



Phone: (573) 364-8659

FAX: (573) 364-8602

e-mail: dprior@rollacity.gov

DEPARTMENT OF PUBLIC WORKS

901 North Elm

P.O. Box 979

Rolla, MO 65402

www.rollacity.gov

NATATORIUM REIMAGINATION AND REDEVELOPMENT

OCTOBER 5, 2026

ADDENDUM NO. 1

- 1. How does the City anticipate building on CCA's previous study while exploring new ideas for the reimagination and redevelopment of the natatorium?**
 - The previous study was a concept level study. The exact split between dry and wet is still to be decided.
- 2. With the community input already gathered through the previous study, how would the City like to build on that engagement with the community as the project moves forward?**
 - The previous study was a concept level study. The final design will need addition public input.
- 3. Could you please let us know what your goal end date for substantial completion is?**
 - Our goal is to bid the project 16-18 months after we issue the NTP on the design.
- 4. Additional attachments:**
 - a. Natatorium Facility Assessments (22 pp.)
 - b. Concept Diagrams (12 pp.)
 - c. Concept Presentation (50 pp.)
 - d. OOM Cost Analysis (5 pp.)
 - e. Financial Position Commentary (6 pp.)

End of Addendum.

CITY OF ROLLA
THE CENTRE - Natatorium Planning Study

NATATORIUM FACILITY ASSESSMENTS - ARCHITECTURAL AND AQUATICS

February 2, 2026



TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	1.1 - 1.2
2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING	2.1 - 2.8
3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS	3.1 - 3.10

1. EXECUTIVE SUMMARY

Executive Summary:

Working closely with the City of Rolla, a physical analysis of the Centre Natatorium space was developed along with an assessment of the pool features and support pool mechanical equipment. The scope of these 'high-level' assessment included visual inspection of the pool shell, decks, play structures, the natatorium enclosure, and support spaces including the pump filter room, wet multipurpose room, aquatic office and guard room. This visual assessment of the Natatorium is a critical component of the Natatorium Study in helping to determine the best long term approach for maintaining and/or improving The Centre Natatorium for continue service to the community.

When completed in 2002, the Centre was a state-of-the-art facility created at the front end of a paradigm shift in municipal recreation facility design. Within the 62,000 SF Centre is the 10,600 SF Natatorium, also developed at the front end of this indoor recreation facility evolution. The multigenerational pool has consistently been serving residents and non-residents of all ages and backgrounds. However, after 25 years in operation, the indoor complex is showing many signs of aging, both physically and operationally, typical of an indoor pool complex of this age.

Programmatically, the facility has served the community well during the past 25 years. However, the current pool configuration creates many challenges in providing diverse multigenerational fitness and recreational activities. While the amount of water surface area of the existing pool is substantial, the current pool configuration does inhibit the facilities ability to attract multigenerational participation, which is one of the greatest benefits gained from having a properly designed indoor aquatic center.

Below is a brief summary of key issues identified during the Natatorium Building assessment that included the natatorium space and support spaces. Along with the building assessment is a derail assessment of the swimming pool and support equipment.

Programmatic Assessment:

Pros:

- The lap lanes are very popular for lap swimming and water exercise classes.
- Lap Swimming and water exercise continue to be extremely popular in the rectangular pool
- Current channel is largely used as a therapy pool for exercise.
- Beach entry used for swim lessons for toddlers.
- Splash down area for (decommissioned) water slide is used for water therapy.

Considerations:

- Reconfiguration of the pool complex, either through renovation or replacement would provide greater programming opportunities and higher utilization by the community at large, while also addressing the many maintenance and repair issues. Modifications should align with community input and identified needs.

Cons:

- An excessive amount of area is taken up by the zero-depth beach entry at the northwest corner of the pool which then connects to a limited area of recreational water (3'-6" deep). The amount of recreational water is too small to accommodate youth programs such as water volleyball, basketball or free swim inhibiting a diversity of use in these areas.
- The relatively small size of the current channel limits use of this activity.

1. EXECUTIVE SUMMARY

Physical Assessment:

Pros

- Overall, the indoor pool complex is in fair condition given its age, but many elements have exceeded their expected life span.
- The colored concrete pool deck is in remarkably good condition given its age. Cracks in the concrete were observed that have been patched.
- The pool tile (Porcelain) is also in fairly condition for a pool of this age, but is need of repair in limited areas.
- Ancillary spaces have been maintained well, with expected signs of aging, wear and also areas of corrosion.

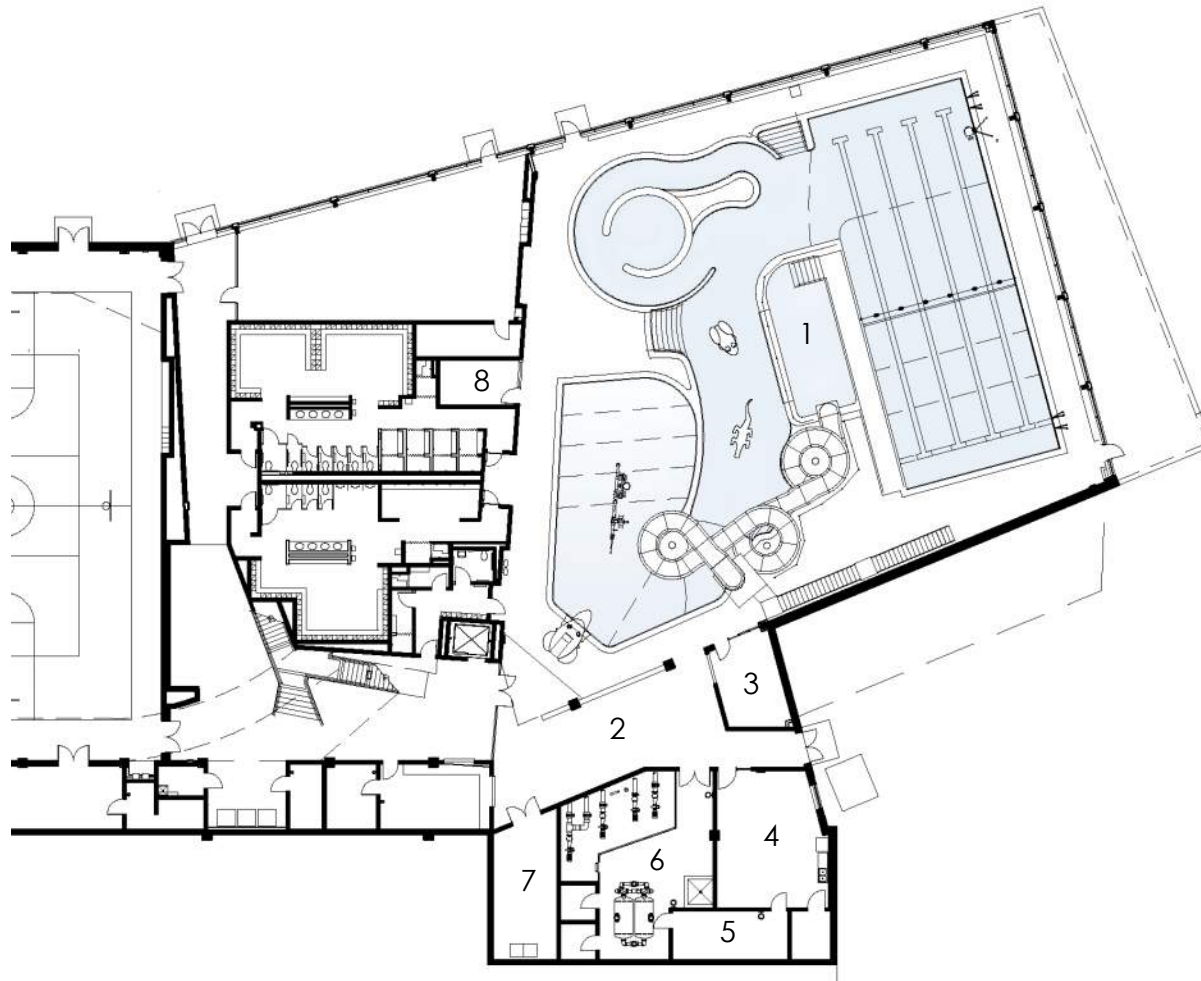
Cons:

- Waterslide and tower are now dangerous and unsightly relics in the natatorium.
- The Pool Pac equipment (Pool HVAC/dehumidification unit) has exceeded its life span and requires a good deal of maintenance and cost to keep operational.
- The existing metal deck and steel truss exposed roof structure is yellowing and showing indications of rust throughout. This includes horizontal steel support beams above the exterior window walls. The yellowing material is the result of older paint reacting to the pool chemicals and UV light. The rust is a results of the metal becoming exposed to the moisture and harsh pool chemicals.
- According to staff, the Roof appears to be leaking. This could be caused by condensation of water vapor occurring within the roofing system and or leaks in the standing seam metal roof. The roof system should be analyzed in greater detail.
- The existing portland cement plaster finish within the pools has outlived is life span.
- Metal lockers in the Life Guard room have also outlasted their life span and are showing signs of rusting.
- Lay-in ceilings in ancillary spaces are showing signs of wear and aging.

Considerations:

- Water Slide: The entire structure is now dangerous and unsightly and should be entirely removed. The slide could be replaced if the city desires to keep the feature.
- HVAC - Remove and replace the existing, ageing pool HVAC / dehumidification equipment.
- Exposed Roof Structure - Recondition the metal deck, steel roof trusses and steel beams. Remove all compromised paint finish and rust and repaint in its entirety with an industrial grade paint system.
- Roofing System - Assess the entire roof system for condensation issues and/or leaks. If required, remove and replace the entire vapor barrier and insulation system sandwiched between the metal ceiling on the inside and the standing seam metal roof panels on the exterior of the natatorium space. Improvements to deal with water penetration from below (in addition to above the roof) have evolved.
- Pool Finish – Remove and replace all existing portland cement plaster and replace with a Quartz aggregate and fortified white Portland cement finishes system. This product has a longer shelf life than Portland cement plaster, requires less maintenance, is easier on bare feet and provides a better aesthetic in the water.
- Concrete Pool Deck - Re-caulk all expansion joints throughout the pool deck including where concrete meets the pool tile edge band.
- Life Guard Lockers - Replace metal lockers in the lifeguard room with Phenolic resin lockers.
- General Finish Improvements - Upgrade finishes in the Wet Multipurpose Room, Pool Staff office and Life Guard room. This could include a partial or full replacement of ceiling tiles and grid, patching or replacing the slip resistant vinyl flooring, and other exposed components that seem to be worn out or have become unsightly.

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING



- 1 - Natatorium
- 2 - Concession Lounge
- 3 - Pool Staff
- 4 - Wet Multipurpose
- 5- Electrical Room
- 6 - Pump / Filter Room
- 7 - Chemical Storage
- 8 - Guard Break Room

Existing Floor Plan - Natatorium

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

EXPOSED METAL ROOF DECK AND STRUCTURE

Observations:

- The natatorium ceiling/roof structure is made up of 64" deep long-span steel roof trusses spaced at 5'-0" on center supporting corrugated metal decking
- The existing exposed roof structure (metal deck and steel trusses) is yellowing and showing indications of rust throughout. This includes horizontal steel support beams above the exterior window walls.
- The yellowing and unsightly appearance is the result of older paint reacting to the pool chemicals and UV light. The rust is a result of bare steel being exposed to moisture and harsh pool chemicals over time.
- Staff noted that the roof is currently leaking with water infiltrating the interior at various locations adjacent to the east exterior wall.

Considerations:

- Sand blast and repair the entire metal roof structure including metal decking, bar joists and other exposed steel members.
- Inspect roof for potential leaking and undertake efforts to mitigate water infiltration into the natatorium feature.



Discoloration of painted steel metal decking



Discoloration on steel roof trusses and metal decking



Rust on steel roof trusses

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

EXTERIOR NATATORIUM WALLS

Observations:

- Anodized aluminum and glass window system is still in relatively good condition. Some streaking is visible in various locations of the aluminum frames
- Glazing also appears to be in good condition, with only minor streaking / etching observed in a few locations.
- The air curtain fed from the sill of the exterior glass wall is intended to prevent or greatly reduce condensation on the exterior glazing and appears to be working as designed.
- Steel framing above the exterior aluminum window wall system is showing signs of rusting in isolated areas. This is likely, in part from moisture infiltration previously noted and leaking along the east elevation.

Considerations:

- Thoroughly inspect exterior window wall system.
- Clean windows and anodized aluminum frame system after leaking has been resolved.



Exterior window wall



Minor staining of anodized aluminum frame system



Exterior natatorium glazing and aluminum frame

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

NATATORIUM POOL DECK SURFACE

Observations:

- The broom finished concrete deck appears to be in relatively good condition for its age.
- Multiple cracks were observed in the concrete deck in the northeast corner of the natatorium and along the east elevation
- Concrete control joints and expansion joints have been caulked in many areas
- The caulk joint between the perimeter pool tile band and the concrete deck is overall in good condition. However, several areas where caulk is missing or has failed were observed.

Considerations:

- Patch any exposed concrete cracks in the pool deck
- Re-caulk expansion joints throughout the concrete pool deck and at the expansion joint between the colored concrete deck and the pool tile edge band



Expansion joint between colored concrete pool deck at perimeter pool tile band



Cracks in colored concrete pool deck



Failing expansion joint caulking

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

CONCESSION LOUNGE AREA

Observations:

- Space serves as a hub for Natatorium Entry, Wet Multipurpose Room, Electrical Equipment Room, Pump / Filter Room (Pool Equipment Room) and Pool Storage Room.
- Area is clean and materials and finishes are in good condition

Considerations:

- Inspect concrete deck and re-caulk control and expansion joints as required.
- Inspect structure above plaster ceiling for signs of corrosion



Access to Wet Multipurpose Room and Pump / Filter Room



Concession / Pool Lounge



Concession / Pool Lounge

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

WET MULTIPURPOSE ROOM

Observations:

- Overall condition of the space is very good for it's age.
- Ceiling is still in fairly good condition with visible signs of wear and dirt and a few damaged tiles.
- The slip resistant sheet vinyl flooring has held up remarkably well for its age. Cracking was observed around the internal floor drain and minor portions of seams are showing signs of deterioration.
- Minor patching is visible around the floor at the drain.
- The interior aluminum and glass entry, the interior steel doors and door frames and the exterior window and glazing are all in good condition.

Considerations:

- Inspect above ceiling for signs of corrosion on existing steel structure
- A few ceiling tiles should be replaced at a minimum
- Patch or replace slip resistant vinyl sheet flooring.



Patching of vinyl flooring at floor drain



Wet Multipurpose Room with open door to electrical equipment room beyond



Wet Multipurpose Room view towards natatorium

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

POOL OFFICE / ELECTRICAL ROOM

Observations - Pool Office:

- The Pool Staff office has been well maintained and appears to be in good condition.

Considerations:

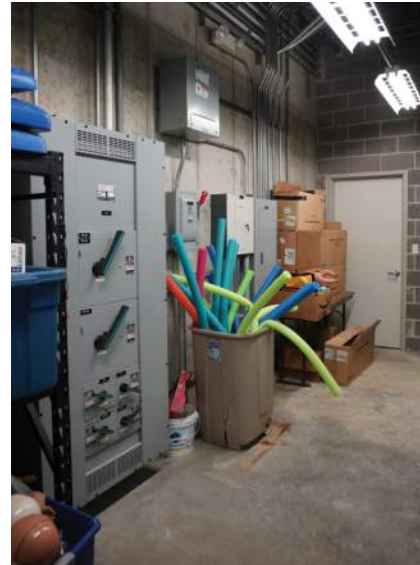
- Closer inspection to check for flooring / ceiling Issues
- Inspect above ceiling for signs of corrosion on structure above

Observations - Electrical Room:

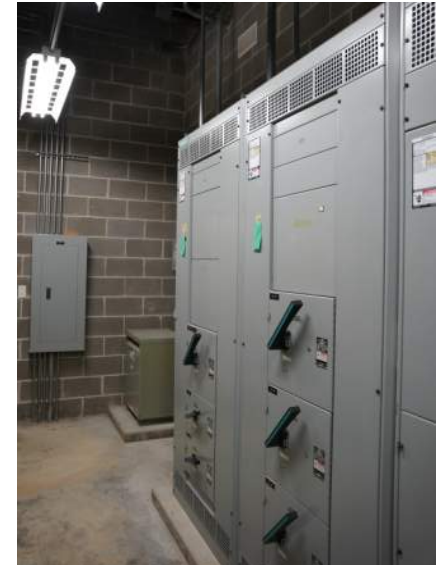
- Room and electrical panels appear to be in very good condition.
- Room is doubling as pool storage which is not uncommon.

Considerations:

- Check electrical panel wiring connections for any signs of corrosion.
- Move pool equipment and supplies to a dedicated storage room



Electrical Switchgear / storage items



Electrical Switchgear



Pool Office



Pool Office entry

2. EXISTING NATATORIUM FACILITY ASSESSMENT - BUILDING

GUARD BREAK ROOM

Observations:

- Rusting is visible on metal lockers
- Floor appears to be in relatively good condition aside from a few observable cracks around the floor drain.

Considerations:

- Closer inspection to check for flooring / ceiling issues
- Inspect area above ceiling for signs of degradation from pool chemicals
- Patch slip resistant vinyl flooring, or replace with new
- Lockers have far exceeded their expected life span in an indoor pool environment. Replace prefinished metal lockers with phenolic resin lockers.



Guard Break Room overview



Prefinished metal locker with signs of rusting



Slip resistant vinyl floor at floor drain

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman-Hunsaker
AQUATICS FOR LIFE

INDOOR AQUATIC FACILITY CONDITION ASSESSMENT REPORT

The Centre – Indoor Pool

Rolla, Missouri

Assessment Date: February 2, 2026

Prepared By:

Counsilman-Hunsaker

Dallas | Denver | San Diego | St. Louis

counsilmanhunsaker.com



3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman · Hunsaker
AQUATICS FOR LIFE

1. Summary

Counsilman-Hunsaker conducted a general overview and condition assessment of the indoor aquatic facility at The Centre in Rolla, Missouri on February 2, 2026. The purpose of this assessment was to document current physical conditions, identify deficiencies impacting safety, and provide recommendations for repairs and long-term capital planning.

The indoor pool remains an important year-round amenity serving lap swimmers, recreational users, therapy programming, and aquatic fitness. Aquatics participation continues to be a critical component of facility membership and community use. A recent survey by The Centre consisted of a core group of members who utilize the indoor pool on a regular basis.

Observed conditions indicate deferred maintenance, aging infrastructure, and deterioration of key pool components. Pool interior finishes are exhibiting delamination, staining, and cracking. Structural corrosion was observed on waterslide tower components and aquatic feature elements. The pool deck shows cracking and exposed reinforcing steel in certain locations. The facility is also currently deficient in accessibility compliance. ADA equipment and access points require upgrades to provide compliant entry into both the main pool and therapy pool. Mechanical systems are aged and exhibit corrosion, leaks, and reduced reliability and chemical room ventilation and separation should be improved to reduce safety risk.

A phased approach is recommended, including immediate corrections, major pool finish replacement, aquatic feature replacement or removal, and future mechanical system modernization. These improvements will extend the operational lifespan of the indoor pool, reduce risk of unplanned closures, improve user experience, and support year-round aquatic programming.

2. The Centre Overview

The Centre is a community fitness and recreation facility serving the City of Rolla, Missouri. Power Wellness has operated The Centre since 2021 and the City has recently entered into an agreement with Phelps Health to manage the facility with the exception of aquatics operations. The Centre currently operates with an estimated monthly subsidy of \$60,000.

Indoor aquatics provides a year-round service that is distinct from seasonal outdoor aquatic amenities. Core aquatic program needs include lap lanes, current/walking channel space, and open recreation/program areas. Continued operation of indoor aquatics is important for community wellness, rehabilitation, and fitness programming.

The indoor aquatic facility consists of a single main body of water with a combination of lap lane space, shallow recreation area, current/walking channel, and integrated play features. The pool includes a frog slide feature and a waterslide tower structure. The waterslide has been closed for several years due to its condition with extensive corrosion on the tower and

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman • Hunsaker
AQUATICS FOR LIFE

stairs. A separate therapy pool is also present in the waterslide plunge area. The observed pool depth profile transitions approximately from 0'-0" to 3'-6" to 8'-0".

3. Observed Conditions

3.1 Pool Interior Finish and Structure

The pool interior plaster finish is in poor condition and exhibits widespread delamination, staining, spider cracking, and exposed concrete. Multiple areas of patch repair were observed, including repairs on one of the entry stairs. These stairs also had large exposed areas of concrete. Rebar bleed-through was also observed on lap lane wall surfaces and in the current channel.

3.2 Tile and Grout

Pool tile in portions of the current channel was observed to be in good condition with no major cracking or popping. However, other tile areas show buildup, missing pieces, and failing grout specifically popped tile was observed at the underwater bench seat in the shallow area. Perimeter tile exhibits notable scale buildup and discoloration.

3.3 Pool Deck and Surrounding Areas

The pool deck exhibits cracking and deterioration. Deck cracking and uneven surfaces present trip hazards and should be corrected. Corrosion was also observed at starting block anchor points. Corrosion was observed on stainless steel railings and other deck-mounted components.

3.4 Aquatic Features and Slide Structures

The frog slide in the shallow end shows corrosion at the base. The slide finish is faded and would require surface preparation and repainting if it continues in use. The slide landing pad is in need of replacement.

The waterslide tower structure shows heavy corrosion on supports and the underside of the platform. Peeling paint and corrosion were observed throughout the waterslide stairs, including areas of complete deterioration. The waterslide has been closed for two years due to insurance recommendations based on the condition of the stairs and tower. Staff report the waterslide is tested monthly and rust often comes down the slide when turned on.

