction algorithms.

It is indicated for use as a diagnostic imaging device to produce axial, sagittal, coronal, and oblique anatomical images, spectroscopic data, parametric maps,, or dynamic images of the structures or functions of the entire body. The indication for use includes, but is not limited to, head, neck, TMJ, spine, breast, heart, abdomen, pelvis, joints, prostate, blood vessels, and musculoskeletal regions of the body. Depending on the region of interest being imaged, contrast agents may be used.

Both the present and new equipment has the same basic functions as listed above. The new equipment will not result in more than a 10% increase in patient charges or per procedure operating expenses with in the first twelve months.

4. The replacement equipment will not be leased it will be purchased.

- 5. The replacement equipment will be purchased, attached is a copy of the proposed purchase order and quotation. This quotation demonstrates the amount of the purchase price before discounts and trade-in allowances as well as the cost with discount and trade-in. Exhibit # 2a and #2b
- 6. GE will be taking possession of the existing equipment and have provided a letter that acknowledges the existing equipment will be removed from North Carolina. Exhibit #3
- 7. Document that the existing equipment is currently in use and has not been taken out of service. Document from Johnston Health, Exhibit #4.

Thank you for your consideration and assistance in this matter.

Respectfully yours,

Kyle McDermott

Senior Admin. Director of Support Services

Johnston Health

kmcdermott@johnstonhealth.org

	EXISTING EQUIPMENT	DEDI A CEMENT EQUIDMENT	
Type of Equipment (List Each	MRI	REPLACEMENT EQUIPMENT MRI	
Component)	IVIICI	WIKI	
Manufacturer of Equipment	General Electric	General Electric	
Tesla Rating for MRIs	1.5T	1.5T	
Model Number	1,31		
	2226300	Will not be available until equipment is built.	
Serial Number	R3679	Will not be available until equipment is built.	
Provider's Method of Identifying Equipment	Serial number	Serial number	
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	7/2003	TBD by CON	
Does Provider Hold Title to	Title	Will own	
Equipment or Have a Capital Lease?		Will Owli	
Specify if Equipment Was/Is New	New	New	
or Used When Acquired		14CW	
Total Capital Cost of Project	NA	\$1,534,614.78 Back up form	
(Including Construction, etc.) <use< td=""><td>1121</td><td>following page.</td></use<>	1121	following page.	
Attached Form>		lone wing page.	
Total Cost of Equipment	\$1,853,833.00	\$2,822,099.00 MSRP	
Fair Market Value of Equipment	NA	\$1,375,914.78	
Net Purchase Price of Equipment	NA NA	\$1,190,914.78	
Locations Where Operated	Smithfield NC	Smithfield NC	
Number Days In Use/To be Used in	365/365	365/365	
N.C. Per Year	303/303	505/305	
Percent of Change in Patient	NA	No change in charges	
Charges (by Procedure)	1471	140 change in charges	
Percent of Change in Per Procedure	NA		
Operating Expenses (by Procedure)	A 14 A		
Type of Procedures Currently	Head and Spines for Neurologist,	NA	
Performed on Existing Equipment	Extremity MRIs for Vascular	NA	
9 - 1 1	Surgeons, Shoulder and knee for		
	Orthopedic Surgeons and Feet for		
	Wound Care physicians of non		
	healing ulcers.		
Type of Procedures New	NA	Head and Spines for Neurologist,	
Equipment is Capable of	- · · · · ·	Extremity MRIs for Vascular	
Performing		Surgeons, Shoulder and knee for	
-		Orthopedic Surgeons and Feet for	
		Wound Care physicians of non	
		healing ulcers	

GE Healthcare PO Box 414 Milwaukee, WI 53187

Exhibit 2A

April 9, 2012

Mr. Kyle McDermott VP Purchasing Johnston Health System Highway 70 Smithville, NC 27577

RE: GE 1.5T MR450w

Dear Mr. McDermott,

This letter is to confirm the existing GE 1.5T Excite MRI system proposed for trade in on replacement equipment will be removed by General Electric and not operate in the state of North Carolina.

The new GE 1.5T MR 450w, list price is \$2,822,099.00

Trade in allowance for the current 1.5T LX unit being removed = \$185,000.00

Net selling price for the new 1.5T MRI is \$1,190.914.00

Thank you for your support of General Electric

Sincerely,

Kimberly McCrary Client Director GE Healthcare Technologies

CC Kevin Morris

GE Healthcare

Extilit 26
QUOTATION

Quotation Number: P1-C122532 V 12

Johnston Memorial Hospital 509 N Brightleaf Blvd Smithfield NC 27577 Attn: Patricia Weaver 509 N Brightleaf Blvd Smithfield NC 27577

Date: 09-30-2011

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified herein. GE Healthcare agrees to provide and Customer agrees to pay for the Products listed in this GE Healthcare Quotation ("Quotation"). "Agreement" is defined as this Quotation and the terms and conditions set forth in either (i) the Governing Agreement identified below or (ii) if no Governing Agreement is identified, the following documents:

1) This Quotation that identifies the Product offerings purchased or licensed by Customer;

2) The following documents, as applicable, if attached to this Quotation: (i) GE Healthcare Warranty(ies); (ii) GE Healthcare Additional Terms and Conditions; (iii) GE Healthcare Product Terms and Conditions; and (iv) GE Healthcare General Terms and Conditions.

In the event of conflict among the foregoing items, the order of precedence is as listed above.

This Quotation is subject to withdrawal by GE Healthcare at any time before acceptance. Customer accepts by signing and returning this Quotation or by otherwise providing evidence of acceptance satisfactory to GE Healthcare. Upon acceptance, this Quotation and the related terms and conditions listed above (or the Governing Agreement, if any) shall constitute the complete and final agreement of the parties relating to the Products identified in this Quotation. The parties agree that they have not relied on any oral or written terms, conditions, representations or warranties outside those expressly stated or incorporated by reference in this Agreement in making their decisions to enter into this Agreement. No agreement or understanding, oral or written, in any way purporting to modify this Agreement, whether contained in Customer's purchase order or shipping release forms, or elsewhere, shall be binding unless hereafter agreed to in writing by authorized representatives of both parties. Each party objects to any terms inconsistent with this Agreement proposed by either party unless agreed to in writing and signed by authorized representatives of both parties, and neither the subsequent lack of objection to any such terms, nor the delivery of the Products, shall constitute an agreement by either party to any such terms.

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

• Terms of Deliveru:

F.O.B. Origin

• Quotation Expiration Date:

09-30-2011

Billing Terms:

20% down / 60% delivery / 20% install

• Payment Terms:

NET 30

Governing Agreement:

HPG-DI-Base

Each party has caused this agreement to be signed by an authorized representative on the date set forth below. Please submit purchase orders to GE Healthcare

3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

GE HEALTHCARE

Paul Billingsly Date
Product Sales Specialist
2253 Limehurst Drive
Atlanta, GA 30319

HS

Phone: 404-549-3658 Fax: 404-506-9391

Paul.Billingsly@med.ge.com

CUSTOMER

Authorized Customer Date
Print Name and Title

Desired Equipment First Use Date

INDICATE FORM OF PAYMENT:

(If there is potential to finance with a lease transaction, GE HFS or otherwise, select lease.)

