

Evolution of a Plan

Redevelopment of the Purdue University Recreational Sports Center

May 18, 2011

Greg Wachalski AIA



Howard Blaisdell
AIA, LEED AP



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Presentation Outline

- Existing Building
- Starting with a Strategy
- Power of Benchmarking
- Good Ideas Important Early
- How Data Shapes the Project Concept
- Early Sketches and Process
- Plans
- Renderings
- Communicating Design



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Existing Building

- Opened in 1957 – 145,000 sq. ft.
- East/West Gym Addition in 1981 – 65,000 sq. ft.
- North Gym Modification in 2000 – 7,000 sq. ft.
- Aquatic Center Opened in 2001 – 80,000 sq. ft.
- Colby Fitness Center Renovation in 2001 - 18,000 sq. ft.
- Today: 289,000 sq. ft. (14,000 sq. ft. vacant)



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Existing Building



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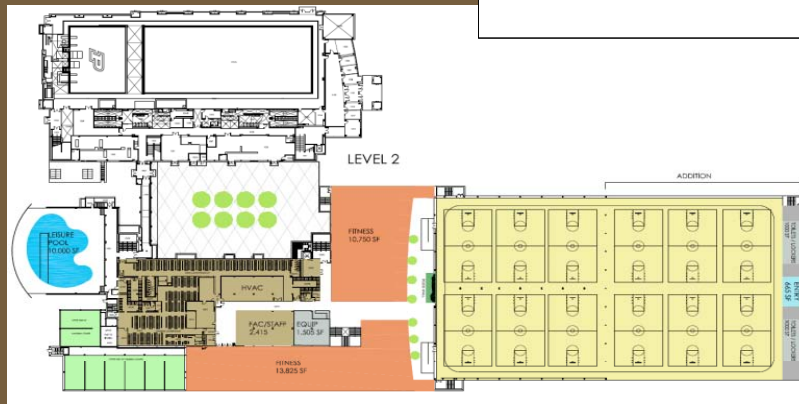
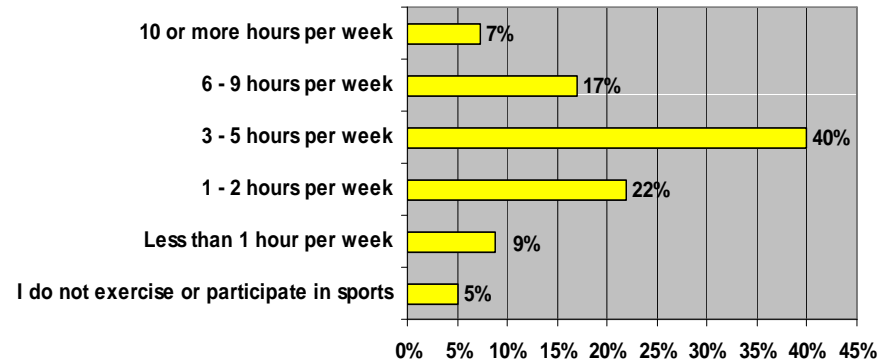
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The Process



How many hours per week do you spend pursuing recreational sports & fitness?



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Starting with a Strategy

Developing Strategy – “Creating The Filter”

- Educational Outcomes
- Enrollment Management
- Campus Community
- Financial Performance



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Starting with a Strategy

- Priority Order of Space Needs
 - Weight & Fitness / Intramurals are equal high priorities
 - Social objectives are high priority
 - Lower alumni focus
- Architectural & Construction Quality
- Target Markets / Campus Location
- Operating Paradigm / Financial Performance



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Starting with a Strategy

- Priority Order of Space Needs
- Architectural & Construction Quality
 - Architectural quality should be appropriate for recruiting amenity
 - Construction quality is important, but can be cost sensitive
- Target Markets / Campus Location
- Operating Paradigm / Financial Performance



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Starting with a Strategy

- Priority Order of Space Needs
- Architectural & Construction Quality
- Target Markets / Campus Location
 - Full-time & part-time students are both primary
 - Employees are secondary
 - Alumni are of interest, but after campus populations
- Operating Paradigm / Financial Performance



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Starting with a Strategy

- Priority Order of Space Needs
- Architectural & Construction Quality
- Target Markets / Campus Location
- Operating Paradigm / Financial Performance
 - Expand revenue opportunities
 - Maintain current level of expense management



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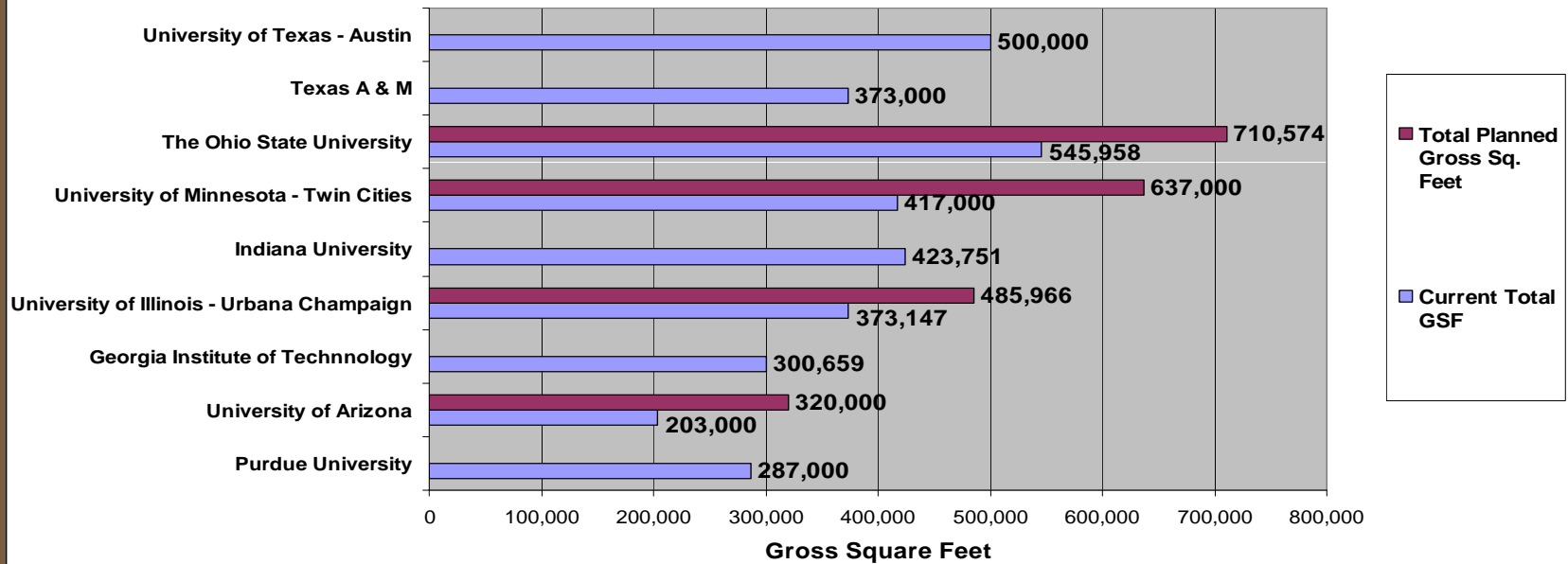


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Power of Benchmarking

Total Recreation Space



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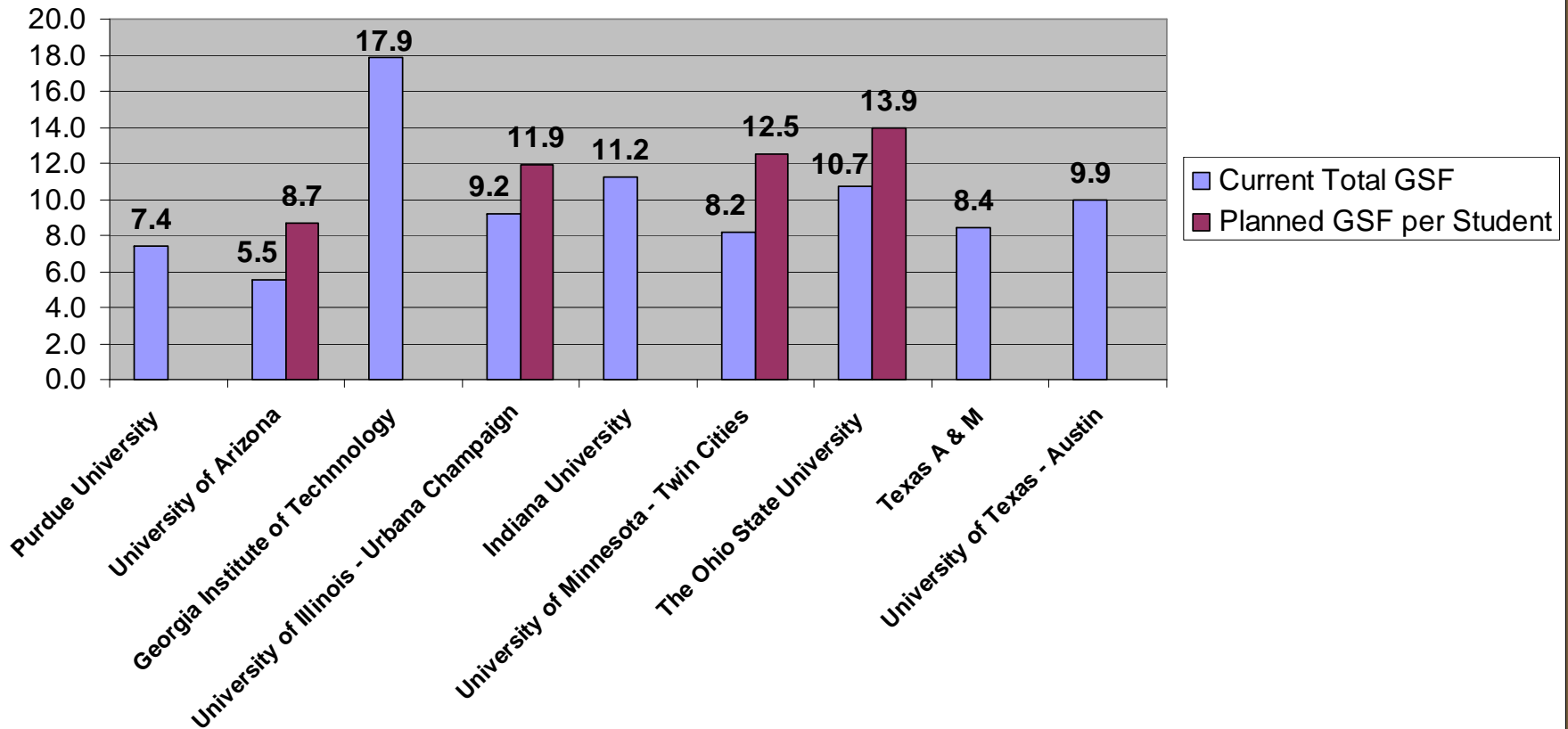


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Power of Benchmarking

Recreation GSF per Student



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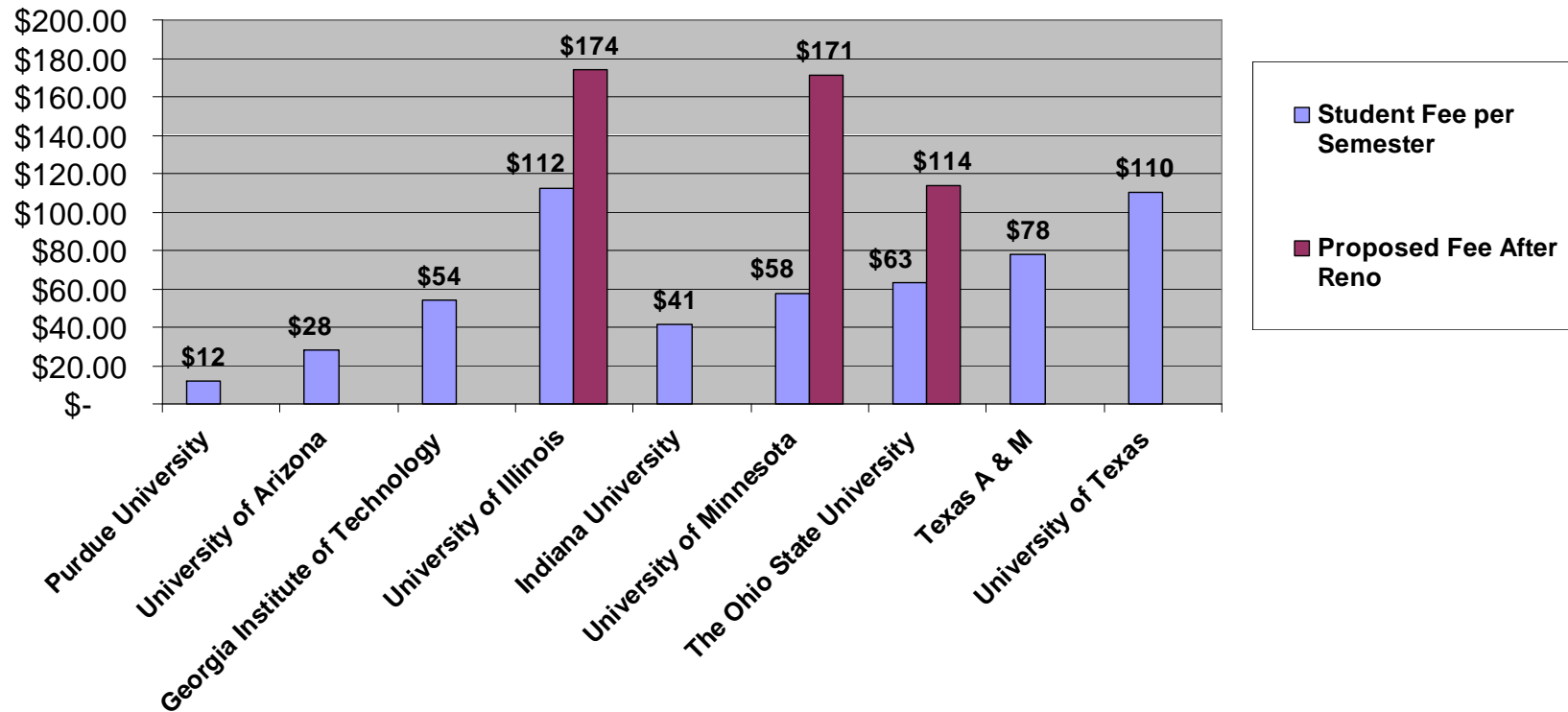


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Power of Benchmarking

Recreation Student Fees (per semester)



Good Ideas Important Early

Existing Facilities Observations

- Way-finding difficult, poor signage
- Parking near building needed
- Limited operating hours – weekends and breaks
- Colby Center popular but overcrowded at times
- Some students willing to adjust their schedules
- Too many pieces of equipment in Colby
- More light weights for women needed
- Great swimming facility
- Racquetball popular but cannot be reserved – more courts needed in the winter
- Dissatisfaction with group exercise space
- Jogging track too short/narrow
- Poor outdoor fields condition
- Poor temperature control – temperature extremes
- Limited funding and spending opportunities for sports clubs



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Good Ideas Important Early

Ideas For Improvements

- More openness and light in the building
- Support for multiple satellite operations (near Union)
- More Weight & Fitness space
- Better quality of group exercise space
- More gym space and badminton courts
- Climbing wall needed (sports clubs and general population)
- Jogging track needed
- Martial Arts room w/ permanent mats needed
- Remodeling of locker rooms
- Free group exercise classes
- Refunds of insurance premiums for rec membership and usage
- Childcare need to faculty/staff



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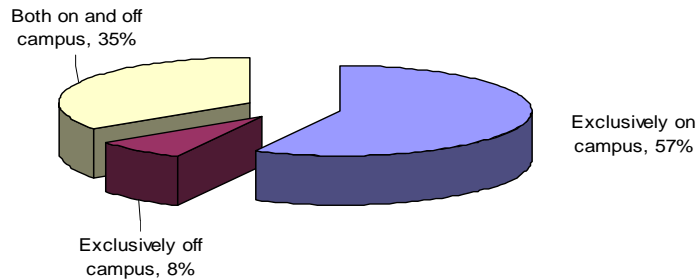


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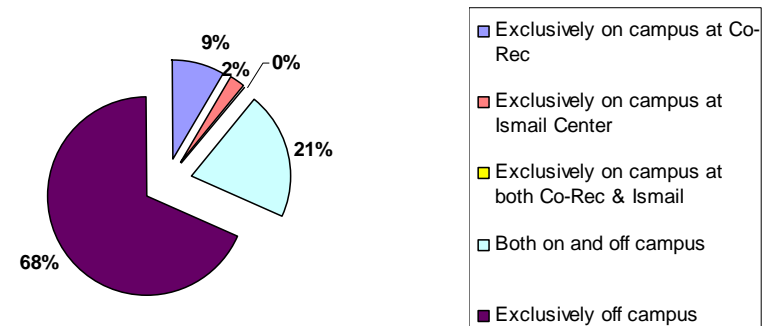
How Data Shapes the Project Concept

Where do you participate in recreational sports & fitness



Students

Where do you currently participate in recreation activities?