3.5 Current Channel

The current channel is functional. Tile in this area was observed to be in good condition; however, the plaster finish is in poor condition consistent with the rest of the pool. Exposed rebar was also observed in areas of the current channel.

3.6 Therapy Pool

The therapy pool exhibits plaster deterioration. The plaster finish on the entry stairs is jagged and cracking, and the pool surface is etched. Areas of patch repairs and rebar bleed-through

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman Hunsaker
AQUATICS FOR LIFE

were observed. Corrosion was noted on railings and deck-mounted components around the pool.

3.7 Underwater Lighting

Underwater light fixtures were filled halfway with water, indicating failed seals. These fixtures should be replaced and conduit integrity should be verified to prevent electrical hazards.

3.8 Drain Covers and Safety Systems

Virginia Graeme Baker Pool and Spa Safety Act (VGBA) main drain grates were noted as installed in 2017 with an estimated 15-year lifecycle as noted on the grates. These should be monitored and scheduled for replacement in accordance with manufacturer recommendations.

3.9 Mechanical and Equipment Systems

The pool's mechanical and recirculation equipment is primarily original to the pool and has observed corrosion on pumps, motors, pipe hangers, and strainer baskets. The system consists of four Neptune Benson high-rate sand filters which have some rust, corrosion, and leaks. Standing water was present in the pump room because of this. A fifth high-rate sand filter is installed on the recirculation system for the waterslide plunge area that has been converted to a warm-water spa/therapy pool. Flow meters were not functioning. A Lochinvar heater was observed with corrosion on exhaust piping. Electrical cabinets also exhibit corrosion. The chlorine room and acid room were open to the pump room as opposed to being separately ventilated which is the current standard for chemical room design.

3.10 Water Level

The pool level was low during the site visit. A low water level will effect surface skimming performance, circulation effectiveness, and proper operation of features and mechanical systems.

4. Recommendations

4.1 Priority 1

- Engage a qualified structural engineer to evaluate the waterslide tower and slide support framing for structural integrity.
- Remove the waterslide and/or tower if structural repairs are not feasible or if continued operation is not desired.
- Remove or replace the frog slide and replace the underwater landing pad.
- Replace underwater light fixtures and confirm watertight seals; inspect electrical components.
- Repair exposed reinforcing steel in pool shell and deck areas to prevent further deterioration.
- Repair cracked deck surfaces to remove trip hazards and eliminate sharp edges.

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman • Hunsaker
AQUATICS FOR LIFE

- Provide two means of ADA-compliant access into the main pool that consists of either two compliant ADA lifts, or one compliant lift and one set of compliant handrails on one of the stair entries.
- Provide ADA-compliant access into the therapy pool.
- Confirm that all suction outlet covers and safety systems remain VGBA compliant.

4.2 Priority 2

- Replaster the entire main pool to address delamination, cracking, exposed concrete, and staining.
- Replaster therapy pool surfaces, including steps, benches, and interior walls.
- Replace missing or damaged tile and regrout the perimeter.
- Replace popped or loose tile at underwater bench seating.
- Replace the original shallow area children's feature.
- Inspect stainless steel railings and anchors and implement ongoing maintenance schedule.

4.3 Priority 3

- Replace original Neptune Benson high-rate sand filtration.
- Replace corroded pumps, motors, strainers, and valves.
- Replace flow meters.
- Evaluate chemical feed systems and ensure proper containment, ventilation, and code-compliant separation.
- Inspect and replace corroded heater exhaust piping; evaluate heater replacement due to age and condition.
- Upgrade electrical panels that are exhibiting corrosion.
- Verify that UV systems are functional.
- Consider automation upgrades to the pool's mechanical system.
- Evaluate and correct chemical room separation and ventilation.

4.4 Ongoing Maintenance

- Maintain water chemistry and monitor saturation index.
- Power wash and clean perimeter tile.
- Establish stainless steel cleaning and passivation.
- Investigate cause of low water level and ensure automatic fill and level control systems are functioning properly.
- Document repairs and establish long-term capital replacement plan for aquatic infrastructure.

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman Hunsaker
AQUATICS FOR LIFE

5. Repair Priority Matrix

Priority Level	Category	Representative Scope Items
Priority 1 – Immediate (0–6 Months)	Life Safety / Compliance	Waterslide structural evaluation, ADA compliance upgrades, underwater light replacement, deck repairs, pool surface repairs
Priority 2 – Short Term (6–18 Months)	Renovation	Replaster of main and therapy pools, tile replacement and regrouting, feature replacement, entry stair and bench repairs
Priority 3 – Mid Term (1–3 Years)	Mechanical Upgrades	Filter replacement, pump/motor replacement, heater upgrades, chemical ventilation and electrical improvements, chemical automation upgrades
Ongoing	Preventative Maintenance	Water chemistry, stainless cleaning, tile cleaning, routine inspections, preventative maintenance program

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman • Hunsaker
AQUATICS FOR LIFE



Figure 1 Zero-depth entry



Figure 2 Lap lane area



Figure 3 Current channel



Figure 4 Waterslide



Figure 5 Open water area



Figure 6 Therapy pool | waterslide plunge area

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman Hunsaker
AQUATICS FOR LIFE



Figure 7 Plaster staining and discoloration



Figure 8 Plaster delamination



Figure 9 Rebar bleed through

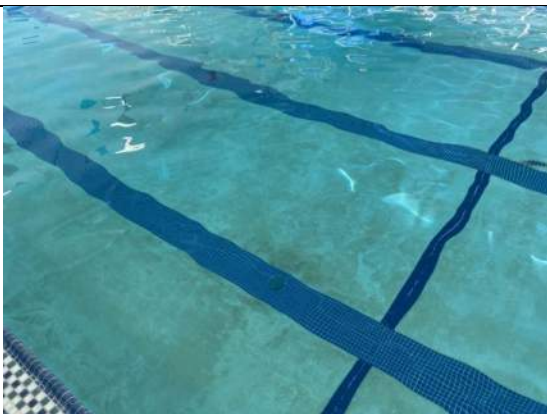


Figure 10 Plaster staining in lap lanes



Figure 11 Rebar bleed through



Figure 12 Missing tile on underwater bench

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsilman • Hunsaker
AQUATICS FOR LIFE



Figure 13 Frog Slide (Corrosion at base)

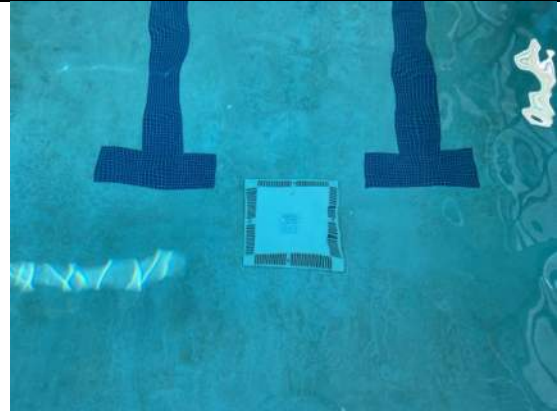


Figure 14 Main drain



Figure 15 Plaster spalling and delamination on stair entry



Figure 16 Corrosion on deck anchors



Figure 17 Waterslide tower corrosion



Figure 18 Waterslide tower stair corrosion

3. EXISTING INDOOR AQUATIC FACILITY ASSESSMENT - POOLS



Counsillman • Hunsaker
AQUATICS FOR LIFE



Figure 19 High-rate sand filtration



Figure 20 Recirculation pump pit



Figure 21 Chemical rooms



Figure 22 Recirculation system components corrosion



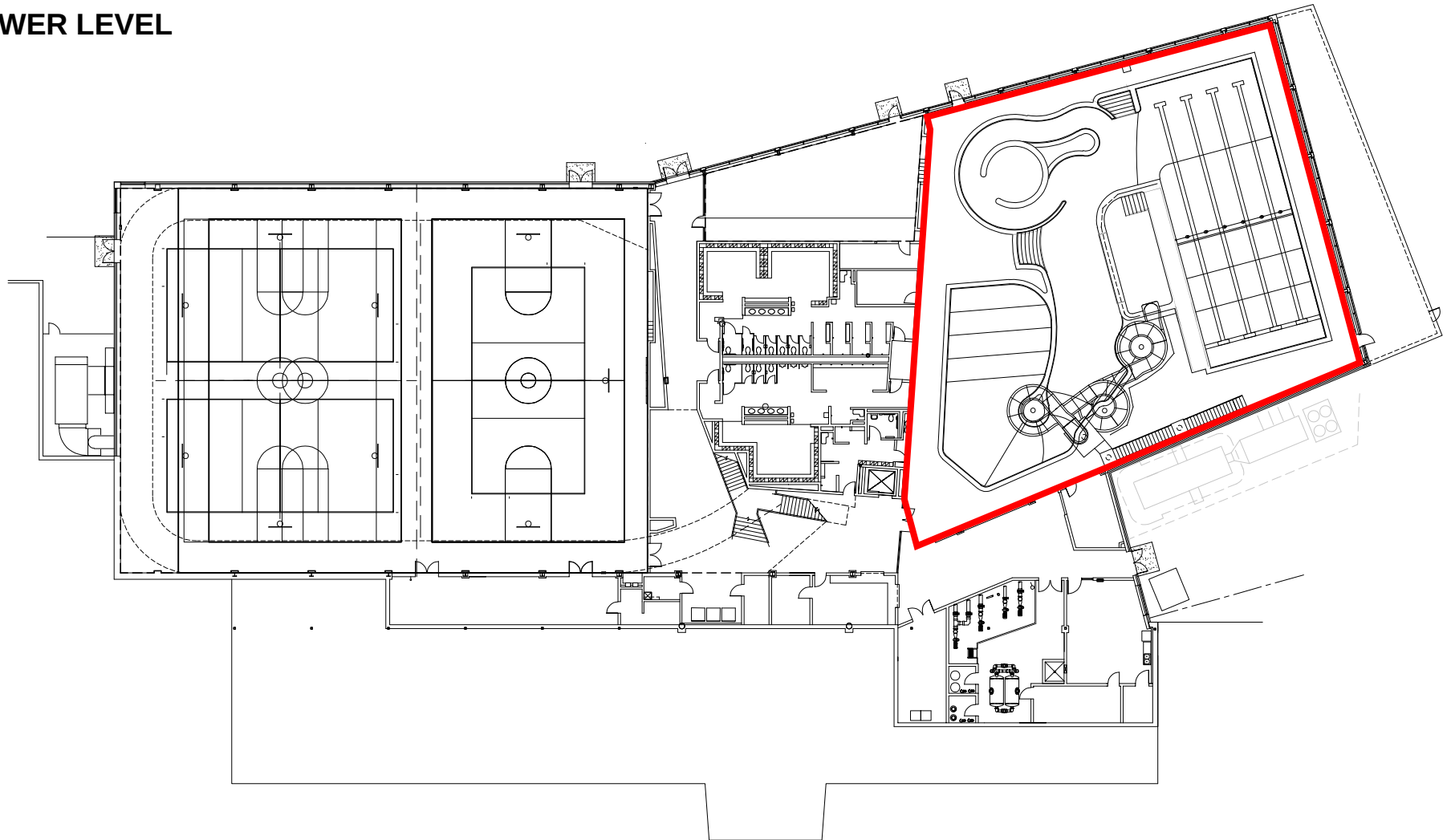
Figure 23 Lochinvar pool heater (corrosion)



