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

Pat McCrory
Governor

Richard O. Brajer
Secretary DHHS

Mark Payne, Director
Health Service Regulation

August 19, 2016

Dee Jay Zerman
211 Friday Center Drive, Suite G015
Chapel Hill, NC 27517

Exempt from Review – Replacement Equipment

Record #:	**2030**
Facility Name:	Caldwell Memorial Hospital
FID #:	933051
Project Description:	Replace an existing MRI scanner
County:	Caldwell

Dear Ms. Zerman:

The Healthcare Planning and Certificate of Need Section, Division of Health Service Regulation (Agency), determined that based on your letter of August 12, 2016, the above referenced proposal is exempt from certificate of need review in accordance with G.S 131E-184(f). Therefore, you may proceed to acquire without a certificate of need GE Optima MR450w MRI scanner to replace the GE Signa HD MRI scanner. 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.

Moreover, you need to contact the Agency's Construction and Acute and Home Care Licensure and Certification Sections to determine if they have any requirements for development of the proposed project.

It should be noted that the 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 office and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Julie Halatek
Project Analyst

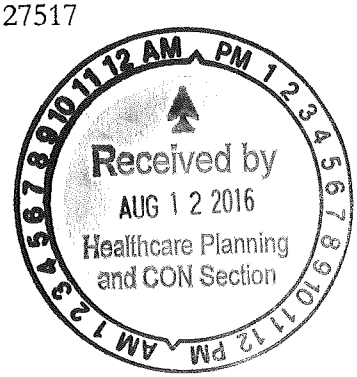
Martha J. Frisone
Assistant Chief, Certificate of Need

cc: Construction Section, DHSR
Acute and Home Care Licensure and Certification Section, DHSR
Paige Bennett, Assistant Chief, Healthcare Planning, DHSR

Healthcare Planning and Certificate of Need Section
www.ncdhhs.gov
Telephone: 919-855-3873 • Fax: 919-715-4413
Location: Edgerton Building • 809 Ruggles Drive • Raleigh, NC 27603
Mailing Address: 2704 Mail Service Center •Raleigh, NC 27699-2704
An Equal Opportunity/ Affirmative Action Employer

CALDWELL
UNC HEALTH CARE

Hedrick Building
211 Friday Center Drive, Suite G015
Chapel Hill, NC 27517



August 12, 2016

Julie Halatek, Project Analyst
Certificate of Need Section
Division of Health Service Regulation, DHHS
Mail Service Center 2704
Raleigh, NC 27699-2704

RE: Exemption Notices / Renovation and expansion of space pursuant to NCGS § 131E-184(g) and Replacement of existing MRI scanner pursuant to NCGS §131E-184(f) / Caldwell Memorial Hospital / Caldwell County / FID 933051

Dear Ms. Halatek:

Caldwell Memorial Hospital is planning to renovate, refurbish and expand portions of the hospital and main campus as part of a Master Facility Plan. Caldwell Memorial Hospital would also like to replace its existing MRI Scanner when the existing MRI space is refurbished and renovated. Caldwell Memorial Hospital is requesting confirmation that this refurbishment, renovation, expansion is exempt from review pursuant to NCGS §131E-184(g). Caldwell Memorial Hospital is also requesting confirmation that the replacement of MRI scanner is exempt from review pursuant to NCGS §131E-184(f).

NCGS §131E-184(g) provides that *The Department shall exempt from certificate of need review any capital expenditure that exceeds the two million dollar ($2,000,000) threshold set forth in G.S. 131E-176(16)b if all of the following conditions are met:*

(1) The sole purpose of the capital expenditure is to renovate, replace on the same site, or expand the entirety or a portion of an existing health service facility that is located on the main campus.

(2) The capital expenditure does not result in (i) a change in bed capacity as defined in G.S. 131E-176(5) or (ii) the addition of a health service facility or any other new institutional health service facility or any other new institutional health service other than that allowed in G.S. 131E-176(16)b.

(3) The licensed health service facility proposing to incur the capital expenditure shall provide prior written notice to the Department along with supporting documentation to demonstrate that it meets the exemption criteria of this subsection.

The Master Facility Plan work will be performed in several phases. The two story entrance at the front of the hospital will be filled in with new floor space, a new two story mechanical building to house switch gear and generators will be added adjacent to the main building, and two new air handlers will be added on existing third floor roof and fifth floor roof areas. Additionally, a considerable amount of the existing hospital space on the first and second floor

will be renovated and refurbished, including the following: financial counseling, patient services, surgical services, procedures, pre- and post-care, on-call rooms, equipment storage, anesthesia, radiology, cardiology, information technology, gift shop, volunteers, classrooms, conference rooms, bio medical, file processing, sterile processing, and associated patient support, waiting and staff spaces. Also, as part of the surgical services renovation several ORs will be enlarged.

The entire project involves 54,315 SF of space. Of this amount, only 7,560 SF of space will be added to the main hospital building, not including the utility and parking components outside of the main building as identified in the attached exhibits. The projected cost of the Master Facility Plan renovations, refurbishment and expansion is estimated to be approximately $20,918,775. See Exhibit 1. This $20,918,775 does not including the cost of the proposed replacement MRI equipment, which is $1,226,116.80 as discussed later below, or its fair market value of $1,381,116.80.

(1) Main Campus: The vast majority of the proposed project's SF involves the renovations of certain portions of the 1st and 2nd floors of Caldwell Memorial Hospital and the addition of 7,560 SF of space to the main hospital building. The additional space will be used for an enlarged front entrance, enhanced front service areas, front canopy, 2nd floor support space, and an electrical room. Other work included in the project involves utility upgrades, generators, fuel tank, medical gas farm, electrical transformer, retaining walls, parking lot enhancement, and similar upgrades all of which are on the Main Campus but outside the main building.

The clinical renovations and expanded spaces will be part of the 1st and 2nd floors of Caldwell Memorial Hospital, which is the main building on the Caldwell Memorial Hospital's Main Campus. The building's address is 321 Mulberry Street, Lenoir, NC 28645. Most of the spaces involved are physically located inside the main hospital building, all components of the project have the same physical address, and all components of the project are on the Main Campus. The distance from the main building to those portions of the project outside the main building are identified in Exhibit 2. Exhibit 3 contains the architectural site plan for the project which reflects the entire project's components and extents, as well as floor plans of the spaces involved. The office of the administrative and financial control of the hospital are located on the 5th floor of the same building being renovated are also indicated on the site plan in Exhibit 2.

(2) New Institutional Health Service: As confirmed in this correspondence, the renovation and expansion project will not result in a change of bed capacity, the addition of a health service facility, or any other new institutional health service other than that allowed in G.S. 131E-176(16)b. The proposed replacement of the existing MRI scanner is not part of the Master Facility Plan and it is addressed below. While some equipment and furniture will be replaced as required in these areas, other than the separately proposed replacement of the existing MRI Scanner, no additional units of major medical equipment will be acquired. No new services are being proposed to be provided, as the renovation is planned to allow existing services to be house and provided in an enhanced environment. The number of beds, operating rooms, endoscopy rooms or any other CON regulated equipment or service will not be increased.

(3) Prior Written Notice: This request shall serve of prior written notice of this activity.

NCGS §131E-184(f) provides that *The Department shall exempt from certificate of need review the purchase of any replacement equipment that exceeds the two million dollar ($2,000,000) threshold set forth in G.S. 131E-176(22) [sic, should be (22a)] if all of the following conditions are met:*

(1) The equipment being replaced is located on the main campus.

(2) The Department has previously issued a certificate of need for the equipment being replaced. This subdivision does not apply if a certificate of need was not required at the time the equipment being replaced was initially purchased by the licensed health service facility.

(3) The licensed health service facility proposing to purchase the replacement equipment shall provide prior written notice to the Department, along with supporting documentation to demonstrate that it meets the exemption criteria of this subsection.

As noted above, the spaces included in Master Facility Plan project includes radiology and its associated support space. The projected cost of the Master Facility Plan renovations, refurbishment and expansion is estimated to be approximately $20,918,775 not including the cost of the proposed replacement MRI equipment, which is $1,226,116.80 as indicated below, and fair market value of $1,381,116.80. With respect to the MRI replacement, the size of the MRI suite is approximately 1,843 SF, which is approximately half of the radiology space identified in Exhibit 4. The gray hatched area on the 2nd floor plan in Exhibit 4 is the MRI suite. The MRI suite project cost per SF based on the estimated total project cost for the Master Facility Plan's $20,918,775 for a total of 54,315 SF becomes $358.14 per SF. This attributes a refurbishment and upfit cost of $709,809.49 to the MRI suite's 1,843 SF. Adding this $709,809.49 to the replacement MRI's fair market value of $1,381,116.80, demonstrates that the replacement would be $2,090,926.29 thereby exceeding the $2M threshold.

The existing MRI scanned was placed into service in 2006, has not had any updates since it was installed, and is approaching the end of its usefulness for our patients. The proposed replacement MRI Scanner is a wide bore scanner allowing most patients to be scanned feet first, thus reducing cases of claustrophobia. The new scanner will allow us to perform breast MRI, which now have had to be referred to another scanner. It will also allow us to perform MRA studies, especially on patients who cannot receive contrast. Because of the master facility plan construction process described above, and the age of the equipment, it is more cost efficient to replace the MRI scanner when the space is under renovation. Otherwise, we would have to deconstruct the newly renovated area to install a new replacement MRI scanner. Exhibit 5 contains a copy of the original Certificate of Need issued for the existing MRI scanner.

This replacement also meets the requirements of NCGS §131E-184(f) as follows:

(1) the equipment being replaced is located on the main campus.

The existing equipment is located on the first floor of Caldwell Memorial Hospital in the Radiology Department, which is Caldwell Memorial Hospital's main campus. NCGS §131E-176(14n) defines "Main Campus" as *the site of the main building from which a licensed health service*

facility provides clinical patient services and exercises financial and administrative control over the entire facility, including the building and grounds adjacent to the main building."

Exhibit 2 contains maps reflecting the Caldwell Memorial Campus and the campus buildings. The existing MRI scanner is located in the Radiology Department on the first floor of Caldwell Memorial Hospital. This is where replacement equipment will also be located. Caldwell Memorial Hospital is a licensed health service facility. See Exhibit 6 for a copy of Caldwell's current license, DHSR Acute Care License No. H0061. The financial and administrative control is provided in offices physically located on the 5th floor of Caldwell Memorial Hospital, the same building that provides clinical and inpatient services on the Caldwell's main campus. The locations of the financial officer and administrative officer are indicated on a map contained in Exhibit 2.

(2) The Department has previously issued a certificate of need for the equipment being replaced.

Exhibit 5 contains a copy of the original certificate of need issued for the existing MRI scanner, which is to be replaced.

(3) The licensed health service facility proposing to purchase the replacement equipment shall provide prior written notice to the Department, along with supporting documentation to demonstrate that it meets the exemption criteria of this subdivision.

This correspondence serves as prior written notice in accordance with this requirement.

Following is the equipment comparison table as required in previous CON replacement requests. We are supplying the following information that the CON Section previously requested in the past as a part of its general information request for an equipment replacement exemption.

1. A comparison of the existing and replacement equipment, using the format in the following table:

Equipment Comparison

MRI Scanner	*Existing Equipment*	*Replacement Equipment*
Type of Equipment (List each component)	MRI Scanner	MRI Scanner
Manufacturer of Equipment	GE	GE
Tesla Rating for MRIs	1.5 T	1.5T
Model Number	Signa HD 1.5T	Optima MR450w 32ch GEM
Serial number	276187m2	Not yet available
Provider's Method of Identifying Equipment	By model & serial #s	By model & serial #s
Specify if Mobile or Fixed	Fixed	Fixed
Mobile Trailer Serial Number/ VIN #	Not applicable	Not applicable
Mobile Tractor Serial Number/ VIN #	Not applicable	Not applicable
Date of Acquisition of Each Component	Installed 9/2006	TBD
Does Provider Hold Title to Equipment or Have a Capital Lease?	Own	Will own
Specify if Equipment Was/ Is New or Used When Acquired	New	Will be new
Total Capital Cost of Project (Including Construction, etc.)	$1.9 M approximately	$1,226,116.80 equipment

		– see discussion above regarding cost
Total Cost of Equipment	$1.2 M approximately	$1,226,116.80
Fair Market Value of Equipment	Currently $155,000	$1,381,116.80
Net Purchase Price of Equipment	$1.2 M approximately	$1,226,116.80
Locations Where Operated	Caldwell Memorial Hospital	Caldwell Memorial Hospital
Number of Days In Use/To be Used in N.C. Per Year	365 days	365 days
Percent of Change in Patient Charges (by Procedure)	Not applicable	Existing procedures will have no change in patient charges. New patient charges will result due to new functionality of replacement equipment.
Percent of Change in Per Procedure Operating Expenses (by Procedure)	Not applicable	Existing procedures will have no change in patient charges. A few new types of charges will result due to functionality of replacement equipment.
Type of Procedures Currently performed on Existing Equipment	MRI scans	Not applicable
Type of Procedures New Equipment is Capable of Performing	Not applicable	MRI scans

As noted in the chart above, the total cost of the replacement MRI equipment will be $1,226,116.80. The installation could easily be performed during the refurbishment planned for the radiology department. A valid quote for the replacement MRI scanner is attached as Exhibit 7.

2. A description of the basic technology and functions of the existing and replacement equipment, including the diagnostic and treatment purposes for which the equipment is used or capable of being used.

Response: The machine to be replaced is a GE Signa HD 1.5T MRI which was installed in 2006 and was purchased for approximately $1,200,000. The current equipment and the replacement equipment will perform the same general basic functions although it will possess expanded technological capabilities due to technological improvements. See equipment comparison chart and other discussion above. Caldwell Memorial Hospital does not intend to increase patient charges or current per procedure operating expenses, which is well within the 10% threshold for the first 12 months after its acquisition as contained 10A NCAC 14C .0303 Replacement Equipment. Based on this and other information included in this request, the replacement equipment is comparable medical equipment as defined in 10A NCAC 14C .0303.

3. Brochures or letters from the vendors describing the capabilities of the existing equipment and the replacement equipment.

Response: A copy of the original brochure and the original quote for the existing GE Signa HD 1.5T MRI are not available. A copy of a brochure for a replacement GE Optima 450W is attached as Exhibit 8.

4. A copy of the purchase order for the existing equipment, including all components and original purchase price.

Response: A copy of the original brochure and the original quote for the existing GE Signa HD 1.5T MRI are not available. A copy of a brochure for a replacement GE Optima 450W is attached as Exhibit 8.

5. A copy of the title, if any, for the existing equipment or the capital lease for the existing equipment.

Response: Not applicable. The existing equipment does not have a title and is not leased.

6. If the replacement equipment is to be leased, a copy of the proposed lease that transfers substantially all the benefits and risks inherent in the ownership of the equipment to the lessee of the equipment, in accordance with criteria in Generally Accepted Accounting Principles (GAAP).

Response: Not applicable. The replacement equipment will not be leased.

7. If the replacement equipment is to be purchased, a copy of the proposed purchase order or quotation, including the amount of the purchase price before discounts and trade-in allowance.

Response: A copy of the quote received from the vendor for the replacement equipment is contained in Exhibit 7. The existing MRI scanner has a minimal trade-in value as indicated in the quotes and the equipment comparison table.

8. A letter from the person taking possession of the existing equipment that acknowledges the existing equipment will be permanently removed from North Carolina, will no longer be exempt from requirements of the North Carolina Certificate of Need law, and will not be used in North Carolina without first obtaining a new certificate of need.

Response: See Exhibit 9 for a copy of a confirmation letter from GE Healthcare Technologies.

9. Documentation that the existing equipment is currently in use and has not been taken out of service.

Response: Caldwell Memorial Hospital's existing MRI scanner is currently in use as indicated and certified on the most recent Licensure Renewal Application form. The equipment will remain in use until it is replaced. See Exhibit 10 for copies of pages from the 2016 Licensure Renewal Application pertaining to the MRI scanner.

Please do not hesitate to contact me at 984-974-1234 if you need any additional information. Thank you for your prompt consideration of this matter.

Sincerely,

Dee Jay Zerman

Dee Jay Zerman
System Director of Regulatory Planning
UNC HCS

VANNOY CONSTRUCTION

CALDWELL UNC HEALTH CARE

Caldwell Memorial Hospital
Design Development Conceptual Estimate
First and Second Floor Addition and Renovation
Lenoir, North Carolina

Contact: Mike Kesterson
Date: 4/18/2016
Total SF: 58,130

	WORK TRADE:	TOTAL:
1	SITE DEVELOPMENT	$ 485,515
2	PHASING & LOGISTICS	$ 282,250
3	SELECTIVE DEMOLITION	$ 331,614
4	CONCRETE	$ 380,953
5	MASONRY	$ 340,982
6	STRUCTURAL STEEL	$ 585,562
7	ROUGH CARPENTRY	$ 81,879
8	GENERAL REQUIREMENTS	$ 256,844
9	HOISTING, CRANE, RIGGING, EQUIPMENT	$ 330,367
10	FINISH CARPENTRY, MILLWORK, & CASEWORK	$ 302,100
11	ROOFING, METAL PANELS	$ 458,540
12	SPRAY FIREPROOFING	$ 65,261
13	CAULKING, WATERPROOFING, FIRESTOPPING	$ 186,667
14	DOORS, FRAMES, & HARDWARE	$ 368,454
15	GLASS & GLAZING SYSTEMS	$ 479,492
16	DRYWALL ASSEMBLIES	$ 888,429
17	CEILING TREATMENTS	$ 315,985
18	FLOORING & ACCESSORIES	$ 544,035
19	PAINTING	$ 103,612
20	SPECIALTIES	$ 467,888
21	EQUIPMENT & APPLIANCES - NIC	$ -
22	WINDOW TREATMENTS	$ 13,579
23	SPECIAL CONSTRUCTION - NIC	$ -
24	CONVEYING SYSTEMS - (Exterior Lift Only)	$ 40,000
25	FIRE SPRINKLERS	$ 204,825
26	PLUMBING SYSTEMS	$ 1,404,716
27	HVAC & MECHANICAL SYSTEMS	$ 3,646,537
28	ELECTRICAL SYSTEMS	$ 4,653,698
29	ICRA/ ILSM	$ 480,295
30	BUILDING PERMIT FEES - ALLOWANCE	$ 73,611

	SUBTOTAL	**$**	**17,773,688**
31	GENERAL CONDITIONS	$	1,185,417
32	PROJECT INSURANCES	$	233,714
33	SUBCONTRACTOR DEFAULT BONDS	$	215,216
34	PERFORMANCE & PAYMENT BOND	$	-
	SUBTOTAL	**$**	**19,408,035**
35	FEE	$	377,062
36	**CONTINGENCY**		
	Contingency	$	920,134
37	**ALLOWANCES**		
	Relocate Existing Services/ Utilities	$	-
	MEP/ FS Services and Conditions in Existing Hospital	$	-
	Remove Existing Storage Tank EC Addition	$	32,000
	Remove/ Fill (2) Existing Storage Tanks CEP Expansion	$	64,000
	Temporary Generator		By Owner
	Aesthetics and Programming	$	-
	Existing/ Concealed Conditions	$	450,000
38	**PRE-CONSTRUCTION SERVICES**	$	43,600

DESIGN DEVELOPMENT ESTIMATE	**$**	**21,294,831**

Capital Improvement Projects Under Separate Contracts

A	Remove existing storage tank for electrical room addition	Included in estimate	
B	Remove (2) existing storage tanks for CEP expansion	Included in estimate	
C	Relocate existing main bulk oxygen storage tank	Included in estimate	
D	Primary electrical service/ transformer	Included in estimate	
E	Fire alarm/ fire sprinkler renovations (remaining facility)	$	-
E-2	Fire alarm panels (includes panel for 1st and 2nd floor)	$	30,000
F	ED replace existing fire alarm devices	$	-
G	Existing elevator modernization (2)	$	350,000
H	Painting of existing building veneer	$	-
I	Electrical panel and feeder change out	$	-
J	Electrical pipe and wire (6) ATS	$	438,000

CAPITAL IMPROVEMENT PROJECTS - DD ESTIMATE	**$**	**818,000**
ACCEPTED VALUE ENGINEERING	**$**	**(1,194,056)**
TOTAL	**$**	**20,918,775**

FOX SURVEYING COMPANY, P.C.
770 NC HIGHWAY 15 SOUTH
P.O. BOX 637
TAYLORSVILLE, NC 28681
OFFICE: 828-635-1902 FAX: 828-635-1912
E-MAIL: wfox@foxsurveying.com
BUSINESS LICENSE #C-1902

"CALDWELL UNC HEALTH CARE"

REVISED: 10/01/15 TO SHOW UNDERGROUND UTILITIES.
REVISED: 10/21/15 TO SHOW UNDERGROUND UTILITIES.

N.C. GRID NORTH
BASED ON THE N.C. GRID SYSTEM
NAD 83 (2011)
VERTICAL DATUM: NAVD 88

JULIA J. VANSTANT
1760/396

ROBERT A. KENT, II
1529/1065

JAMES M. JOHNSON JR.
1553/325

ROBERT B. LEE, JR.
909/29

BETTY BOEVINGTON
1056/1256

WILLIAM R. JENKINS
1247/1036

THOMAS R. HINTON
754/1757

MULTI STORY HOSPITAL WITH BASEMENT

CANOPY

CONCRETE

MULBERRY STREET

OFFICES OF ADMINISTRATIVE AND FINANCIAL CONTROL ARE LOCATED ON THE 5TH FLOOR OF THE HOSPITAL.

SPECIAL NOTES

NOTE: ALL AREAS SHOWN HEREON ARE DETERMINED BY COORDINATE COMPUTATION.

NOTE: THIS PROPERTY IS SUBJECT TO ANY AND ALL RIGHTS-OF-WAY, EASEMENTS, ENVIRONMENTAL RESTRICTIONS, AND ALL OTHER ITEMS OF RECORD AFFECTING SAID PROPERTY.

NOTE: CHAINED LINES REPRESENT PROPERTY LINES WHICH ARE NOT ACTUALLY SURVEYED. THE PORTION OF CHAINED LINES ARE TAKEN FROM DEEDS.

NOTE: THE CLOSURE RATIO OF PRECISION IS 1:10000+.

NOTE: THE PROPERTY IS TIED TO THE NC GRID SYSTEM BY MONUMENTATION AS SHOWN USING NAD 83 PUBLISHED DATA AND A COMBINED FACTOR OF COMBINED TIE LINES ARE SHOWN WITH HORIZONTAL AND MILL GRID DISTANCES AND GRID BEARINGS. HOWEVER, ALL BEARINGS ALONG PROPERTY LINE DESCRIPTIONS ARE HORIZONTAL MEASUREMENTS.

30 0 15 30 60 120

LEGEND

LOCATION MAP (NO SCALE)

SITE

I, WESLEY G. FOX, III, PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THIS PLAT WAS DRAWN FROM AN ACTUAL FIELD SURVEY PERFORMED UNDER MY DIRECTION AND SUPERVISION, THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10000+, WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 21 DAY OF SEPTEMBER, 2015.

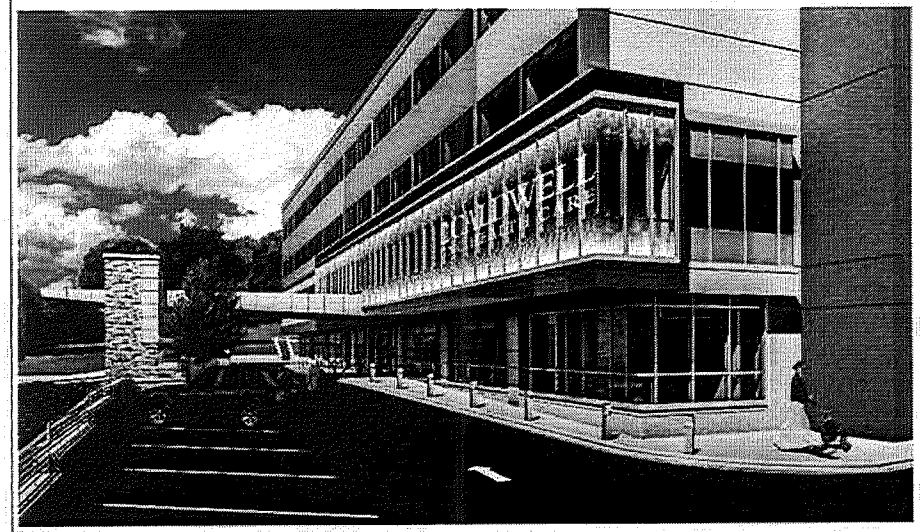
PROFESSIONAL LAND SURVEYOR

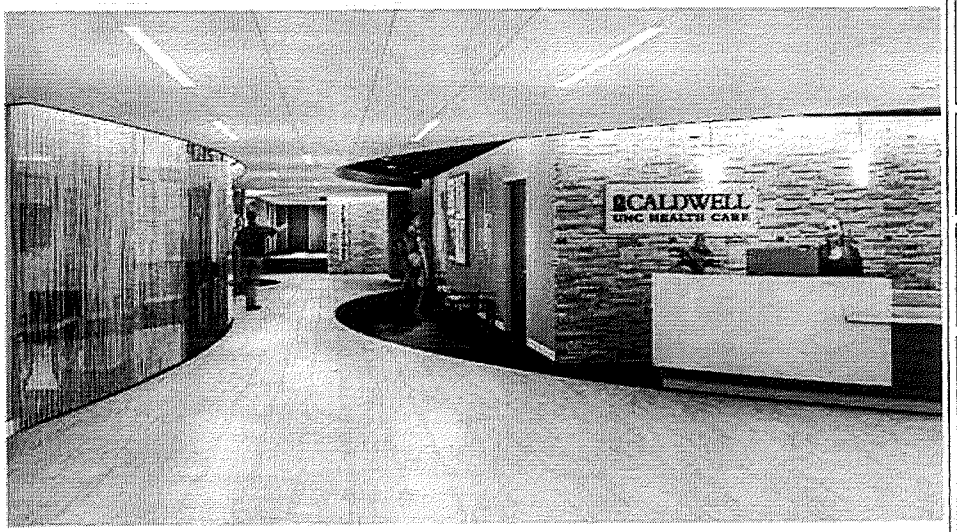
Exhibit 2

Caldwell UNC Health Care
FIRST AND SECOND FLOOR ADDITION AND RENOVATION

321 Mulberry Street SW, Lenoir, NC 28645

100% DESIGN DEVELOPMENT





OWNER

Caldwell UNC Health Care
321 Mulberry Street, SW
Lenoir, NC 28645
caldwellmemorial.org

CONSTRUCTION MANAGER

Vannoy Construction
4024 Barringer Drive
Charlotte, NC 28217
704-529-1912
www.jrvannoy.com

ARCHITECT

Clark Patterson Lee
6302 Fairview Road
Suite 102
Charlotte, NC 28210
800-274-9000
www.clarkpatterson.com

MEP ENGINEERS

Charlotte Engineers, LLP
5838 Monroe Road
Charlotte, NC 28212
704-531-3000
charlotteengineers.com

CIVIL ENGINEER

Alfred Benesch & Company
2320 West Morehead Street
Charlotte, NC 28208
704-521-9880
www.benesch.com