____ Cash * ____ Lease ____ HFS Loan
If financing please provide name of finance

company below*:

*Selecting Cash or not identifying GE HFS as the finance company declines option for GE HFS financing.

1/24



GE Healthcare Confidential and Proprietary General Electric Company, GE Healthcare Division 3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

Item No.	Qty	Catalog No.	Description
Metallic Company of the Company of t	1	and the same and the	Optima MR450w 1.5T 16-Channel
1	1	S4500WA	Optima MR450w 16-Channel 1.5T MR System with In-Room Display
			Optima MR450w 16-Channel 1.5T MR System with In-Room Display
		, . C	Patient expectations of MR have shifted in recent years, as patients have begun to demand a better, more comfortable scanning experience. Increasing the size of the bore is a good first step, but it's only the beginning. The right system should overcome traditional limitations of wide-bore MR, offering both excellent images and a user-friendly experience. Patients should be more comfortable during their scan, and clinicians more comfortable in making a diagnosis. All the while, organizations should expect their MR system to help them deliver solid financial returns, maintain a high standard of patient safety, and increase the quality of their care.
			GE has advanced the capabilities of wide-bore MR by delivering both uncompromised image quality and high productivity, all with an expansive clinical field of view. With the Optima MR450w 1.5T GE offers a range of new functionality, provides a more patient friendly environment and a clinical workhorse system for practices of all sizes and specialties.
			OpTix RF Receive Chain: GE's innovative Optical RF receive technology improves signal detection while simultaneously reducing electrical noise. By locating the receiver electronics on the side of the magnet and close to the origin of the MR signal, interference from external noise sources is reduced thus improving image quality and SNR. The result is a 27% SNR improvement over previous generation, non-optical systems for volumetric scanning.
			The use of optical transmission reduces the cabling footprint over conventional copper cable designs and enables high channel count configurations without requiring additional space. The OpTix technology can seamlessly route signals from any coil port to the receivers using a dynamic switching RF hub. • Sampling Bandwidth 80MHz. • Receive channels 16.
			Volume Reconstruction Engine 2.0 (VRE): The backbone of any high-channel count system is the reconstruction architecture. The Optima MR450w utilizes the latest dual-core 2.6 GHz processing technology with the VRE 2.0 recon architecture. With its 16 GB of memory, acquisition-to-disk technology, the VRE 2.0 delivers the processing power to quickly reconstruct high-resolution 3D volumetric data.
			Included is a single channel transmit receive head coil.
			Optima MR450w Site Collector: Optimally designed for patient safety, patient comfort,

and efficient workflow, the external features of the MR450w also provide an



Item No. Qty

Catalog No.

Description

aesthetically pleasing look and feel that can reduce patient anxiety. The wide-open flare of the covers increase the effective bore size and can reduce patient anxiety when entering the scan room or magnet bore. With patient-optimized lighting and air conditioning, the system can be ideally set for each individual, increasing their control of the environment.

Wide-Screen LCD Monitor: This flat-panel Liquid Crystal Display (LCD) monitor delivers 1920×1200 dot resolution at a refresh rate of 60Hz and an excellent 500:1 contrast ratio using a digital DVI interface, all significant improvements over conventional designs.

Optima MR450w ScanTools 22.0: The Express Exam and Scantools of the Optima MR450 include a comprehensive suite of workflow features, advanced applications, and parallel imaging capabilities to enable the user to harness the Simply Powerful capabilities of the scanner efficiently and effectively. The patient and technologist workflow of Optima MR450 automates many of the routine tasks that

previously required user interaction, thus dramatically reducing the workload for the user and ensuring that consistent and repeatable images are presented for review. Prescription, acquisition, processing and networking steps can be automatically completed throughout the exam. These automated steps can be saved in the Protocol Library to ensure consistent exam workflow for each type of patient.

The automated workflow features of the Express Exam interface includes the Modality Worklist, Protocol Library, Autostart, AutoScan, AutoVoice, Linking, and Inline Processing.

Modality worklist: The modality worklist (MWL) provides an automated method of obtaining exam and protocol information for a patient directly from a DICOM Worklist server. For sites with full DICOM connectivity, once a patient has been selected from the MWL, a new session is opened on the host interface and the relevant exam details are highlighted for the user. The Optima MR450 MLW provides complete control of the exam protocol prescription.

Protocol libraries and properties: The Optima MR450 system provides the user with complete control of protocols for simple prescription, archiving, searching, and sharing. The protocols are organized into two main libraries, a GE optimized set that are included with the system and Site-Authored.

ProtoCopy: Standard on every Optima MR450 system, the ProtoCopy feature enables a complete exam protocol to be shared with the click of a mouse. The exam protocol can originate from either a library or previously acquired exam.

Workflow Manager: Once a protocol has been selected for an exam, it is automatically loaded into the Workflow Manager. The Workflow Manager controls image





Item No. Qty

Catalog No.

Description

prescription, acquisition, processing, visualization and networking and may fully automate these steps if requested.

AutaStart: With AutoStart, once the landmark position has been set and the technologist leaves the room the Workflow Manager will automatically start the first acquisition in the exam.

Linking: Linking automates the prescription of images for each series in an exam. Once the targeted anatomical region has been located the Linking feature combines information from a prescribed imaging series to all subsequent series in the Workflow Manager. All series that have been linked may automatically be prescribed (Rx) and no further interaction will be needed by the technologist to initiate the scan. The user has control over which specific parameters can be linked together. Series can have common fields of view, obliquity, slice thickness, anatomical coverage, saturation bands, or shim volumes. Multiple series can be linked together and saved in the Protocol Library or edited in real time.

AutoScan: With AutoScan enabled, the Workflow Manager will sequentially go through the list of prescribed series without any user interaction.

AutoVoice: The AutoVoice feature ensures that consistent and repeatable instructions are presented to the patient for each and every exam. User selectable, pre-recorded instructions are presented at defined points in the acquisition. The AutoVoice feature includes instructions in over 14 languages and the user can create and include their own unique voice instructions for local needs,

Inline processing: To further automate an exam, the Inline processing feature can complete all tasks for a particular series. For certain tasks, the user must accept the results, or complete additional steps prior to saving the image to the database.

Inline viewing: Inline viewing allows the user to conveniently view, compare, and analyze images without having to switch to the Browser. Simply select the series to view from the Workflow Manager and the images are displayed along with standard image display tools.

Image fusion: To better visualize tissue and contrast, multiple images from separate acquisitions can be overlaid on one another. High-resolution anatomical images can be automatically fused with functional data or parametric maps for improved visualization by the user. The data is registered using translation and rotation and distortion correction to ensure accurate fusion. High resolution 2D and 3D data sets can be fused with reformats, parametric maps, 2D and 3D Spectroscopy maps, plus functional datasets and more.

Following is a list of the acquisition pulse sequences and parallel imaging capabilities for the Optima MR450 ScanTools 22.0.



5/24

GE Healthcare

QUOTATION

Quotation Number: P1-C122532 V 12

GE Healthcare will use reasonable efforts to meet Customer's desired equipment first use date. The actual delivery date will be mutually agreed upon by the parties.



Item No. Qty

Catalog No.