Figure 24 Chemical controller

THE CENTRE NATATORIUM RENOVATION STUDY
CITY OF ROLLA, MISSOURI

LOWER LEVEL

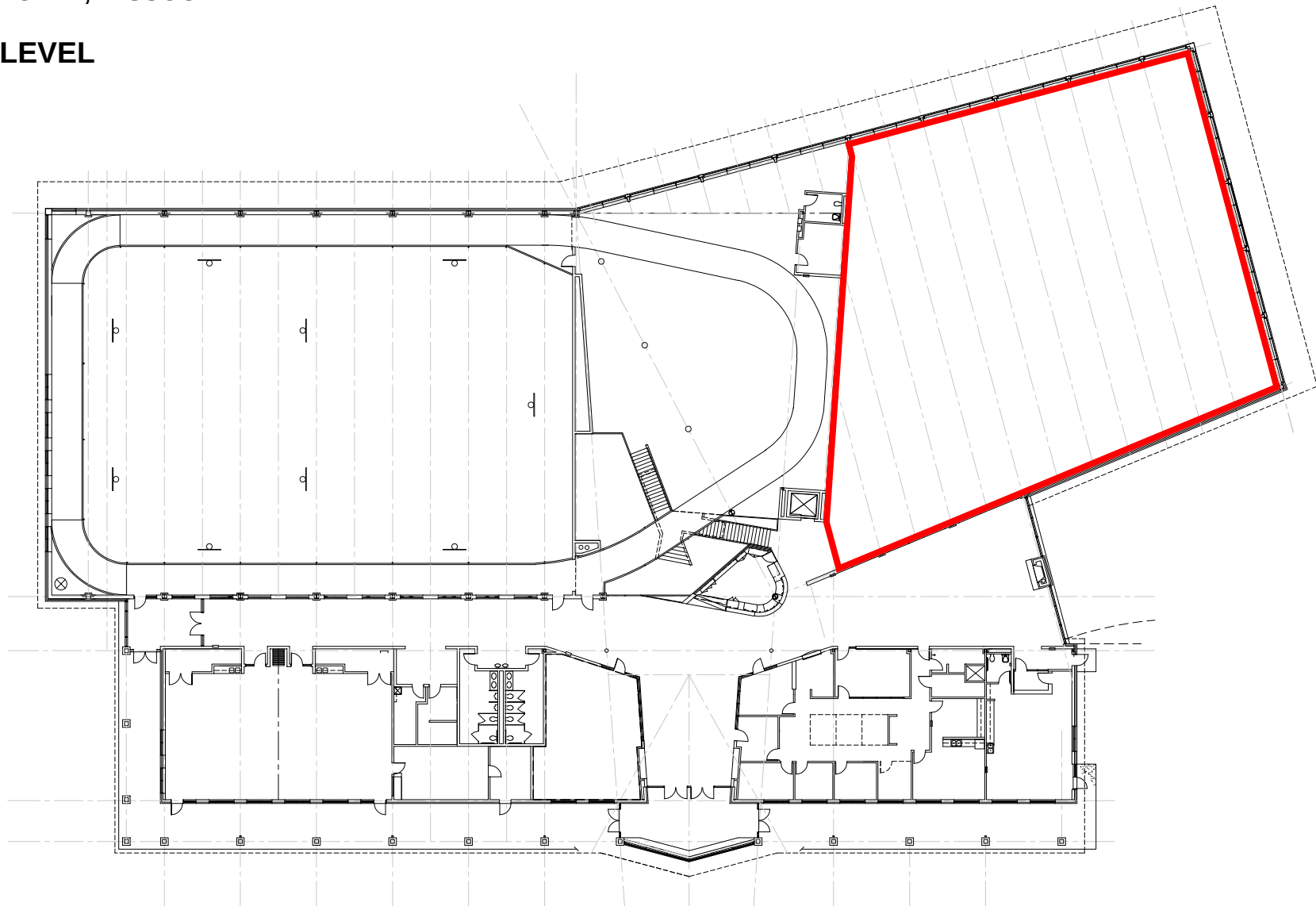


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

THE CENTRE NATATORIUM RENOVATION STUDY
CITY OF ROLLA, MISSOURI

UPPER LEVEL

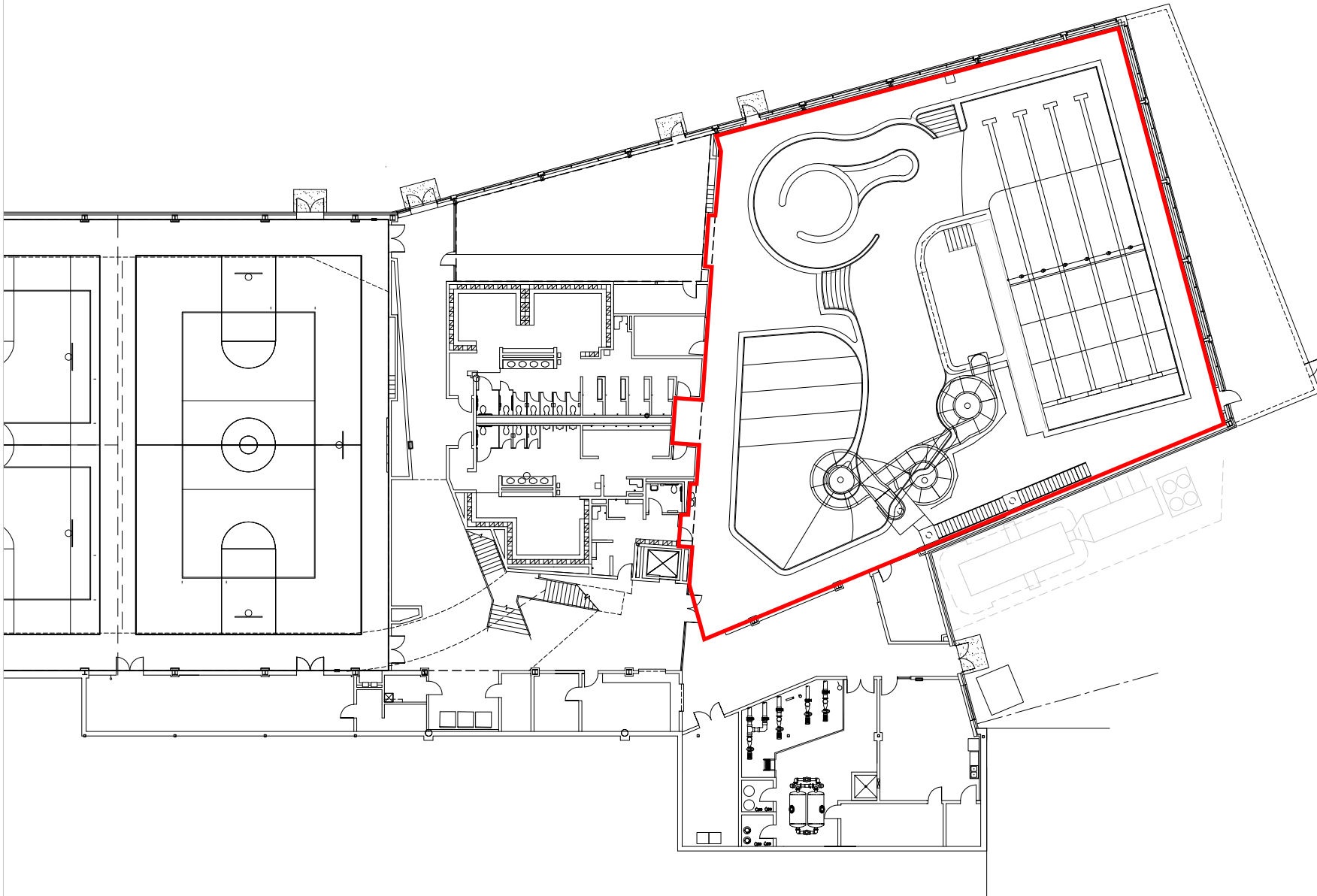


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

EXISTING INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL

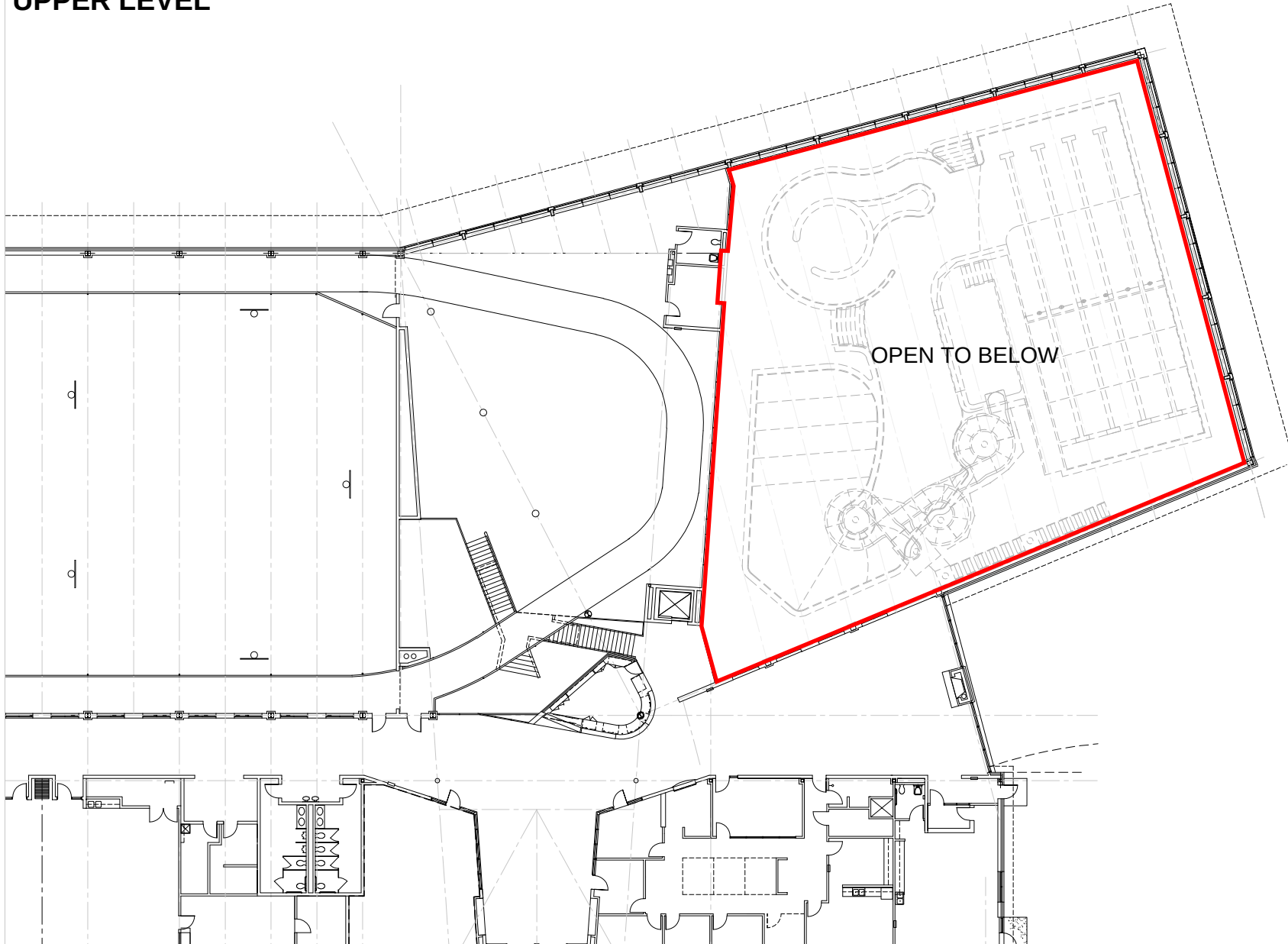


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

EXISTING INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL

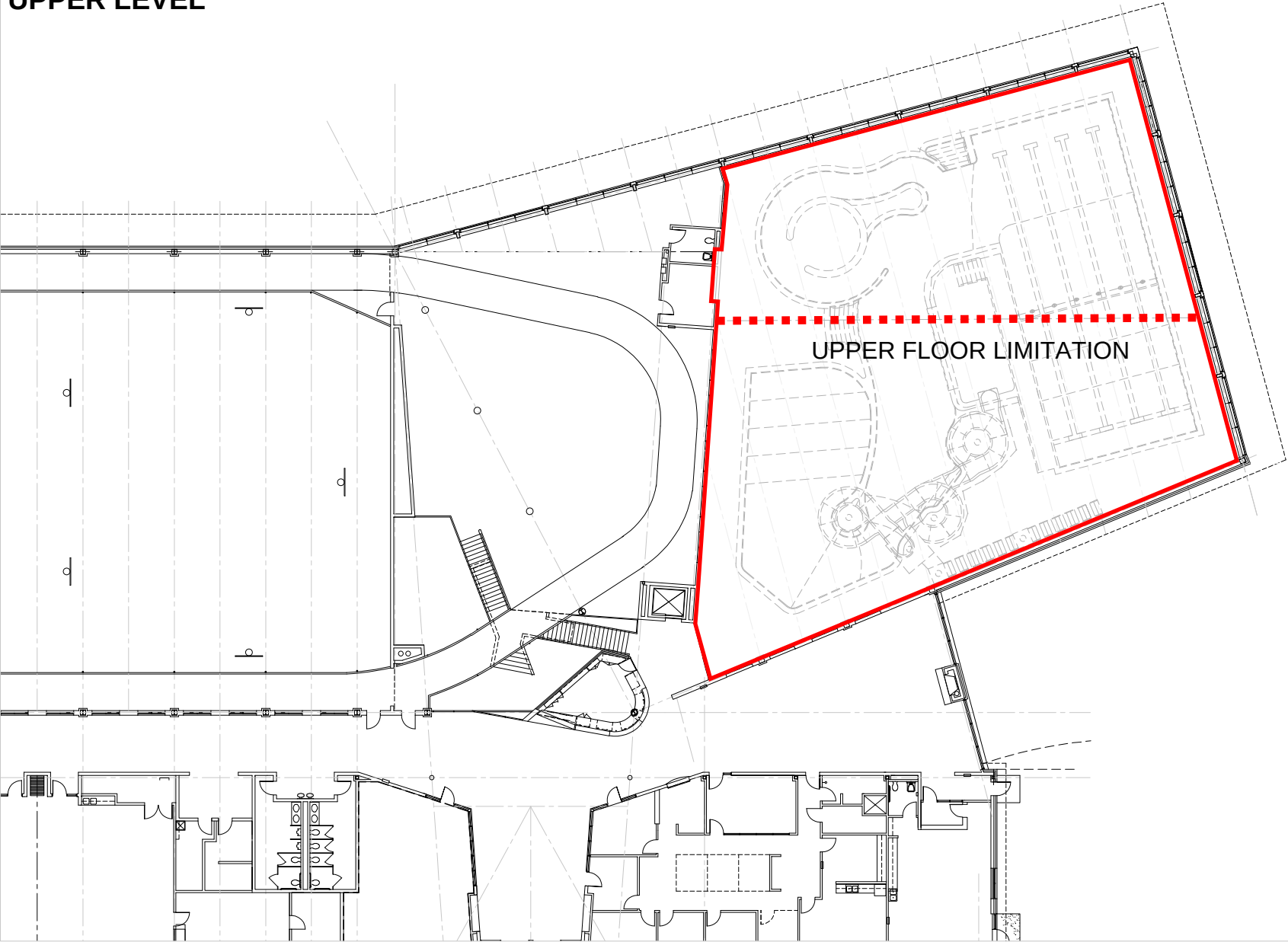


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

EXISTING INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL

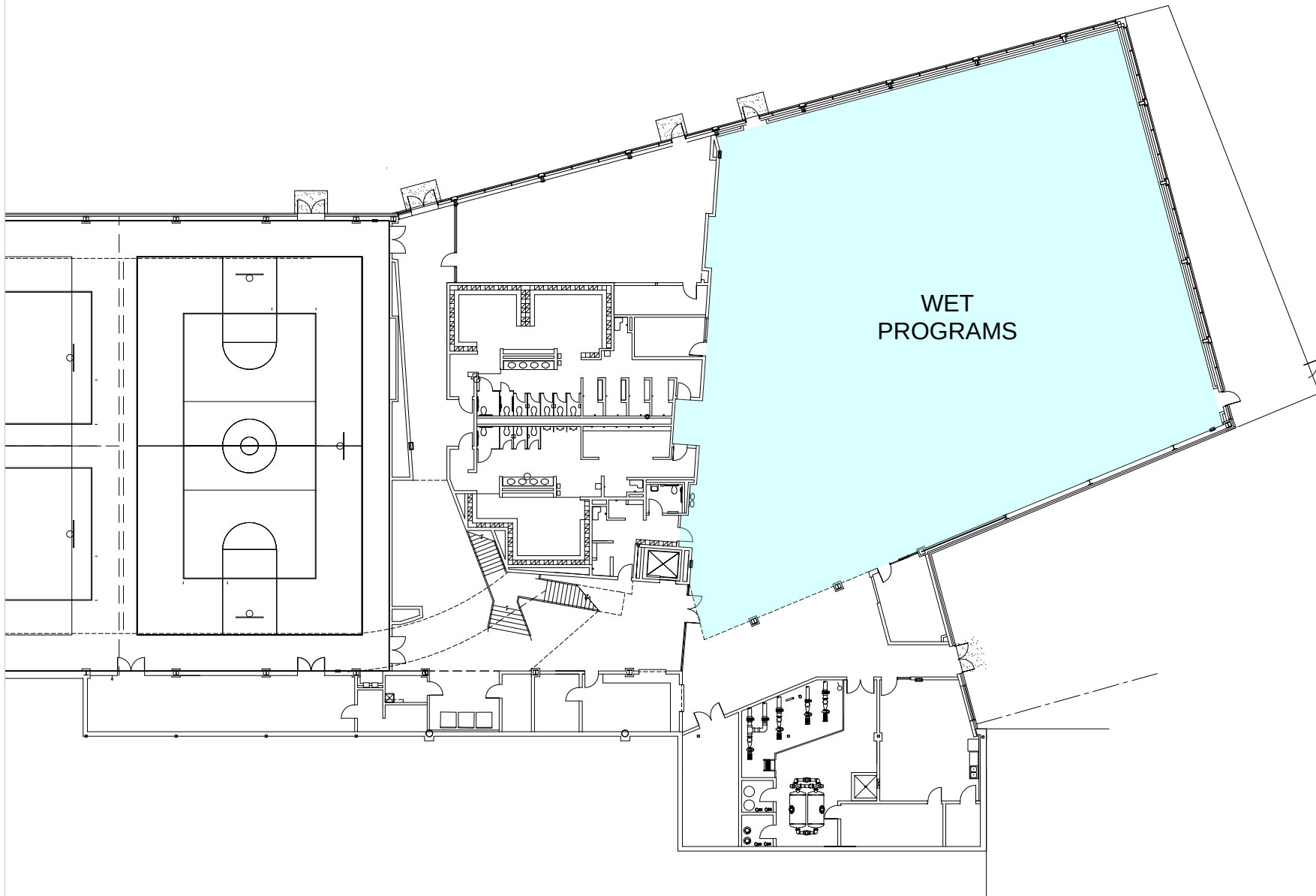


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL - FULL AQUATICS

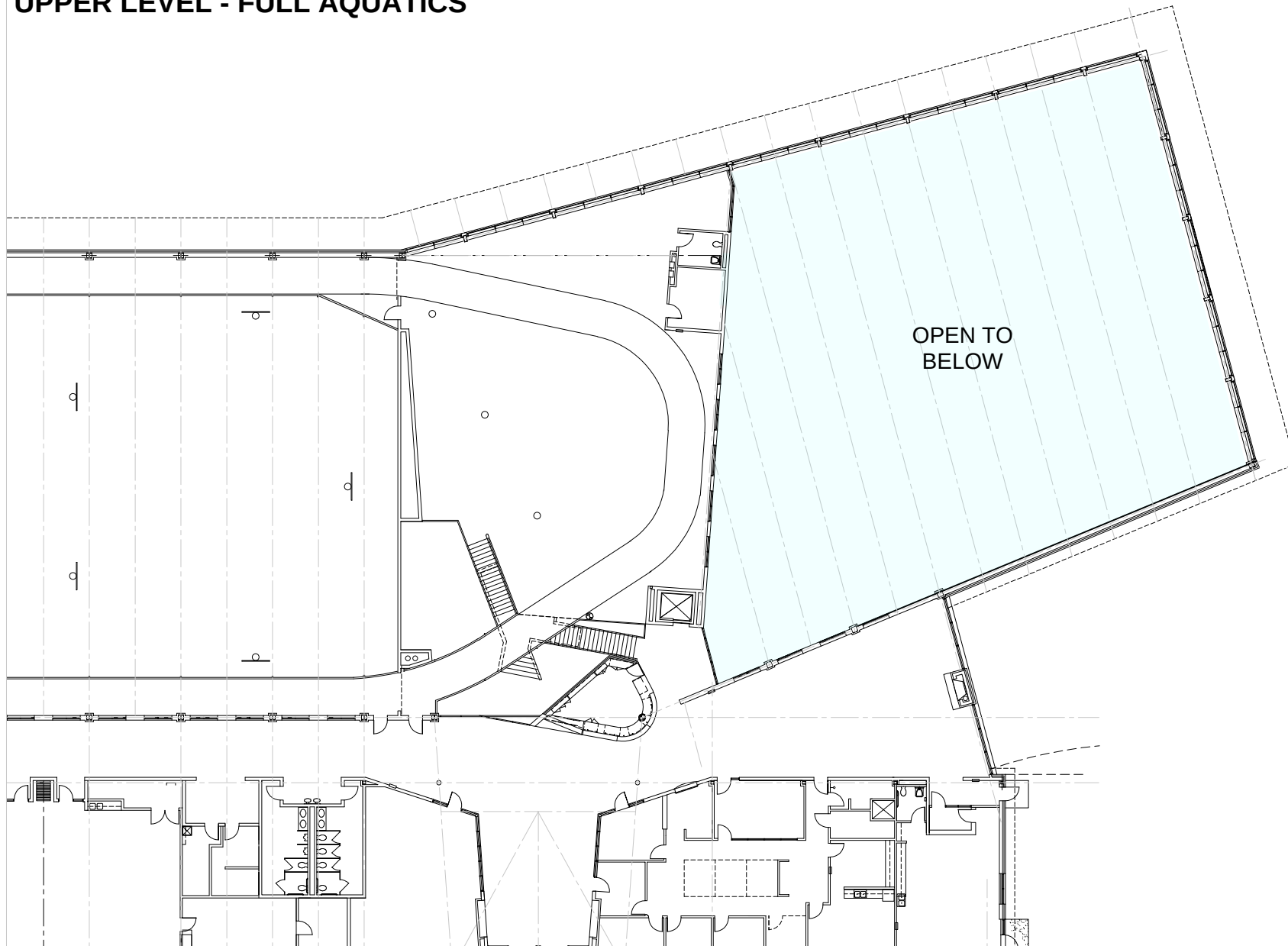


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - FULL AQUATICS

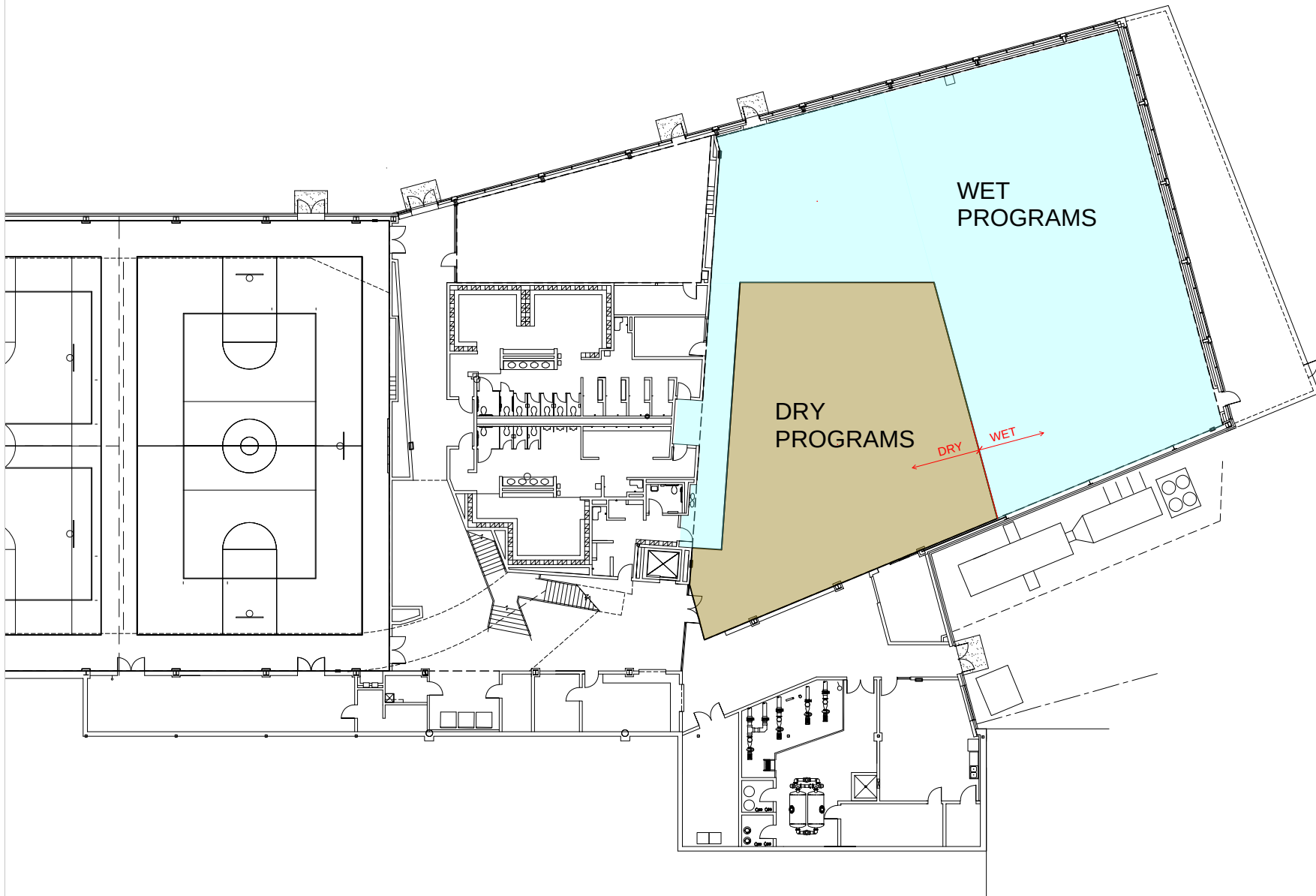


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL - REDUCED AQUATICS + NEW DRY SPACE

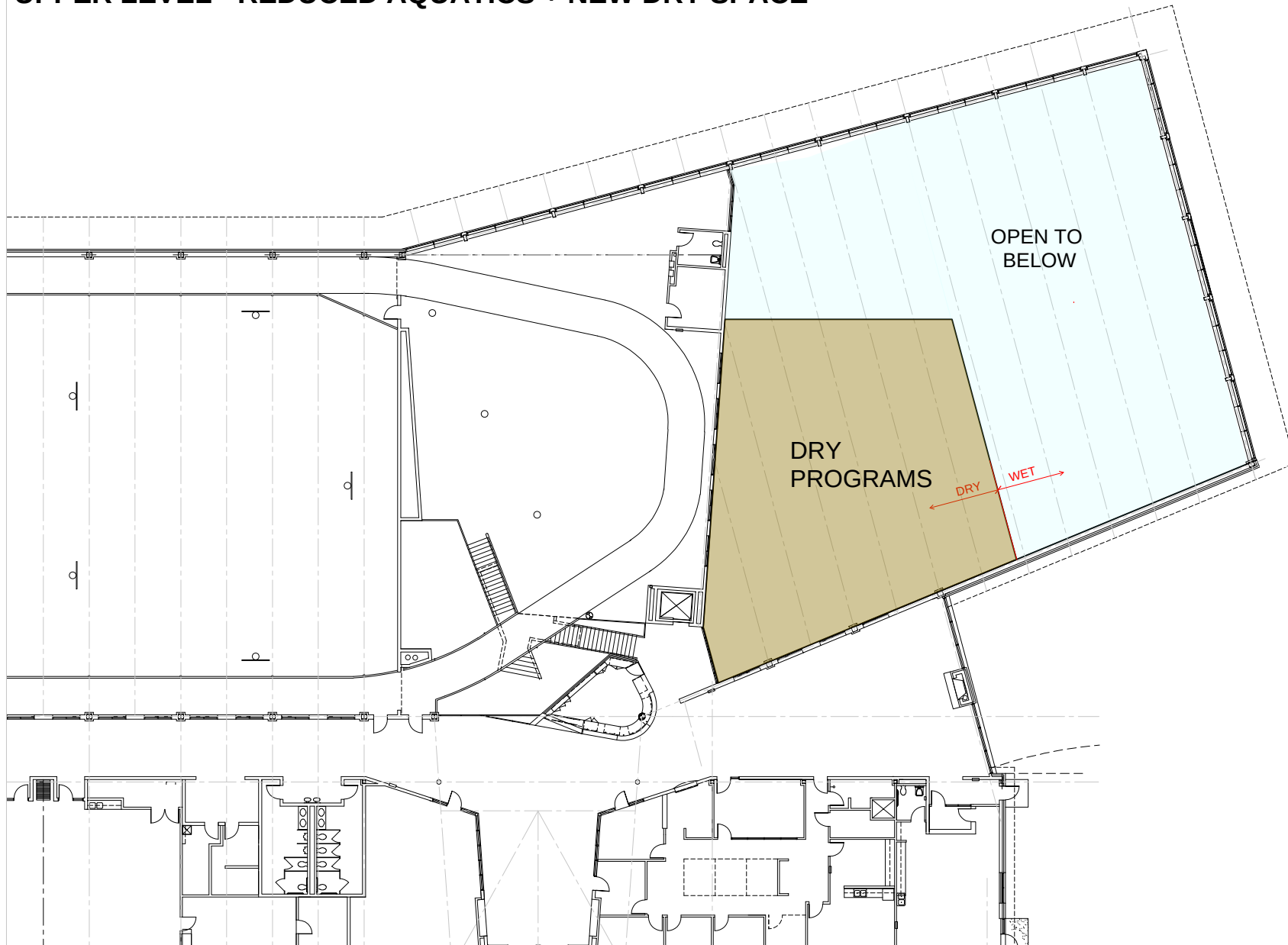


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - REDUCED AQUATICS + NEW DRY SPACE

