University of Wisconsin-Madison - Madison, Wisconsin

# Recreational Sports Master Plan

## DFD Project #13D3P | FINAL REPORT

WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

Kahler Slater
experience design

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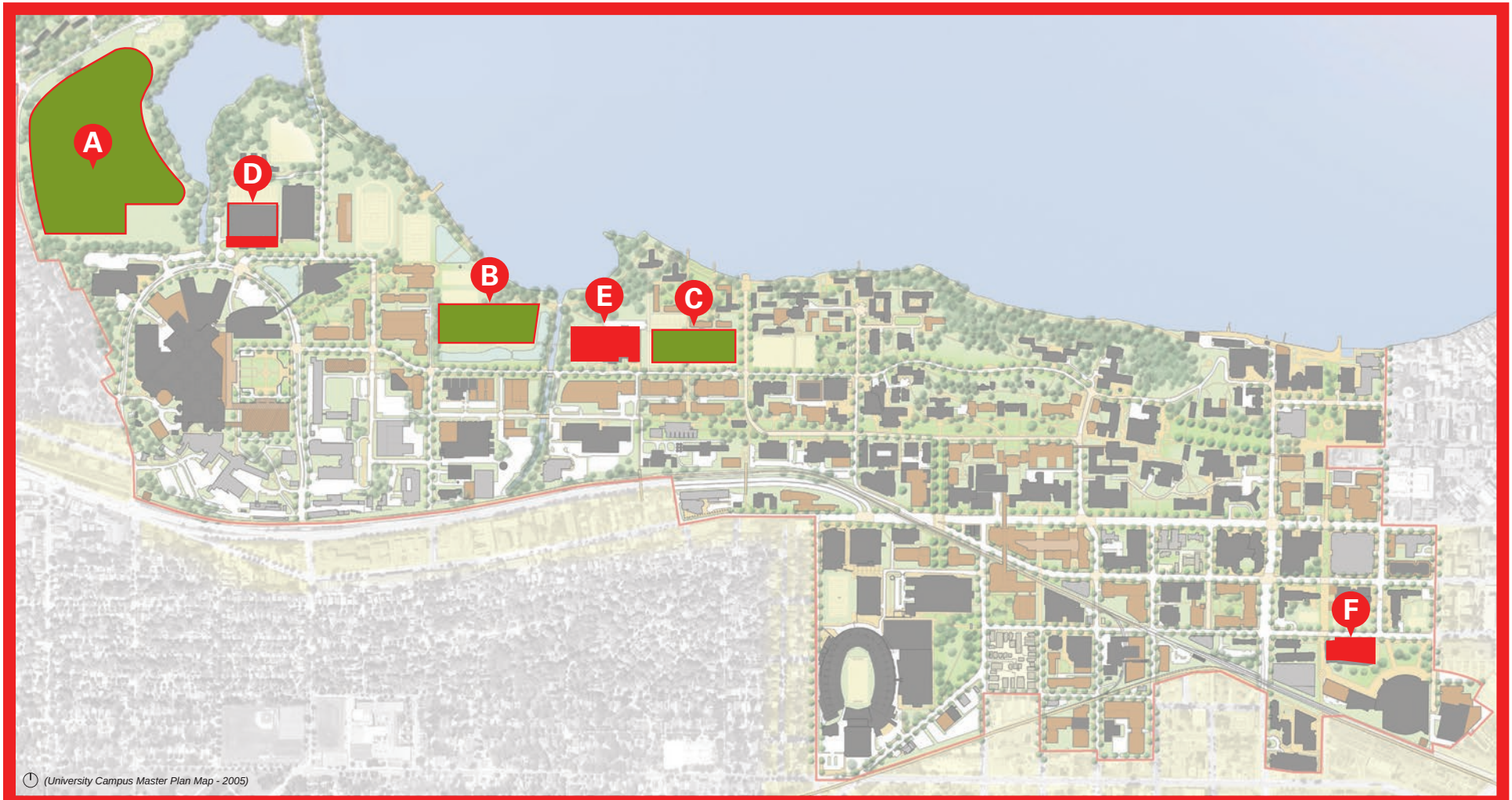
## EXECUTIVE SUMMARY

Kahler Slater was originally retained by the University of Wisconsin – Madison (UW) in 2006, and again in 2007 to identify and quantify the recreational space needs on campus. That study resulted in a proposed recreation building expansion at the Natatorium and is outlined in a report document dated June 2008 (DFD #05J2N).

This Master Plan process started with and built upon the June 2008 study which concluded that the Natatorium site would be the location for the new recreation facility. For this study, the SERF, Nielsen Tennis Stadium, University Bay/Far West Fields, Near West Fields, and Near East Fields were also included. This allows for maximum future flexibility so all students, faculty and staff have access to recreational facilities.

The Recreational Sports Master Plan's goal is to provide a comprehensive evaluation of the current and future health and wellness needs for students at UW. This study also documents the existing facilities available and how the facilities are meeting the needs of these programs.

This report outlines the process Kahler Slater and this committee used to quantify the size, determine the location and quantify the costs for new recreational facilities, both interior and exterior, at the University of Wisconsin – Madison.




New or Rehabilitated Recreation/Athletic Fields

- A University Bay/Far West Fields
- B Near West Fields
- C Near East Fields

New or Rehabilitated Recreation/Athletic Facilities

- D Nielsen Wellness Center and Tennis Stadium
- E Natatorium
- F South East Recreational Facility

Campus Plan showing scope of the study

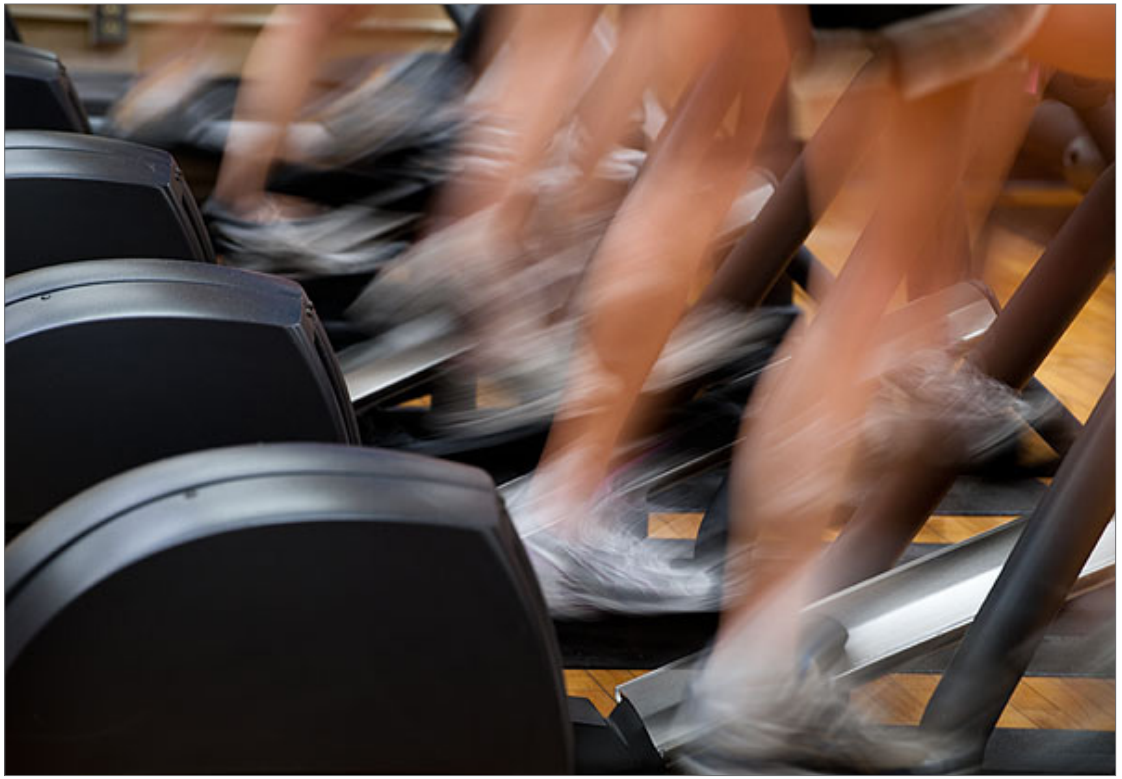
## THE NEED

UW Rec Sports identified deficiencies in the current recreational facilities and fields available to UW students they want addressed. Available facilities are considered by students as inadequate for desired current and future programming. They also determined that the recreational facilities are severely inadequate compared to peer universities.

The current facilities are outdated, overcrowded and are in need of extensive repairs and deferred maintenance due to failing infrastructure. Existing facility assessment reports and deferred maintenance lists are included in the appendix.

The Kinesiology department currently resides in the Natatorium. Their facilities are also outdated and are in need of an overhaul. The plan calls for the department to be relocated within the new Natatorium.

It is Rec Sports vision to enhance the UW-Madison experience by providing students, faculty and staff with top quality programs, services and facilities. The master plan includes designs to renovate and/or reconstruct most of the indoor and outdoor recreational facilities at UW-Madison.




U-Bay Fields


SERF


Near West Fields


Natatorium


Near East Fields

## CONCLUSION

This study concludes that the addition to the Natatorium (2008 study) is no longer a viable option for the increased programmatic needs of Rec Sports. The Study Committee chose to construct a new Natatorium and SERF, on their existing sites. An addition of a wellness facility is to be added to Nielsen Tennis Stadium. University Bay/Far West Fields, Near West Fields, and Near East Fields are to be renovated, including combinations of natural and synthetic turf.

Currently, the Shell is used almost extensively by Rec Sports. It houses an indoor track, basketball/volleyball courts, ice rink and locker facilities, and fitness space. The future of the facility is undetermined so Rec Sports has decided to relocate its program space elsewhere on campus.

### Outdoor Fields

The master plan reviewed multiple options for University Bay/Far West Fields, Near West Fields, and Near East Fields. Versions with varying amounts of synthetic turf, which expands playability throughout the year, were explored at each site. Fields included in the plan are:

University Bay/Far West Fields

- (2) synthetic turf soccer fields
- (2) synthetic turf lacrosse fields
- (2) natural turf rugby fields
- (2) natural turf softball fields
- (1) natural turf baseball field
- (2) shelters, including concessions and restrooms
- Walking/jogging path surrounding all fields
- New lighting to maximize playability
- Fencing around the synthetic turf fields

Near West Fields

- (4) synthetic turf flag football fields
- (1) championship soccer field (overlaid)
- Decorative fencing with brick piers surrounding all fields
- New lighting to maximize playability

Near East Fields

- (4) synthetic turf rec soccer fields
- (1) championship soccer field (overlaid)
- Decorative fencing with brick piers surrounding all fields
- New lighting to maximize playability
- Bleacher seating for spectators

Lighting the fields was determined to be necessary to allow for use later into the day, which dramatically increases the amount of students who can participate in outdoor rec sports activities.

### Natatorium

- 470,900 SF total
- 385,000 SF of recreation space
- 44,900 SF of fitness space
- (6) multi-purpose rooms
- 32,000 SF turf gym
- (12) basketball/volleyball/badminton courts
- (6) racquetball courts
- 85'x200' recreational ice sheet
- 4-lane running/walking track - 4.5 laps/mile
- 8-lane 25 yd. pool
- Recreation/exercise pool
- 81,900 SF of Kinesiology

At the beginning of the master plan process, alternative sites for the Natatorium were suggested by the design committee, but it was determined by FP&M that the only appropriate site is where the building currently resides. This required the design team to explore multiple options of how to fit the required program on the site. This included options which explored retaining existing portions of the current building, and options which demolished the existing building and built new. A building height limit of 60' - 65' was determined by FP&M, which eliminated multiple options. In the end, it was determined that a new building supplied Rec Sports with the most future flexibility, given the amount of program which needed to be included on the site.

Through the master plan process, it was determined that the competition pool and diving well will not be included in the future plans for the facility. The pools included are for recreational purposes.

The Natatorium houses both Rec Sports and Kinesiology. Between the two, at the heart of the design, is the shared lobby / lounge. All users of the building enter through this shared space, providing a social hub for the building and campus neighborhood. The wood clad ceiling extends the space outside, creating a covered entry courtyard along Observatory Drive.

The exterior includes natural materials which complement many of the surrounding structures. Buff colored brick, terracotta paneling and limestone are composed together to break down the larger volumes of the building.

**South East Recreational Facility (SERF)**

- 259,200 total building SF
- 233,000 SF of recreation space
- 35,500 SF of fitness space
- 26,200 SF of aquatic space
- (9) multi-purpose rooms
- (9) basketball/volleyball/badminton courts
- (6) racquetball courts
- 3-lane running/walking track - 7 laps/mile
- Existing 63 meter pool renovated

Like the Natatorium, alternative sites for the SERF were suggested by the design committee, but it was determined by FP&M that the only appropriate site is where the building currently resides. Multiple options, both renovation/addition and new were studied. Once again, it was determined that a new building supplied Rec Sports with the most future flexibility, given the amount of program which needed to be included on the site.

The new SERF is completely re-planned and re-stacked to maximize efficiency and visual openness on a tight urban site. The entry lobby is open to the fitness and track levels above, showcasing much of the activity in the building to all who enter.

On the exterior, the gymnasium volume, which includes 9 basketball/volleyball/badminton courts, becomes the visual focus of the building. Clad in alternating glass and translucent panels, the volume provides a light and delicate aesthetic. This counters the current design of the SERF, which many see as a dark, windowless box, and provides life and activity along Dayton St.

The pool at the SERF was subject to much debate during the master plan process. The design team produced multiple options based off of the following overall concepts:

- Keep the existing pool and its enclosure, and build a new rec sports facility connected to and around it.
- Keep the existing pool vessel but build a new enclosure surrounding it to simplify the construction process.
- Keep the existing pool, but build a new enclosure surrounding it to simplify the construction process and raise the roof to accommodate for new diving platforms at the east end of the space. The pool was originally designed for diving to be located in that end.
- Build a new 50m competition pool and diving well, with dive tower as part of a completely new facility.

At the conclusion of the master plan process, it was determined that the best solution for Rec Sports and the students would be to keep the existing pool vessel and build a new enclosure around it. Diving platforms would not be added at this time, but could be in the future in some form.

**Nielsen Wellness Center and Tennis Stadium**

- 47,300 SF addition total
- 20,250 SF fitness space
- 3,500 SF multi-purpose studio
- Renovated Tennis Stadium lobby and court viewing.
- Upscale locker rooms including individual unisex changing rooms.
- Tournament locker rooms accessible from U-Bay fields.

Rec Sports has a desire to partner with a health care provider to provide a new health and wellness facility to serve both employees of the health care provider and students, faculty and staff at UW. An addition to Nielsen Tennis Stadium was determined to be a great location for the facility.

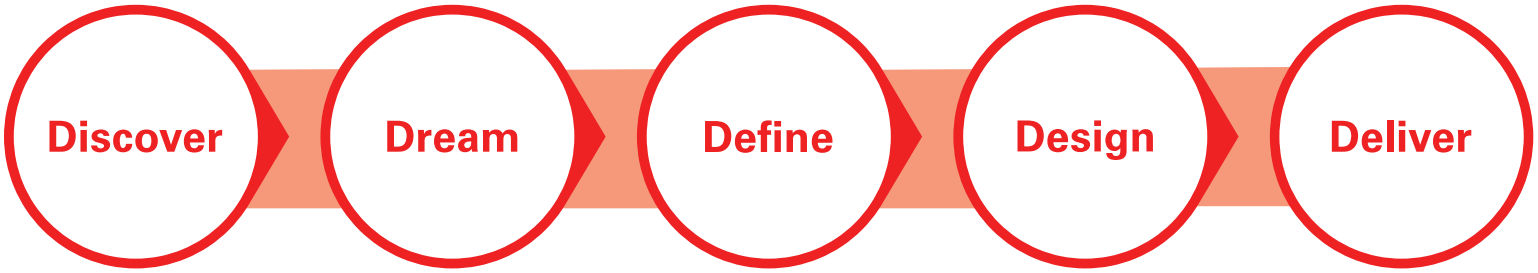
The Wellness Center is designed to be visually open both within the facility and to the exterior. Fitness activities are separated from the street by a delicate glass facade, maximizing daylighting and activating the adjacent streets.
The butterfly roof above the entry provides spatial variation within the fitness center, and is inspired by the folded roof planes of the existing Tennis Stadium.

**Referendum**

At the conclusion of the master plan process, Rec Sports put forth a $223 million proposal that included the Natatorium, SERF, and Near East & West fields for referendum in March of 2014. The remaining portions of the master plan will be implemented at a later date with outside, private gift and program revenue funding sources.


Process

The Kahler Slater Team worked with the Core Committee using their 5D Process as outlined below:

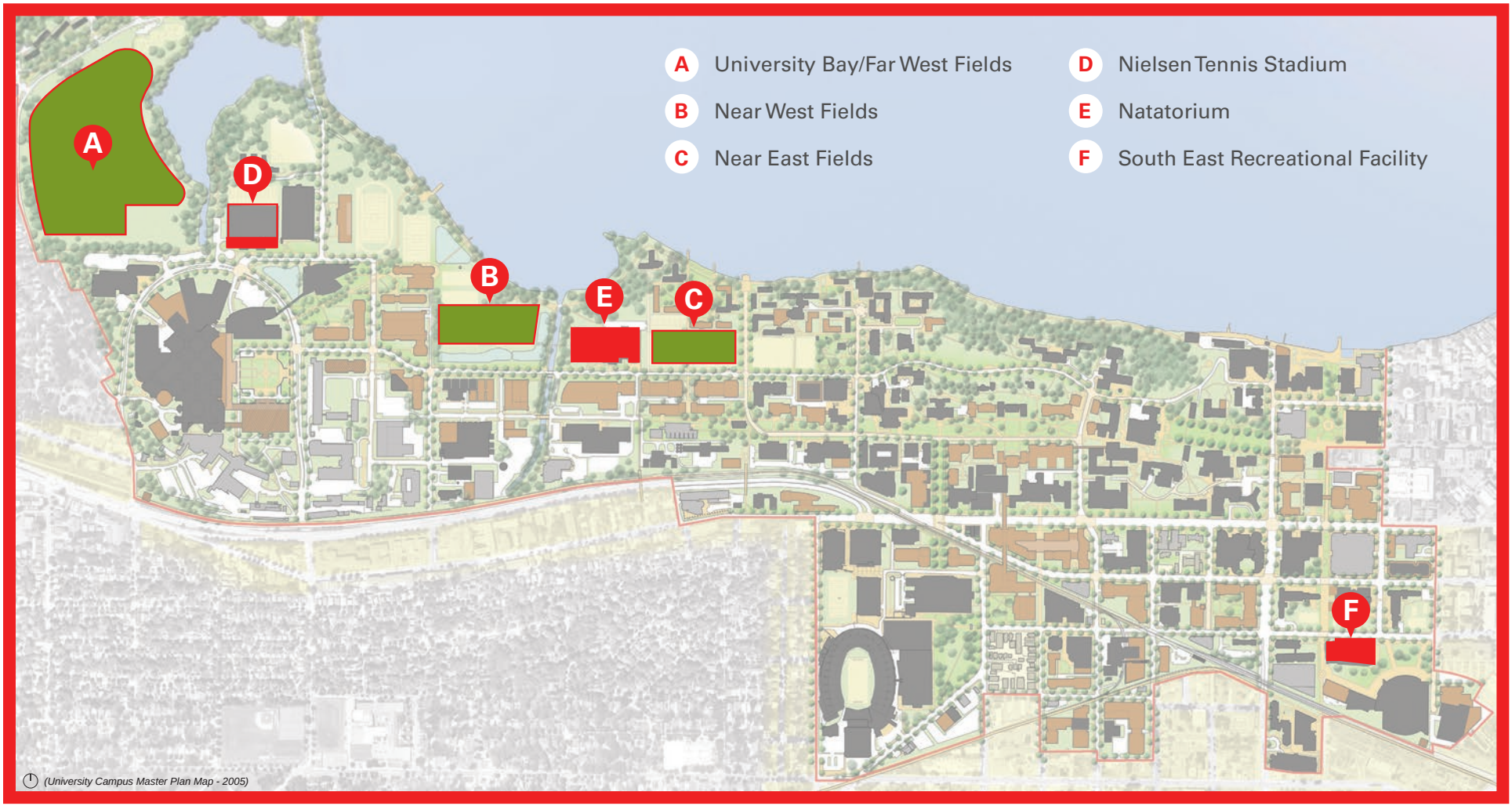



| | | |
|---|---|---|
| **Discover** | *Project Kick-off Meeting*<br>*Workshop1* | July 9, 2013<br>July 25, 2013 |
| **Dream** | *Workshop 2* | August 12, 2013 |
| **Define** | *Workshop 3* | August 30, 2013 |
| **Design** | *Workshop 4*<br>*Workshop 5*<br>*Workshop 6* | September 23, 2013<br>October 21, 2013<br>November 26, 2013 |
| **Deliver** | *Designs Complete*<br>*Assemble Report*<br>*Complete Master Plan* | December 2013<br>January 2014<br>May 2014 |


Existing
Facilities

## BACKGROUND

The University of Wisconsin – Madison has four main recreation facilities on campus, three of which are included in this master plan. Those facilities are the Natatorium, the SERF, and the Nielsen Tennis Stadium. There are also outdoor recreation fields on the west side of campus. These include University Bay/Far West Fields, and Near East & West Fields.



## A - UNIVERSITY BAY/FAR WEST FIELDS

View of the existing University Bay/Far West Fields

## B - NEAR WEST FIELDS

View of the existing Near West Fields

## C - NEAR EAST FIELDS

View of the existing Near East Fields

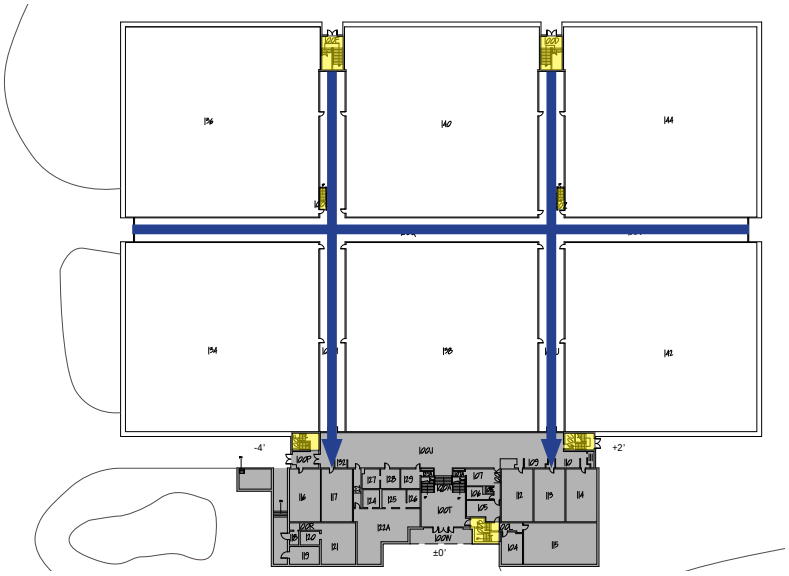
## D - NIELSEN TENNIS STADIUM

Built in 1968, the Nielsen Tennis Stadium features 18 tennis courts (12 indoor, 6 outdoor), five singles squash courts, and 1 doubles squash court.

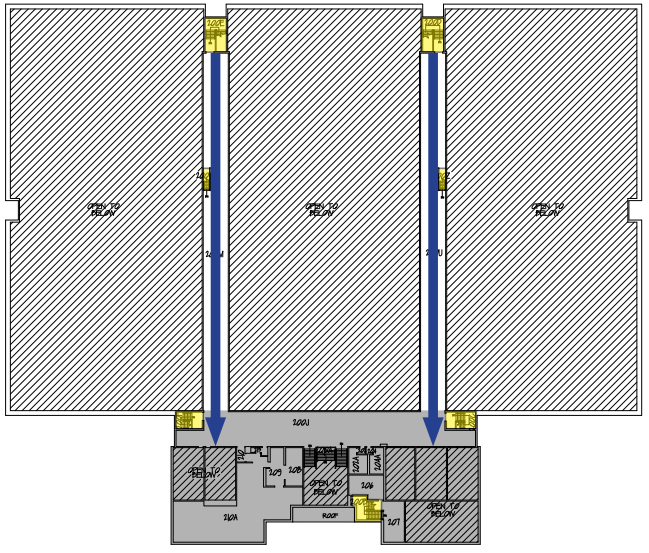
More than 6,000 students, faculty, and staff use the facility each week. Also included are locker rooms, and upper level seating for tennis events for more than 1,500 spectators.