Description

- Peripheral Gating that minimizes the pulsatile artifacts.
- Optimized View Ordering to improve arterial signal.
- ASSET acceleration compatibility to reduce scan time.

Cube 3D: The Cube technology can eliminate multiple independent two-dimensional datasets with a single three-dimensional volume (or cube) of high resolution data to provide better image quality in shorter exam times. Compared to traditional 3D fast spin echo acquisitions, Cube uses a combination of optimized echo train pulses and ARC parallel imaging to reduce SAR, extend the duration of the acquisition echo train, and reduce the echo spacing. The system automatically adjusts the echo train flip angle amplitudes to provide optimized tissue contrast based on the specific tissue T1 and T2 characteristics and prescription parameters. To further reduce exam time and improve image quality, Cube is compatible with ARC self calibrating parallel imaging.

Isotropic Cube datasets may be automatically reformatted from a single acquisition into any plane, without gaps, and with the same resolution as the original plane for improved anatomical review and tissue visualization. The maximum parallel imaging acceleration is dependent upon the surface coil in use.

High resolution Cube data can be acquired with T1, T2, T2 FLAIR, or Proton density weighted tissue contrasts for neuro, abdominal, pelvic, and musculoskeletal imaging.

Quote Summary:

1.5 Excite II Trade In
Total Quote Net Selling Price

(\$185,000.00) \$1,190,914.78

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)



GE Healthcare PO Box 414 Milwaukee, WI 53187

March 19, 2012

Kyle McDermott Johnston Medical Center 509 N. Bright Leaf Blvd. Smithfield, NC 27577

RE: GE 1.5T 11x Excite II MRI

Dear Kyle,

This letter is to confirm the existing GE 1.5T 11x Excite II MRI, proposed for trade in on replacement equipment will be removed by General Electric and not operate in the state of North Carolina.

Thank you for your support of General Electric

Sincerely,

Kevin Morris MRI Product Specialist General Electric Healthcare March 26, 2012

Michael J. McKillip, Project Analyst Certificate of Need Section Division of Health Services Regulations 809 Ruggles Drive, Raleigh, NC 27603 2704 Mail Service Center Raleigh, NC 27699-2704

RE: Information Request for Replacement Equipment/ Johnston Memorial Hospital / Replace existing GE
Echospeed magnetic resonance imaging (MRI) scanner with a new GE Optima MRI scanner / Johnston
County
FID # 943290

Dear Mr. McKillip,

Please accept this letter as the Owners documentation that the existing fixed MRI unit that was installed at Johnston Memorial Hospital, 509 N. Bright Leaf Blvd., Smithfield NC 27577 in 2004 has continue to be operated since that time and continues to be so. The fixed MRI was taken down for a period of three months in November and December 2008 and January 2009 during the recently completed construction project to allow for modifications to be make to the chiller system and the exhaust vent. This required down time was reviewed and approved by DHSR construction division. Other from those few months the fixed MRI unit has continuously been in service.

Respectfully Submitted,

Kyle McDermott

Senior Admin. Director Support Services

Johnston Health

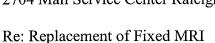
PROPOSED TOTAL CAPITAL COST OF PROJECT

Project Name: Johnston Memorial Hospital Authority Fixed MRI Replacment Provider/Company: A. Site Costs (1) Full purchase price of land Price per Acre Acres (2) Closing costs (3) Site Inspection and Survey (4) Legal fees and subsoil investigation (5) Site Preparation Costs Soil Borings..... Clearing-Earthwork... Fine Grade For Slab ... Roads-Paving...... Concrete Sidewalks.... Water and Sewer..... Footing Excavation Footing Backfill..... Termite Treatment Other (Specify)..... **Sub-Total Site Preparation Costs** (6) Other (Specify) (7) Sub-Total Site Costs B. Construction Contract (8) Cost of Materials General Requirements \$13,7001 Concrete/Masonry \$<u>7,000</u> Woods/Doors & Windows/Finishes \$9,000 Thermal & Moisture Protection Equipment/Specialty Items (shielding) \$15,000 Mechanical/Electrical \$110,000 Other (Specify) Sub-Total Cost of Materials..... \$154,700 (9) Cost of Labor.....Rigging \$40,000 (10) Other (Specify)..... (11) Sub-Total Construction Contract \$194,700 C. Miscellaneous Project Costs (12) Building Purchase..... (13) Fixed Equipment Purchase/Lease \$<u>1,190,914.78</u> (14) Movable Equipment Purchase/Lease for Mobile during install \$122,000 (15) Furniture (16) Landscaping (17) Consultant Fees Architect and Engineering Fees \$12,000 Legal Fees..... Market Analysis..... Other (Specify)..owners rep. \$15,000 Other (Specify)..... Sub-Total Consultant Fees..... \$27,000 (18) Financing Costs (e.g. Bond, Loan, etc.). (19) Interest During Construction. (20) Other (Specify) (21) Sub-Total Miscellaneous .. \$1,339,914.78 (22) Total Capital Cost of Project (Sum A-C above) \$1,534,614.78 that, to the best of my knowledge, the costs of the proposed project named above are complete and correct. David E. Johnson Date Certified: (Signature of Licensed Architect or Engineer) I assure that, to the best of my knowledge, the above costs for the proposed project are complete and correct and that it is my intent to carry out the proposed project as describad. (Signature and Title of Officer Authorized to Represent Provider/Company)

with

March 5, 2012

Mr. Craig Smith, Chief Certificate on Need Section Division of Health Services Regulations 809 Ruggles Drive, Raleigh, NC 27603 2704 Mail Service Center Raleigh, NC 27699-2704



Dear Mr. Smith

Please accept this letter as an official request on behalf of Johnston Memorial Hospital Authority, (NC License # H0151, Facility ID # 943290) to replace the 2004 fixed MRI located at Johnston Medical Center Smithfield, 509 N. Bright Leaf Blvd. Smithfield NC. Johnston Memorial Hospital Authority has been given approval to utilize realized savings of the HUD 242 loan following the recently completed Johnston Medical Center Clayton and new Johnston Medical Center Smithfield Bed Tower. The replacement of the MRI was not originally a part of the construction project but since that time has been deemed a need for replacement.

Background

Following Certificate of Need approval on July 16, 2003 for a fixed MRI, Johnston Memorial Hospital constructed the facility and installed a General Electric Sigma EchoSpeed Plus 1.5 Tesla MRI unit which opened for patient care October 2004. Since that time the unit has had one software upgrade and has served the community well. In the June 2010 the hospital based radiologist physician group (Wake Radiology) contract expired and the Johnston Health entered into a new physician contract with Carolina Radiology Consultants to provide interpretations for our patients. As part of this change, we are learning that some of older technology that has not been kept as current means that our patients may not be receiving as precise reports as what they would if the procedures were performed on newer equipment. Our goal is to insure that the residents of Johnston County receive the absolute best care that we can provide to them.

The new MRI we plan to purchase is the General Electric Optima MR450w 1.5T 16-Channel, the present unit is be traded in to GE as part of the purchase agreement that you can see on the attached purchase agreement. (Exhibit #1)

Below are bullet points that provided supporting information of procedures and services that we will be able to provide to our patients that the present system will not do.