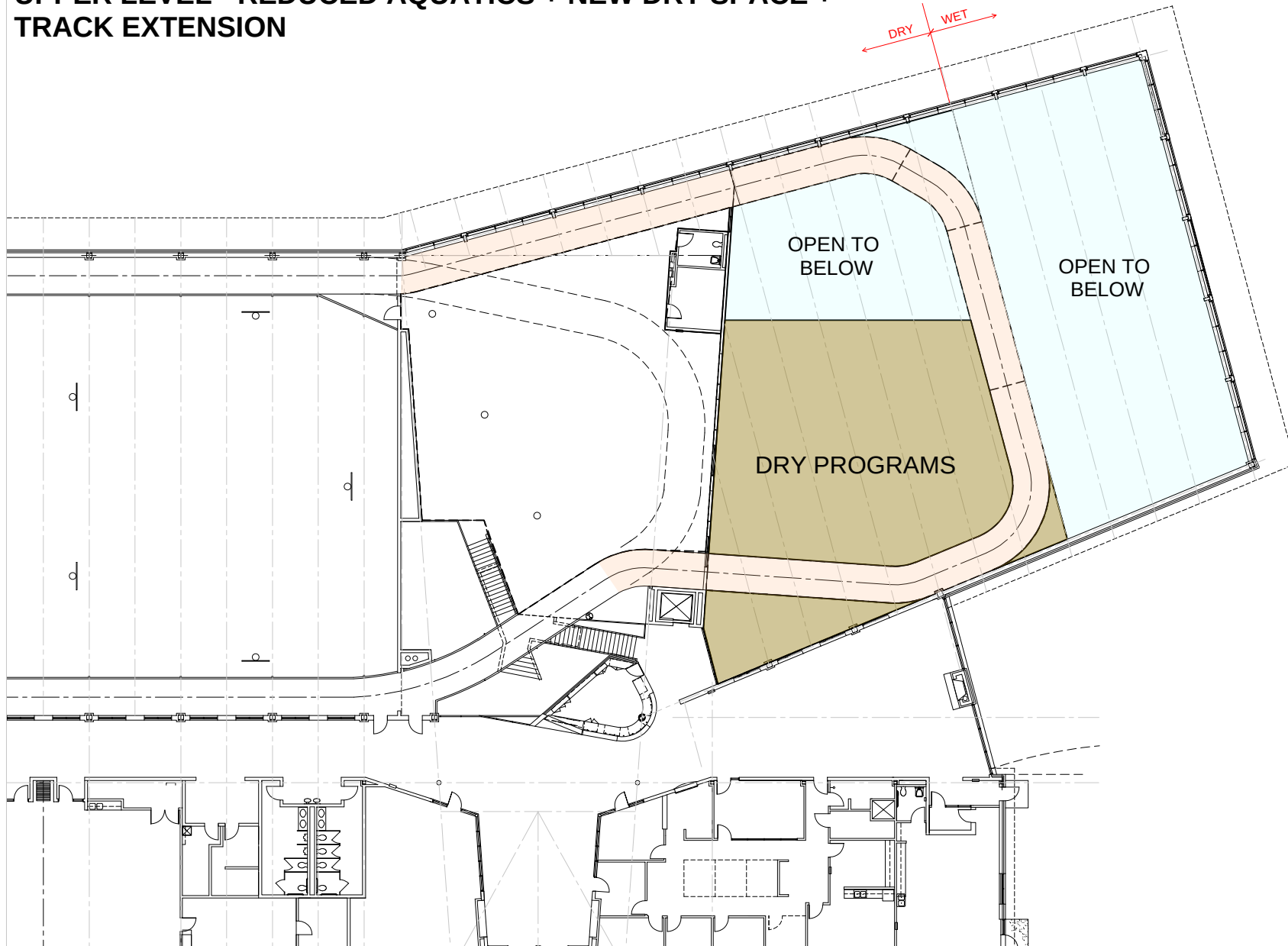


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - REDUCED AQUATICS + NEW DRY SPACE + TRACK EXTENSION

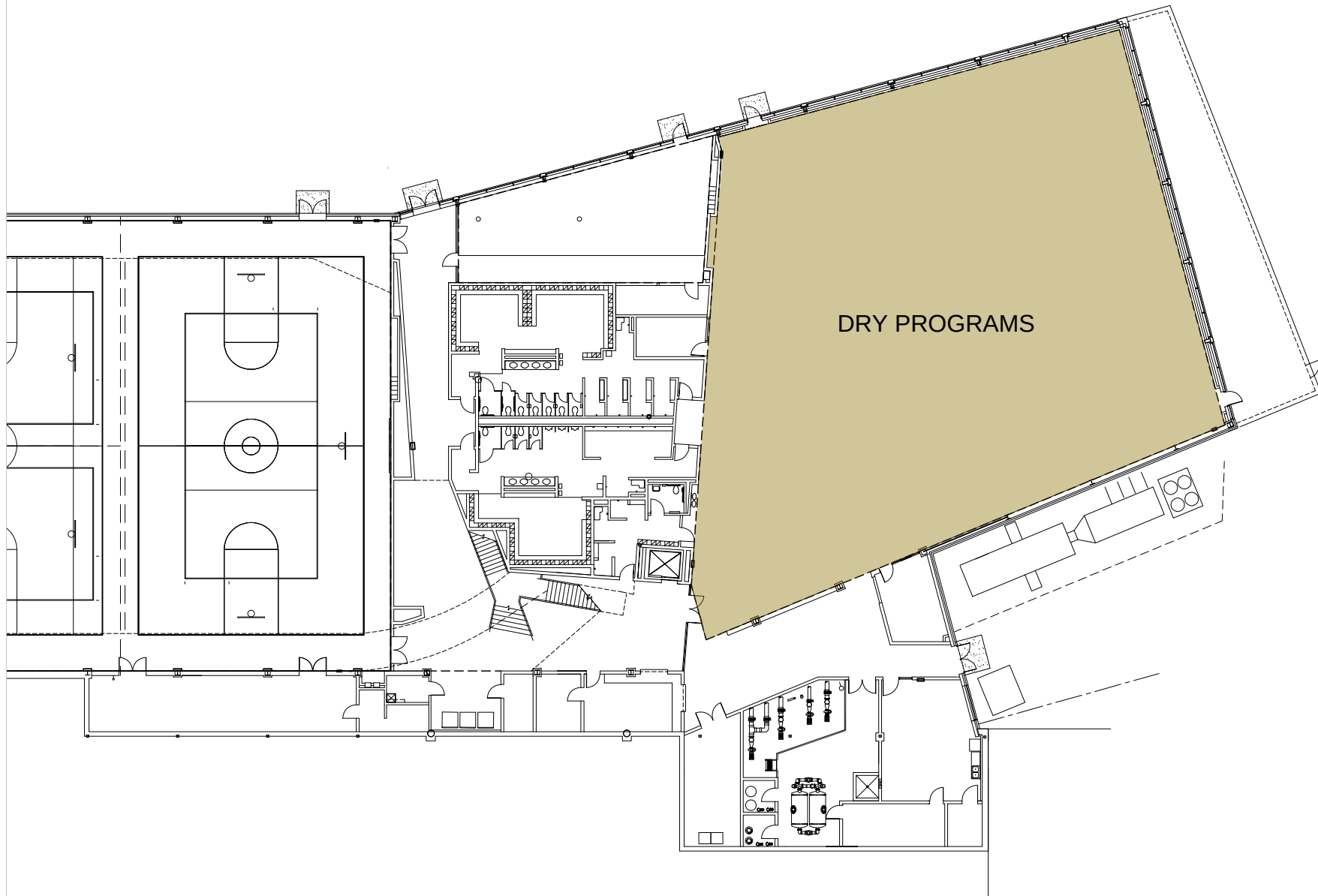


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL - ALL DRY / NO AQUATICS

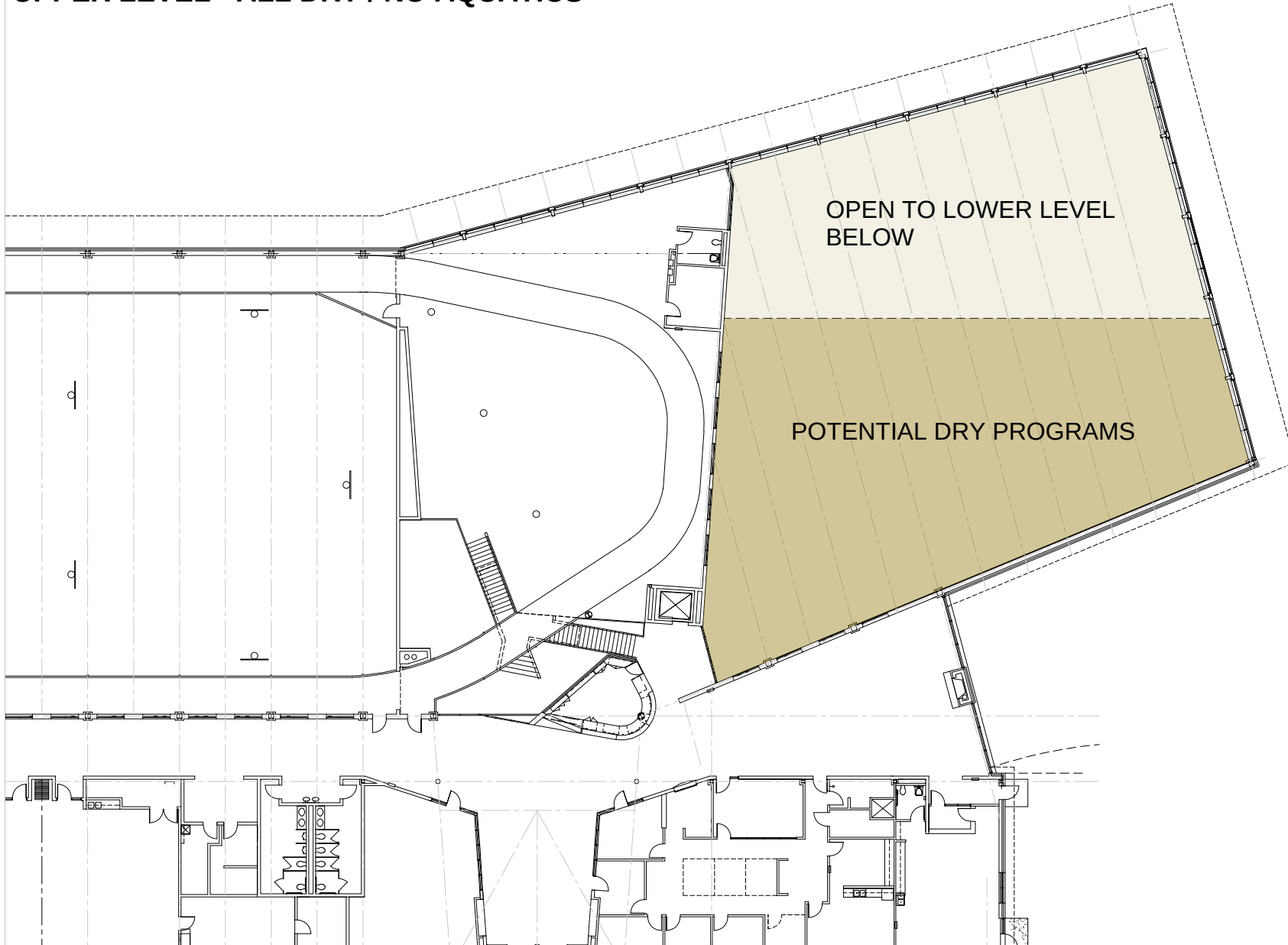


DATE: 3.16.2026

SCALE: 1/32"= 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - ALL DRY / NO AQUATICS



DATE: 3.16.2026

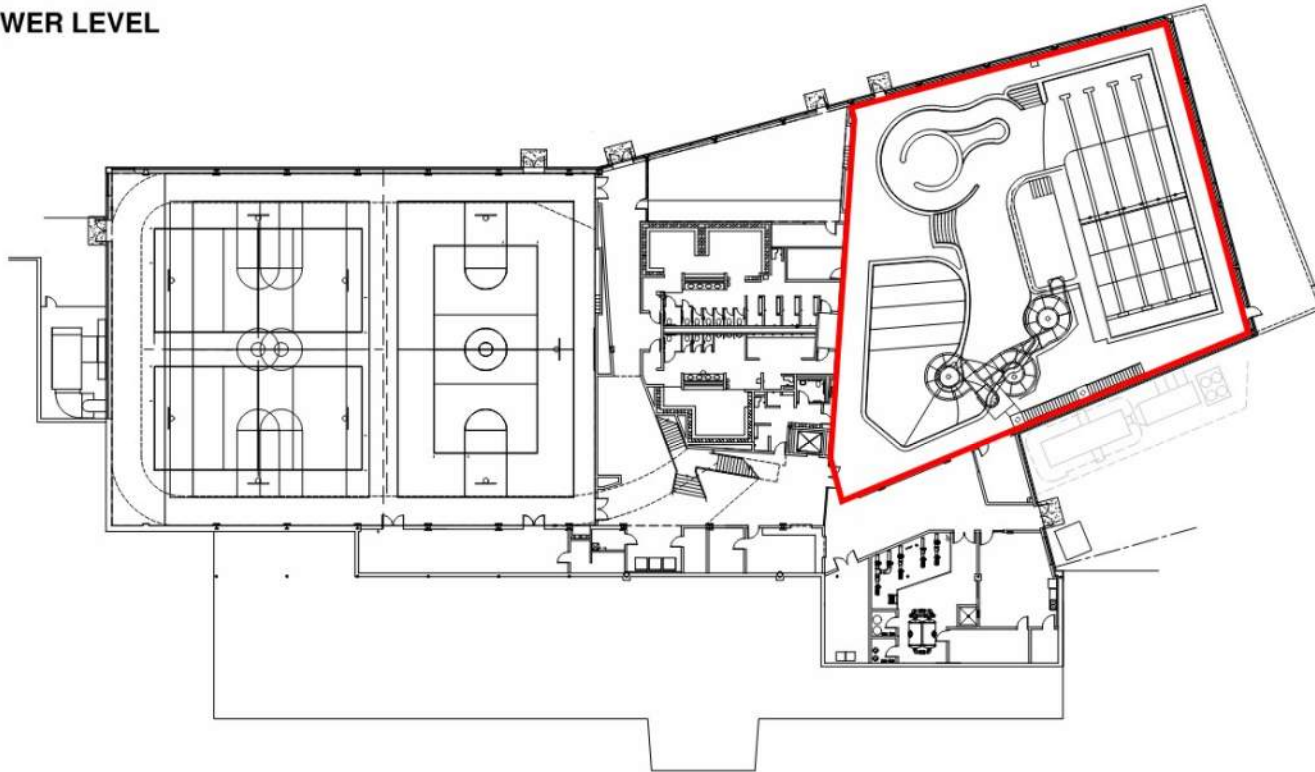
SCALE: 1/32"= 1'-0"