The facility has served as the site for multiple indoor tennis championships both nationally and state wide. In 2012, the facility was renovated, which included upgraded court surfaces, lighting, and scoreboards. All of the upgrades occurred in the tennis court portion of the building. An existing deferred maintenance list is included in the appendix.

View of the existing Nielsen Tennis Stadium



Nielsen First Floor Plan



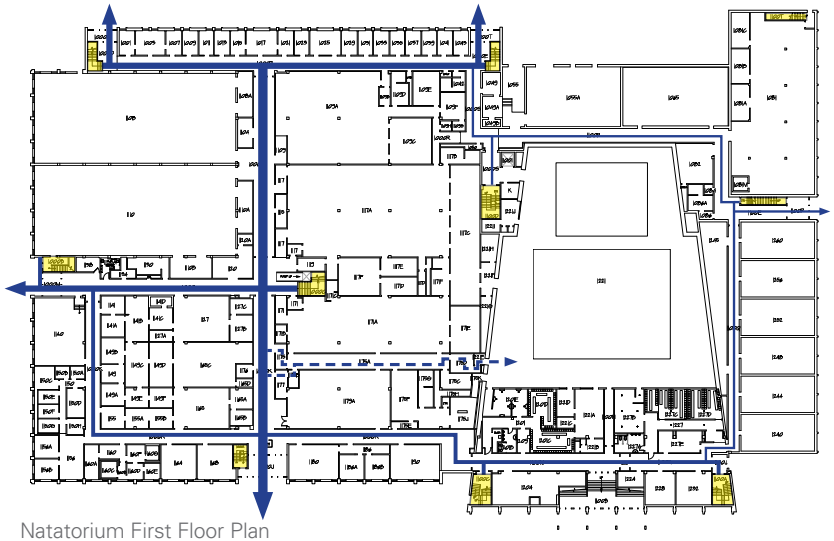
Nielsen Second Floor Plan

## E - NATATORIUM

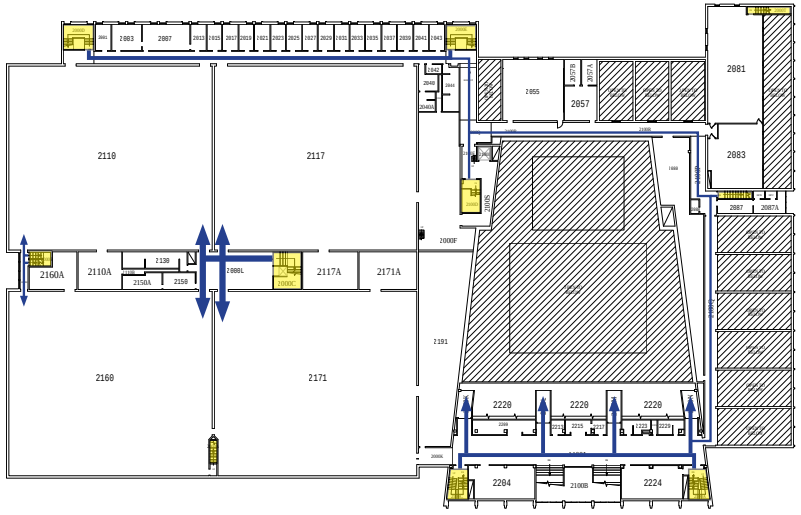
The first facility to be constructed in 1963 was the Natatorium (Nat), located at 2000 Observatory Drive, with the Unit II Gymnasium (Gym) addition being built in 1967. The combined facilities consist of a diving well and lap pool, cardio/weight training, racquetball, gymnasiums, group fitness, locker room, member service, and office spaces. The gross square footage of this facility is 249,578. The assignable square footage for Recreational Sports is 83,000.

In addition to recreation spaces, the Natatorium is an academic facility for Department of Kinesiology; therefore, recreational activity spaces are interspersed with classroom and laboratory spaces throughout the facility. An existing facility assessment and deferred maintenance list is included in the appendix.

View of the existing Natatorium



Natatorium First Floor Plan

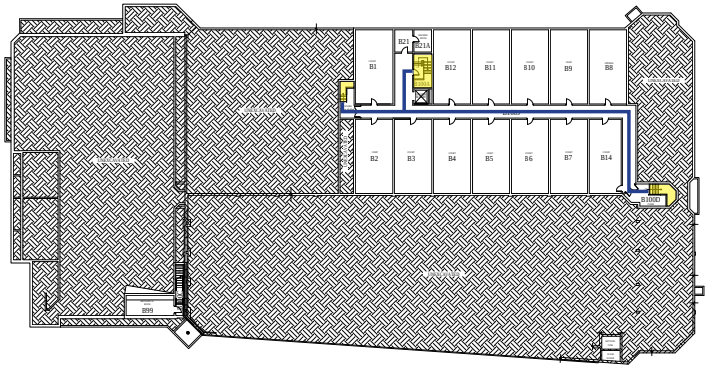



Natatorium Second Floor Plan

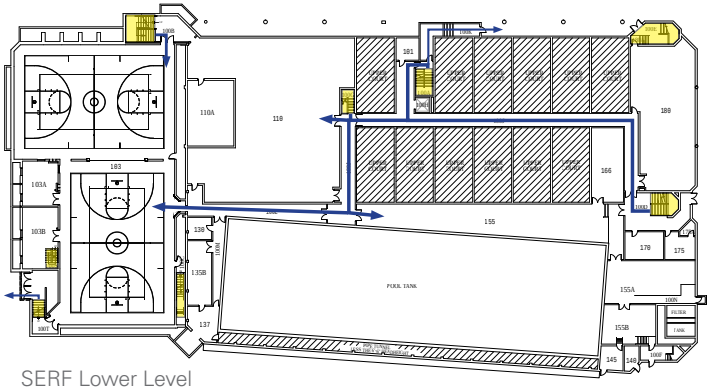
## F - SERF

The South East Recreational Facility (SERF) at 715 W. Dayton Street was constructed in 1983 to serve many students living in campus residence halls nearby. This very popular facility is in the Southeast corner of campus. The SERF houses the east campus Recreational Sports Office in room 287. Although informal recreation has many hours available each day, the facility is shared with Kinesiology, Physical Education, and Intercollegiate Athletics. This facility consists of gymnasium, cardio/weight training, racquetball, group fitness, jogging track, locker room, member service, and office spaces. In June 2003, the westerly addition was completed and opened for use. The new addition includes 2 gymnasiums, an expanded Cardio Center, and a new Fitness Studio. Also included in the expansion was air conditioning to the existing administrative area, racquetball courts, weight room, and Fitness Training room. The gross square footage of this facility is 192,170. The assignable square footage is 124,000. An existing facility assessment and deferred maintenance list is included in the appendix.

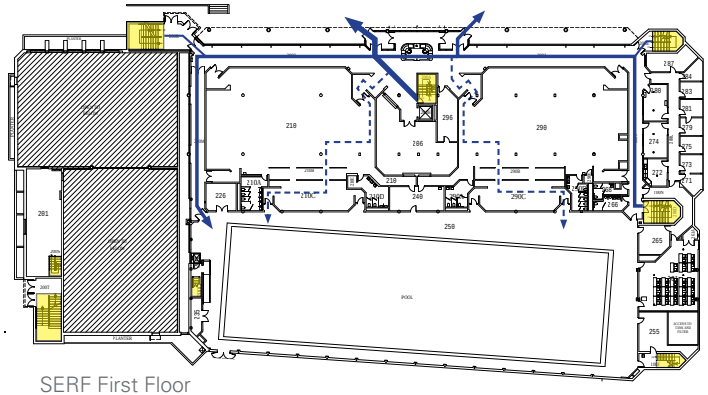
View of the existing SERF



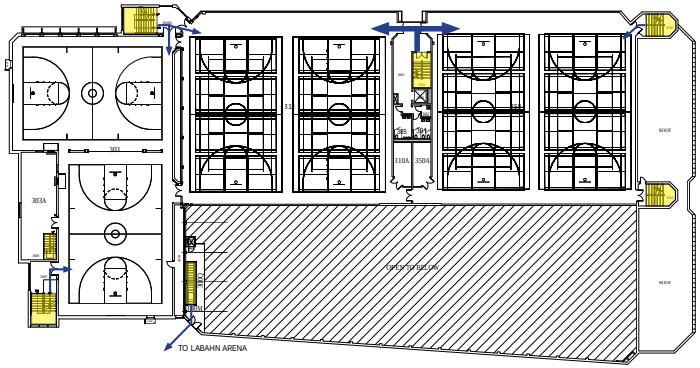
SERF Sub Level



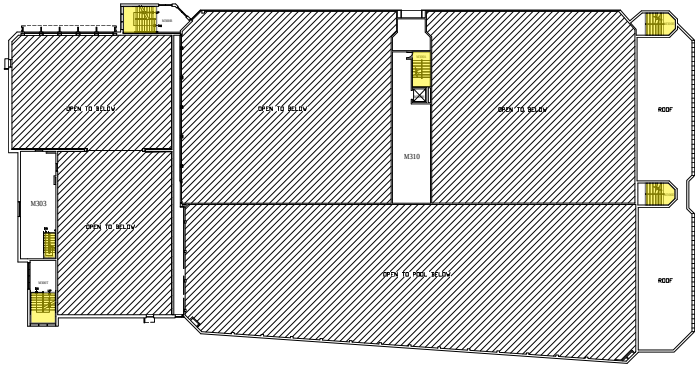
SERF Lower Level



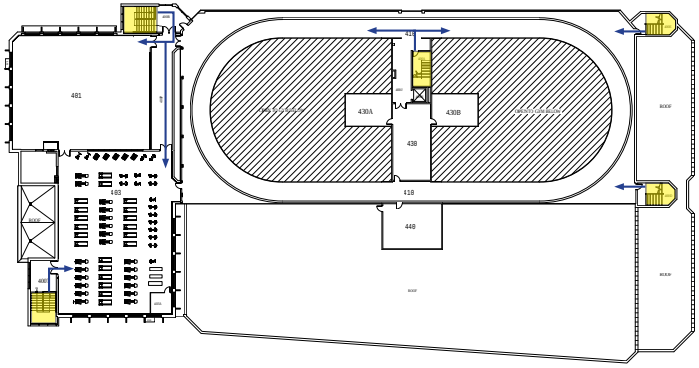
SERF First Floor




SERF Second Floor



SERF Mezzanine Level



SERF Third Floor

## G - FACILITY DEFICIENCIES

Currently, on the UW-Madison Campus, there is roughly 12,000 sf of fitness space. According to the National Intramural-Recreational Sports Association (NIRSA), it is an industry standard to have 1.5 square feet of fitness space for each eligible user. Currently there are 100,000 eligible users on campus which would dictate roughly 150,000 sf of fitness space. This calculation does not include gymnasiums, running tracks, pools, etc. All have their own calculations and are equally as lacking on campus.

A full peer evaluation was completed by Rec Sports, which looks at the size, condition, and usage of all schools in the Big Ten. This information is available on the Rec Sports Master Plan website (http://uwmadisonrecsports.wordpress.com/facility-comparison-uw-vs-big-ten/). In short, UW-Madison falls behind almost every school in the conference in all recreation categories, including total square footage. UW-Madison was also one of only two schools that had no plans in the works for a new or renovated recreational center.

In addition to the square footage shortage, the existing Rec Sports facilities are in need of extensive deferred maintenance, just to maintain their current usage. According Bill Elvey, Associate Vice-Chancellor at UW-Madison FP&M, "... a significant investment in all of the Recreational Sports facilities, including the SERF and the NAT, is going to be necessary, whether it be in new or remodeled facilities or major repair and maintenance projects. The condition of buildings has gotten to the point that a significant amount of deferred maintenance items must be addressed immediately or at least in the very near future. Many of these repair and maintenance projects include major building components and infrastructure-related items such as roof replacements and building envelope repairs. In some cases, complete replacement and upgrades of mechanical and electrical systems are also required to ensure reliability as well as address capacity deficiencies and meet new building codes. Some lead paint and asbestos abatement is also needed. Finally, most of the building finishes have also reached the end of their useful life."

Elvey adds, "While a detailed facility condition assessment performed by an outside consultant would lead to a series of individual projects intended to correct these known deficiencies, FP&M conservatively estimates that the current (seg fee) investment that will be needed to repair and upgrade the facilities will need to be more than double what has been available in the past. In addition, at the end of this process most/all of the known Rec Sports facilities programmatic needs relating to space and capacity shortfalls would still remain, which would place further increases on seg fees to address. The list below provides a general overview of projects that UW-Madison Facilities Planning and Management have identified as necessary either immediately, or within the 5 year forecast within the Division of Recreational Sports."

Refer to the appendix for existing facilities assessments and deferred maintenance lists.

The Rec Sports Master Plan websites lists the facility repair and maintenance projects as:

SERF
According to a report prepared by UW-Madison in 2013, the SERF has over $3.7M in deferred maintenance costs to year 2025. Some of these include:

- Exterior cladding and roof-cap repair
- Elevator replacement
- North entrance upgrade
- Emergency/backup generator upgrade
- Interior finishes repair
- Air handler/exhaust replacement & DDC
- Lighting controls, A/V, and clock
- Pool plumbing equipment replacement
- PROGRAMMATIC IMPROVEMENTS

Natatorium
According to a report prepared by UW-Madison in 2013, the Natatorium has over $4.7M in deferred maintenance costs to year 2025. Some of these include:

- Roof areas 1-17 replacement
- Exterior caulk/tuck point/etc.
- Emergency/backup generator replacement
- Electric service & distribution (50%)
- Hazardous materials abatement
- Freight elevator replacement
- Locker rooms: plumbing & partitions
- HVAC pool area upgrade
- Building air management upgrade
- Interior finishes upgrade
- Pool plumbing & equipment replacement
- PROGRAMMATIC IMPROVEMENTS

Camp Randall Sports Center (Shell)
- Metal roof coating
- HVAC upgrade – track/ice rink
- Hazardous materials abatement

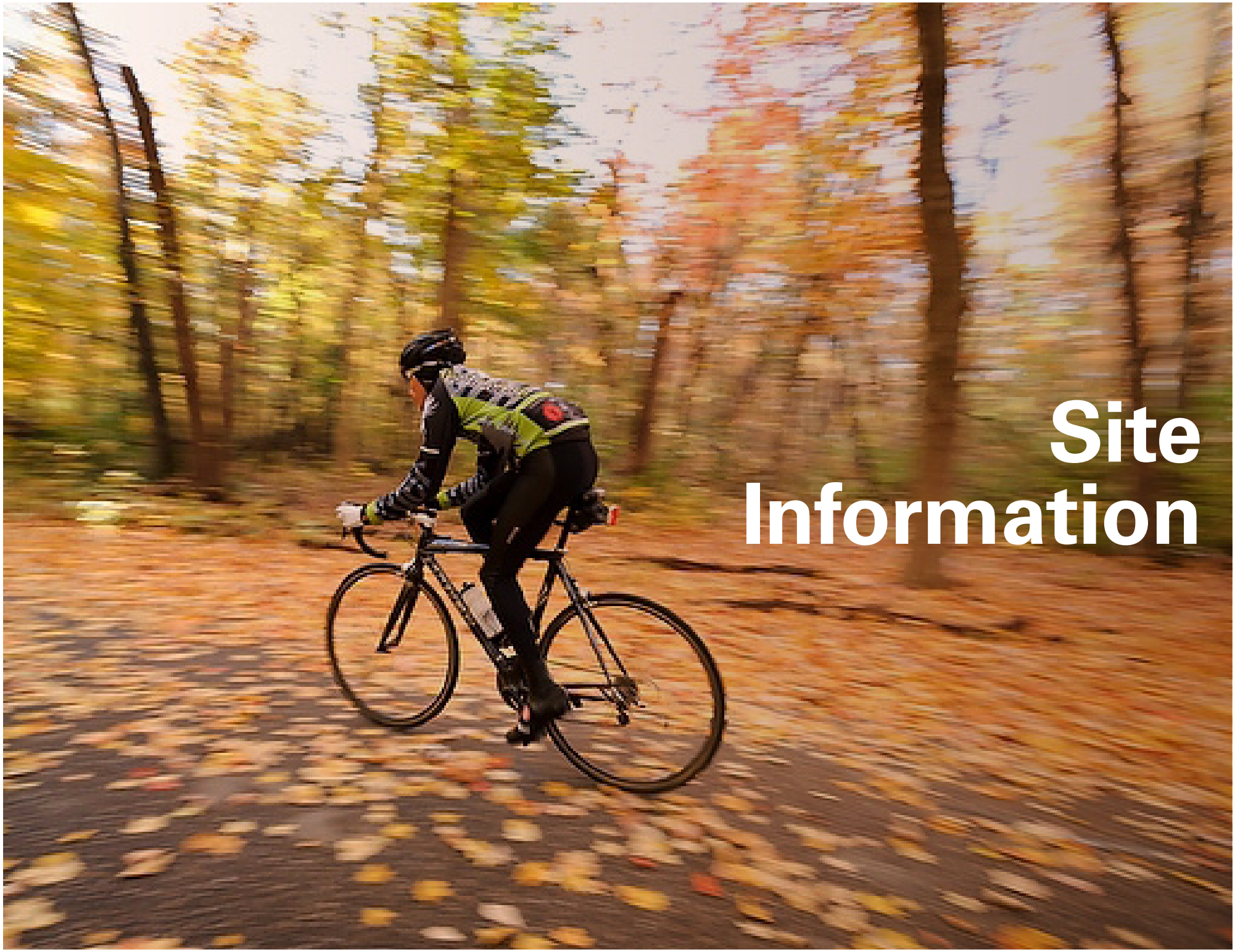
- Electric – light/controls/building service
- Plumbing – locker/shower rooms
- Fire detection system
- Fire sprinkler system
- Ice rink dehumidification
- PROGRAMMATIC IMPROVEMENTS

Nielsen Tennis Stadium (operating costs not funded by seg fees)
According to a report prepared by UW-Madison in 2013, the Nielsen Tennis Stadium has over $3.9M in deferred maintenance costs to year 2025. Some of these include:

- Roof areas 1-9 replacement
- Elevator installed (ADA accessibility)
- Locker rooms – plumbing & partitions
- Building air management upgrade
- Electric – building service
- Fire sprinkler system
- HVAC upgrade
- PROGRAMMATIC IMPROVEMENTS

## H - FIELD DEFICIENCIES

The biggest issue with the current recreation fields on the UW-Madison campus revolves around the playability of the fields. Because of the lack of synthetic turf and lighting, the playing hours are limited in the day and year. With the addition of field lighting, hours could extend into the night time, when most students prefer to play. Synthetic turf will add playability in the winter months as it is plow-able and does not turn into mud in the fall and spring as natural turf does.



# Site Information

## SITE OWNERSHIP

The sites under consideration for this master plan are the current sites for the fields and facilities. They are considered part of the University of Wisconsin-Madison campus and owned by the Board of Regents of the University of Wisconsin System.

## EXISTING LANDSCAPING

It is the intent of this project to preserve as much of the existing landscape as possible.

## FLOODPLAIN

Everything proposed in this master plan is outside of the 100-year floodplain with the exception of a portion of the University Bay/Far West Fields. The layout of the fields is designed so that no synthetic turf is within the floodplain.

## TOPOGRAPHY

No topographic surveys have been completed as part of this master plan. Generally all of the sites are fairly flat and level, with the exception of the SERF, which drops roughly 12'-0" from West to East. A full topographic study will be completed with each project as they are implemented.

## SUBSURFACE CONDITIONS

There have been no subsurface or geotechnical exploration done as part of this master plan scope of work. UW-Madison has suggested that using subsurface levels at both the Natatorium and SERF should be OK, considering the lack of water issues in the current basements of each facility. The Master Plan calls for similar lower level elevations as what currently exists.

During the master plan process, the committee discussed the general soil conditions of the University Bay Fields several times. It was determined that the soils are typically wet and hydric, and further detailed soil studies will be needed to determine the feasibility of the artificial turf fields and the proposed parking lots and building developments.

## SITE UTILITIES

The anticipated utility loads have not been calculated as a part of the scope of this master plan.

Sustainable or "green" design ideas should be implemented to ensure energy efficiency and to improve the health and comfort of the building's occupants.

## VEHICULAR AND PEDESTRIAN CIRCULATION

### *Natatorium*

The main pedestrian access to the Natatorium will be the sidewalks lining Observatory Drive from the east and Willow Dr. to Dejope Residence Hall to the northeast. Access to the Lakeshore Path system along Lake Mendota will be preserved for recreational walking, jogging and biking. Vehicular access to the building will be from Observatory Drive. Willow Dr. will be the primary service / loading dock access route. This Drive will also be the service access for the Lakeshore Residence Hall area.

### *SERF*

The SERF will help anchor the southern end of East Campus Mall which extends north to Memorial Union. This is an important campus pedestrian link to the recreational and athletic activities/events at the SERF and adjacent LaBahn Arena and Kohl Center. West Dayton Street will continue to be the main vehicular route to the SERF with service access on the south side of the existing buildings.

### *Nielsen Wellness Center and Tennis Stadium*

The Wellness Center at Nielsen Tennis Stadium will have main pedestrian access from the sidewalks along Marsh Dr. and Highland Ave. Vehicular access uses those same drives, with University Bay Drive Parking Ramp to the east of Nielsen, and surface lots to the West.

### *University Bay/Far West Fields*

Pedestrians would gain access to U-Bay fields by Highland Ave, and the Lakeshore Path. Parking is included on the proposed plans, both on the north and south portions of the site.

### *Near West & East Fields*

Similar to the Natatorium, main pedestrian access will be the sidewalks on Observatory Dr. from the south, and from the Lakeshore path system and Lakeshore residence halls from the north.

# Special Planning Issues

## ENVIRONMENTAL IMPACT / WEPA

In accordance with the Wisconsin Environmental Policy Act (WEPA), each of the major elements within this master plan will require at minimum a Type II, Environmental Impact Assessment including the new buildings on existing building sites, building additions and for the upgrades to the existing outdoor fields. This requirement ensures that all environmental impacts that may have fiscal impact can be raised during the WEPA process and that they will be addressed in the project budget estimate. The last public meeting shall occur and major issues resolved before State Building Commission authority to construct. The entire WEPA process must be completed soon after that but no later than prior to bid solicitation.

## DEMOLITION

Natatorium will be completely demolished to allow for a new building to be constructed in it's current location. The SERF will be mostly demolished, as the current plan calls for the pool and its associated mechanicals and deck to be retained, with a new facility to be built around it. The fields will also need to be excavated and regraded to allow for synthetic and natural turf fields.

Every effort will be made to recycle and re-purpose significant amounts of the buildings materials to reduce the impact of building demolition on local landfills.

## CULTURAL RESOURCES

Native American cultural resources in the UW-Madison Lakeshore Nature Preserve area range from archaeological sites dating back 12,000 years to present-day sites that continue to be important places of spiritual practice.

Ancient Native American burial mound sites are scattered across campus but are primarily located within the Lakeshore Nature Preserve. This collection of sacred sites includes several unique effigy-type burial mounds. Indeed, the UW-Madison campus has management responsibility for more effigy mounds than any other university in the world.

View of Effigy Mound (Photo courtesy of UW Campus Photo Library)

The area just north of the Natatorium site is identified as an "Ancient Campsite/Village" whose boundaries were established for the Archaeological Site Inventory (ASI), by the Wisconsin Historical Society. Just east of Willow Creek, north of the existing Natatorium facility are four mounds. The group includes three effigy forms (a goose, water spirit, and an unnamed type) and a small conical form. The goose mound is readily visible from the Lakeshore Path. These mounds have been delineated and are not to be disturbed by development.