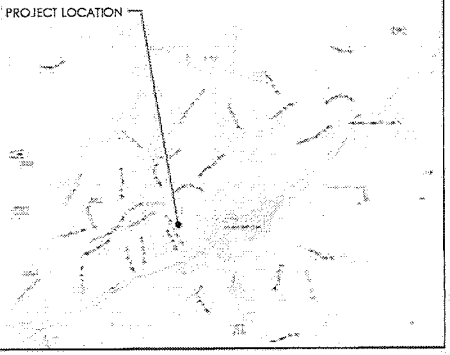
STRUCTURAL ENGINEER

Fitzpatrick Engineering Group, PLLC
Structural Engineers
19520 West Catawba Avenue
Suite 311
Cornelius, NC 28031
704-987-9114
www.fegstructural.com

MEDICAL EQUIP/LOW VOLTAGE

Healthcare Technology Consulting
1893 General George Patton Drive
Franklin, TN 37067
615-376-3100
www.gbainc.com
only one team covers it all

PROJECT LOCATION



CLARK PATTERSON LEE
DESIGN PROFESSIONALS
6302 Fairview Rd. Suite 102
Charlotte, North Carolina 28210
Tel: (800) 274-9000
Fax: (704) 521-0402
www.clarkpattersonlee.com

NOT FOR CONSTRUCTION
DD SET

NOT FOR CONSTRUCTION
DD SET

CALDWELL UNC HEALTH CARE
D SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST. SW
LENOIR, NORTH CAROLINA

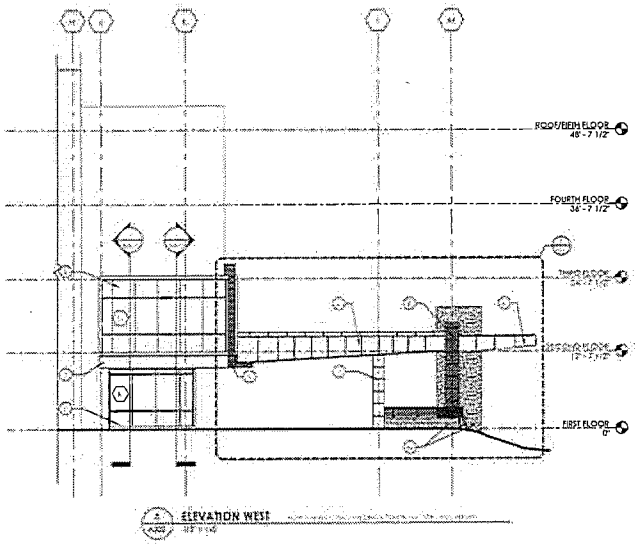
Exhibit 3

EXTERIOR ELEVATION KEYNOTES

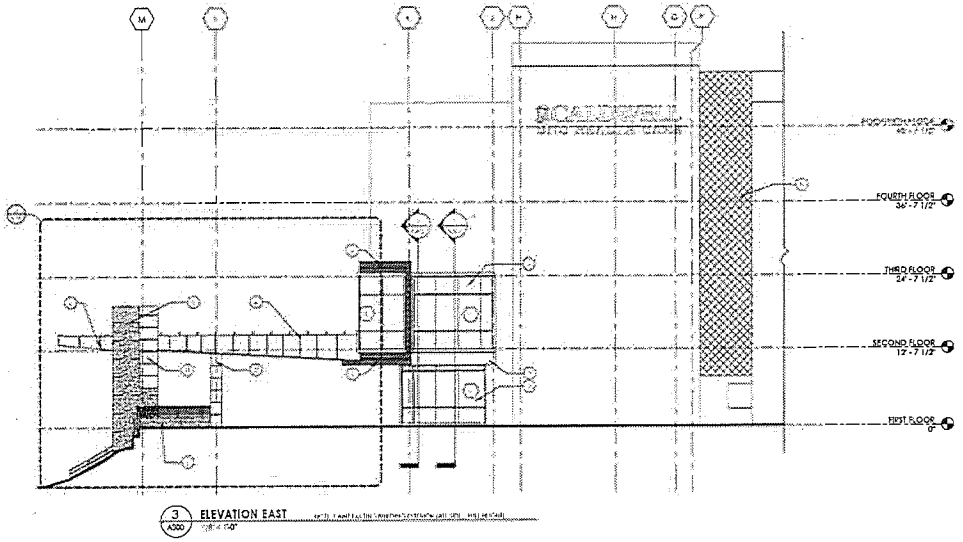
1. EXTERIOR APPLIED FOAM, VERIFY CLADDING SYSTEM
2. ALUMINUM METAL PANEL 24" WIDE OPENING HORIZONTALLY 12" PROFILE COLOR 2
3. ALUMINUM CURTAIN WALL SYSTEM
4. METAL RAILING SYSTEM
5. ALUMINUM METAL PANEL 12" WIDE OPENING HORIZONTALLY 12" PROFILE COLOR 1
6. ALUMINUM METAL PANEL 24" WIDE OPENING VERTICALLY 12" PROFILE COLOR 2
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. ALUMINUM METAL PANEL 24" WIDE OPENING HORIZONTALLY 4" PROFILE COLOR 2

GENERAL ELEVATION NOTES

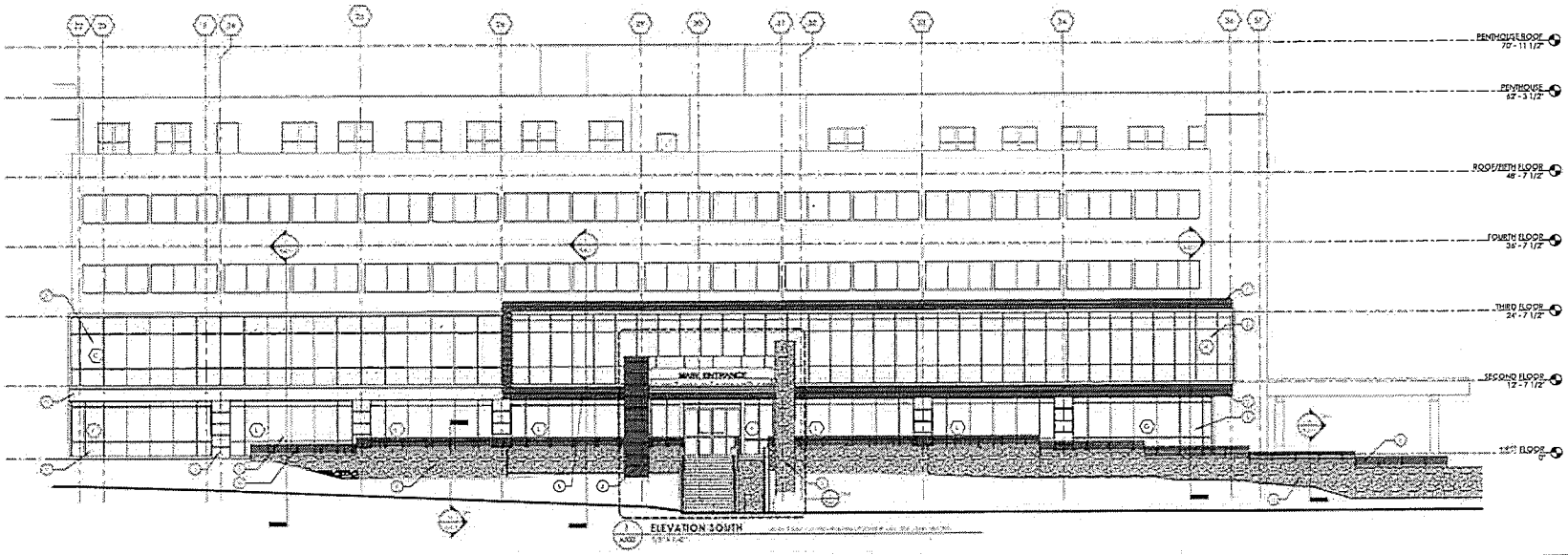
1. ALL DRAWINGS AND OPENINGS TO FACILITATE PLACEMENT AND SIZE OF EXISTING KITCHEN MATERIALS AND EQUIPMENT. COORDINATE LOCATIONS OF EXISTING KITCHEN MATERIALS AND EQUIPMENT WITH OWNER'S REPRESENTATIVE PRIOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK
2. REFER TO WOOD EXPANSION DOOR FRAME AND WINDOW DETAILS
3. PROVIDE ALL KNOWN OPENINGS AS REQUIRED, COORDINATE WITH MECHANICAL CONTRACTOR FOR FINAL SIZE AND LOCATION
4. ARCHITECTURAL ELEVATIONS ARE TYPICAL, STAGGERING OF JOINTS
   EXPANSION JOINT - EJ
   CONTROL JOINT - CJ
   EXPANSION ZONE - EJ
   BUILDING EXPANSION ZONE - BEJ



1 A300 ELEVATION WEST



3 A300 ELEVATION EAST



2 A300 ELEVATION SOUTH

CLARK PATTERSON LEE
ARCHITECTS + ENGINEERS
1920 Yadkinville Rd. Suite 100
Charlotte, North Carolina 28213
Tel. (704) 334-3563
Fax. (704) 332-3453

NOT FOR CONSTRUCTION
DD SET

NOT FOR CONSTRUCTION
DD SET

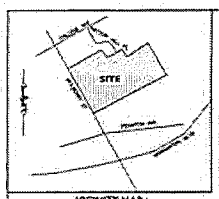
CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST. SW.
LENOIR, NORTH CAROLINA

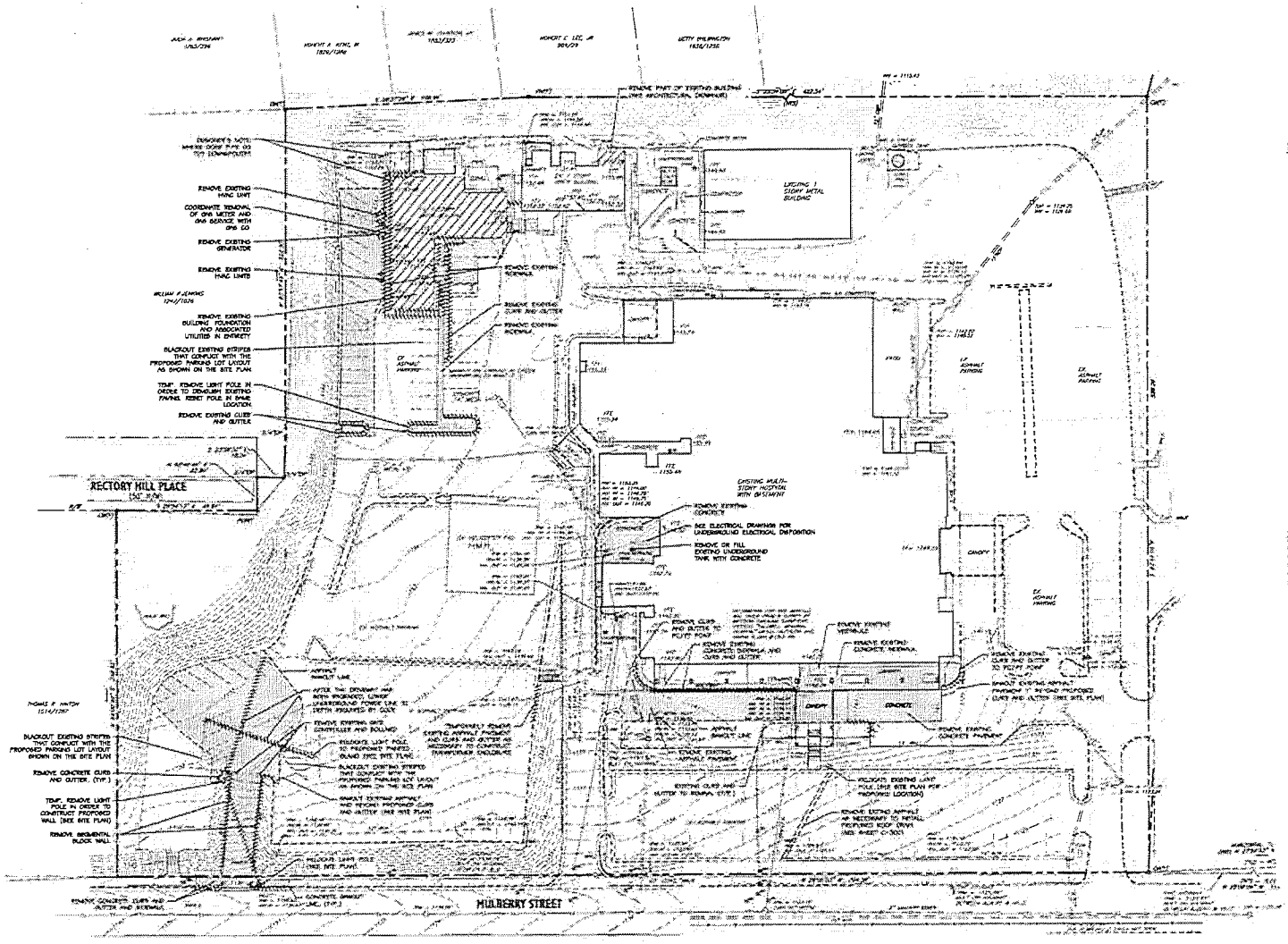
12/17/15 | ACA | RTW

EXTERIOR BUILDING ELEVATIONS

13471.00

A300





DEMOLITION/CLEARING NOTES

1. PARTIAL BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PREPARED BY FOX SURVEYING CO. P.C. 040-1006-1802 AND LAST REVISED 10/31/16.
2. CONTRACTOR SHALL REMOVE EXISTING TREES, CONCRETE, ASPHALT AND OTHER EXISTING STRUCTURES INDICATED ON PLAN. CONTRACTOR TO DISPOSE OF ALL DEBRIS TO AN APPROVED (LEGAL) OFF-SITE LOCATION.
3. PROTECT ADJACENT QUEENS TREES, BUILDINGS, UTILITIES AND OTHER ITEMS TO REMAIN FROM DAMAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR TREATMENT OF ANY DAMAGED ITEMS TO REMAIN.
4. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK, BOTH PUBLIC AND PRIVATE. CONTRACTOR IS FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES AND SHALL REPAIR ANY DAMAGE AS A RESULT OF THIS CONTRACT.
5. CONTRACTOR'S SURVEYOR SHALL REPORT ANY ENCROACHMENTS OR ENCROACHMENT GENERATED BY THIS CLEARING PLAN IMMEDIATELY TO ALFRED BENESCH & COMPANY FOR DIVISION.
6. CONTRACTOR'S SURVEYOR SHALL VERIFY CLOSURES AND ACCURACY OF CLEAR DATA PRIOR TO COMMENCEMENT OF FIELD STAKING.
7. CONTRACTOR SHALL MAKE EVERY EFFORT TO SAVE ADDITIONAL TREES WHEREVER FEASIBLE.
8. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TEMPTING, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE SAVE AREA.
9. CLEARING LIMITS ON THIS PLAN INDICATE THE EXTENT OF ALL MAJOR CLEARING REQUIRED. CONTRACTOR IS ALSO RESPONSIBLE FOR ANY INCIDENTAL CLEARING REQUIRED FOR MINOR ENCROACHMENTS OF GRADE, UTILITY OR STORM PIPE INSTALLATIONS, EROSION CONTROL MEASURES, ETC.

BENESCH - INDEX OF SHEETS

LEGEND

⊣	EXISTING SIGN	X OR \\\\\	EXISTING ITEMS TO BE REMOVED
DP	EXISTING DRAIN PIPE		EXISTING PAVEMENT TO BE REMOVED
	EXISTING LIGHT POLE		SAWCUT LINE
	EXISTING UTILITY POLE		EXISTING CURB AND GUTTER
R/W	RIGHT-OF-WAY		PROPERTY LINE
	ACCESSIBLE SPACE		EXISTING FENCE
	EXISTING TREE TO REMAIN		EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING TREE TO BE REMOVED		EXISTING OVERHEAD ELECTRIC LINE
	EXISTING FIRE HYDRANT		EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING WATER VALVE		EXISTING SANITARY SEWER LINE
	EXISTING WATER METER		EXISTING WATER LINE
	EXISTING SEWER MANHOLE		EXISTING GAS LINE
	EXISTING STORM MANHOLE		EXISTING STORM LINE
	EXISTING DRAINAGE STRUCTURE		TEMPORARY TREE PROTECTION BARRICADE
	EXISTING CLEANOUT		EXISTING TREELINE
	EXISTING SPOT ELEVATION		
	EXISTING GAS METER		

811 Know what's below. Call before you dig.

NORTH

SCALE: 1" = 30'

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
6742 Fairview Rd. Suite 102
Charlotte, North Carolina 28210
Tel (704) 274-8700
Fax (704) 231-0452
www.clarkpatterson.com

benesch

PRELIMINARY-NOT FOR CONSTRUCTION

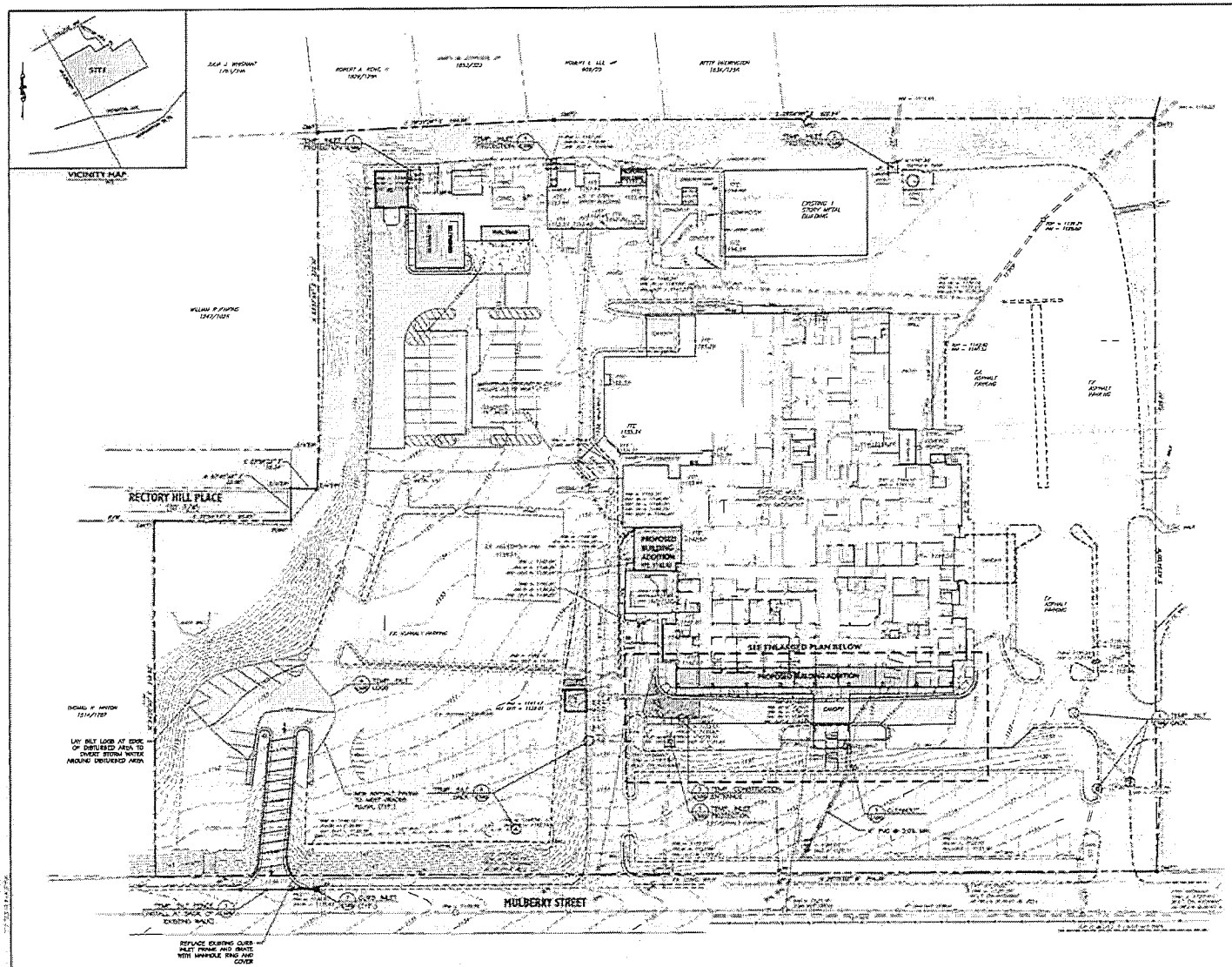
CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST. SW
LENOIR, NORTH CAROLINA

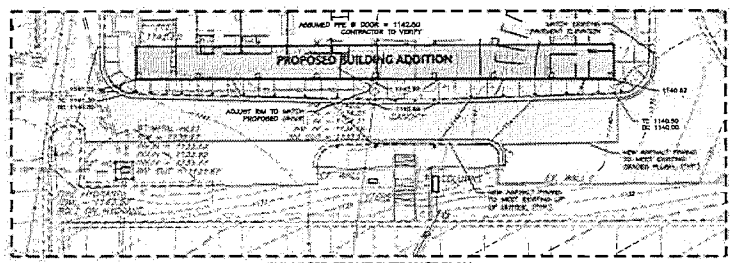
12/21/2017	S.M.	WES

EXISTING CONDITIONS/ DEMOLITION PLAN

134171.00

C-100





ENLARGED FRONT ENTRANCE PLAN
SCALE 1"=20'

CONSTRUCTION SEQUENCE:

A. CONTACT NCDENR EROSION CONTROL INSPECTOR TO SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 10 DAYS PRIOR TO BEGIN.

B. CONDUCT A PRE-CONSTRUCTION ON-SITE MEETING WITH THE OWNER, CONTRACTOR, AND EROSION CONTROL INSPECTOR.

C. CLEARING ONLY AS NECESSARY, INSTALL CONSTRUCTION ENTRANCE, SILT FENCE, TEMPORARY DIVERSION SWALES AND EROSION CONTROL DEVICES AS SHOWN ON SHEET ESP1A1 AS NEEDED TO BEGIN GRADING. PHASE COMPLETE A FULL INSPECTION REPORT FOR THE PHASE OR CONSTRUCTION ONLY (NOT INSPECTION REQUIREMENTS FIND 3.1.4.1.F).

D. GRADING AND STABILIZATION OF THE PROJECT LIMITS AS SHOWN ON SHEET ESP1A1 AS NEEDED.

E. TEMP. SEED ALL NEW DISTURBED AREAS FROM THE INSTALLATION OF ANY NEWLY INSTALLED EROSION CONTROL MEASURES.

F. TEMP. SEED ALL NEW DISTURBED AREAS FROM THE INSTALLATION OF ANY NEWLY INSTALLED EROSION CONTROL MEASURES.

G. BEGIN GRADING SITE UP TO GRADE. INSTALL TEMPORARY INLET PROTECTION, EROSION CONTROL DEVICES & TEMPORARY DIVERSION SWALES AS SHOWN ON SHEET ESP1A1 AS SITE IS CONSTRUCTED TO FINAL GRADE. INSTALL PERMANENT INLET PROTECTION AS NOTED WHEN SITE IS BEING DEVELOPED UP TO READY AND STORM DRAINAGE IS INSTALLED.

H. COMPLETE OR A INSPECTION REPORT ONLY SEDIMENT BASINS #3 AND #4 HAVE BEEN INSTALLED, STABILIZED ALL PAVING SINCE THEY HAVE BEEN EXPOSED FOR THE CORRECT 2-YEAR/24-HR.

I. CONSTRUCT ALL WATERSHEDDING FIXTURE FOR THE SIDEWALK AROUND SOFTBALL FIELDS #1 AND #2 AND THOSE CORRESPONDING POST BASINS I THRU. (THESE CAN NOT BE CONSTRUCTED UNTIL THE SITE HAS BEEN STABILIZED AND THE BASINS/STRUCTURES HAVE BEEN REMOVED.

J. SEED DISTURBED AREAS WITH SEED TYPE, RATE, AND DATE.

K. COMPLETE ALL CONSTRUCTION WITHIN THESE PROJECT LIMITS, STABILIZE THE FIELDS AS THEY ARE BEING CONSTRUCTED.

L. EROSION CONTROL MEASURES (DRAINS, FENCES, DIVERSION DITCHES) DIRECTLY AFFECTED BY THE CONTRACT SHALL BE MAINTAINED/REMOVED UNDER THIS CONTRACT. DEVICES SHALL BE MAINTAINED TO MAX 50% CAPACITY UNTIL AREAS THEY SERVE ARE FULLY STABILIZED.

M. PROVIDE PERMANENT SEEDING FOR ALL DISTURBED AREAS.

N. CONTACT NCDENR FOR PERMANENT OR FINAL EROSION CONTROL INSPECTION.

O. REMOVE ALL EROSION CONTROL DEVICES AFTER AND WHILE ACCUMULATED SEDIMENT

P. MONITOR ALL EROSION CONTROL AND STABILIZED AREAS. ALL EROSION CONTROL DEVICES MUST REMAIN

N. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, AND THE SCS EROSION CONTROL ORDINANCE.

O. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCDENR SO THAT PERIODIC INSPECTIONS CAN BE CONDUCTED AT APPROPRIATE STAGES OF CONSTRUCTION.

P. [illegible]

EROSION CONTROL NOTES:

1. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:

1A. ALL PERIMETER DIKES, SWALES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE, BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

1B. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE, BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

1C. EXCEPTIONS — IN MEETING THE STABILIZATION REQUIREMENTS ABOVE THE FOLLOWING CONDITIONS OR EXCEPTIONS SHALL APPLY:

1D. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.

1E. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THEN 7 DAY REQUIREMENT APPLIES.

1F. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT.

1G. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS STEEPER THAN 3:1

1H. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.

1I. FOR PORTIONS OF PROJECTS WITHIN THE SEDIMENT CONTROL COMMISSION-DEFINED HIGH QUALITY WATER ZONE (15A NCAC 04A .0105), STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE, BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT.

1J. PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&SC PLAN OR AGREED BY THE PERMITTING AUTHORITY.

2. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NCDENR IF ANY LAND-DISTURBING ACTIVITY IS NOT ADEQUATELY COMPLIANCE WITH ALL CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (PERMIT NCG010000). ANY FUTURE NONCOMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES.

3. DISTURBED AREA DRAINING GREATER THAN ONE ACRE MUST HAVE AN EROSION CONTROL MEASURE THAT DRAINS FROM THE WATER SURFACE ELEVATION.

4. REQUIRED APPLY COPIES AND PERMIT AND WATER QUALITY NOT CERTIFICATION MUST BE OBTAINED FOR STREAM DISTURBANCES OVER 150 LINEAR FEET.

5. ANY BORROW OR WASTE MATERIAL SHALL BE TAKEN/PLACED ON A SITE THAT HAS AN ACTIVE APPROVED GRADING PERMIT. IF THIS IS NOT DETERMINED, THE CONTRACTOR MAY SUBMIT PLAN FOR APPROVAL TO NCDENR PRIOR TO ANY OFF-SITE BORROW/WASTE WORK SHALL BE DEALOED AND ANY GRADING OPERATIONS STARTING ON THE SITE.

6. ANY GRADING BEYOND THE APPROVED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE NCDENR EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.

7. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE NCDENR EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.

8. BUFFER ZONES TO BE MAINTAINED ADJACENT TO [illegible] PERENNIAL WATERS SHALL BE 50' FOR ALL NEW DEVELOPMENT ACTIVITIES, EXCEPT AS PROVIDED FOR IN 15A NCAC 2H .0506(b)(6). A 30' BUFFER ZONE IS REQUIRED ADJACENT TO TROUT WATERS.

9. TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING

10. [illegible]

11. [illegible]

12. NAME OF RECEIVING WATER COURSE: _____ CLASSIFICATION OF RECEIVING WATER COURSE: _____

GRADING AND DRAINAGE NOTES

1. BENCHMARK ELEVATIONS HAVE NOT BEEN ESTABLISHED AND SITE AS SHOWN IS NOT ADJUSTED TO REPRESENT A BALANCED CUT/FILL CONDITION.
2. CONTRACTOR SHALL FIELDTOUR THE OWN ESTIMATES AND SHALL PROVIDE ALL EARTHWORK NECESSARY TO ACHIEVE THE DESIGN GRADE, INCLUDING ANY OFFSITE BORROW OR SPOILS NEEDED.
3. ROOF LEADERS SHALL BE HDPE OR PVC MINIMUM CLOSED SHALL BE 10', MINIMUM SLOPE SHALL BE 1%. PROVIDE CLEANOUTS AT ALL CONNECTIONS WITH BUILDING DRAIN AND WHERE INDICATED ADJUST TO PLUMBING PLANS FOR THE EXACT LOCATION OF ROOF DRAINS AT THE BUILDING.
4. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN ALL GRADED AREAS INCLUDING PAVING, LAWN AND PLANTING AREAS.
5. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION BEFORE PROCEEDING.
6. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK, BOTH PUBLIC AND PRIVATE. CONTRACTOR IS FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES AND SHALL REPAIR ANY DAMAGE AS A RESULT OF THIS CONTRACT.
7. CONTRACTOR SHALL FILLING NEW EARTHWORK ENCOUNTERED TO TRANSITION BACK TO EXISTING GRADE.
8. THE PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN IN DRIVES, PARKING LOTS AND SIDEWALKS ARE FINISHED ELEVATIONS INCLUDING ASPHALT, EXPOSE TO PAVEMENT CROSS SECTION DATA TO DETAILSUM CORRECT SUBGRADE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
9. PIPE LENGTHS SHOWN ARE THE ENGINEER'S ESTIMATE USED TO COMPUTE PIPE SLOPES AND INVERTS AND SHALL NOT BE CONSTRUED BY THE CONTRACTOR TO REPRESENT THE ACTUAL QUANTITY OF PIPE REQUIRED.
10. CROSS SLOPE OF SIDEWALK SHALL BE 1/8"/FT. (1%).
11. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1
12. NO DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.
13. NO DRUMMING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH, RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS
14. PRUNE VINES AND SMALL TREES 1.0 IN. DIA. OR AS SHALL AS 2 IN. CALIPERED MAY BE HAND CLIMBED ONLY CUT FLUSH WITH GROUND ALLOWED. EXISTING TREES MAY BE LIMBED UP 6 FEET (AT MOST 2/3 OF THE CANOPIES SHOULD BE LEFT) TO IMPROVE VISIBILITY.
15. EXPOSED TREE ROOTS MUST BE CLEANLY CUT WITH A SHARP PRUNING TOOL. BACKFILL ASAP TO MINIMIZE EXPOSURE TO THE AIR.
16. UNLESS OTHERWISE NOTED, THE PHYSICAL CONNECTION BETWEEN THE SITE ROOF DRAIN PIPE AND THE PIPE INSTALLED BY THE PLUMBING CONTRACTOR SHALL BE MADE BY THE SITE UTILITY CONTRACTOR.
17. PIPE LENGTHS SHOWN ON CULVERT PROFILE SHEETS ARE APPROX.
18. IN ORDER TO ENSURE ADEQUATE DRAINAGE FLOW SLABS IN SLOTTED SHALL BE SLOPED MINIMUM

LEGEND

	EXISTING IRON PIN		EXISTING CURB AND GUTTER
	EXISTING IRON PIN		PROPOSED CURB AND GUTTER
	EXISTING LIGHT POLE		PAVEMENT LINE
	EXISTING UTILITY POLE		EXISTING FENCE
R/W	RIGHT-OF-WAY		EXISTING UNDERGROUND ELECTRIC LINE
HC	ACCESSIBLE SPACE		EXISTING UNDERGROUND UTILITY LINE
	EXISTING TREE TO REMAIN		EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING FIRE HYDRANT		EXISTING SANITARY SEWER LINE
	EXISTING WATER VALVE		EXISTING WATER LINE
	EXISTING WATER METER		EXISTING GAS LINE
	EXISTING SEWER MANHOLE		EXISTING CONTOUR LINE
	EXISTING STORM MANHOLE		PROPOSED CONTOUR LINE
MH 1	PROPOSED STORM MANHOLE		TEMPORARY TREE PROTECTION BARRICADE
	PROPOSED FLARED END SECTION		EXISTING STORM DRAINAGE PIPE
YD 1	EXISTING DRAINAGE STRUCTURE		PROPOSED STORM DRAINAGE PIPE
DI 1	PROPOSED DRAINAGE STRUCTURE		PROPOSED ROOF DRAIN PIPE
1234.5	EXISTING SPOT ELEVATION		EXISTING TREE LINE
1234.5	PROPOSED SPOT ELEVATION		EXISTING GAS VALVE
	EXISTING CLEANOUT		DRAINAGE INLET PROTECTION
			TEMPORARY SILT FENCE

811 Know what's below. Call before you dig.

NORTH

SCALE 1"=30'

GLARK PATTERSON LEE
DESIGN PROFESSIONALS
1700 E Trade St Suite 102
Charlotte, North Carolina 28203
Tel (704) 374-8780
Fax (704) 374-0462
www.glarkpatterson.com

benesch
Atlanta Branch - A Corporation
3330 Cumberland Blvd SE Suite 900
Atlanta, GA 30339
Tel 770.612.9201
Fax 770.612.9202
Date of License: 4/1/2014
Expire: 3/31/2015

PRELIMINARY-NOT FOR CONSTRUCTION

CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST. SW
LENOIR, NORTH CAROLINA

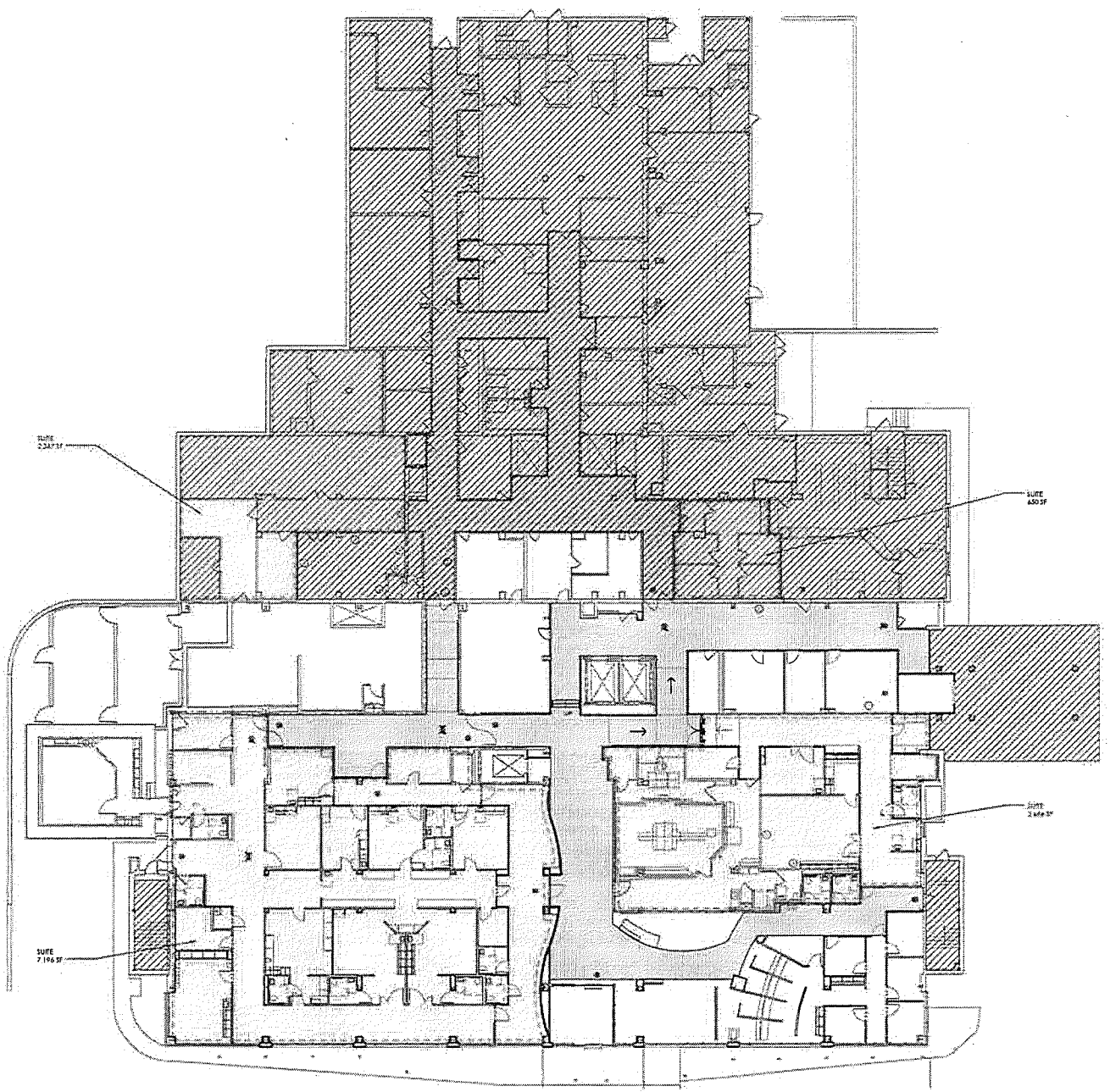
DATE	BY	CHKD
12/13/13	SJH	WES

SCALE 1"=30'

GRADING/DRAINAGE & EROSION CONTROL PLAN

P3421.00

C-300



1 FIRST FLOOR LIFE SAFETY PLAN

SYMBOL LEGEND

	EXIT SIGN
	EXIT
	EMERGENCY LIGHT
	MINIMUM CORRIDOR WIDTH
	1 HR MASONRY FIRE WALL (MIN 4" CMU OR BRICK) OR 2 HR FIRE WALL (MIN 8" CMU OR BRICK)
	MINIMUM 1HR RATED CORRIDOR WALL
	ROOM NAME / NO.
	DOOR NO.
	DOOR SIZE
	HANDICAP ACCESSIBLE
	1 HOUR RATED SMOKE BARRIER
	1 HOUR FIRE RATED & SMOKE BARRIER
	2 HOUR RATED FIRE BARRIER
	3 HOUR RATED FIRE BARRIER
	4 HOUR RATED FIRE BARRIER
	SMOKE
	FIRE EXTINGUISHER
	FIRE EXTINGUISHER CABINET
	EXIT IN CORRIDOR WITH 1 HR FIRE RATED ENCLOSURE

KEY NOTES

1. EXISTING 2 HOUR RATED BUILDING CORRIDOR WALL TO REMAIN. PROVIDE DOOR OPENING AS REQUIRED
2. EXISTING 1 HOUR RATED FIRE BARRIER WALL TO REMAIN. PROVIDE DOOR OPENING AS REQUIRED
3. EXISTING 2 HOUR RATED FIRE BARRIER WALL TO REMAIN. PROVIDE DOOR OPENING AS REQUIRED
4. EXISTING 2 HOUR RATED FIRE BARRIER WALL TO REMAIN. PROVIDE DOOR OPENING AS REQUIRED

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
6302 Fairview Rd., Suite 102
Charlotte, North Carolina 28210
TEL (980) 214-8000
FAX (704) 321-0402

NOT FOR CONSTRUCTION
DD SET

NOT FOR CONSTRUCTION
DD SET

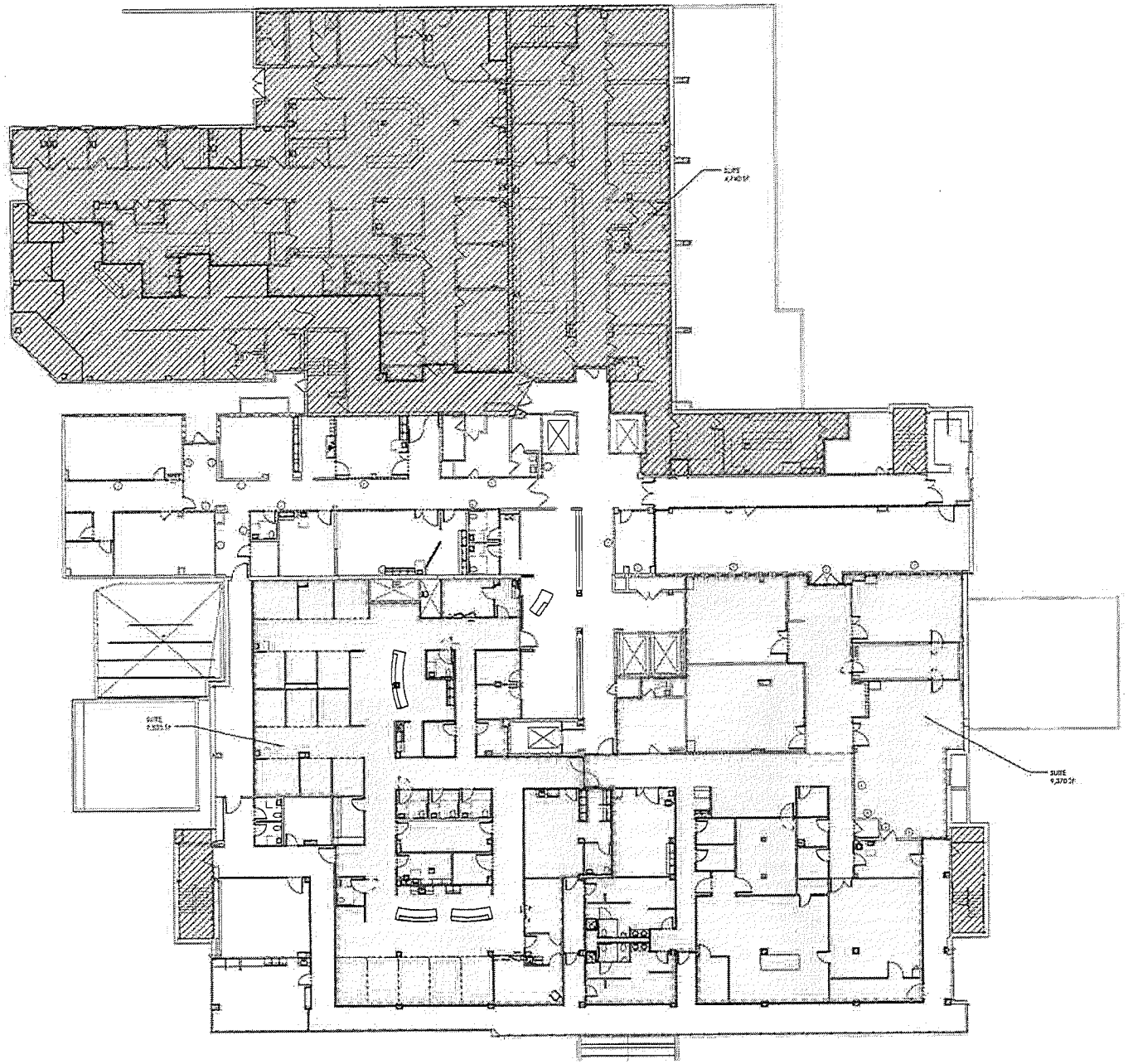
CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST. SW
LENOIR, NORTH CAROLINA

DATE	DRAWN	CHECKED
12/17/15	RTW	TSH

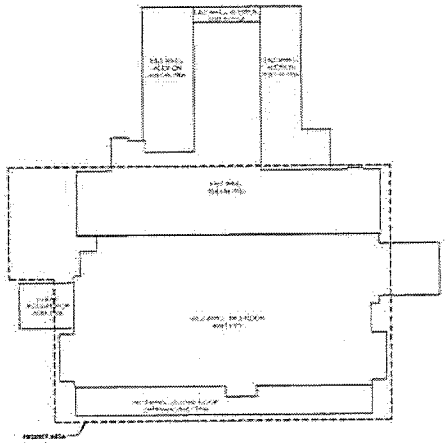
FIRST FLOOR LIFE SAFETY PLAN

PROJECT NO. 15411.00

NB
G003



1 SECOND FLOOR LIFE SAFETY PLAN
G004



SYMBOL LEGEND

KEY NOTES

1. EXISTING 2 HOUR RATED RUNNING SEPARATION NO LONGER REQUIRED OR EXTEND OR DOWN GRADE AS REQUIRED
2. EXISTING 1 HOUR RATED DEMISING PARTITION NO LONGER REQUIRED DOWN GRADE AS REQUIRED
3. EXISTING 2 HOUR RATED FIRE BARRIER NO LONGER REQUIRED OR EXTEND OR DOWN GRADE AS REQUIRED
4. EXISTING 2 HOUR RATED FIRE BARRIER NO LONGER REQUIRED OR EXTEND OR DOWN GRADE AS REQUIRED

CLARK PATTERSON LEE
DESIGN PROFESSIONALS
4203 Fairview Rd Suite 102
Charlotte, North Carolina 28210
Tel (803) 274-6000
Fax (704) 321-0402
www.clarkpatterson.com

NOT FOR CONSTRUCTION
DD SET

NOT FOR CONSTRUCTION
DD SET

CALDWELL UNC HEALTH CARE
FIRST AND SECOND FLOOR ADDITION AND RENOVATION
321 MULBERRY ST. SW
LENOIR, NORTH CAROLINA

12/17/15 | RSP | RTW

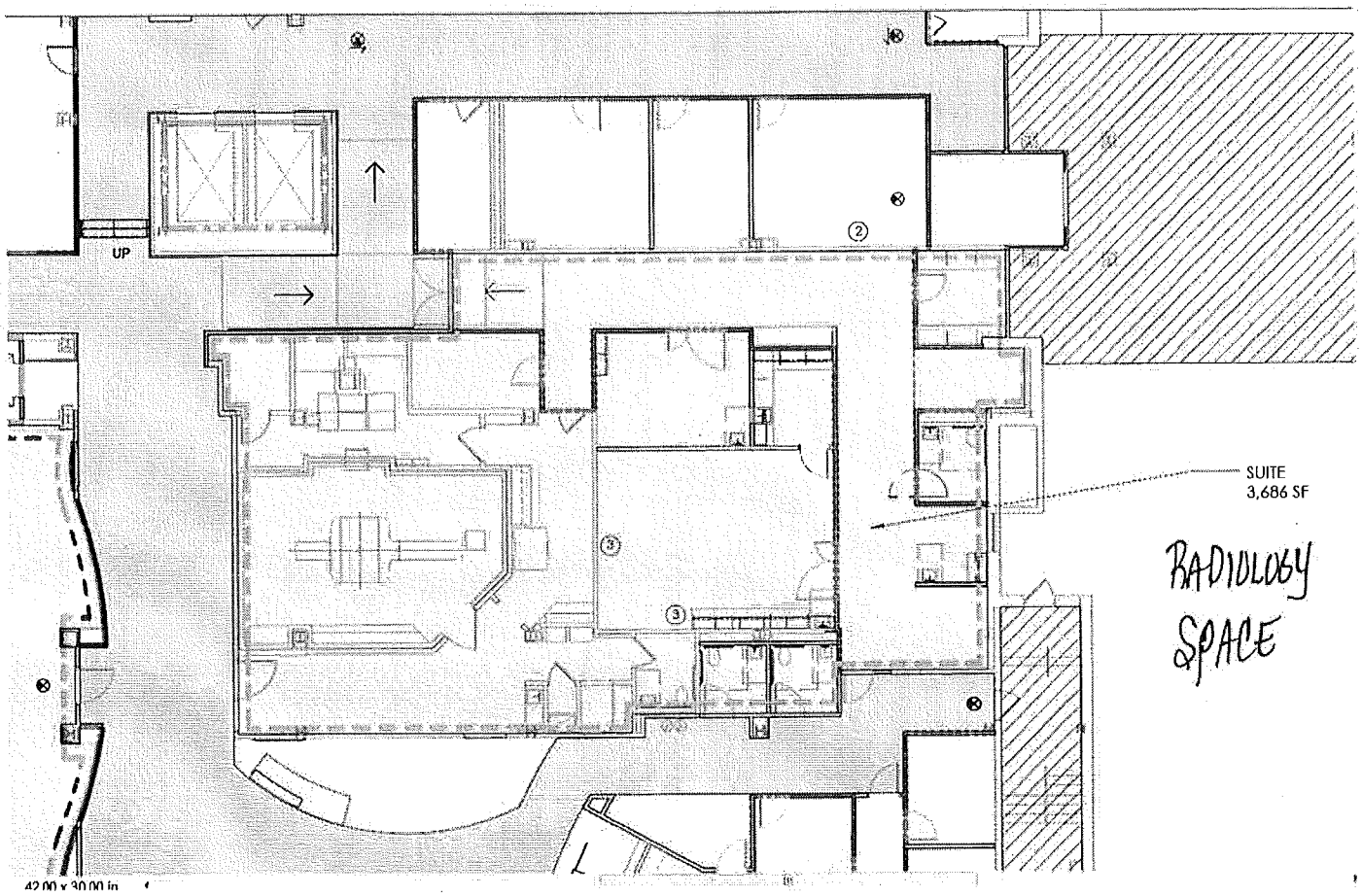
SECOND FLOOR LIFE SAFETY PLAN

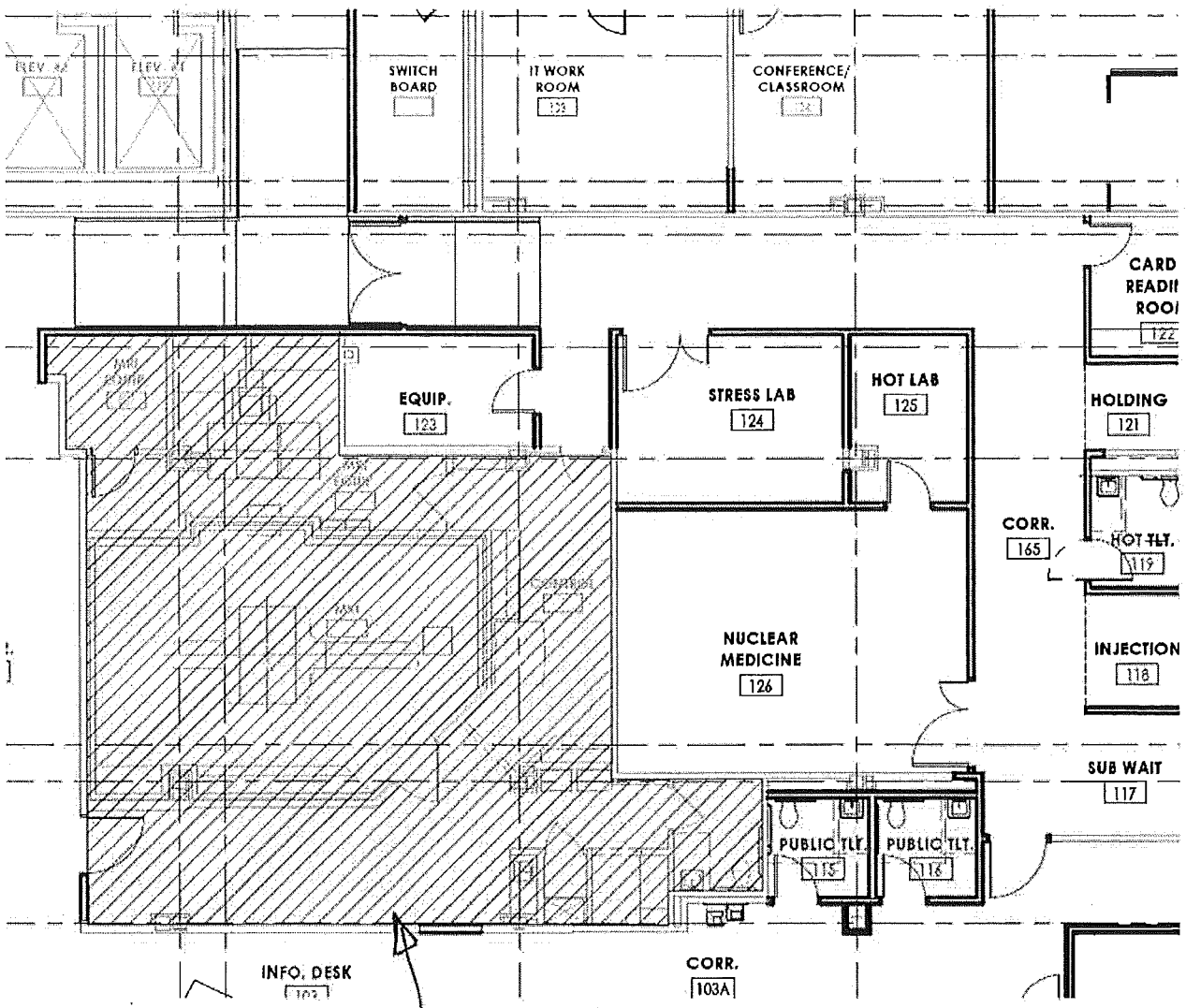
13471.00

G004

CALDWELL MEMORIAL HOSPITAL - MASTER FACILITY PLAN

FIRST FLOOR





SPACE ATTRIBUTED TO MRI SUITE 1,843 SF

Exhibit 5

STATE OF NORTH CAROLINA
Department of Health and Human Services
Division of Facility Services

CERTIFICATE OF NEED

for

Project Identification Number O-7222-05
FID# 933051

ISSUED TO: **Caldwell Memorial Hospital**
321 Mulberry Street, SW
Lenoir, NC 28645

Pursuant to N.C. Gen. Stat. § 131E-175, et. seq., the North Carolina Department of Health and Human Services hereby authorizes the person or persons named above (the "certificate holder") to develop the certificate of need project identified above. The certificate holder shall develop the project in a manner consistent with the representations in the project application and with the conditions contained herein and shall make good faith efforts to meet the timetable contained herein. The certificate holder shall not exceed the maximum capital expenditure amount specified herein during the development of this project, except as provided by N.C. Gen. Stat. § 131E-176(16)e. The certificate holder shall not transfer or assign this certificate to any other person except as provided in N.C. Gen. Stat. § 131E-189(c). This certificate is valid only for the scope, physical location, and person(s) described herein. The Department may withdraw this certificate pursuant to N.C. Gen. Stat. § 131E-189 for any of the reasons provided in that law.

SCOPE: **Caldwell Memorial Hospital of North Carolina shall acquire a fixed MRI scanner/Caldwell County**

CONDITIONS: **See Reverse Side**

PHYSICAL LOCATION: **Caldwell Memorial Hospital**
321 Mulberry Street, SW
Lenoir, NC 28645

MAXIMUM CAPITAL EXPENDITURE: **$1,899,799**

TIMETABLE: **See Reverse Side**

FIRST PROGRESS REPORT DUE: **December 1, 2005**

This certificate is effective as of the 23rd day of August 2005.

Chief, Certificate of Need Section
Division of Facility Services

CONDITIONS

1. Caldwell Memorial Hospital, Inc. shall materially comply with all representations made in the certificate of need application.