JMHMR12x12

- -70 cm bore versus current 60 cm bore. This will allow Johnston Health to scan larger patients while addressing claustrophobia issues
- 500 lb. table weight versus 350 lb. current table weight
- New MRI offers faster scanning capability to improve patient comfort and productivity than the current system
- Vibrant for breast imaging (currently they are unable to do MRI breast imaging)
- Inhance for non-contrast imaging (currently all exams requiring contrast requires an injection, the new system will not and will give greater patient care)
- Propeller for full body motion reduction (currently Propeller only works in eliminating motion in Neurovascular imaging)
- Ideal for reducing metal artifact bloom (currently there is no work around on their existing scanner and this will give much better diagnostic images when metal implants are involved)
- True Detachable table Best for safety and the technologist. Gives the ability to add a second table for productivity, as you grow in volume
- Field of View 48 cm in all 3 axis with Optima MR450w 1.5T 16Channel

Installation Preparation

The new MRI will be placed in the same room that the present MRI is presently located following removal. In preparation for the removal of the present MRI and installation of the new one Johnston Health has taken the following steps:

- Engaged Johnson Johnson and Crabtree Architect, PA, for determination of structural information to insure present facility will support the new unit. They are also validating the structural strength of the roof to support new chiller that is required. Included in the engagement, Johnson Johnson and Crabtree will provide stamped drawings for DHSR Construction Section to review as necessary.
- Engaged Braden Shielding Systems for shielding report of present room
- Engaged ICM Georgia for removal of old MRI and placement of new MRI
- In discussions with Alliance Imaging and IMIS for proposals of a mobile MRI unit to be used for up to ninety (90) days during the installation of the new unit. We will utilize on a temporary basis a mobile MRI unit for the same time period that our fixed MRI is out of service. At the time the new unit is operational the mobile unit will be removed. At no time will both units be operational for providing services to Johnston Medical Center Smithfield patients. The mobile unit will be placed on the mobile pad that Johnston Medical Center Smithfield installed in September 2008 that was utilized for a mobile MRI unit during the construction of the Smithfield Bed Tower project. The pad is located one hundred fifty (75) feet from the Radiology Department and thirty (30) feet from the exterior of the facility

Capital Cost of Project

Engineering/ Structural fees		\$	12,000.00
Drywall and doorframes		\$	5,000.00
Electrical	•	\$	70,000.00
Chiller change out / HVAC		\$	22,000.00
Roofing		\$	4,500.00
Magnetic shielding		\$	15,000.00
Rigging		\$	35,000.00
Window removal / Eifis work		\$	4,000.00
Plumbing		\$	2,500.00
Patch and Paint		\$	2,000.00
Flooring		\$	2,500.00
Cleaning / Trash Removal/ safety		\$	1,200.00
Recessed Floor Infill		\$	5,500.00
	subtotal	\$	181,200.00
5% Contingency		\$	9,000.00
Mobile unit lease		\$	145,000.00
Equipment cost		\$	1,190,914.78
		•	4 500 444 50
	TOTAL	\$	1.526.114.78

Mr. Smith, thank you for your attention to this request, as soon as I receive a favorable response from the CON Section I will contact the Construction Section to prepare documents that they will require to proceed.

Respectfully Submitted,

Kyle McDermott

Senior Administrative Director of Support Services

Johnston Memorial Hospital Authority

GE Healthcare

Exhibit 1 **QUOTATION**

Quotation Number: P1-C122532 V 12

Johnston Memorial Hospital 509 N Brightleaf Blvd Smithfield NC 27577

Attn: Patricia Weaver 509 N Brightleaf Blvd Smithfield NC 27577

Date: 09-30-2011

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified herein. GE Healthcare agrees to provide and Customer agrees to pay for the Products listed in this GE Healthcare Quotation ("Quotation"). "Agreement" is defined as this Quotation and the terms and conditions set forth in either (i) the Governing Agreement identified below or (ii) if no Governing Agreement is identified, the following documents:

1) This Quotation that identifies the Product offerings purchased or licensed by Customer;

2) The following documents, as applicable, if attached to this Quotation: (i) GE Healthcare Warranty(ies); (ii) GE Healthcare Additional Terms and Conditions; (iii) GE Healthcare Product Terms and Conditions; and (iv) GE Healthcare General Terms and Conditions.

In the event of conflict among the foregoing items, the order of precedence is as listed above.

This Quotation is subject to withdrawal by GE Healthcare at any time before acceptance. Customer accepts by signing and returning this Quotation or by otherwise providing evidence of acceptance satisfactory to GE Healthcare. Upon acceptance, this Quotation and the related terms and conditions listed above (or the Governing Agreement, if any) shall constitute the complete and final agreement of the parties relating to the Products identified in this Quotation. The parties agree that they have not relied on any oral or written terms, conditions, representations or warranties outside those expressly stated or incorporated by reference in this Agreement in making their decisions to enter into this Agreement, No agreement or understanding, oral or written, in any way purporting to modify this Agreement, whether contained in Customer's purchase order or shipping release forms, or elsewhere, shall be binding unless hereafter agreed to in writing by authorized representatives of both parties. Each party objects to any terms inconsistent with this Agreement proposed by either party unless agreed to in writing and signed by authorized representatives of both parties, and neither the subsequent lack of objection to any such terms, nor the delivery of the Products, shall constitute an agreement by either party to any such terms.

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

• Terms of Delivery:

F.O.B. Origin

• Quotation Expiration Date:

09-30-2011

• Billing Terms:

20% down / 60% delivery / 20% install

• Payment Terms:

NET 30

Date

• Governing Agreement:

HPG-DI-Base

Each party has caused this agreement to be signed by an authorized representative on the date set forth below. Please submit purchase orders to GE Healthcare

3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

GE HEALTHCARE

Paul Billingsly Product Sales Specialist Date

2253 Limehurst Drive Atlanta, GA 30319

Phone: 404-549-3658 Fax: 404-506-9391

Paul.Billingsly@med.ge.com

CUSTOMER

Authorized Customer

Print Name and Title

PO#

Desired Equipment First Use Date

INDICATE FORM OF PAYMENT:

(If there is potential to finance with a lease transaction, GE HFS or otherwise, select lease.)

Cash * Lease HFS Loan

If financing please provide name of finance

company below*:

*Selecting Cash or not identifying GE HFS as the finance company declines option for GE HFS financing.

1/24



GE Healthcare Confidential and Proprietary General Electric Company, GE Healthcare Division 3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

GE Healthcare will use reasonable efforts to meet Customer's desired equipment first use date. The actual delivery date will be mutually agreed upon by the parties.