## SUSTAINABLE / HIGH-PERFORMANCE DESIGN

The State of Wisconsin - Division of Facilities Development (DFD) recognizes the economic, environmental and human health and performance benefits of high-performance "green" buildings. High-performance buildings are designed, constructed and operated to maximize energy savings, limit their detrimental effects on the environment and improve the health and comfort of occupants and users. DFD expects the A/E team to follow an integrated "whole building" design process and to be proficient with the use of life cycle cost analysis to make design decisions which support these values.

At this time, specific performance measures are not mandated, but DFD encourages the A/E team to become familiar with a building design rating system, such as US Green Building Council's LEED system, and to incorporate these energy-efficient, environmentally-responsible design principles to the maximum extent possible within program and budget.

The LEED (Leadership in Energy and Environmental Design) Green Building Rating System™ is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. It is suggested by the design committee that LEED Guidelines should be used as a conceptual framework and guideline for the project. Early in the project the Owner should work with the architectural/engineering team to identify project specific sustainable

design goals and conceptual standards. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for:

***Sustainable Site Development***

*Alternative transportation and pedestrian routes*

*Storm water management (quantity and quality)*

*Urban heat island reduction*

*Native and adaptive vegetation*

***Water Savings***

*Water efficiency options (low-flow fixtures, etc)*

***Energy Efficiency***

*Target energy efficiency is 20%-30% lower than code minimums (includes cool daylighting, high performance glazing, and other options)*

***Material Selection***

*Locally sourced materials within 500 miles of project*

*Recycled content*

*Durable, long-lasting*

***Indoor Environmental Quality (IEQ)***

*Includes enhanced indoor air quality, access to daylight and views, etc.*

The State of Wisconsin has Energy Issues and Policies. The following reports, guidelines, etc. should be followed and addressed in the development of design for this project:

***DFD Project Energy Use Policy***

This policy is intended to reduce the use of fossil fuels in state owned Facilities without adversely affecting program operations. Building users, managers, physical plant staff and designers share the responsibility for achieving this goal.

***DFD Project Energy Design Guidelines***

This guideline is intended to reduce the use of fossil fuels in state owned Facilities without adversely affecting program operations. Recognizing that the greatest cost of owning state Facilities over their lifetime is the cost of energy to heat, cool, light and operate them, DFD expects the design of every project to:

*Achieve the highest energy efficiency and lowest energy consumption that life cycle costing will justify*

*Incorporate the most energy-efficient materials, products, equipment and systems consistent with program and budget;*

*Incorporate renewable energy technologies at the earliest possible stages of design whenever they are technically and economically feasible;*

*Consider the impact on the utility infrastructure of the existing building/institution.*

***DFD Lighting Design Guidelines***

The Electrical Design Guidelines discuss guidelines for indoor and outdoor lighting systems to be used in state owned buildings and facilities.

***Energy Use in State-Owned Facilities***

Fiscal Year 2006: This report presents the total energy consumption for the largest State of Wisconsin owned and operated Facilities. These facilities account for the majority of energy consumed in buildings owned by the State of Wisconsin.

## ZONING/ DNR

All sites have very specific zoning requirements. The City of Madison Zoning Ordinances along with the University of Wisconsin – Madison planning staff should be consulted on these projects before preliminary planning and approval from the Joint West Campus Area Committee and the City of Madison Plan Commission.

***Natatorium***

The Nat site is currently zoned CI, Campus Institutional and "college/university" buildings are considered a "permitted use" if 3 stories or under 68 feet tall. This project will require a presentation to and approval from the Joint West Campus Area Committee.
Other standards for development in this district require that the principal structure have a:

- Setbacks - per campus master plan or zero
- The DNR has shoreline setback requirements of 75' from the navigable waterways of Lake Mendota and Willow Creek.
- Campus FP&M has specified a 60'-65' height limit

***SERF***

The entire block of the SERF is zoned PD – Planned Development. With the new facility we are proposing for the SERF, it should be anticipated that the City would want to see the proposals and run it through both the Urban Design Commission and the City Plan Commission. This project will require a major alteration to an existing Planned Development and require a presentation to the Joint Southeast Campus Area Committee and the City of Madison Plan Commission.

Other standards for development in this district require that the principal structure have a:

- Height: Structures within a mile of the State Capital fall under the Capital View Height Preservation Ordinance and are limited to 187.2 feet.
- Setbacks: per approved plan
- CSM 10494 created the parcel

***Nielsen Tennis Stadium***

Nielsen, like the Natatorium, is zoned CI, Campus Institutional. The project would also require a presentation to and approval from the Joint West Campus Area Committee. Setbacks are per campus master plan or zero.

***University Bay/Far West Fields***

U-Bay fields are zoned CN (Conservancy). Outdoor recreational fields are considered a conditional use with a Conservancy district and will therefore require review by the Joint West Campus Area Committee and the City of Madison Plan Commission. Setbacks are:

- Front - 30'
- Side - 80'
- Rear - 100'

## MASTER PLAN CONSIDERATIONS

***Natatorium***

Roads
There should be little or no change to Observatory Drive as a result of this facility's expansion and renovation. The bus drop-off location may need to be relocated to not impede with the new entry location.

Paths
The sidewalk on the north side of Observatory Drive will remain. No part of this expansion/renovation project will affect the Howard Temin Lakeshore Path.

Play fields
The play fields to the east and west of the Natatorium are included in this master plan. Refer to the conceptual design section for more information.

Adjacent development
For additional information, please review the 2005 Campus Master Plan document to understand future development in this area. There are substantial academic building plans and a new above grade parking structure planned on the south side of Observatory Drive.

***SERF***

Roads
Any work done to the SERF would not substantially affect the adjacent roads. The bus drop-off may need to be relocated to not impede with the new entry location.

Paths
No part of this master plan should affect the existing paths around the SERF.

Parking
There is no street parking in this area. There should be little to no change to the existing parking on the east and south of the facility. There is no dedicated parking lot for visitors.

Adjacent Development
For additional information, please review the 2005 Campus Master Plan document to understand future development in this area.

***Nielsen Tennis Stadium***

Roads
There should be no change to Marsh Drive as a result of this facility's expansion and renovation.

Paths
No part of this expansion/renovation project will affect the existing paths in the area.

Adjacent development
For additional information, please review the 2005 Campus Master Plan document to understand future development in this area.

## CIVIL AND STORM WATER MANAGEMENT

Please refer to the Civil Narrative included in the Appendix for more information relating to

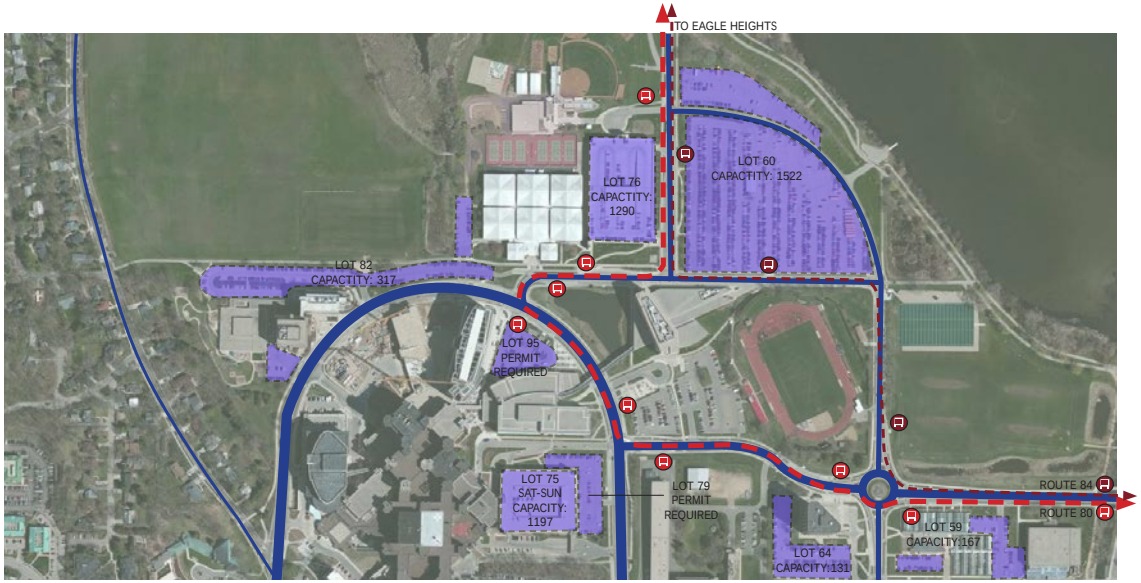
existing civil conditions and storm water management recommendations for each project site.

## SYNTHETIC TURF

Please refer to the Synthetic Turf Environmental Response document included in the Appendix for more information relating to environmental impacts and historical concerns relating to the use of synthetic turf.


# Site Analysis

# NIELSEN TENNIS STADIUM





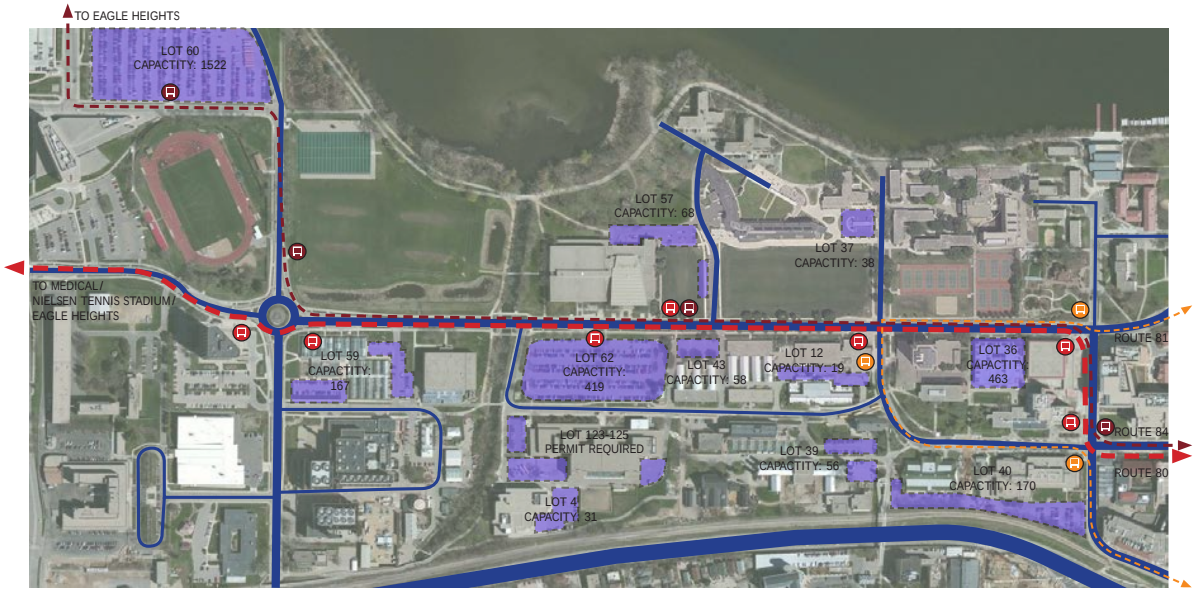
## *VEHICULAR CIRCULATION - PARKING - PUBLIC TRANSPORTATION*

A majority of the vehicular circulation is coming and going on Highland Avenue. Minimal traffic exists on Marsh Drive, mostly to access the parking to the east of the facility. The site is very connected by public transportation. Route 80 has stops in both directions directly in front of the facility, while route 84 has stops just to the east. The entry of the new facility should take advantage of this close proximity and possibly remain in its existing location. This would also address the ample amounts of parking to the east. The facility should take advantage of the busy nature of Highland Avenue by putting active programmatic spaces on the south facade.

## *PEDESTRIAN CIRCULATION - VIEWS*

The pedestrian link between the Nielsen Tennis Stadium and the hospital should be clearly defined and the entry to the new facility should respond accordingly. Views to and from the site are immense and will be easy to take advantage of.

# NATATORIUM



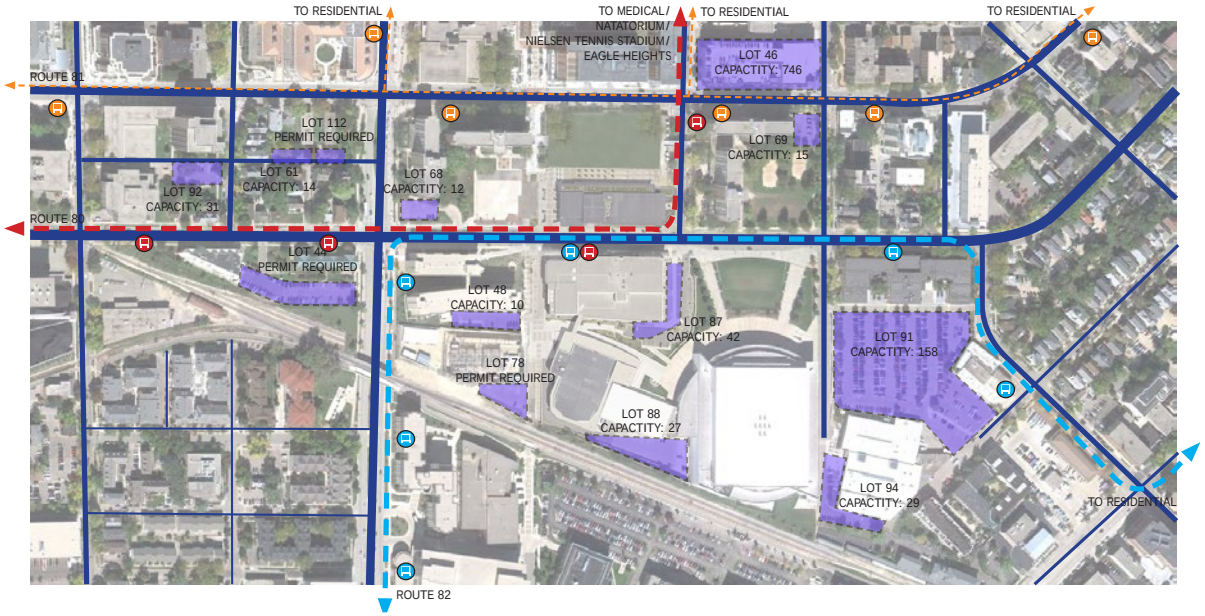

### *VEHICULAR CIRCULATION - PARKING - PUBLIC TRANSPORTATION*

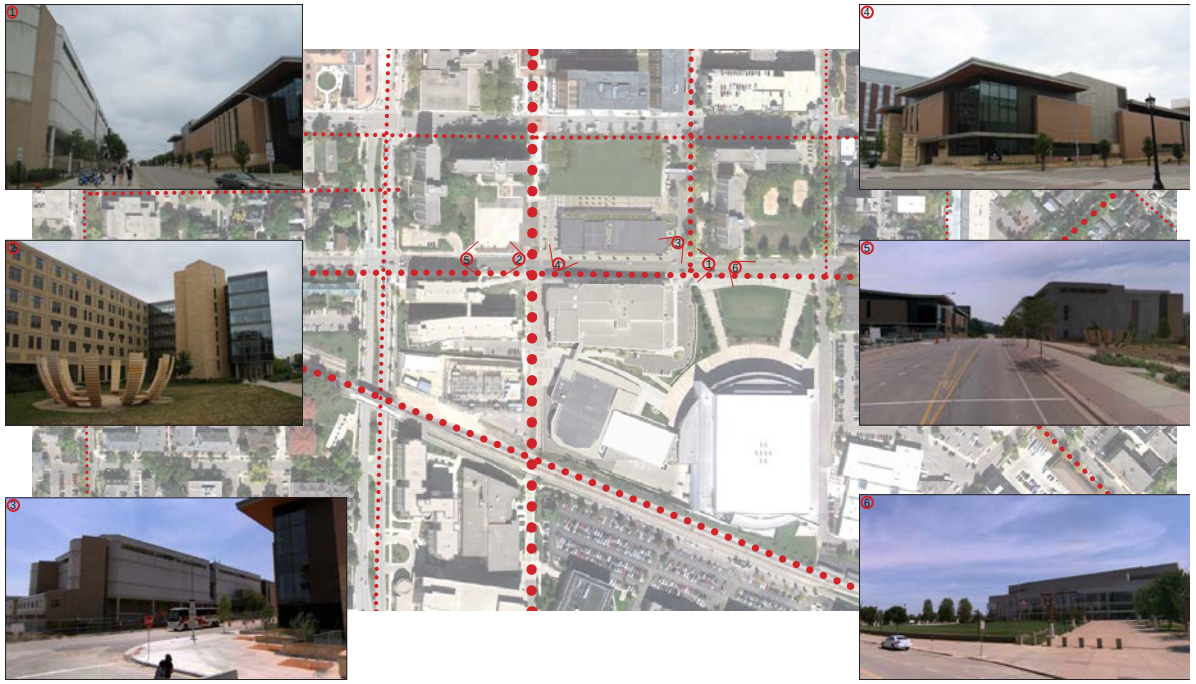
A majority of the vehicular circulation is coming and going on Observatory Drive. Minimal traffic exists on Willow Drive, mostly to access the residence halls north of the site. The site is very connected by public transportation. Route 80 and route 84 have stops in both directions directly in front of the facility. The main entry of the new facility should take advantage of this close proximity and possibly remain along the street. This would also address the ample amounts of parking just across Observatory Dr. The facility should take advantage of the busy nature of Observatory Dr. by putting active programmatic spaces on the south facade.


### *PEDESTRIAN CIRCULATION - VIEWS*

The pedestrian circulation around the site concentrates itself on Observatory Dr, and the Howard M. Temin Lake-shore Path. The residence halls to the northeast also will bring ample pedestrian traffic to the site. All need to be considered when locating major and minor entry's to the facility. Views to and from the site are immense and will be easy to take advantage of.

# SERF




### *VEHICULAR CIRCULATION - PARKING - PUBLIC TRANSPORTATION*

Vehicular traffic is relatively constant throughout the area, but does focus on Dayton Street and Park Street. Like the other two sites, the SERF is very well connected with public transportation. Route 80 and route 82 have stops in both directions directly in front of the facility. Route 80 connects all sites associated with the master plan. The surrounding area is also very dense, with many surrounding buildings close to the street. The SERF should respond to this, continuing the "street wall" where possible.

### *PEDESTRIAN CIRCULATION - VIEWS*

Pedestrian circulation is evident on all surrounding streets and paths, but is concentrated along East Campus Mall. Locating the entry along the Mall would continue to solidify this pedestrian spine as a major unifying element on campus, and provide it with a southern destination.

Views to and from the site are limited because of the dense nature of the area, but the Kohl Center lawn does provide expansive vistas to and from the building.


Building
Programs

## PROGRAMMING PROCESS

The programming process started with an extensive analysis of existing peer recreational facilities, mostly at other Big Ten schools. Rec Sports compared both schools with existing facilities and schools that had facilities in the planning stages and concluded that UW-Madison was severely short on almost all types of recreational spaces. Rec space guidelines from National Intramural-Recreational Sports Association (NIRSA) also confirm a major shortage in program square footage on campus.

After comparing peer universities and guidelines from national recreation organizations, UW Rec Sports looked at usage of their existing facilities to develop new programs, with the assistance of Kahler Slater and their experience with these types of facilities. Through many workshops the design committee determined the right location for the added program and distributed it between the three facilities proposed. The distribution was determined based on usage of the current facilities, size of the sites, and other factors to provide a dispersed recreational experience to everyone on campus.

The elimination of recreational activities at the Shell adds to the space at each new facility, but is primarily accounted for at the Natatorium.

As the master plan process progressed, the Natatorium program was downsized to better address the needs of the students, faculty and staff. (4) courts were removed from the gymnasium, 15,000 sf of fitness space was removed, and multi-purpose square footage was cut in half. The current program better reflects the future needs of the users, while still being fiscally responsible.

The program for Kinesiology was developed by the department based upon current usage, and consolidation of other spaces in use around campus. Future needs of the department are planned for both within the program and with shelled space in the lower level of the Nat. Shelled space is also available for Rec Sports to expand into in the future.

The instructional spaces at the Natatorium were included to function as both classrooms for Kinesiology and Rec Sports, and provide more multi-purpose space for all occupants. Usage was based upon demand of existing similar spaces within the building which was then expanded for future usage given the added Kinesiology and rec sports users.

The program for the fields was based upon current usage of each individual area, that was then dispersed between all three areas according to better usage throughout the day and year. Currently similar activities happen in different areas around campus. The new plan calls for consolidation to better serve the student population, while making it more efficient for Rec Sports staff.

