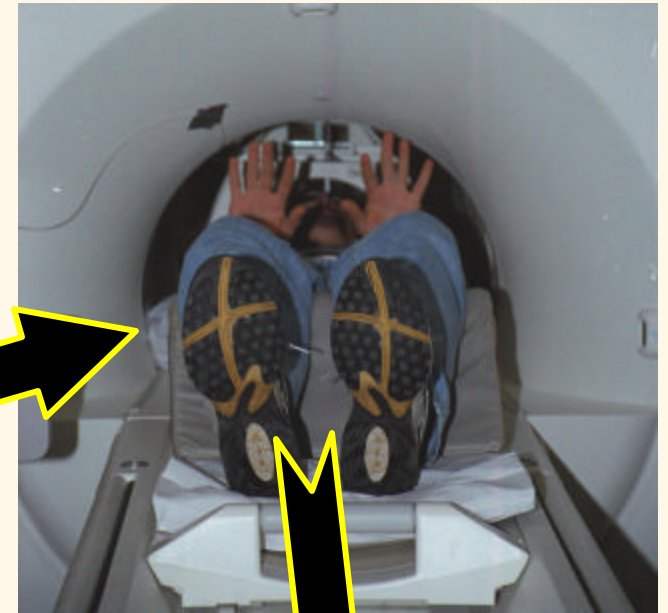


Magnetic Resonance Imaging Facility

Weldon School of Biomedical Engineering

Biomedical Engineering Imaging Facilities Committee:

George R. Wodicka
Charles A. Bouman
Thomas M. Talavage
Edward J. Delp
Lynetta Freeman
William E. Schoenlein
Zygmunt Pizlo



Magnetic Resonance Imaging *in Action*

InnerVision 1.5T MRI
(Lafayette, IN)

Magnetic Resonance Imaging (MRI) at Purdue West Lafayette

- What is MRI?
 - An MRI scanner is a software programmable device for medical imaging that does not use X-rays.
- Why is MRI important to Purdue?
 - MRI can be used for:
 - Safe human research studies
 - Functional neuro-imaging (fMRI)
 - Sports medicine and kinesiology studies
 - Animal studies
 - Clinical
 - Scientific
 - Engineering research of imaging physics/algorithms/physiology
 - MRI infrastructure enables NIH/NSF funding opportunities
- What is the challenge?
 - Cost
 - History of MRI funding stream

