



Report Date: February 14, 2025

VanRIMS No.: 08-3000-30

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TO: Park Board Chair and Commissioners  
FROM: Director, Recreation Services  
SUBJECT: Vancouver Aquatic Centre Renewal – Recommended Program

### RECOMMENDATIONS

- A. THAT the Vancouver Park Board approve the recommended Vancouver Aquatic Centre (VAC) renewal program as described in this report, which includes a 25-meter lap pool, leisure pool, large hot pool, dive towers, and other aquatic and recreation amenities.
- B. THAT the Vancouver Park Board direct staff to proceed with detailed design work of the VAC Renewal, in collaboration with City staff.
- C. THAT the Vancouver Park Board approve a Capital Plan reallocation of \$9,000,000 from the West End Waterfront Parks Phase 1 Implementation Project to fund the VAC renewal project.

### PURPOSE AND SUMMARY

This report provides a recommendation to approve the proposed VAC program optimizing the new facility for public use within the project's budget and schedule and an overview of the VAC Renewal project to date, including the feasibility study findings.

To achieve the recommended program, an additional \$30 million of funding is required. Should the Board approve the recommended program and Capital Plan reallocation, City Staff will seek Council approval for the total incremental funding in March 2025. If Council approves the additional funds, the project will proceed to detailed planning and design with the objective of starting construction in Q4 2026.

### BOARD AUTHORITY / PREVIOUS DECISIONS

As per the [Vancouver Charter](#), the Park Board has exclusive jurisdiction and control over all areas designated as permanent and temporary parks in the City of Vancouver, including any structures, programs and activities, fees, and improvements that occur within those parks.

The recommended VAC program, aligns with the following Park Board policies and principles:

- [VanSplash Aquatics Strategy](#) (October 2019) includes recommendations for a holistic approach to renewals of indoor pool facilities reaching the end of their functional lifespan and balanced aquatic experiences throughout the system, which include renewal of the VAC and a feasibility study for a large, sport training and hosting facility.

- [VanPlay – Parks and Recreation Services Plan](#) (October 2019) offers a thorough understanding of recreational needs across the entire city, including aquatic amenities, and points to VanSplash for specific recommendations.

## CONTEXT AND BACKGROUND

Built in 1974, VanSplash (2019) identified the VAC as nearing the end of its functional lifespan and a high priority for renewal in the following Capital Plan (2023-2026). VanSplash indicated the primary concerns with the facility's condition being the structural seismic performance and the precast wall panels, one of which failed in May 2022. The 2023-2026 Capital Plan allocated \$140 million for a phased approach of the facility renewal. Phase 1 proposed renewal of the 50-meter competition pool and dive tank and Phase 2 proposed included a leisure aquatic facility, pending future funding. During the 2022 municipal election, a plebiscite vote secured \$103 million for the replacement, renewal or rehabilitation of the VAC and Council approved \$37 million in the 2023-2026 Capital Plan for a total \$140 million project budget.

Park Board and City of Vancouver Real Estate, Environment and Facilities Management (REFM) staff launched the VAC renewal project in January 2024 with lead consultants Acton Ostry Architects and MJMA Architecture and Design. In late 2024, the project team completed a feasibility study for renewal options and preliminary cost estimates, initiating a new-build facility design. Staff led conversations with VAC user groups in January 2025 to validate the proposed program and input on specific program components. Subject to Board approval, staff will proceed to detailed design work to ensure the project remains on schedule.

## Current State

The current VAC facility is located on Beach Avenue in Sunset Beach Park. It is adjacent to the spectacular Sunset Beach and Seawall pathway, as well as many high-rise residential towers and the Burrard Street Bridge. It serves West End and Downtown residents, as well as the surrounding region as a swim and dive training and competition facility. The facility features a 50-meter lap tank, small teaching tank, dive tank and towers, and hot pool. Other recreational amenities in the facility include a sauna, spectator seating area, a fitness centre, and changerooms.

The VAC currently hosts three, 25-meter short course swim competitions and two regional dive competitions per year put on by club rental groups. Due to updated aquatic regulations, the existing 50-meter tank has not supported 50-meter competitive swim meets since the mid-1990's. The facility primarily attracts lap swimmers, divers, and clubs and serves as a specialized facility for training and teams, rather than a leisure facility (e.g. swim lessons, lane swimming, hot tub/steam room/sauna uses).

## DISCUSSION

### Program Recommendation

The recommended program, detailed in Appendix A, meets the greatest aquatic service need for all users, with the ability to maintain or improve most of the VAC's existing programming including:

#### *Maintained programming:*

- Aquafit and other deep-water programming
- Water polo
- Artistic swimming
- Underwater hockey

*Improved programming:*

- 25-meter competition swimming (the current level of competition swimming available), providing warmup and cool down facilities through the improved dive tank and new leisure tank.
- Dive training and competitions, providing World Aquatics compliant diving amenities
- Swim lessons
- Hot tub
- Sauna
- Steam room
- Leisure pool amenities
- Fitness centre

*Multi-purpose space*

- Accessibility, targeting Rick Hansen Gold standard
- More welcoming lobby and entrance space with a stronger connection to the adjacent waterfront.