2 Caldwell Memorial Hospital, Inc. shall not acquire, as part of this project, any equipment that is not included in the project's proposed capital expenditure in Section VIII of the application or that would otherwise require a certificate of need.

3. Prior to issuance of the certificate of need, Caldwell Memorial Hospital, Inc. shall acknowledge acceptance of and agree to comply with all conditions stated herein in writing to the Certificate of Need Section.

TIMETABLE

Contract award (Notice to Proceed)	September 1, 2005
25% completion of construction (25% of contract in place)	October 1, 2005
50% completion of construction	November 1, 2005
75% completion of construction	December 1, 2005
Completion of construction	January 1, 2006
Occupancy/offering of service(s)	February 1, 2006

Exhibit 6

State of North Carolina

Department of Health and Human Services
Division of Health Service Regulation

Effective January 01, 2016, this license is issued to

Caldwell Memorial Hospital, Inc.

to operate a hospital known as

Caldwell Memorial Hospital, Inc.

located in Lenoir, North Carolina, Caldwell County.

This license is issued subject to the statutes of the State of North Carolina, is not transferable and shall remain in effect until amended by the issuing agency.

Facility ID: 933051

License Number: H0061

Bed Capacity: *110*

General Acute 110

Dedicated Inpatient Surgical Operating Rooms: 1
Dedicated Ambulatory Surgical Operating Rooms: 3
Shared Surgical Operating Rooms: 4
Dedicated Endoscopy Rooms: 2

Authorized by:

Richard O. Bry

Secretary, N.C. Department of Health and Human Services

Director, Division of Health Service Regulation

Exhibit 7

GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

Caldwell Memorial Hospital Inc
321 Mulberry St SW
Lenoir NC 28645-5720

Attn: Tim Harris
321 Mulberry St SW Lenoir
NC 28645

Customer Number : 1-23I96K
Quotation Expiration Date: 09-29-2016

The terms of the Master Purchasing Agreement, Strategic Alliance Agreement or GPO Agreement referenced below as the Governing Agreement shall govern this Quotation. No additional or different terms shall apply unless agreed to in writing by authorized representatives of both parties.

Governing Agreement:	MedAssets
Terms of Delivery:	FOB Destination
Billing Terms:	80% on Delivery/ 20% on Acceptance or First Patient Use
Payment Terms:	Upon Receipt
Total Quote Net Selling Price:	$1,226,116.80

INDICATE FORM OF PAYMENT:

If "GE HFS Loan" or "GE HFS Lease" is NOT selected at the time of signature, then you may NOT elect to seek financing with GE Healthcare Financial Services (GE HFS) to fund this arrangement after shipment.

____Cash/Third Party Loan

____GE HFS Lease

____GE HFS Loan

____Third Party Lease (please identify financing company)

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.

Each party has caused this agreement to be executed by its duly authorized representative as of the date set forth below.

CUSTOMER

_____ _____
Authorized Customer Signature Date

_____ _____
Print Name Print Title

_____
Purchase Order Number (if applicable)

GE HEALTHCARE
Scott Ramsey 08-05-2016
Signature Date

Product Sales Specialist

Email: Floyd.Ramsey@med.ge.com
Office: +1 919 621 1657
Mobile: 919-621-1657
Fax: 919-869-1618

GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

Total Quote Selling Price	**$1,381,116.80**
Trade-In and Other Credits	$155,000.00
Total Quote Net Selling Price	**$1,226,116.80**

To Accept this Quotation

Please sign and return this Quotation together with your Purchase Order To:
Floyd Ramsey
Office: +1 919 621 1657
Mobile: 919-621-1657
Email: Floyd.Ramsey@med.ge.com
Fax: 919-869-1618

Payment Instructions

Please **Remit** Payment for invoices associated with this quotation to:
GE Healthcare
P.O. Box 96483
Chicago, IL 60693

To Accept This Quotation

- Please sign the quote and any included attachments (where requested).
- If requested, please indicate, your form of payment.
- If you include the purchase order, please make sure it references the following information
  - The correct Quote number and version number above
  - The correct Remit To information as indicated in **"Payment Instructions"** above
  - The correct SHIP TO site name and address
  - The correct BILL TO site name and address
  - The correct Total Quote Net Selling Price as indicated above

"Upon submission of a purchase order in response to this quotation, GE Healthcare requests the following to evidence agreement to contract terms.
Signature page on quote filled out with signature and P.O. number.
**********OR**********
Verbiage on the purchase order must state one of the following: (i) Per the terms of Quotation #_____; (ii) Per the terms of GPO#_____; (iii) Per the terms of MPA #_____; or (iv) Per the terms of SAA #_____. Include the applicable quote/agreement number with the reference on the purchase order.
In addition, source of funds (choice of: Cash/Third Party Loan or GE HFS Lease or GE HFS Loan or Third Party Lease through _____), must be indicated, which may be done on the quote signature page (for signed quotes), on the purchase order (where quotes are not signed) or via a separate written source of funds statement (if provided by GE Healthcare)."

GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

08-05-2016

GPO Agreement Reference Information

Customer:	Tim Harris
Contract Number:	PLEASE SEE MEDASSETS CONTRACT # BELOW
Start Date:	
End Date:	07/31/2019
Billing Terms:	80% on Delivery/ 20% on Acceptance or First Patient Use
Payment Terms:	Upon Receipt
Shipping Terms:	FOB Destination

NOTICE REGARDING MAGNETIC RESONANCE ("MR") PRODUCTS. This notice applies only to the following GE Healthcare products: MR: Discovery MR750, Discovery MR750w, Discovery MR450 and Optima MR450w. GE Healthcare has reclassified several advanced software tools and associated documentation to a GE Healthcare Technical Service Technology package that GE Healthcare feels will bring greater value and interest to our customers. GE Healthcare will continue to provide trained Customer employees with access to the GE Healthcare Technical Service Technology package under a separate agreement. GE Healthcare will continue to provide customers and their third party service providers with access to software tools and associated documentation in order to perform basic service on the CT, MR and NM products listed above upon a request for registration for such access. This will allow GE Healthcare to react faster to the future service needs of GE Healthcare customers. If you have any questions, you can contact your sales Service Specialist.

Offer subject to the Terms and Conditions of the applicable Group Purchasing Agreements currently in effect between GE Healthcare and MedAssets includes MS03210 (MR).

GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

Item No.	Qty	Description
		Optima MR450w 1.5T GEM ES
	1	**Optima MR450w 1.5T GEM ES Promos**
1	1	Optima MR450w 1.5T GEM MR System ES Platform

The Optima MR450w 1.5T GEM MRI system from GE Healthcare is designed to deliver a comfortable patient-friendly environment while also delivering uncompromised clinical performance and streamlined workflow. The ES configuration includes the system electronics, operating software, imaging software, post-processing software and RF coil suite:

- eXtreme Gradient Technology
- Acoustic Reduction Technology
- OpTix RF Receive Technology
- Volume Reconstruction Engine
- Computing Platform and DICOM
- GEM Express Patient Table with IntelliTouch
- GEM Suite Coil Package
- Express 2.0 Workflow
- ScanTools and ES Tools

eXtreme Gradient Technology: The Optima MR450w delivers high temporal resolution through 3-axis gradient amplifier power supply and efficient gradient coil design as well as high spatial integrity through excellent magnet homogeneity and gradient linearity over a large FOV. In addition, the XRM gradients are non-resonant and actively shielded to minimize eddy currents, and use an innovative digital control architecture design to deliver high fidelity, accuracy and reproducibility.

- Peak amplitude per axis: 34 mT/m
- Peak slew rate per axis: 150 T/m/s
- Peak current & voltage: 660 Amps, 1650 Volts
- Digital PI feedback loop control
- Maximum FOV: 50cm
- Duty Cycle: 100%

Acoustic Noise Reduction Technology: The Optima MR450w GEM system features five levels of acoustic reduction technology to deliver an enhanced patient environment.

- Gradient & RF coil isolation
- Acoustic dampening material

Item No.	Qty	Description

- Vibro-acoustic isolation
- Gradient waveform optimization

OpTix RF Receive Technology: The OpTix RF receive chain enables high bandwidth, high channel count reception with improved SNR over conventional MR receiver designs. The MR signal is digitized within the scan room and then optically transmitted to the reconstruction engine in the electronics room increasing SNR for all volume acquisitions.

- Coil input ports: 138
- Simultaneous channel/receivers: 32
- Receiver sampling per channel: 80 MHz
- Receiver dynamic range at 1 Hz BW: >165 dB
- Receiver resolution: up to 32 bits
- Digital quadrature demodulation

Computing Platform: The Intel Xeon Nehalem Dual Core Processor computing platform utilizes a parallel, multi-processor design to enable simultaneous scanning, reconstruction, filming, post-processing, archiving, and networking. The keyboard assembly integrates an intercom speaker, microphone, volume controls, and emergency stop switch. Start scan, pause scan, stop scan and table advanced to center hot keys are also included.

- 8GB DDR3 Memory
- 146GB SAS disk subsystem
- 24" flat panel LCD with 1920x1200 resolution
- Single tower configuration
- DVD interchange

DICOM: The Optima MR450w GEM system generates MR Image, Secondary Capture, Structured Report, and Gray Scale Softcopy Presentation State DICOM objects. The DICOM networking supports both send and query retrieve as well as send with storage commit to integrate with PACS archive. Please refer to the DICOM Compliance Statement for Optima MR450w GEM for further details.

M7000ZM (1 unit included in S7525SB) GEM Express Patient Table with IntelliTouch: The GEM Express table is a mobile patient transport device with an embedded high-density, GEM Posterior RF Array and touch sensitive IntelliTouch land-marking. The fully detachable GEM Express table is easily docked and undocked by a single operator and simple to move in and out of the exam room for patient transport and

Item No.	Qty	Description

preparation. These features can be vital in instances where multiple patient transfers can negatively impact patient care or when emergency extraction is required.

The GEM Express table and embedded GEM PA coil are designed to accommodate head-first or feet-first imaging for all supported exams. The table features three high-density coil connection ports: one at each end and one embedded for the GEM PA. Two additional coil connection ports are included in the docking mechanism.

- Maximum patient weight for scanning: 500 lbs
- Maximum patient weight mobile: 500 lbs
- Maximum patient weight for lift: 500 lbs
- 205 cm symmetrical scan range
- Automated vertical and longitudinal power drive
- Fast longitudinal speed: 30 cm/sec
- Slow longitudinal speed: 0.5 cm/sec
- Integrated arm boards & non-ferrous IV pole
- IntelliTouch & laser land-marking

GEM Suite Coil Package: The Geometry Embracing Method - GEM - Suite of coils is designed to enhance patient comfort and image quality while simplifying workflow by ensuring that the geometry of the surface coil matches the geometry of the patient. The ES Coil Package includes:

- T/R Body Coil & T/R Head Coil
- GEM PA, HNU & AA Arrays
- GEM Standard Flex Suite & Positioner
- 3-channel Shoulder Array

M7000AA (1 unit included in S7525SB) The GEM Posterior Array is designed to provide optimal element geometry for each targeted anatomy by using different element geometries for the cervical-to-thoracic spine transition, thoracic and lumbar spine, and the body.

- Elements: 40
- Length: 100 cm; Width: 40cm
- S/I coverage: 100cm head-first or feet-first
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

The GEM PA is designed to be used in conjunction with the GEM HNU, GEM AA or GEM

Item No.	Qty	Description

Small AA (purchased separately), and the GEM PV Array (purchased separately), The GEM PA is invisible to additional surface coils placed directly on top of the table surface.

M7000AB (1 unit included in S7525SB) The GEM Head and Neck Unit includes the head base-plate and three anatomically optimized anterior arrays: the anterior Neuro-vascular array, the anterior cervical spine array, the anterior open-face array.

The GEM HNU may be positioned at either end of the GEM Express table to support head-first or feet-first imaging and may remain in place for all body, vascular, spine, and the majority of MSK exams. The GEM HNU base plate supports the patient's head and the Comfort Tilt variable-degree ramp can be positioned under the HNU base plate to elevate the coil to match the patient's head and neck position.

- Elements: up to 28 combined with PA and AA
- Length: 49.5 cm; Width: 38.8cm
- Height with NV Array: 36.8 cm
- Height with Cervical Array: 33.6 cm
- Height with Open Array: 25.7 cm
- S/I coverage: up to 50 cm with PA and AA
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

M7000AD (1 unit included in S7525SB) The GEM Large Anterior Array facilitates chest, abdomen, pelvis, and cardiac imaging. The GEM AA is lightweight, thin and flexible, and pre-formed to conform to the patient's size and shape. The GEM AA permits upper abdomen and pelvis imaging without repositioning the coil.

- Elements: up to 36 combined with PA
- Length: 55.6 cm; Width: 67.3cm
- S/I coverage: 54 cm
- R/L coverage: up to the full 50 cm FOV
- Parallel imaging in all three scan planes
- Head-first or feet-first positioning

M7000SC (1 package included in S7525SB) and M7005BE (1 unit included in S7525SB) The GEM Flex Suite is a versatile set of high-density 16CH receive arrays designed to provide high quality imaging in a wide range of clinical applications. The high degree of flexibility is particularly advantageous when imaging patients that do not fit the constraints of rigid coils. This standard set includes:

Item No.	Qty	Description

- Large Flex Array: 23 cm x 70 cm
- Medium Flex Array: 23 cm x 48 cm
- GEM Flex Interface Module P-Connector
- Positioning Devices

M7000AT (1 unit included in S7525SB) The 3-channel Shoulder Array offers the increased signal-to-noise characteristic of phased-array technology, along with unique sleeve design that delivers exceptional joint-imaging capabilities.

Workflow: Express Workflow 2.0 incorporates features designed to streamline and automate exams.

- In-Room Operator Console and controls
- IntelliTouch land-marking
- Protocol Libraries & Management Tools
- Workflow Manager & Auto Functions
- Inline Processing, Networking & Viewing
- Start Scan, Stop Scan, Pause/Resume Scan

The In-Room Operator Console and dual-sided controls enable interaction with the host computer from the magnet room. The user has direct control or selection of:

- Display of patient name, ID, study description
- Display and entry of patient weight
- Display and entry of patient orientation and position
- Cardiac gating waveform display
- EKG lead confirmation with gating control
- Respiratory waveform display
- IntelliTouch Landmarking
- AutoStart
- Display of coil connection and status
- Display of table location and scan time
- Screen saver

Express Exam enables complete control of protocols for prescription, archiving, searching, and sharing. Protocols are organized into two libraries – GE authored and Site authored – and Protocol Notes allow customized notes to be saved with each protocol. ProtoCopy enables a complete exam protocol, from either a library or

Item No.	Qty	Description

previous exam, to be shared with a mouse click, and the Modality Worklist provides an automated method of linking exam and protocol information for a patient directly from a DICOM Worklist server.

The Workflow Manager controls the execution of scan prescription, acquisition, processing, viewing and networking and may automate these steps, when requested by the user. Auto Coil Prescription automatically selects the optimum subset of elements, and AutoStart automatically starts the first acquisition as soon as the technologist exits the magnet room.

Processing steps are automatically completed with Inline Processing once the data have been reconstructed and the images saved into the database. For certain tasks, the user must accept the results or complete additional steps prior to saving the images. These automatic Inline Processing steps can be saved into the Protocol Library.

Inline Viewing allows the user to conveniently view, compare, and analyze images from the Scan Desktop by selecting the desired series from the Workflow Manager.

ScanTools: ScanTools 25.1 and the ES clinical package deliver an expansive portfolio of advanced applications, imaging options, and visualization tools packaged with the system operating software to provide extensive clinical capability and enhanced productivity.

Advanced Neuro Applications:

- PROPELLER 3.0 motion robust radial FSE
- PROPELLER 3.0 FSE-based diffusion imaging
- 3D Cube 2.0 FSE-based 3D imaging
- Dual Inversion 3D Cube imaging
- Spin Echo & Fast Spin Echo Suites
- T1-FLAIR & T2-FLAIR Suite
- Gradient Echo & Fast GRE Suites
- Spoiled Gradient Echo & Fast SPGR Suites
- Echo Planar, EPI FLAIR & fMRI EPI Suites
- EchoPlus with RTFA diffusion imaging
- 3D FIESTA & 3D FIESTA-C steady-state imaging
- 3D BRAVO IR-prepped fast SPGR imaging
- 3D COSMIC modified steady-state imaging

Item No.	Qty	Description

- 2D/3D MERGE multi-echo recombined GRE imaging
- PROBE PRESS single voxel spectroscopy
- BrainSTAT GVF & AIF parametric maps
- Ready Brain automated brain exam prescription
- DWI Prep

Advanced Spine & MSK Applications:
- PROPELLER 3.0 motion-robust radial FSE
- 3D Cube 2.0 FSE-based 3D imaging
- Spin Echo & Fast Spin Echo Suites
- Gradient Echo & Fast GRE Suites
- 3D COSMIC modified steady-state imaging
- 2D/3D MERGE multi-echo recombined GRE imaging
- High Bandwidth FSE artifact reduction
- Spectral Spatial Fat Suppression

Advanced Body Applications:
- Body Navigators pencil-beam diaphragm tracker
- PROPELLER 3.0 motion robust radial FSE
- Spin Echo & Fast Spin Echo Suites
- Gradient Echo & Fast GRE Suites
- 3D Cube 2.0 FSE-based 3D imaging
- 3D LAVA T1 DCE imaging with Turbo ARC
- 2D/3D Dual Echo Fat-Water Imaging
- 3D FRFSE MRCP & HYDRO imaging
- Enhanced SSFSE single-shot FSE imaging
- 2D FS FIESTA steady-state imaging
- Multi-phase DynaPlan
- SmartPrep automated bolus detection
- Fluoro Trigger real-time bolus monitoring
- Respiratory Compensation, Gating & Triggering
- iDrivePro & iDrivePro Plus real-time imaging
- SPECIAL IR Fat Saturation

Advanced Vascular Applications:

Item No.	Qty	Description

- Body Navigators pencil-beam diaphragm tracker
- 2D/3D Time-Of-Flight & 2D Gated Time-of-Flight
- 2D/3D Phase Contrast & Phase Contrast Cine
- SmartPrep automated bolus detection
- Fluoro Trigger real-time bolus monitoring
- 3D QuickStep automated multi-station imaging
- Magnetization Transfer& Flow Compensation
- Peripheral & EKG Gating & Triggering
- Respiratory Compensation, Gating & Triggering

Advanced Cardiac Applications:

- Double-Triple IR-FSE with spectral fat suppression
- FastCine FGRE-based, gated multi-phase imaging
- 2D FIESTA Cine steady-state, gated multi-phase imaging
- 3D FS FIESTA steady-state coronary imaging
- iDrivePro Plus real-time inter-active imaging
- Blood Suppression
- Cardiac Navigator diaphragm tracker
- Cardiac Compensation, Gating & Triggering
- Respiratory Compensation, Gating & Triggering
- Cine Paging (128 images/4 windows @ 30fps)

Advanced Imaging Tools:

- ARC & Turbo ARC data-based parallel acceleration
- ASSET 3.0 image-based parallel acceleration
- Real Time Field Adjustment for DWI
- Chemical Shift Direction Selection
- 2D/3D GradWarp compensation
- Acoustic Reduction Technology
- IR Prep, DE Prep & T2 Prep
- Full Echo Train & Tailored RF
- Spectral Spatial Fat Suppression
- SPECIAL IR Fat Suppression
- ASPIR Fat Suppression

Item No.	Qty	Description

- Matrix ZIP 512 & ZIP 1024
- 3D Slice 2X ZIP & 4X ZIP
- Square Pixel & Rectangular FOV
- No Phase Wrap & No Frequency Wrap
- Extended Dynamic Range

Advanced Processing & Display:
- Inline Viewing & Inline Processing
- Image Fusion & Image Pasting
- SCIC & PURE surface coil intensity correction
- Multi-planar Volume Reformat
- Interactive Vascular Reformat
- ClariView Image Filtering
- Compare Mode & Reference Image
- Cine Paging (128 images/4 windows @ 30fps)

Advanced FuncTool Analysis:
- ADC maps & eADC mapping
- Correlation Coefficient analysis
- NEI Negative Enhancement Integral analysis
- MTE Mean Time To Enhance analysis
- Positive Enhancement Integral analysis
- Signal Enhancement Ratio analysis
- Maximum Slope Increase analysis
- Maximum Difference Function analysis
- Difference Function analysis

Neuro Expert Package
- eDWI
- SWAN
- DTI
- FiberTrak

The eDWI application includes the acquisition sequence and post-processing tools. It is designed to provide high signal-to-noise-ratio diffusion images of the brain and liver with short-acquisition time. Its multi-B feature is designed to provide measurement of

Item No.	Qty	Description

apparent diffusion coefficient (ADC) map with reduced effect of perfusion. In addition, "3 in 1" B value combining technique, applies diffusion weighting to all three gradients simultaneously, helping improve sensitivity. Its smart NEX feature significantly reduces the acquisition time. Inversion recovery has been deployed to provide robust fat suppression.

SWAN is a volumetric 3D acquisition technique that is sensitive to differences in susceptibility between different tissues. This technique acquires multiple-echoes at different echo times to highlight regions with increased T2* (susceptibility-induced) decay. Utilizing multiple-echoes, SWAN generates images with higher SNR when compared with similar techniques that rely on a single echo.

Diffusion Tensor Imaging (DTI) creates contrast based on the degree of diffusion anisotropy in cerebral tissues such as white matter. The DTI method expands Echo planar imaging capability to include diffusion imaging sequence using motion sensing gradient pulses along 6 to 155 orientations in order to generate tensor component images. With the Express Workflow, fractional anisotropy (FA) and Volume Ratio Anisotropy (VRA) maps may be automatically created after image acquisition without any user intervention.

FiberTrak is a host computer post processing tool expands the capability of Diffusion Tensor imaging by generation of 2D color orientation maps, 2D eigenvector maps, and 3D tractography maps from the diffusion tensor image data. The resulting datasets may be easily saved and archived for later use.

Vascular Expert Package

- Inhance Suite 2.0
- TRICKS
- Flow Analysis

The Inhance Suite application consists of several sequences designed to provide high-resolution images of the vasculature with short-acquisition times and excellent vessel detail. These sequences include: Inhance Inflow IR: Inhance Inflow IR is an angiographic method, which has been developed to image renal arteries with ability to suppress static background tissue and venous flow. This sequence is based on 3D FIESTA, which improves SNR, as well as produce bright blood images.

Inhance 3D Velocity: Inhance 3D Velocity is designed to acquire angiography images in brain and renal arteries with excellent background suppression in a short scan time. By combining a volumetric 3D phase contrast acquisition with parallel imaging,

Item No.	Qty	Description
		efficient k-space traversal, and pulse sequence optimization, Inhance 3D Velocity is capable of obtaining complete Neurovascular imaging in 5-6 minutes. Inhance 3D Deltaflow is a 3D non-contrast enhanced MRA application for peripheral arterial imaging. Inhance 3D Deltaflow is based on the 3D Fast Spin Echo technique and it utilizes the systolic and diastolic flow differences to help generate arterial signal contrast. A subtraction of the systolic phase from the diastolic phase images results in arterial only images, with venous and background suppression. Inhance 2D Inflow: The Inhance 2D Inflow pulse sequence is designed to acquire angiography images of arteries, which follow almost a straight path, i.e. femoral, popliteal, carotid arteries, etc. TRICKS provides high resolution multi-phase 3D volumes of any anatomy for fast accurate visualization of the vasculature. With segmented complex data recombination, TRICKS can accelerate 3D dynamic vascular imaging without compromising spatial detail. TRICKS also uses elliptic centric data collection for optimized contrast resolution and auto-subtraction for optimized background suppression. The result is time course imaging that does not require timing or triggering, provides high temporal and high spatial resolution, and enables the extraction of optimum phases of data. As a result, TRICKS enables reliable, high quality vascular imaging. Flow Analysis automates the review and analysis of gated phase contrast magnetic resonance (MR) images and generates a report for the referring physician. This version is available on the host computer. Flow Analysis has an automated edge detection algorithm that propagates through all the phases of the cine phase contrast series. The flow analysis measurement tab displays a summary chart of peak velocities in addition to individual velocity results from each phase of the cardiac cycle. A background correction may also be applied which is particularly suited to slow flowing fluid such as cerebrospinal fluid. Customizable Macros are a feature of Flow Analysis 4.0. These Marcos allow the user to quickly write a report specific to the patient being assessed with simple mouse clicks. The macros are customizable to reflect the language used by the reporting physician. Flow Analysis offers the capability to archive reports or cine images as seen in a DICOM format so they may be viewed on any DICOM viewer.
2	1	Optima MR450w with GEM Magnet Design To improve the patient experience and provide high image quality, no other

Item No.	Qty	Description

component of an MRI system has greater impact than the magnet. The Optima MR450w system features a short, wide bore magnet that delivers a large field of view. The magnet geometry has been optimized to reduce patient anxiety by providing more space in the bore and more exams with the patient's head outside of the magnet. The 50cm field of view provides uniform image quality and can reduce exam times since fewer acquisitions may be necessary to cover large areas of anatomy. Complemented by GE's active shielding technology, the Optima MR450w has very flexible installation specifications to provide easy siting. And with zero-boil-off magnet technology, helium refills are effectively eliminated, thus reducing operating costs and maximizing uptime.

Magnet:

- Manufactured by GE Healthcare.
- Operating field strength 1.5T (63.86 MHz).
- Active magnet shielding.
- Zero boil-off Cryogens.
- Magnet length 145cm.
- Patient Aperture 76 cm.
- Patient Bore Diameter 70cm.
- Patient Bore Length 105cm.
- Maximum Field of View 50 cm x 50 cm x 50 cm.

Magnet Homogeneity: Typical ppm and Guaranteed ppm shown.

- 10cm DSV 0.007 and 0.02.
- 20cm DSV 0.035 and 0.06.
- 30cm DSV 0.11 and 0.18.
- 40cm DSV 0.5 and 0.7.
- 45cm DSV 1.2 and 1.6.
- 50x50x45cm 2.3 and 3.6.
- 50cm DSV 3.3.

DSV = Diameter Spherical Volume. Homogeneity for an elliptical volume of 50cm (x,y) by 45cm (z) dimension volume is shown for reference. Fringe field (axial x radial):

- 5 Gauss = 4.0 m x 2.5 m.
- 1 Gauss = 6.2 m x 3.7 m.

Quiet Technology:
GE has implemented Quiet Technology on critical components of the Optima MR system to reduce

Item No.	Qty	Description
		acoustic noise and improve the patient environment. This technology enables full use of the eXtreme Gradient Platform for excellent image quality, while maintaining a safe environment for the patient. The technology encompasses the gradient coil, RF body coil, and magnet mounting.
3	1	Optima MR450w 1.5T GEM 32ch System Electronics 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. The Optima MR450w with GEM 1.5T MRI scanner from GE Healthcare offers a range of new functionality, provides a more patient-friendly environment, and is a clinical workhorse system for practices of all sizes and specialties. Volume Reconstruction Engine Architecture: The backbone of any high-channel count system is the reconstruction architecture. The MR450w utilizes the latest multi-core processing engine acquisition to disk technology, and bulk-access memory to deliver the necessary processing power to reconstruct data from high channel count coils. With 36,000 2D FFTs/sec an impressive volume to ensure you are not hampered in image reconstruction speed. The result is reliable and efficient processing MR data that enhances exam productivity.
4	1	Vibroacoustic Dampening Kit Material in the Vibroacoustic Dampening Kit can significantly attenuate the transmission of gradient-generated acoustic noise through the building structure to nearby areas, including adjacent rooms and floors above or below the MR suite. If this kit is applied during the installation of a new magnet, no additional service charges are necessary. However, installation of the Vibroacoustic Dampening kit under an existing magnet requires special steps. The steps to prepare the site and steps to install, such as modifications to the RF screen room, and other magnet rigging, modifications to the RF screen room, and other finishing work, are not covered in the pricing.