# NIELSEN WELLNESS CENTER AND TENNIS STADIUM

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| **A** | **Rec Sports** | | | | | | | | | | |
| **1** | **PUBLIC SPACES** | | | | | | | | | | |
| 1.01 | Vestibule | | | | | | | 200 | 2 | 400 | Metal drainage grates |
| 1.02 | Welcome Desk/Lobby | | | | | | | 1,200 | 1 | 1,200 | |
| 1.03 | Lounge | | | | | | | 350 | 1 | 350 | |
| 1.04 | Existing Lounge | 1,780 | 1 | 1,780 | | | | | | | |
| 1.05 | Existing Court Viewing | 1,780 | 1 | 1,780 | | | | | | | |
| 1.06 | Event Lobby | | | | | | | 950 | 1 | 950 | |
| 1.07 | Event Office | | | | | | | 120 | 1 | 120 | |
| | **TOTAL AREA:** | | **2** | **3,560** | | | | | **6** | **3,020** | |
| **2** | **FITNESS AREAS** | | | | | | | | | | |
| 2.01 | Fitness Center | | | | | | | 20,500 | 1 | 20,500 | |
| 2.02 | Equipment Repair/Storage | | | | | | | 200 | 1 | 200 | |
| 2.03 | Multi-Purpose Studio | | | | | | | 3,500 | 1 | 3,500 | |
| 2.04 | Multi-Purpose Studio - Small | | | | | | | 350 | 1 | 350 | |
| 2.05 | Multi-Purpose Studio Storage | | | | | | | 250 | 1 | 250 | |
| | **TOTAL AREA:** | | | | | | | | **5** | **24,800** | |
| **3** | **LOCKER ROOMS** | | | | | | | | | | |
| 3.01 | Men's Locker Room | | | | | | | 1,650 | 1 | 1,650 | |
| 3.02 | Women's Locker Room | | | | | | | 1,650 | 1 | 1,650 | |
| 3.03 | Unisex / Special Needs Locker Room | | | | | | | 100 | 4 | 400 | |
| 3.03 | Team Locker Rooms | | | | | | | 275 | 2 | 550 | |
| 3.04 | Tournament Locker Rooms | | | | | | | 600 | 2 | 1,200 | |
| | **TOTAL AREA:** | | | | | | | | **10** | **5,450** | |
| **4** | **ADMINISTRATION/OFFICE SUITE** | | | | | | | | | | |
| 4.01 | Reception | | | | | | | 120 | 1 | 120 | |
| 4.02 | Conference Room | | | | | | | 220 | 1 | 220 | |
| 4.03 | Staff Offices | | | | | | | 120 | 3 | 360 | |
| | **TOTAL AREA:** | | | | | | | | **5** | **700** | |
| **5** | **BUILDING SUPPORT** | | | | | | | | | | |
| 5.01 | General Storage | | | | | | | 200 | 2 | 400 | |
| 5.02 | Building Maintenance | | | | | | | 500 | 1 | 500 | |
| | **TOTAL AREA:** | | | | | | | | **3** | **900** | |

# NIELSEN WELLNESS CENTER AND TENNIS STADIUM

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| | **RECREATION AREA ASF TOTALS:** | | | **EXISTING** | | | | | | **PROPOSED** | |
| | | | | TOTAL ASF | | | | | | TOTAL ASF | |
| 1 | PUBLIC SPACES | | | 3,560 | | | | | | 3,020 | |
| 2 | FITNESS AREAS | | | 0 | | | | | | 24,800 | |
| 3 | LOCKER ROOMS | | | 0 | | | | | | 5,450 | |
| 4 | ADMINISTRATION/OFFICE SUITE | | | 0 | | | | | | 700 | |
| 5 | BUILDING SUPPORT | | | 0 | | | | | | 900 | |

| | | |
|---|---|---|
| **TOTAL RECREATION ASF:** | **34,870** | |
| Departmental SF Multiplier | 1.35 | Grossing factor |
| **TOTAL RECREATION DEPT. GSF** | **47,075** | |
| | 12,205 | Grossing factor SF |
| | 74.1% | Efficiency Factor |

# NATATORIUM - REC SPORTS

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| **A** | **REC SPORTS** | | | | | | | | | | |
| **1** | **PUBLIC SPACES** | | | | | | | | | | |
| 1.01 | Vestibule | 268 | 1 | 268 | Nat 1000J | | | 250 | 1 | 250 | Metal drainage grates |
| 1.02 | Lobby | 0 | 0 | 0 | | | | 2,000 | 1 | 2,000 | |
| 1.03 | Lounge | 0 | 0 | 0 | | | | 3,000 | 1 | 3,000 | Comfortable seating areas for students |
| 1.04 | Welcome Desk | 261 | 1 | 261 | Nat 1180 | | | 600 | 1 | 600 | One point of entry into Recreation/Fitness areas |
| 1.05 | Welcome Desk Workroom/Storage | 0 | 0 | 0 | | | | 250 | 1 | 250 | |
| 1.06 | One Stop Shop | 0 | 0 | 0 | | | | 600 | 1 | 600 | Membership, lockers, equipment checkout, merch. |
| 1.07 | Membership/Program Desk | 261 | 1 | 261 | Nat 1180 | | | 400 | 1 | 400 | Before restricted access |
| | **TOTAL AREA:** | | **3** | **790** | | | | | **7** | **7,100** | |
| **2** | **FITNESS AREAS** | | | | | | | | | | |
| 2.01 | Fitness Center - Cardio/Selectorized | 2,000 | 1 | 2,000 | Nat 1110 | | | 36,700 | 1 | 36,700 | 100,000 eligible users |
| 2.02 | Fitness Center - Strength | 3,353 | 1 | 3,353 | Nat 1110 | | | 10,000 | 1 | 10,000 | 100,000 eligible users |
| 2.03 | Fitness Center - Stretch / Funct. Training | 100 | 1 | 100 | Nat 1110 | | | 1,000 | 1 | 1,000 | |
| 2.04 | Fitness Center - Assist Desk | 0 | 0 | 0 | | | | 150 | 1 | 150 | |
| 2.05 | Fitness Center Storage | 251 | 2 | 502 | Nat 1110A & 1110B | | | 500 | 1 | 500 | |
| 2.06 | Multi-Purpose Studio - Large | 0 | 0 | 0 | | | | 4,000 | 1 | 4,000 | Up to 200 participants |
| 2.07 | Multi-Purpose Studio - Medium | 1,851 | 1 | 1,851 | Nat 1065 | | | 2,000 | 2 | 4,000 | |
| 2.08 | Multi-Purpose Studio - Small | 0 | 0 | 0 | | | | 1,000 | 3 | 3,000 | 10-50 participants |
| 2.09 | Multi-Purpose Studio Storage | 0 | 0 | 0 | | | | 150 | 6 | 900 | One room for each studio |
| 2.10 | Wellness Complex | 0 | 0 | 0 | | | | 4,300 | 1 | 4,300 | Offices, counseling suites, PT/AT, kitchen, reception |
| | **TOTAL AREA:** | | **6** | **7,806** | | | | | **18** | **64,550** | |
| **3** | **RECREATIONAL COURT SPACE** | | | | | | | | | | |
| 3.01 | 12-Court Gymnasiums with MAC Court | 22,700 | 2 | 45,400 | Nat 2110, 2117, 2160 & 2171 | | | 96,000 | 1 | 96,000 | With (2) MAC courts and Championship court |
| 3.02 | Gymnasium Storage | 1,316 | 5 | 6,580 | Nat 2110A, 2160A, 2117A, 2171A, 2000F & 2191 | | | 2,000 | 3 | 6,000 | |
| 3.03 | Jogging Track | 0 | 0 | 0 | | | | 16,000 | 1 | 16,000 | 4 lanes, stretching, views, day lockers. 4.5 laps to the mile |
| 3.04 | Indoor Turf Field | 0 | 0 | 0 | | | | 30,000 | 1 | 30,000 | Dividable, retractable netting, built in/portable goals. |
| 3.05 | Turf Field Storage | 0 | 0 | 0 | | | | 2,000 | 1 | 2,000 | |
| 3.06 | Racquetball Court | 808 | 6 | 4,848 | Nat 1240-1260 | | | 800 | 6 | 4,800 | Movable back wall for Squash. Wallyball capable. |
| | **TOTAL AREA:** | | **13** | **56,828** | | | | | **13** | **154,800** | |
| **4** | **NATATORIUM** | | | | | | | | | | |
| 4.01 | Instructional Pool | 13,874 | 1 | 13,874 | Nat 1221 | | | 15,000 | 1 | 15,000 | (8) lane, 25yd. Water volleyball, inner tube water polo |
| 4.02 | Pool Storage | 140 | 2 | 280 | Nat 1221G & 1221H | | | 500 | 1 | 500 | |
| 4.03 | Wet Classroom | 420 | 1 | 420 | Nat 1221A | | | 1,000 | 1 | 1,000 | Adjoining pool and dry corridor. |
| | **TOTAL AREA:** | | **4** | **14,574** | | | | | **3** | **16,500** | |
| **5** | **ICE ARENA** | | | | | | | | | | |
| 5.01 | Ice Sheet | 20,050 | 1 | 20,050 | CRSC 110 | | | 25,000 | 1 | 25,000 | 85'x200' NCAA sheet. Bleacher seating for 500 |
| 5.01 | Lobby/Storage Lockers | 1,194 | 1 | 1,194 | CRSC 100M | | | 500 | 1 | 500 | 100+ Storage Lockers |
| 5.02 | Zamboni Area | 479 | 1 | 479 | CRSC 107 & 109 | | | 1,500 | 1 | 1,500 | 2 Zamboni's, work area, dump pit. |
| 5.03 | Skate Rental/Equipment Desk | | | 0 | | | | 150 | 1 | 150 | |
| 5.04 | Equipment Storage | | | 0 | | | | 300 | 1 | 300 | |
| 5.05 | Player Locker Rooms | 330 | 4 | 1,320 | CRSC 110C,D, G & H | | | 750 | 4 | 3,000 | Share shower and toilet areas |
| 5.06 | Officials Locker Room | 325 | 1 | 325 | CRSC 110B | | | 400 | 1 | 400 | |
| | **TOTAL AREA:** | | **4** | **23,368** | | | | | **10** | **30,850** | |

# NATATORIUM - REC SPORTS

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| **6** | **LOCKER ROOMS** | | | | | | | | | | |
| 6.01 | Men's Locker Room | 6,155 | 1 | 6,155 | Nat 1117A | | | 4,500 | 1 | 4,500 | 200 lockers, pool access |
| 6.02 | Women's Locker Room | 3,420 | 1 | 3,420 | Nat 1171A | | | 4,500 | 1 | 4,500 | 200 lockers, pool access |
| 6.03 | Unisex / Special Needs Locker Room | | | 0 | | | | 1,500 | 1 | 1,500 | |
| | **TOTAL AREA:** | | **2** | **9,575** | | | | | **3** | **10,500** | |
| **7** | **ADMINISTRATION/OFFICE SUITE** | | | | | | | | | | |
| 7.01 | Reception/Waiting Area | 0 | 0 | 0 | | | | 400 | 1 | 400 | |
| 7.02 | Staff offices | 0 | 0 | 0 | | | | 120 | 40 | 4,800 | Includes IM Sports/Sport Club office area |
| 7.03 | Student Suite Office | 0 | 0 | 0 | | | | 150 | 3 | 450 | |
| 7.04 | Work Room | 0 | 0 | 0 | | | | 200 | 1 | 200 | |
| 7.05 | Staff Lounge | 0 | 0 | 0 | | | | 200 | 1 | 200 | |
| 7.06 | Staff Toilets | 0 | 0 | 0 | | | | 100 | 2 | 200 | |
| 7.07 | Large Conference Room | 0 | 0 | 0 | | 40 | 20 | 800 | 1 | 800 | dividable |
| 7.08 | Small Conference Room | 0 | 0 | 0 | | 15 | 20 | 300 | 1 | 300 | |
| | **TOTAL AREA:** | | **0** | **0** | | | | | **50** | **7,350** | |
| **8** | **MEETING/CLASSROOMS** | | | | | | | | | | |
| 8.01 | Class/Instructional Room | | | | | 75 | 25 | 1,875 | 2 | 3,750 | 50-75 people |
| | **TOTAL AREA:** | | | | | | | | **2** | **3,750** | |
| **9** | **BUILDING SUPPORT** | | | | | | | | | | |
| 9.01 | Loading Dock | 402 | 1 | 402 | Nat 1055 | | | 400 | 1 | 400 | |
| 9.02 | General Storage | | | 0 | | | | 200 | 5 | 1,000 | Distributed through building |
| 9.03 | Building Maintenance | 1,200 | 1 | 1,200 | Nat 1055A | | | 1,000 | 1 | 1,000 | Attached to Loading Dock |
| 9.04 | Wood Shop | 420 | 1 | 420 | Nat 1082 | | | | | | |
| 9.05 | Trash/Recycling Room | 0 | 0 | 0 | | | | 300 | 1 | 300 | Adjacent to Loading Dock |
| 9.06 | Equipment Repair Room | 100 | 1 | 100 | Nat 1055A | | | 300 | 1 | 300 | Adjacent to Loading Dock |
| 9.07 | Outdoor Equipment Storage | 395 | 1 | 395 | Nat 1055A | | | 1,500 | 1 | 1,500 | Currently in Shed |
| 9.08 | Field Equipment Storage | 0 | 0 | 0 | | | | 2,000 | 1 | 2,000 | |
| | **TOTAL AREA:** | | **5** | **2,517** | | | | | **11** | **6,500** | |
| | **RECREATION AREA ASF TOTALS:** | | | EXISTING TOTAL ASF | | | | **PROPOSED** | | TOTAL ASF | |
| **1** | **PUBLIC SPACES** | | | **790** | | | | | | **7,100** | |
| **2** | **FITNESS AREAS** | | | **7,806** | | | | | | **64,550** | |
| **3** | **RECREATIONAL COURT SPACE** | | | **56,828** | | | | | | **154,800** | |
| **4** | **NATATORIUM** | | | **14,574** | | | | | | **16,900** | |
| **5** | **ICE ARENA** | | | **23,368** | | | | | | **30,850** | |
| **6** | **LOCKER ROOMS** | | | **9,575** | | | | | | **10,500** | |
| **7** | **ADMINISTRATION/OFFICE SUITE** | | | **0** | | | | | | **7,350** | |
| **8** | **MEETING/CLASSROOMS** | | | **0** | | | | | | **3,750** | |
| **9** | **BUILDING SUPPORT** | | | **2,517** | | | | | | **6,500** | |

| | | |
|---|---|---|
| **TOTAL RECREATION ASF:** | **302,300** | |
| Departmental SF Multiplier | 1.29 | Grossing factor |
| **TOTAL RECREATION DEPT. GSF** | **389,967** | |
| | 87,667 | Grossing factor SF |
| | 77.5% | Efficiency Factor |

# NATATORIUM - KINESIOLOGY

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| **B** | **DEPARTMENT OF KINESIOLOGY** | | | | | | | | | | |
| **1** | **PUBLIC SPACES** | | | | | | | | | | |
| 1.01 | Vestibule | | | | | | | 250 | 1 | 250 | Metal drainage grates |
| 1.02 | Lobby | | | | | | | 1,000 | 1 | 1,000 | Shared with Rec Sports |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | | | | | | **1** | **1,250** | |
| **2** | **CLASSROOMS AND CLASS LABS** | | | | | | | | | | |
| 2.01 | Large Classroom (Active Learning) | | | | | 80 | 35 | 2,800 | 1 | 2,800 | Flat floor, movable furniture |
| 2.02 | Medium Classroom - 50 (Active Learning) | | | | | 50 | 35 | 1,750 | 2 | 3,500 | Flat floor, movable furniture |
| 2.03 | Fitness Classroom | | | | | 30 | 18 | 525 | 1 | 525 | Adjoining Fitness Class Lab |
| 2.04 | Fitness Class Lab | | | | | | | 3,000 | 1 | 3,000 | Adjoining rooms. Movable furniture, fitness equipment, secure storage |
| 2.05 | Fitnees Class Lab Storage | | | | | | | 300 | 1 | 300 | |
| 2.06 | Athletic Training Classroom | | | | | 30 | 25 | 750 | 1 | 750 | Adjoioning AT class lab. Moveable classroom furniture |
| 2.07 | Athletic Training Class Lab | | | | | | | 1,050 | 1 | 1,050 | 8-10 training tables. Cabinets/storage. |
| 2.08 | Occupational Therapy Class Lab | | | | | 30 | 35 | 1,050 | 2 | 2,100 | Movable furniture. |
| 2.09 | OT Class Lab Storage | | | | | | | 150 | 1 | 150 | |
| 2.10 | OT ADL Sim Class Lab | | | | | | | 1,000 | 1 | 1,000 | |
| 2.11 | Multipurpose Fitness Class Lab | | | | | 30 | 30 | 900 | 1 | 900 | Needs high ceilings, at least 15 ft. A sink is required. |
| 2.12 | Multipurpose Fitness Class Lab Storage | | | | | | | 350 | 1 | 350 | |
| 2.13 | Adaptive Fitness Class Lab | | | | | | | 3,500 | 1 | 3,500 | |
| 2.14 | Adaptive Fitness Class Lab Storage | | | | | | | 250 | 1 | 250 | |
| 2.15 | ~~Gym Class Lab~~ | | | | | | | ~~6,000~~ | 0 | 0 | Kines will use Rec Sports gyms for instruction |
| 2.16 | Gym Class Lab Storage | | | | | | | 1,000 | 1 | 1,000 | Gym storage will be required for Kines programs |
| 2.17 | Biomechanics Classroom | | | | | 30 | 25 | 750 | 1 | 750 | Adjacent to Biomechanics Research Lab. Movable furniture. |
| 2.18 | Clinical Assessment Room | | | | | | | 120 | 6 | 720 | Adjacent to Live Observation Room |
| 2.19 | Live Observation Room | | | | | | | 100 | 2 | 200 | Adjacent to Clinical Assessment Room |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | | | | | | **26** | **22,845** | |
| **3** | **CONFERENCE ROOMS** | | | | | | | | | | |
| 4.01 | Large Conference Room | | | | | 50 | 20 | 1,000 | 1 | 1,000 | Movable furniture |
| 4.02 | Medium Conference Room | | | | | 20 | 20 | 400 | 1 | 400 | Movable furniture |
| 4.03 | Small Conference Room | | | | | 12 | 20 | 240 | 1 | 240 | Fixed table, moveable chairs |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | | | | | | **3** | **1,640** | |
| **4** | **RESEARCH/ NON-CLASS LABS** | | | | | | | | | | |
| | Shared by multiple projects across fields of study. Secondary use as instructional space. | | | | | | | | | | |
| 5.01 | Wet Lab | | | | | | | 4,500 | 1 | 4,500 | Benches, ventilation, storage for shared access to all projects |
| 5.02 | Training Area | | | | | 20 | 50 | 1,000 | 1 | 1,000 | Treadmills, bikes, open area |
| 5.03 | Testing Area | | | | | 4 | 80 | 320 | 2 | 640 | Treadmill (1), bike (1), metabolic cart, ECG, VO2 equip, exam table, desk, chair, storage for supplies, and sink |
| 5.04 | Testing - Body Composition | | | | | 1 | 150 | 150 | 2 | 300 | Bod Pod, DXA equipment |
| 5.05 | Interview/Consultation Rooms | | | | | | | 150 | 5 | 750 | Used for human subject intake, baseline measurements. Sink, exam table, desk, chairs |
| 5.06 | Collaboration/conference space | | | | | 10 | 20 | 250 | 1 | 250 | Semi-formal area for group meetings, ad hoc collaboration |

# NATATORIUM - KINESIOLOGY

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| 5.07 | Shower/Changing Room | | | | | | | 600 | 2 | 1,200 | (1) male, (1) female.Changing space for approx. 12 people at once. 1-2 private changing rooms, 3-4 private shower rooms |
| 5.08 | Cold Room | | | | | | | 100 | 1 | 100 | |
| 5.09 | Patient/clinic rooms | | | | | | | 250 | 3 | 750 | Hospital bed, sink, computer work station |
| 5.10 | Force Treadmills | | | | | | | 1,000 | 1 | 1,000 | |
| 5.11 | Body/Limb Force Measurement Lab | | | | | | | 1,000 | 1 | 1,000 | Custom equip, force plates, motion capture, EMG |
| 5.12 | Machine Shop | | | | | | | 400 | 1 | 400 | Lathe, mills, grinders, drill press, work bench |
| 5.13 | Electronics Shop | | | | | | | 120 | 1 | 120 | Work bench and tool storage |
| 5.14 | Assignable Activity Spaces | | | | | | | 750 | 10 | 7,500 | Open, high ceiling spaces (12-15 ft) for project work. Need to accommodate a range of human activity and movement. |
| | **TOTAL AREA:** | | | | | | | | **32** | **19,510** | |
| **5** | **ADMINISTRATIVE AND OFFICE SPACE** | | | | | | | | | | |
| 6.01 | Reception | | | | | | | 200 | 1 | 200 | |
| 6.02 | Admin Offices | | | | | | | 120 | 10 | 1,200 | Private offices |
| 6.03 | Faculty/ Staff Offices | | | | | | | 120 | 40 | 4,800 | Private offices |
| 6.04 | Chair Office | | | | | | | 175 | 1 | 175 | Private office w/ meeting area |
| 6.05 | IT Office/Work Area | | | | | | | 150 | 1 | 150 | Private offcie w/ IT work area |
| 6.06 | Work room | | | | | | | 200 | 1 | 200 | |
| 6.07 | Open Office Area (grads, etc) | | | | | 6 | 40 | 240 | 7 | 1,680 | |
| 6.08 | Emeriti Faculty Office Area | | | | | | | 200 | 1 | 200 | |
| 6.09 | Lounge/Kitchenette | | | | | | | 300 | 1 | 300 | |
| 6.10 | Wellness Room | | | | | | | 150 | 1 | 150 | |
| | **TOTAL AREA:** | | | | | | | | **64** | **9,055** | |
| **6** | **BUILDING SUPPORT** | | | | | | | | | | |
| 8.01 | Loading Dock/Building Maintenance | | | | | | | | | | Combined with Rec Sports |
| 8.02 | General Storage | | | | | | | 1,000 | 1 | 1,000 | |
| 8.03 | Wood Shop | | | | | | | 700 | 1 | 700 | |
| | **TOTAL AREA:** | | | | | | | | **2** | **1,700** | |

| | RECREATION AREA ASF TOTALS: | EXISTING ASF | PROPOSED ASF |
|---|---|---|---|
| **1** | **PUBLIC SPACES** | | **1,250** |
| **2** | **CLASSROOMS AND CLASS LABS** | | **22,845** |
| **3** | **CONFERENCE ROOMS** | | **1,640** |
| **4** | **RESEARCH/ NON-CLASS LABS** | | **19,510** |
| **5** | **ADMINISTRATIVE AND OFFICE SPACE** | | **9,055** |
| **6** | **BUILDING SUPPORT** | | **1,700** |

| | | |
|---|---|---|
| **TOTAL KINESIOLOGY ASF:** | **54,300** | |
| Departmental SF Multiplier | 1.5 | Grossing factor |
| **TOTAL KINESIOLOGY GSF** | **81,450** | |
| | 27,150 | Grossing factor SF |
| | 66.7% | Efficiency Factor |

# NATATORIUM

| ASSIGNABLE SPACE | | EXISTING | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| | **SUMMARY:** | | | | | | | | | | |
| | **RECREATION AREA ASF TOTALS:** | | | **EXISTING** TOTAL ASF | | | | | | **PROPOSED** TOTAL ASF | |
| 1 | **PUBLIC SPACES** | | | | | | | | | **7,100** | |
| 2 | **FITNESS AREAS** | | | | | | | | | **64,550** | |
| 3 | **RECREATIONAL COURT SPACE** | | | | | | | | | **154,800** | |
| 4 | **NATATORIUM** | | | | | | | | | **16,900** | |
| 5 | **ICE ARENA** | | | | | | | | | **30,850** | |
| 6 | **LOCKER ROOMS** | | | | | | | | | **10,500** | |
| 7 | **ADMINISTRATION/OFFICE SUITE** | | | | | | | | | **7,350** | |
| 8 | **MEETING/CLASSROOMS** | | | | | | | | | **3,750** | |
| 9 | **BUILDING SUPPORT** | | | | | | | | | **6,500** | |

| | | |
|---|---|---|
| **TOTAL RECREATION ASF:** | **302,300** | |
| Departmental SF Multiplier | 1.29 | Grossing factor |
| **TOTAL RECREATION DEPT. GSF** | **389,967** | |
| | 87,667 | Grossing factor SF |
| | 77.5% | Efficiency Factor |

| | **DEPARTMENT OF KINESIOLOGY AREA ASF TOTALS:** | **EXISTING** TOTAL ASF | **PROPOSED** TOTAL ASF |
|---|---|---|---|
| 1 | **PUBLIC SPACES** | | **1,250** |
| 2 | **CLASSROOMS AND CLASS LABS** | | **22,845** |
| 3 | **CONFERENCE ROOMS** | | **1,640** |
| 4 | **RESEARCH/ NON-CLASS LABS** | | **19,510** |
| 5 | **ADMINISTRATIVE AND OFFICE SPACE** | | **9,055** |
| 6 | **BUILDING SUPPORT** | | **1,700** |

| | | |
|---|---|---|
| **TOTAL KINESIOLOGY ASF:** | **54,300** | |
| Departmental SF Multiplier | 1.5 | Grossing factor |
| **TOTAL KINESIOLOGY GSF** | **81,450** | |
| | 27,150 | Grossing factor SF |
| | 66.7% | Efficiency Factor |

| **OVERALL BUILDING TOTALS:** | **ASF** | **GSF** | |
|---|---|---|---|
| Recreation | 302,300 | **389,967** | |
| Department of Kinesiology | 54,300 | **81,450** | |
| | | | |
| | **356,600** | **471,417** | |
| | | 114,817 | Grossing factor SF |
| | | 75.6% | Efficiency Factor |