**Feasibility Analysis and Results***Feasibility Study Approach*

The project team conducted detailed testing of the proposed VAC program feasibility put forward in the 2023-2026 Capital Plan, including a phased approach prioritizing the 50-meter pool in Phase 1 and a leisure facility in Phase 2. The technical team explored various 50-meter pool configurations for the new program, including expansion into the adjacent Sunset Beach Park, but ultimately determined this approach would not be viable. Further, the feasibility study highlighted the importance of remaining within the existing building footprint, therefore eliminating opportunities for expansion, relocation and Phase 2. This was due to several considerations, including:

- **Site Constraints:** The site is physically constrained due to the Burrard Street Bridge (engineering setbacks), Beach Avenue (road alignment), and the shoreline (sea-level rise), which limits the ability to expand west into Sunset Beach Park.
- **Deck Space and Tank Requirements:** The existing 50-meter pool does not comply with modern pool tank standards, nor modern competition or accessibility standards for on-deck space. The existing facility is not viable as a competition standard pool, further limiting the opportunities for renewing the existing 50-meter condition with a like-for-like replacement.
- **Financial Constraints:** Aquatic facilities are one of the most expensive capital infrastructure investments municipalities make due to the complexity of the building systems and volume of the buildings. High-performance competition focused facilities built to national or provincial event hosting standards require significant single use spaces (i.e. extensive spectator seating) and features (i.e. multiple competition standard lane tanks) that increase the size of these spaces and drive up the costs. Funding limitations to this project necessitate prioritizing flexible, local, community programming within the limited footprint.

- **Plebiscite Requirements:** The 2022 plebiscite requires construction contracts to be awarded and construction to commence by the end of 2026. Failure to meet this requirement risks losing the \$103 million; delaying the project schedule indefinitely; risking unplanned facility closures due to further building deterioration; and a significant increase in costs to deliver a renewed facility due to cost escalation.
- **Archaeological Concerns:** Unknown archaeological considerations in a significant waterfront location add material risk to the schedule and budget for this project, which would significantly impact program delivery.
- **Excavation and Construction Coordination:** Settlement beyond what is expected is a concern when building a pool. Using the existing building footprint reduces risk of additional construction costs. Additional excavation increases the risk of increased shoring to retain the vertical earth elements and increased costs for structural design elements.

To ensure the project remains on schedule and as close to the funding envelope as possible, the project team pivoted to a program that would accommodate existing facility services and to look for any opportunities to enhance service levels. It was also determined that prioritizing a 50-meter pool within the existing building footprint would be at the expense of all other aquatic/leisure components. The result is a hybrid of a 25-meter swim and a full complement of dive competition program, with an increase in community and leisure design considerations. This recommended program maintains or enhances all existing services (except the 50-meter pool) and offers more diverse programming opportunities. This approach also reduces the need for a phased approach, maintains as many current services as possible within one phase, and responds to a broader range of community needs.

#### *Program Analysis*

The existing VAC operates at approximately 30% of its potential operating capacity, mainly due to the temperature, depth, and configuration of the lap and dive tanks, as well as the facility's age and condition. The recommended VAC program will provide broader community leisure service delivery for the local community to participate in programming opportunities which are currently limited or not feasible in a 50-meter tank such as shallow and warmer water programming (i.e. swimming lessons, community leisure recreation, and therapeutic uses).

In 2023, VAC welcomed 187,000 swimmers. It is anticipated the renewed VAC will welcome approximately 415,000 swimmers per year across drop-ins, lessons, and other recreational aquatic uses. Assuming the new facility operates at 80% of capacity, this is a 113% increase in annual visits. VanSplash identified the importance for all new and renewed facilities to operate at as close to full capacity as is reasonably possible to avoid unnecessarily high subsidies per swim. Conversely, “overbuilding” capacity in the short term to meet long term needs will likely result in operating subsidies per swim that are so high they have a negative impact on improvements to other pools in the system or the consideration of new pools.

As a comparison, Kerrisdale and Hillcrest pools have seen a significant increase to operating capacity and operational efficiencies as a result of expanded leisure programming through recent renewals. Both pools operate in the top three of the highest performing pools in the system at 83% for Hillcrest and 112% for Killarney with respect to operational capacity. Capacities are

determined by considering a variety of uses which allows for facilities to sometimes operate over 100%. They have high percentages of use in the recreational swim and skill development (i.e. lessons) categories which are two of the most cost-effective categories of aquatic services. Of the nine indoor pool facilities, the Vancouver Aquatic Centre operates at the lowest proportion of capacity utilized at 28% (2013) and subsequently has the highest subsidy per swim, due to its focus on deep water activities and aquatic based training (swim and dive).