Faculty/Staff



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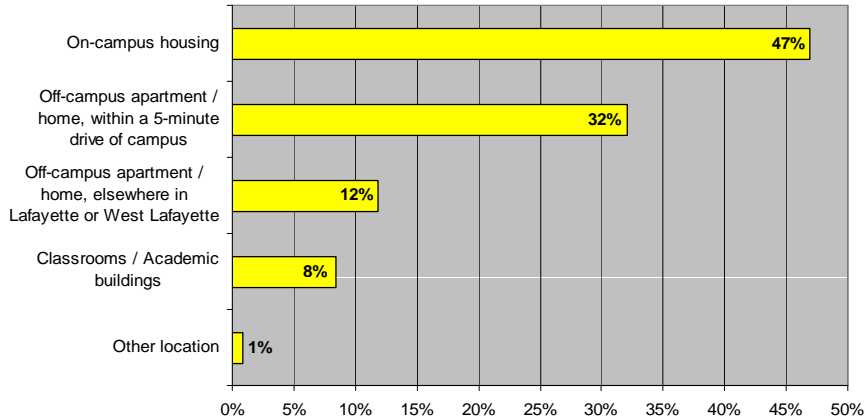
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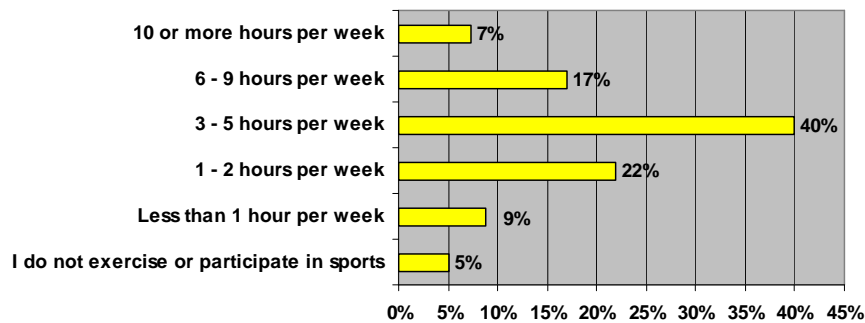
How Data Shapes the Project Concept

Students

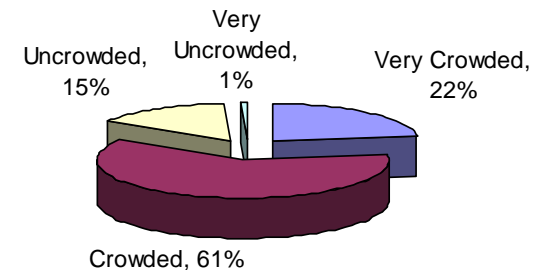
Where are you coming from when you participate in recreation activities



How many hours per week do you spend pursuing recreational sports & fitness?



During the time you prefer to participate in your desired activity, the recreation/fitness facilities are typically:



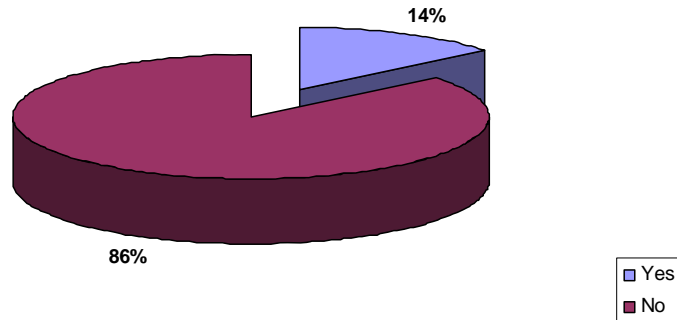
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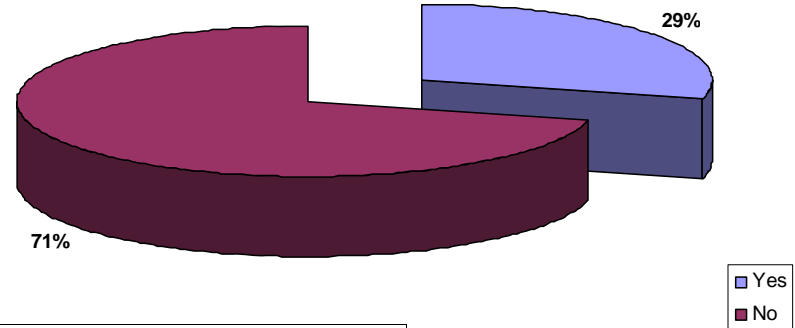
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How Data Shapes the Project Concept

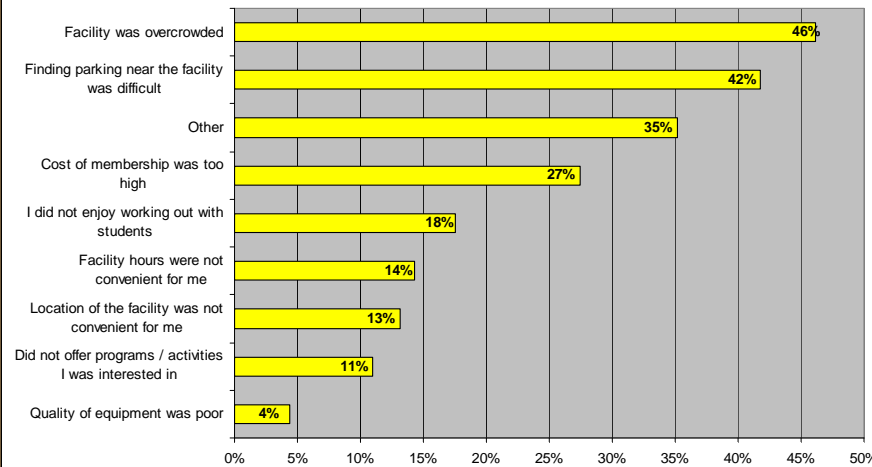
Are you a member of the Co-Rec?



In the past, did you have a Co-Rec membership that you did not renew?



Why did you not renew your membership?



Faculty/Staff



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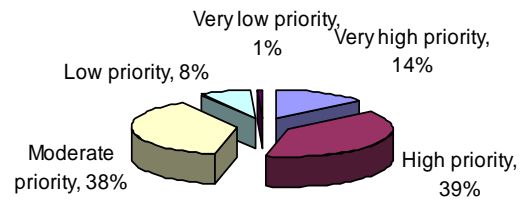


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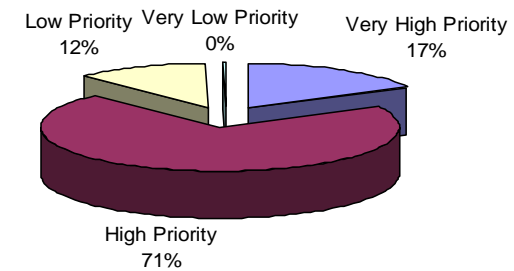
How Data Shapes the Project Concept

Improvements to recreation sports facilities & programs at Purdue should be:



Students

Improvements to recreational sports facilities & programs at Purdue should be:



Faculty/Staff



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How Data Shapes the Project Concept

	Activity	Priority Category	Peak Accommodation			Space Type	Peak Demand	Space Allocation Based on Prioritization of Demand		
1	Cardiovascular fitness machines	first	75%	to	85%	Sq. Ft.	16,220	12,200	to	13,800
2	Free weights	first	75%	to	85%	Sq. Ft.	18,340	13,800	to	15,600
3	Weight machines	first	75%	to	85%	Sq. Ft.	15,510	11,600	to	13,200
4	Indoor jog or walk	second	55%	to	65%	Sq. Ft.	11,940	6,600	to	7,800
5	Group Fitness (aerobics, dance, slide, spinning, step)	second	55%	to	65%	Sq. Ft.	10,190	5,600	to	6,600
6	Basketball	second	55%	to	65%	Courts	23	13	to	15
7	Yoga, stretch, or Pilates	second	55%	to	65%	Sq. Ft.	9,580	5,300	to	6,200
8	Lap swimming	third	40%	to	50%	Lanes	44	18	to	22
9	Racquetball	third	40%	to	50%	Courts	39	16	to	20
10	Outdoor tennis	third	40%	to	50%	Courts	25	10	to	13
11	Rock climbing wall	third	40%	to	50%	Ln. Ft.	52	21	to	26
12	Outdoor basketball	fourth	25%	to	35%	Courts	10	3	to	4
13	Indoor tennis	fourth	25%	to	35%	Courts	20	5	to	7
14	Recreational swimming	fourth	25%	to	35%	Sq. Ft.	6,410	1,600	to	2,200
15	Indoor soccer	fourth	25%	to	35%	Courts	6	2	to	2
16	Outdoor sand volleyball	fourth	25%	to	35%	Courts	5	1	to	2
17	Badminton	fifth	10%	to	20%	Courts	18	2	to	4
18	Water aerobics	fifth	10%	to	20%	Sq. Ft.	8,660	900	to	1,700
19	Volleyball	fifth	10%	to	20%	Courts	6	1	to	1
20	Martial arts	fifth	10%	to	20%	Sq. Ft.	4,240	400	to	800
21	Table Tennis	fifth	10%	to	20%	Tables	11	1	to	2
22	Roller or floor hockey	fifth	10%	to	20%	Courts	2	0	to	0
23	Squash or paddleball	fifth	10%	to	20%	Courts	5	1	to	1
1	COMBINED 1: (Fitness Machines, Free Weights and Weight Machines)						50,070	37,600	to	42,600
2	COMBINED 2 (Group Fitness, Yoga, Stretch, or Pilates, and Martial Arts)						24,010	11,300	to	13,600



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How Data Shapes the Project Concept

- 45,000 sq. ft. of Weight & Fitness
- 19,000 sq. ft. of Group Fitness Space
- Six (6) New Basketball Courts
- One (1) new MAC
- Leisure Pool
- New ¼-Mile Jogging Track
- Redevelopment/Renovation of Existing Facility



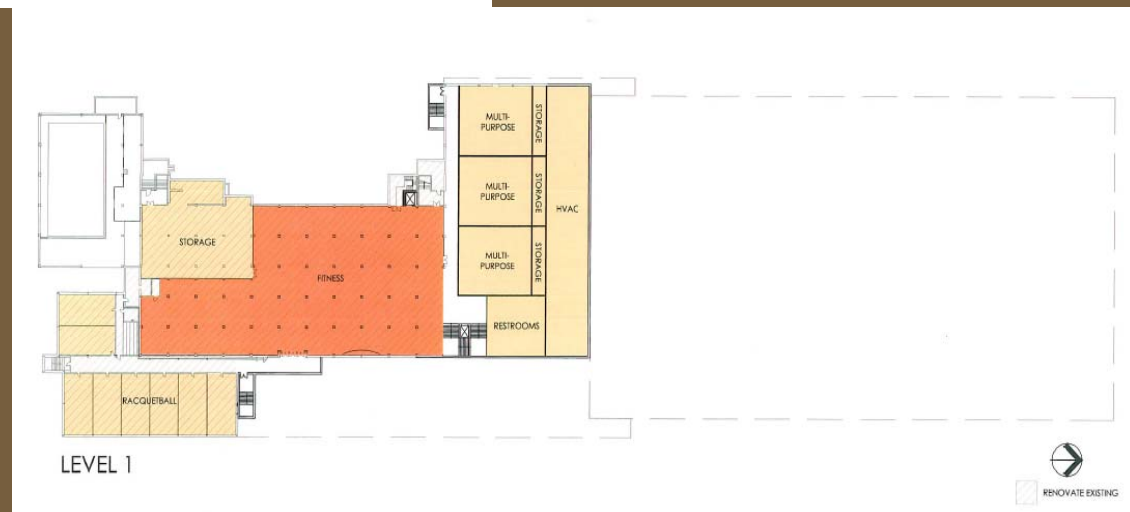
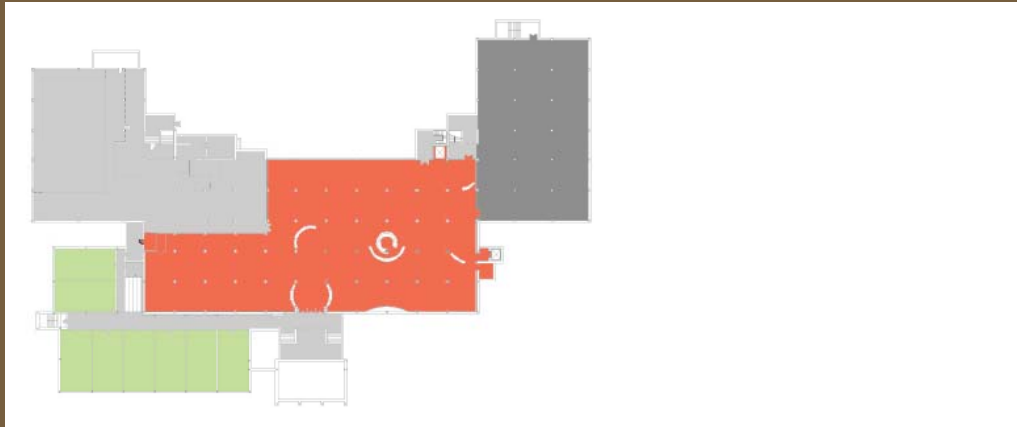
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Early Sketches



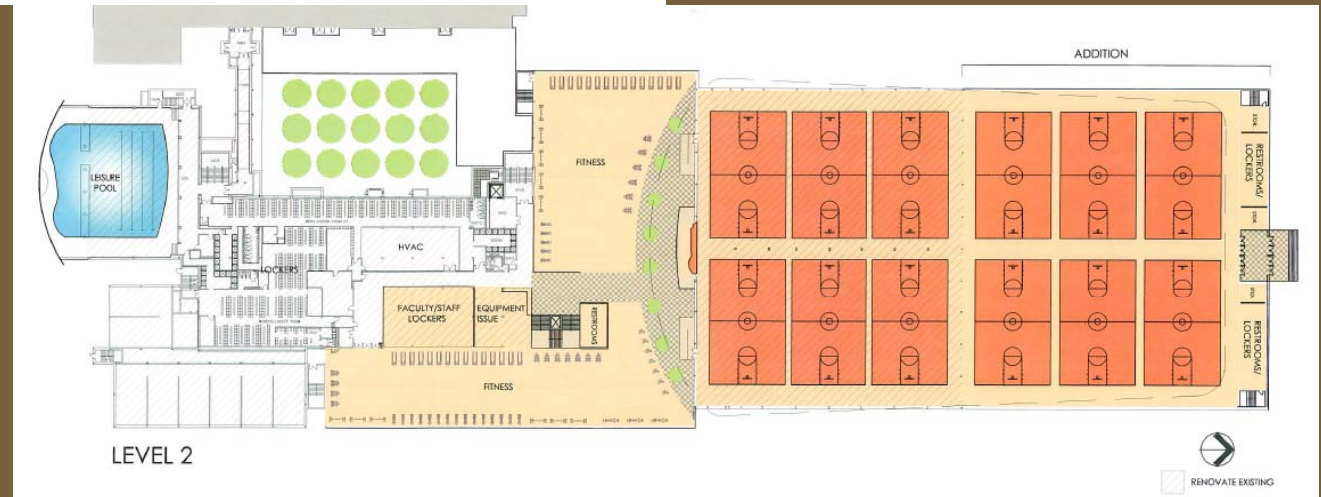
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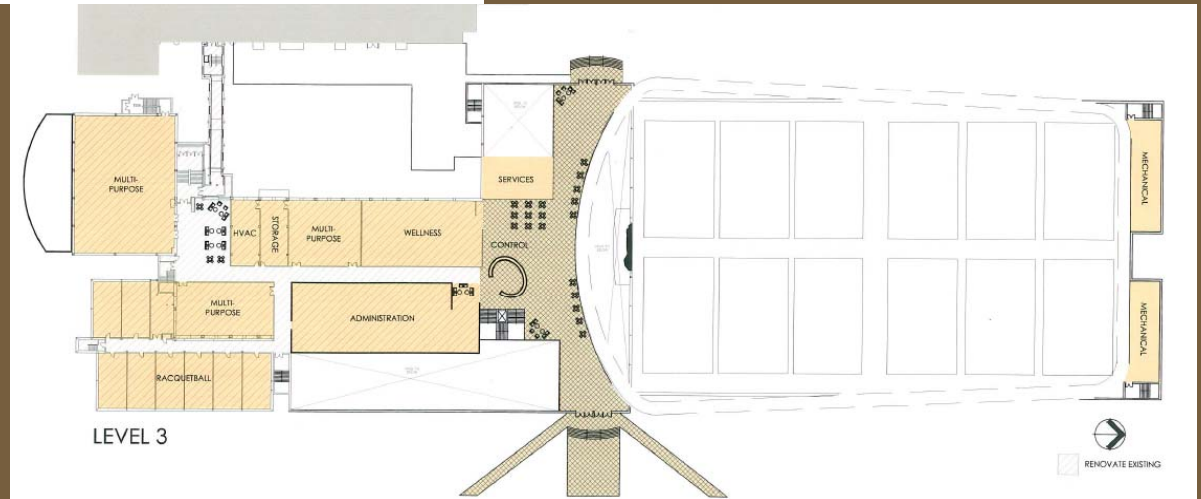
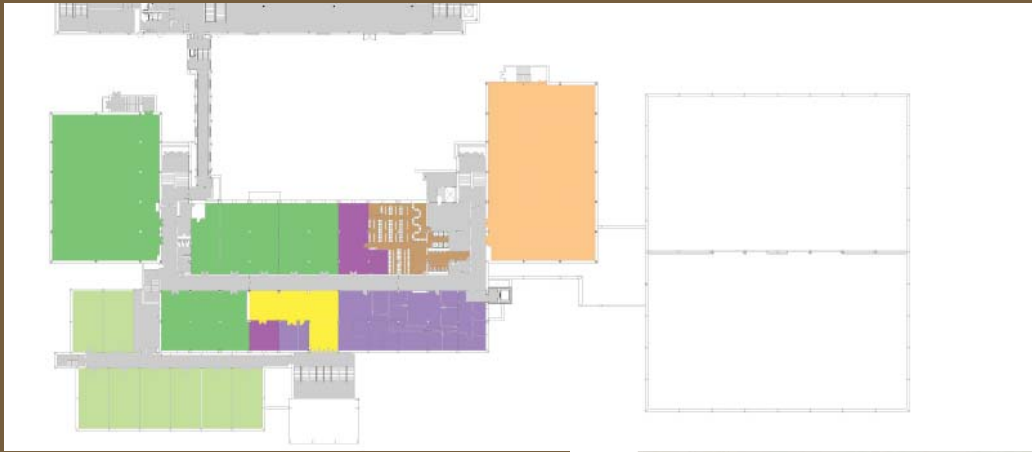
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Early Sketches