# SOUTH EAST RECREATIONAL FACILITY

| ASSIGNABLE SPACE | | Renovation | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| **A** | **REC SPORTS** | | | | | | | | | | |
| **1** | **PUBLIC SPACES** | | | | | | | | | | |
| 1.01 | Vestibule | 445 | 1 | 445 | | | | 250 | 1 | 250 | Metal drainage grates |
| 1.02 | Lobby | 4,397 | 1 | 4,397 | | | | 1,500 | 1 | 1,500 | |
| 1.03 | Lounge | | | 0 | | | | 3,000 | 1 | 3,000 | Comfortable seating areas for students |
| 1.04 | Welcome Desk | | | 0 | | | | 500 | 1 | 500 | One point of entry into Recreation/Fitness areas |
| 1.05 | Welcome Desk Workroom/Storage | | | 0 | | | | 250 | 1 | 250 | |
| 1.06 | One Stop Shop | | | 0 | | | | 500 | 1 | 500 | Membership, lockers, equipment checkout, merch. |
| 1.07 | Membership/Program Desk | | | 0 | | | | 400 | 1 | 400 | Before restricted access |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | **4,842** | | | | | **7** | **6,400** | |
| | | | | | | | | | | | |
| **2** | **FITNESS AREAS** | | | | | | | | | | |
| 2.01 | Fitness Center - Cardio/Selectorized | 5,404 | 1 | 5,404 | | | | 24,500 | 1 | 24,500 | |
| 2.02 | Fitness Center - Strength | 6,434 | 1 | 6,434 | | | | 10,000 | 1 | 10,000 | |
| 2.03 | Fitness Center - Stretch / Funct. Training | | | 0 | | | | 1,000 | 1 | 1,000 | |
| 2.04 | Fitness Center - Assist Desk | | | 0 | | | | 150 | 1 | 150 | |
| 2.05 | Fitness Center Storage | 890 | 1 | 890 | | | | 500 | 1 | 500 | |
| 2.06 | Multi-Purpose Studio - Large | 4,260 | 1 | 4,260 | | | | 4,000 | 1 | 4,000 | Up to 200 participants |
| 2.07 | Multi-Purpose Studio - Medium | 2,365 | 2 | 4,730 | | | | 2,500 | 3 | 7,500 | |
| 2.08 | Multi-Purpose Studio - Small | 990 | 2 | 1,980 | | | | 1,000 | 5 | 5,000 | 10-50 participants |
| 2.09 | Group Fitness Studio Storage | 200 | 5 | 1,000 | | | | 150 | 9 | 1,350 | One room for each studio |
| 2.10 | Personal Training | | | 0 | | | | 1,000 | 1 | 1,000 | |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | **24,698** | | | | | **24** | **55,000** | |
| | | | | | | | | | | | |
| **3** | **RECREATIONAL COURT SPACE** | | | | | | | | | | |
| 3.01 | 9-Pack Gymnasium | | | 0 | | | | 62,500 | 1 | 62,500 | Includes one MAC Court, Championship Court |
| 3.02 | Existing Gymnasiums | 45,250 | 1 | 45,250 | | | | | | 0 | 8 courts total, 4 of which are not regulation size |
| 3.03 | Gymnasium Storage | 220 | 2 | 440 | | | | 2,000 | 2 | 4,000 | |
| 3.04 | Jogging Track | 9,601 | 1 | 9,601 | | | | 9,000 | 1 | 9,000 | 3 lanes, 7 laps to the mile |
| 3.05 | Racquetball Court | 800 | 9 | 7,200 | | | | 800 | 6 | 4,800 | Movable back wall for Squash. Wallyball capable. |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | **62,491** | | | | | **10** | **80,300** | |
| | | | | | | | | | | | |
| **4** | **NATATORIUM** | | | | | | | | | | |
| 4.01 | Existing Pool | 25,700 | 1 | 25,700 | | | | | | | |
| 4.02 | Pool Storage | 500 | 1 | 500 | | | | 1,000 | 1 | 1,000 | |
| 4.03 | Wet Classroom | | | 0 | | | | 1,200 | 1 | 1,200 | Adjoining pool |
| | | | | | | | | | | | |
| | **TOTAL AREA:** | | | **26,200** | | | | | **2** | **2,200** | |

# SOUTH EAST RECREATIONAL FACILITY

| ASSIGNABLE SPACE | | Renovation | | | | PROPOSED | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UNIT NO. | UNIT | ASF / SPACE | NO. OF SPACES | TOTAL ASF | CURRENT LOCATION | NO. OF OCCUP. | ASF / OCCUP. | ASF / SPACE | NO. OF SPACES | TOTAL ASF | NOTES |
| **5** | **LOCKER ROOMS** | | | | | | | | | | |
| 5.01 | Men's Locker Room | 6,400 | 1 | 6,400 | | | | 5,000 | 1 | 5,000 | 200 lockers, pool access |
| 5.02 | Women's Locker Room | 6,400 | 1 | 6,400 | | | | 5,000 | 1 | 5,000 | 200 lockers, pool access |
| 5.03 | Unisex / Special Needs Locker Room | | | 0 | | | | 2,400 | 1 | 2,400 | |
| | **TOTAL AREA:** | | | | | | | | **3** | **12,400** | |
| **6** | **ADMINISTRATION/OFFICE SUITE** | | | | | | | | | | |
| 6.01 | Reception/Waiting Area | | | 0 | | | | 500 | 1 | 500 | |
| 6.02 | Staff offices | 120 | 6 | 720 | | | | 120 | 10 | 1,200 | |
| 6.03 | Student Suite Office | 350 | 3 | 1,050 | | | | 250 | 3 | 750 | |
| 6.04 | Work Room | 169 | 2 | 338 | | | | 200 | 1 | 200 | |
| 6.05 | Staff Lounge | | | 0 | | | | 200 | 1 | 200 | |
| 6.06 | Staff Toilets | | | 0 | | | | 100 | 2 | 200 | |
| 6.07 | Conference Room | 229 | 1 | 229 | | 30 | 20 | 600 | 1 | 600 | 15-40 people, dividable |
| | **TOTAL AREA:** | | | | | | | | **19** | **3,650** | |
| **7** | **BUILDING SUPPORT** | | | | | | | | | | |
| 7.01 | Loading Dock | 314 | 1 | 314 | | | | 400 | 1 | 400 | |
| 7.02 | General Storage | 150 | 4 | 600 | | | | 200 | 5 | 1,000 | Distributed through building |
| 7.03 | Building Maintenance | 222 | 1 | 222 | | | | 1,500 | 1 | 1,500 | Attached to Loading Dock |
| 7.04 | Trash/Recycling Room | | | 0 | | | | 300 | 1 | 300 | Adjacent to Loading Dock |
| 7.05 | Equipment Repair Room | | | 0 | | | | 300 | 1 | 300 | Adjacent to Loading Dock |
| | **TOTAL AREA:** | | | | | | | | **9** | **3,500** | |

| | RECREATION AREA ASF TOTALS: | RENOVATED TOTAL ASF | PROPOSED TOTAL ASF |
|---|---|---|---|
| **1** | **PUBLIC SPACES** | | **6,400** |
| **2** | **FITNESS AREAS** | | **55,000** |
| **3** | **RECREATIONAL COURT SPACE** | | **80,300** |
| **4** | **NATATORIUM** | | **2,200** |
| **5** | **LOCKER ROOMS** | | **12,400** |
| **6** | **ADMINISTRATION/OFFICE SUITE** | | **3,650** |
| **7** | **BUILDING SUPPORT** | | **3,500** |

| | | |
|---|---|---|
| **TOTAL RENOVATED REC ASF:** | **26,200** | |
| **TOTAL NEW RECREATION ASF:** | **163,450** | |
| SF Multiplier | 1.42 | Grossing factor |
| **TOTAL RECREATION DEPT. GSF** | **232,099** | |
| | 68,649 | Grossing factor SF |
| | 70.4% | Efficiency Factor |


Conceptual
Design


New or Rehabilitated Recreation/Athletic Fields

- A University Bay/Far West Fields
- B Near West Fields
- C Near East Fields

New or Rehabilitated Recreation/Athletic Facilities

- D Nielsen Wellness Center and Tennis Stadium
- E Natatorium
- F South East Recreational Facility

Campus Plan showing scope of the study


Outdoor Fields

# OUTDOOR FIELDS

UW-Madison Rec Sports wanted to explore options on how to make the existing outdoor fields on campus more playable throughout the day and year. The master plan reviewed multiple options for University Bay/Far West Fields, Near West Fields, and Near East Fields. Versions with varying amounts of synthetic turf, which expands playability throughout the year, were explored at each site. Similarly, lighting the fields was determined to be necessary to allow for use later into the day, which dramatically increases the amount of students who can participate in outdoor rec sports activities.

## University Bay/Far West Fields

The University Bay/Far West Fields will be the largest collection of recreation fields. It resides on the west end of campus, just north of the hospital. Parking will be added to the site to make it more accessible to the rest of campus, but its location close to the Howard M. Temin Lakeshore Path and multiple public transportation lines make it easy to access from anywhere on campus or within the city.

Nearby Nielsen Wellness Center and Tennis Stadium will house tournament locker rooms, and two new structures will be built on site housing toilets and concessions.

- (2) synthetic turf soccer fields
- (2) synthetic turf lacrosse fields
- (2) natural turf rugby fields
- (2) natural turf softball fields
- (1) natural turf baseball field
- (2) shelters, including concessions and restrooms
- Walking/jogging path surrounding all fields
- New lighting to maximize playability
- Fencing around the synthetic turf fields

## Near West Fields

The Near West Fields will be synthetic turf, with new lighting and decorative fencing surrounding the perimeter.

- (4) synthetic turf flag football fields
- (1) championship soccer field (overlaid)
- Decorative fencing with brick piers surrounding all fields
- New lighting to maximize playability

## Near East Fields

Like Near West, the Near East Fields will be synthetic turf, with new lighting and decorative fencing surrounding the perimeter. Spectator seating will be included against Dejope Residence Hall for championship games on the large soccer field.

- (4) synthetic turf rec soccer fields
- (1) championship soccer field (overlaid)
- Decorative fencing with brick piers surrounding all fields
- New lighting to maximize playability
- Bleacher seating for spectators

University Bay/Far West Fields

Near West Fields

Near East Fields

# Nielsen Wellness Center and Tennis Stadium

## NIELSEN WELLNESS CENTER AND TENNIS STADIUM

With a great need to increase fitness space on the west side of campus, and a possibility to partner with health care entities in the area, Rec Sports decided to provide a new health and wellness facility to serve both the area's working population and students, faculty and staff at UW. An addition to the Nielsen Tennis Stadium was determined to be a great location for the added fitness space.

The addition to Nielsen Tennis Stadium, will be on the south side of the facility, after the existing entry volume is demolished. This new addition will not only provide a home for ample fitness space, but must still function as an entry for tennis events within the stadium. The two entries, wellness and stadium, need to be separated and clearly identified. Care must be given to separate traffic but still allow flexible usage of shared space on non-tournament days. The addition should not encroach the existing street setback of the current building, maintaining as much green space in front as possible.

The Wellness Center is designed to be visually open both within the facility and to the exterior. Fitness activities are separated from the street by a delicate glass facade, maximizing daylighting and activating the adjacent streets.
The butterfly roof above the entry provides spatial variation within the fitness center, and is inspired by the folded roof planes of the existing Tennis Stadium.

It is Rec Sports desire to create an upscale facility that will enhance the student experience at the University of Wisconsin, and be attractive to the working population in the area. The fitness center is open and light filled, allowing great views to and from the space. Locker rooms for members are paired with tennis locker rooms for the athletic teams and flexible locker space used for tournaments at the nearby U-Bay fields.

Amenities:

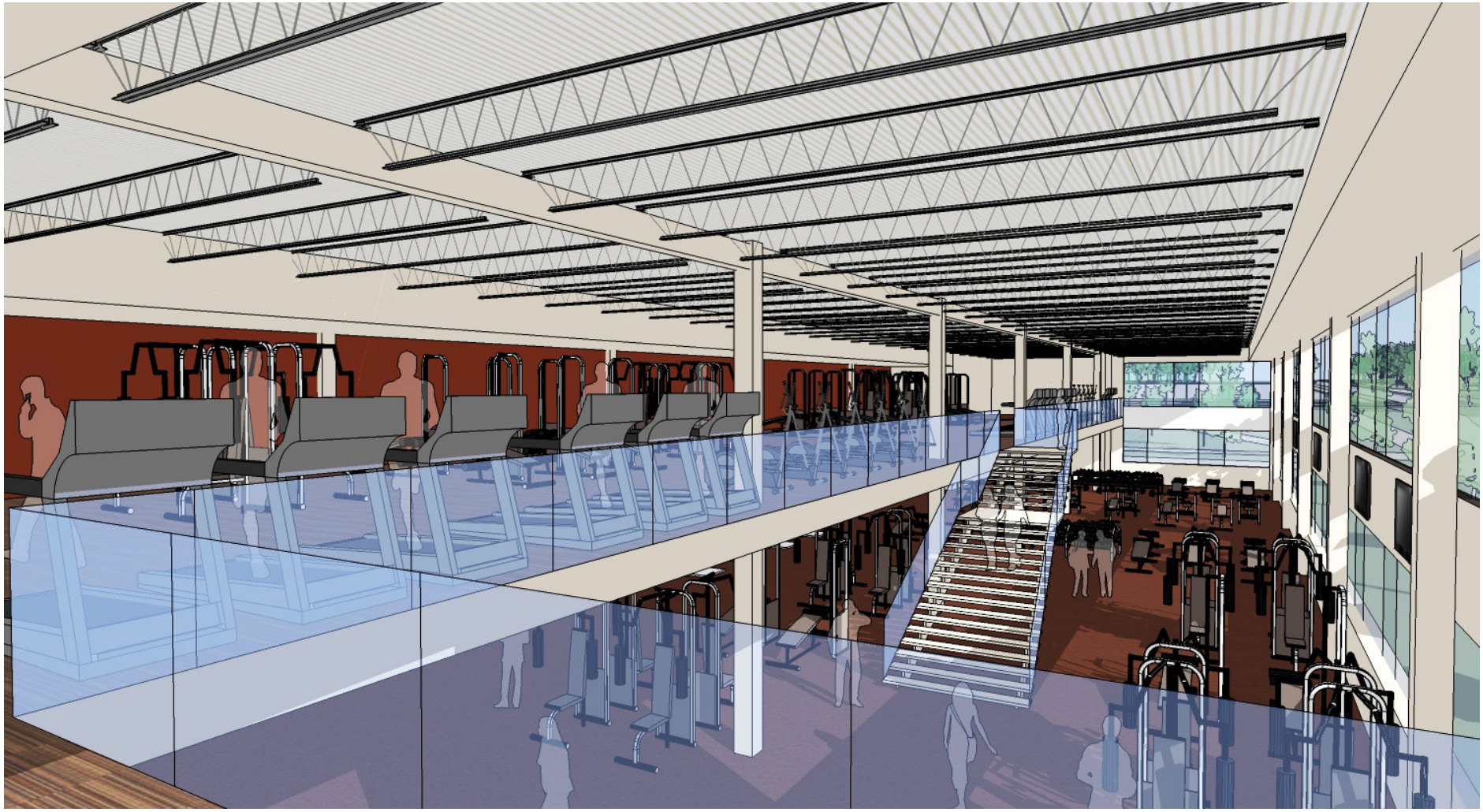
- 47,300 SF addition total
- 20,250 SF fitness space
- 3,500 SF multi-purpose studio
- Renovated Tennis Stadium lobby and court viewing.
- Upscale locker rooms including individual unisex changing rooms.
- Tournament locker rooms accessible from U-Bay fields.


Nielsen Wellness Center and Tennis Stadium — Site Plan

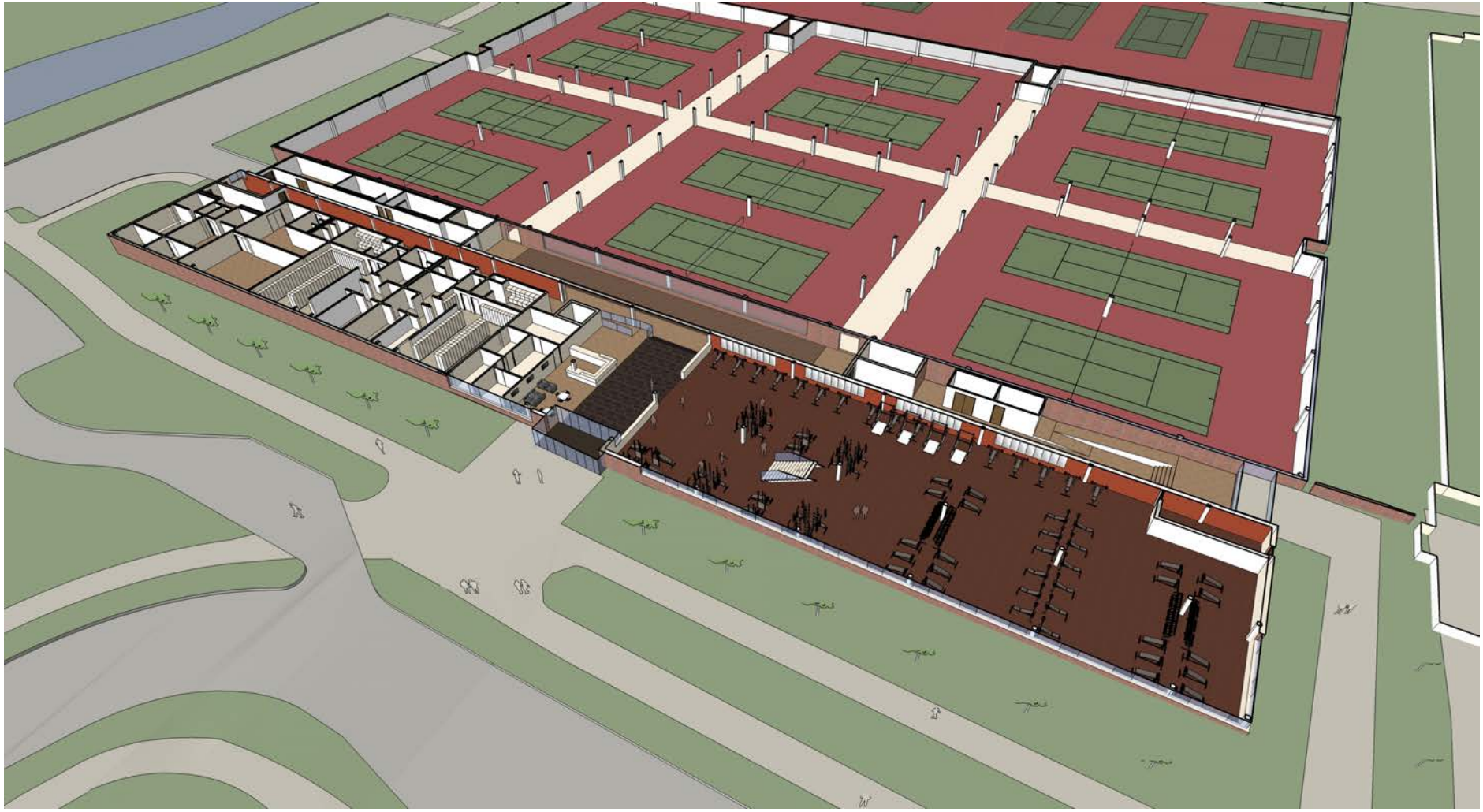

Nielsen Wellness Center and Tennis Stadium — Floor Plans


Nielsen Wellness Center and Tennis Stadium — Aerial from SE

Nielsen Wellness Center and Tennis Stadium — Entry



Nielsen Wellness Center and Tennis Stadium — Fitness Center



Nielsen Wellness Center and Tennis Stadium — First Floor Axonometric

Nielsen Wellness Center and Tennis Stadium — Second Floor Axonometric


Natatorium

## NATATORIUM

The Rec Sports Master Plan design committee identified a need for additional recreation programming space at the Natatorium which is currently undersized and overused. The existing 2-level Nat facility has a poor flow and layout which prompted the team to study how it could be reorganized. In the end, after several renovation options were studied, it was recommended that the existing Nat building be demolished and that site be prepped for the construction of a new facility.

The site for the Nat will be in it's current location, resulting in a full demolition of the existing building. During the Master Plan process, other locations were debated by the committee, but it was determined by FP&M that the only logical site for its replacement is where it currently resides.

The conditions of the site are more natural, compared to much of the UW-Madison campus, with the Effigy mounds to the south, Willow Creek to the West and the Far East Fields to the east. Observatory Drive provides the southern most boundary to the south. Providing a landscaped setback will be key to help break down the overall scale of the building from the street. Height limitations are set at 65 feet, in response to the Campus Master Plan and its intention to have buildings "step down" as they approach the lake. There is a 75 foot setback from Willow Creek, and a 25 foot setback from all effigy mounds.

Throughout the master planning process, options were explored that looked at renovating the existing facility and adding program through minimal additions, demolishing selective areas and building larger additions, or demolishing the building completely to clear the site for an entirely new facility.

At the conclusion of the master plan process, it was determined that the best solution for Rec Sports and the students would be to demolish the existing facility completely and build a new building from scratch. This was determined due to the complexity and size of the new program. To work around existing structure and space compromised future planning and flow. It also caused the design team to look into options of stacking program above portions of the existing facility, which proved to be structurally complex and possibly more expensive than starting fresh.

The new Natatorium program needs to account for a substantial increase in square footage due to a substantial increase in potential users on the west side of campus. Also adding to the user base is the eventual elimination of the Shell for recreation use. The ice arena, running track and fitness space currently located there need to be replaced at the Natatorium.

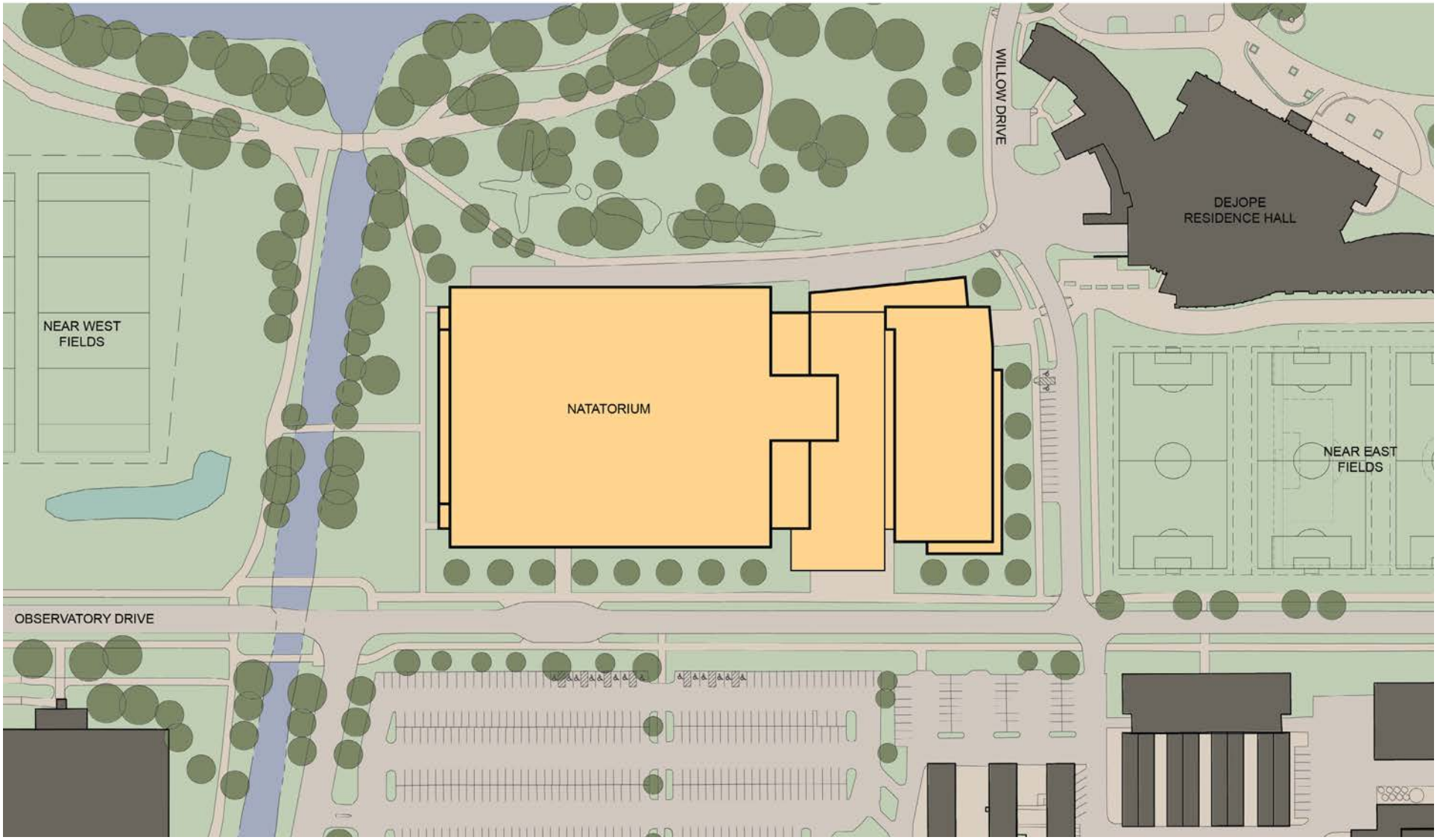
It is Rec Sports desire to create a facility that will enhance the student experience at the University of Wisconsin. The layout of the program spaces should be done in such a way to promote openness and views to and from the various building programs. Natural light is desired throughout the building but some programs spaces such as the natatorium and gymnasiums are more sensitive to direct sunlight/glare. The "free-zone" space should include a student lobby/lounge where all student would be encouraged to study, hang out with friends or have a healthy snack. The Rec Sports program will include: administrative areas, four racquetball courts, significant square footage for fitness spaces (weights, selectorized, & cardiovascular equipment), several multi-purpose rooms ranging in size, a 4-lane walking/jogging track, and a 12 basketball court gymnasium, including two MAC courts, that will be striped for a variety of sports. Also included is a large turf gym, full ice arena with seating for 500 spectators, and 6 racquetball courts.