2/24

Item No.	Qty	Catalog No.	Description
to the second se	1	A de la decima decima de la decima decima de la decima de	Optima MR450w 1.5T 16-Channel
1	1	S4500WA	Optima MR450w 16-Channel 1.5T MR System with In-Room Display
			Optima MR450w 16-Channel 1.5T MR System with In-Room Display
		· đ	Patient expectations of MR have shifted in recent years, as patients have begun to demand a better, more comfortable scanning experience. Increasing the size of the bore is a good first step, but it's only the beginning. The right system should overcome traditional limitations of wide-bore MR, offering both excellent images and a user-friendly experience. Patients should be more comfortable during their scan, and clinicians more comfortable in making a diagnosis. All the while, organizations should expect their MR system to help them deliver solid financial returns, maintain a high standard of patient safety, and increase the quality of their care.
			GE has advanced the capabilities of wide-bore MR by delivering both uncompromised image quality and high productivity, all with an expansive clinical field of view. With the Optima MR450w 1.5T GE offers a range of new functionality, provides a more patient friendly environment and a clinical workhorse system for practices of all sizes and specialties.
			OpTix RF Receive Chain: GE's innovative Optical RF receive technology improves signal detection while simultaneously reducing electrical noise. By locating the receiver electronics on the side of the magnet and close to the origin of the MR signal, interference from external noise sources is reduced thus improving image quality and SNR. The result is a 27% SNR improvement over previous generation, non-optical systems for volumetric scanning.
			The use of optical transmission reduces the cabling footprint over conventional copper cable designs and enables high channel count configurations without requiring additional space. The OpTix technology can seamlessly route signals from any coil port to the receivers using a dynamic switching RF hub. • Sampling Bandwidth 80MHz. • Receive channels 16.
			Volume Reconstruction Engine 2.0 (VRE): The backbone of any high-channel count system is the reconstruction architecture. The Optima MR450w utilizes the latest dual-core 2.6 GHz processing technology with the VRE 2.0 recon architecture. With its 16 GB of memory, acquisition-to-disk technology, the VRE 2.0 delivers the processing power to quickly reconstruct high-resolution 3D volumetric data.
			Included is a single channel transmit receive head coil.
			Optima MR450w Site Collector: Optimally designed for patient safety, patient comfort



and efficient workflow, the external features of the MR450w also provide an

Item No. Qty Catalog No.

Description

aesthetically pleasing look and feel that can reduce patient anxiety. The wide-open flare of the covers increase the effective bore size and can reduce patient anxiety when entering the scan room or magnet bore. With patient-optimized lighting and air conditioning, the system can be ideally set for each individual, increasing their control of the environment.

Wide-Screen LCD Monitor: This flat-panel Liquid Crystal Display (LCD) monitor delivers 1920×1200 dot resolution at a refresh rate of 60Hz and an excellent 500:1 contrast ratio using a digital DVI interface, all significant improvements over conventional designs.

Optima MR450w ScanTools 22.0: The Express Exam and Scantools of the Optima MR450 include a comprehensive suite of workflow features, advanced applications, and parallel imaging capabilities to enable the user to harness the Simply Powerful capabilities of the scanner efficiently and effectively. The patient and technologist workflow of Optima MR450 automates many of the routine tasks that

previously required user interaction, thus dramatically reducing the workload for the user and ensuring that consistent and repeatable images are presented for review. Prescription, acquisition, processing and networking steps can be automatically completed throughout the exam. These automated steps can be saved in the Protocol Library to ensure consistent exam workflow for each type of patient.

The automated workflow features of the Express Exam interface includes the Modality Worklist, Protocol Library, Autostart, AutoScan, AutoVoice, Linking, and Inline Processing.

Modality worklist: The modality worklist (MWL) provides an automated method of obtaining exam and protocol information for a patient directly from a DICOM Worklist server. For sites with full DICOM connectivity, once a patient has been selected from the MWL, a new session is opened on the host interface and the relevant exam details are highlighted for the user. The Optima MR450 MLW provides complete control of the exam protocol prescription.

Protocol libraries and properties: The Optima MR450 system provides the user with complete control of protocols for simple prescription, archiving, searching, and sharing. The protocols are organized into two main libraries, a GE optimized set that are included with the system and Site-Authored.

ProtoCopy: Standard on every Optima MR450 system, the ProtoCopy feature enables a complete exam protocol to be shared with the click of a mouse. The exam protocol can originate from either a library or previously acquired exam.

Workflow Manager: Once a protocol has been selected for an exam, it is automatically loaded into the Workflow Manager. The Workflow Manager controls image





Item No. Qty Catalog No.

Description

prescription, acquisition, processing, visualization and networking and may fully automate these steps if requested.

AutoStart: With AutoStart, once the landmark position has been set and the technologist leaves the room the Workflow Manager will automatically start the first acquisition in the exam.

Linking: Linking automates the prescription of images for each series in an exam. Once the targeted anatomical region has been located the Linking feature combines information from a prescribed imaging series to all subsequent series in the Workflow Manager. All series that have been linked may automatically be prescribed (Rx) and no further interaction will be needed by the technologist to initiate the scan. The user has control over which specific parameters can be linked together. Series can have common fields of view, obliquity, slice thickness, anatomical coverage, saturation bands, or shim volumes. Multiple series can be linked together and saved in the Protocol Library or edited in real time.

AutoScan: With AutoScan enabled, the Workflow Manager will sequentially go through the list of prescribed series without any user interaction.

AutoVoice: The AutoVoice feature ensures that consistent and repeatable instructions are presented to the patient for each and every exam. User selectable, pre-recorded instructions are presented at defined points in the acquisition. The AutoVoice feature includes instructions in over 14 languages and the user can create and include their own unique voice instructions for local needs.

Inline processing: To further automate an exam, the Inline processing feature can complete all tasks for a particular series. For certain tasks, the user must accept the results, or complete additional steps prior to saving the image to the database.

Inline viewing: Inline viewing allows the user to conveniently view, compare, and analyze images without having to switch to the Browser. Simply select the series to view from the Workflow Manager and the images are displayed along with standard image display tools.

Image fusion: To better visualize tissue and contrast, multiple images from separate acquisitions can be overlaid on one another. High-resolution anatomical images can be automatically fused with functional data or parametric maps for improved visualization by the user. The data is registered using translation and rotation and distortion correction to ensure accurate fusion. High resolution 2D and 3D data sets can be fused with reformats, parametric maps, 2D and 3D Spectroscopy maps, plus functional datasets and more.

Following is a list of the acquisition pulse sequences and parallel imaging capabilities for the Optima MR450 ScanTools 22.0.



5/24

Item No. Qty Catalog No.

Description

- Peripheral Gating that minimizes the pulsatile artifacts.
- Optimized View Ordering to improve arterial signal.
- ASSET acceleration compatibility to reduce scan time.

Cube 3D: The Cube technology can eliminate multiple independent two-dimensional datasets with a single three-dimensional volume (or cube) of high resolution data to provide better image quality in shorter exam times. Compared to traditional 3D fast spin echo acquisitions, Cube uses a combination of optimized echo train pulses and ARC parallel imaging to reduce SAR, extend the duration of the acquisition echo train, and reduce the echo spacing. The system automatically adjusts the echo train flip angle amplitudes to provide optimized tissue contrast based on the specific tissue T1 and T2 characteristics and prescription parameters. To further reduce exam time and improve image quality, Cube is compatible with ARC self calibrating parallel imaging.

Isotropic Cube datasets may be automatically reformatted from a single acquisition into any plane, without gaps, and with the same resolution as the original plane for improved anatomical review and tissue visualization. The maximum parallel imaging acceleration is dependent upon the surface coil in use.

High resolution Cube data can be acquired with T1, T2, T2 FLAIR, or Proton density weighted tissue contrasts for neuro, abdominal, pelvic, and musculoskeletal imaging.