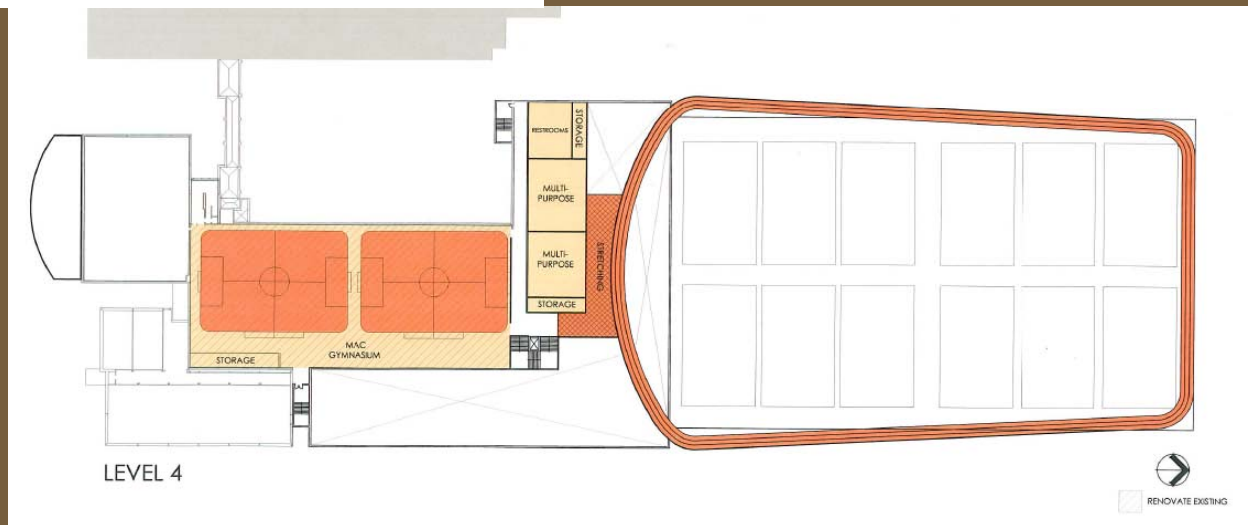
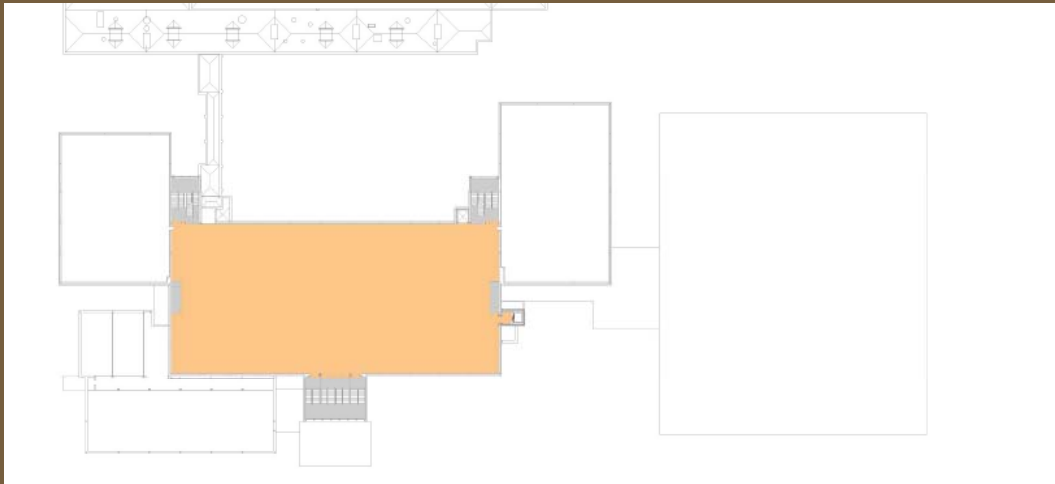
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Early Sketches



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Early Sketches



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**Previous Vision 1:
“Not exciting enough”
“Traditional”**

**Balance of Traditional to
Modern**

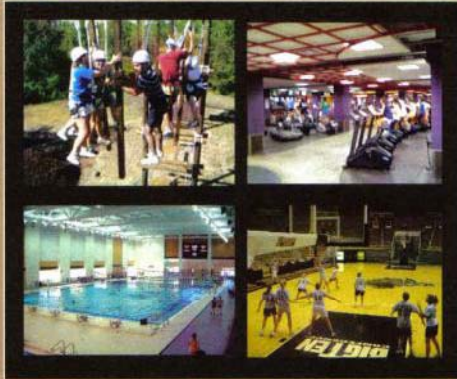
**Previous Vision 2:
“Better”
“More Modern”**



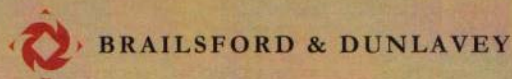
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Program: *Demonstration Concept*

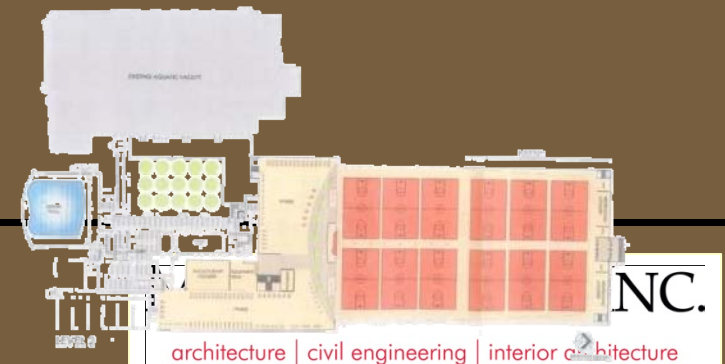


PURDUE UNIVERSITY
RECREATION NEEDS ASSESSMENT
ADDENDUM
JANUARY 2007



Facilities Into

- Basis for Current Description
- 413,000 GSF (measured?)
- More Detailed North Concept Plan & Images
- Helped Sell the Project



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Evaluating the Past

- Evaluating Existing Conditions
- Evaluating existing Feasibility Study

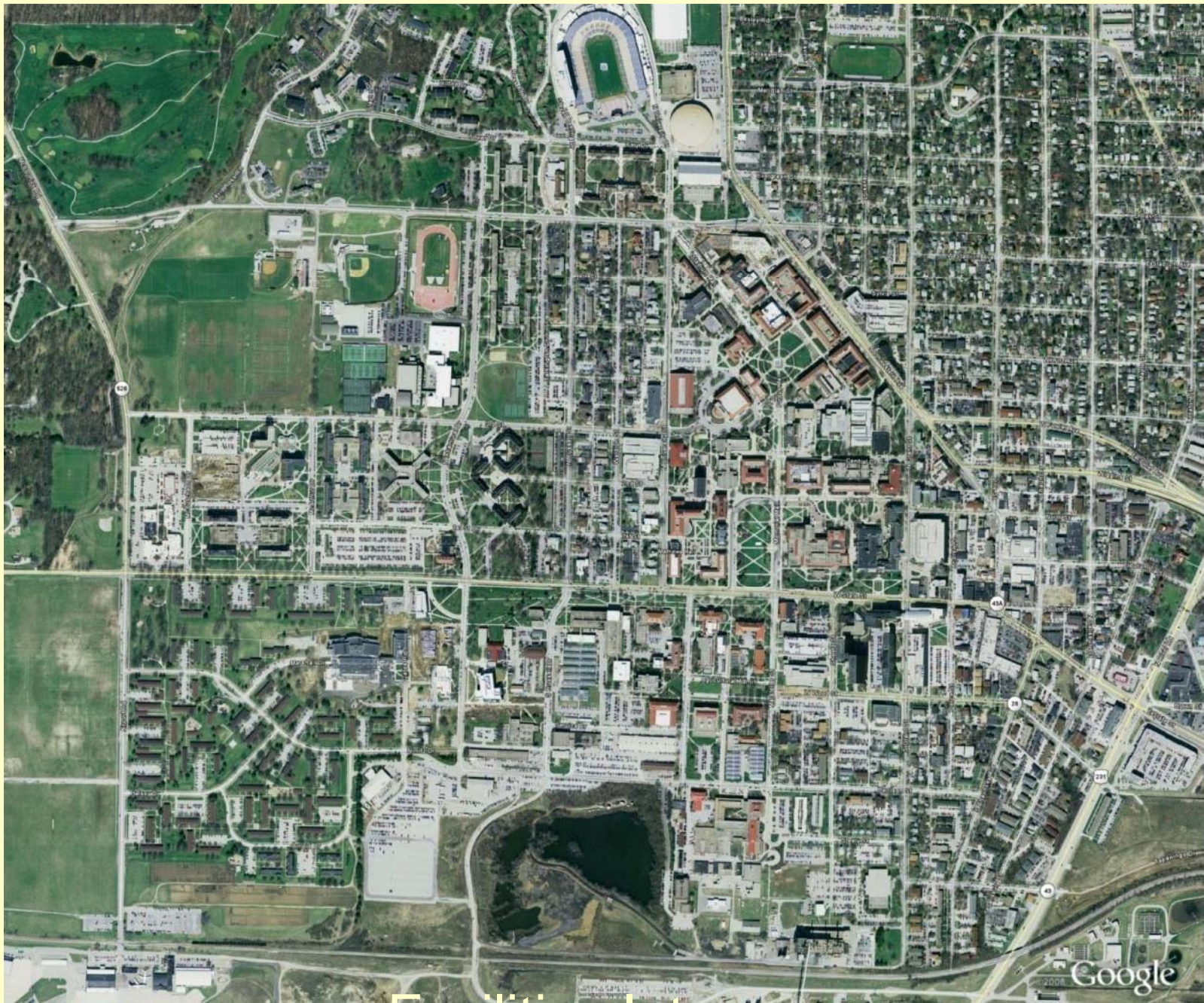


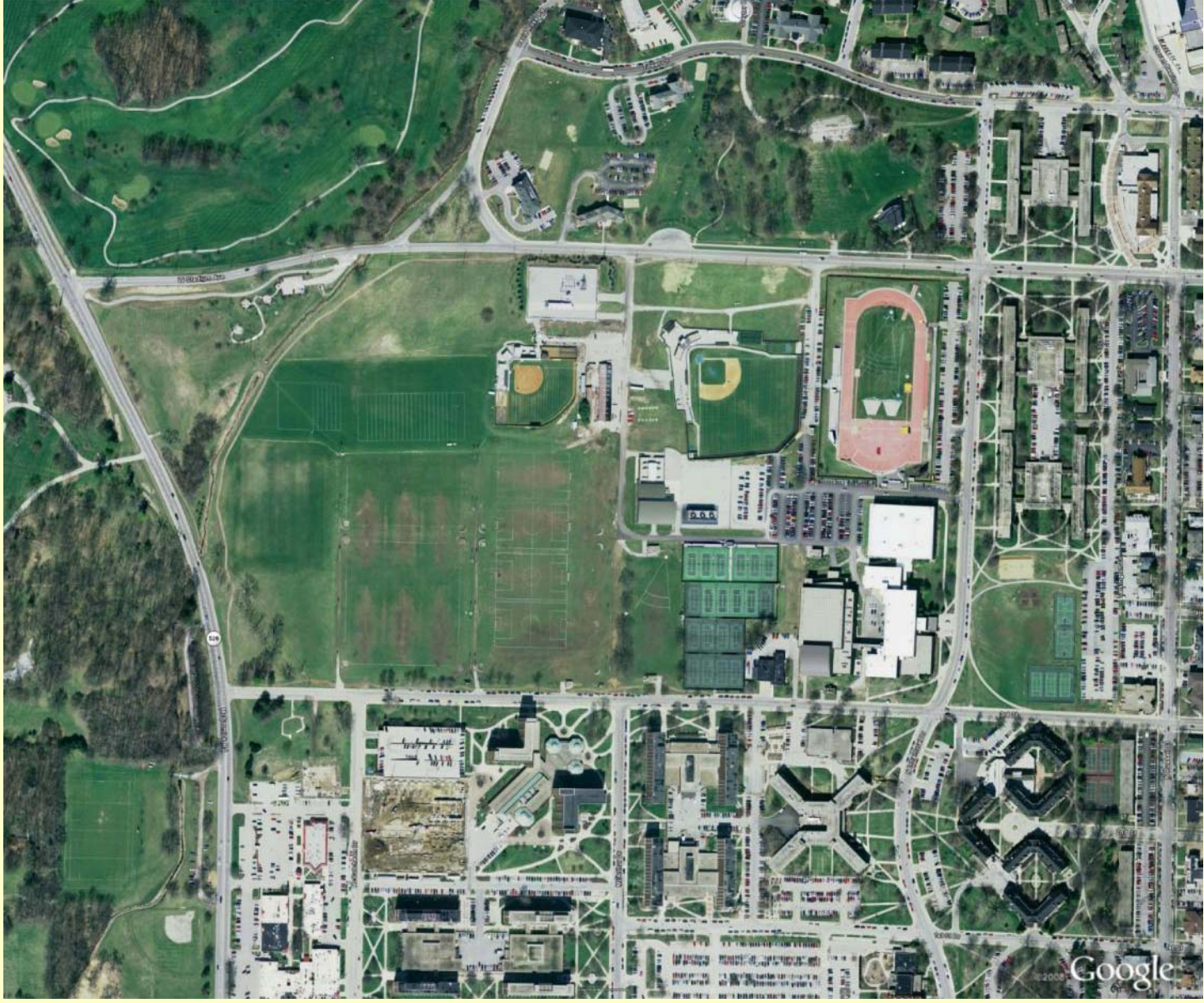
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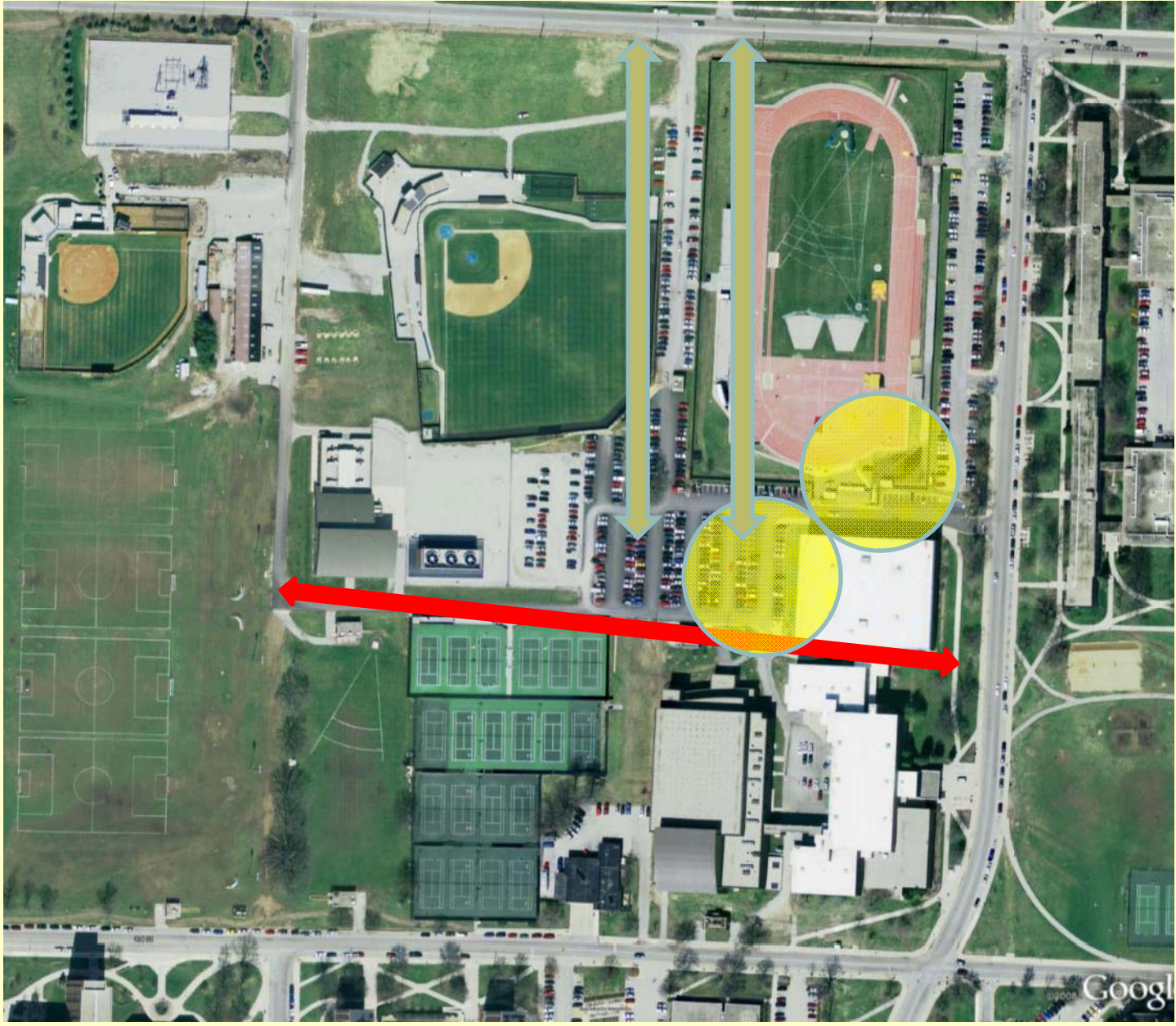
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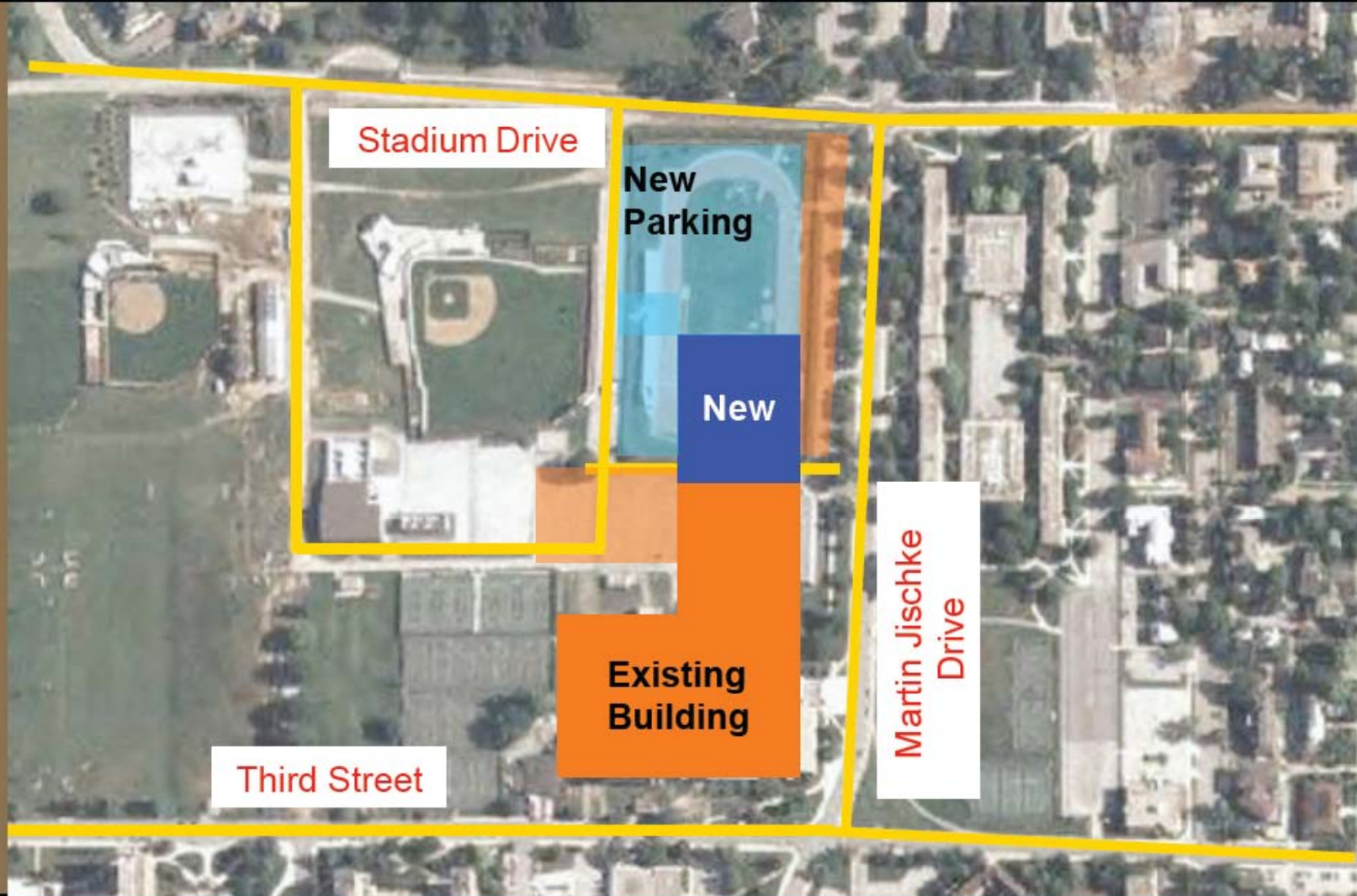