The Kinesiology department currently resides within the Natatorium, but is scattered throughout the building. The new facility will consolidate the department into the eastern most portion of the building, directly off of the "free-zone". This will allow for an individual identity for both Kinesiology and the recreation center to exist both on the exterior and interior of the building.

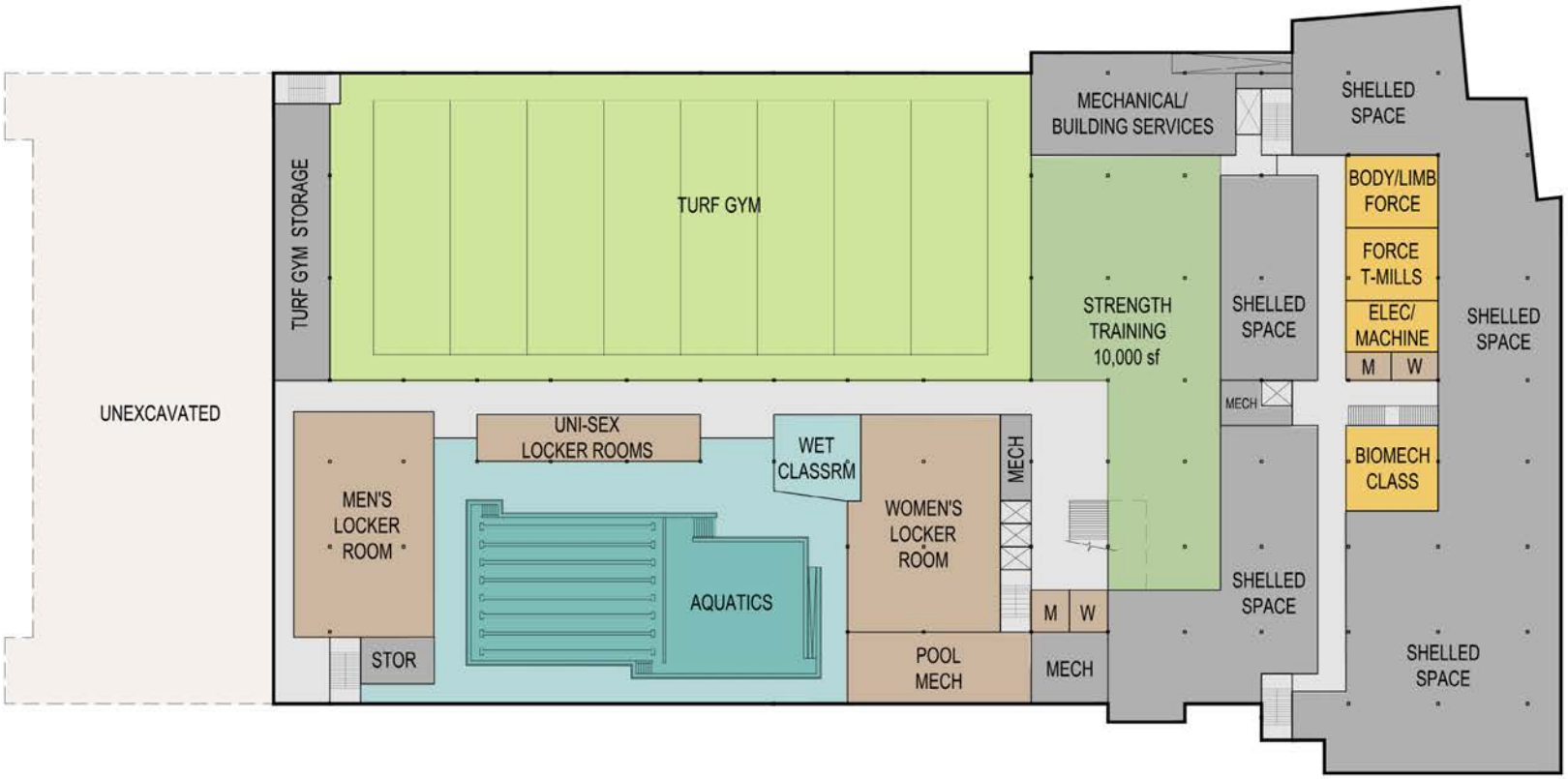
Kinesiology was specifically designed to be a separate portion of the building that has the possibility of becoming a phased component of the construction process. Further exploration of this should be conducted in the next design phases.

Amenities:

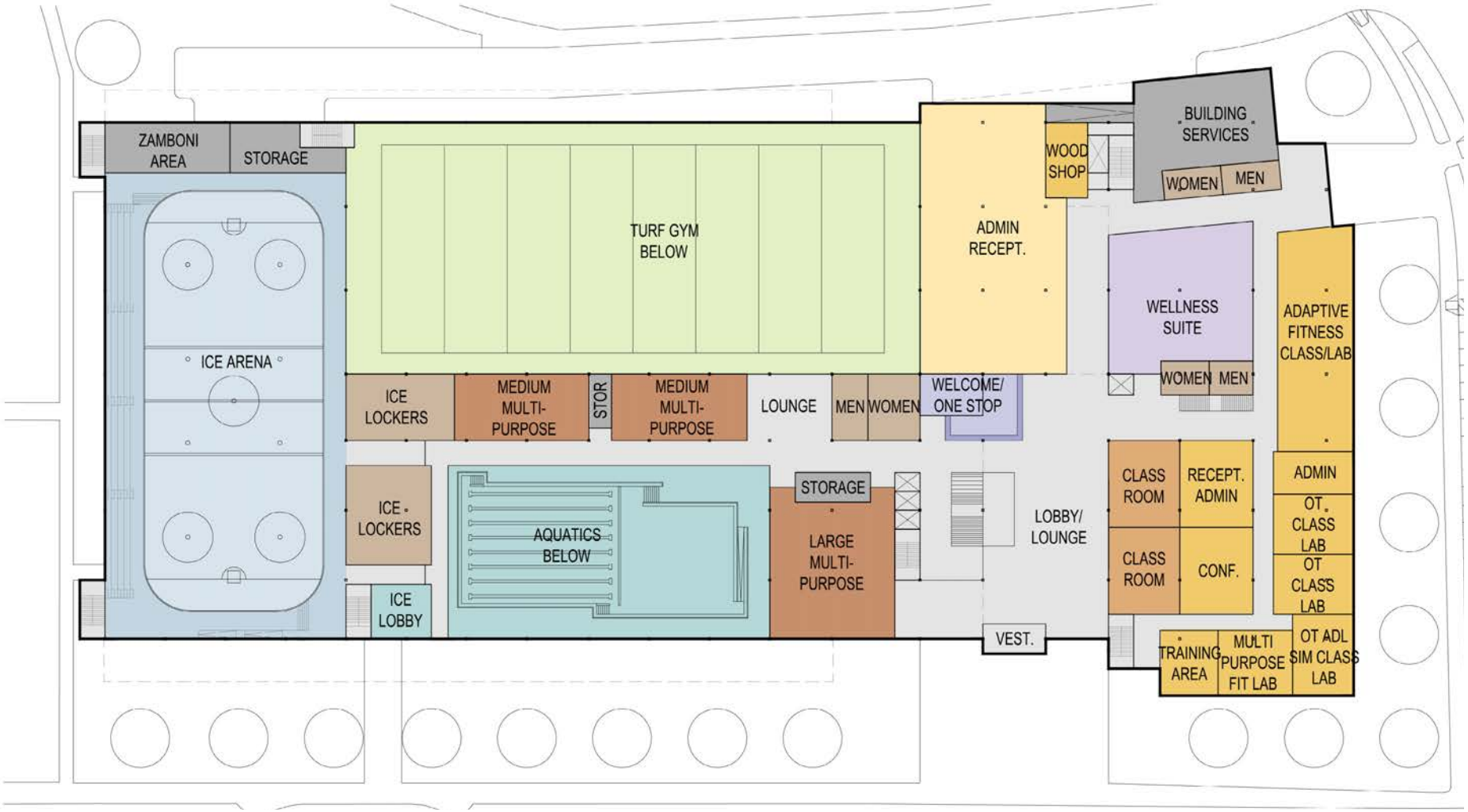
- 470,900 SF total
- 385,000 SF of recreation space
- 44,900 SF of fitness space
- (6) multi-purpose rooms
- 32,000 SF turf gym
- (12) basketball/volleyball/badminton courts
- (6) racquetball courts
- 85'x200' recreational ice sheet
- 4-lane running/walking track - 4.5 laps/mile
- 8-lane 25 yd. pool
- Recreation/exercise pool
- 81,900 SF of Kinesiology



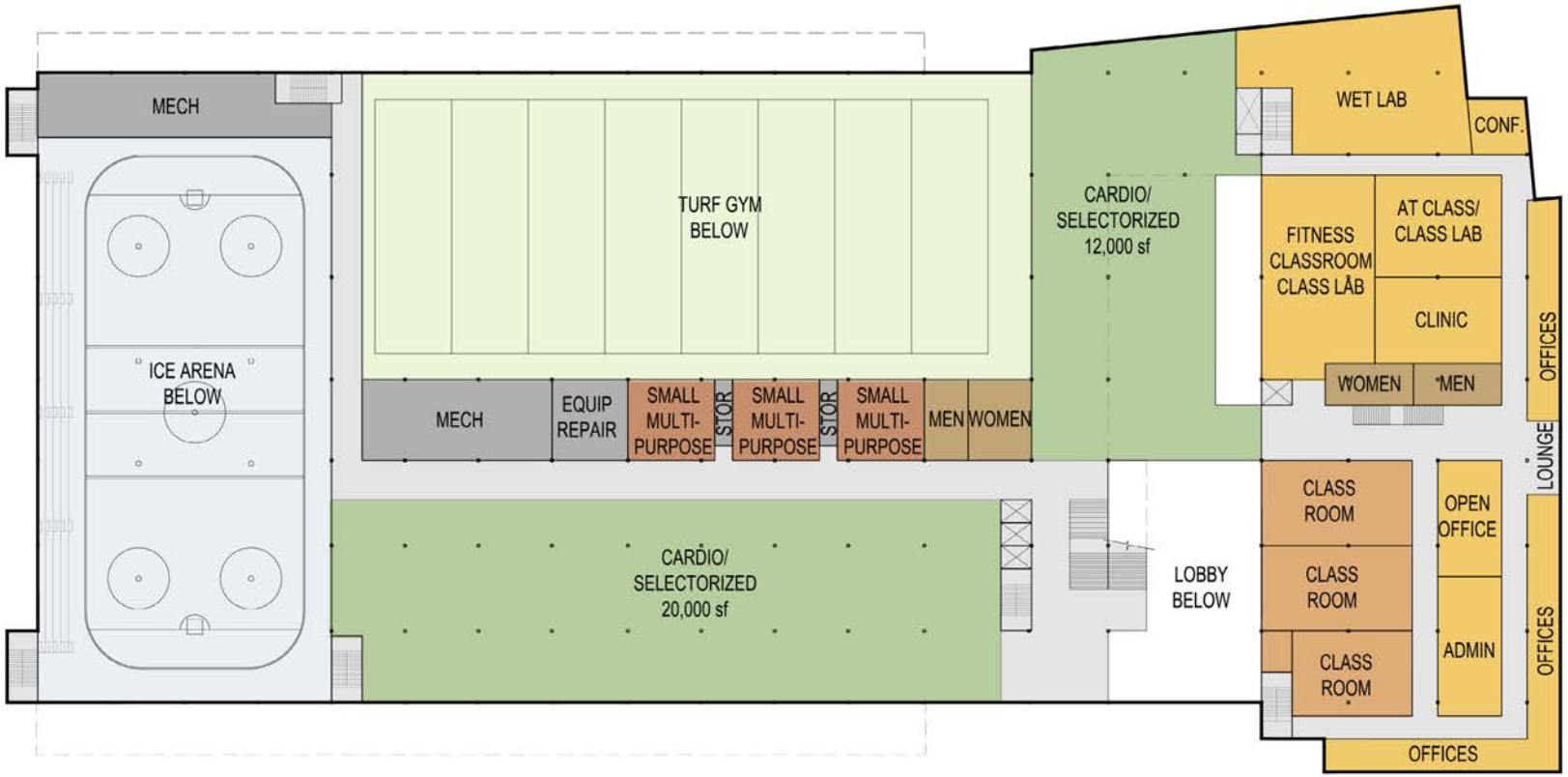

Natatorium — Site Plan



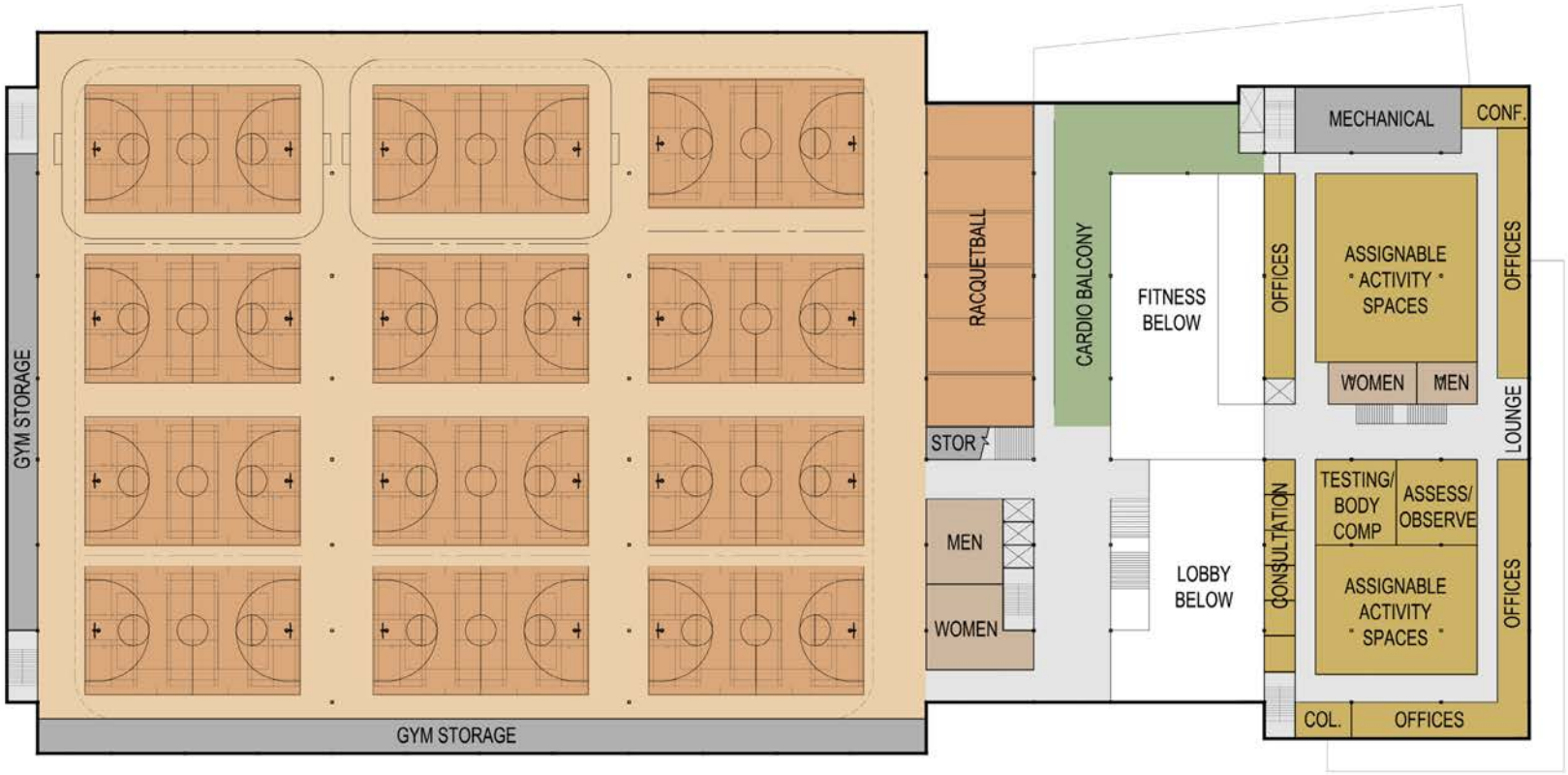

Natatorium — Lower Level Floor Plan



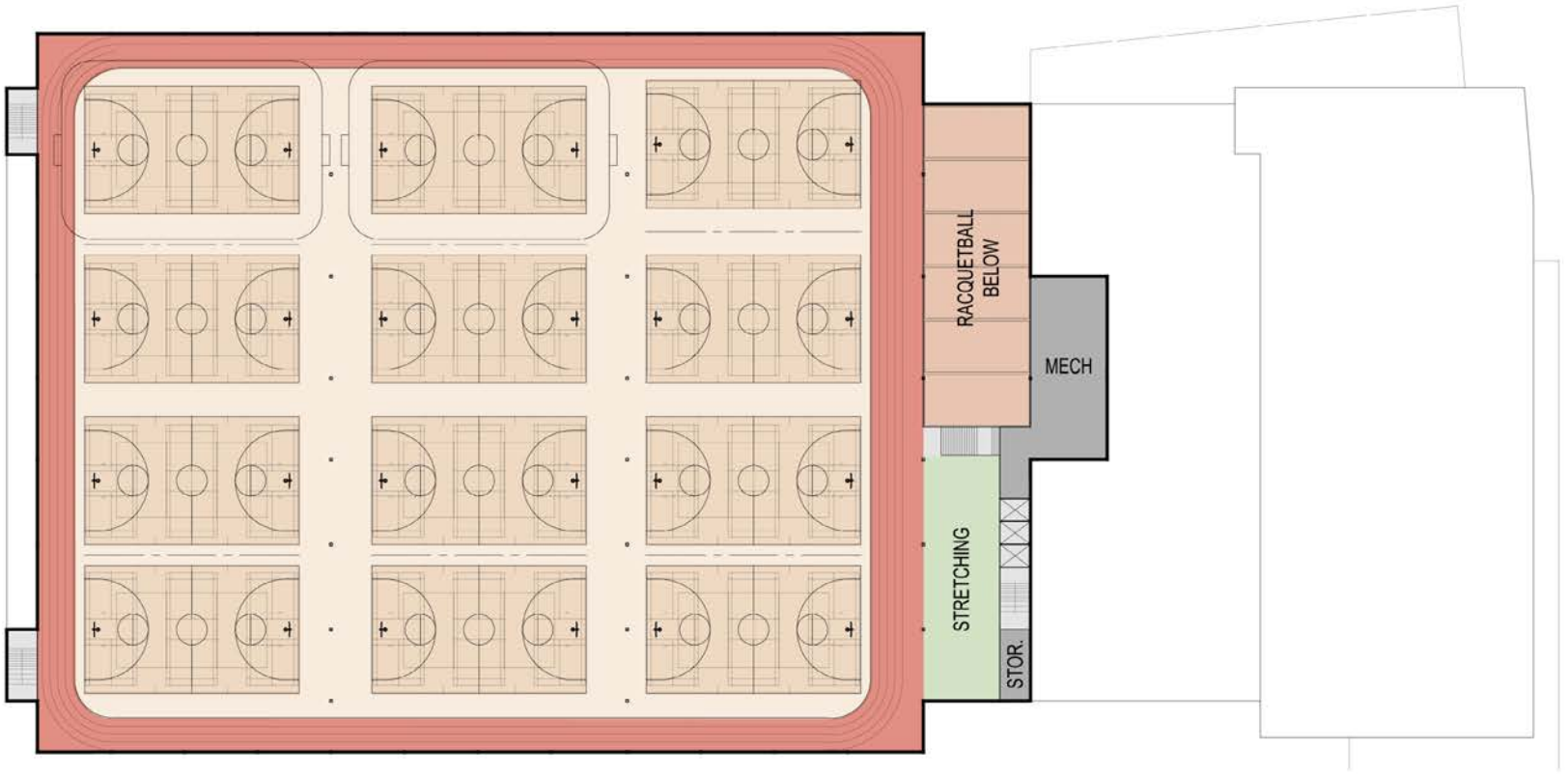

Natatorium — First Floor Plan




Natatorium — Second Floor Plan

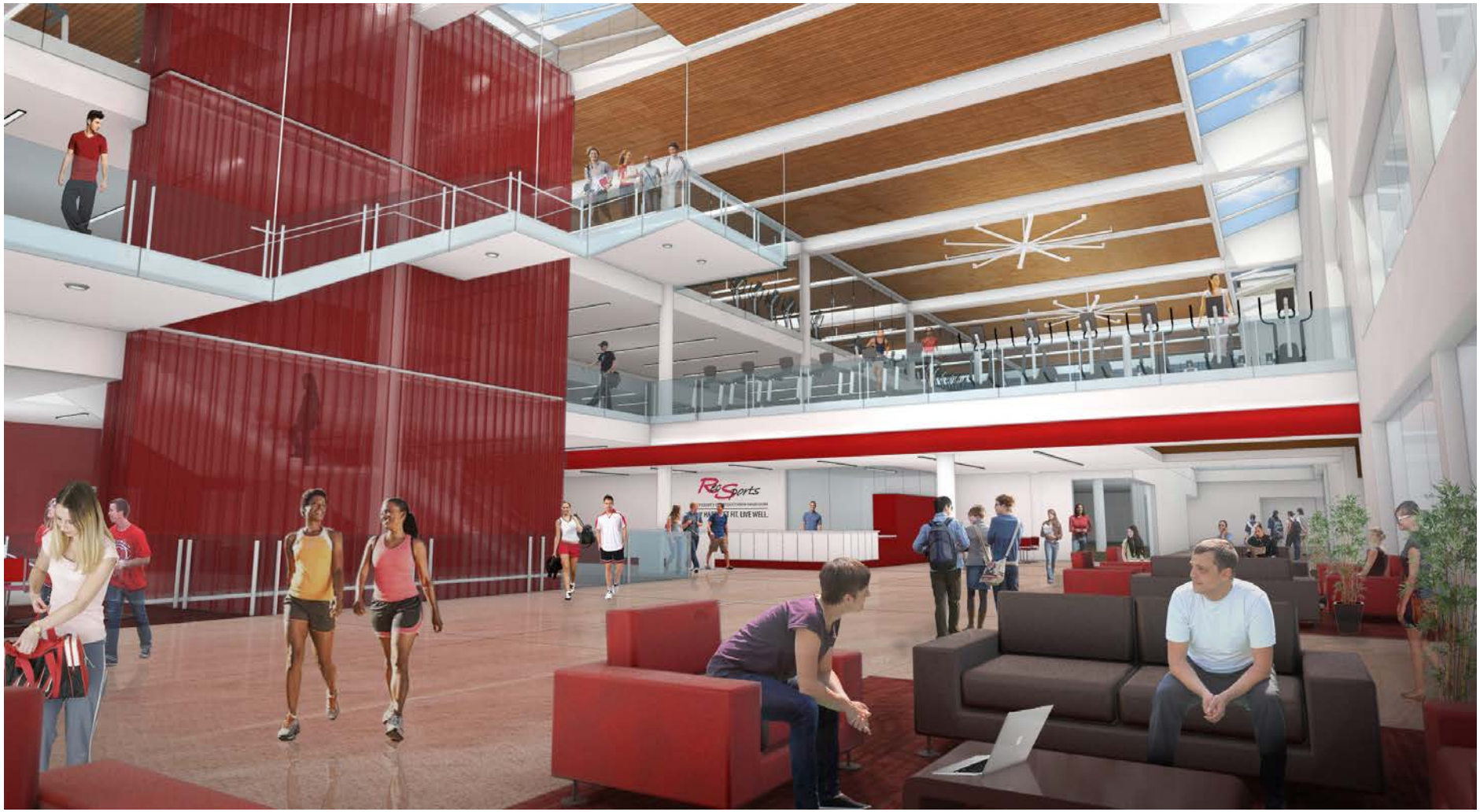



Natatorium — Third Floor Plan




Natatorium — Fourth Floor Plan

Natatorium — Aerial from SE




Natatorium — Lobby/Lounge

Natatorium — Fitness Center


Natatorium — Multi-Purpose Corridor/Aquatic Center


Natatorium — Fitness Center View to Ice Arena

Natatorium — Track/Gymnasium


Natatorium — Turf Gymnasium

# South East Recreational Facility

## SERF

The Rec Sports Master Plan design committee identified a need for additional recreation programming space at the Southeast Recreation Facility (SERF) which is clearly the most heavily used recreation facility on campus. The existing 4-level SERF facility has a poor flow and layout which prompted the team to study how it could be reorganized. In the end, after several renovation options were studied, it was recommended that the existing SERF building be demolished and that site be prepped for the construction of a new facility.