Quote Summary:

1.5 Excite II Trade In
Total Quote Net Selling Price

(\$185,000.00) \$1,190,914.78

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)



4-6-2012 Michael J. McKillip, Project Analyst Certificate of Need Section Division of Health Services Regulations 809 Ruggles Drive, Raleigh, NC 27603 2704 Mail Service Center Raleigh, NC 27699-2704



RE: Information Request for Replacement Equipment/ Johnston Memorial Hospital / Replace existing GE Echospeed magnetic resonance imaging (MRI) scanner with a new GE Optima MRI scanner / Johnston County FID # 943290

Dear Mr. McKillip

Per your correspondence

- 1. Evidence to demonstrate conformance with each criterion in 10A NCAC 14C.0303.
 - a. Listed below in document.
- 2. A comparison of the existing and replacement equipment, using in the format in the attached Table. Exhibit #1
- 3. A Description of the basic technology and functions of the existing and replacement equipment:

The 1.5T GE features a superconducting magnet operating at 1.5 Tesla. The data acquisition system accommodates independent receive channels in various increments, and multiple independent coil elements per channel during a single acquisition series. The system uses a combination of time-varying magnetic fields (gradients) and RF transmissions to obtain information regarding the density and position of elements exhibiting magnetic resonance. The system can image in the sagittal, coronal, axial. oblique and double oblique planes, using various pulse sequences and reconstruction algorithms...

It is indicated for use as a diagnostic imaging device to produce axial, sagittal, coronal, and oblique anatomical images, spectroscopic data, parametric maps,, or dynamic images of the structures or functions of the entire body. The indication for use includes, but is not limited to, head, neck, TMJ, spine, breast, heart, abdomen, pelvis, joints, prostate, blood vessels, and musculoskeletal regions of the body. Depending on the region of interest being imaged, contrast agents may be used.

Both the present and new equipment has the same basic functions as listed above. The new equipment will not result in more than a 10% increase in patient charges or per procedure operating expenses with in the first twelve months.

The replacement equipment will not be leased it will be purchased.

- 5. The replacement equipment will be purchased, attached is a copy of the proposed purchase order and quotation. This quotation demonstrates the amount of the purchase price before discounts and trade-in allowances as well as the cost with discount and trade-in. Exhibit # 2a and #2b
- 6. GE will be taking possession of the existing equipment and have provided a letter that acknowledges the existing equipment will be removed from North Carolina. Exhibit #3
- 7. Document that the existing equipment is currently in use and has not been taken out of service. Document from Johnston Health, Exhibit #4.

Thank you for your consideration and assistance in this matter,

Respectfully yours,

Kyle McDermott

Senior Admin. Director of Support Services

Johnston Health

kmcdermott@johnstonhealth.org

	EXISTING EQUIPMENT	REPLACEMENT EQUIPMENT	
Type of Equipment (List Each Component)	MRI	MRI	
Manufacturer of Equipment	General Electric	General Electric	
Tesla Rating for MRIs	1.5T	1.5T	
Model Number	2226300	Will not be available until equipment is built.	
Serial Number	R3679	Will not be available until equipment is built.	
Provider's Method of Identifying Equipment	Serial number	Serial number	
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	7/2003	TBD by CON	
Does Provider Hold Title to Equipment or Have a Capital Lease?	Title	Will own	
Specify if Equipment Was/Is New or Used When Acquired	New	New	
Total Capital Cost of Project (Including Construction, etc.) <use attached="" form=""></use>	NA	\$1,534,614.78 Back up form following page.	
Total Cost of Equipment	\$1,853,833.00	\$2,822,099.00	
Fair Market Value of Equipment	NA	\$1,375,914.78	
Net Purchase Price of Equipment	NA	\$1,190,914.78	
Locations Where Operated	Smithfield NC	Smithfield NC	
Number Days In Use/To be Used in N.C. Per Year	365/365	365/365	
Percent of Change in Patient Charges (by Procedure)	NA	No change in charges	
Percent of Change in Per Procedure Operating Expenses (by Procedure)	NA		
Type of Procedures Currently Performed on Existing Equipment	Head and Spines for Neurologist, Extremity MRIs for Vascular Surgeons, Shoulder and knee for Orthopedic Surgeons and Feet for Wound Care physicians of non healing ulcers.	NA	
Type of Procedures New Equipment is Capable of Performing	NA	Head and Spines for Neurologist, Extremity MRIs for Vascular Surgeons, Shoulder and knee for Orthopedic Surgeons and Feet for Wound Care physicians of non healing ulcers	

GE Healthcare PO Box 414 Milwaukee, WI 53187

Exlibit 2A

April 9, 2012

Mr. Kyle McDermott VP Purchasing Johnston Health System Highway 70 Smithville, NC 27577

RE: GE 1.5T MR450w

Dear Mr. McDermott,

This letter is to confirm the existing GE 1.5T Excite MRI system proposed for trade in on replacement equipment will be removed by General Electric and not operate in the state of North Carolina.

The new GE 1.5T MR 450w, list price is \$2,822,099.00

Trade in allowance for the current 1.5T LX unit being removed = \$185,000.00

Net selling price for the new 1.5T MRI is \$1,190.914.00

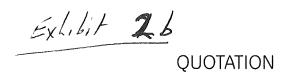
Thank you for your support of General Electric

Sincerely,

Kimberly McCrary Client Director GE Healthcare Technologies

CC Kevin Morris

GE Healthcare



Quotation Number: P1-C122532 V 12

Johnston Memorial Hospital

509 N Brightleaf Blvd Smithfield NC 27577

Attn: Patricia Weaver 509 N Brightleaf Blvd

Smithfield NC 27577

Date: 09-30-2011

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified herein. GE Healthcare agrees to provide and Customer agrees to pay for the Products listed in this GE Healthcare Quotation ("Quotation"). "Agreement" is defined as this Quotation and the terms and conditions set forth in either (i) the Governing Agreement identified below or (ii) if no Governing Agreement is identified, the following documents:

1) This Quotation that identifies the Product offerings purchased or licensed by Customer;

2) The following documents, as applicable, if attached to this Quotation: (i) GE Healthcare Warranty(ies); (ii) GE Healthcare Additional Terms and Conditions; (iii) GE Healthcare Product Terms and Conditions; and (iv) GE Healthcare General Terms and Conditions.

In the event of conflict among the foregoing items, the order of precedence is as listed above.

This Quotation is subject to withdrawal by GE Healthcare at any time before acceptance. Customer accepts by signing and returning this Quotation or by otherwise providing evidence of acceptance satisfactory to GE Healthcare. Upon acceptance, this Quotation and the related terms and conditions listed above (or the Governing Agreement, if any) shall constitute the complete and final agreement of the parties relating to the Products identified in this Quotation. The parties agree that they have not relied on any oral or written terms, conditions, representations or warranties outside those expressly stated or incorporated by reference in this Agreement in making their decisions to enter into this Agreement. No agreement or understanding, oral or written, in any way purporting to modify this Agreement, whether contained in Customer's purchase order or shipping release forms, or elsewhere, shall be binding unless hereafter agreed to in writing by authorized representatives of both parties. Each party objects to any terms inconsistent with this Agreement proposed by either party unless agreed to in writing and signed by authorized representatives of both parties, and neither the subsequent lack of objection to any such terms, nor the delivery of the Products, shall constitute an agreement by either party to any such terms.