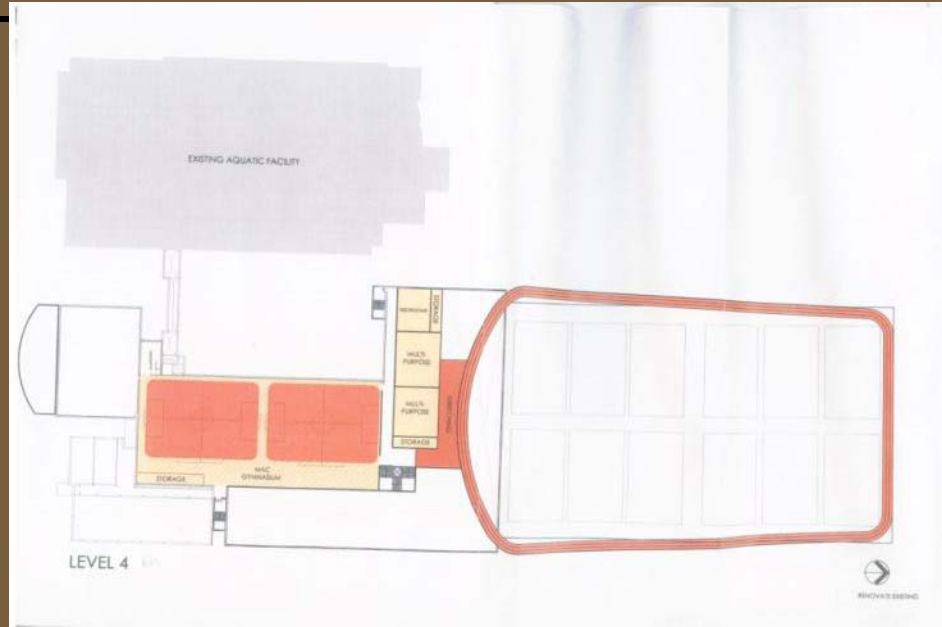
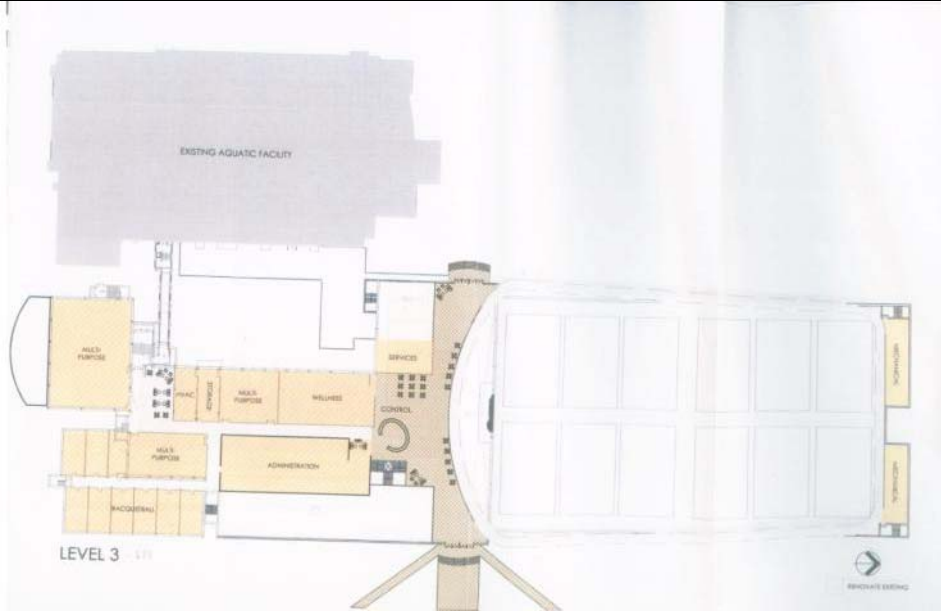




Site Analysis Previous Direction



Sample: 4 floors Behind one Diagram



Facilities Into

Early Sketches : Existing Conditions



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Early Sketches

- Initial Concepts :
- Design Charrette (Workshop)
 - Bring multiple Ideas
 - Investigate many options
 - Evaluate the good/bad of each
 - Created Consensus
 - Create General Direction



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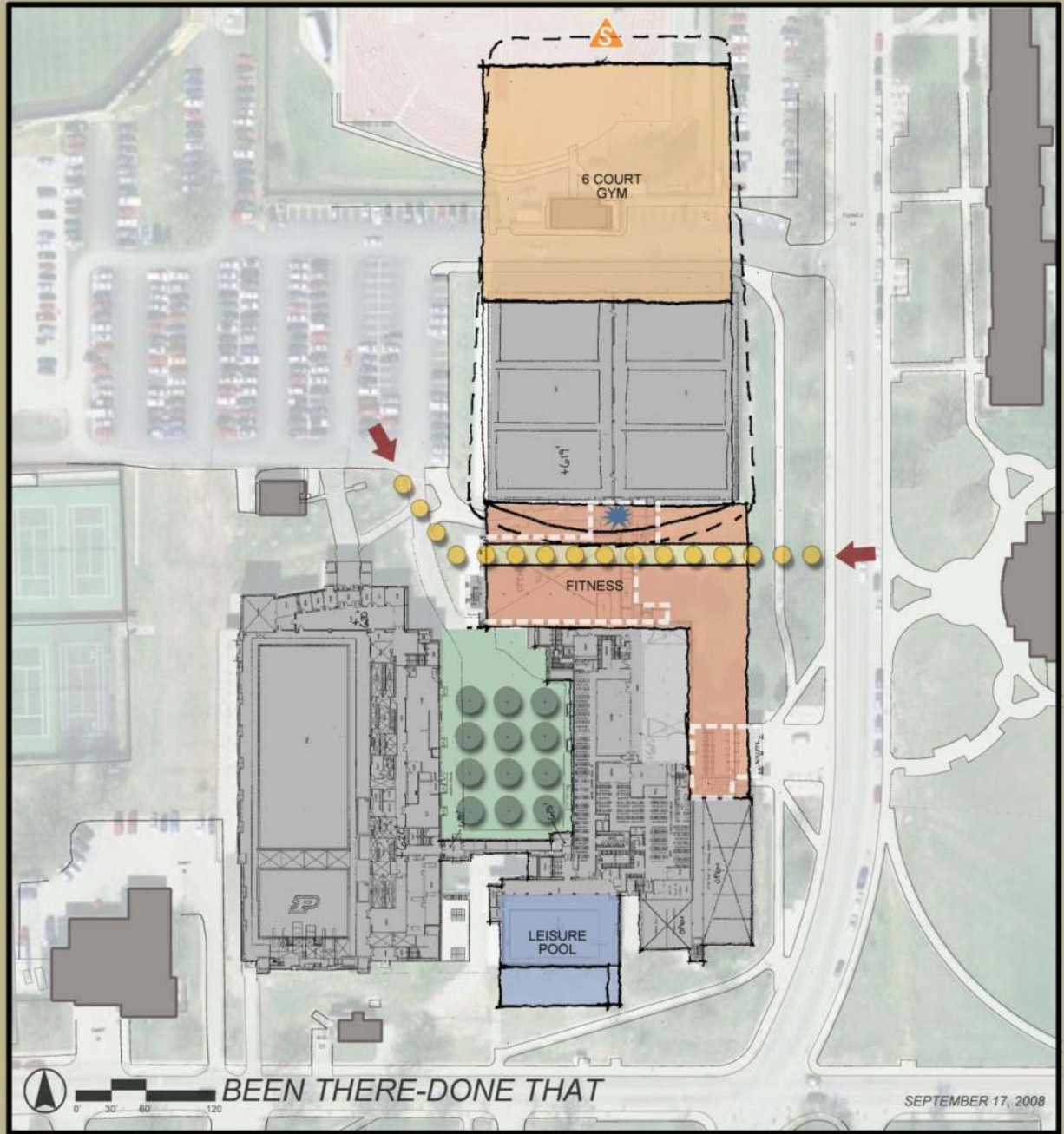
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Been
There...
Done That

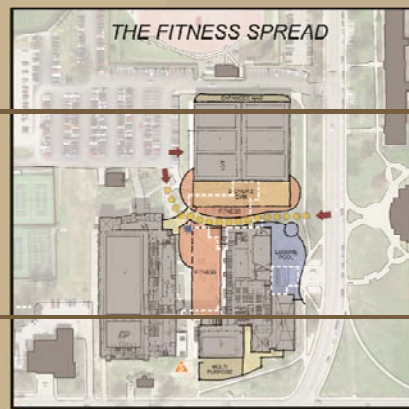
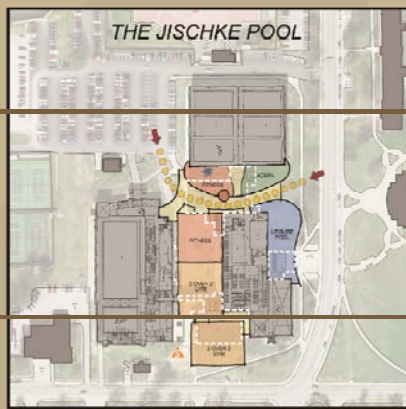
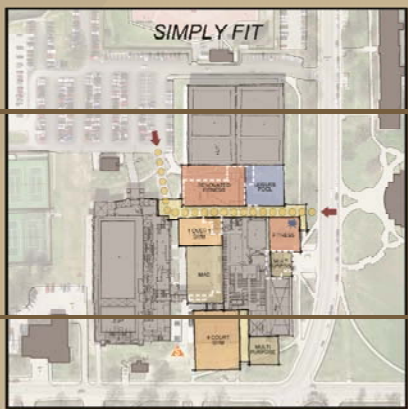
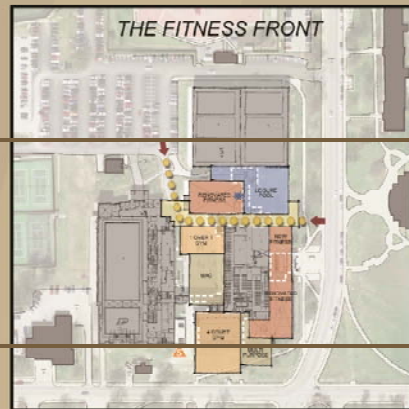
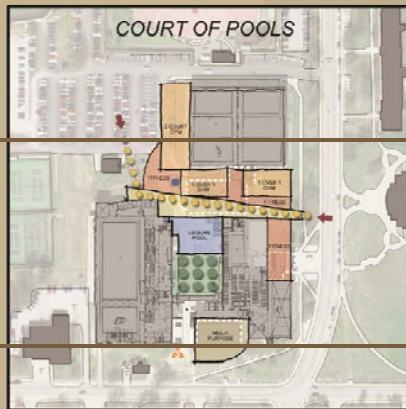
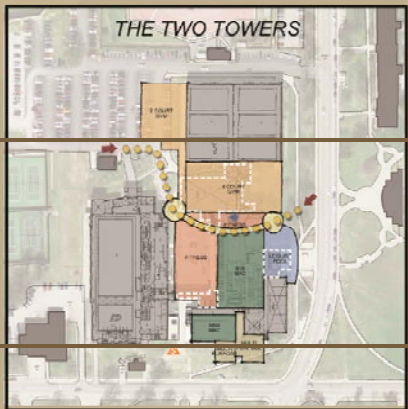
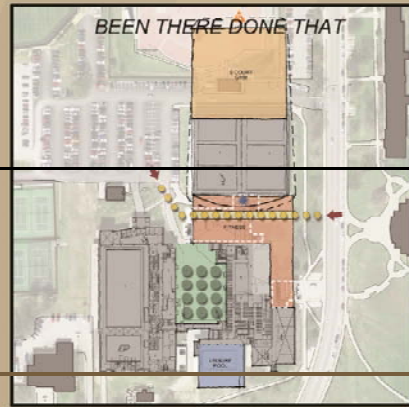
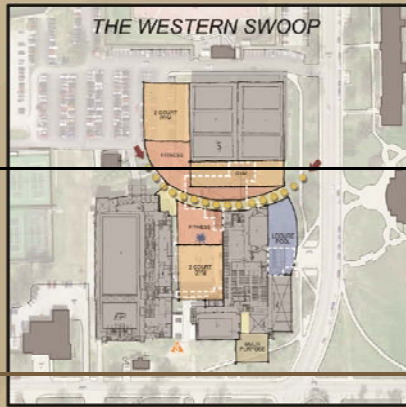


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UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
BEASLY HALL SPORTS CENTER

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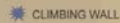


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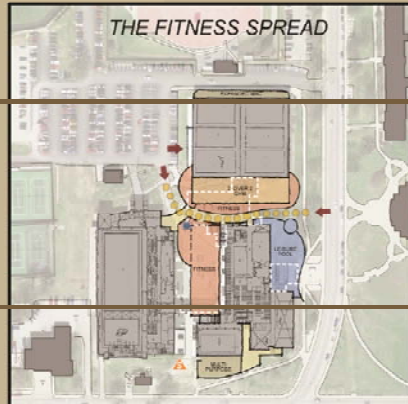
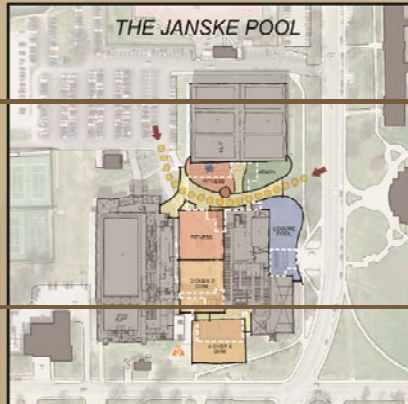
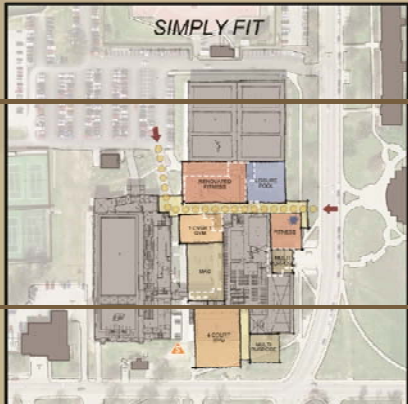
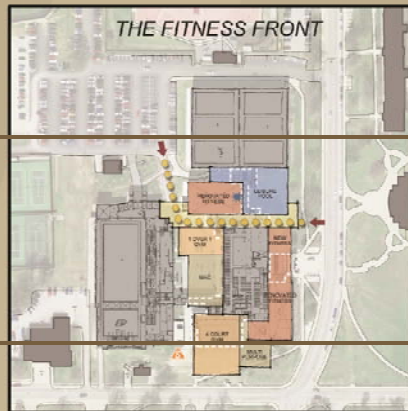
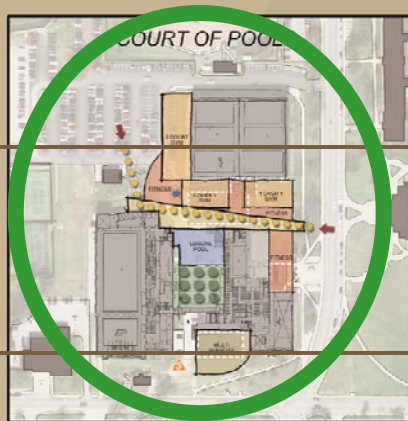
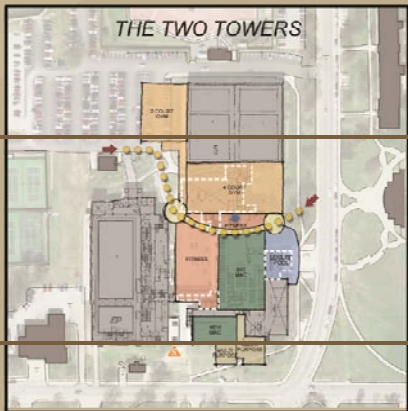
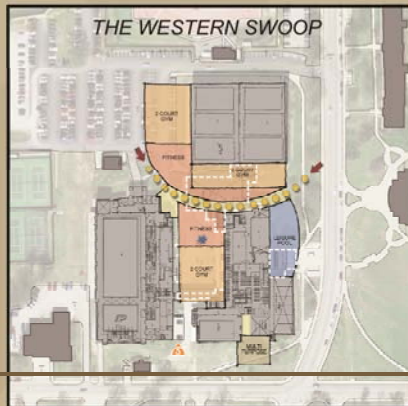
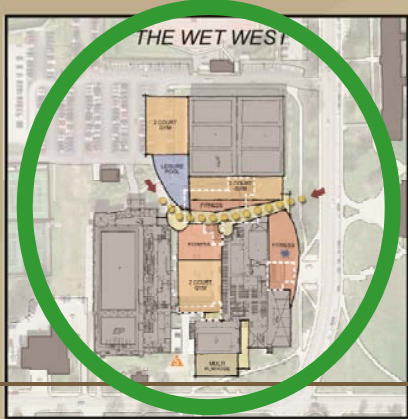
NORTH