Item No.	Qty	Description
5	1	Main Disconnect Panel The Main Disconnect Panel safeguards the MR system's critical electrical components, by providing complete power distribution and emergency-off control.
6	1	Preinstallation Collector and Cable Concealment Kit The Preinstallation Collector delivers to the site in advance of the magnet and main electronic components. This facilitates the later delivery and installation of supporting electronics. The following are the main components in the Preinstallation collector: • Heat exchange cabinet for distribution of chilled water. • Primary Penetration wall panel for support of the penetration cabinet. • Secondary Penetration wall panel for support of gradient filters, helium cables, and chilled air and water. • Helium cryocooler hose kit. The Cable Concealment Kit accommodates a wide-range of scan room ceiling heights and is designed to provide a clean-look installation by concealing the overhead cabling from view.
7	1	MR450w Dock and 32-Channel Switch Collector The MR450w Dock and 32-Channel Switch collector provides the interface between the magnet and GEM Express Patient Table with IntelliTouch. Also included is the RF signal switching hardware that routes the input signals to the respective OpTix receivers.
8	1	Optima MR450w Cable Configuration - A To accommodate various electronic and scan room configurations and sizes, the MR450w has preset lengths of cables and connector kits to speed system installation. This cable collection is compatible with fixed and relocatable building configurations.
9	1	English Keyboard Required for our operator console. This keyboard is ergonomically designed to keep your staff comfortable even through the longest shifts. The scan control keyboard assembly has an intercom speaker, microphone, volume controls and emergency stop switch.
10	1	Operator's Console Table Wide table designed specifically for the color LCD monitor and keyboard.
11	1	1.5T Calibration Phantom Kit

Item No.	Qty	Description
		This 1.5T calibration kit contains a large volume shim phantom, a daily quality assurance phantom, an echo-planar calibration phantom, and the associated loader shells.
12	1	Calibration Kit Phantom Holder Cart
13	1	Standard service package delivered for the warranty period.
14	1	Breast Expert Package - GEM 1.5T • VIBRANT • 1.5T 8-channel GEM Breast Array VIBRANT is a fast, high resolution T1-weighted imaging sequence and application optimized for evaluation of breast tissue. VIBRANT uses parallel imaging acceleration to quickly acquire multi-phase data without compromising spatial resolution. This 3D gradient echo technique, optimized for sagittal or axial acquisitions, uses an optimized inversion pulse and dual-shimming technology that yields enhanced image contrast and robust, uniform, bilateral fat suppression. For improved tissue contrast, VIBRANT is compatible with Flex imaging (sold separately). VIBRANT Flex acquisition will provide a water-only, fat-only, in-phase and out of phase data sets in a single acquisition and produce images with significantly reduced chemical shift and susceptibility artifacts. The GEM Breast Array generates high-definition breast images, designed for optimized use with ASSET and ARC parallel imaging techniques to accelerate image acquisition for both 2D and 3D data sets. The eight element phased-array coil helps ensure excellent temporal and spatial resolution, patient after patient. The array is compatible with VIBRANT, VIBRANT Flex, IDEAL, Fast Spin Echo, Fast Gradient Echo, spectroscopy and diffusion imaging sequences, and includes a set of MR compatible biopsy grids.
15	1	1.5T Small Flex Coil with Interface - P Connector The Small Flex Coil is the smallest of a versatile set of high density 16-channel receive coils designed to give high quality images in a wide range of applications. The smallest of these three coils is optimized for the reduced field of view and improved image quality needed in hand, wrist, and elbow imaging applications. Together with an extra interface assembly, this coil is ideal for MR sites doing a higher volume of musculoskeletal scans.

Item No.	Qty	Description
		The high degree of flexibility is particularly advantageous when imaging patients that do not fit the constraints of rigid coils, improving the patient and technologist experience, and enabling most exams to be completed with the same level of image quality expected from dedicated coils. The Small Flex Coil is compatible with the Discovery MR450 and Optima MR450w systems with the standard Express Patient Table and also with the MR450w systems with the GEM Express Patient Table. Includes: • 1.5T Small Flex Coil. • Flex Interface Module 16-channel Fixed, P-Connector. • Flex Interface Module Cover.
16	1	GE MR Heat Exchanger Manual Cryogen Compressor Water Bypass Option Add a level of magnet protection with a Manual Cryogen Compresor Bypass. In case of a power failure, you can cycle municipal or facility water through the cryogen compresor and reduce cryogen loss and reduce the likelihood of quenching. FEATURES AND BENEFITS • Easy to install and simple to use • Helps switch over water supply to your cryogen compressor in the event of loss of power to reduce cryogen loss • Includes fluid supply pressure gauge, temperature gauge and flow rate meter for easy verification of operation • Manual operation reduces unintentional switch-overs and coolant dumping during brown-outs and supply power glitches COMPATIBILITY Must be used with a GE MR Heat Exchanger: • E8911CA • E8911CB • E8911CC • E8911CD • E8912CA • E8912CB • E8912CC • E8912CD NOTES:

Item No.	Qty	Description
		• Item is NON-RETURNABLE and NON-REFUNDABLE
17	1	GE Optima MR450w Heat Exchangers - 49kW (20Tons) Cooling for your GE Healthcare MR system has never been so easy. GE Healthcare has partnered with the Glen Dimplex Group, a world leader in cooling systems, to offer heat exchangers designed to meet the needs of your MR System. Now you can look to GE Healthcare for your entire MR purchase and support. This heat exchanger is highly reliable and the only unit verified to perform with the new platform of GE Healthcare MR systems. As part of your integrated GE Healthcare solution, you'll work with a single contact throughout the whole installation. A Project Manager of Installation will help with building layout, room designs, delivery and installation - every step until your system is ready to scan. Our team will work seamlessly with architects, contractors and your internal team to help ensure timely, cost-effective completion. Once your cooling system is running, you'll get fast, highly-skilled service support managed through GE Healthcare - with the same quality and response time you expect from your MR system. FEATURES AND BENEFITS o Designed to provide stable fully dedicated cooling for your MR system's needs o Water/glycol outdoor-air-cooled heat

Item No.	Qty	Description
		exchangers to support your highest exam volumes and your full range of diagnostic procedures o Redundant fluid pumps with automatic switchover let you keep operating with no loss of cooling even if one pump goes down o Quad compressor, dual tandem refrigeration circuit design saves on energy while your system smoothly transitions through the 10% to 100% heat load capacity cycles of patient scanning and idling o Quiet operation between patient exams and overnight - ideal for facilities in residential areas o Comes with installation support, installation visits, preventative maintenance visit and 1 full year of parts and labor warranty o Installation support includes: support through GE's Project Manager of Install, GE's Design Center, technical support from the Glen Dimplex company, two (2) installation visits o Comprehensive and quality service rapidly delivered through our CARES service solution o 65 gallons of 100% glycol concentrate for complete system filling and diluting o Wall mounted remote display panel provides the ability to monitor the system's operation and indicates possible system errors o Filter kit with flow meter helps to ensure purity of water prior to entry to the MR system o Highly recommended that Vibration Isolation Spring Kit (E8911CJ) be added for systems that will be roof top mounted

Item No.	Qty	Description
		SPECIFICATIONS o Net Cooling Capacity: 49 kW / 20 Ton o Maximum Coolant Flow: 35 gpm (132 l/m) o Coolant Outlet Temperature: 48 F (8.9 C) o Coolant Temp Stability: E 1.8 F (E1.0 C) o Max Coolant Pressure : 70 Psi (4.8 Bar) o Refrigerant: R407C o Ambient Temp Range: -20 to 120 F (-30 to 50 C) o Condenser Air Flow (Approx): 18,000 Cfm o Tank Capacity: 100 gal (378 l) o Flow Meter Range: 4-40 gpm o Filters: 50 micron cartridge filters o Supply Voltage: 460v / 3 phase / 60 Hz o Coolant Connections: 2" NPTF o Overall Size (L x W x H) 44" x 136" x 84.5" COMPATIBILITY: o GE MR450w or MR System NOTES: o Item is NON-RETURNABLE and NON-REFUNDABLE
18	1	TiP MR System Upgrade Training 10 Days Onsite 10 Hours TVA 10 Days plus 10 Hours TVA training for New MR system Installation Training. Onsite days are delivered in 3 site visits. Onsite training is delivered Monday through Friday between 8AM and 5PM. T&L expenses are included. This training program must be scheduled and completed within 36 months after the date of product delivery.
	1	AW upgrade and CAD **AW VOLUMESHARE 7**
19	1	AW Hardware Upgrade to VolumeShare 7 with Two Flat Panel Monitors and 32GB of RAM. All applicable existing licenses will be transferred at system install. NOTE: The AW Workstation that is to be Upgraded with this purchase becomes the

Item No.	Qty	Description

Property of GE Healthcare. Upon Installation Of the New AW Workstation, the current AW Unit must be De-Installed and Returned To GE Healthcare.

NOTE: A Signed Trade-in Addendum Required Upon Order.

AW VolumeShare 7 is a multi-modality image review, comparison and post processing workstation built with simplicity and power at its core. Powerful software is optimized to take advantage of state of the art 64 bit technology and multiple cores to ensure leading edge performance.

AW VolumeShare 7 features include:

Hardware:

- HP Z440 Workstation
- CPU: Intel Xeon E5-1660v3 (Haswell) Eight-Core @ 3.0 GHz with 20MB L3 Shared Cache each with Dual QPI @ 8 GT/s
- RAM: 32GB (8x4GB) Four-channel DDR4 ECC RDIMM @ 2133 MHz
- GRAPHICS: NVIDIA Quadro NVS310 with 1 GB Video RAM
- 1x 256GB SATA3 SSD for OS and Apps
- 2x 512GB SATA3 SSD in RAID 0 for 1TB data storage
- 2x 19" 1280x1024 color monitors

Software:

- GE Healthcare HELiOS 6 operating system
- Volume Viewer for advanced post-processing
- Demo Exams for training and exploration
- Fast access to information you need through optional RIS integration & priors post-fetch
- Efficient workflow through dynamic load, end review and Key Image Notes features
- Productivity package to pre-process exams and allow up to 8 simultaneous sessions
- Applications usage monitor to track and view usage of your system
- Smart layouts with Volume Viewer General review protocol that optimizes comparison and single exam layouts
- Enhanced multi-modality contouring tool with support for PET SUVs
- Support for external DICOM USB media and preference management tool to exchange preferences across users
- Support for optional, broad suite of multi-modality advanced applications

Item No.	Qty	Description
20	1	AW VolumeShare 7 Software Only Upgrade Includes: • SW Only upgrade to VolumeShare 7 • Pre-Processing • Upgrade to 24GB RAM Software upgrade to AW VolumeShare 7. AW VolumeShare 7 Software Upgrade REQUIRES HPZ800 Hardware
21	1	AW VolumeShare 7 (z800) RAM capacity Upgrade Kit Increasing RAM is important to support processing of larger volumes of data generated with sophisticated post processing applications, larger average slice counts or multi-dimensional modalities such as MR and GSI.
22	1	CADstream 5.5 with SureLoc on AW CADstream includes hardware and post processing software that facilitates analysis and management of breast image data. Image processing is performed automatically, using predefined templates for non-rigid image registration, subtraction, parametric maps, maximum intensity projection and multi-planar reformat. CADstream also generates reports that include images and graphs that can be exported in PDF or DICOM formats. CADstream includes SureLoc - a tool that helps radiologists to more efficiently calculate coordinates for MR-guided interventions at the point of procedure. SureLoc reports needle position in real time and displays images and needle position in the patient's orientation. The following new features are available on CADstream 5.5: • CADalog, CADstream's study library provides instant access to CADstream-processed studies. • Easily view and align patient studies side by-side for comparison. • Automatically calculate differences between studies, including changes in lesion sizes and diameters. • Report changes between studies using the CADstream Portfolio. • Multiple configurations provide improved scalability to accommodate MRI program growth, including increases in study volume, physicians reading locations. • CADstream integrates at the work-list level with many PACS, including Merge, GE, Carestream, McKesson and Sectra.

Item No.	Qty	Description
		The BIRADS-centric user interface guides use through the recommended assessment for location size, morphology and kinetics analysis, and automates reporting. • Smart, adaptive motion correction automatically registers in 2D or 3D, depending on patient movement. • Allows users to select the worst curve within a lesion. • Provides the ability to grow or shrink region of interest for improved reporting of DCIS or treated lesions. • Improved reports and renderings enhance communication with referring physicians and patients.
23	2	2 Days TiP Onsite Training Advantage Windows Workstation--MR One 2 day TiP onsite visit for MR Advantage Windows Workstation training. Includes T&L expenses. Days provided consecutively. This training program must be scheduled and completed within 12 months after the date of product delivery.
		UPS
	1	**POWER QUALITY**
24	1	700 VA Partial System UPS - MR Tested with all MR system computers, the 700VA Partial System UPS provides reliable, clean, consistent power for the data processing portion of the MR imaging system. The use of the double conversion UPS enables the MR system data processing portion electronics to operate when there is a power anomaly or total power loss. Valuable data and the system operating software are protected, if there is an extended outage the UPS allows for an orderly shutdown of the system. FEATURES/BENEFITS • True double-conversion, online technology provides reliable operation and uninterrupted glitch free power • Automatic frequency selection eases startup, i.e., 50 or 60 Hz compatible • Integral Electronic Static Bypass switch means zero transfer time • Improves user productivity, system reliability, reduces service costs and increases system uptime • Advanced Battery Management (ABM) software monitors / indicates battery health and improves battery service life SPECIFICATIONS

Item No.	Qty	Description
		• Dimensions (H x W x D): 9.09" x 6.3" x 13.9" • Weight: 26 lbs. • Input Voltage Range: Single Phase 80-138 V • Input Frequency Range: 47-70 Hz • Rating: 700 VA / 630 W COMPATIBILITY • MR Systems NOTES • This is a partial system UPS - it covers only the computer, not the entire MR imaging system. After a power event portions of the system will have to be reset before operation can resume • Customer is responsible for rigging and arranging for installation with a certified electrician • ITEM IS NON-RETURNABLE AND NON-REFUNDABLE
		Caring MR Suite
	1	**NonProducts**
25	1	Caring MR Suite Electronics $110,000

Quote Summary:

2006 Signa HD 1.5T HDMR	**($155,000.00)**
Total Quote Net Selling Price	**$1,226,116.80**

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

GE Healthcare

Date: 08-05-2016
Quote #: PR13-C1598
Version #: 9

Options

(These items are not included in the total quotation amount)

Item No.	Qty	Description	Ext Sell Price	
26	1	**Optima MR450w 1.5T GEM ES** 1.5T MR-Touch MR-Touch is a non-invasive method to measure relative tissue stiffness with MR. MR-Touch is a new acquisition and reconstruction technique that combines hardware, and acquisition and reconstruction algorithms to produce Elastograms, color-coded anatomical images showing varying degrees of elasticity or stiffness. The image contrast is related to relative stiffness of soft tissue and is generated from the real-time data acquisition during tissue palpation with low amplitude and low frequency sound waves. The hardware component is comprised of an active sound wave generator and a passive transducer that produces small vibrations in the area of the patient to be scanned. The MR-Touch acquisition software is an evolutionary improvement to the gradient echo sequence. The acquisition software also triggers the sound wave generator to produce synchronized vibrations on the surface of the patient during the data acquisition. The reconstruction algorithms generate images that show the propagation of sound waves through the tissue (phase images) and also the corresponding strain wave and relative stiffness images. Parallel imaging is used to accelerate image acquisition and provide for whole liver coverage in a few breath holds.	$139,000.00	X_____

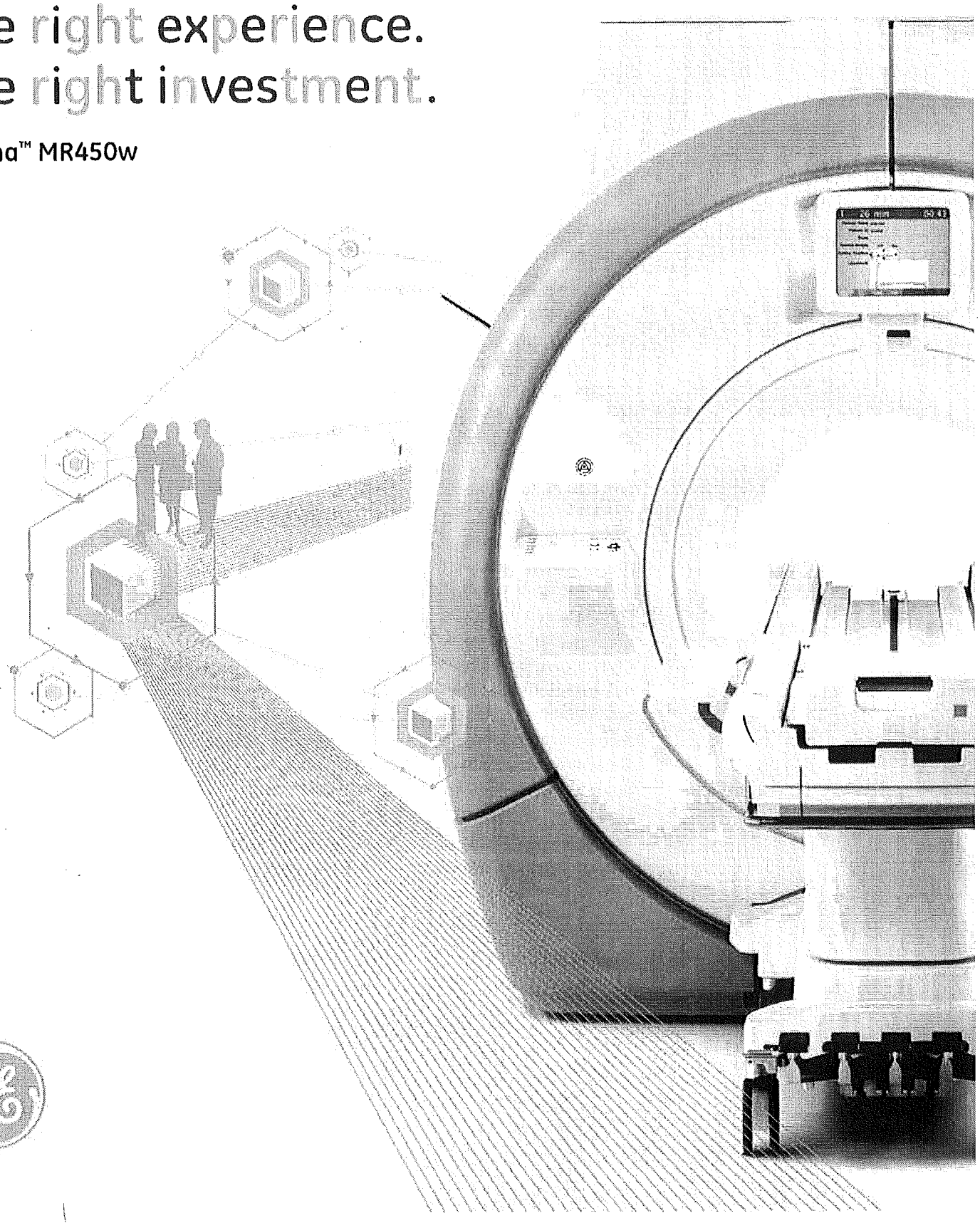
(Quoted prices do not reflect state and local taxes if applicable. Total Net Selling Price Includes Trade In allowance, if applicable.)

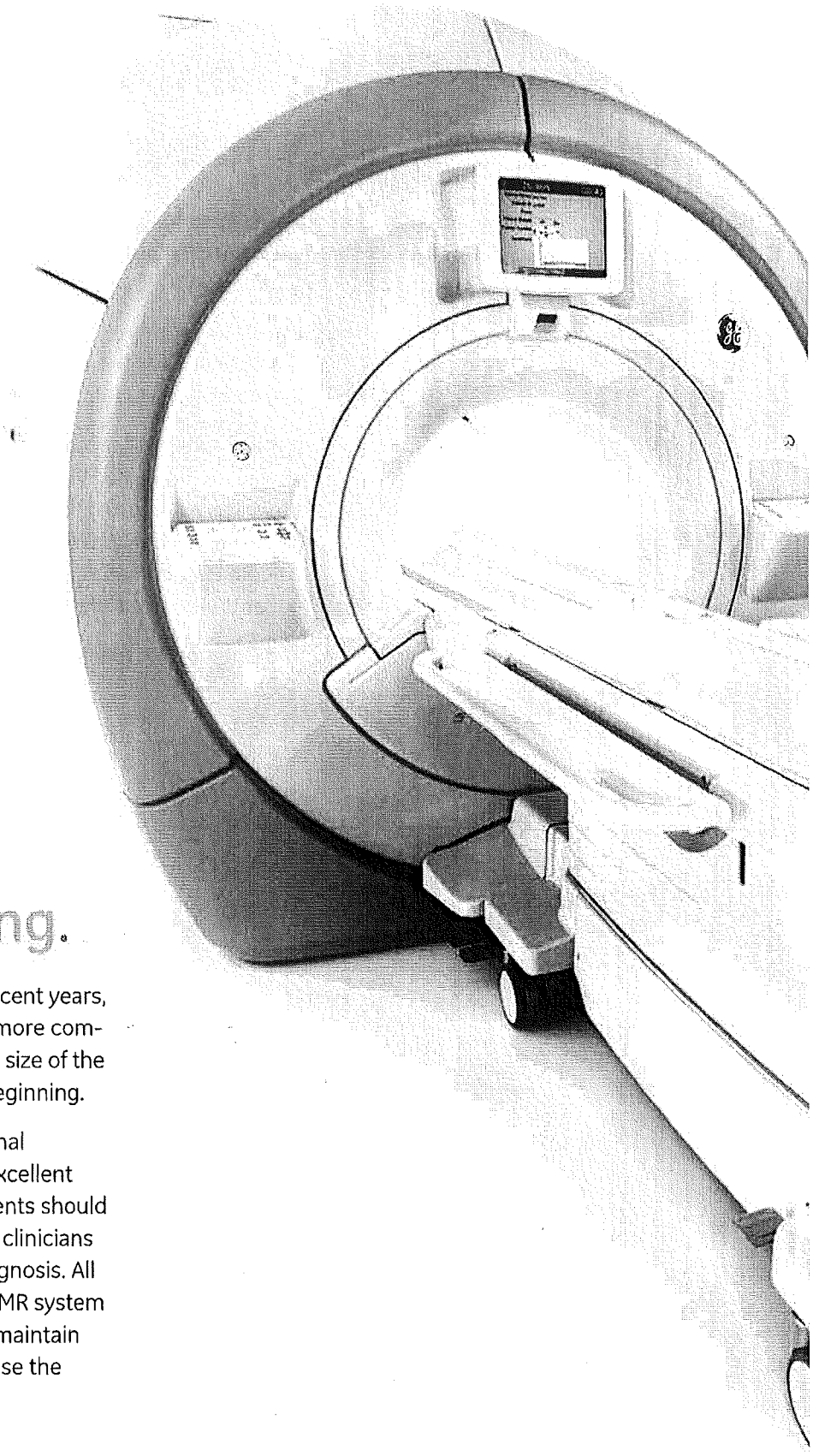
Exhibit 8

GE Healthcare

The right capabilities.
The right experience.
The right investment.

Optima™ MR450w





The world of MR is always changing.

Patient expectations of MR have shifted in recent years, as people have begun demanding 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 definitive 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.

Today, the right way has arrived.

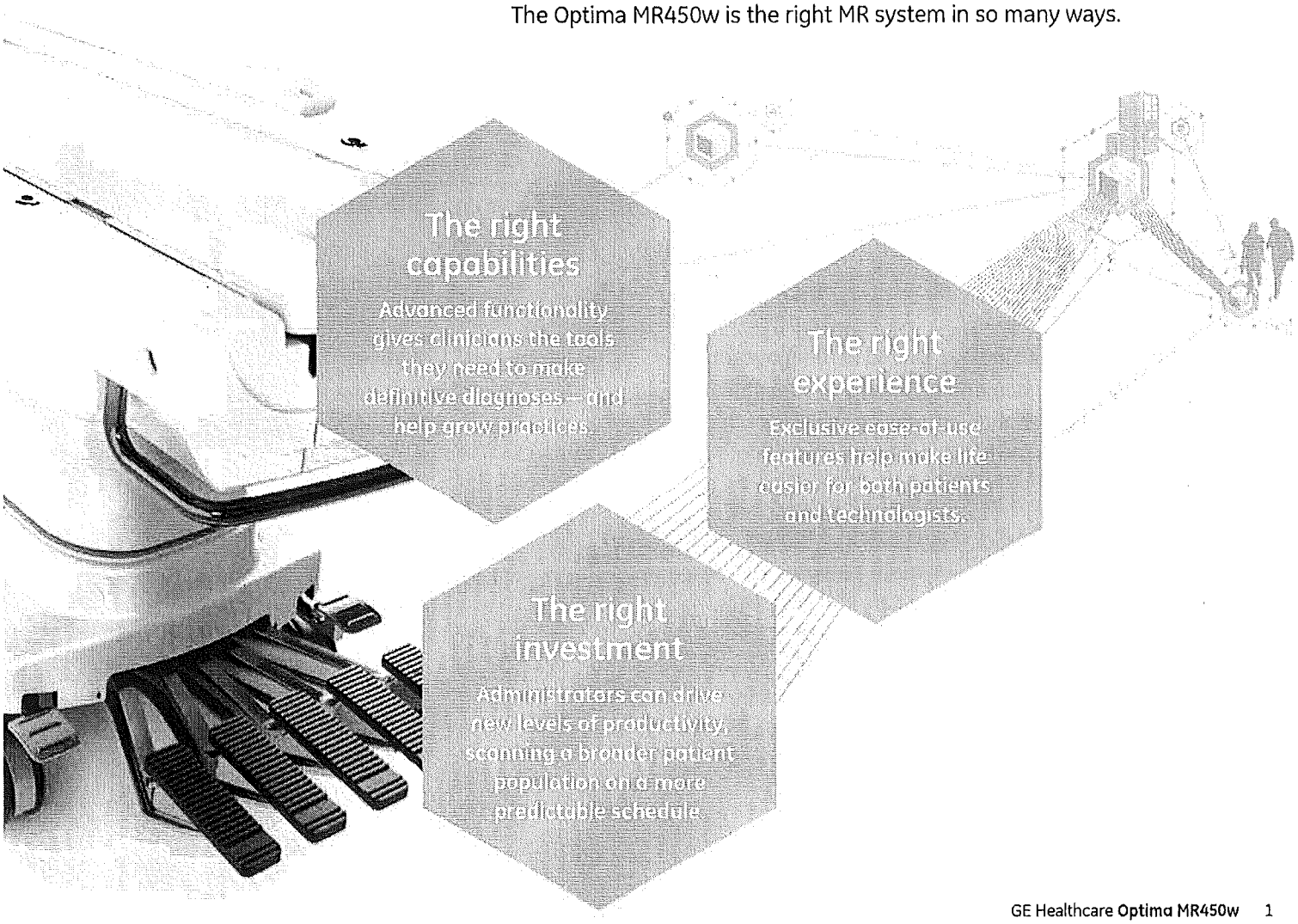
The Optima MR450w is wide-bore MR done right.