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

Terms of Deliveru:

F.O.B. Origin

Quotation Expiration Date:

09-30-2011

• Billing Terms:

20% down / 60% delivery / 20% install

• Payment Terms:

NET 30

· Governing Agreement:

HPG-DI-Base

Each party has caused this agreement to be signed by an authorized representative on the date set forth below. Please submit purchase orders to GE Healthcare

3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

GE HEALTHCARE

Date

Paul Billingsly Product Sales Specialist 2253 Limehurst Drive

Atlanta, GA 30319

Phone: 404-549-3658 Fax: 404-506-9391

Paul.Billingsly@med.ge.com

CUSTOMER

Authorized Customer

Date

Print Name and Title

PO#

Desired Equipment First Use Date

INDICATE FORM OF PAYMENT:

(If there is potential to finance with a lease transaction, GE HFS or otherwise, select lease.)

Cash * ____ Lease ____ HFS Loan

If financing please provide name of finance

company below*:

*Selecting Cash or not identifying GE HFS as the finance company declines option for GE HFS financing.

1/24



GE Healthcare Confidential and Proprietary General Electric Company, GE Healthcare Division 3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

Item No.	Qty	Catalog No.	Description
***************************************	1		Optima MR450w 1.5T 16-Channel
1	1	S4500WA	Optima MR450w 16-Channel 1.5T MR System with In-Room Display
			Optima MR450w 16-Channel 1.5T MR System with In-Room Display
		, <i>t</i> :	Patient expectations of MR have shifted in recent years, as patients have begun to demand a better, more comfortable scanning experience. Increasing the size of the bore is a good first step, but it's only the beginning. The right system should overcome traditional limitations of wide-bore MR, offering both excellent images and a user-friendly experience. Patients should be more comfortable during their scan, and clinicians more comfortable in making a diagnosis. All the while, organizations should expect their MR system to help them deliver solid financial returns, maintain a high standard of patient safety, and increase the quality of their care.
			GE has advanced the capabilities of wide-bore MR by delivering both uncompromised image quality and high productivity, all with an expansive clinical field of view. With the Optima MR450w 1.5T GE offers a range of new functionality, provides a more patient friendly environment and a clinical workhorse system for practices of all sizes and specialties.
			OpTix RF Receive Chain: GE's innovative Optical RF receive technology improves signal detection while simultaneously reducing electrical noise. By locating the receiver electronics on the side of the magnet and close to the origin of the MR signal, interference from external noise sources is reduced thus improving image quality and SNR. The result is a 27% SNR improvement over previous generation, non-optical systems for volumetric scanning.
			The use of optical transmission reduces the cabling footprint over conventional copper cable designs and enables high channel count configurations without requiring additional space. The OpTix technology can seamlessly route signals from any coil port to the receivers using a dynamic switching RF hub. • Sampling Bandwidth 80MHz. • Receive channels 16.
			Volume Reconstruction Engine 2.0 (VRE): The backbone of any high-channel count system is the reconstruction architecture. The Optima MR450w utilizes the latest dual-core 2.6 GHz processing technology with the VRE 2.0 recon architecture. With its 16 GB of memory, acquisition-to-disk technology, the VRE 2.0 delivers the processing power to quickly reconstruct high-resolution 3D volumetric data.
			Included is a single channel transmit receive head coil.
			Optima MR450w Site Collector: Optimally designed for patient safety, patient comfort,



and efficient workflow, the external features of the MR450w also provide an

Item No. Qty Catalog No.

Description

aesthetically pleasing look and feel that can reduce patient anxiety. The wide-open flare of the covers increase the effective bore size and can reduce patient anxiety when entering the scan room or magnet bore. With patient-optimized lighting and air conditioning, the system can be ideally set for each individual, increasing their control of the environment.

Wide-Screen LCD Monitor: This flat-panel Liquid Crystal Display (LCD) monitor delivers 1920 x 1200 dot resolution at a refresh rate of 60Hz and an excellent 500:1 contrast ratio using a digital DVI interface, all significant improvements over conventional designs.

Optima MR450w ScanTools 22.0: The Express Exam and Scantools of the Optima MR450 include a comprehensive suite of workflow features, advanced applications, and parallel imaging capabilities to enable the user to harness the Simply Powerful capabilities of the scanner efficiently and effectively. The patient and technologist workflow of Optima MR450 automates many of the routine tasks that

previously required user interaction, thus dramatically reducing the workload for the user and ensuring that consistent and repeatable images are presented for review. Prescription, acquisition, processing and networking steps can be automatically completed throughout the exam. These automated steps can be saved in the Protocol Library to ensure consistent exam workflow for each type of patient.

The automated workflow features of the Express Exam interface includes the Modality Worklist, Protocol Library, Autostart, AutoScan, AutoVoice, Linking, and Inline Processing.

Modality worklist: The modality worklist (MWL) provides an automated method of obtaining exam and protocol information for a patient directly from a DICOM Worklist server. For sites with full DICOM connectivity, once a patient has been selected from the MWL, a new session is opened on the host interface and the relevant exam details are highlighted for the user. The Optima MR450 MLW provides complete control of the exam protocol prescription.

Protocol libraries and properties: The Optima MR450 system provides the user with complete control of protocols for simple prescription, archiving, searching, and sharing. The protocols are organized into two main libraries, a GE optimized set that are included with the system and Site-Authored.

ProtoCopy: Standard on every Optima MR450 system, the ProtoCopy feature enables a complete exam protocol to be shared with the click of a mouse. The exam protocol can originate from either a library or previously acquired exam.

Workflow Manager: Once a protocol has been selected for an exam, it is automatically loaded into the Workflow Manager. The Workflow Manager controls image



4/24

Item No. Qty Catalog No.

Description

prescription, acquisition, processing, visualization and networking and may fully automate these steps if requested.

AutoStart: With AutoStart, once the landmark position has been set and the technologist leaves the room the Workflow Manager will automatically start the first acquisition in the exam.

Linking: Linking automates the prescription of images for each series in an exam. Once the targeted anatomical region has been located the Linking feature combines information from a prescribed imaging series to all subsequent series in the Workflow Manager. All series that have been linked may automatically be prescribed (Rx) and no further interaction will be needed by the technologist to initiate the scan. The user has control over which specific parameters can be linked together. Series can have common fields of view, obliquity, slice thickness, anatomical coverage, saturation bands, or shim volumes. Multiple series can be linked together and saved in the Protocol Library or edited in real time.

AutoScan: With AutoScan enabled, the Workflow Manager will sequentially go through the list of prescribed series without any user interaction.

AutoVoice: The AutoVoice feature ensures that consistent and repeatable instructions are presented to the patient for each and every exam. User selectable, pre-recorded instructions are presented at defined points in the acquisition. The AutoVoice feature includes instructions in over 14 languages and the user can create and include their own unique voice instructions for local needs.

Inline processing: To further automate an exam, the Inline processing feature can complete all tasks for a particular series. For certain tasks, the user must accept the results, or complete additional steps prior to saving the image to the database.