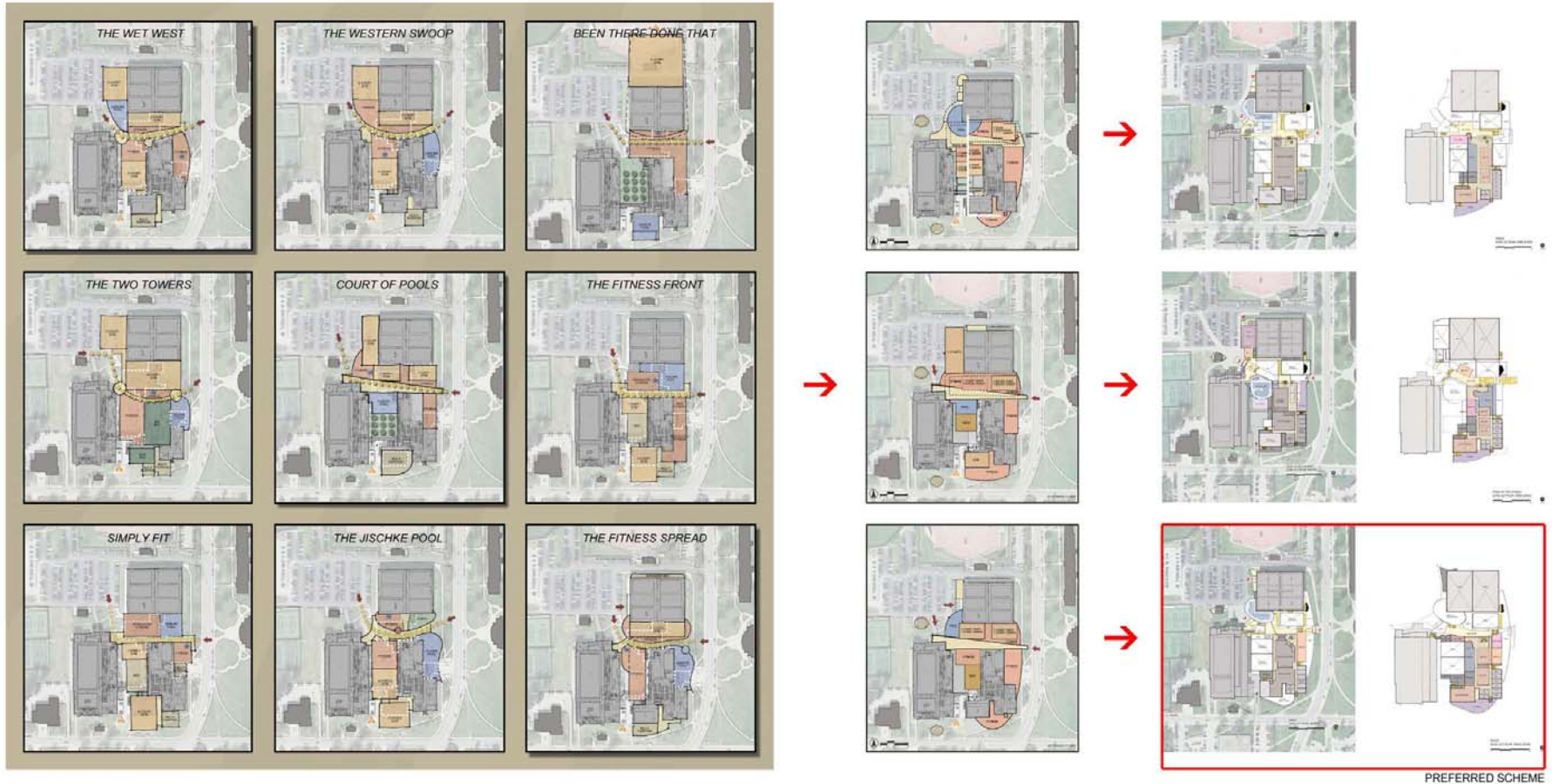
SEPTEMBER 17, 2008
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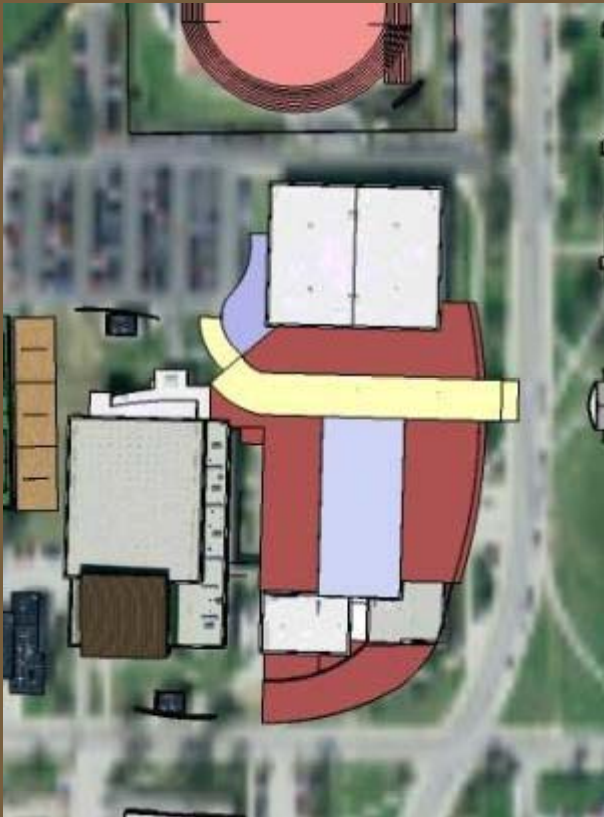
Early Sketches- Process Diagrams



PROCESS & DEVELOPMENT DIAGRAMS



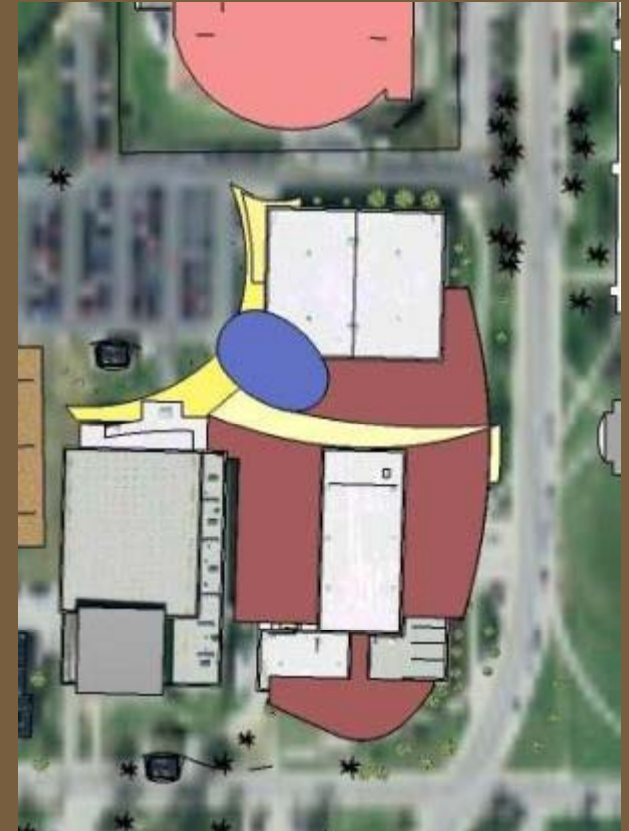
Swish



Pool in Middle



Edge



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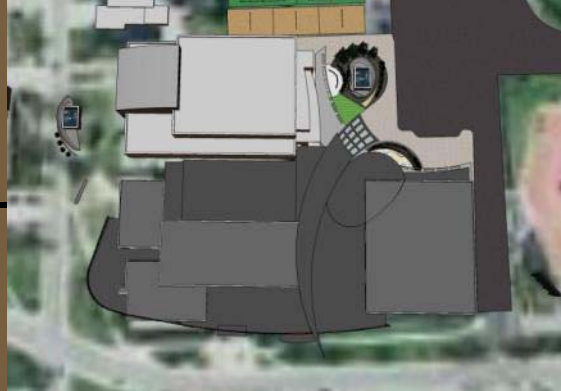
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COMPOSITE
QUARTERS

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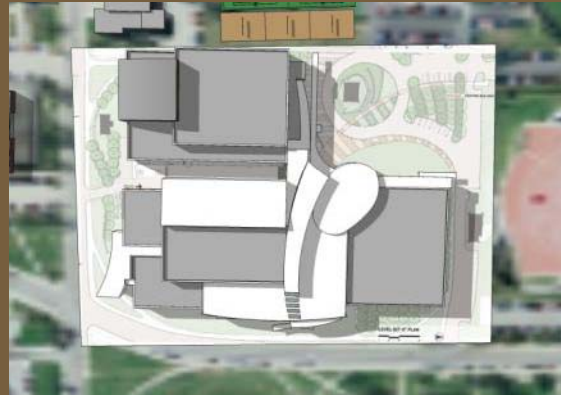
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WHAT'S THE POINT



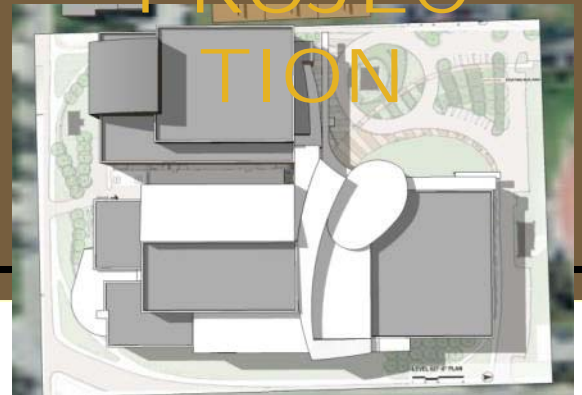
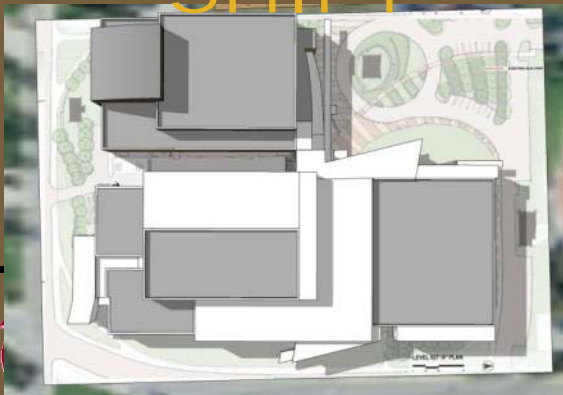
BENT
SHIFT

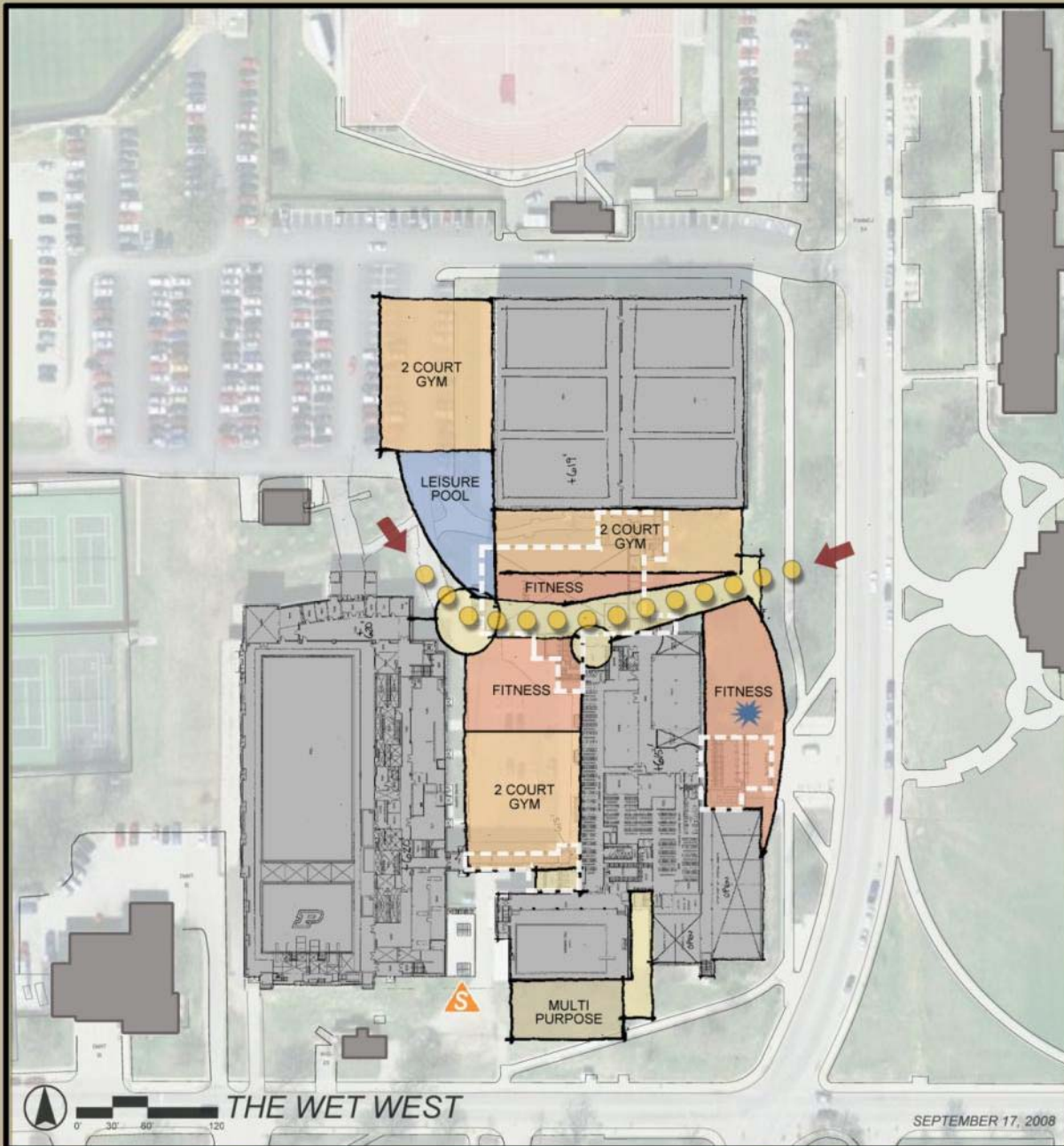


ARC
BACK TO
BASICS



FOLD
PROJEC
TION





The Wet West





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Phasing

- Temporary Facilities
 - Equipment at Residence Halls
 - Keeping north Gyms open during Construction
 - Early MAC/Turf Structure
- Early Site Packages –
 - Utilities
 - Steel
 - Demolition