Thanks to cutting-edge technologies, we've advanced the capabilities of wide-bore MR by delivering both uncompromised image quality and high productivity—all with an expansive 50cm field of view.

But it's about more than the bore. Built on a fully redesigned MR platform, the Optima MR450w offers a range of advanced new functionality, making it a workhorse system for practices of all sizes and specialties.

It is also extremely accessible. Its cost and capabilities make it a great choice for first-time MR customers who can make it their only scanner, as well as established MR users seeking a versatile, hard-working system. Its 1.5T field strength is the industry's best-known and most-used. And its bore diameter and field of view make MR scans accessible to more patients who need them.

The Optima MR450w is the right MR system in so many ways.



The right capabilities

Advanced functionality gives clinicians the tools they need to make definitive diagnoses—and help grow practices.

The right experience

Exclusive ease-of-use features help make life easier for both patients and technologists.

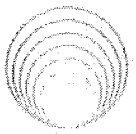
The right investment

Administrators can drive new levels of productivity, scanning a broader patient population on a more predictable schedule.

The right capabilities — to diagnose *and* grow.

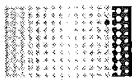
The Optima MR450w delivers exquisite image quality to aid in your diagnosis. To meet your high quality expectations, the advanced capabilities of our Discovery™ MR platform have been applied in the Optima MR450w, making it both versatile and powerful.

FROM ADVANCED TECHNOLOGIES...



Redesigned magnet

A completely new 145cm long magnet is designed to ensure uniform tissue contrast in a patient-friendly space.



eXtreme gradients

Strong whole-body gradients deliver 34 mT/m amplitude and 150 T/m/s slew rate on each axis, yielding scans that are fast, accurate, and highly reproducible.

OpTix RF digital receiver

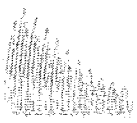
An exclusive optical RF system increases signal clarity and maximizes signal intensity for clean, crisp images.

Anatomy-optimized RF coils

High-density coils focus elements around the anatomy of interest and provide extended coverage where needed, for optimal image quality in virtually every procedure.

Express patient table

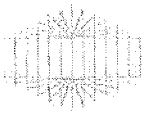
A fully removable table minimizes time between scans to help boost productivity.



Acoustic Reduction Technology

Reduce an acquisition's acoustic noise with virtually no compromise to image quality.

...COME POWERFUL ABILITIES.



Large field of view

With a 50cm field of view, you can cover more anatomy in fewer scans.

Unmatched breast imaging

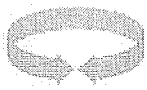
Thanks to applications like IDEAL and VIBRANT-FLEX, no comparable solution can capture so much so well.

Two-station whole-spine imaging

Acquire an entire spine in a fraction of the time—and with multiple contrasts.

Holistic Liver Assessment

An industry first, MR-Touch opens up new opportunities for care by identifying variations in liver tissue stiffness.

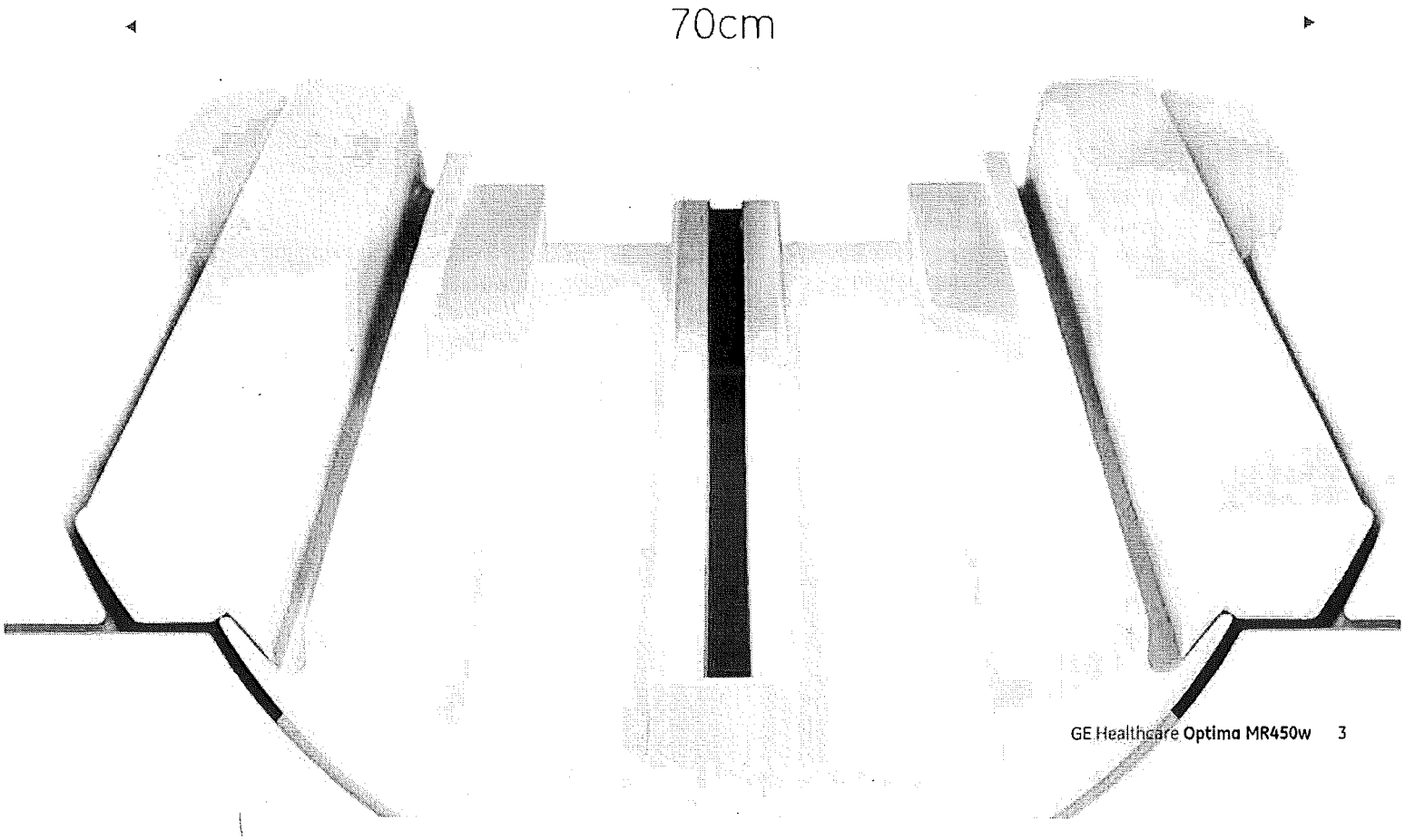


3-D Arterial Spin Labeling (3D ASL)

Generate a full-coverage, high-SNR 3D image of the brain, great for evaluating cerebrovascular conditions such as stroke.

Growing your offerings — and your practice

Along with these capabilities, the system's wider bore opens up additional pathways for diagnosis and treatment. Greater patient positioning freedom and access enables interventional procedures. Such procedures give practices new ways to care for patients, opening new opportunities for increased patient referrals.



The right experience — for patients

The Optima MR450w comes with a 70cm bore, offering a more comfortable experience for your patients — especially larger individuals, children, and those prone to claustrophobia. And the improved patient experience goes beyond the bore — next-generation clinical applications help reduce exam time and improved patient comfort features result in a cooler, quieter experience.

Image A

Image B

A work of ART

Acoustic Reduction Technology delivers a quieter patient experience

The right MR experience goes beyond bore size and positioning — patients today are also demanding a quieter MR acquisition. New Acoustic Reduction Technology (ART) delivers just that, reducing acoustic noise.

ART is a highly useful application that's usable in brain, spine and MSK scans. And because ART reduces noise by optimizing the gradient performance, there's virtually no compromise to image quality.

Image B, captured at the same resolution and scan time as image A, was acquired using ART. The acquisition was 10 dBA quieter — with virtually no compromise to image quality.

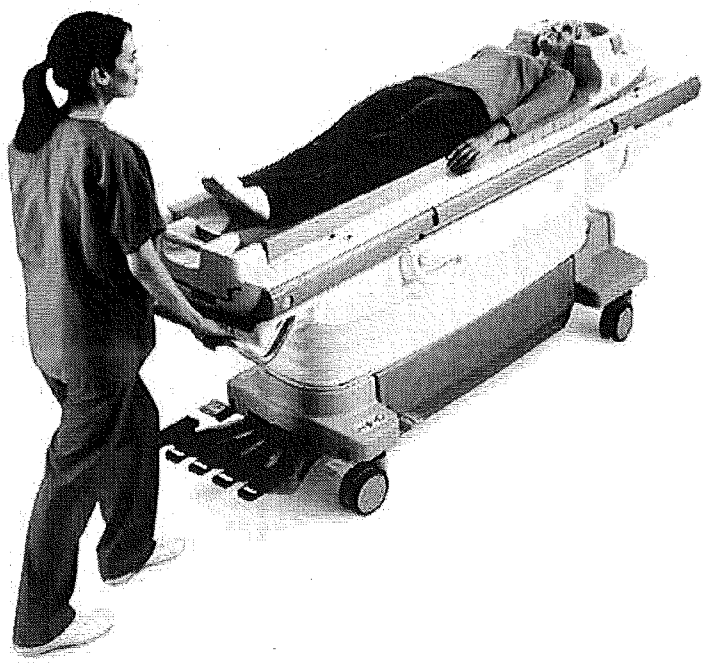
Express Patient Table

Transfer patients once to improve throughput.

Easily docked and undocked by a single technologist, the Express detachable patient table helps improve workflow and efficiency by minimizing time between scans. It allows for faster patient positioning accuracy compared to fixed table designs, and can support up to 500 lbs.

Patients are able to prep in private, and single transfers of patients directly onto the MR table create a more comfortable patient experience. In the event of an emergency, just one technologist can typically undock the table and safely transport the patient out of the room in under 30 seconds.

Beyond productivity, the table enables new kinds of growth for your practice, including interventional radiology and advanced breast imaging.



The right experience — for technologists

Staying on schedule has an added benefit — it may help increase the job satisfaction of technologists, aiding in their retention. This can help enable administrators to hold onto talent longer, saving on turnover and training costs.

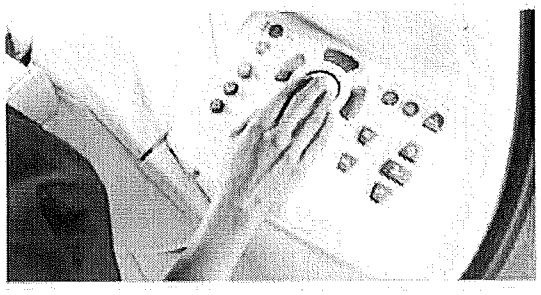
In-Room Operator Console

Fast exam setup – at your fingertips

Mounted conveniently on the front of the magnet, the high-resolution color console of the Optima MR450w consolidates patient set-up information and operator controls in one place that's easy to see. View patient, system and scan information, control and select parameters, change scanner configurations, and initiate scans in real time right in the room. Save footsteps by eliminating multiple trips to and from the control room.

When AutoStart™ is selected on the iROC, the system will start scanning automatically when the scan room door is closed.

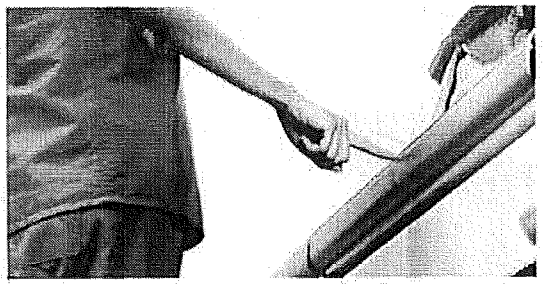
Optional



Dual-sided scanner control panels

Within reach

Control the scanner from either side of the patient table and easily access cardiac or peripheral gating leads and IV lines. Backlit buttons indicate the next logical step in the exam process, simplifying patient setup.



IntelliTouch patient positioning

Start scanning in just two simple steps.

Set up your patients in as little as 30 seconds, and in just two simple steps. Along with the use of the detachable table, IntelliTouch patient positioning shortens in-room set-up time by up to 70% over fixed-table designs.

To operate, simply press the IntelliTouch strip on either side of the patient table at the landmark location, then press the Advance to Scan button to begin scanning.

Optional

The right investment — for administrators.

In today's economic environment, productivity and throughput are top-of-mind for administrators everywhere. The Optima MR450w allows you to keep up with evolving expectations around comfort, capabilities, and definitive diagnosis. With an advanced suite of clinical applications—including IDEAL, LAVA-Flex, VIBRANT-Flex, and Cube—you can handle more patients with fewer scans, helping boost the efficiency of your practice and making scheduling more predictable.

Buying GE is a good long-term investment. With the GE Continuum, we can help you maintain your clinical capabilities and your competitive edge. And our world-class service organization will keep uptime high, year after year.

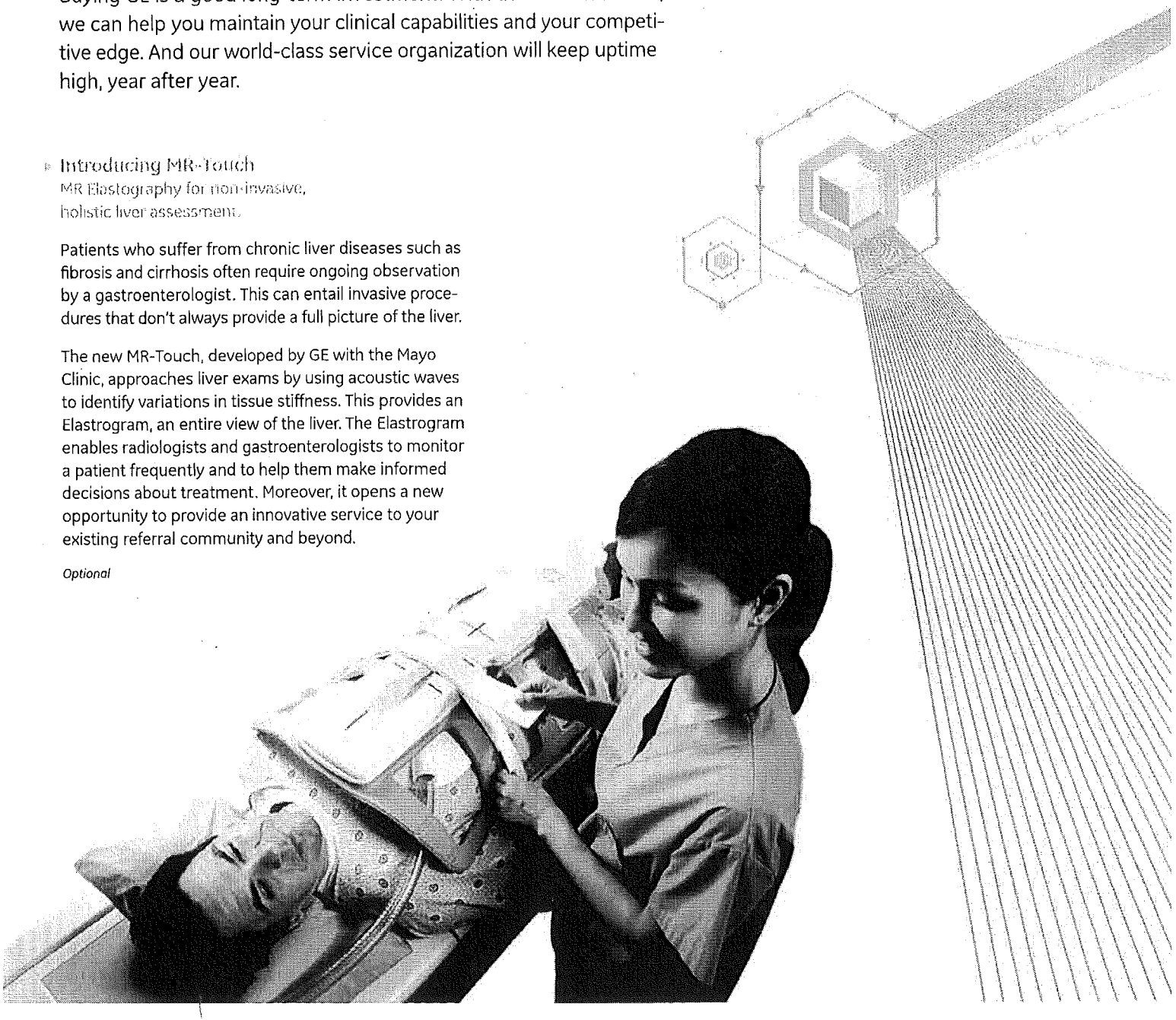
Introducing MR-Touch

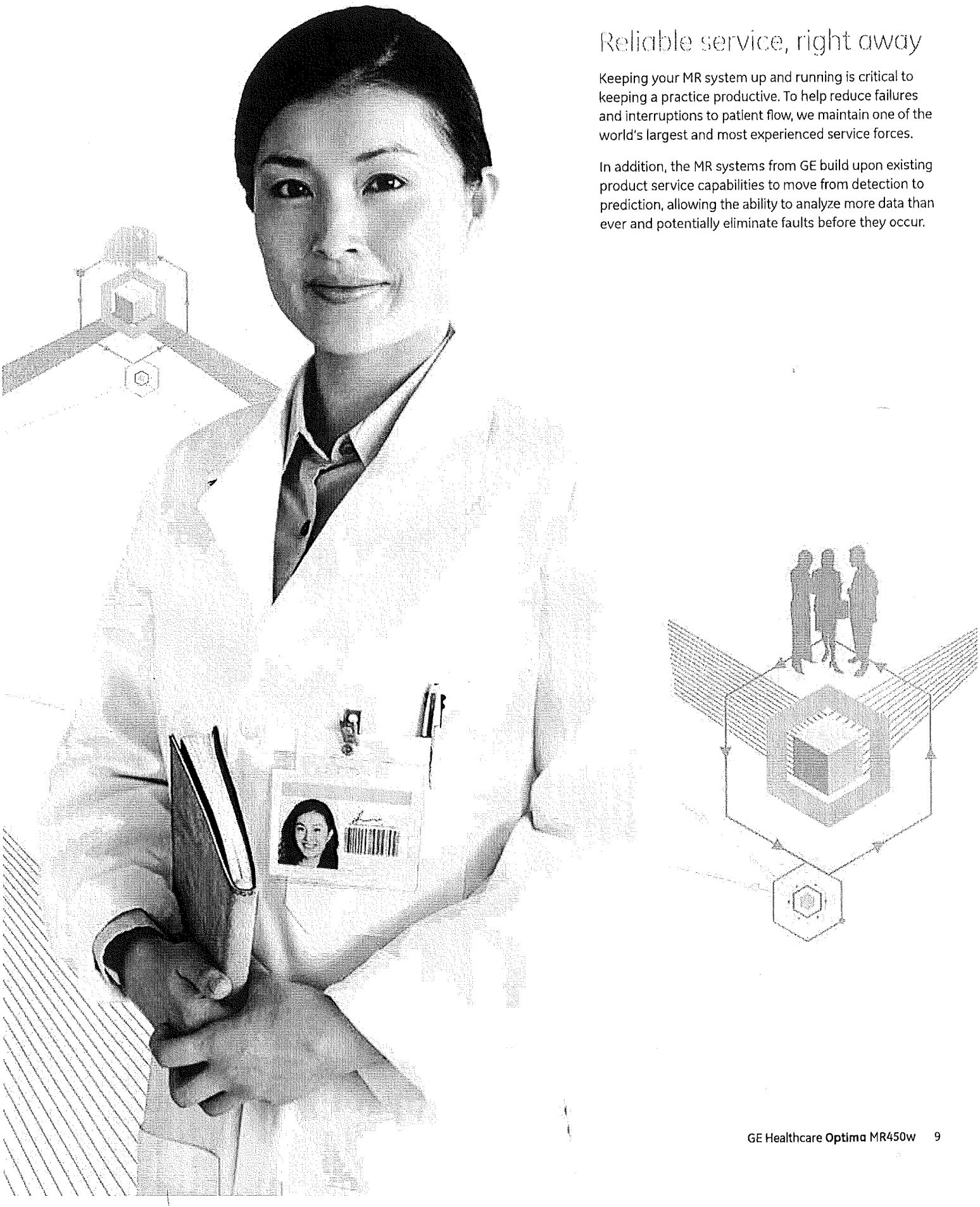
MR Elastography for non-invasive, holistic liver assessment.

Patients who suffer from chronic liver diseases such as fibrosis and cirrhosis often require ongoing observation by a gastroenterologist. This can entail invasive procedures that don't always provide a full picture of the liver.

The new MR-Touch, developed by GE with the Mayo Clinic, approaches liver exams by using acoustic waves to identify variations in tissue stiffness. This provides an Elastrogram, an entire view of the liver. The Elastrogram enables radiologists and gastroenterologists to monitor a patient frequently and to help them make informed decisions about treatment. Moreover, it opens a new opportunity to provide an innovative service to your existing referral community and beyond.

Optional





Reliable service, right away

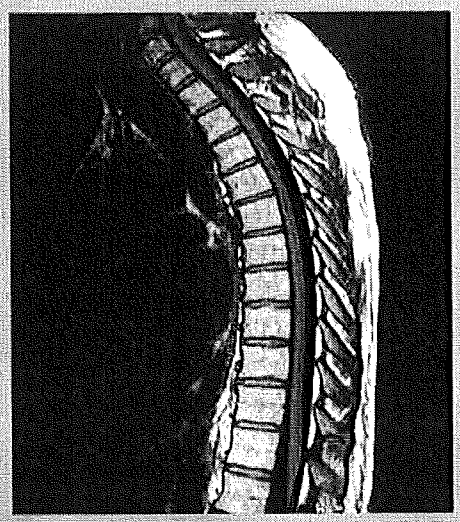
Keeping your MR system up and running is critical to keeping a practice productive. To help reduce failures and interruptions to patient flow, we maintain one of the world's largest and most experienced service forces.

In addition, the MR systems from GE build upon existing product service capabilities to move from detection to prediction, allowing the ability to analyze more data than ever and potentially eliminate faults before they occur.

Image Gallery

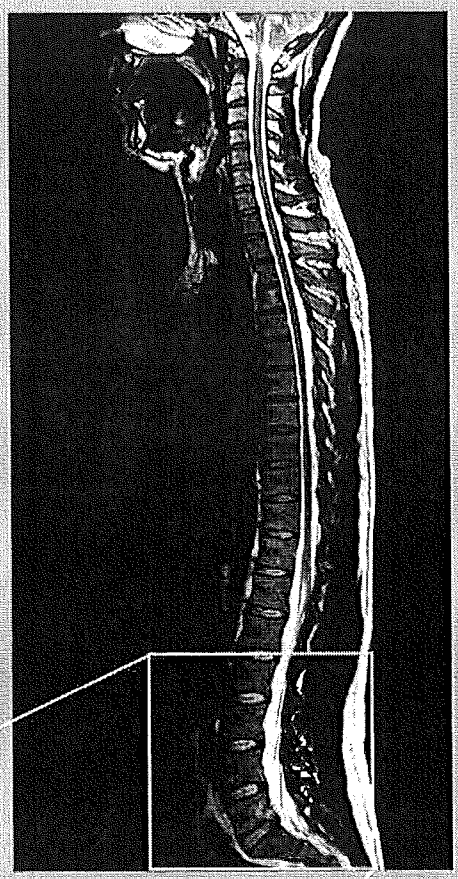
The following pages illustrate how the Optima MR450w generates stellar images across areas of care.

Spine

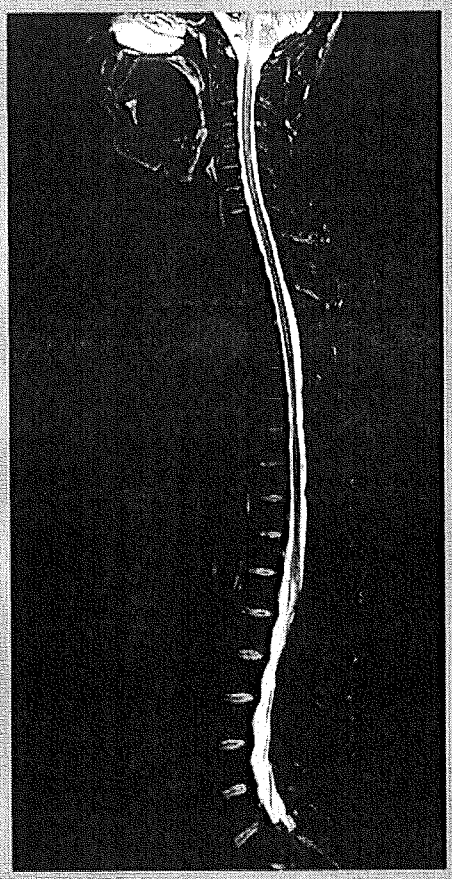


T2 FLAIR

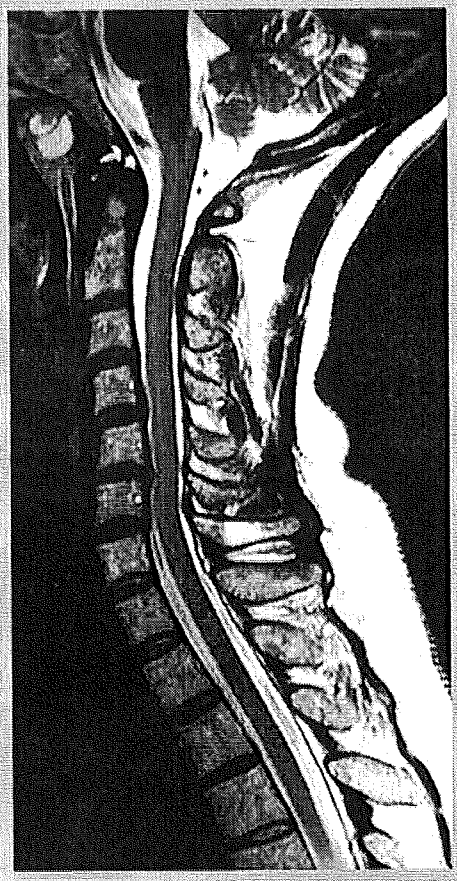
Two Station Whole Spine



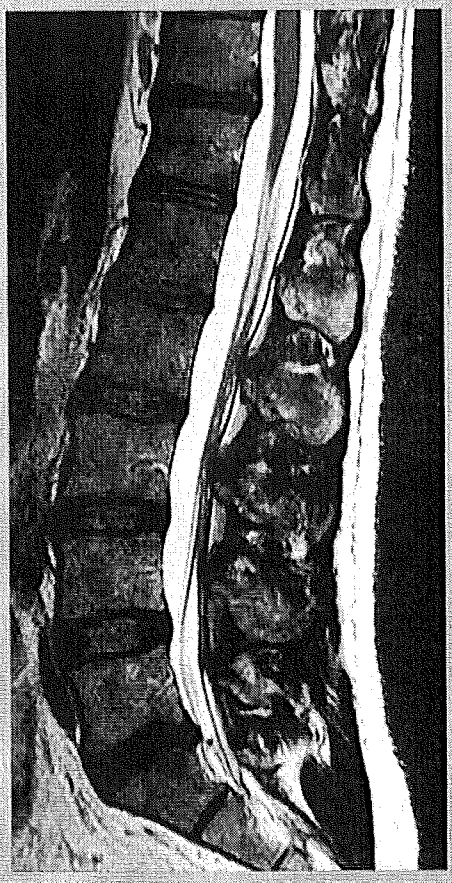
IDEAL In-phase



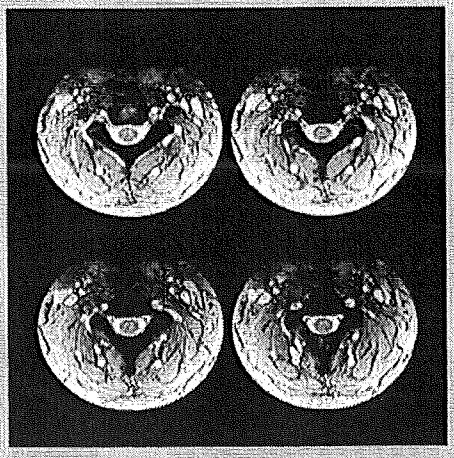
IDEAL Water Only



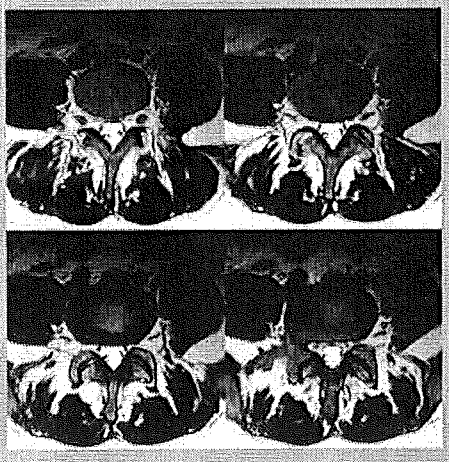
frFSE T2



frFSE T2 with ARC (acquired in 56 sec.)