THE CENTRE – NATATORIUM PLANNING STUDY



THE CENTRE NATATORIUM RENOVATION STUDY
CITY OF ROLLA, MISSOURI

LOWER LEVEL

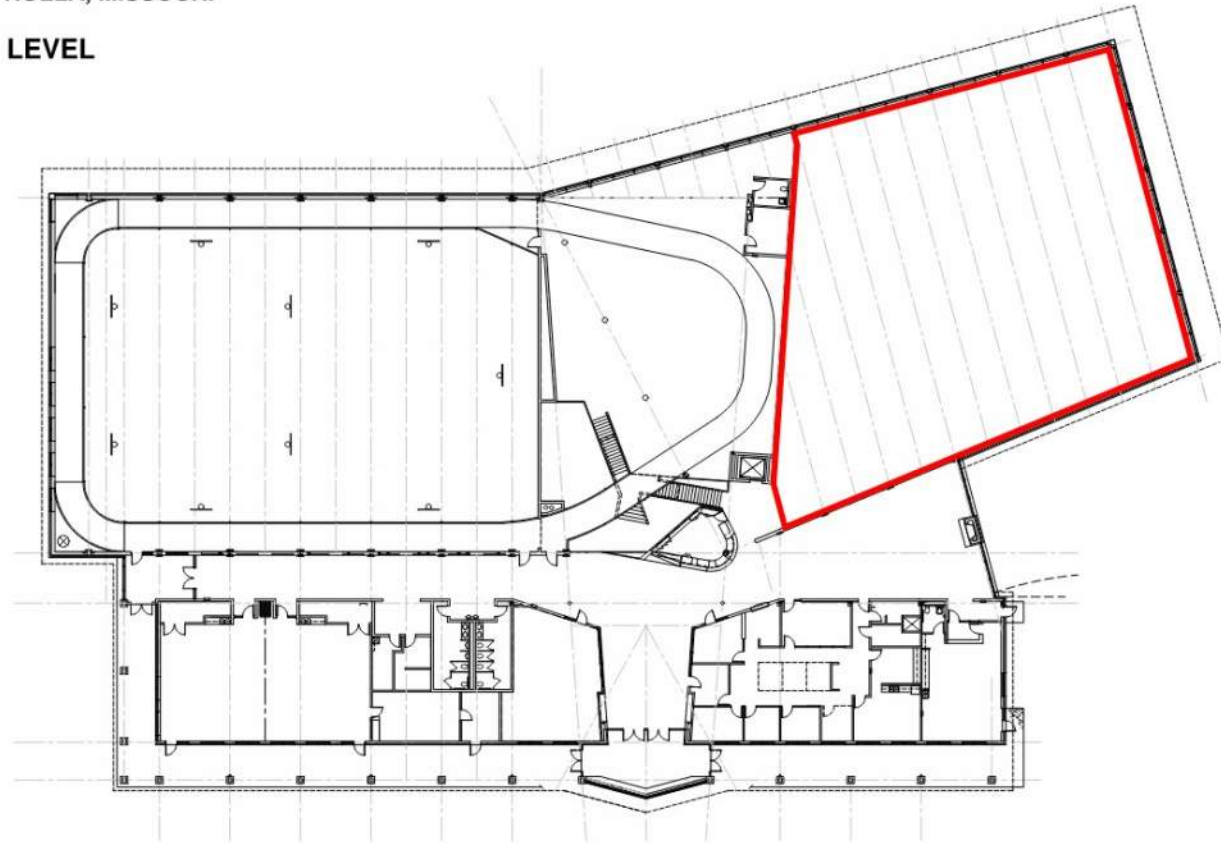


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

THE CENTRE NATATORIUM RENOVATION STUDY
CITY OF ROLLA, MISSOURI

UPPER LEVEL

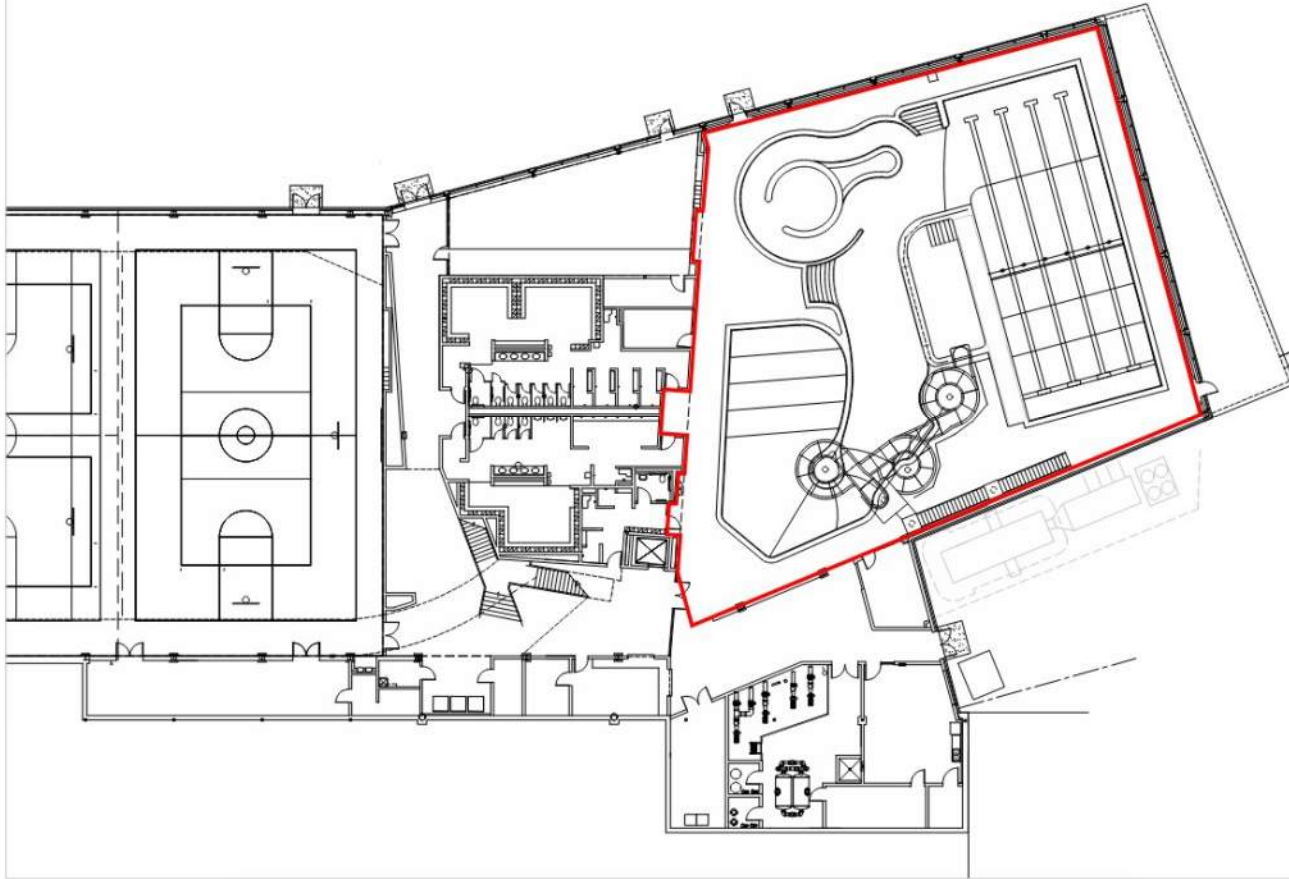


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

EXISTING INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL

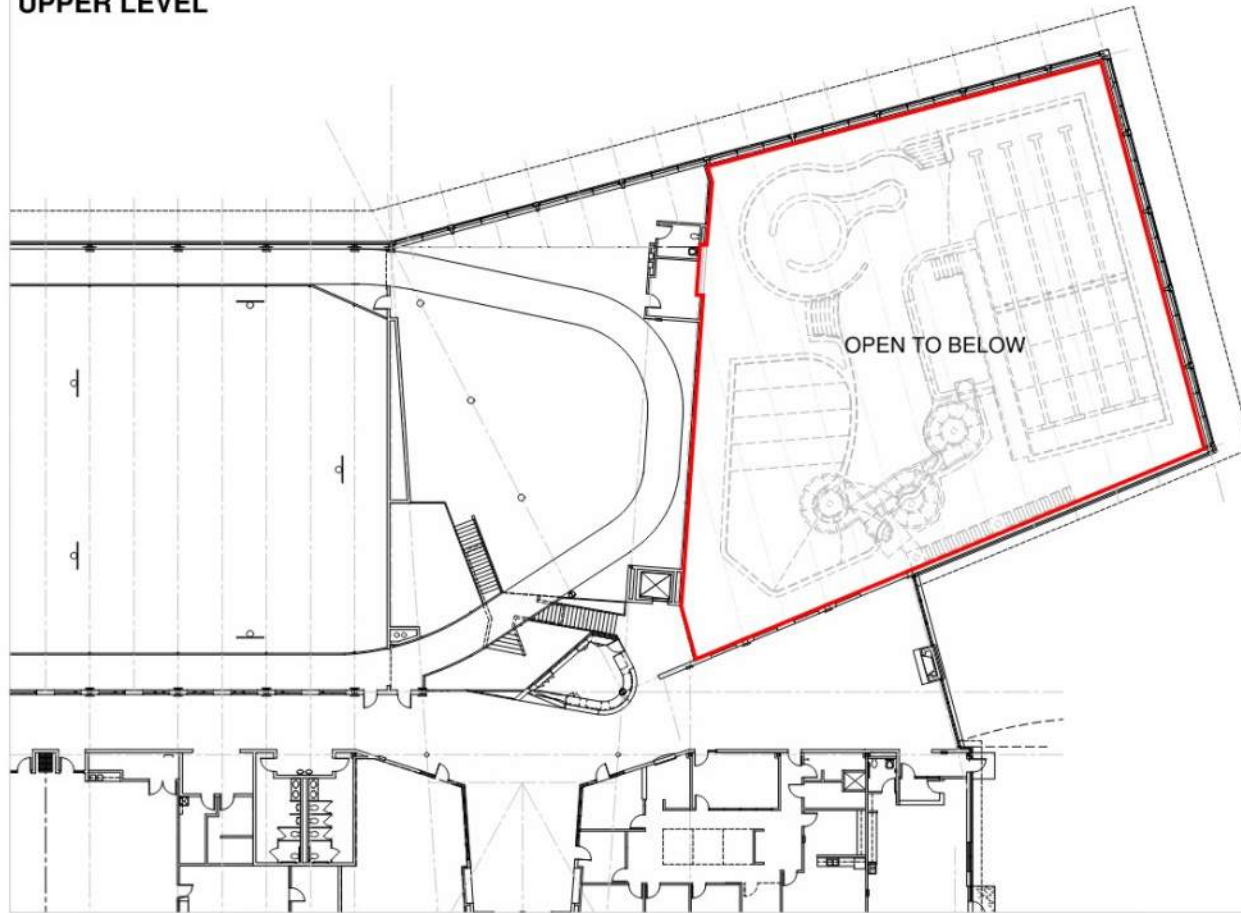


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

EXISTING INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL

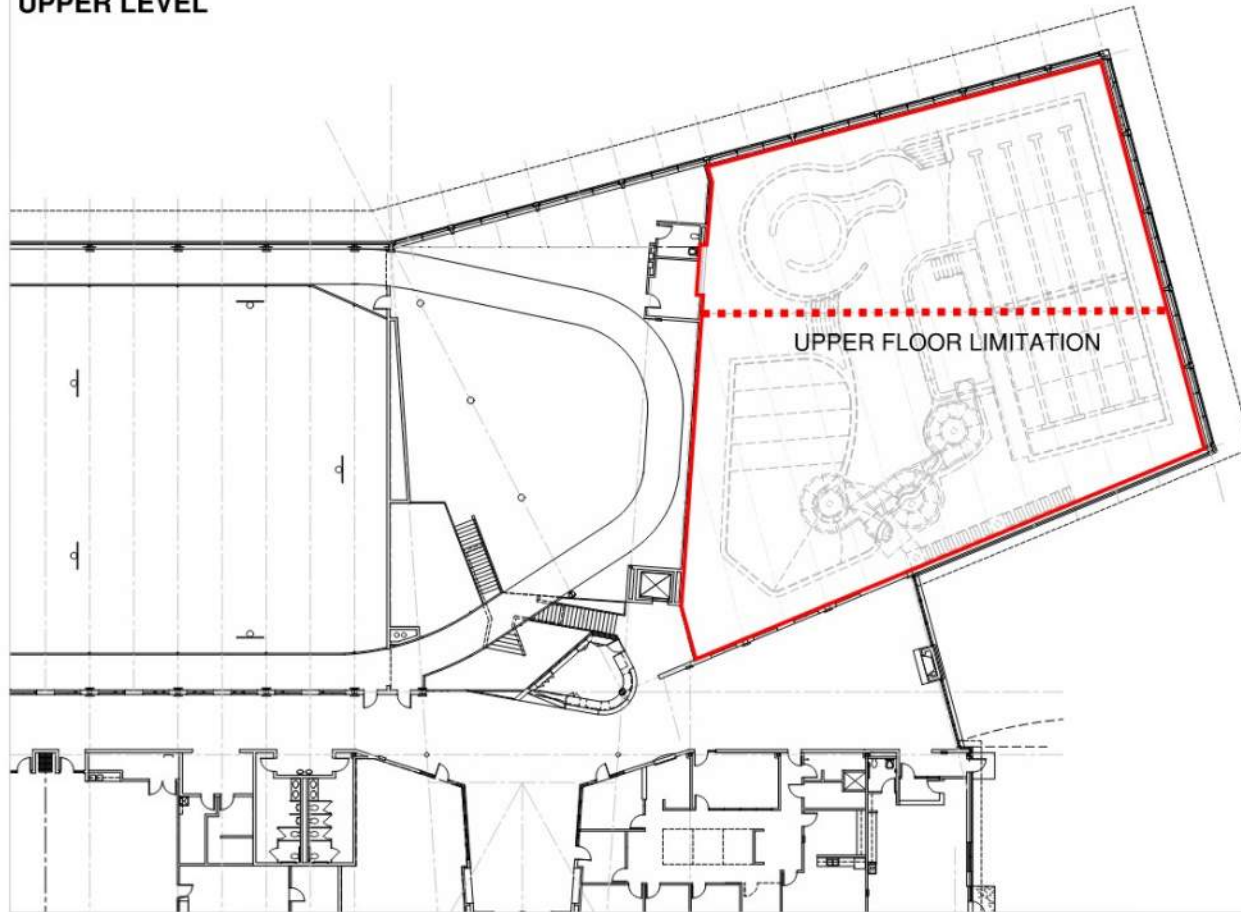


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

EXISTING INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL

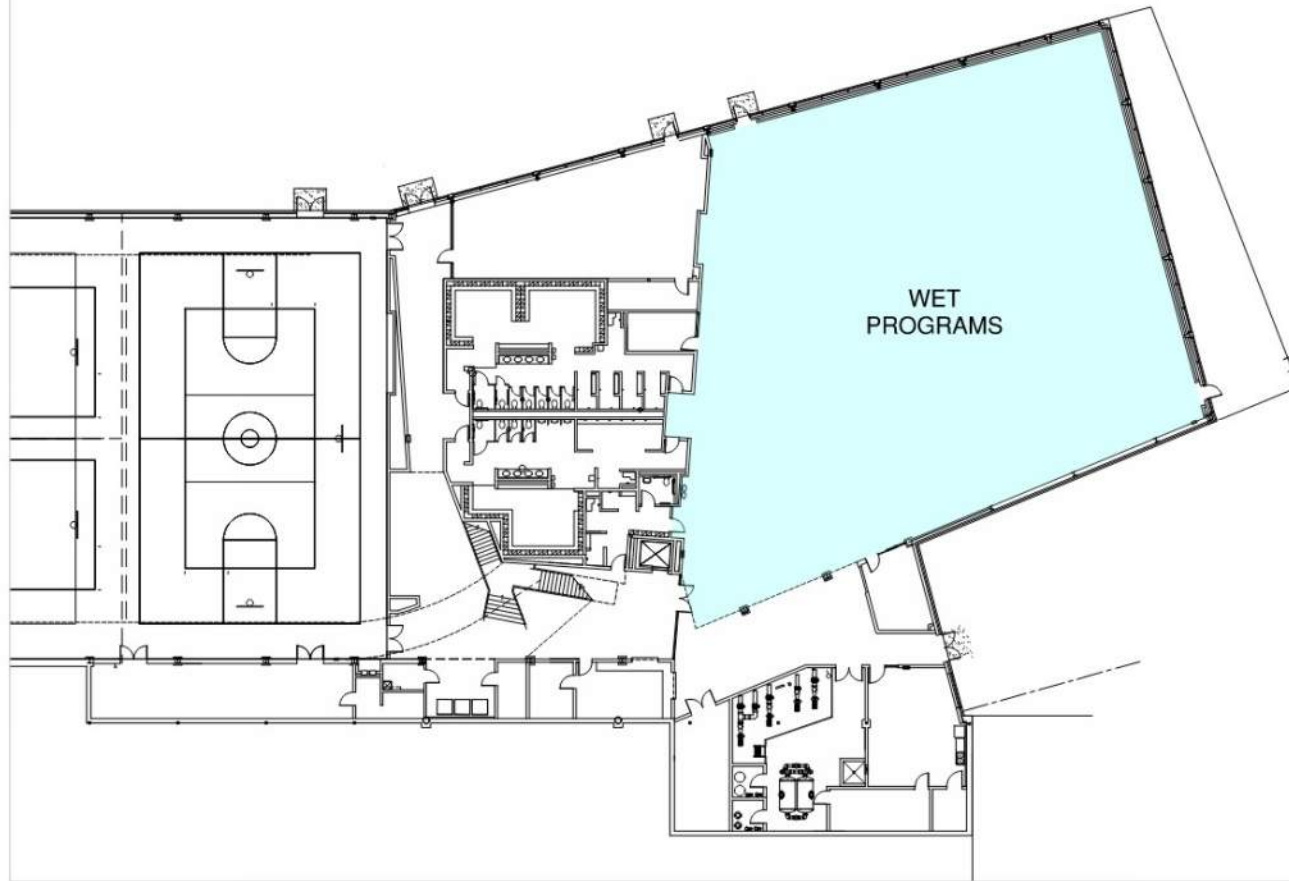