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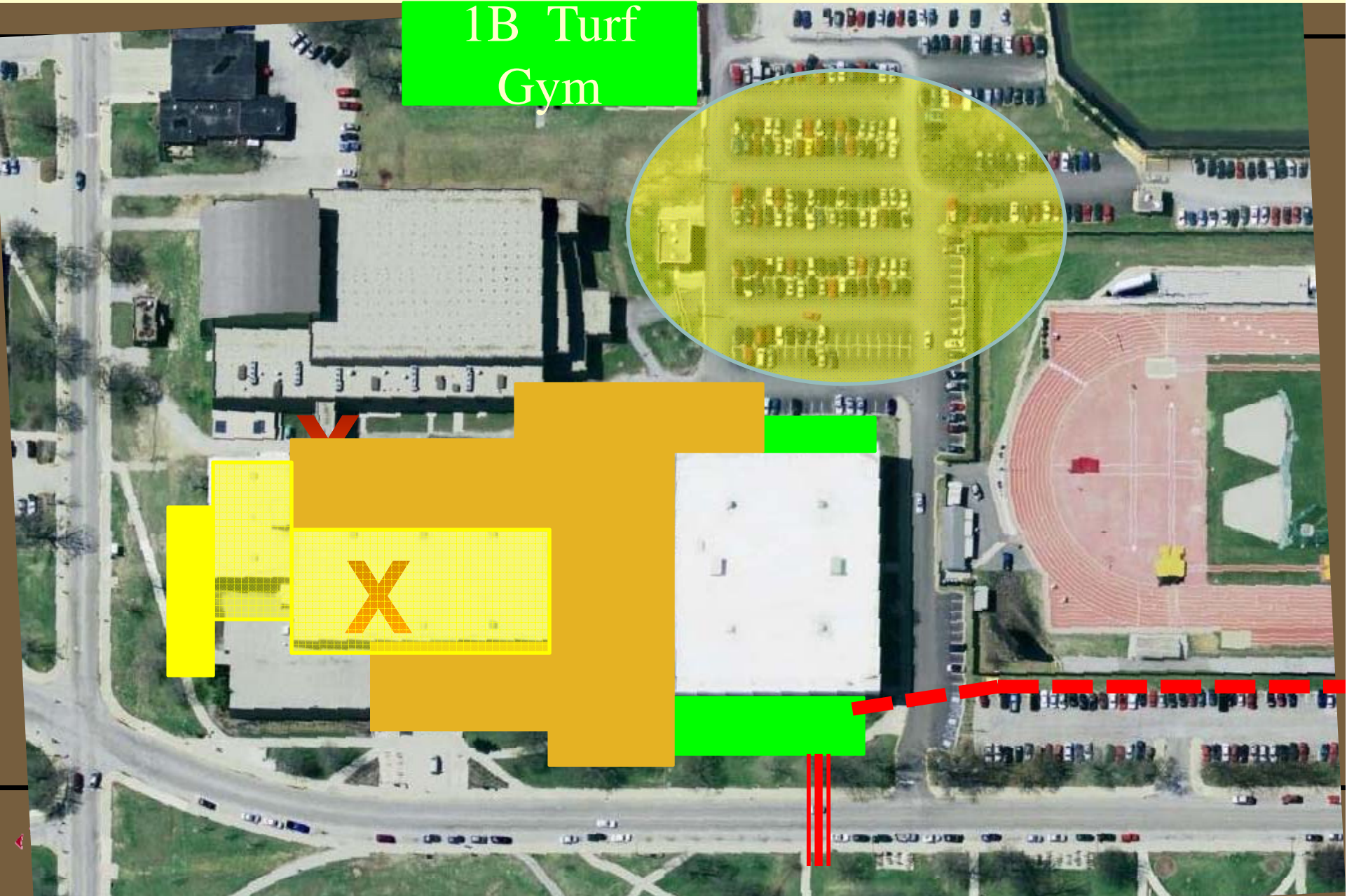
PHASING

ONE

TWO

THREE

1B Turf
Gym



Early Phase- Turf Gym



Early Sketches-Modeling

- Initial Concepts :
- Design Charrette

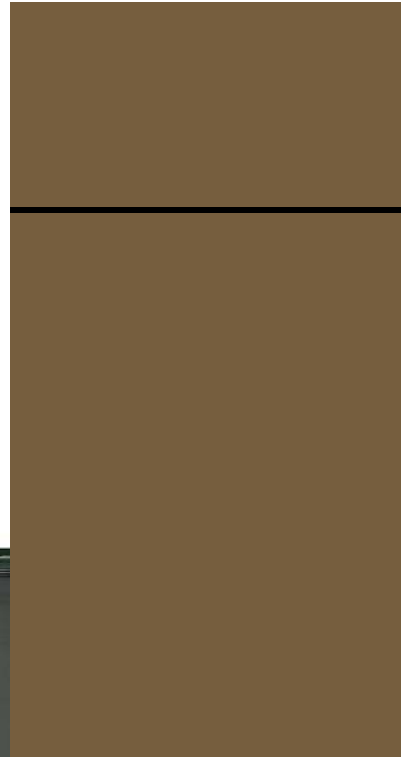


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Named Studies



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Early NW Entry Study



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Study Elevations

Elevation Studies



Too Modern



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Early Sketches

- Refining the Concept – Working through Plans



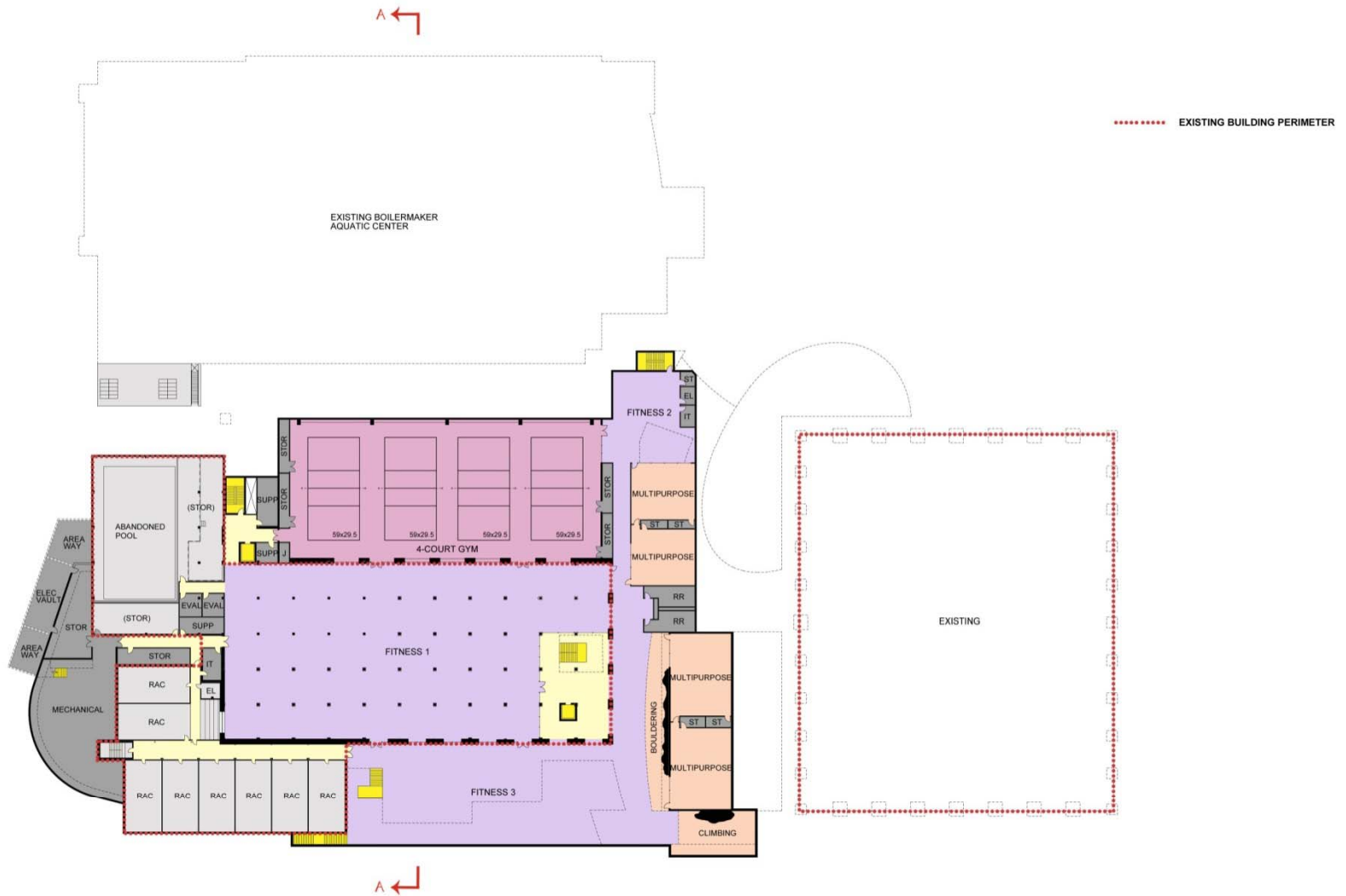
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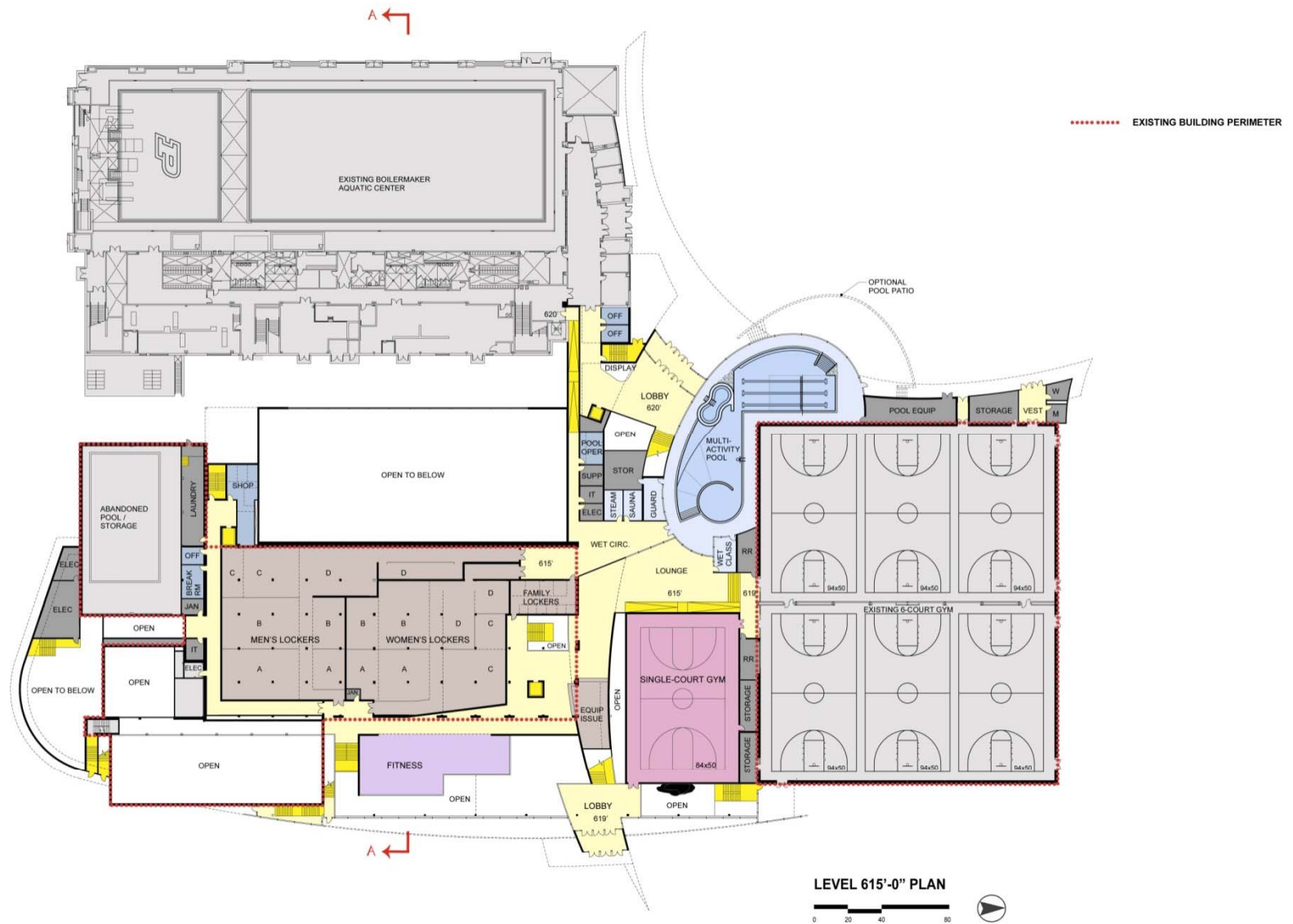
Early Sketches- Concept Floor plans



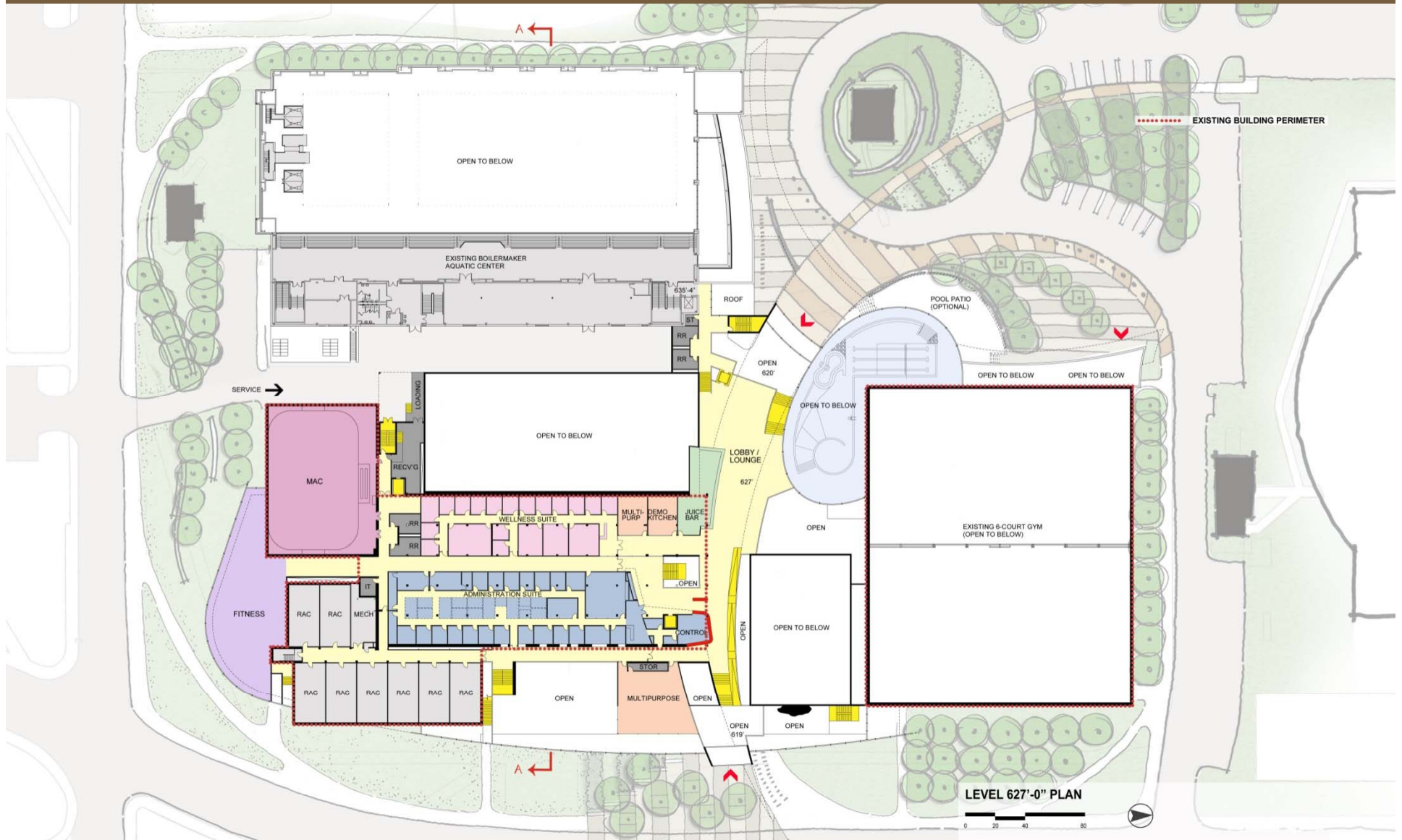
LEVEL 603'-0" PLAN



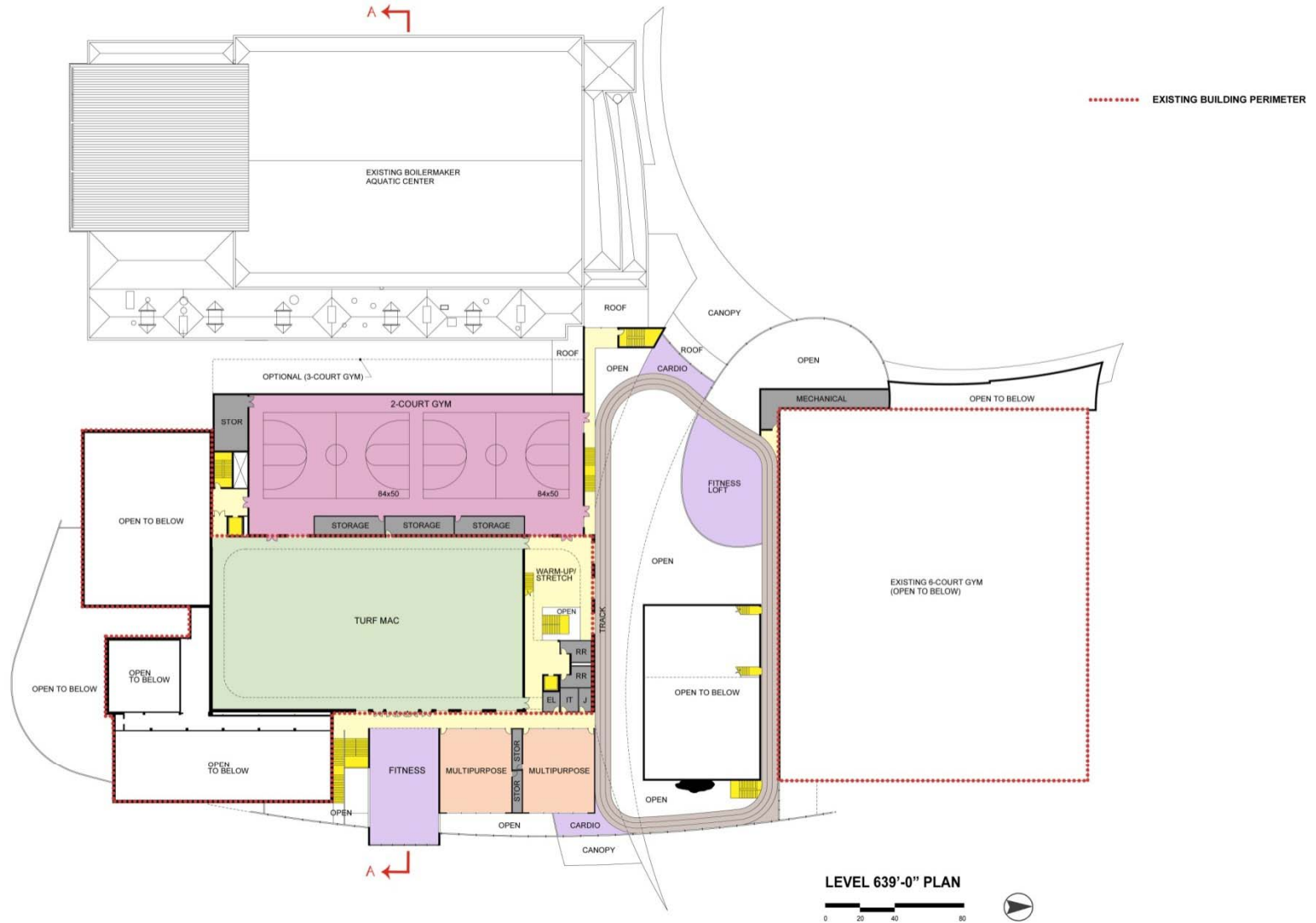
Early Sketches- Concept Floor plans



Early Sketches- Concept Floor plans



Early Sketches- Concept Floor plans



REFINING THE CONCEPT

- The role of Study Models
 - Starts with Chip Board massing
 - Extends to more detailed modeling as project progresses