Redeveloping the SERF site does not come without its challenges. There are defined property lines to the north along Dayton Street and to the east along East Campus Mall (previously Murray Street). To the west there is a small parking area (Lot 87) that also wraps around a portion of the south side of the building. This lot is necessary for building deliveries, maintenance/service vehicles and is integral on game days for the neighboring Kohl Center and LaBahn Arena. Running parallel along the entire length of the south side of the building there is a underground 69-KVA high voltage line which has specific setback and service requirements.

The pool at the SERF was subject to much debate during the master plan process. The design team produced multiple options based off of the following overall concepts:

- Keep the existing pool and its enclosure, and build a new rec sports facility connected to and around it.
- Keep the existing pool vessel but build a new enclosure surrounding it to simplify the construction process.
- Keep the existing pool, but build a new enclosure surrounding it to simplify the construction process and raise the roof to accommodate for new diving platforms at the east end of the space. The pool was originally designed for diving to be located in that end.
- Build a new 50m competition pool and diving well, with dive tower as part of a completely new facility.

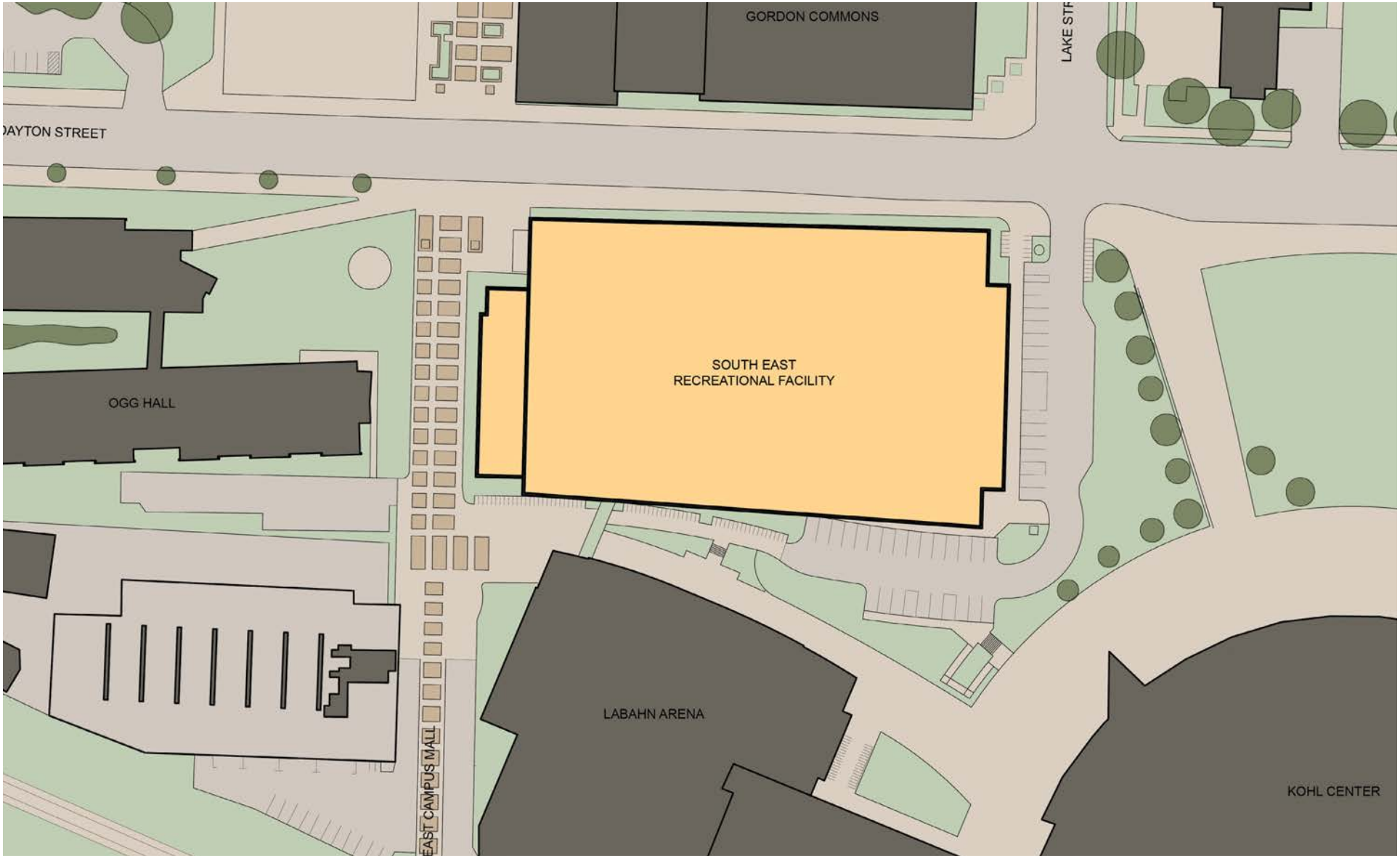
At the conclusion of the master plan process, it was determined that the best solution for Rec Sports and the students would be to keep the existing pool vessel and build a new enclosure around it. Diving platforms would not be added at this time, but could be in the future in some form.

There will be several adjacent supporting spaces to the pool such as pool storage, a shared wet classroom, access from the men's, women's and unisex locker rooms, and adjacent pool mechanical rooms. This new facility will need to continue to connect to the existing LaBahn Arena sky-walk. This sky-walk provides a connection for the men's and women's swim team lockers to this facility.

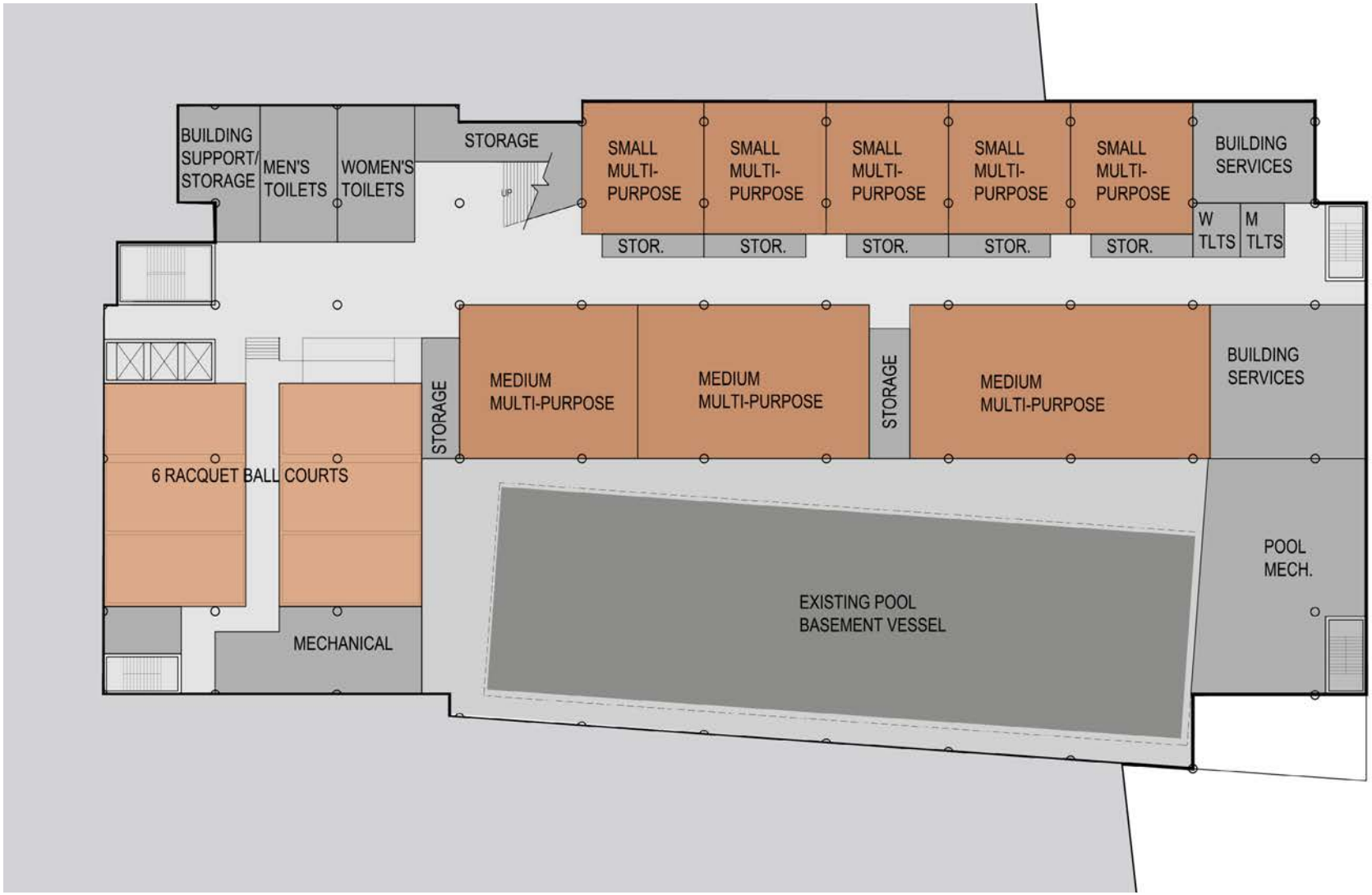
This facility will also provide a significant increase in Rec Sports program space as well as improved functionality. It is Rec Sports desire to create a facility that will enhance the student experience at the University of Wisconsin. The layout of the program spaces should be done in such a way to promote openness and views to and from the various building programs. Natural light is desired throughout the building but some programs spaces such as the aquatic center and gymnasiums are more sensitive to direct sunlight/glare. The "free-zone" space should include a student lobby/lounge where all student would be encouraged to study, hang out with friends or have a healthy snack. The Rec Sports program will include: administrative areas, four racquetball courts, significant square footage for fitness spaces (weights, selectorized, & cardiovascular equipment), several multi-purpose rooms ranging in size, a 3 to 4-lane walking/jogging track, and a 9 basketball court gymnasium that will be striped for a variety of sports.

Amenities:

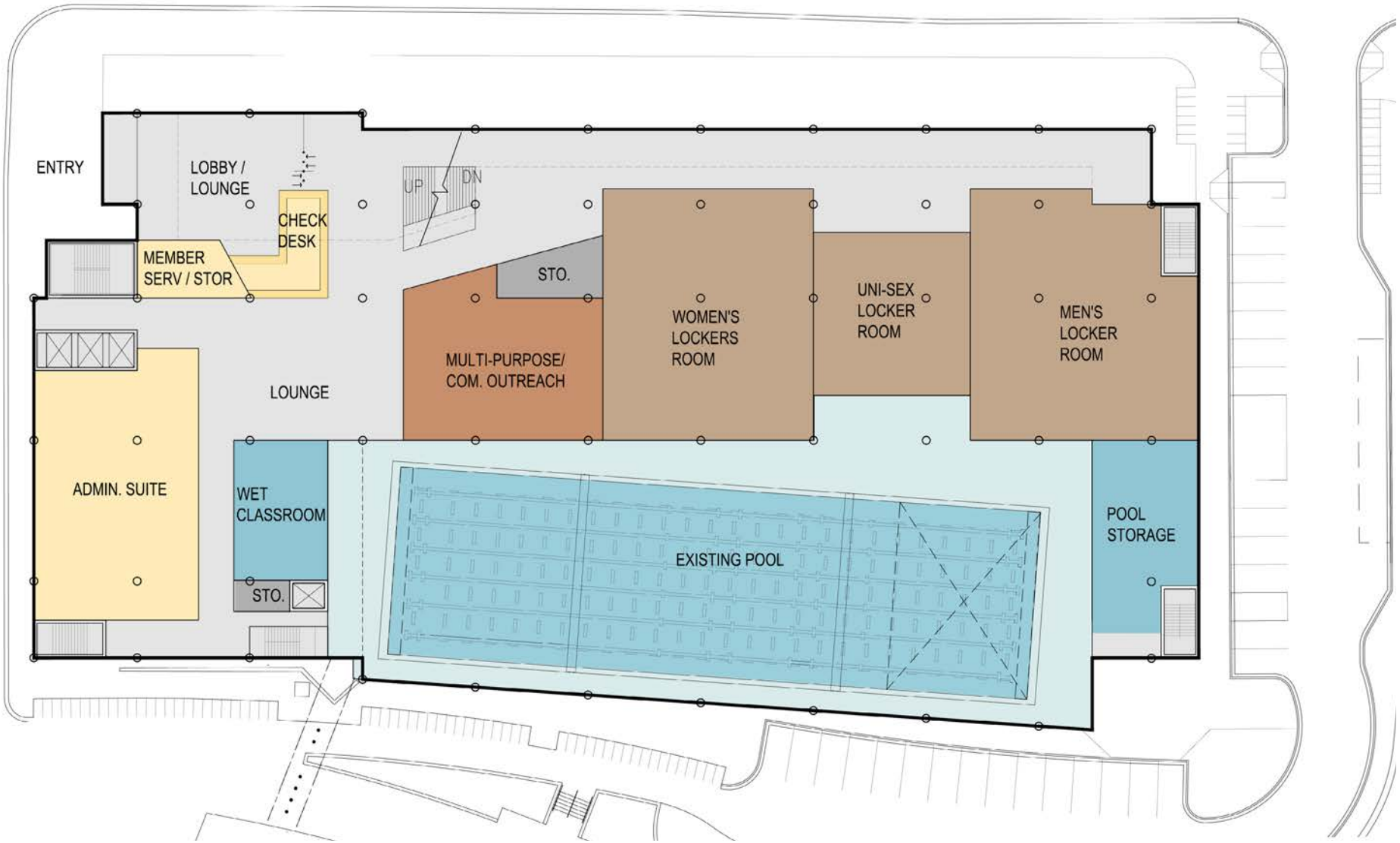
- 259,200 total building SF
- 233,000 SF of recreation space
- 35,500 SF of fitness space
- 26,200 SF of aquatic space
- (9) multi-purpose rooms
- (9) basketball/volleyball/badminton courts
- (6) racquetball courts
- 3-lane running/walking track - 7 laps/mile
- Existing 63 meter pool renovated