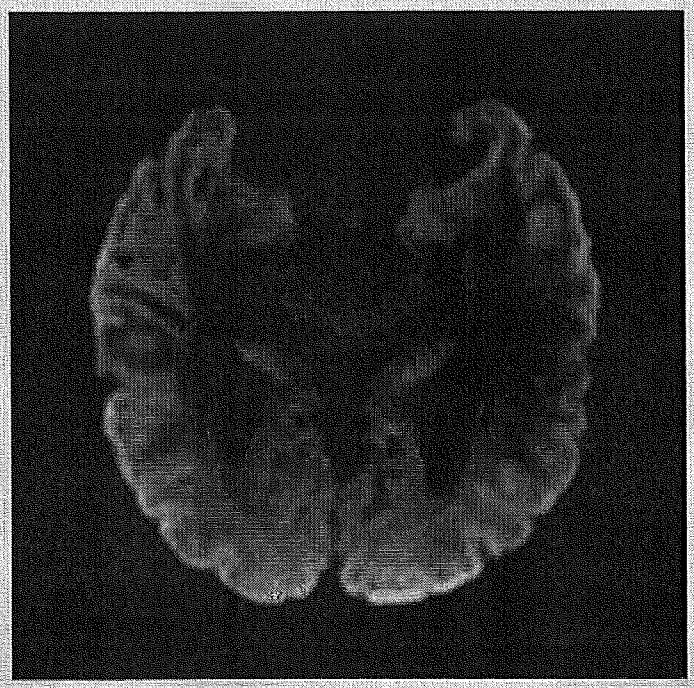


3D MERGE



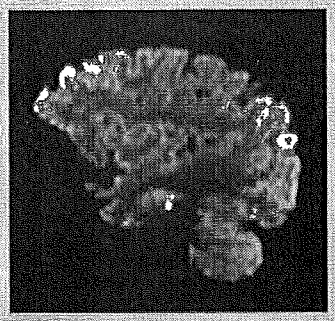
frFSE T2

Neuro



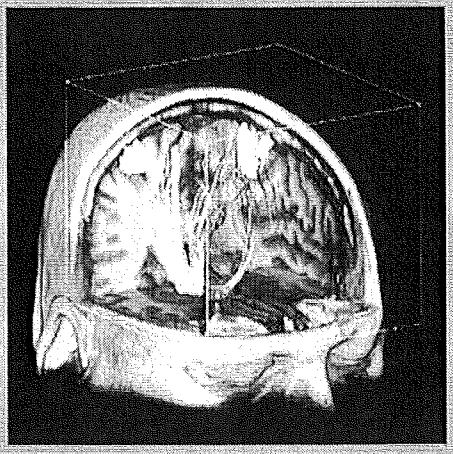
High Resolution Tetrahedral apDWI
Diffusion imaging is a demanding application for gradients in any environment. Combining extreme gradient technology and tetrahedral gradient encoding provides superior TE, SNR, susceptibility and more.

Reformat



Reformat

3mm DTI with 20 Directions
The Optima MR450w delivers uncompromised high-resolution, 20-direction diffusion tensor imaging. Using a robust and efficient reading process, FiberTrak effectively generates three-dimensional renderings of the diffusion along white matter tracts.

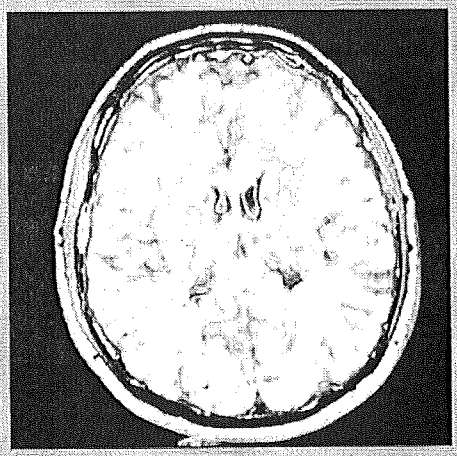


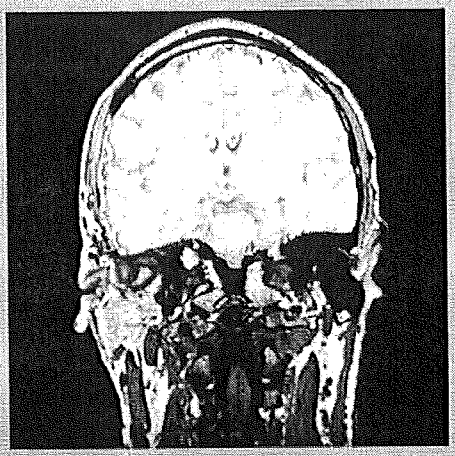
BrainWave Fusion
BrainWave fusion provides the ability to fuse high-resolution anatomical images with fMRI activation maps and fiber tract fiber maps.

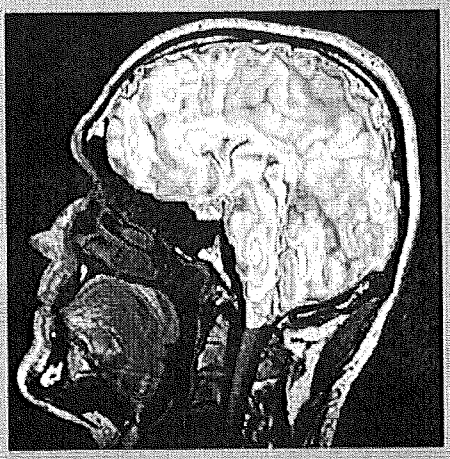
FiberTrack of 23 direction DTI overlaid on 512 x 512 PROPELLER T2

3D Arterial Spin Labeling (3D ASL)

This technique offers full-brain coverage, delivering robust, high SNR 3D images. It works by generating a 3D FSE acquisition with spiral readout, with pulsed continuous labeling close to the image slab. Background suppression is then added for motion insensitivity. The application is great for evaluating cerebrovascular conditions such as stroke.



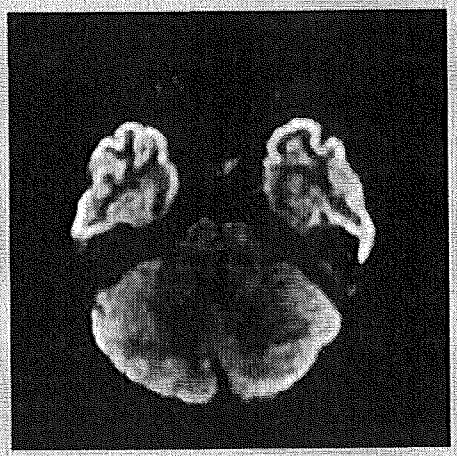




High-resolution 3D TOF MRA demonstrating the benefits of the additional SNR provided by OptiMR.

PROPELLER DWI

PROPELLER DWI corrects for susceptibility artifacts at air/tissue interfaces, which are commonly seen in the temporal lobes when using standard EPI sequences. It also reduces artifacts from dental and/or surgical implants.



SWAN

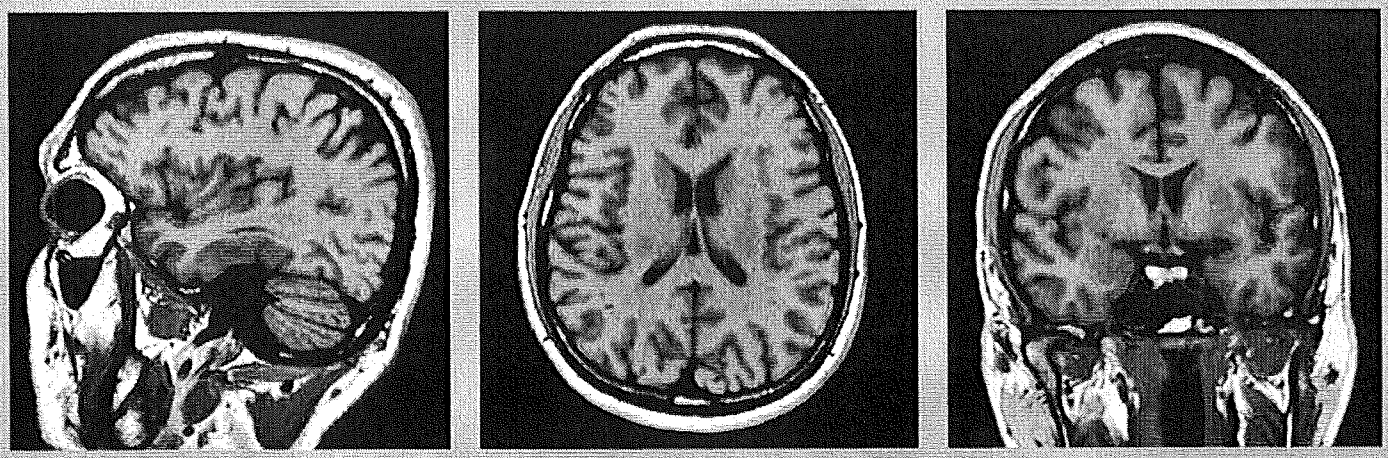
SWAN is a unique 3D T2*-weighted technique that provides the ability to clearly delineate small vessels. As a 3D application, SWAN benefits from the added SNR of the OpTix optical RF technology.

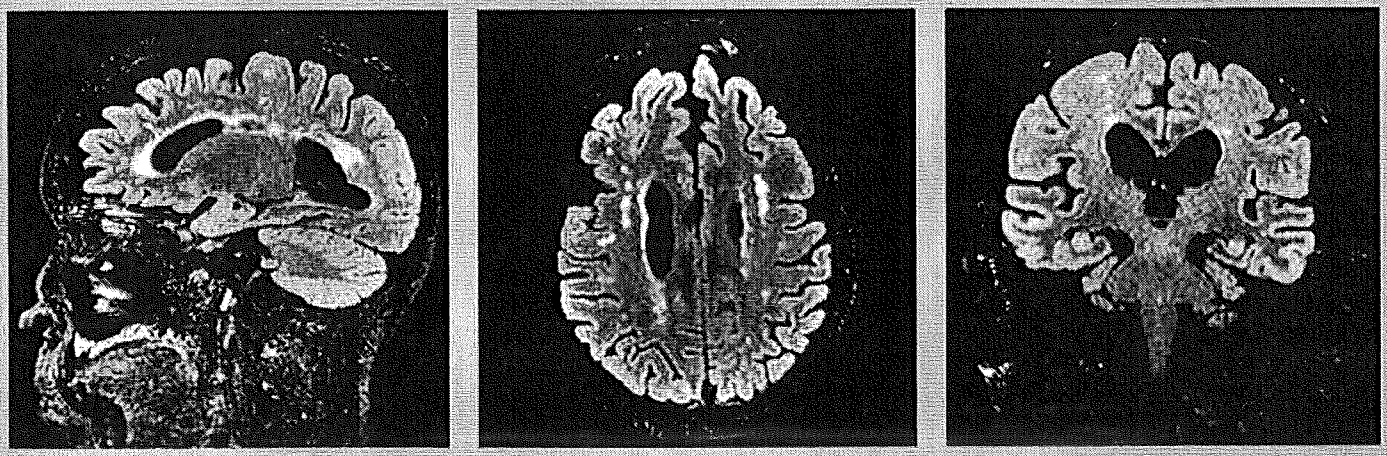
Neuro

Continued

Cube T1

Cube is a volumetric imaging technique with isotropic resolution – scan once and reformat into any plane with excellent resolution. Cube utilizes a unique, advanced acceleration technique, ARC, which reduces scan times for 3D imaging, and allows you to reduce voxel size in order to enhance the quality of the reformatted planes.





Cube T2 FLAIR

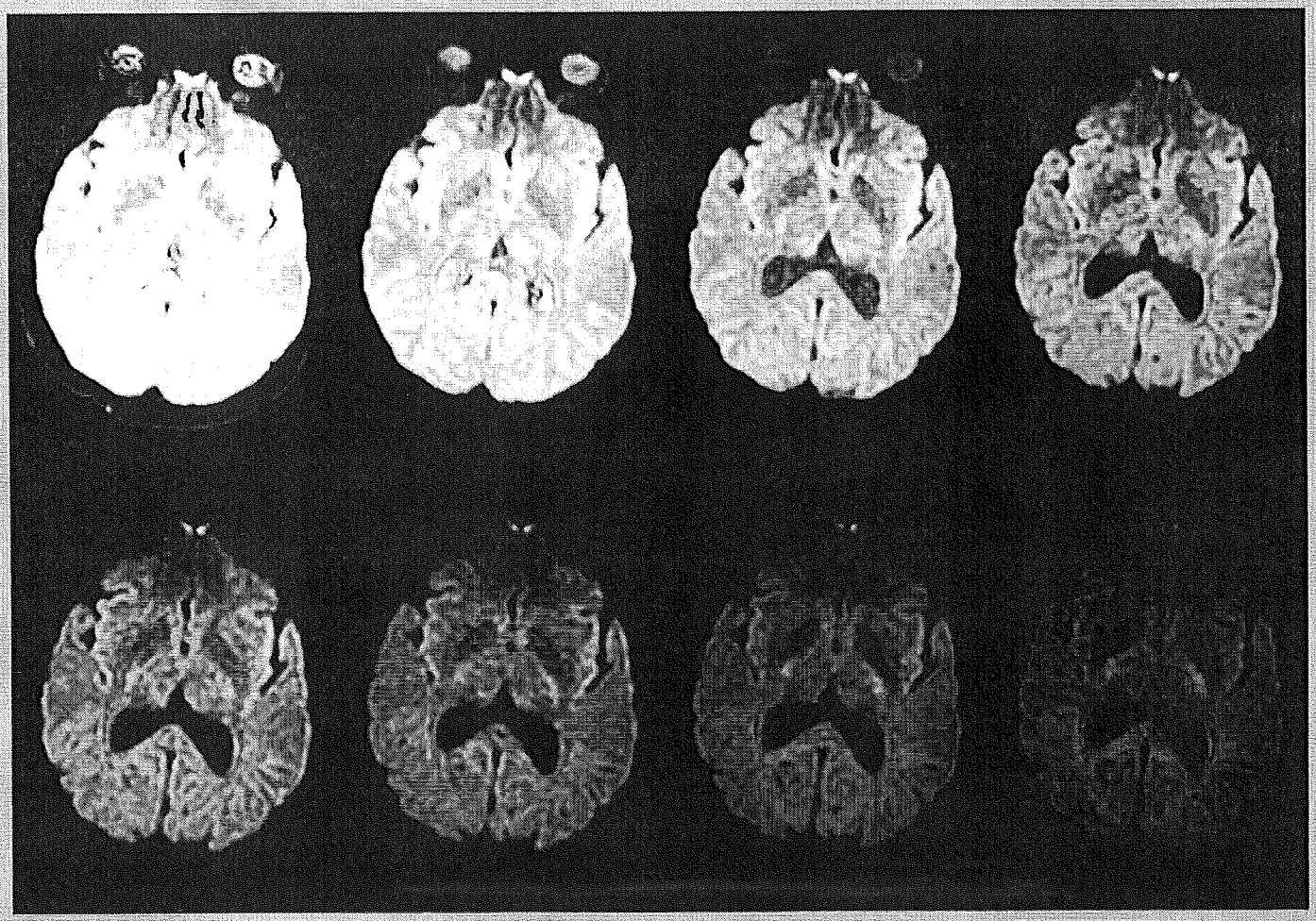
Cube is compatible with multiple contrasts making it a versatile technique for rapid but uncompromised neuro imaging.

Neuro

(continued)

Multi b-value eDWI

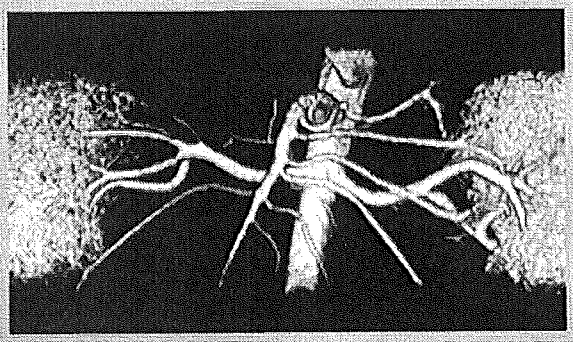
This new technique represents the next level in diffusion imaging, delivering more SNR, less scan time and more accurate ADC. It applies an EPI single shot sequence with adjustable multiple b-values, using either TR range or SSFP pulse for fat suppression. It can be done with a normal body or cardiac triggered acquisition.



Multi b-value eDWI of the brain showing b-values ranging from 250 to 2000

Non-contrast Angiography

Inhance Inflow IR eliminates the need for contrast on renal MRA studies, and does it without adding time-consuming setup. Combined with the Express user interface with automated fat and background suppression prescription is dramatically simplified.

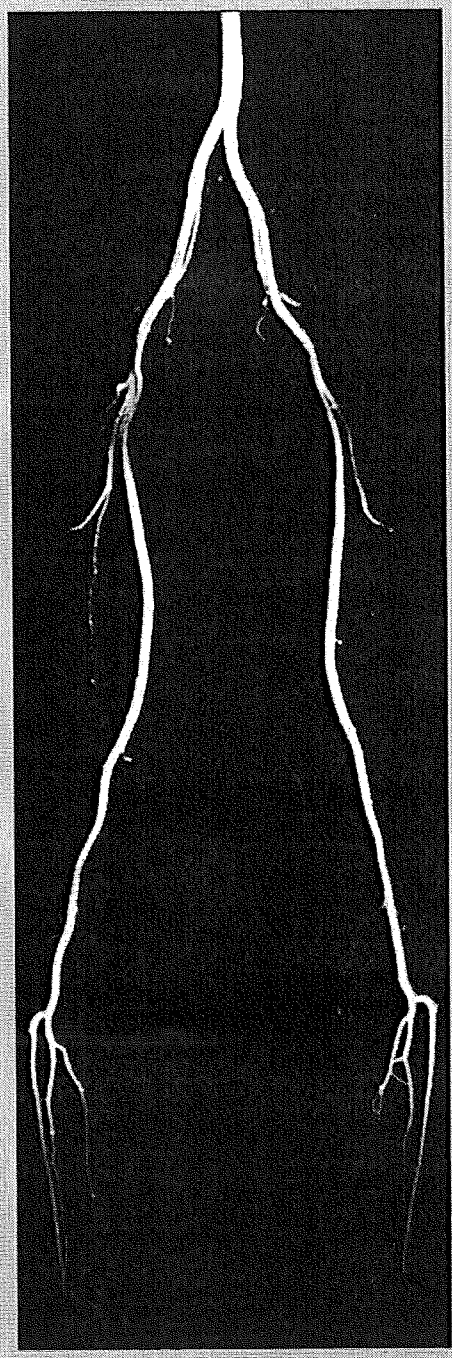


Inhance Inflow IR

Inhance Inflow IR

Inhance 3D DeltaFlow

This application delivers excellent contrast and surrounding tissue subtraction—all with zero use of a contrast agent. It subtracts the systolic from the diastolic phase, helping eliminate venous and background signal.

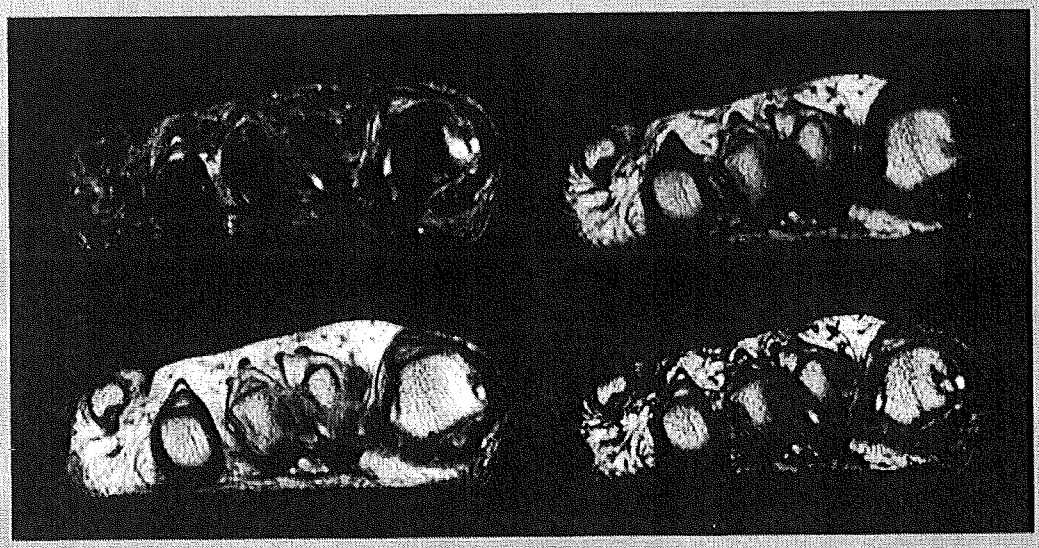


Inhance 3D Velocity

Inhance 3D Velocity is a non-contrast enhanced technique designed to acquire angiographic images of the brain and renal arteries with excellent background suppression in short scan times. The technique is capable of obtaining the whole neurovascular anatomy in 5–6 minutes.

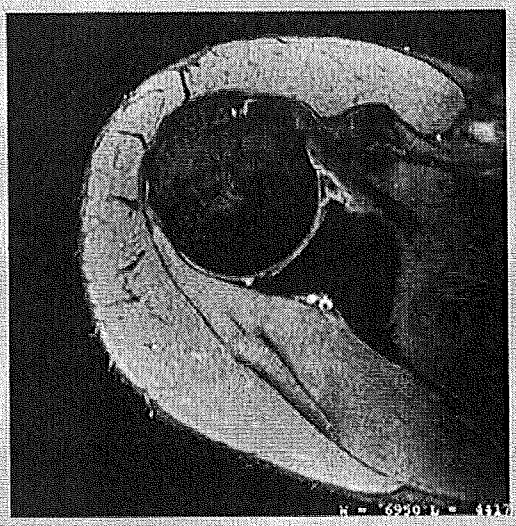
MSK

With the Optima MR450w patients can be imaged in a more comfortable position.



IDEAL

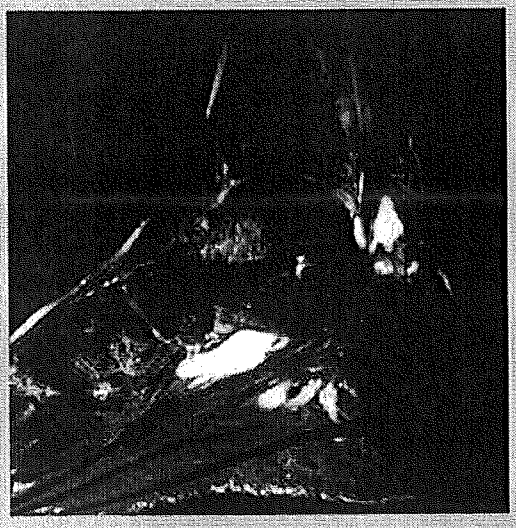
3D MERGE is designed to deliver enhanced contrast and SNR for musculoskeletal and spine imaging. It also benefits from the additional SNR of the OpTx RF technology.



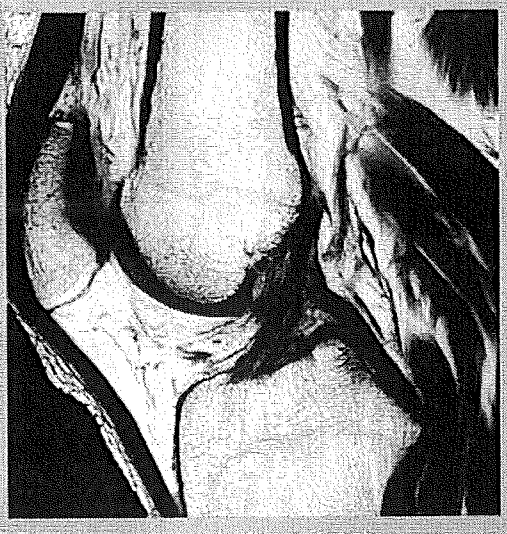
3D MERGE

T2 Fat Sat

The performance of the new Optima MR450w MRI unit delivers uncompromised off-center imaging with uniform fat saturation performance in a wide bore environment.



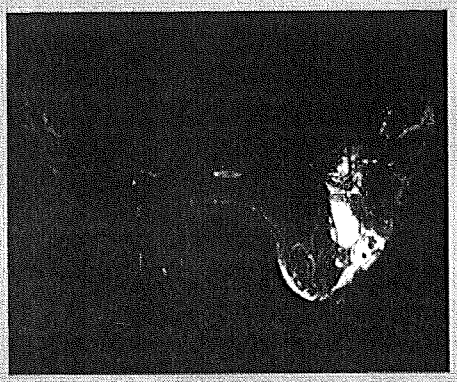
T2 Fat Sat



PD (640 x 320 resolution in 337)

Breast

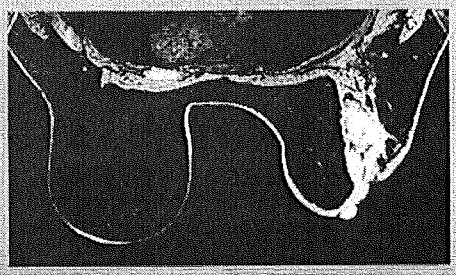
IDEAL provides a robust, high-resolution alternative to fat-SAT or STIR for T2-fat-suppressed breast imaging.