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL - FULL AQUATICS

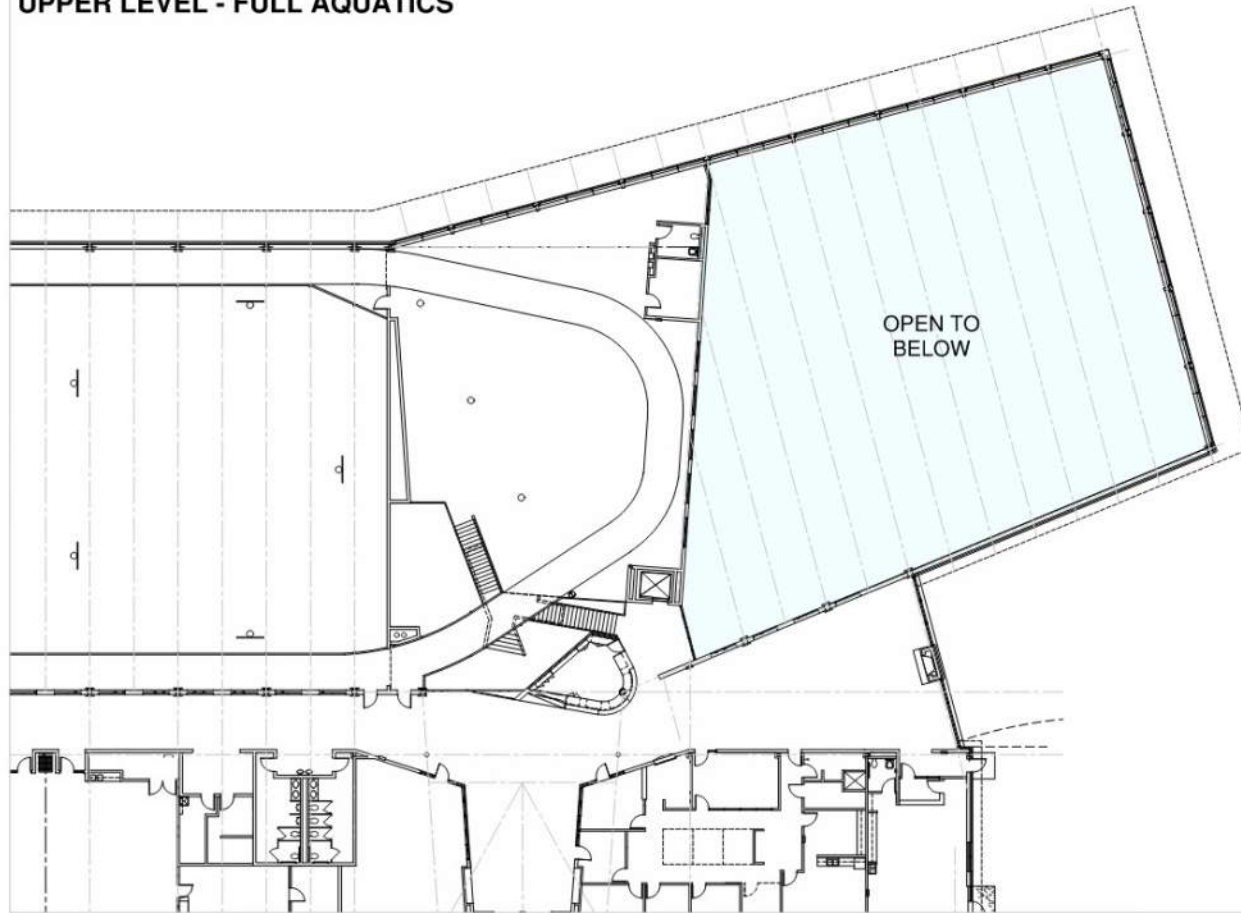


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - FULL AQUATICS



DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

INDOOR FAMILY AQUATICS

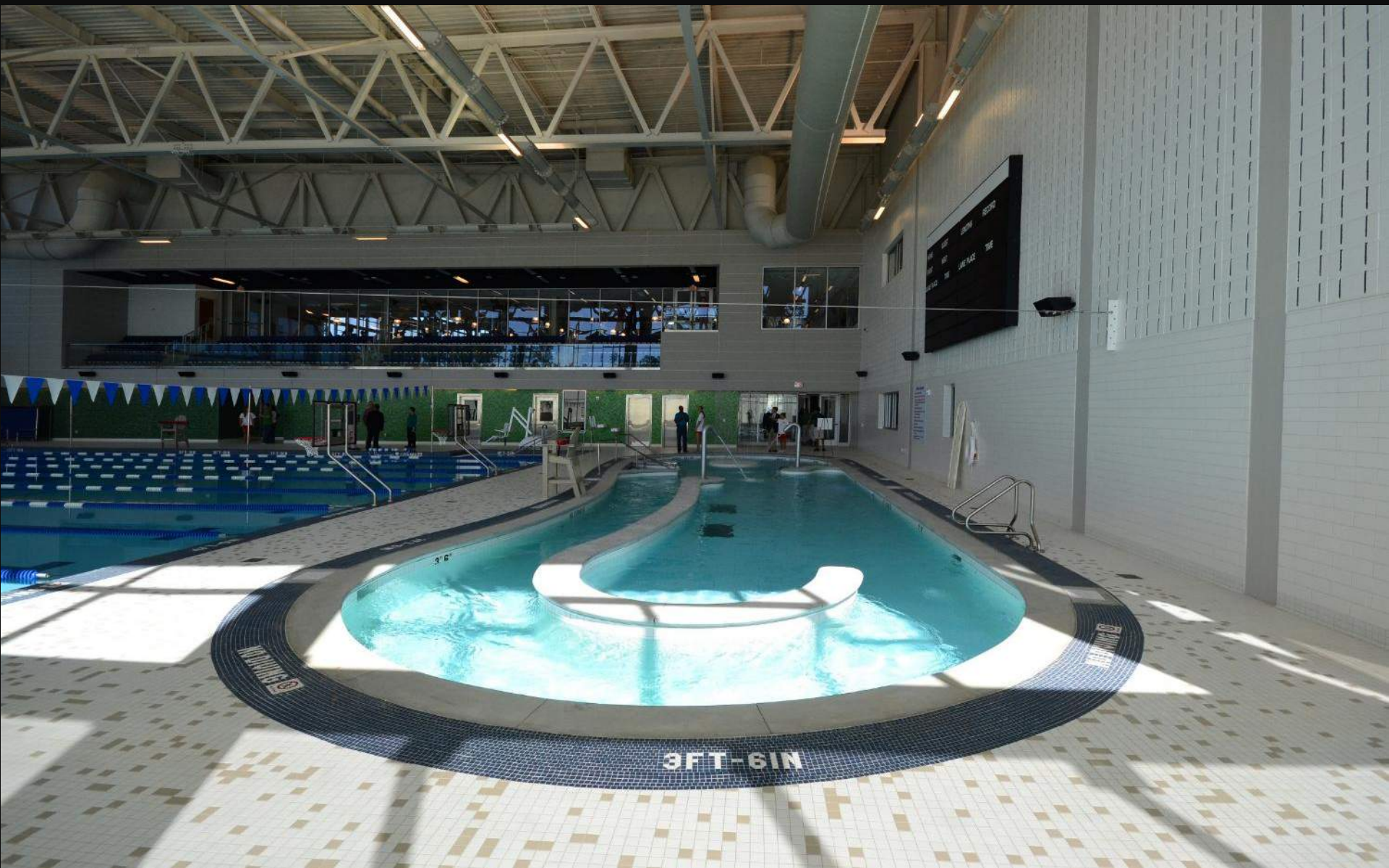


INDOOR AQUATICS



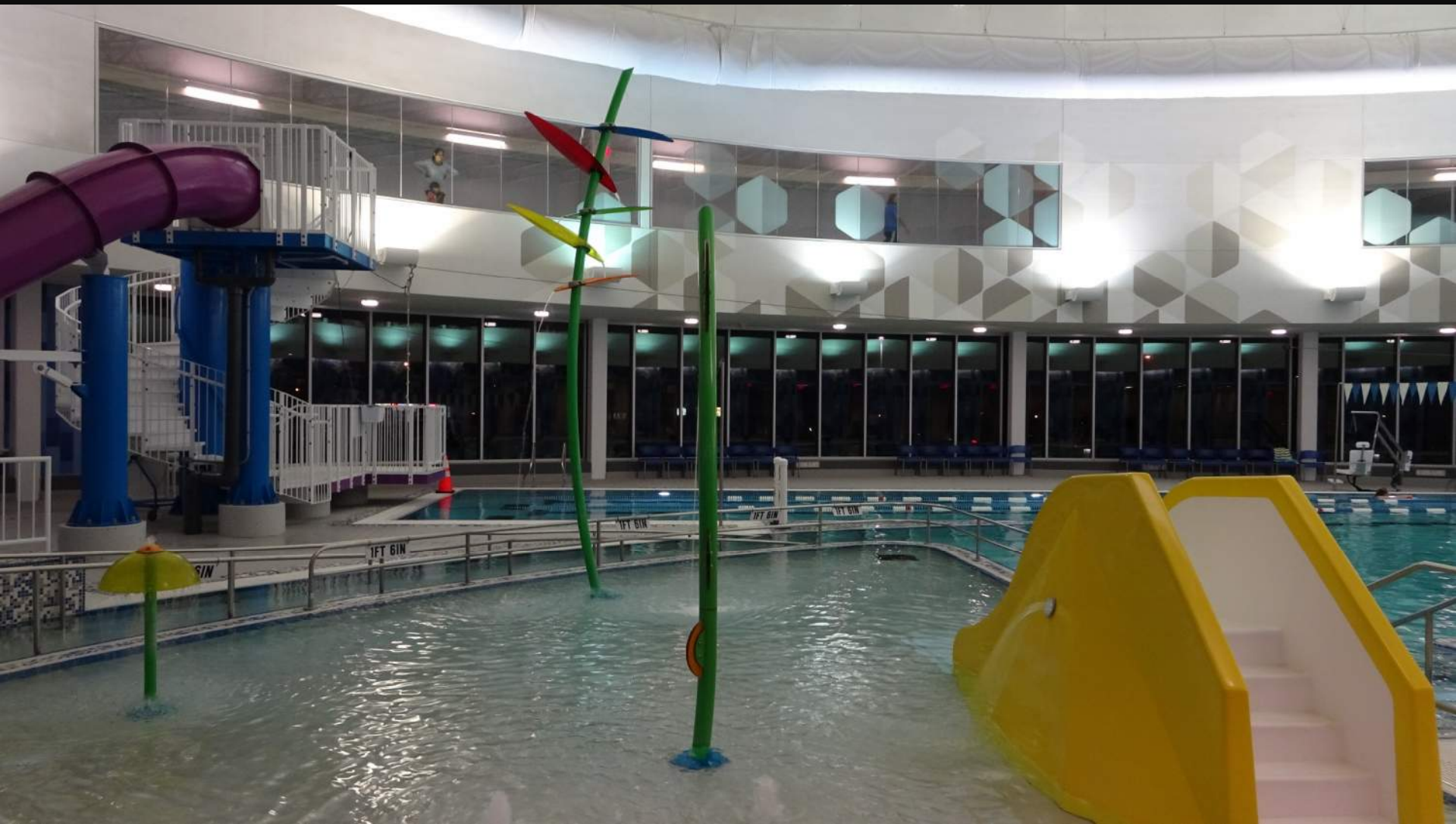






SWIM	WIM	WIM	WIM	WIM
100	200	400	800	1600
3200	6400	12800	25600	51200
100	200	400	800	1600
3200	6400	12800	25600	51200

9FT-6IN





WET MULTIPURPOSE SPACE

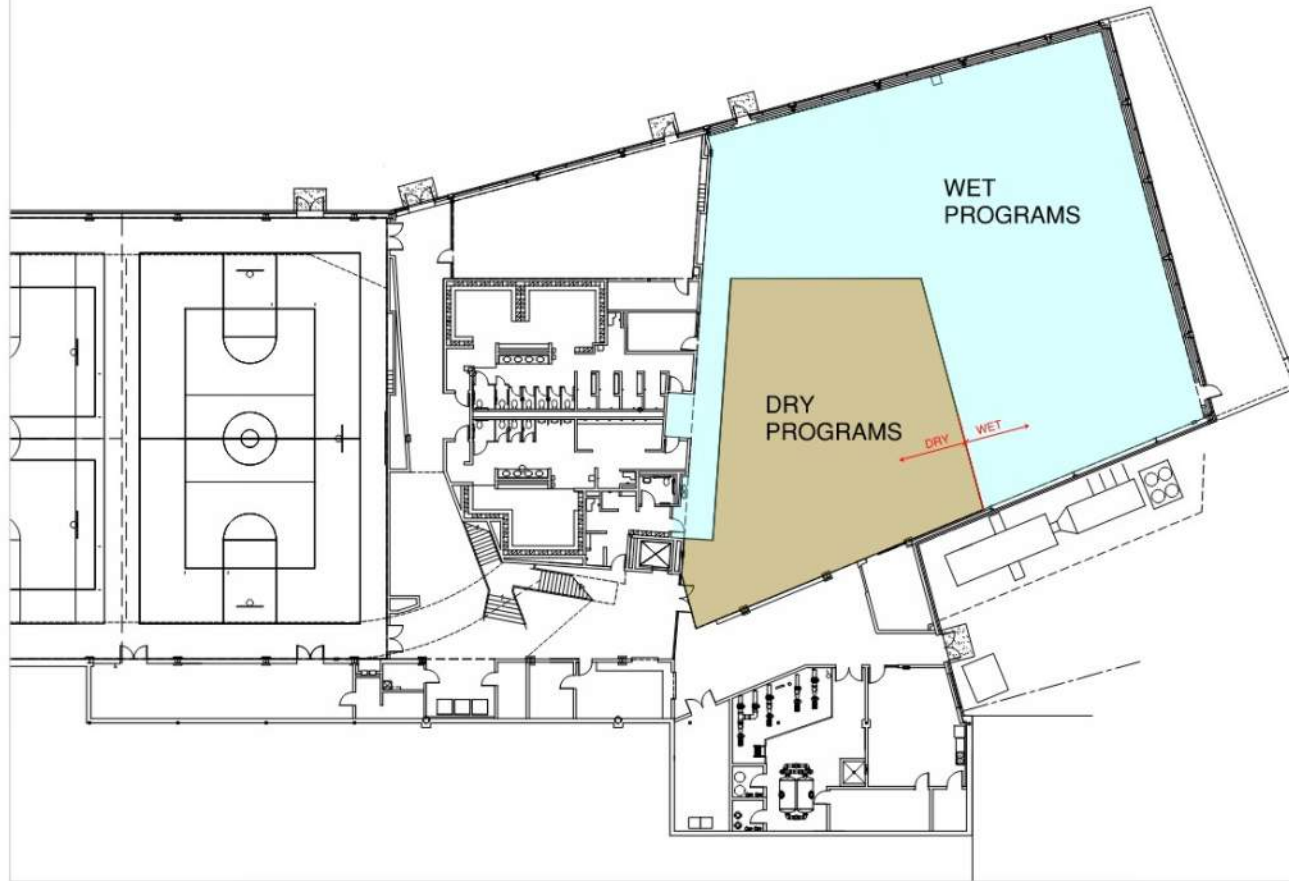


SAUNA



RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL - REDUCED AQUATICS + NEW DRY SPACE

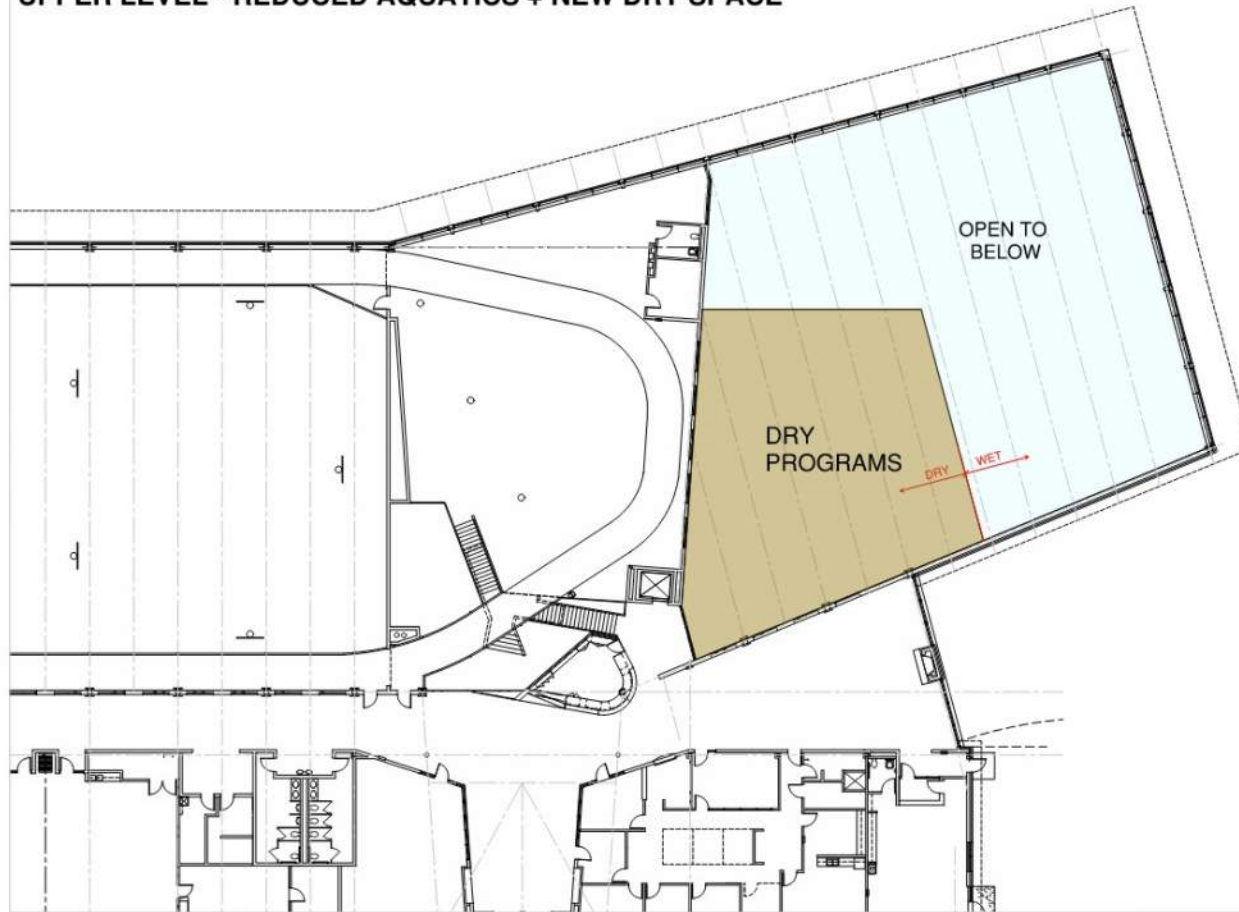


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - REDUCED AQUATICS + NEW DRY SPACE