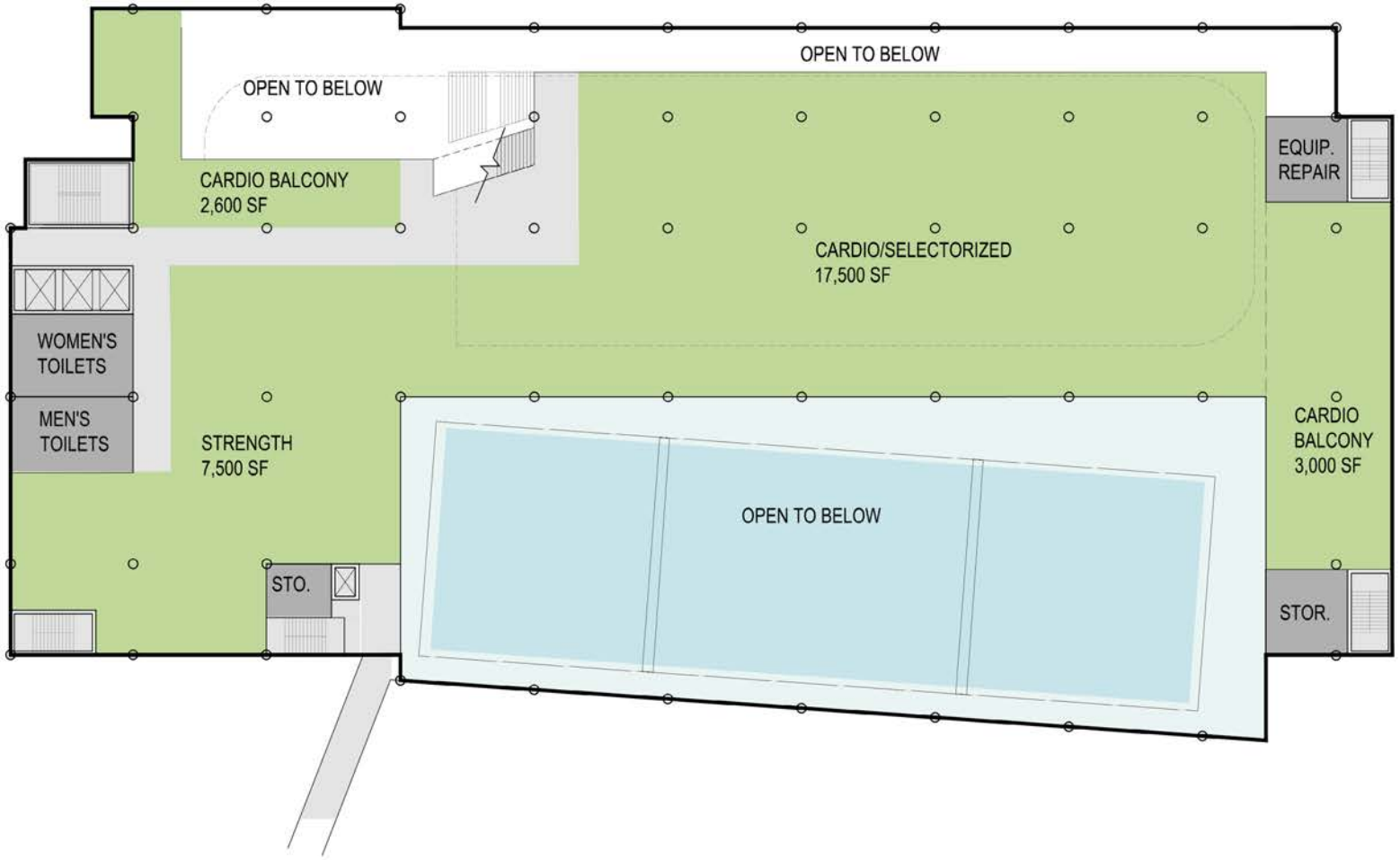

SERF — Site Plan



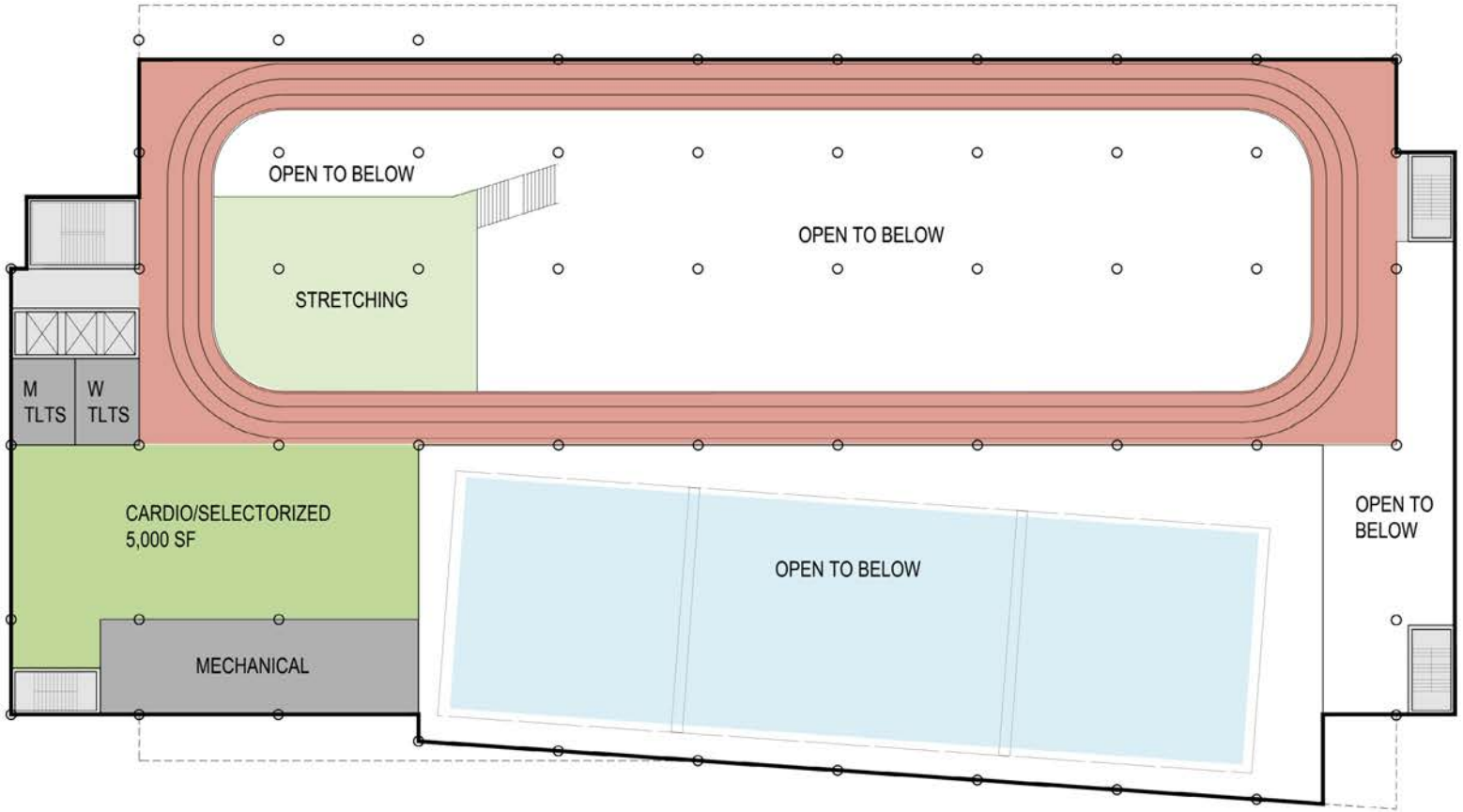

SERF — Lower Level Floor Plan



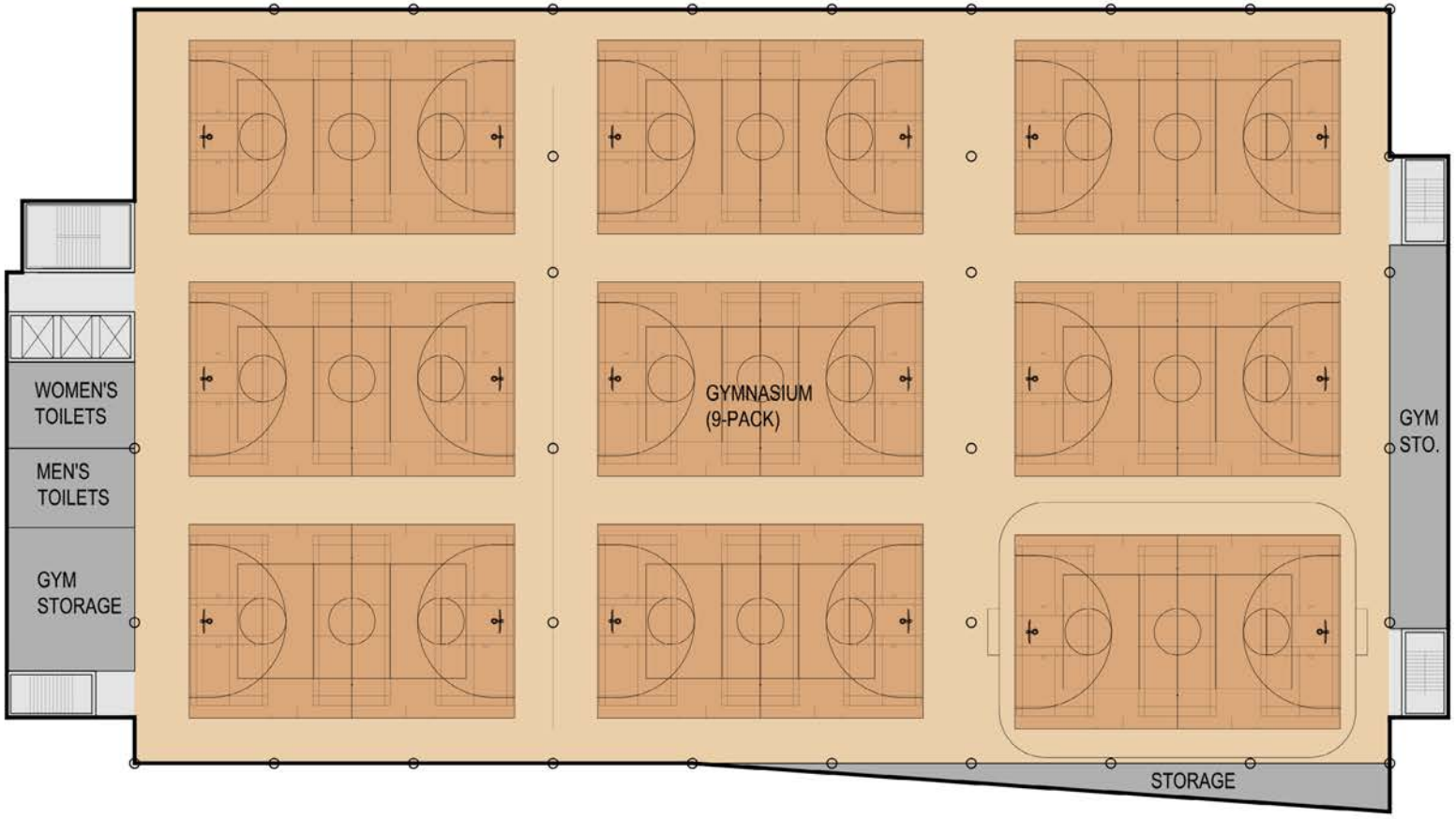

SERF — First Floor Plan



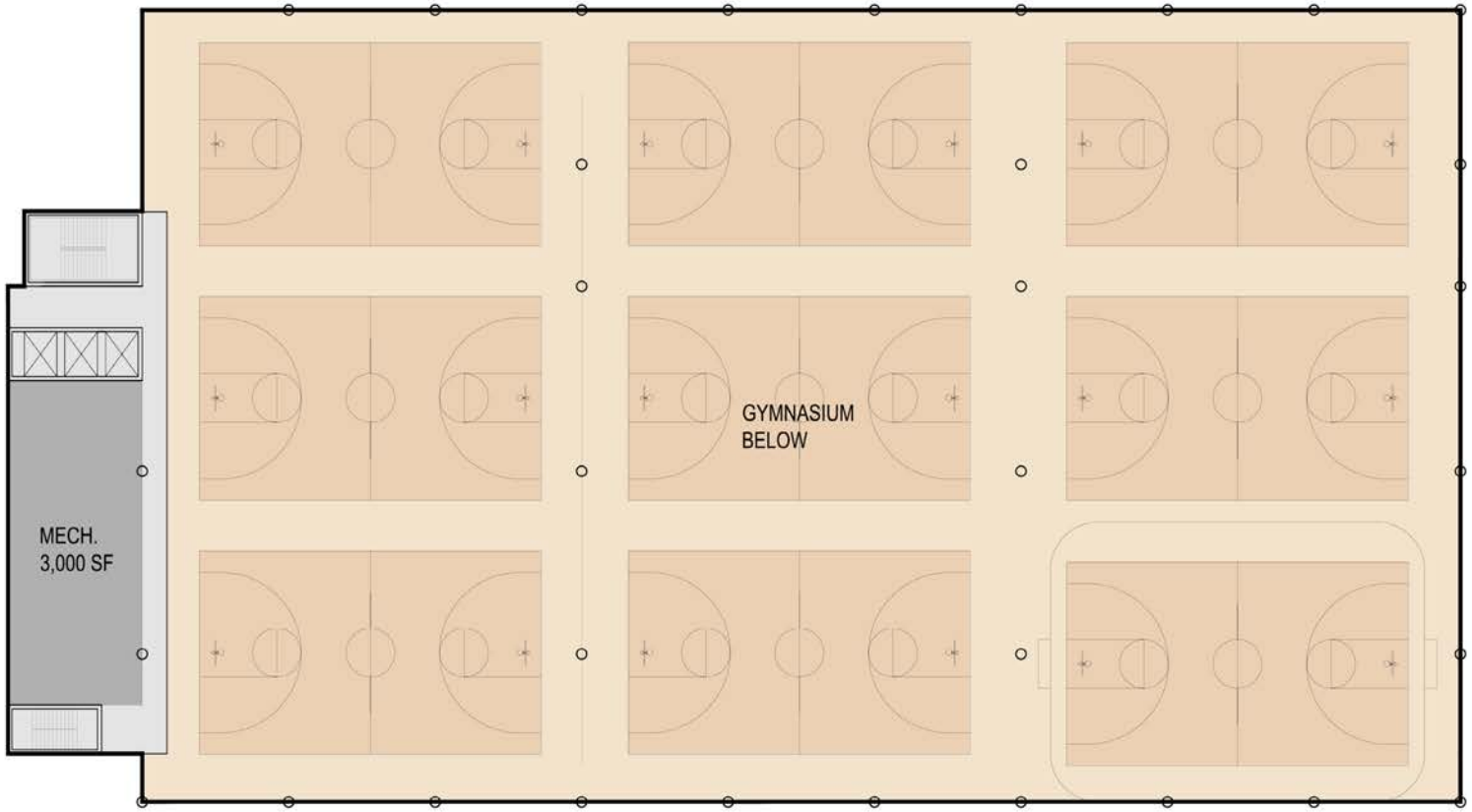

SERF — Second Floor Plan




SERF — Third Floor Plan




SERF — Fourth Floor Plan

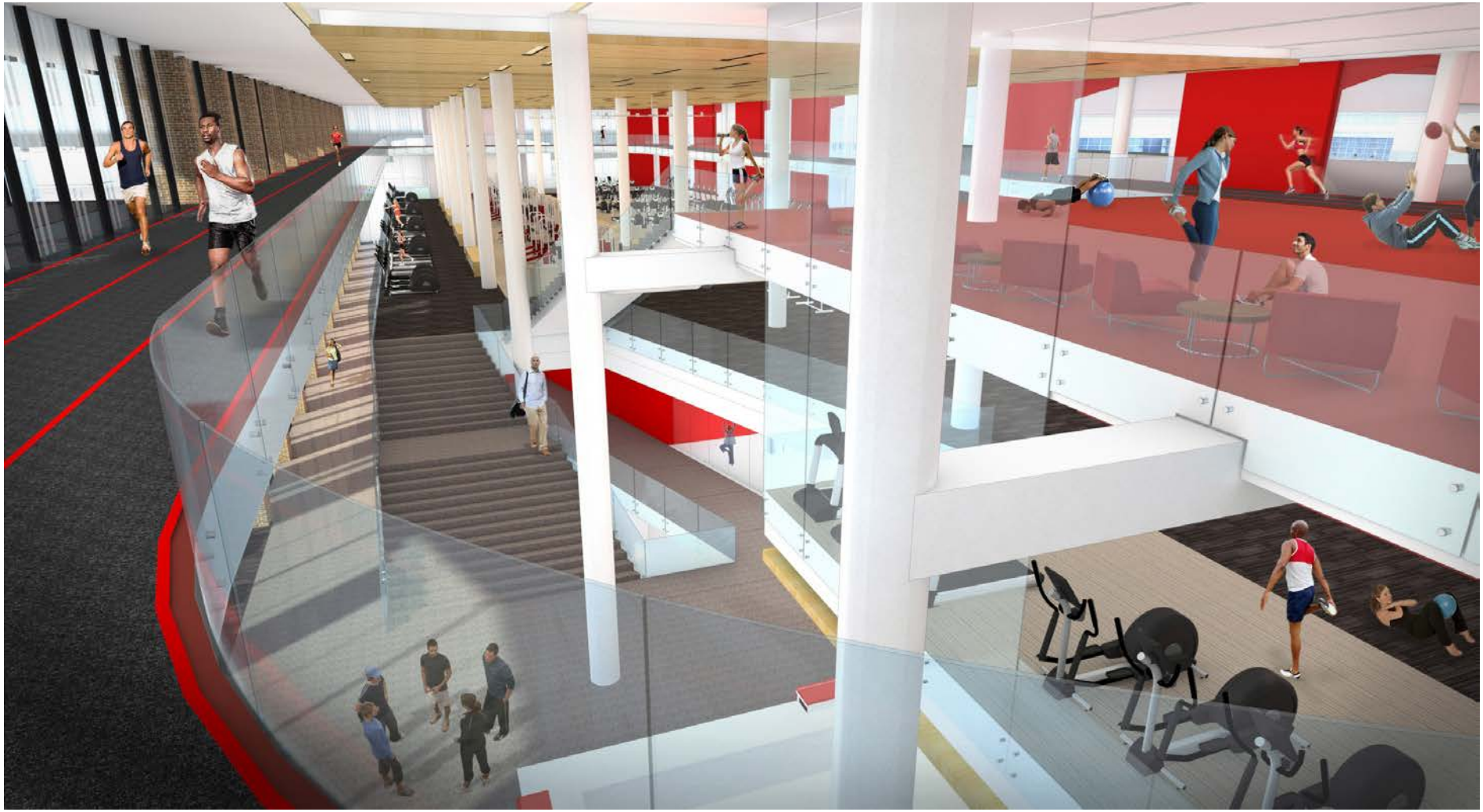



SERF — Mezzanine Floor Plan


SERF — View from NW


SERF — Lobby/Lounge

SERF — Fitness Center



SERF — Track

SERF — Gymnasium


Conceptual
Estimate

| | Master Plan - Project Budget Summary | | Anticipated Construction | Conceptual Project Budgets<br>Total Cost |
|---|---|---|---|---|
| A | Near West Fields | | 2016 | $6,264,605 |
| B | SERF w/ existing pool | | 2017-19 | $74,719,968 |
| C | New Natatorium w/ Kinesiology | | 2019-21 | $124,089,077 |
| D | Near East Fields | | 2021 | $5,021,935 |
| E | TOTAL OF PROJECTS IN REFERENDUM | A+B+C+D | | $210,095,585 |
| F | Neilsen Tennis Center - Addition | | 2017-19 | $15,427,327 |
| G | University Bay Fields | | 2017-19 | $17,282,451 |
| H | TOTAL OF PROJECTS NOT IN REFERENDUM | F+G | | $32,709,778 |
| | | TOTAL OF ALL PROJECT BUDGETS | | $242,805,363 |

**Notes:**

1. Conceptual Construction Estimates prepared by The Concord Group. Final Estimate dated December 18, 2013.
2. Estimates include pricing as of December 2013.
3. All construction estimates were escalated using Design Cost Data indexes and regional modifiers. Each project was escalated to the midpoint of construction.
4. Construction phasing and anticipated construction start dates were determined by the University of Wisconsin-Madison.
5. Of the "Projects in Referendum", approximately $25million - $30million is assumed for the School of Kinesiology. This portion will be funded separately outside of student segregated fees.

| | Near West Fields | | | Conceptual Project Budget<br>Total Cost |
|---|---|---|---|---|
| A | Near West Fields - Construction Estimate | | | $4,279,521 |
| B | Design & Bidding Contingency | 10% | x A | $427,952 |
| C | Escalation to Construction (2016) | 6.65% | x A +B | $313,047 |
| D | TOTAL CONSTRUCTION COST | | A+B+C | $5,020,520 |
| | SOFT COSTS | | | |
| E | Owner/Construction Contingency | 7.0% | x D | $351,436 |
| F | DFD Management Fees | 4.0% | x D +E | $214,878 |
| G | A/E Fees | 7.0% | x D | $351,436 |
| H | Moveable and Special Equipment (FF&E, Scoreboard, etc) | 5.0% | x D | $251,026 |
| I | Testing / Surveys / Special Fees / Reimbursables | 1.0% | x D | $50,205 |
| J | Project Commissioning | 0.5% | x D | $25,103 |
| K | SOFT COST TOTAL | | E+F+G+H+I+J | $1,244,085 |
| L | TOTAL PROJECT COST | | D+K | $6,264,605 |

| | SERF w/ existing pool | | | Conceptual Project Budget | Total Cost |
|---|---|---|---|---|---|
| A | SERF - Construction Estimate | 253,000 SF | | $191 /SF | $48,280,441 |
| B | Design & Bidding Contingency | 7% | x A | | $5,759,857 |
| C | Escalation to Construction (2017) | 11.93% | x A +B | | $6,447,008 |
| D | TOTAL CONSTRUCTION COST | | A+B+C | | $60,487,305 |
| | SOFT COSTS | | | | |
| E | Owner/Construction Contingency | 7.0% | x D | | $4,234,111 |
| F | DFD Management Fees | 4.0% | x D +E | | $2,588,857 |
| G | A/E Fees | 7.0% | x D | | $4,234,111 |
| H | Moveable and Special Equipment (FF&E, Fitness Equip, etc) | 4.0% | x D | | $2,419,492 |
| I | Testing / Surveys / Specialty Consultants Fees / Reimbursabl | 1.0% | x D | | $604,873 |
| J | Project Commissioning | 0.25% | x D | | $151,218 |
| K | SOFT COST TOTAL | | E+F+G+H+I+J | | $14,232,663 |
| L | TOTAL PROJECT COST | | D+K | | $74,719,968 |

| | New Natatorium with New Kinesiology | | | Conceptual Project Budget | Total Cost |
|---|---|---|---|---|---|
| A | New Natatorium and Kinesiology Bldg. - Construction Estim | 470,900 SF | | $173 /SF | $81,381,863 |
| B | Design & Bidding Contingency | 7% | x A | | $5,696,730 |
| C | Escalation to Construction (2019) | 16.30% | x A +B | | $14,193,811 |
| D | TOTAL CONSTRUCTION COST | | A+B+C | | $101,272,404 |
| | SOFT COSTS | | | | |
| E | Owner/Construction Contingency | 7.0% | x D | | $7,089,068 |
| F | DFD Management Fees | 4.0% | x D +E | | $4,334,459 |
| G | A/E Fees | 6.0% | x D | | $6,076,344 |
| H | Moveable and Special Equipment (FF&E, Fitness Equip, etc) | 4.50% | x D | | $4,557,258 |
| I | Testing / Surveys / Special Fees / Reimbursables | 0.5% | x D | | $506,362 |
| J | Project Commissioning | 0.25% | x D | | $253,181 |
| K | SOFT COST TOTAL | | E+F+G+H+I+J | | $22,816,673 |
| L | TOTAL PROJECT COST | | D+K | | $124,089,077 |

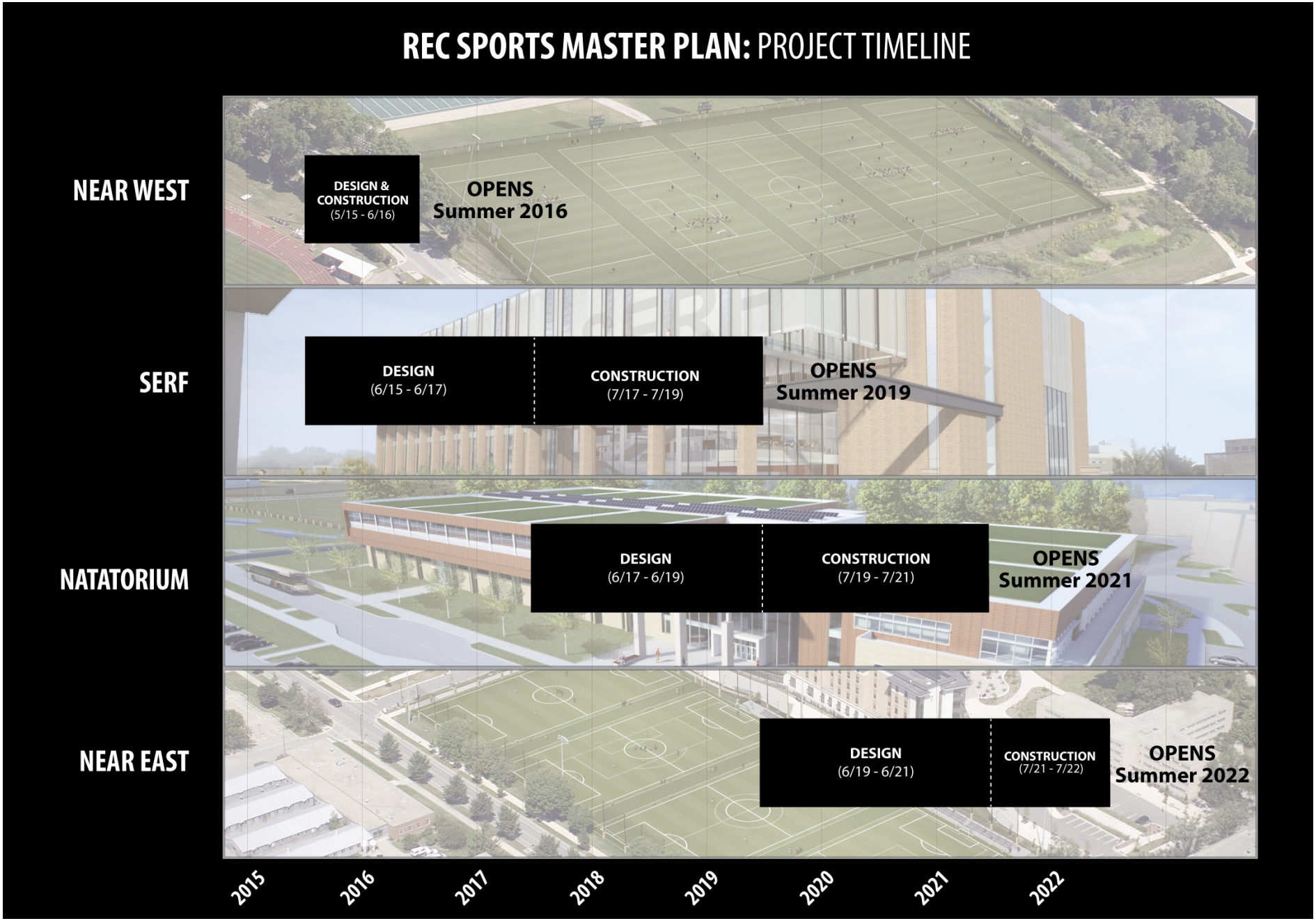
| | Near East Fields | | | Conceptual Project Budget<br>Total Cost |
|---|---|---|---|---|
| A | Near East Fields - Construction Estimate | | | $3,064,294 |
| B | Design & Bidding Contingency | 10% | x A | $306,429 |
| C | Escalation to Construction (2021) | 19.88% | x A +B | $670,100 |
| D | TOTAL CONSTRUCTION COST | | A+B+C | $4,040,823 |
| | SOFT COSTS | | | |
| E | Owner/Construction Contingency | 7.0% | x D | $282,858 |
| F | DFD Management Fees | 4.0% | x D +E | $172,947 |
| G | A/E Fees | 7.0% | x D | $282,858 |
| H | Moveable and Special Equipment (FF&E, Scoreboard, etc) | 5.0% | x D | $202,041 |
| I | Testing / Surveys / Special Fees / Reimbursables | 0.5% | x D | $20,204 |
| J | Project Commissioning | 0.5% | x D | $20,204 |
| K | SOFT COST TOTAL | | E+F+G+H+I+J | $981,112 |
| L | TOTAL PROJECT COST | | D+K | $5,021,935 |

| | Nielsen Tennis Stadium - Addition | | | Conceptual Project Budget | Total Cost |
|---|---|---|---|---|---|
| A | Nielsen Addition - Construction Estimate | 47,075 SF | | $215 /SF | $10,132,088 |
| B | Design & Bidding Contingency | 7% | x A | | $709,246 |
| C | Escalation to Construction (2017) | 10.93% | x A +B | | $1,184,958 |
| D | TOTAL CONSTRUCTION COST | | A+B+C | | $12,026,292 |
| | SOFT COSTS | | | | |
| E | Owner/Construction Contingency | 7.0% | x D | | $841,840 |
| F | DFD Management Fees | 4.0% | x D +E | | $514,725 |
| G | A/E Fees | 7.5% | x D | | $901,972 |
| H | Moveable and Special Equipment (FF&E, Fitness Equip, etc) | 8.00% | x D | | $962,103 |
| I | Testing / Surveys / Special Fees / Reimbursables | 1.0% | x D | | $120,263 |
| J | Project Commissioning | 0.50% | x D | | $60,131 |
| K | SOFT COST TOTAL | | G+H+I+J+K+L | | $3,401,035 |
| L | TOTAL PROJECT COST | | F+M | | $15,427,327 |

| | University Bay Fields (Far West Fields) | | | Conceptual Project Budget<br>Total Cost |
|---|---|---|---|---|
| A | University Bay Fields - Construction Estimate | | | $12,052,307 |
| B | Design & Bidding Contingency | 7% | x A | $843,661 |
| C | Escalation to Construction (2017) | 9.15% | x A +B | $1,179,981 |
| D | TOTAL CONSTRUCTION COST | | A+B+C | $14,075,950 |
| | SOFT COSTS | | | |
| E | Owner/Construction Contingency | 7.0% | x D | $985,316 |
| F | DFD Management Fees | 4.0% | x D +E | $602,451 |
| G | A/E Fees | 7.0% | x D | $985,316 |
| H | Moveable and Special Equipment (FF&E, Scoreboard, etc) | 3.0% | x D | $422,278 |
| I | Testing / Surveys / Special Fees / Reimbursables | 1.0% | x D | $140,759 |
| J | Project Commissioning | 0.5% | x D | $70,380 |
| K | SOFT COST TOTAL | | E+F+G+H+I+J | $3,206,501 |
| L | TOTAL PROJECT COST | | D+K | $17,282,451 |


Schedule

Upon completion of this study, it is anticipated that the University of Wisconsin-Madison will put the SERF, Natatorium, Near East & West Fields forth as a Student Referendum question in March of 2014. If a March Referendum is approved, a hypothetical schedule for these projects could be:




Schedule courtesy of UW Rec Sports


Appendix

The Appendix information has been included separately on a CD. The CD includes:

## PRESENTATIONS

- Workshop 2 08.06.2013
- Workshop 3 08.22.2013
- Workshop 4 09.12.2013
- Workshop 5 10.08.2013
- Workshop 6 11.14.2013

## MEETING MINUTES

## BUILDING PROGRAMS

- Natatorium
- SERF
- Nielsen Wellness Center and Tennis Stadium

## CONSTRUCTION COST ESTIMATES

## CIVIL ENGINEERING AND SYNTHETIC TURF ANALYSIS

## EXISTING FACILITY ASSESSMENTS

## CONCEPTUAL DESIGN

- Site Plan
- Floor Plans
- Renderings