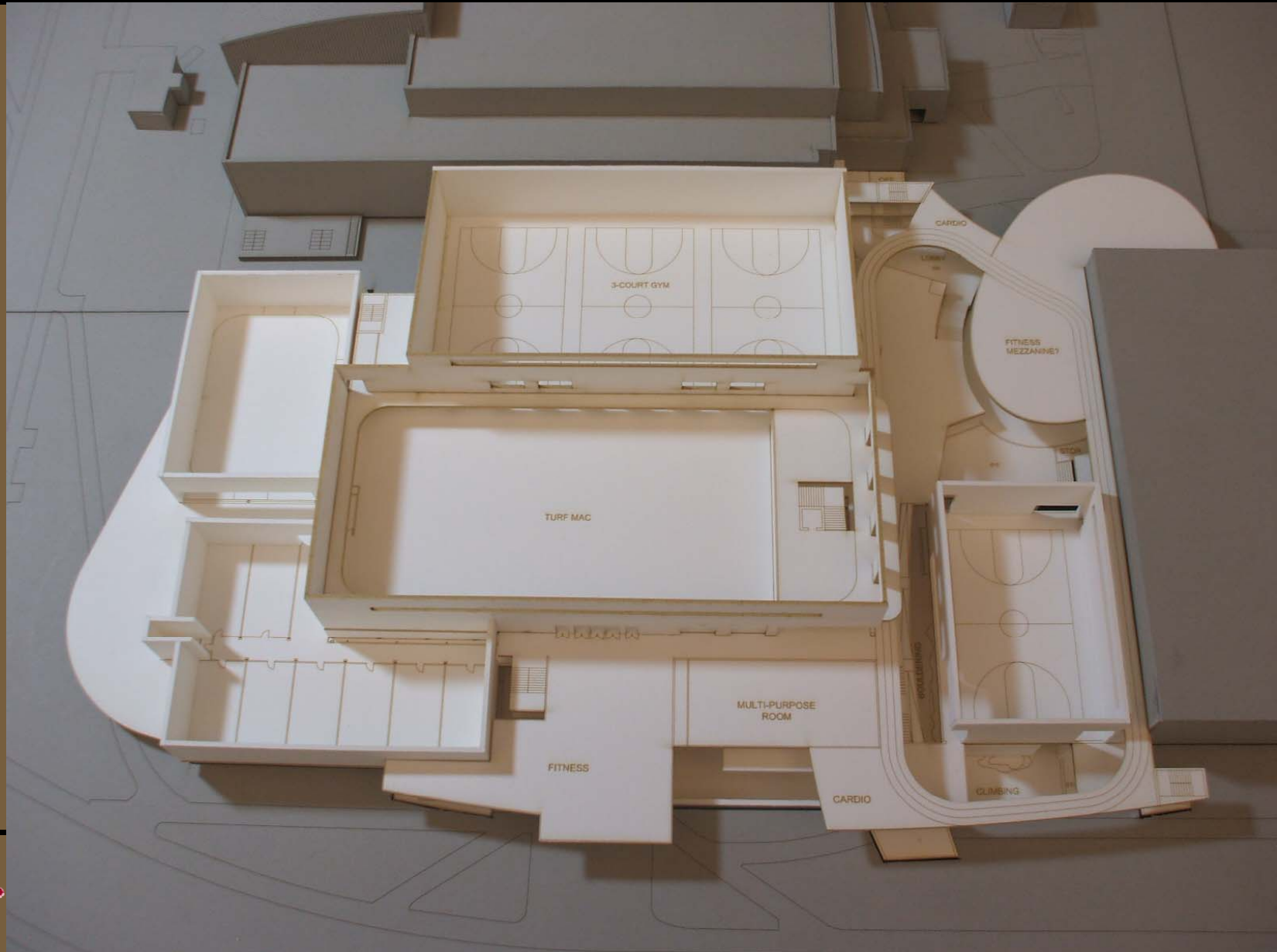
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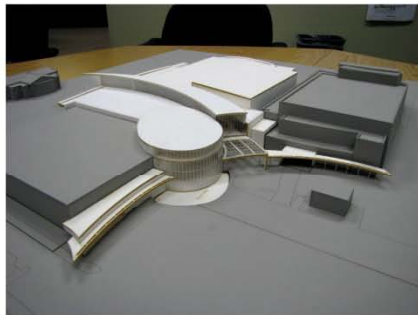
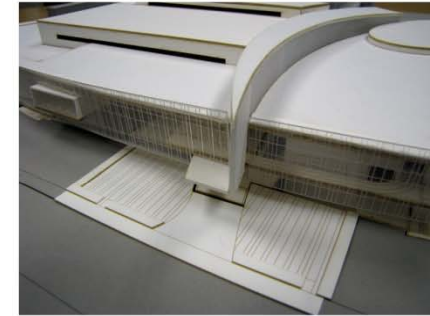
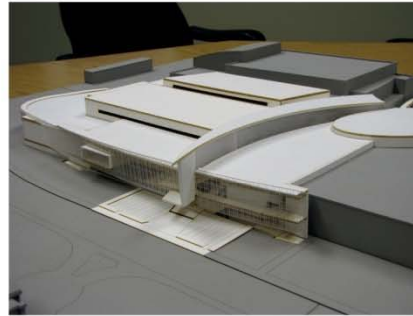
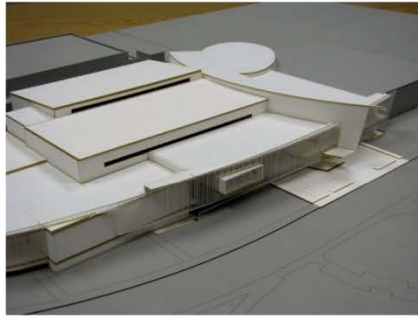
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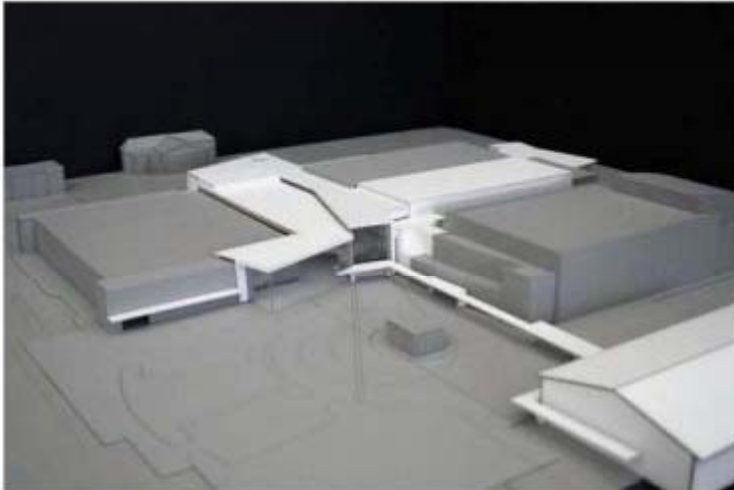
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Early Concept Models



Refining the Concept





NORTHWEST VIEW



SOUTHEAST VIEW



INTERIOR INFILL



EAST ENTRANCE

OCTOBER 29, 2008



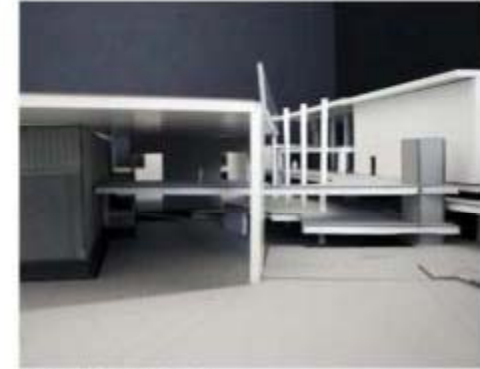
WEST ENTRANCE



EAST ENTRANCE



INTERIOR VIEW



WEST ATRIUM SPACE



SOUTH SECTIONAL VIEW



EAST ATRIUM SPACE

OCTOBER 29, 2008

Developed Model



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Developed Model



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REFINE THE CONCEPT

- Refining the Concept – Fitting Campus Image and vernacular
 - Existing Large Brick Masses
 - Adding Glass while maintaining existing



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


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SOUTHEAST VIEW

 PURDUE UNIVERSITY
STUDENT FITNESS & WELLNESS CENTER RENOVATION AND ADDITION

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
EAST ELEVATION



NORTH ELEVATION

ELEVATIONS

NO SCALE

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WEST ELEVATION



SOUTH ELEVATION

ELEVATIONS

NO SCALE

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Communicating the Design

- Renderings



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East Entry View @ SD



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Updated East Façade Design Direction



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 **HEATHWOOD & DUNLAVY**
Southeast Entry View



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Refining the Concept

- Accepted Image



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REFINING THE PROJECT

- Role of BIM: Building Information Modeling
- Model project in 3D
- Intelligent information
- Reduces conflicts – helps identify potential errors
- Helps to share and explain ideas.



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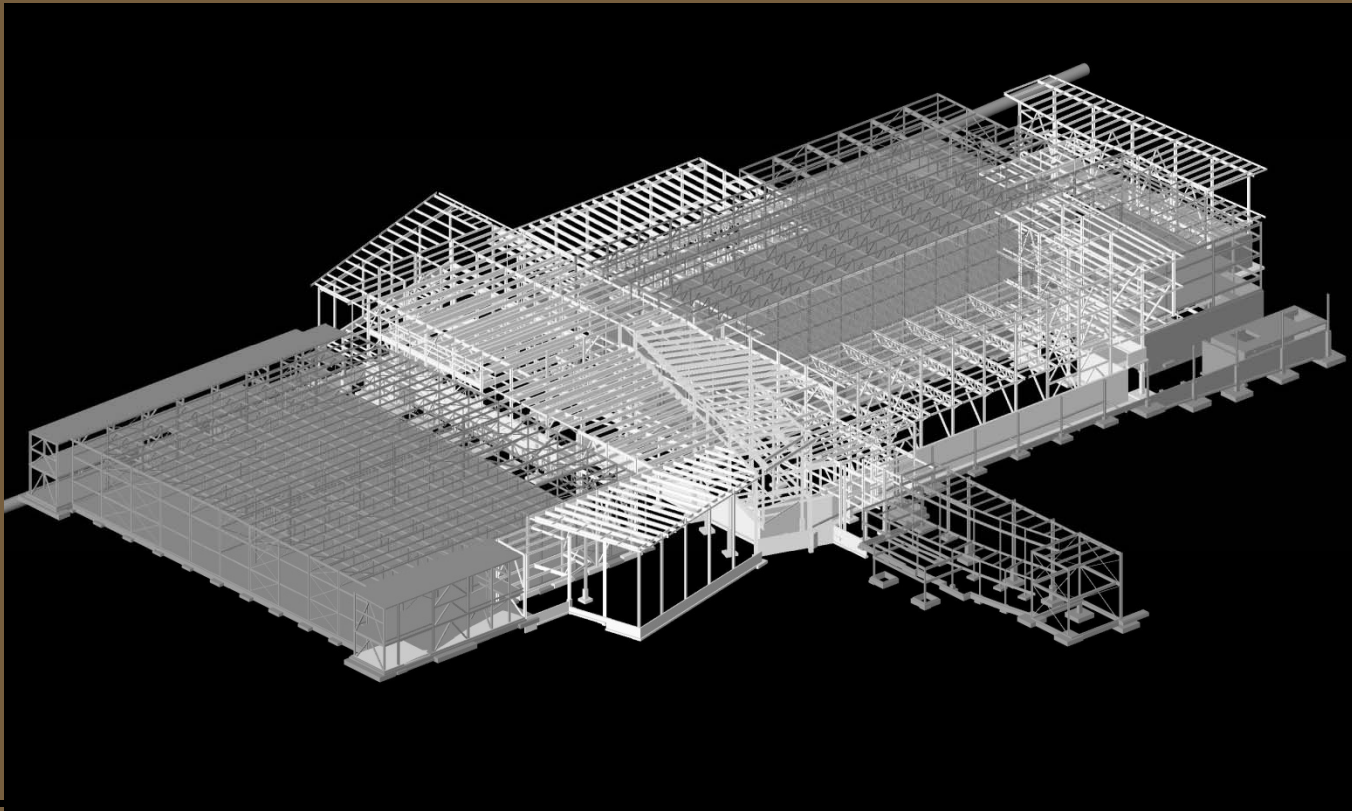


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STRUCTURAL BUILDING INFORMATION MODEL

- SET UP BY PHASES / SEQUENCING
- COORDINATION WITH OTHER DISCIPLINES



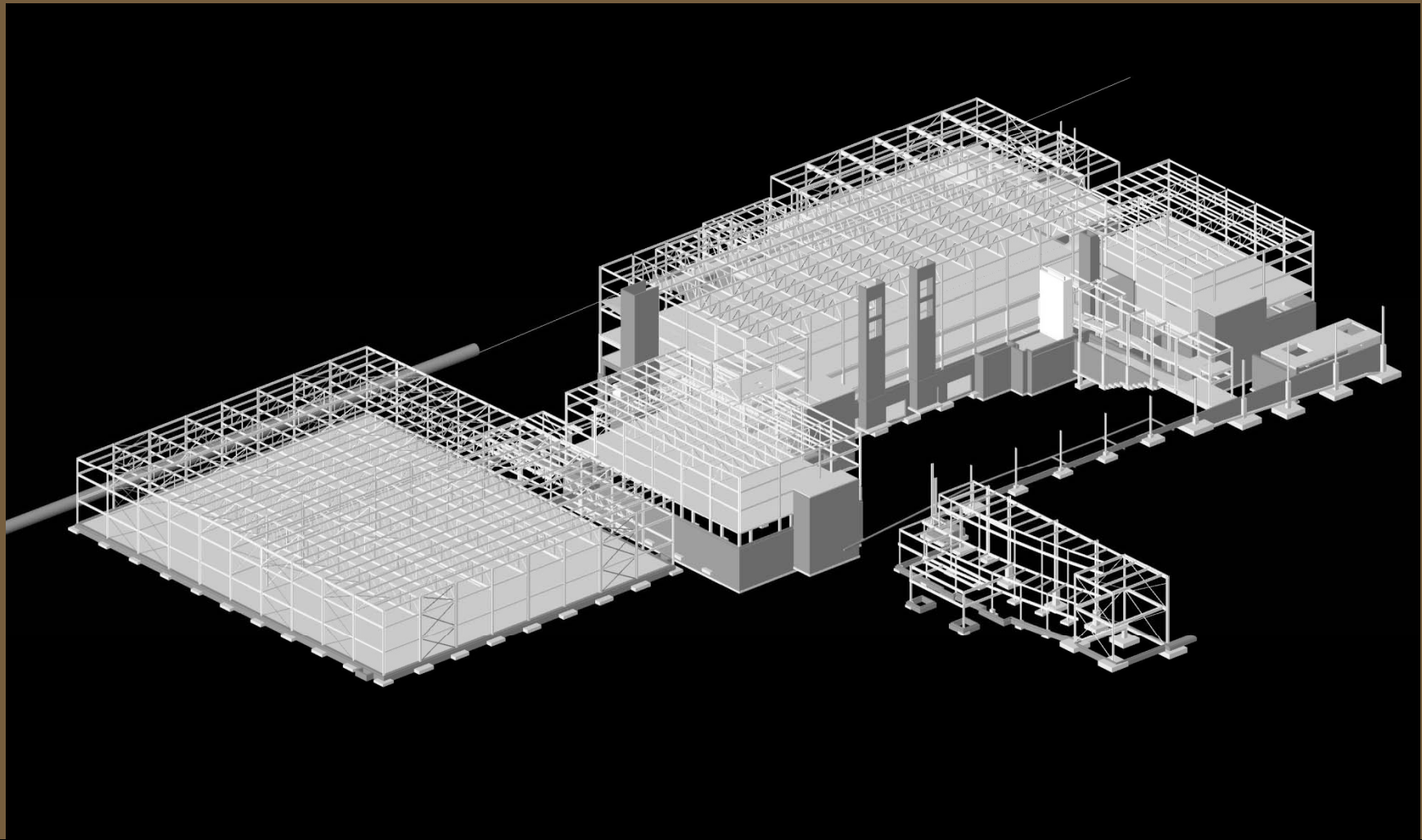
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EXISTING STRUCTURE