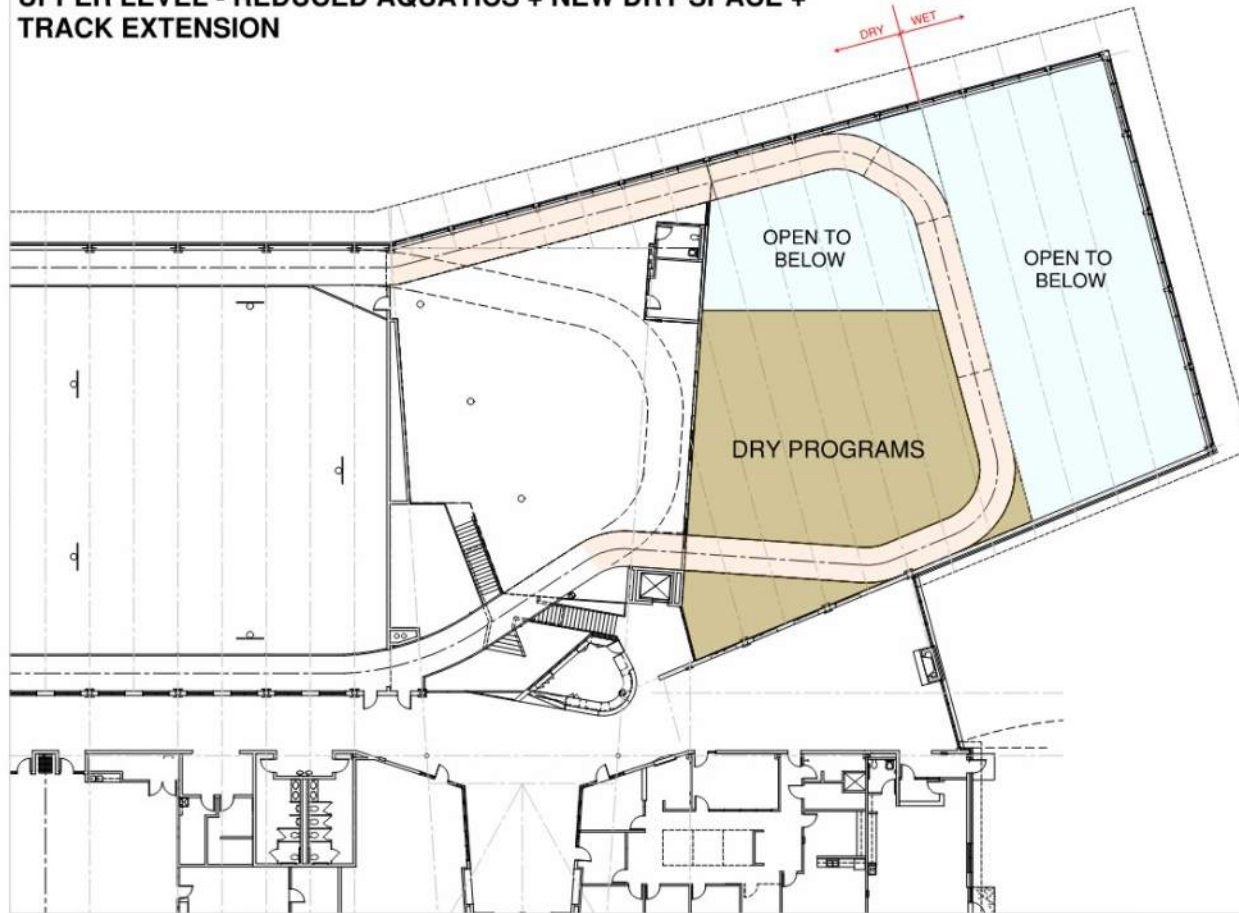


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

**UPPER LEVEL - REDUCED AQUATICS + NEW DRY SPACE +
TRACK EXTENSION**



DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

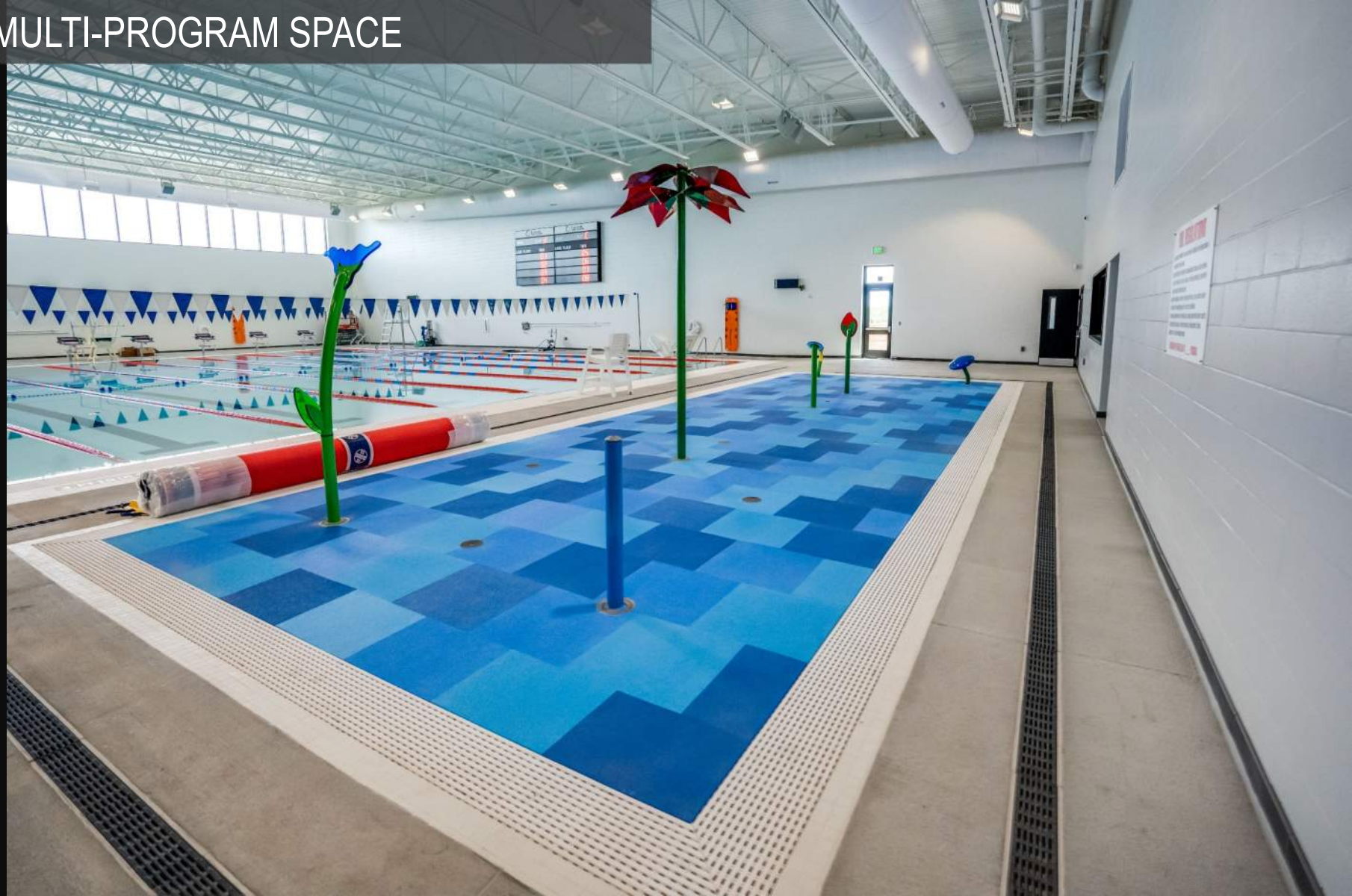
INDOOR FAMILY AQUATIC







MULTI-PROGRAM SPACE











FLOATABLES



CLIMBING



ZIP LINE

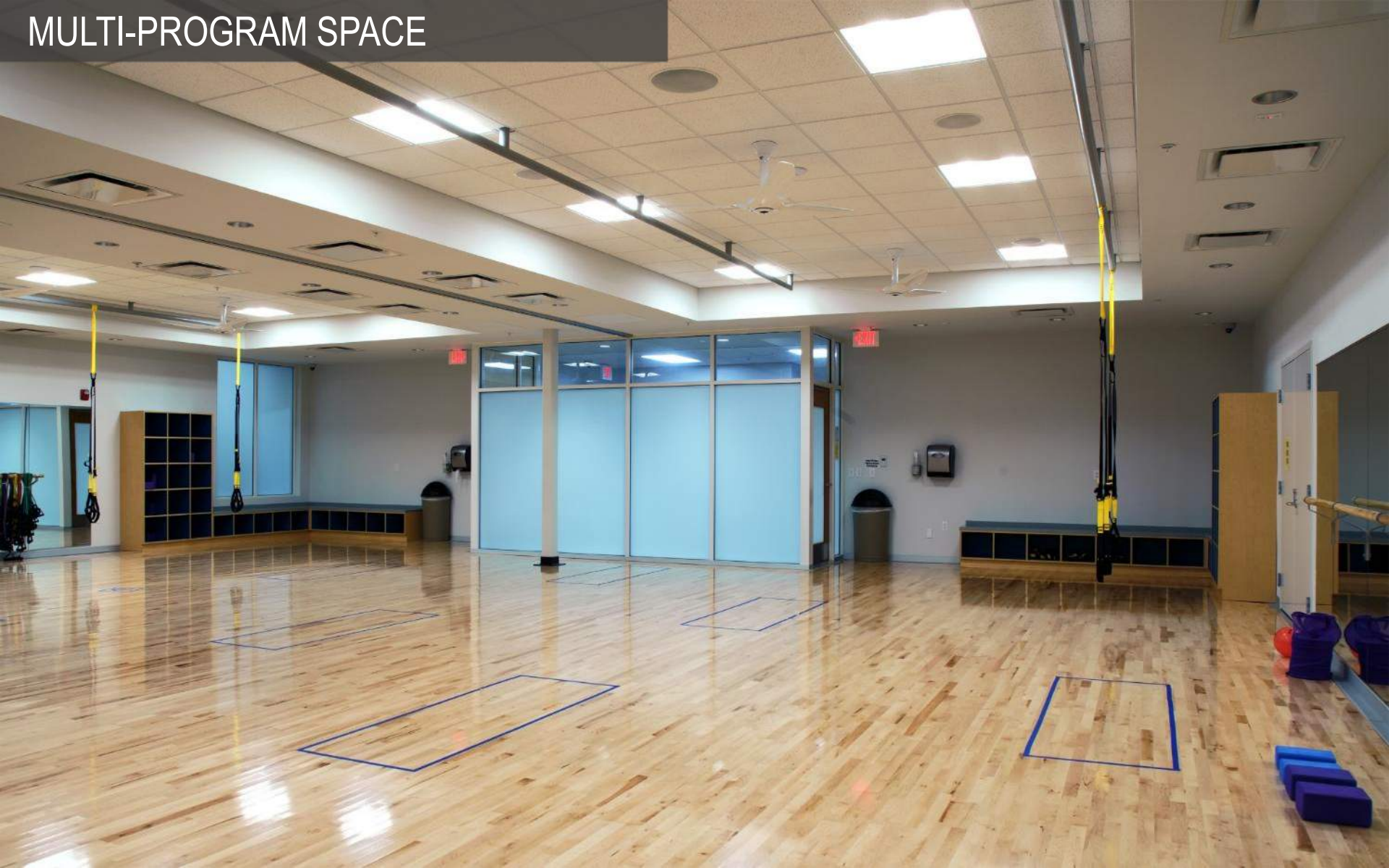


SLACK LINE

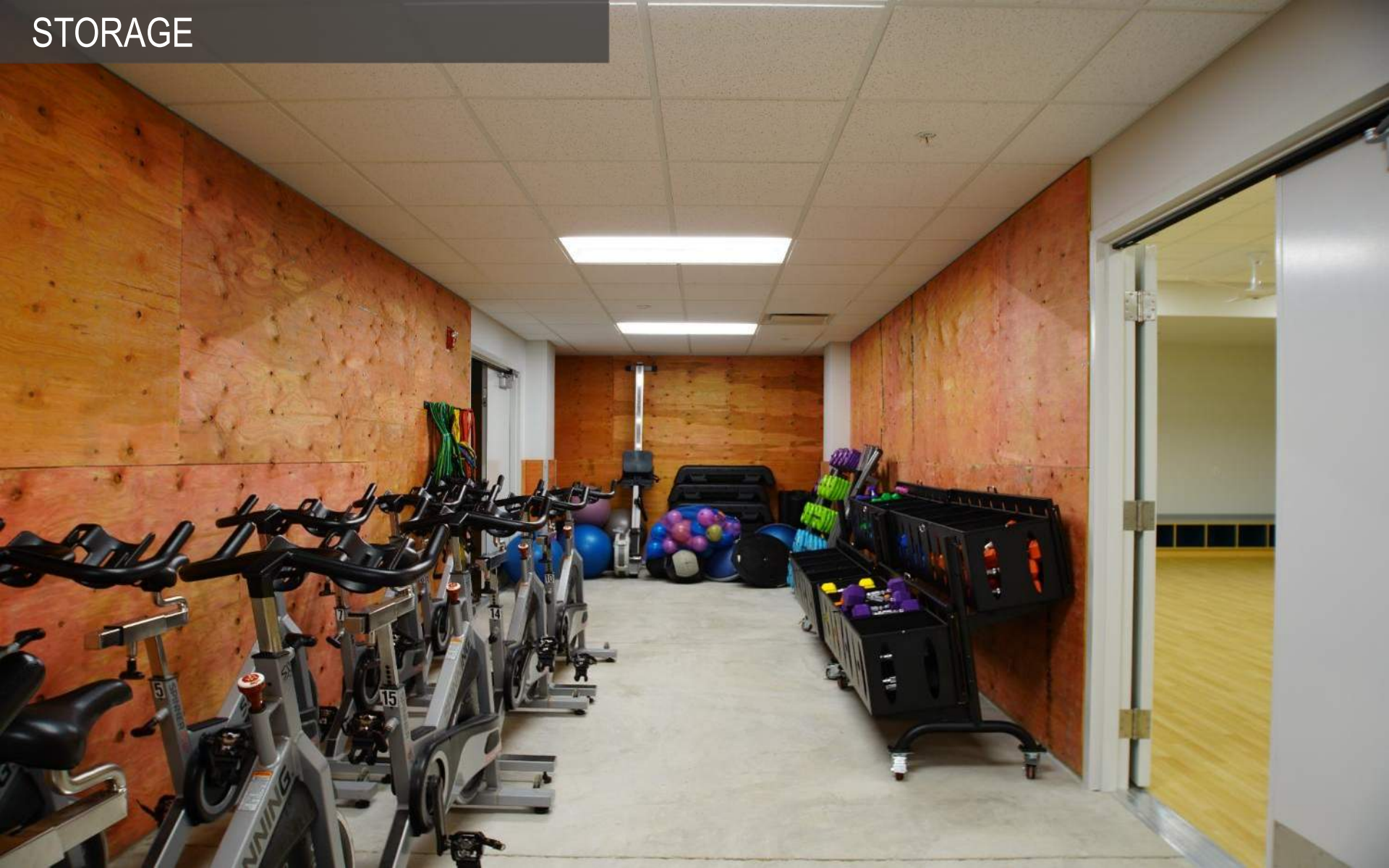




MULTI-PROGRAM SPACE



STORAGE



MULTI-PROGRAM SPACE



E - SPORTS





WALKING – JOGGING TRACK

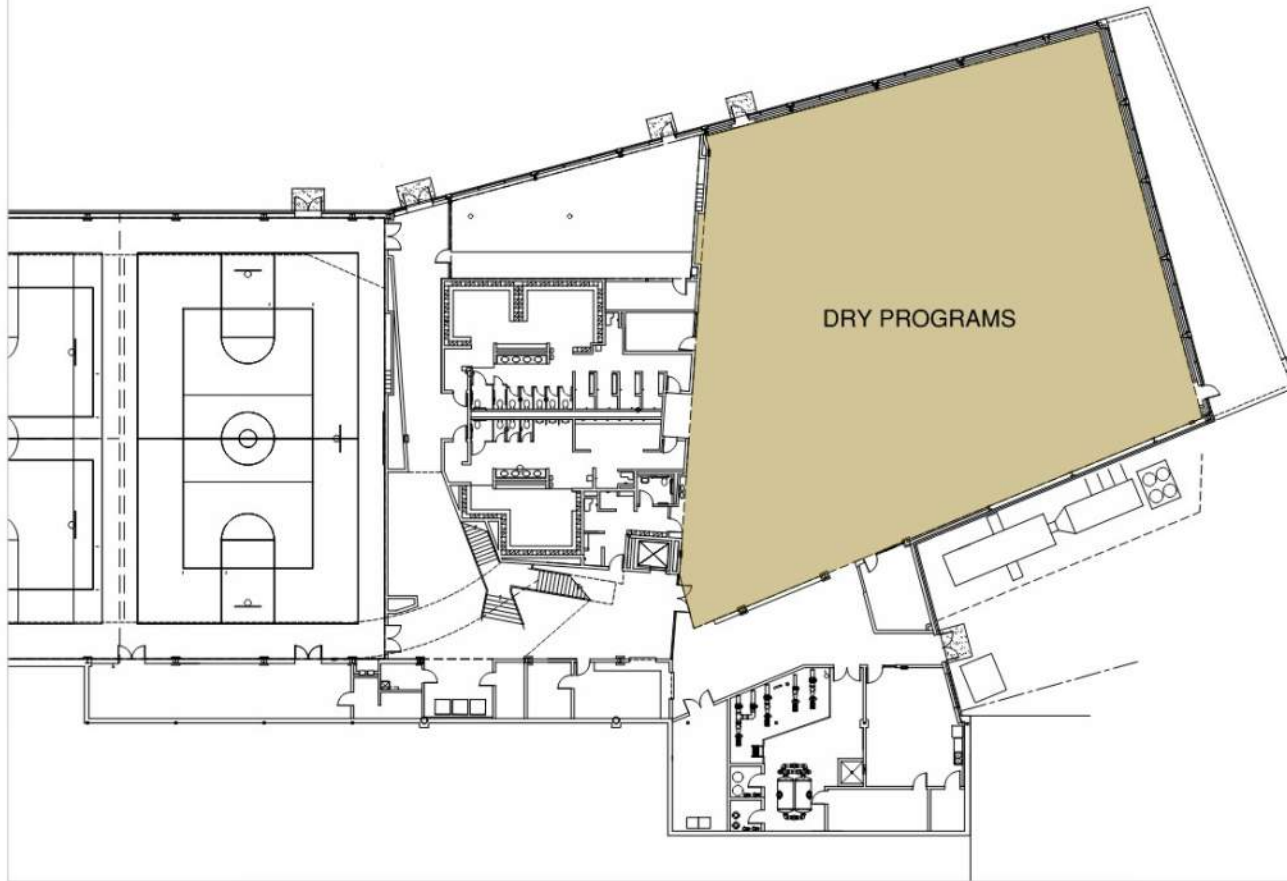






RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

LOWER LEVEL - ALL DRY / NO AQUATICS

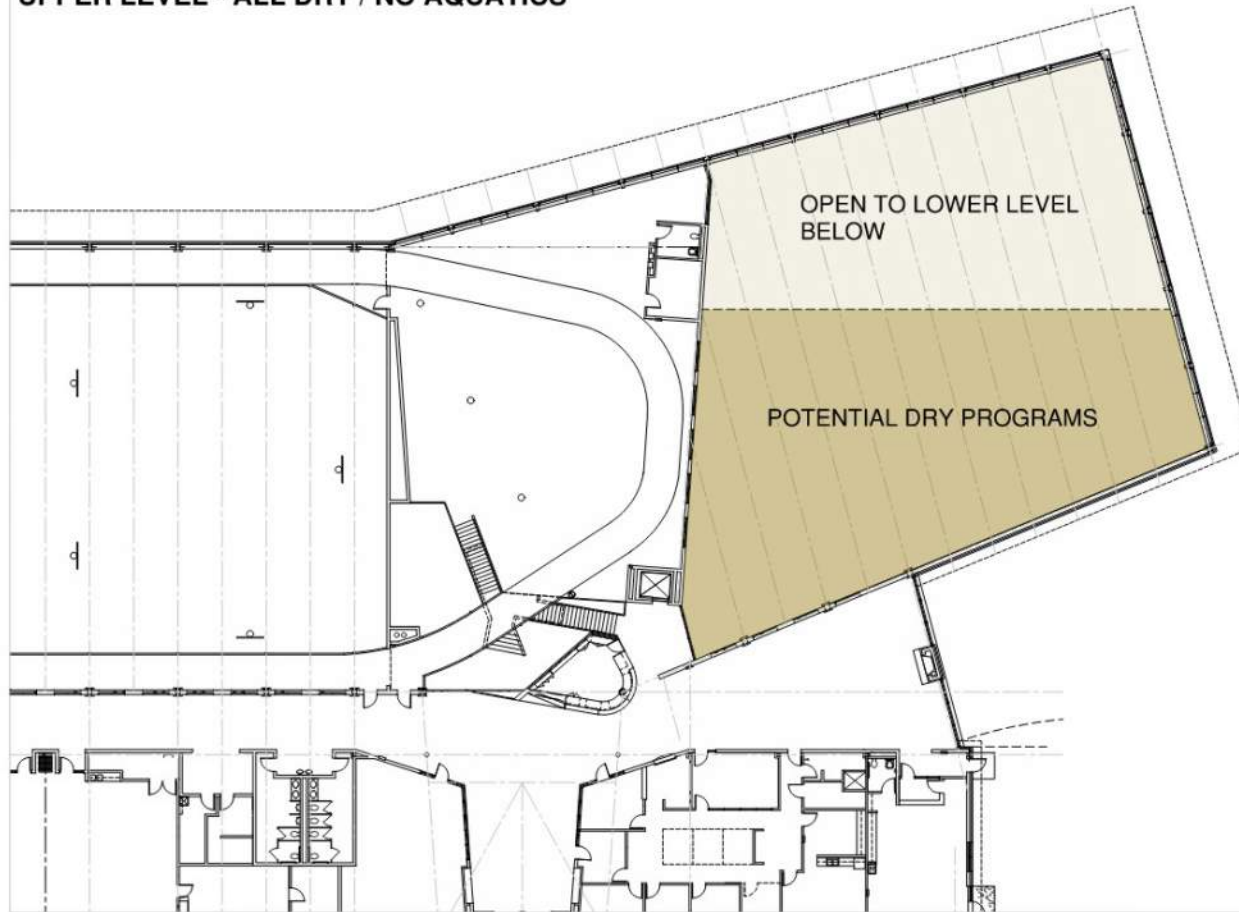


DATE: 3.16.2026

SCALE: 1/32" = 1'-0"

RENOVATED INDOOR AQUATIC SPACE (NATATORIUM)

UPPER LEVEL - ALL DRY / NO AQUATICS



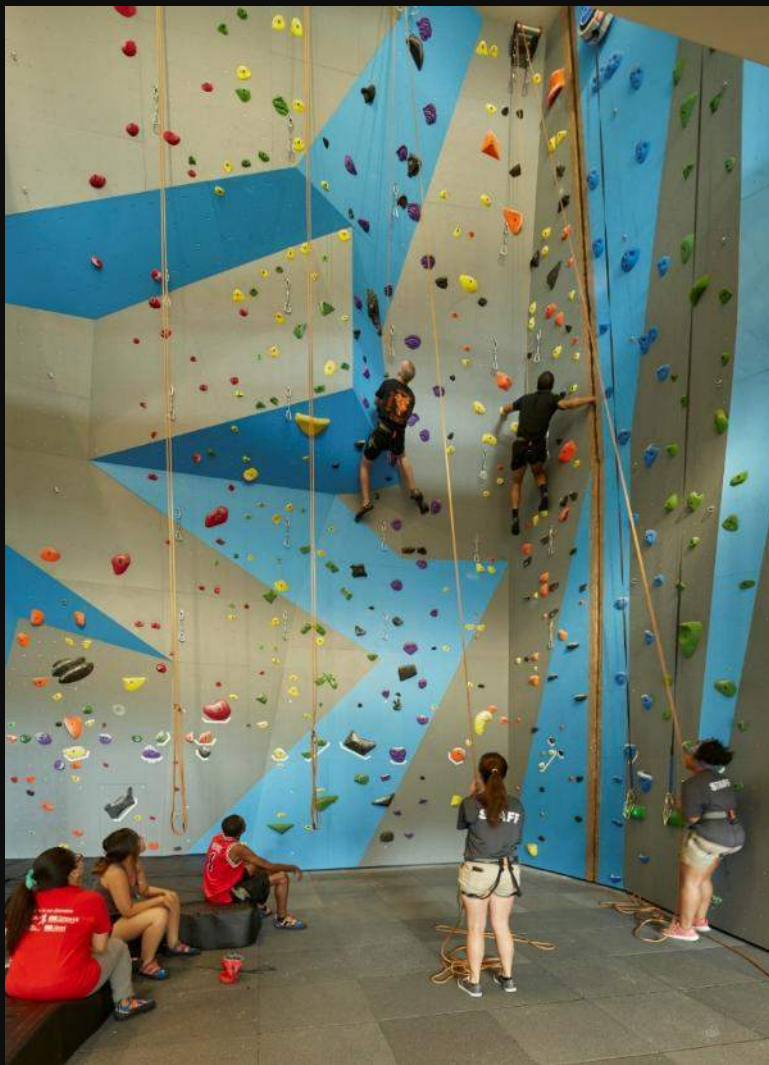
DATE: 3.16.2026

SCALE: 1/32" = 1'-0"





CLIMBING WALL



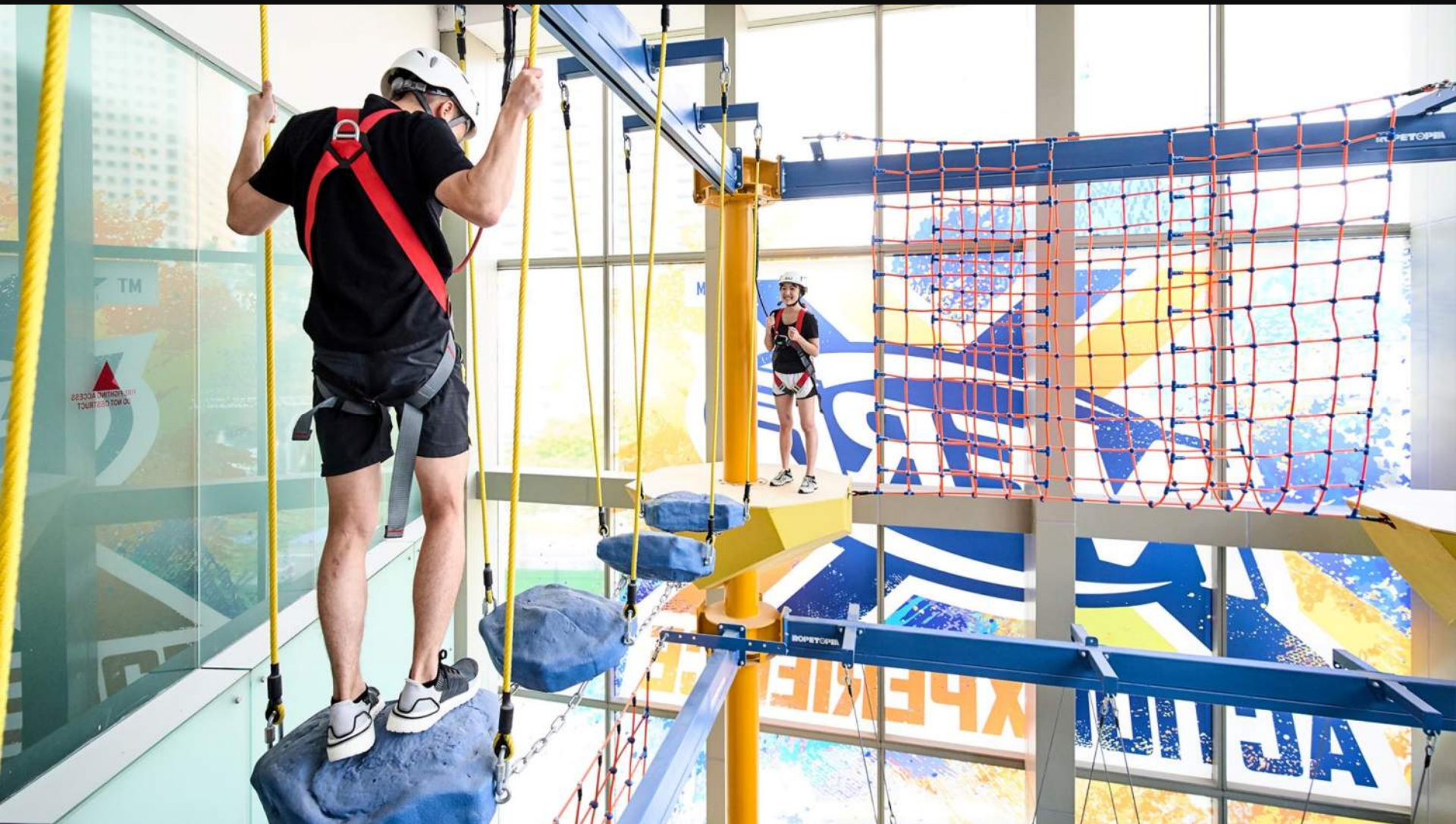
BOULDERING WALL



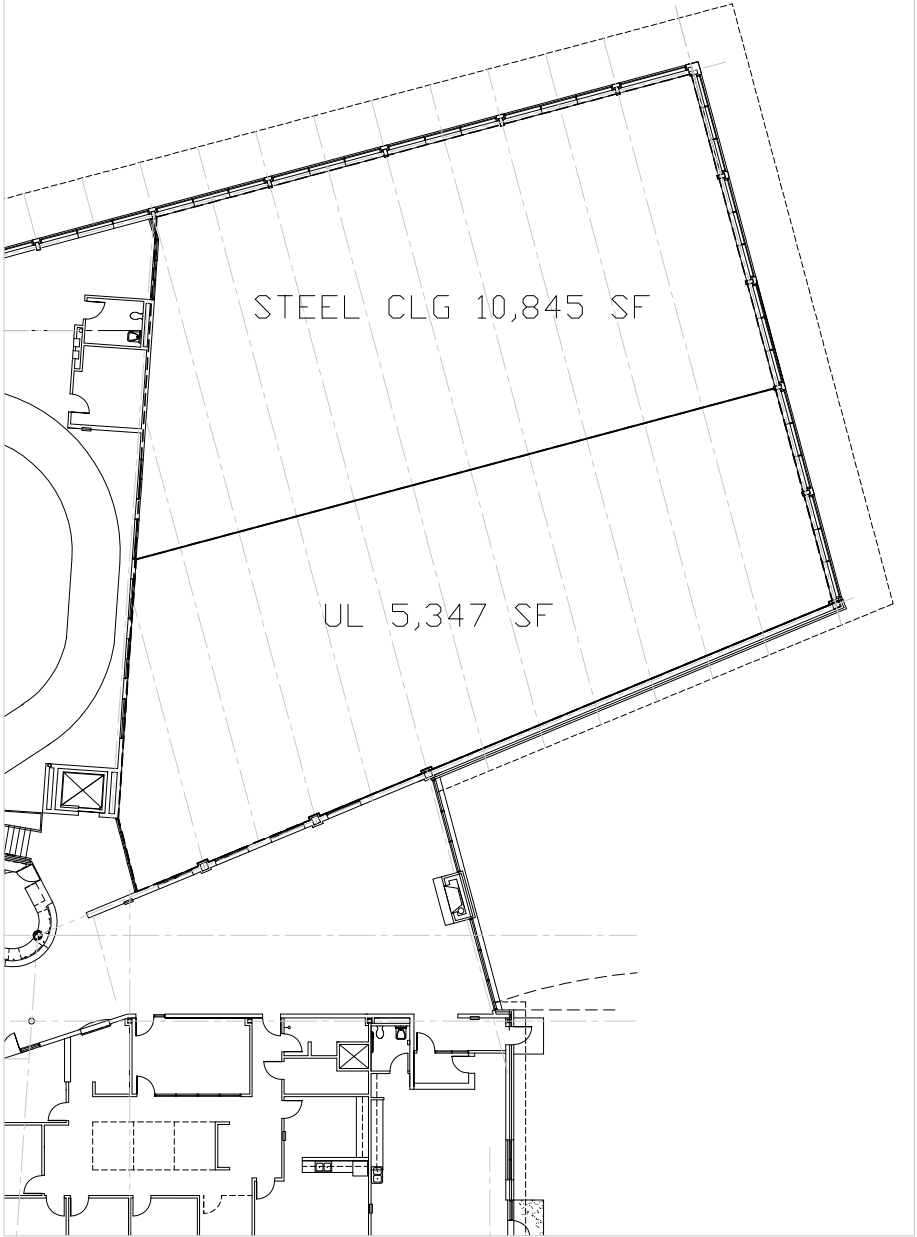
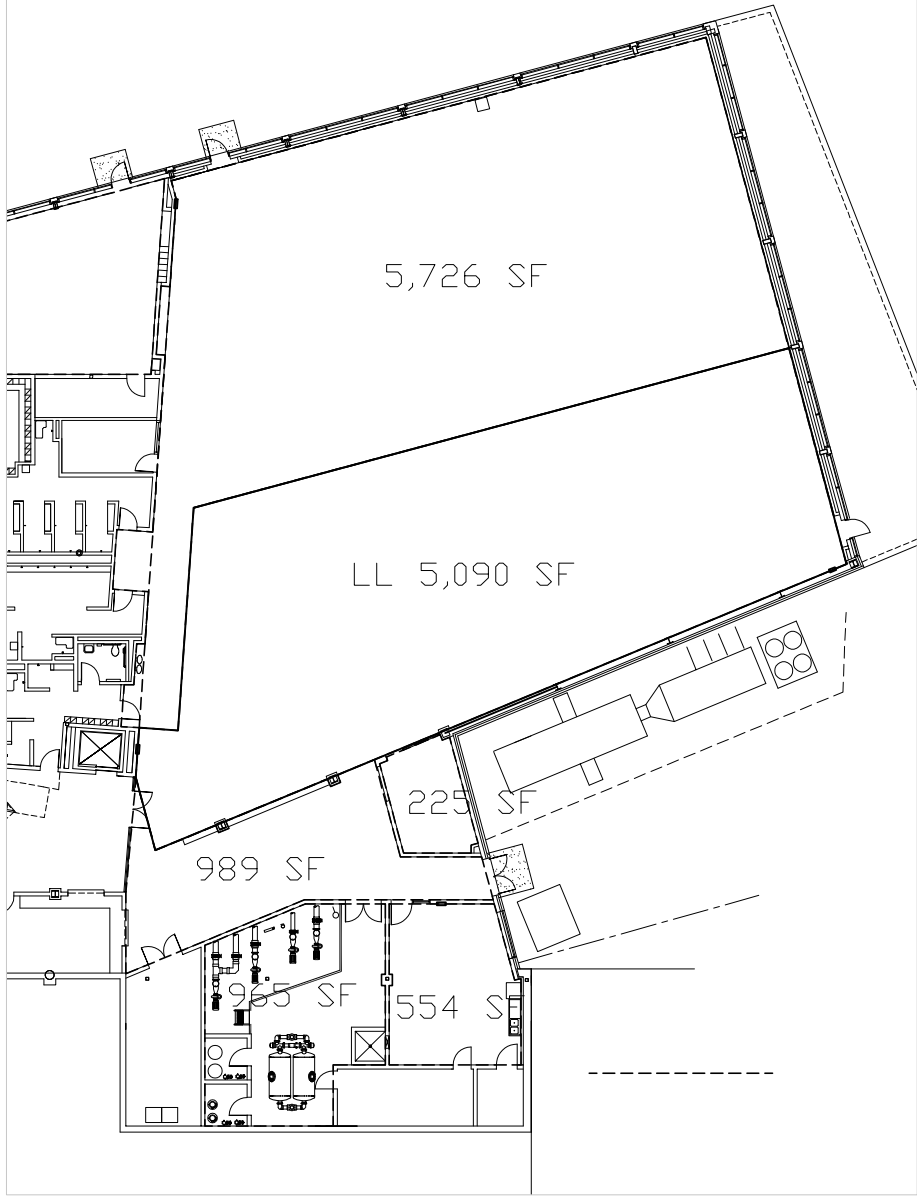
SKATE PARK