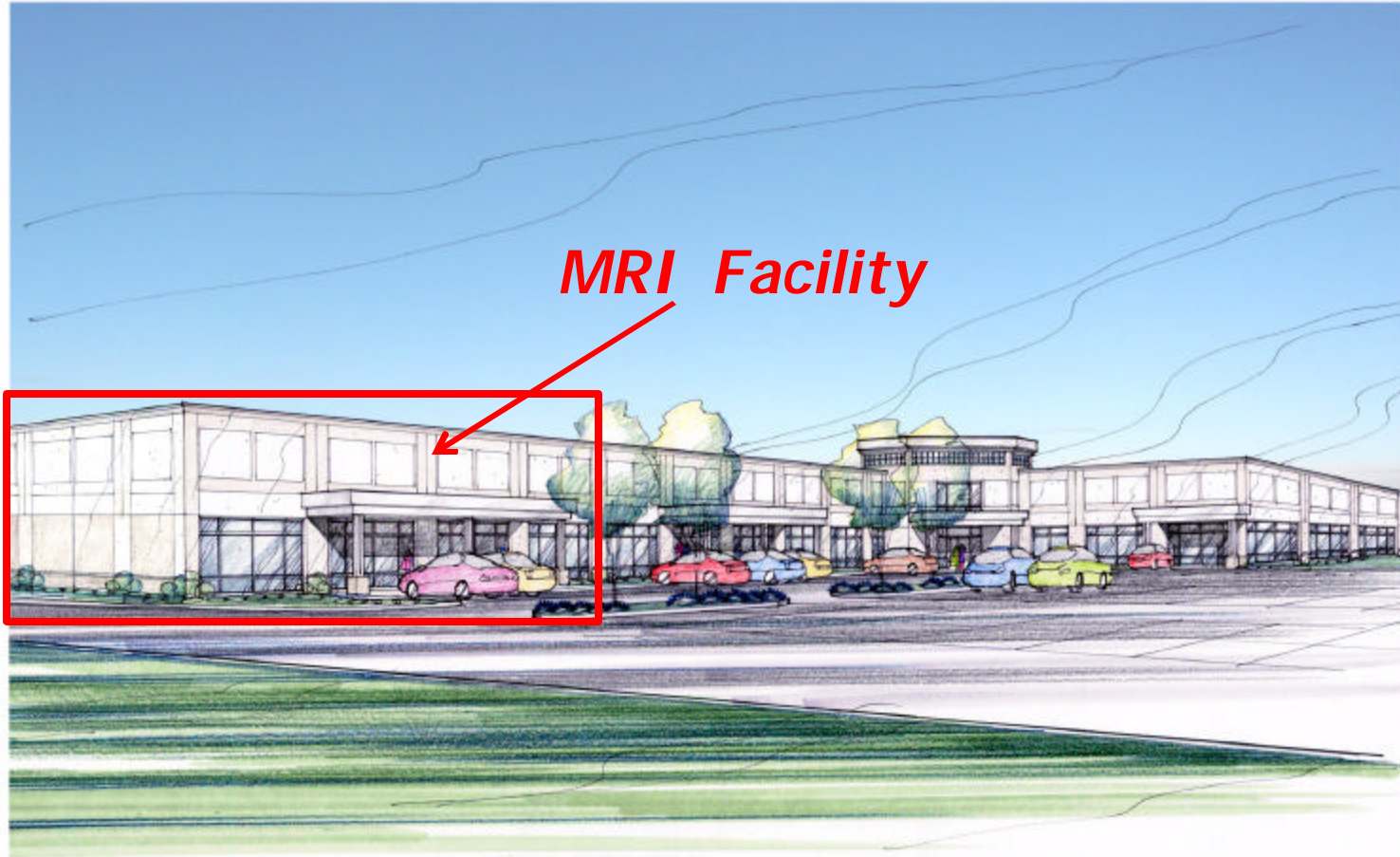
Bringing a 3T MRI to Purdue

- The goal
 - The Weldon School of Biomedical Engineering will provide a **low-cost** high-quality MRI facility for use by all of Purdue-West Lafayette
- The plan
 - Local health care organization seeking partner to share cost burden
 - Leverage relationship with GE Healthcare to enhance impact
 - Facility in Research Park for easy academic and commercial access
- The status
 - Site work began on December 11, 2006
 - MRI facility interior is being designed
 - Use agreements and contracts have been signed
 - Facility will be complete by Fall 2007