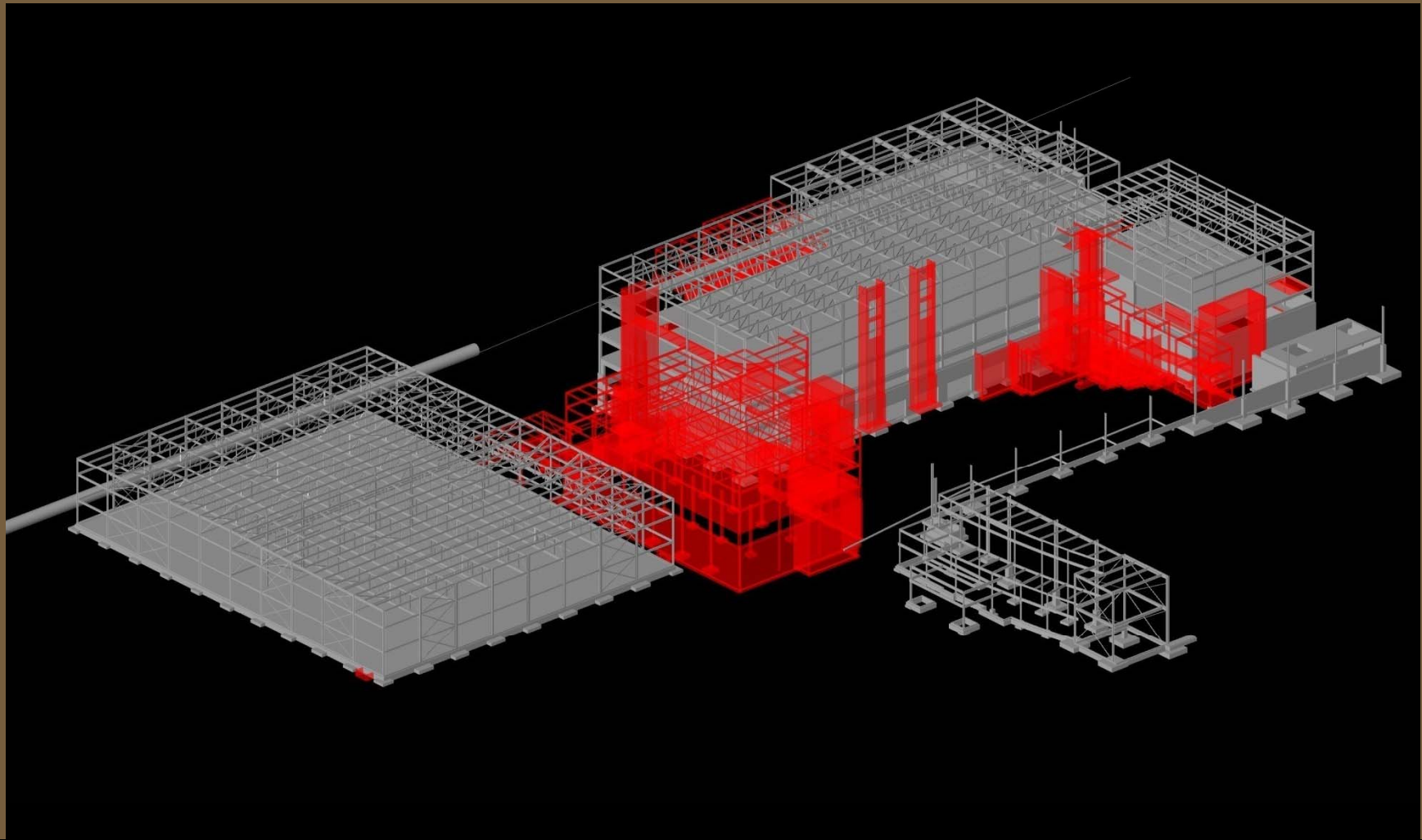
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TO BE DEMOLISHED



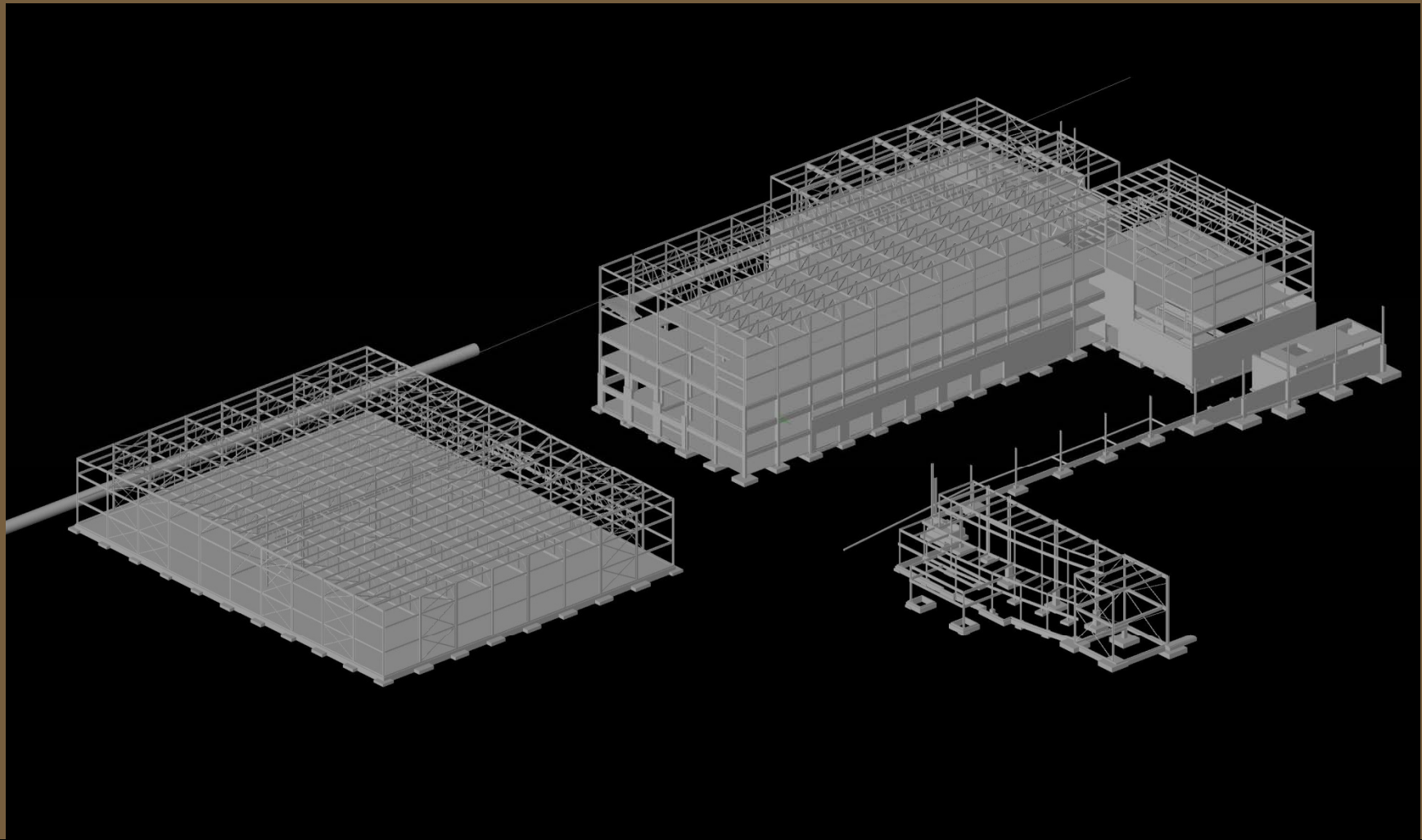
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STRUCTURE TO REMAIN



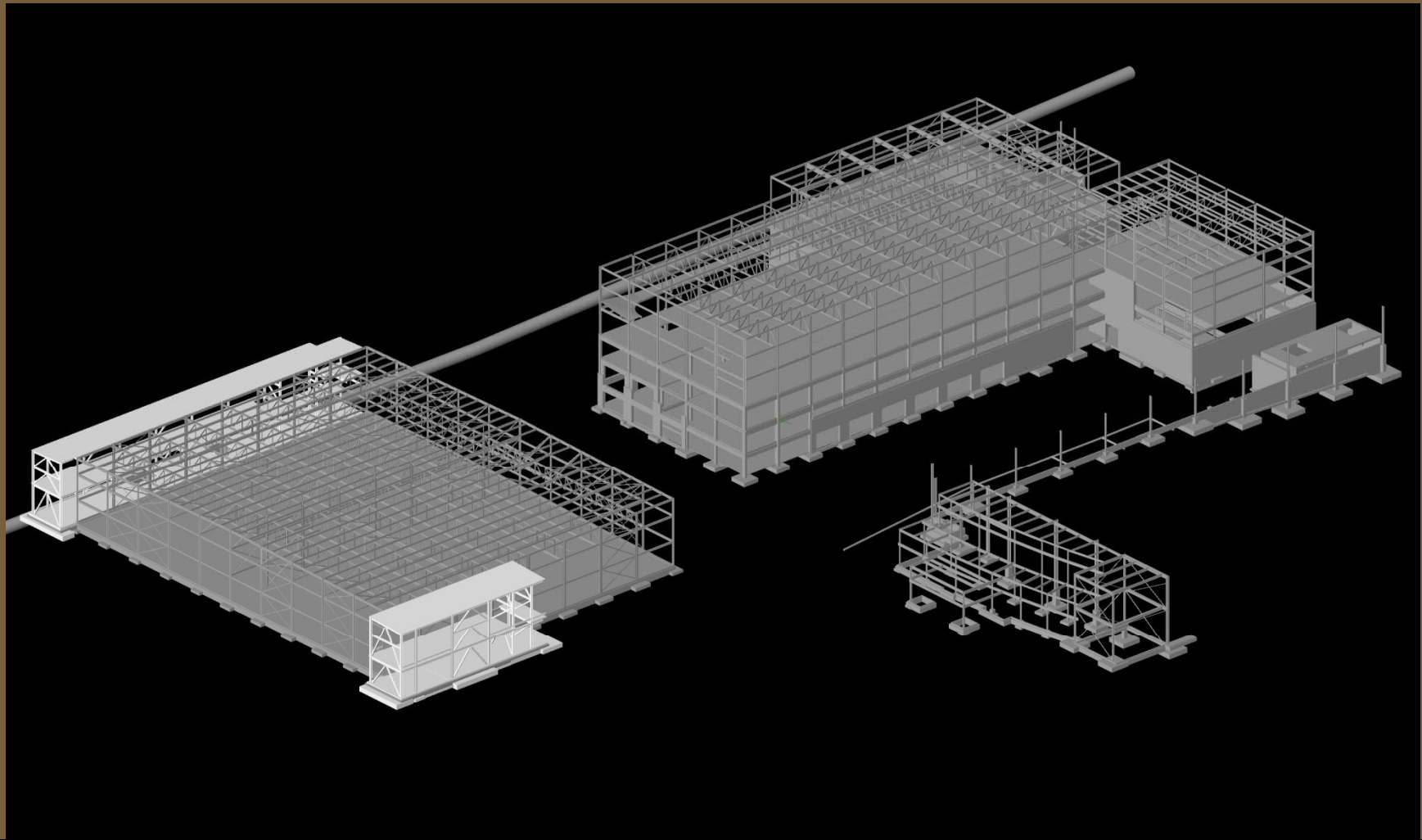
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DESIGN RELEASE 1



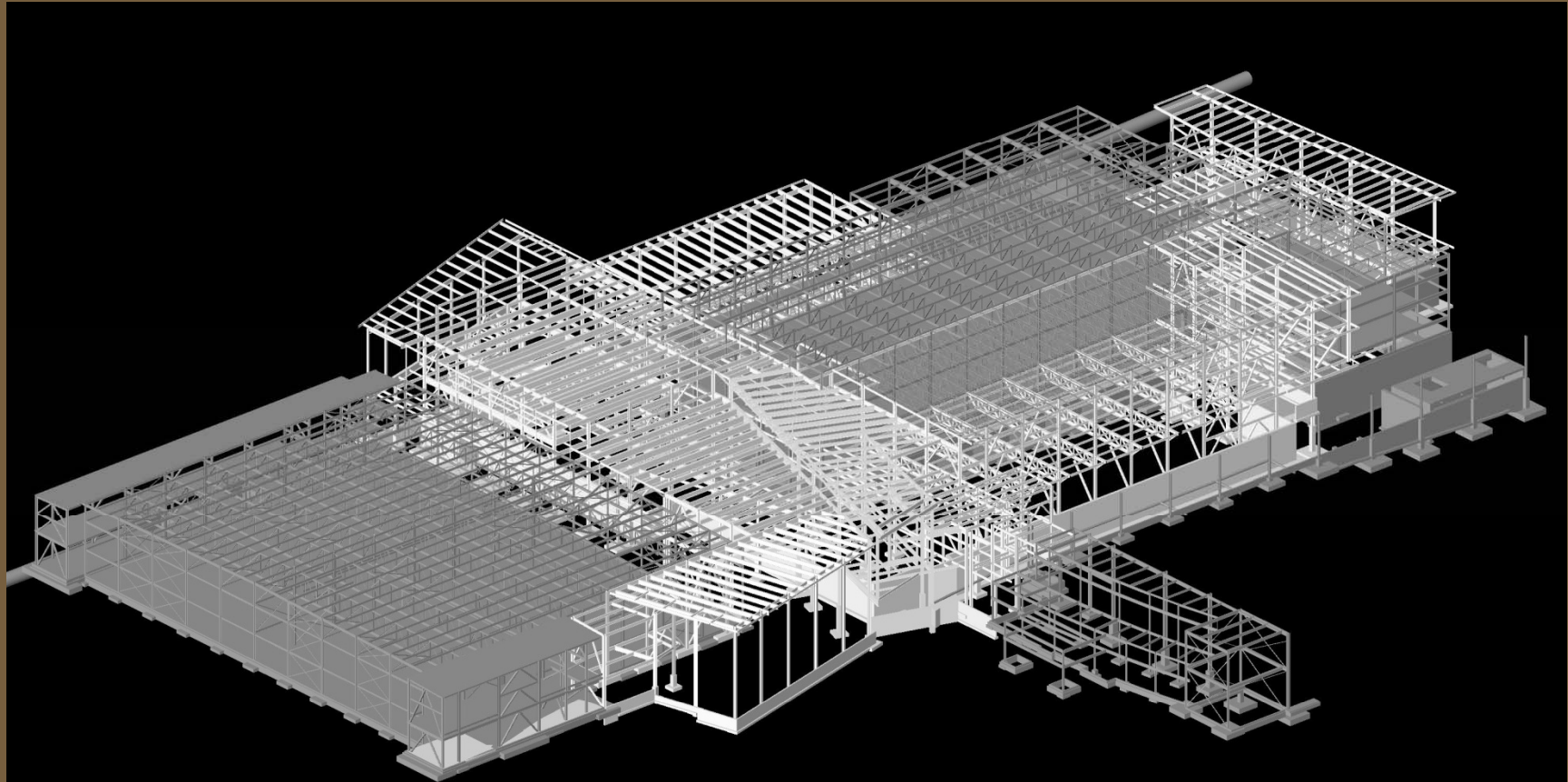
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DESIGN RELEASES 2 AND 3



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Completing the Design

- Pursuing LEED – Sustainability
- Team conducted extensive Research on Materials- Tours- Flooring etc
- Development of final Plans
 - Casework/Millwork/Function and Flow
- FFE (Furniture Fixtures and Equipment)
- Technology- Don't forget in Budget!
 - Balancing Campus Standards vs. Building Needs

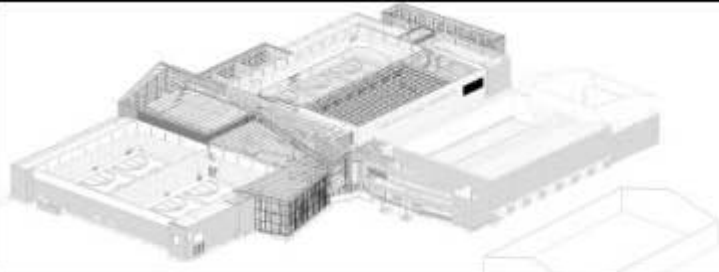


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PURDUE
UNIVERSITY

STUDENT FITNESS & WELLNESS CENTER

Renovation and Addition



DESIGN DEVELOPMENT PROJECT MANUAL

April 15, 2010



DD

MOODY-NOLAN, INC.
ARCHITECTURE | INTERIOR DESIGN | LANDSCAPE ARCHITECTURE

Turner

Frank R. Roberts & Partners, Inc.
FRP

JSA
Life Structures

KKG

COUNSLMAN • HUNSAKER
The National Space Station

Communicating the Progress- Web

- Website
- Banner
- Link on Home Page

Rec Sports Division of Recreational Sports
A Department within the Division of Student Affairs

A-Z Index | Campus Map

Rec Sports Website | Directory

Programs Facilities Membership & Services Partners Employment About Us Support Rec Sports

rec sports > purdue university-division of recreational sports

Hours & Calendar Photo Galleries

Standard Facility Hours—Summer 2011

AQUA M-F 6am-8:30am; 11:30am-2pm; 5pm-7pm. Sat & Sun 12:30pm-5:30pm	East/ West Gyms MWF 6-8:30am, 11a-9pm TTh 11a-9p Sat 10am-6pm Sun 12pm-6pm	TREC M-F 5:30am-9pm Sat 10am-6pm Sun 12pm-6pm	Meredith CLOSED Owen CLOSED Tarkington CLOSED Wiley CLOSED
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News Updated 5.17.11

RSC Renovation
See the updated RSC Renovation Site!
Updated Renovation Photos!
How to get here

Join The DRS Listserv
DRS Listserv
For up-to-date info on Rec Sports facilities and programs.
Follow Us On Facebook & Twitter!
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Hours Of Operation
SUMMER HOURS
CLICK FOR MORE INFO

Renew Your Rec Sports Membership!
Renew NOW!

Looking For A Job?
STAFF STUDENT Employment
Check our Student Employment page!

Access Purdue
Purdue University
Blackboard
Campus Map
ITaP
myPurdue
OnePurdue Portal
PurdueE-board
Purdue Calendars
Rec Sports Calendar
Rec Sports on Facebook
Rec Sports on Twitter
myMail

Mobile Version



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Communicating the Progress- Web

- Website- Access to Photos



B

Communicating the Progress- Web

- Website- Access to Photos



Communicating the Progress- Web

- Website- Access to Photos



B

Communicating the Design- Fly Throughs

Purdue University
Student Fitness and Wellness Center



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Questions



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