OPTION B



DATE: 4.22.2026

SCALE: 1/32"= 1'-0"

CONCEPT B

CONCEPT B

6/30/2024

Program Elements		Renovation SF	Total SF
EXISTING NATATORIUM			
D			
Lower Level - Aquatics (5,714 GSF)			
New Indoor pool and deck	5,726	5,726	
Pool Equipment - Pump Filter Room	965	965	
Sauna / Steam	190	190	
Wet Multipurpose Room	554	554	
Pool Staff Office	225	225	
Concenssions Lounge	989	989	
Lower Level - AquaticsI Total	8,649	8,649	
Lower Level - Dry Area (5,090 GSF)			
Multiuse / Event Space	5,090	5,090	
Lower Level - Dry Area Total	5,090	5,090	
Upper Level - Dry Area (5,347 GSF)			
Weight Fitness Space	5,347	5,347	
Upper Level - Dry Area Tot	5,347	5,347	
NATATORIUM RENOVATION - TOTAL	19,086	19,086	

4.20.2026	Ren	New
5,726		
965		
190		
554		0
225		0
989		0
8,649		0

\$/SF	Renovation Level			
Ren	Low	Med.	High	
75%	50%	75%	100%	
75%	50%	75%	100%	
\$400			x	
\$351			x	
\$313			x	
\$255		x		
\$255		x		
\$226	x			

15% + 15%	\$/SF	\$/SF	Estimate	Estimate	Estimate
Reno	New	Reno	New	Combined	
100%	1				
\$400	\$534	\$2,291,116		\$2,291,116	
\$351	\$468	\$338,382		\$338,382	
\$313	\$417	\$59,437		\$59,437	
\$191	\$340	\$105,797		\$105,797	
\$191	\$340	\$42,968		\$42,968	
\$113	\$301	\$111,522		\$111,522	
\$341		\$2,949,221		\$2,949,221	

\$142			x	\$142	\$189	\$722,080	\$0	\$722,080
				\$142	\$0	\$722,080	\$0	\$722,080

5,347		0	\$151			\$151	\$202	\$809,108	\$0	\$809,108
5,347		0				\$151	\$0	\$809,108	\$0	\$809,108

19,086		0				\$235		4,480,410	\$0	4,480,410

Steel Decking and Trusses	10,845										Est Contingency?		
Pool Mechanical - Pool Pac HVAC Replacement											Design Continge	20%	\$896,082
											Coontractor	15%	\$672,061
													\$6,048,553
											Soft Cost	25%	\$1,512,138
													\$7,560,691

2018 - 2026 (94% Escalation)

CONCEPT B - 1.4 plus 1.6

Program Elements	6/30/2024	
	Renovation SF	Total SF
EXISTING NATATORIUM		
D		
Lower Level - Aquatics (5,714 GSF)		
New Indoor pool and deck	5,726	5,726
Pool Equipment - Pump Filter Room	965	965
Sauna / Steam	190	190
Wet Multipurpose Room	554	554
Pool Staff Office	225	225
Concessions Lounge	989	989
Lower Level - Aquatics! Total	8,649	8,649

Lower Level - Dry Area (5,090 GSF)		
Multiuise / Event Space	5,090	5,090
Lower Level - Dry Area Total	5,090	5,090

Upper Level - Dry Area (5,347 GSF)		
Weight Fitness Space	5,347	5,347
Upper Level - Dry Area Tot	5,347	5,347

NATATORIUM RENOVATION - TOTAL	19,086	19,086
--------------------------------------	---------------	---------------

Total Area 19,086
Steel Decking and Trusses 10,845
Pool Mechanical - Pool Pac HVAC Replacement

2018 - 2026 (124% Escalation)

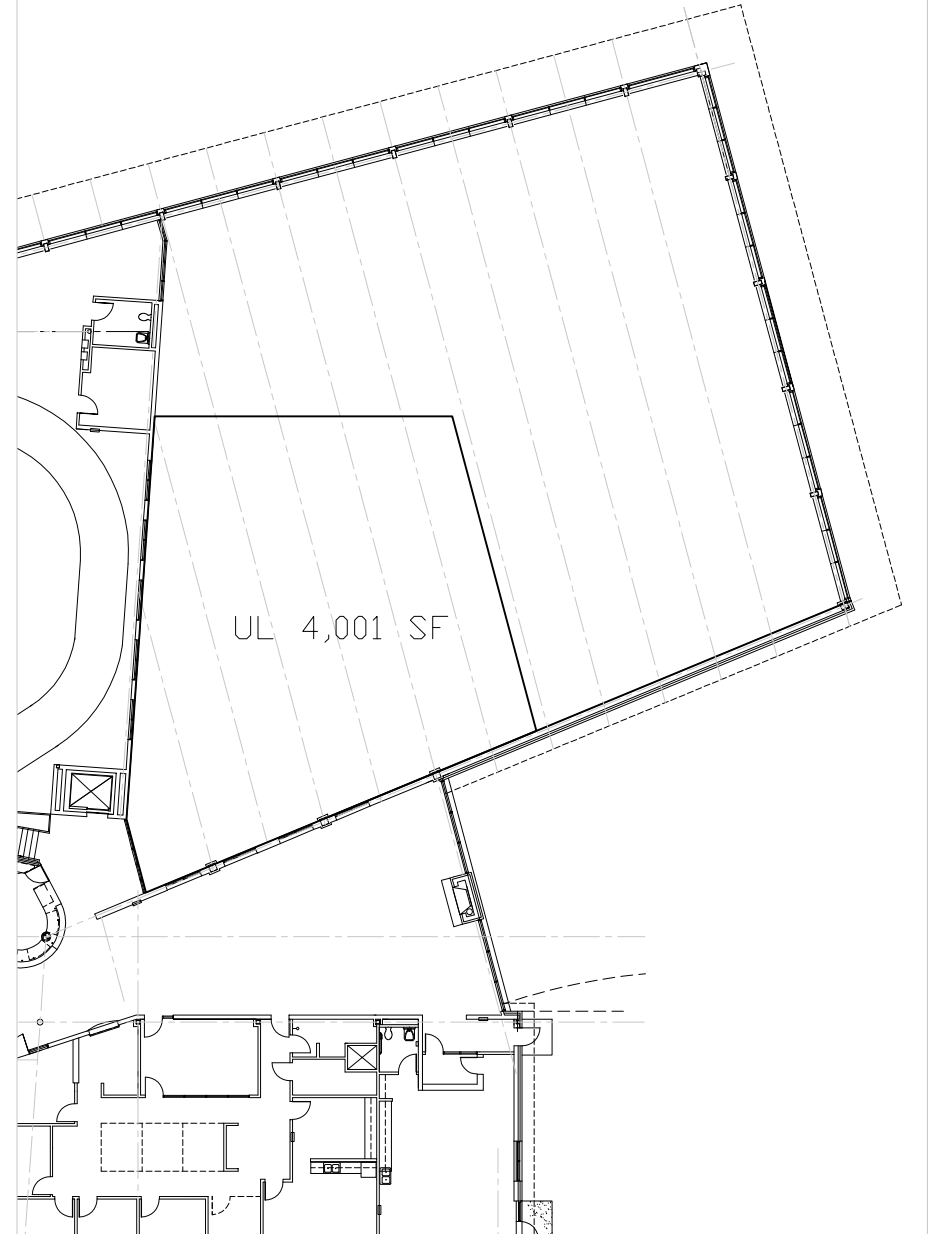
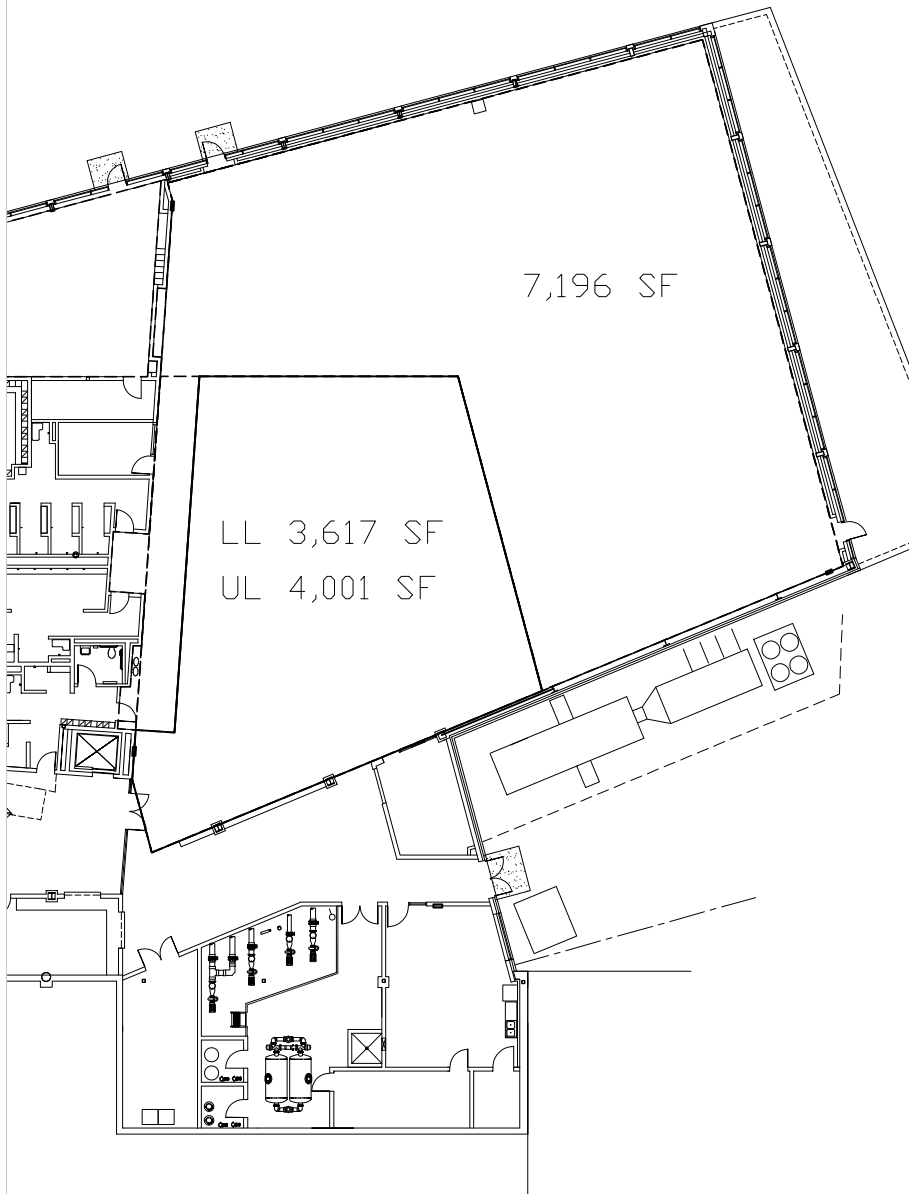
4.20.2026		\$/SF				15% + 15%				
Ren	New	Ren	Low	Med.	High	\$/SF Reno	\$/SF New	Estimate Reno	Estimate New	Total Combined
		75%	50%	75%	100%	100%	1.6			
		75%	50%	75%	100%					
5,726		\$370			x	\$370	\$493	\$2,116,330		\$2,116,330
965		\$405			x	\$405	\$540	\$390,709		\$390,709
190		\$361			x	\$361	\$482	\$68,628		\$68,628
554	0	\$164		x		\$123	\$218	\$68,059		\$68,059
225	0	\$168		x		\$126	\$224	\$28,350		\$28,350
989	0	\$168	x			\$84	\$224	\$83,076		\$83,076
8,649	0					\$319		\$2,755,152		\$2,755,152
5,090	0	\$164			x	\$164	\$218	\$833,742	\$0	\$833,742
5,090	0					\$164	\$0	\$833,742	\$0	\$833,742
5,347	0	\$175			x	\$175	\$233	\$934,228	\$0	\$934,228
5,347	0					\$175	\$0	\$934,228	\$0	\$934,228
19,086	0					\$237		4,523,122	\$0	4,523,122

Design Contingency 20% \$904,624
Coontractor 15% \$678,468
Estimating Continencyt 20% \$904,624
Construction Cost \$7,010,838

Soft Costs (???) 0.25 \$1,752,710

Total Project Cost \$8,763,548

OPTION C



DATE: 4.22.2026

CONCEPT C			6/30/2024						15% + 15%				
Program Elements	Renovation	Total	4.20.2026		\$/SF	Renovation Level			\$/SF	\$/SF	Estimate	Estimate	Estimate
	SF	SF	Ren	New		Ren	Low	Med.	High				
						75%	50%	75%	100%	100%	1		
EXISTING NATATORIUM													
Lower Level - Aquatics (5,714 GSF)													
New Indoor pool and deck	7,196	7,196	7,196		\$400				x	\$400	\$534	\$2,879,300	\$2,879,300
Pool Equipment - Pump Filter Room	965	965	965		\$351				x	\$351	\$468	\$338,382	\$338,382
Sauna / Steam	190	190	190		\$313				x	\$313	\$417	\$59,437	\$59,437
Wet Multipurpose Room	554	554	554	0	\$255			x		\$191	\$340	\$105,797	\$105,797
Pool Staff Office	225	225	225	0	\$255			x		\$191	\$340	\$42,968	\$42,968
Concessions Lounge	989	989	989	0	\$226	x				\$113	\$301	\$111,522	\$111,522
Lower Level - Aquatics Total	10,119	10,119	10,119	0						\$350		\$3,537,405	\$3,537,405
Lower Level - Dry Area (5,090 GSF)													
Multiuse / Event Space	3,617	3,617	3,617	0	\$142				x	\$142	\$189	\$513,117	\$513,117
Lower Level - Dry Area Total	3,617	3,617	3,617	0						\$142	\$0	\$513,117	\$513,117
Upper Level - Dry Area (5,347 GSF)													
Weight Fitness Space	4,001	4,001	4,001	0	\$151				x	\$151	\$202	\$605,431	\$605,431
Upper Level - Dry Area Tot	4,001	4,001	4,001	0						\$151	\$0	\$605,431	\$605,431
NATATORIUM RENOVATION - TOTAL	17,737	17,737	17,737	0						\$262		4,655,953	\$0 4,655,953

Steel Decking and Trusses	10,845										Est Contingency?		
Pool Mechanical - Pool Pac HVAC Replacement											Design Continge	20%	\$931,191
											Cocontractor	15%	\$698,393
													\$6,285,537
											Soft Cost	25%	\$1,571,384
													\$7,856,921

2018 - 2026 (94% Escalation)

The following is a summary of information that BK has gathered thus far from Rolla, along with commentary from what BK has heard through the various listening sessions.

Based on the data that has been shared with BK the following commentary can be offered.

- From fiscal year 2003 (first full year of operations) through fiscal year 2017:
 - \$1,145,893.75 Average Revenue
 - \$1,365,488.60 Average Expense
 - (\$219,594.85) Average Subsidy
 - 83.9% Average Cost Recovery
- In the initial feasibility study that Ballard*King completed prior to the building opening, it was projected that the building could achieve an 80% cost recovery.

Based on information that Power Wellness has recently shared the following can be offered.

	2025	2024	2023	2022
Revenues	\$1,214,105	\$1,105,747.00	\$1,156,853.00	\$965,318.00
<i>Aquatics</i>	<i>\$67,999.00</i>	<i>\$86,798.00</i>	<i>\$107,527.00</i>	<i>\$118,113.00</i>
Expenses	\$1,796,372.00	\$1,704,006.00	\$1,693,646.00	\$1,501,129.00
Subsidy	(\$582,267.00)	(\$553,259.00)	(\$536,793.00)	(\$535,811.00)
Cost Recovery	67.6%	67.5%	68.2%	64.3%

- Note the Aquatics revenue is broken out but is reflected in the total Revenue line. Because BK's focus is developing the revenue model for the pool, it was important to see how that has been trending.

The following chart provides some scenarios for project cost, debt services, and operational subsidy. These assumptions are consistent across all scenarios.

- \$1.6 Million – Revenue Generation from a ¼ Cent Sales Tax
- 15 Year Payment Term
- 4% - Interest Rate
- \$450,000 – Subsidy
 - Assumes a \$1.8 million operating budget and a 75% cost recovery rate.

	Project Cost	Payment	Sales Tax Revenue	Subsidy	Surplus
Option #1	\$5,000,000	\$444,000	\$1,600,000	\$450,000	\$706,000
Option #2	\$10,000,000	\$888,000	\$1,600,000	\$450,000	\$262,000
Option #3	\$15,000,000	\$1,332,000	\$1,600,000	\$450,000	(\$182,000)

Ideally, the project budget would be in the \$10 million range, as it would allow for debt service to be retired, subsidy to be covered from a dedicated source outside of the general fund, and a surplus that the City could place into a sinking fund dedicated to improvements for the entire the building.

As part of BK's scope of services we've been asked to develop an operational plan for the proposed aquatic option. The following information outlines the assumptions that BK has made in the development of the operational plan. This plan is based on the best information available at the time of the study along with historical data and BK's years of operational experience.

Primary Assumptions:

- The pool will be operated by the City of Rolla.
- The pool will have 4, 25Y lanes and a current channel that runs the length of the pool.

Additional Assumptions:

- The pool will operate 50 weeks a year to account for a week closure and holidays.
- Operational Hours:
 - School Year
 - Mon-Fri 6:00A-1:00P & 4:00-8:00P
 - Sat 7:00A-5:00P
 - Sun 12:00-5:00P
 - Summer
 - Mon-Fri 6:00A-8:00P
 - Sat 7:00A-5:00P
 - Sun 12:00-5:00P
- There are two different expense models reflected in the plan.
 - Option #1 – all part-time lifeguard and lead lifeguard staffing.
 - Option #2 – two (2) full-time lifeguards to account for morning operations and part-time lifeguards for afternoons and weekends.

Expense Model:

Personnel	All Part-Time	Part-Time & Full-Time
Full-Time	-	130,000
Part-Time	208,897	138,655
Sub-Total	\$208,897	\$268,644

- Lifeguards - \$17.00/hour
- Lead Lifeguards - \$19/hour
- Full-Time Lifeguards - \$50,000 annual w/ 30% benefits
- Group Exercise Instructor - \$25/hour
- Swim Lesson Instructors - \$18.00/hour
- Birthday Party Attendant \$16.00/hour

Commodities	All Part-Time	Part-Time & Full-Time
Chemicals	15,000	15,000
Maintenance/Repair/Mat.	5,000	5,000
Recreation Supplies	1,500	1,500
Uniforms	1,000	1,000
Misc.	500	500
Sub-Total	23,000	23,000

Contractual Obligations	All Part-Time	Part-Time & Full-Time
Utilities	50,000	50,000
Water/Sewer	10,000	10,000
Contract Services	2,500	2,500
Training	3,000	3,000
Sub-Total	65,500	65,00

Total	All Part-Time	Part-Time & Full-Time
Expenses	\$297,397	\$357,155

Revenue Model:

	All Part-Time	Part-Time & Full-Time
Aquatic Programs	119,500	119,500
Birthday Parties	12,500	12,500
Rental	12,500	12,500
Total Revenue	\$144,500	\$144,500

Aquatic Programs:

- Group Exercise – average of 55 participants per month @ \$50 per month for 11 months.
- Group Swim Lessons – 1,460 registrants over a calendar year @ \$45 per registrant.
- Private Swim Lessons – average of 15 sessions per month @ \$100 per session for 11 months.
- Parent/Tot Time - \$5.00 per person per day, average of 10 people per day, 4 days a week for 44 weeks.
- Birthday Parties - \$250 per party with an average of 1 party per week.

Year 3-5 Average:

	All Part-Time	Part-Time & Full-Time
Expenses	\$321,912	\$386,597
Revenues	\$171,954	\$171,954
Surplus/Deficit	(\$149,958)	(\$214,642)
Cost Recovery Percent	53.4%	44.5%

The keys to the financial success of this project, in the opinion of BK, are as follows:

1. The decrease in the amount of water may help decrease expenses, but it must be recognized that the aquatic revenue has been decreasing since 2022. That is a program and management issue, not a facility issue. The experience BK has had working across the country is that since the pandemic, even bad pools, have waiting lists for swim lesson programs, which should be the life blood of aquatic revenue.

A new body of water needs to account for lap swimming as it does impact membership. However, if that body of water cannot accommodate a good swim lesson program (i.e. at least half of the pool less than 4' deep and a minimum water temperature of 84 degrees, preferably 86 degrees) the financial performance of that area will not improve in a dramatic way.

2. From a full-facility perspective, there needs to be a focused effort on recapturing the second gymnasium. From the BK perspective, expansion of dry space into the natatorium should have a focus on moving the weight and cardio equipment out of the gymnasium and into the former location and the new space.

For a facility like this to be financially successful, i.e. get back to the projected 80% cost recovery rate, it must have a three-prong focus: membership, programming, rental. The current operation is focused on membership, which is approximately 70% of their revenue generation. However, the elimination of a gymnasium space has negatively impacted leagues, programs, camp programs, and rentals in the opinion of BK.

3. Price Point. Whomever is operating The Centre must re-evaluate the price point for membership. Based on research that Reed Voorhees provided early in this process, the average¹ family membership is \$702 in the St. Louis area. By comparison family or household membership to The Centre is \$1,620, and it should be acknowledged that the service area population and the median household income around Rolla is lower than those comparables.

This points to an issue of diminishing returns. As expenses have increased, it is assumed that the operators have increased membership fees to try and narrow that gap. In doing so they have narrowed their market for participation. As the City and/or operator look to the future, they may want to consider a flat, per person, per month membership fee.

The other point that needs to be acknowledged is that the presence of alternative providers in the market is significantly greater in 2026 in comparison to early 2000s.

¹ Ballwin, Maryland Heights, Richmond Heights, Fenton, Wentzville, Carondelet – St. Louis, Des Peres.