Inline viewing: Inline viewing allows the user to conveniently view, compare, and analyze images without having to switch to the Browser. Simply select the series to view from the Workflow Manager and the images are displayed along with standard image display tools.

Image fusion: To better visualize tissue and contrast, multiple images from separate acquisitions can be overlaid on one another. High-resolution anatomical images can be automatically fused with functional data or parametric maps for improved visualization by the user. The data is registered using translation and rotation and distortion correction to ensure accurate fusion. High resolution 2D and 3D data sets can be fused with reformats, parametric maps, 2D and 3D Spectroscopy maps, plus functional datasets and more.

Following is a list of the acquisition pulse sequences and parallel imaging capabilities for the Optima MR450 ScanTools 22.0.



5/24

GE Healthcare will use reasonable efforts to meet Customer's desired equipment first use date. The actual delivery date will be mutually agreed upon by the parties.



Item No. Qty Catalog No.

Description

- Peripheral Gating that minimizes the pulsatile artifacts.
- Optimized View Ordering to improve arterial signal.
- ASSET acceleration compatibility to reduce scan time.

Cube 3D: The Cube technology can eliminate multiple independent two-dimensional datasets with a single three-dimensional volume (or cube) of high resolution data to provide better image quality in shorter exam times. Compared to traditional 3D fast spin echo acquisitions, Cube uses a combination of optimized echo train pulses and ARC parallel imaging to reduce SAR, extend the duration of the acquisition echo train, and reduce the echo spacing. The system automatically adjusts the echo train flip angle amplitudes to provide optimized tissue contrast based on the specific tissue T1 and T2 characteristics and prescription parameters. To further reduce exam time and improve image quality, Cube is compatible with ARC self calibrating parallel imaging.

Isotropic Cube datasets may be automatically reformatted from a single acquisition into any plane, without gaps, and with the same resolution as the original plane for improved anatomical review and tissue visualization. The maximum parallel imaging acceleration is dependent upon the surface coil in use.

High resolution Cube data can be acquired with T1, T2, T2 FLAIR, or Proton density weighted tissue contrasts for neuro, abdominal, pelvic, and musculoskeletal imaging.

Quote Summary:

1.5 Excite II Trade In
Total Quote Net Selling Price

(\$185,000.00) \$1,190,914.78

(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)



GE Healthcare PO Box 414 Milwaukee, WI 53187

March 19, 2012

Kyle McDermott Johnston Medical Center 509 N. Bright Leaf Blvd. Smithfield, NC 27577

RE: GE 1.5T 11x Excite II MRI

Dear Kyle,

This letter is to confirm the existing GE 1.5T 11x Excite II MRI, proposed for trade in on replacement equipment will be removed by General Electric and not operate in the state of North Carolina.

Thank you for your support of General Electric

Sincerely,

Kevin Morris MRI Product Specialist General Electric Healthcare March 26, 2012

Michael J. McKillip, Project Analyst Certificate of Need Section Division of Health Services Regulations 809 Ruggles Drive, Raleigh, NC 27603 2704 Mail Service Center Raleigh, NC 27699-2704

RE: Information Request for Replacement Equipment/ Johnston Memorial Hospital / Replace existing GE Echospeed magnetic resonance imaging (MRI) scanner with a new GE Optima MRI scanner / Johnston County

FID # 943290

Dear Mr. McKillip,

Please accept this letter as the Owners documentation that the existing fixed MRI unit that was installed at Johnston Memorial Hospital, 509 N. Bright Leaf Blvd., Smithfield NC 27577 in 2004 has continue to be operated since that time and continues to be so. The fixed MRI was taken down for a period of three months in November and December 2008 and January 2009 during the recently completed construction project to allow for modifications to be make to the chiller system and the exhaust vent. This required down time was reviewed and approved by DHSR construction division. Other from those few months the fixed MRI unit has continuously been in service.

Respectfully Submitted,

Kyle McDermott

Senior Admin. Director Support Services

Johnston Health

PROPOSED TOTAL CAPITAL COST OF PROJECT Project Name: Johnston Memorial Hospital Authority Fixed MRI Replacment

Provider/Company:	MREDIBERICH
A. Site Costs	
(1) Full purchase price of land	Š
Acres Price per Acre \$	The part of the contraction of t
(2) Closing costs	S (
(3) Site Inspection and Survey	The appropriate contract of the appropriate appropriate and the appropriate ap
(4) Legal fees and subsoil investigation	The state of the s
	Parado (Annonemo (Anno Anno Anno Anno Anno Anno Anno An
(5) Site Preparation Costs	en:
Soil Borings	
Clearing-Earthwork	Sanggran - rynningsma ywnnin.
Fine Grade For Slab	Approximate and a separate and a sep
Roads-Paving	graph of Boson-hand glavour hadaggar.
Concrete Sidewalks	Some interpretation of the state of the stat
Water and Sewer	S. declared transport Acceptance in Land Deliphorary
Footing Excavation	
Footing Backfill	\$
Termite Treatment	\$
Other (Specify)	\$
Sub-Total Site Preparation Costs	.
(6) Other (Specify)	\$
(7) Sub-Total Site Costs	\$
B. Construction Contract	To provide the first the second secon
(8) Cost of Materials	
General Requirements	\$13,7001
Concrete/Masonry	\$7,000
Woods/Doors & Windows/Finishes	\$9,000
Thermal & Moisture Protection	\$
	\$15,000
Equipment/Specialty Items (shielding)	The state of the s
Mechanical/Electrical	\$110,000
Other (Specify) \$	TO DO A PRODU
Sub-Total Cost of Materials	\$ <u>154,700</u>
(9) Cost of Labor <u>Rigging</u>	\$40,000
(10) Other (Specify)	<u> </u>
(11) Sub-Total Construction Contract	\$194,700
C. Miscellaneous Project Costs	
(12) Building Purchase	\$
(13) Fixed Equipment Purchase/Lease	\$ <u>1,190,914.78</u>
(14) Movable Equipment Purchase/Lease for Mobile during	install \$122,000
(15) Furniture	\$
(16) Landscaping	\$
(17) Consultant Fees	The state of the s
Architect and Engineering Fees	\$12,000
Legal Fees	\$

Market Analysis	\$15,000
Other (Specify), owners rep.	\$
Other (Specify)	The state of the s
Sub-Total Consultant Fees	\$ <u>27,000</u>
(18) Financing Costs (e.g. Bond, Loan, etc.).	Damentonicon de la companya della companya della companya de la companya della co
(19) Interest During Construction.	Section of the sectio
(20) Other (Specify)	3
(21) Sub-Total Miscellaneous	\$1,339,914.78
(22) Total Capital Cost of Project (Sum A-C above)	\$1,534,614.78
6 · ()	en de la companya de La companya de la co
I ceftify that, to the best of my knowledge, the costs of the proposed I	project named above are complete and correct.
	0.0
David E. Johnson	Date Certified: 1.4.16
(Signature of Licensed Architect or Engineer)	
I assure that, to the best of my knowledge, the above costs for the pro	posed project are complete and correct and that it is my intent to carry
out the proposed project as described.	
Ille on Desmot Ada Dia S.	proce Louice Date Signed: 4-3-12
(C) Annual Title of Officer Authorized to Represent Provider/Cor	hnany)