Research Park Site for MRI



Research Park Facility for MRI



PURDUE RESEARCH PARK - LOT 8

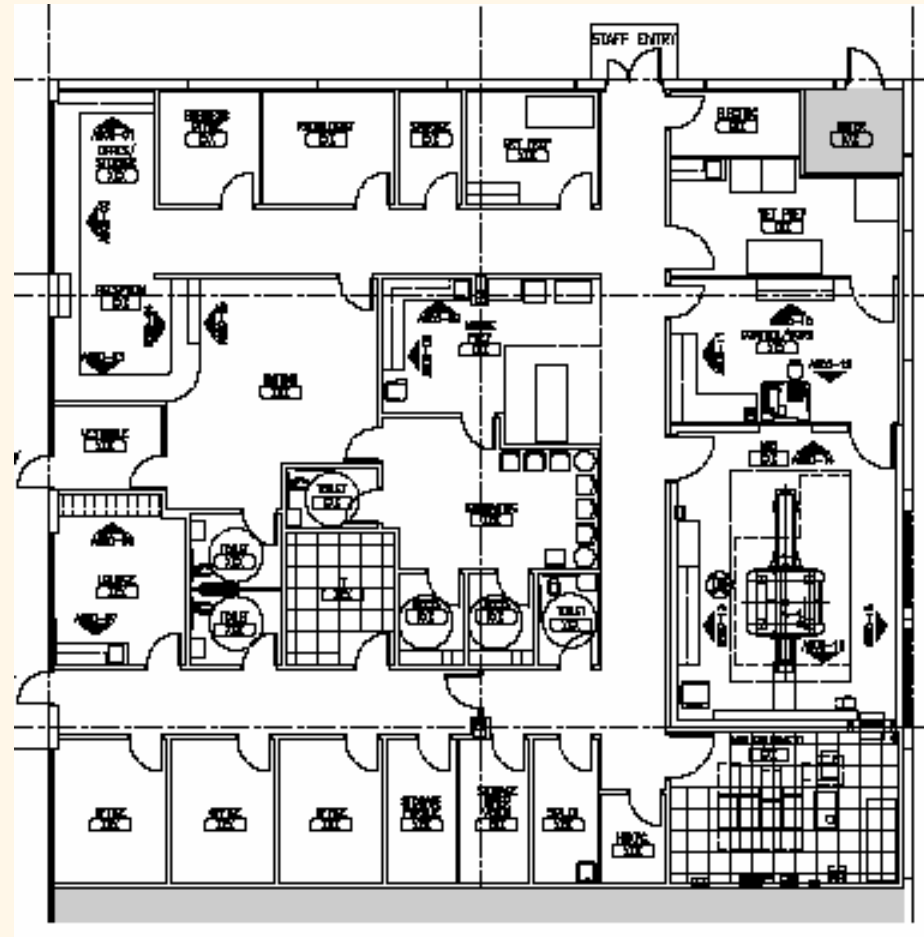
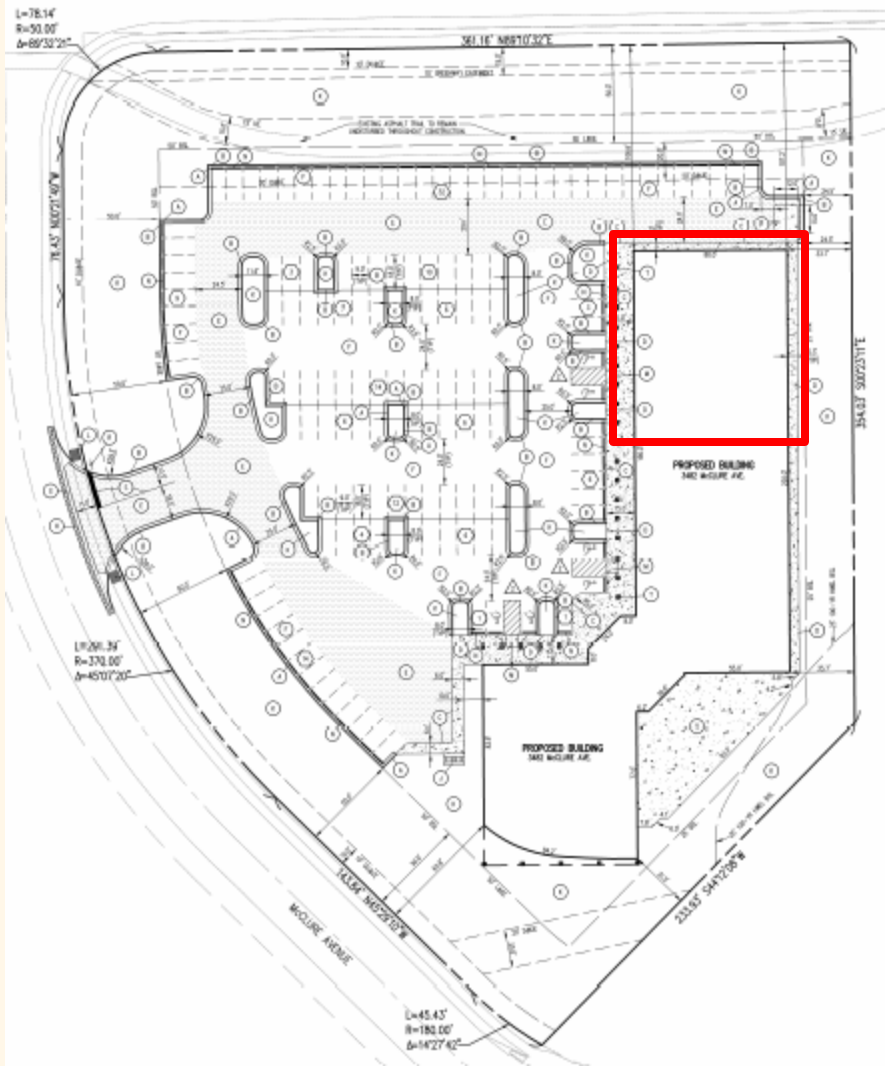
3482 McCLURE AVENUE

29 JANUARY 2007 24038



CSO SCHENKEL SHULTZ

Site and Interior Plans



Interior Layout of MRI Suite

What is available?

- State-of-the-art, GE 16 channel 3.0T MRI
 - High-quality clinical magnet
 - High-resolution capability (<1 mm)
- What can *you* do with it?
 - Structural MRI
 - Musculoskeletal
 - Joint
 - Breast
 - Diagnostic MRI
 - Oncology
 - Cardiac
 - Functional MRI
 - Neuroimaging
 - MR Spectroscopy
 - Proton (^1H)



Signa HDx 3.0T
16 Channel Fixed MR System

When is it available?

- Purdue access: **46** hours per week
 - Monday through Wednesday 8 PM - 2 AM
 - Thursday through Sunday 5 PM - Midnight
 - Daytime, weekend hours "as available"

How do I get access?

- Qualifications:
 - Member of Purdue Faculty/Staff
 - Authorized by BME Imaging Facilities Committee
 - Charles A. Bouman, Chair
 - Thomas M. Talavage, Financial Manager
 - Edward J. Delp, Research Liaison
 - Lynetta Freeman, Clinical Liaison
 - William E. Schoenlein, Safety Manager
 - Zygmunt Pizlo, Member-at-large
- Authorization Process:
 - Project has appropriate IRB or PACUC approval (if required)
 - Identify a person qualified in MRI usage and safety to be present
 - Provide an account number to which expenses may be charged

Operational Philosophy

- YOU ARE THE CUSTOMER!
 - This is your facility
 - We're here to meet your needs
 - We'll help you get started
 - We want to make it work for you

- **EVERYDAY LOW PRICES!**
 - Everyone pays the same LOW rate
 - We want to reduce your costs
 - We want to enhance your funding capacity