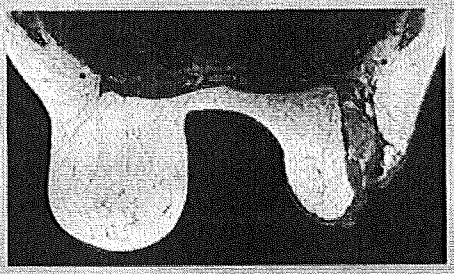
IDEAL Water Only

DWI

The Optima MR450w performs excellent breast diffusion imaging. Breast diffusion can be performed with the HD Breast Array or with the Integrated Body Coil, which allows for a larger imaging field.



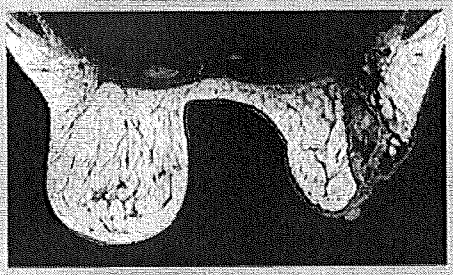
VIBRANT-Flex Water Only



VIBRANT-Flex In-phase

VIBRANT-Flex generates up to 4 contrasts with high-resolution in just one short scan, and virtually eliminates fat suppression failures in breast imaging – even over a large FOV with irregular anatomy. As a result, you gain 4X more data and enhanced ability to "do it once and do it right" on an exam that you don't want to repeat.

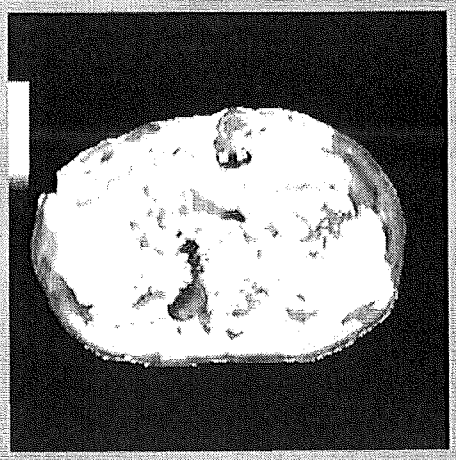
VIBRANT-Flex Fat Only



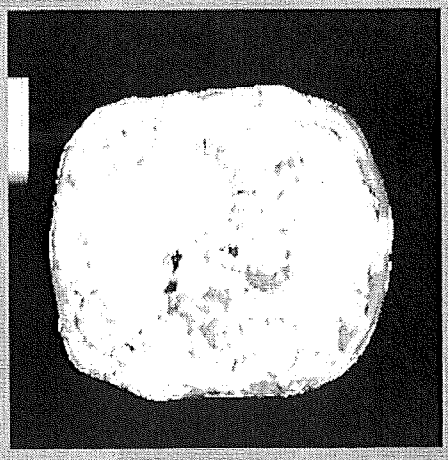
VIBRANT-Flex Out-of-phase

Liver

In these elastograms – acquired with MR-Touch – relative stiffness is shown on a color scale ranging from soft (purple) to hardest (red). The stiffness of normal liver tissue is variable, as seen in the left example. The red in the right image shows high tissue stiffness.

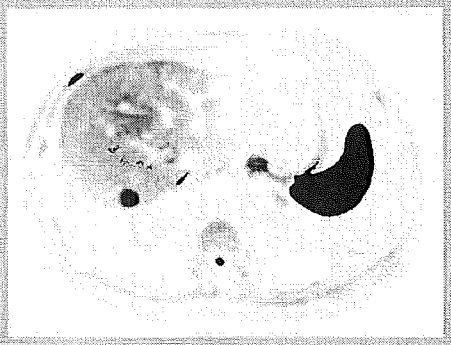


MR-Touch Elastogram (volunteer)

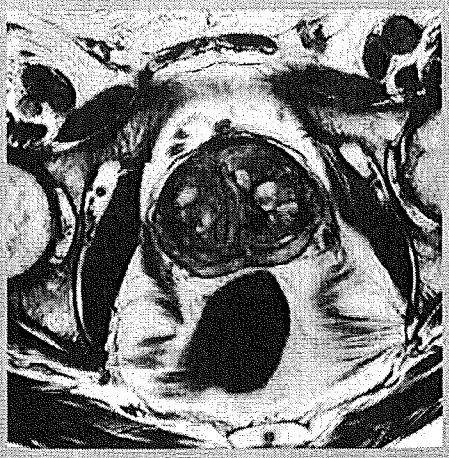


MR-Touch Elastogram (patient with cirrhosis)

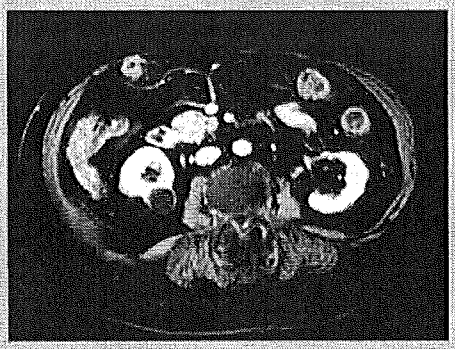
Abdominal



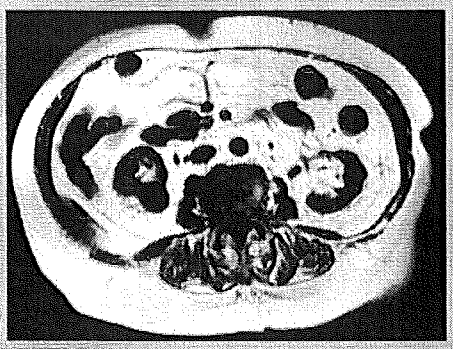
3D DWI



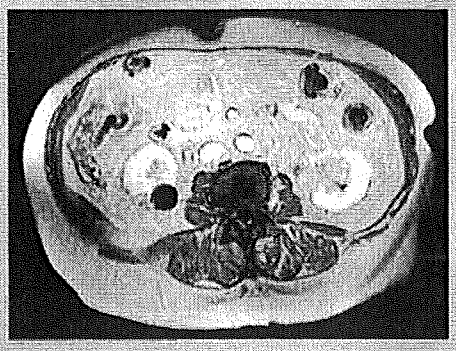
T2 FSE



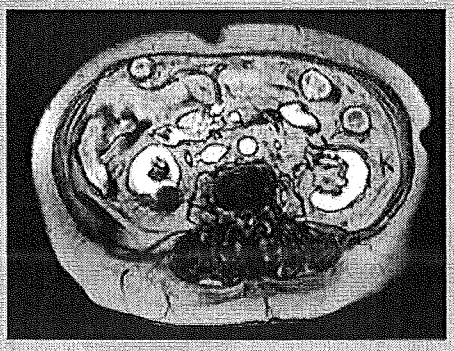
LAVA-Flex Water Only



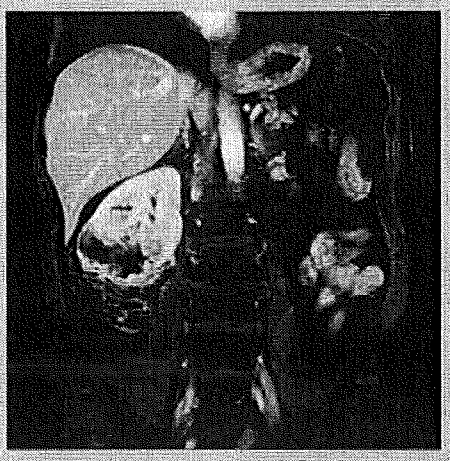
LAVA-Flex Fat Only



LAVA-Flex In-phase



LAVA-Flex Out-of-phase



LAVA-Flex

LAVA-Flex generates up to 9 contrasts with high resolution in just one short scan, and virtually eliminates fat suppression failures over a large FOV whole abdomen.

The eXtreme gradients and OpTix RF technology enable the Optima MR450w to deliver excellent large FOV diffusion imaging. With ARC, this 24 slice SSFSE series was acquired in 16 seconds.

The right choice.

For those seeking to realize the true potential of wide-bore MR, the Optima MR450w is the clear choice. That choice brings more than excellent patient care—it also provides a range of benefits for every key stakeholder in your practice.

Radiologists get the high-quality images they demand for definitive diagnoses.

Administrators get satisfied patients, precise scheduling, and opportunities for growth.

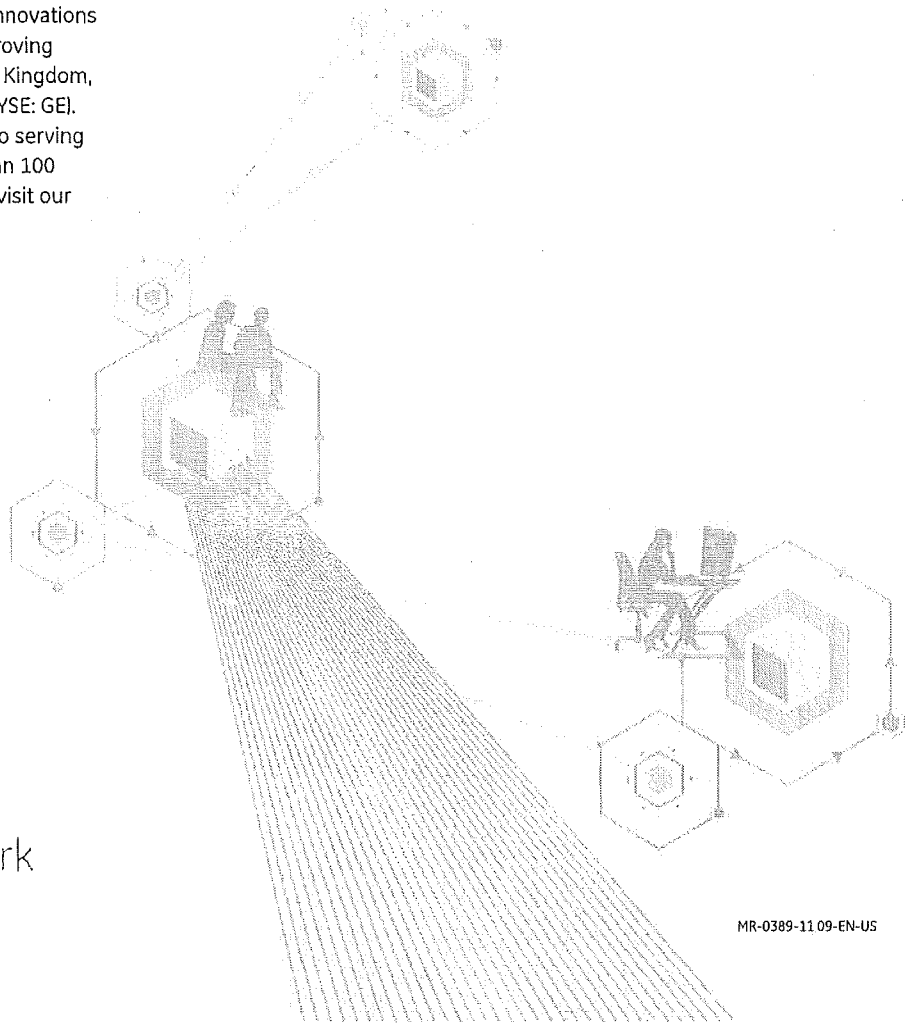
And technologists get to handle more patients with less hassle, capturing images with more consistency.

About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our "healthymagination" vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality around the world. Headquartered in the United Kingdom, GE Healthcare is a unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employees are committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com.

GE Healthcare
3000 North Grandview
Waukesha, WI 53188
USA



imagination at work

MR-0389-11 09-EN-US

Exhibit 9

GE Healthcare Technologies

GE Healthcare
PO Box 414
Milwaukee, WI 53187

August 9th, 2016

Tim Harris
Director of Radiology
Caldwell Memorial Hospital
321 Mulberry St. SW
Lenoir, NC 28645

RE: GE Signa HD 1.5T MRI

Dear Tim,

Thank you for allowing General Electric Healthcare (GEHC) the opportunity to earn your business. UNC Caldwell Memorial Hospital is a valued customer and we truly appreciate the partnership we share.

The purpose of this letter is to inform you that General Electric Healthcare will be responsible for removing your existing GE 1.5T MRI Scanner as part of your upcoming GE Optima MR450w 32ch GEM 1.5T MRI purchase and estimate the de-installation and removal will be completed at no additional charge to UNC Caldwell Memorial Hospital. UNC Caldwell Memorial Hospital will be responsible for the cost of any scan room construction/renovation, clearing the rig path, rigging costs, and opening the scan room access panel. We will work closely with your facilities planning department to insure proper timing of the de-installation. The system will be de-installed, removed, and shipped by our GE team to our Goldseal business in Waukesha, WI. We understand and confirm that this unit may not be returned to the State of North Carolina without proper authorization from the North Carolina Certificate of Need (CON) section of DHSR.

Thank you again for the opportunity to earn your business. If you have any additional questions, feel free to call me at any time.

Sincerely,

F. Scott Ramsey
MR Product Manager, NC
General Electric Healthcare
919-621-1657
scott.ramsey@ge.com

Exhibit 10

North Carolina Department of Health and Human Services
Division of Health Service Regulation
Acute and Home Care Licensure and Certification Section
1205 Umstead Drive, 2712 Mail Service Center
Raleigh, North Carolina 27699-2712
Telephone: (919) 855-4620 Fax: (919) 715-3073

For Official Use Only
License # H0061 Medicare # **340041**
FID #: 933051
PC LS Date 1/13/16

License Fee: **$2,375.00**

2016
HOSPITAL LICENSE
RENEWAL APPLICATION

Legal Identity of Applicant: **Caldwell Memorial Hospital, Inc.**
(Full legal name of corporation, partnership, individual, or other legal entity owning the enterprise or service.)

Doing Business As
(d/b/a) name(s) under which the facility or services are advertised or presented to the public:

PRIMARY: **Caldwell Memorial Hospital, Inc.**
Other: d/b/a Caldwell
Other:

Facility Mailing Address: P.O. Box 1890
Lenoir, NC 28645

Facility Site Address: 321 Mulberry St SW
Lenoir, NC 28645
County: Caldwell
Telephone: (828)757-5100
Fax: (828)757-5512

Administrator/Director: Laura J Easton
Title: PRESIDENT/CEO
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Chief Executive Officer: Laura J. Easton **Title:** President / CEO
(Designated agent (individual) responsible to the governing body (owner) for the management of the licensed facility)

Name of the person to contact for any questions regarding this form:

Name: Jackie G. Berry **Telephone:** (828) 757-5214

E-Mail: jackie.berry@unchealth.unc.edu

PAID
CK NO. 229319
DATE 1-12-16
$2,375

Imaging Procedures

(Campus – *If multiple sites:* Hospital - CMH)

20 Most Common Outpatient Imaging Procedures Table - Enter the number of the top 20 common imaging procedures performed in the ambulatory setting or outpatient department in the table below by CPT code.

CPT Code	Description	Procedures
70450	Computed tomography, head or brain; without contrast material	723
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material followed by contrast material(s) and further sequences	281
71010	Radiologic examination, chest; single view, frontal	134
71020	Radiologic examination, chest; two views, frontal and lateral	4,447
71260	Computed tomography, thorax; with contrast material(s)	920
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing	1
72100	Radiologic examination, spine, lumbosacral; two or three views	725
72110	Radiologic examination, spine, lumbosacral; minimum of four views	195
72125	Computed tomography, cervical spine; without contrast material	306
73030	Radiologic examination, shoulder; complete, minimum of two views	1,316
73110	Radiologic examination, wrist; complete, minimum of three views	316
73130	Radiologic examination, hand; minimum of three views	848
73510	Radiologic examination, hip, unilateral; complete, minimum of two views	602
73564	Radiologic examination, knee; complete, four or more views	94
73610	Radiologic examination, ankle; complete, minimum of three views	572
73630	Radiologic examination, foot; complete, minimum of three views	730
74000	Radiologic examination, abdomen; single anteroposterior view	671
74022	Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest	1,137
74176	Computed tomography, abdomen and pelvis; without contrast material	1,465
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	1,433

Imaging Procedures

(Campus – *If multiple sites:* Hancock Surgery Center-HSO

20 Most Common Outpatient Imaging Procedures Table - Enter the number of the top 20 common imaging procedures performed in the ambulatory setting or outpatient department in the table below by CPT code.

N/A

CPT Code	Description	Procedures
70450	Computed tomography, head or brain; without contrast material	
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material followed by contrast material(s) and further sequences	
71010	Radiologic examination, chest; single view, frontal	
71020	Radiologic examination, chest; two views, frontal and lateral	
71260	Computed tomography, thorax; with contrast material(s)	
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing	
72100	Radiologic examination, spine, lumbosacral; two or three views	
72110	Radiologic examination, spine, lumbosacral; minimum of four views	
72125	Computed tomography, cervical spine; without contrast material	
73030	Radiologic examination, shoulder; complete, minimum of two views	
73110	Radiologic examination, wrist; complete, minimum of three views	
73130	Radiologic examination, hand; minimum of three views	
73510	Radiologic examination, hip, unilateral; complete, minimum of two views	
73564	Radiologic examination, knee; complete, four or more views	
73610	Radiologic examination, ankle; complete, minimum of three views	
73630	Radiologic examination, foot; complete, minimum of three views	
74000	Radiologic examination, abdomen; single anteroposterior view	
74022	Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest	
74176	Computed tomography, abdomen and pelvis; without contrast material	
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	

Imaging Procedures

(Campus – *If multiple sites:* Combined - CMH + HSC)

20 Most Common Outpatient Imaging Procedures Table - Enter the number of the top 20 common imaging procedures performed in the ambulatory setting or outpatient department in the table below by CPT code.

CPT Code	Description	Procedures
70450	Computed tomography, head or brain; without contrast material	723
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material followed by contrast material(s) and further sequences	287
71010	Radiologic examination, chest; single view, frontal	124
71020	Radiologic examination, chest; two views, frontal and lateral	4,447
71260	Computed tomography, thorax; with contrast material(s)	920
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing	1
72100	Radiologic examination, spine, lumbosacral; two or three views	725
72110	Radiologic examination, spine, lumbosacral; minimum of four views	195
72125	Computed tomography, cervical spine; without contrast material	301e
73030	Radiologic examination, shoulder; complete, minimum of two views	636
73110	Radiologic examination, wrist; complete, minimum of three views	366
73130	Radiologic examination, hand; minimum of three views	848
73510	Radiologic examination, hip, unilateral; complete, minimum of two views	602
73564	Radiologic examination, knee; complete, four or more views	94
73610	Radiologic examination, ankle; complete, minimum of three views	572
73630	Radiologic examination, foot; complete, minimum of three views	730
74000	Radiologic examination, abdomen; single anteroposterior view	676
74022	Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest	1,137
74176	Computed tomography, abdomen and pelvis; without contrast material	1,465
74177	Computed tomography, abdomen and pelvis; with contrast material(s)	1,433

10a. Magnetic Resonance Imaging (MRI) Procedures by CPT Codes

Indicate the number of procedures performed during the 12-month reporting period at your facility. For hospitals that operate medical equipment at multiple sites/campuses, please copy the MRI pages and provide separate data for each site/campus. Campus – *if multiple sites:* _____

CPT Code	CPT Description	Inpatient Procedures	Outpatient Procedures	Total Number of Procedures
70336	MRI Temporomandibular Joint(s)			
70540	MRI Orbit/Face/Neck w/o	1	0	1
70542	MRI Orbit/Face/Neck with contrast	2	11	13
70543	MRI Orbit/Face/Neck w/o & with	21	31	52
70544	MRA Head w/o			
70545	MRA Head with contrast			
70546	MRA Head w/o & with	4	7	11
70547	MRA Neck w/o			
70548	MRA Neck with contrast	220	327	547
70549	MRA Neck w/o & with	1	2	3
70551	MRI Brain w/o	56	231	287
70552	MRI Brain with contrast			
70553	MRI Brain w/o & with			
70554	MR functional imaging, w/o physician admin	0	1	1
70555	MR functional imaging, with physician admin			
71550	MRI Chest w/o	0	1	1
71551	MRI Chest with contrast			
71552	MRI Chest w/o & with	12	111	123
71555	MRA Chest with OR without contrast			
72141	MRI Cervical Spine w/o	3	43	46
72142	MRI Cervical Spine with contrast	10	25	35
72156	MRI Cervical Spine w/o & with			
72146	MRI Thoracic Spine w/o	4	20	24
72147	MRI Thoracic Spine with contrast	23	265	288
72157	MRI Thoracic Spine w/o & with			
72148	MRI Lumbar Spine w/o	11	97	108
72149	MRI Lumbar Spine with contrast			
72158	MRI Lumbar Spine w/o & with	4	4	8
72159	MRA Spinal Canal w/o OR with contrast			
72195	MRI Pelvis w/o	3	26	29
72196	MRI Pelvis with contrast	0	1	1
72197	MRI Pelvis w/o & with			
72198	MRA Pelvis w/o OR with contrast			
73218	MRI Upper Ext, other than joint w/o	5	1	6
73219	MRI Upper Ext, other than joint with contrast			
	Subtotals for this page	380	1,204	1,584

10a. MRI Procedures by CPT Codes *continued.....*

CPT Code	CPT Description	Inpatient Procedures	Outpatient Procedures	Total Number of Procedures
73220	MRI Upper Ext, other than joint w/o & with	1	3	4
73221	MRI Upper Ext, any joint w/o	2	166	168
73222	MRI Upper Ext, any joint with contrast	0	10	10
73223	MRI Upper Ext, any joint w/o & with	4	0	4
73225	MRA Upper Ext, w/o OR with contrast	0	1	1
73718	MRI Lower Ext other than joint w/o	4	27	31
73719	MRI Lower Ext other than joint with contrast			
73720	MRI Lower Ext other than joint w/o & with	23	47	70
73721	MRI Lower Ext any joint w/o	4	139	143
73722	MRI Lower Ext any joint with contrast			
73723	MRI Lower Ext any joint w/o & with	10	11	21
73725	MRA Lower Ext w/o OR with contrast			
74181	MRI Abdomen w/o	29	15	44
74182	MRI Abdomen with contrast			
74183	MRI Abdomen w/o & with	17	98	115
74185	MRA Abdomen w/o OR with contrast	1	3	4
75557	MRI Cardiac Morphology w/o			
75561	MRI Cardiac Morphology with contrast			
75565	MRI Cardiac Velocity Flow Mapping			
76125	Cineradiography to complement exam			
76390	MRI Spectroscopy			
77021	MRI Guidance for needle placement			
77022	MRI Guidance for tissue ablation			
77058	MRI Breast, unilateral w/o and/or with contrast			
77059	MRI Breast, bilateral w/o and/or with contrast			
77084	MRI Bone Marrow blood supply			
N/A	Clinical Research Scans			
	Subtotal for this page	95	420	515
	Total Number of Procedures for all pages*	475	1,624	2,099

*Totals must match totals in summary Table 10b and must be greater than or equal to the totals in the MRI Patient Origin Table on page 34 of this application.

10b. MRI CPT Code Procedure Summary (Summary of CPT Codes in Table 10a)

Inpatient Procedures*			Outpatient Procedures*			
With Contrast or Sedation	Without Contrast or Sedation	TOTAL** Inpatient	With Contrast or Sedation	Without Contrast or Sedation	TOTAL** Outpatient	TOTAL** Procedures
140	335	475	612	1,012	1,624	2,099

* An **MRI procedure** is defined as a single discrete MRI study of one patient (single CPT coded procedure). An MRI study means one or more scans relative to a single diagnosis or symptom.
** Totals must match totals in Table 10a on page 16 and must be greater than or equal to the totals in the MRI Patient Origin Table on page 34 of this application.

10c. Fixed MRI

Indicate the number of MRI scanners (units) operated during the 12-month reporting period at your facility. For hospitals that operate medical equipment at multiple sites/campuses, please copy the MRI pages and provide separate data for each site/campus. Campus – *if multiple sites:* _____

Fixed Scanners	Number of Units
Number of fixed MRI scanners-closed (*do not include any* Policy AC-3 scanners)	1
# of fixed MRI scanners-open (*do not include any* Policy AC-3 scanners)	
Number of Policy AC-3 MRI scanners used for general clinical purposes	
Total Fixed MRI Scanners	1

10d. Mobile MRI

Indicate the number of procedures performed on mobile MRI scanners (units) operated during the 12-month reporting period at your facility. For hospitals that use mobile equipment at multiple sites/campuses, please copy the MRI pages and provide separate data for each site/campus. Campus – *if multiple sites:* _____

Mobile Procedures	Inpatient Procedures*			Outpatient Procedures*			TOTAL Procedures
	With Contrast or Sedation	Without Contrast or Sedation	TOTAL Inpatient	With Contrast or Sedation	Without Contrast or Sedation	TOTAL Outpatient	
Scans on mobile MRI performed **only at this site**							

* An **MRI procedure** is defined as a single discrete MRI study of one patient (single CPT coded procedure). An MRI study means one or more scans relative to a single diagnosis or symptom.

Patient Origin - MRI Services

Facility County: Caldwell

In an effort to document patterns of utilization of MRI Services in North Carolina, hospitals are asked to provide county of residence for each patient served in your facility. **The total number of patients reported here should be equal to or less than the total number of MRI procedures reported in Table 10a. on page 16.**

County	No. of Patients	County	No. of Patients	County	No. of Patients
1. Alamance		37. Gates		73. Person	
2. Alexander	11	38. Graham		74. Pitt	
3. Alleghany		39. Granville		75. Polk	
4. Anson		40. Greene		76. Randolph	
5. Ashe	5	41. Guilford		77. Richmond	
6. Avery	4	42. Halifax		78. Robeson	
7. Beaufort		43. Harnett		79. Rockingham	
8. Bertie		44. Haywood		80. Rowan	1
9. Bladen		45. Henderson		81. Rutherford	
10. Brunswick	2	46. Hertford		82. Sampson	
11. Buncombe		47. Hoke		83. Scotland	
12. Burke	47	48. Hyde		84. Stanly	
13. Cabarrus		49. Iredell		85. Stokes	
14. Caldwell	1,978	50. Jackson	1	86. Surry	
15. Camden		51. Johnston	1	87. Swain	
16. Carteret		52. Jones		88. Transylvania	
17. Caswell		53. Lee		89. Tyrrell	
18. Catawba	16	54. Lenoir		90. Union	
19. Chatham		55. Lincoln		91. Vance	
20. Cherokee		56. Macon		92. Wake	
21. Chowan		57. Madison		93. Warren	
22. Clay		58. Martin		94. Washington	
23. Cleveland	1	59. McDowell	8	95. Watauga	12
24. Columbus		60. Mecklenburg		96. Wayne	
25. Craven		61. Mitchell		97. Wilkes	8
26. Cumberland		62. Montgomery		98. Wilson	
27. Currituck		63. Moore		99. Yadkin	
28. Dare		64. Nash		100. Yancey	
29. Davidson		65. New Hanover			
30. Davie		66. Northampton		101. Georgia	1
31. Duplin		67. Onslow		102. South Carolina	2
32. Durham		68. Orange		103. Tennessee	
33. Edgecombe		69. Pamlico		104. Virginia	6
34. Forsyth		70. Pasquotank		105. Other States	
35. Franklin		71. Pender		106. Other	
36. Gaston	1	72. Perquimans		**Total No. of Patients**	2,099

Are mobile MRI services currently provided at your hospital? Yes _____ No ✓