## **User Group Conversations & Previous Engagement**

### *Previous Engagement*

The project team utilized in-depth *VanSplash*, *VanPlay*, *West End Waterfront Plan*, *West End Community Hub*, and the *On Water Strategy* public engagement feedback to inform the feasibility study and recommended program. Generally, from this previous work, Staff heard the public at large were looking forward to a renewal of this “unfriendly and outdated” facility. Feedback, primarily collected from the work of *VanSplash*, heard that the priorities for users were to maintain the ability for swim and dive competition, a 50-meter tank, broader therapy and wellness elements to better serve seniors in the community, a variety of family-friendly features and programming, and accessibility for all users.

### *User Group Conversations*

In January 2025, City and Park Board staff consulted with dive groups on specific dive program elements and met with aquatics user groups to provide a project update around the shift from a 50-meter to 25-meter pool. Due to the project constraints, there is limited opportunity for users to provide feedback and influence the program possibilities. As such, the conversations were generally to inform these impacted groups. The full list of user groups is included in Appendix B for reference. As some user groups were unable to attend in-person meetings, Park Board staff followed up individually to ensure all groups involved in VAC programming had the opportunity to be informed about the recommended programming for the renewal project. Appendix C provides a summary of feedback received from user groups and the project team responses.

Staff are committed to maintaining positive user group relationships throughout the process, respond to concerns, and provide support through service interruption. Staff are exploring potential opportunities across the Park Board facility network to mitigate user group impact during service disruption.

## **Decision and Project Implications**

To ensure the project remains on schedule, the project team is seeking direction on the recommended program and funding reallocation, outlined in the following Financial Considerations section. Pending Board decision to reallocate \$9 million, City staff will seek Council decision to allocate an additional \$21 million towards VAC, to make up the \$30 million funding deficit.

Staff identified the following potential project risks for consideration:

Risk Category		Project Implication
<b>Schedule</b>	<i>Funding</i>	If the project does not proceed on schedule, the plebiscite funding (\$103 million) is at risk of expiring, requiring another plebiscite vote during the 2026 municipal election.
	<i>Budget</i>	Any additional delays in the project schedule will result in an increase in cost for the project, due to escalation.
	<i>Service Disruption</i>	Schedule impacts will increase service disruption uncertainty due to unpredictable shutdowns caused by building system failures or safety concerns.
	<i>Board and Council Decision</i>	Any delay in decision or alternative direction will result in schedule impacts to the project.

**FINANCIAL CONSIDERATIONS**

To maximize program delivery while maintaining swim and dive competition, the total estimated cost of the recommended program is \$170 million (class C estimate). This is \$30 million over the current allocated Capital Plan amount of \$140 million. Contributing factors for the additional costs include increased volume, structural requirements, and excavation. Should future costing go above \$170 million, the project team would undertake a value engineering process and report back to the Board if there are programmatic changes.

The additional \$30 million will come from other Capital Plan project reallocations within the City, with \$9 million coming from the West End Waterfront Parks Phase 1 Implementation. City staff are still working on funding options for the remaining \$21 million.

There is currently \$9.8 million remaining in the West End Waterfront Parks Phase 1 Implementation. Staff are seeking Board approval to reallocate \$9 million in this capital plan. The remaining will allow Park Board Staff to rescope a first phase of West End Waterfront Master Plan implementation per Board direction, and complete schematic through detailed design, so as to be ready for implementation pending funding in the next capital plan.

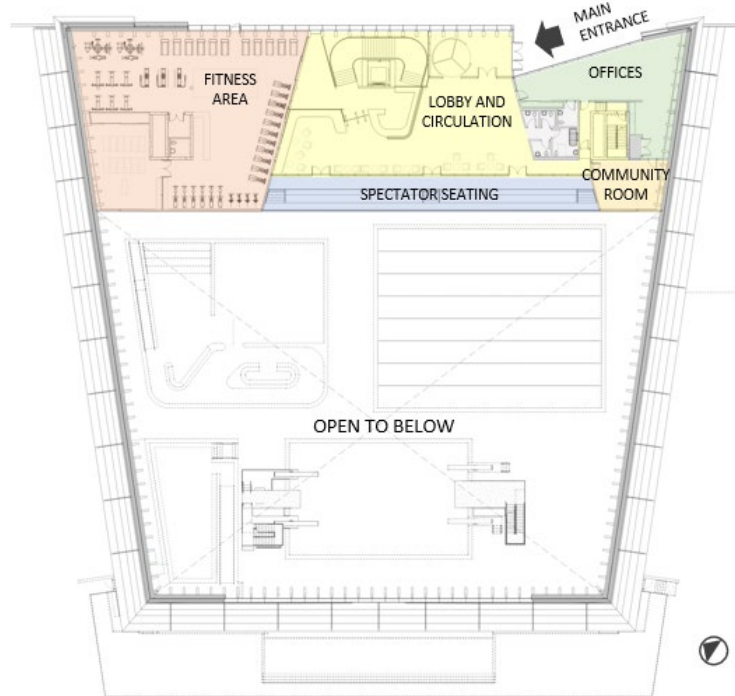
If the Board approves this reallocation, City staff will seek Council approval through the quarterly capital budget adjustment process in March 2025.

**CONCLUSION AND NEXT STEPS**

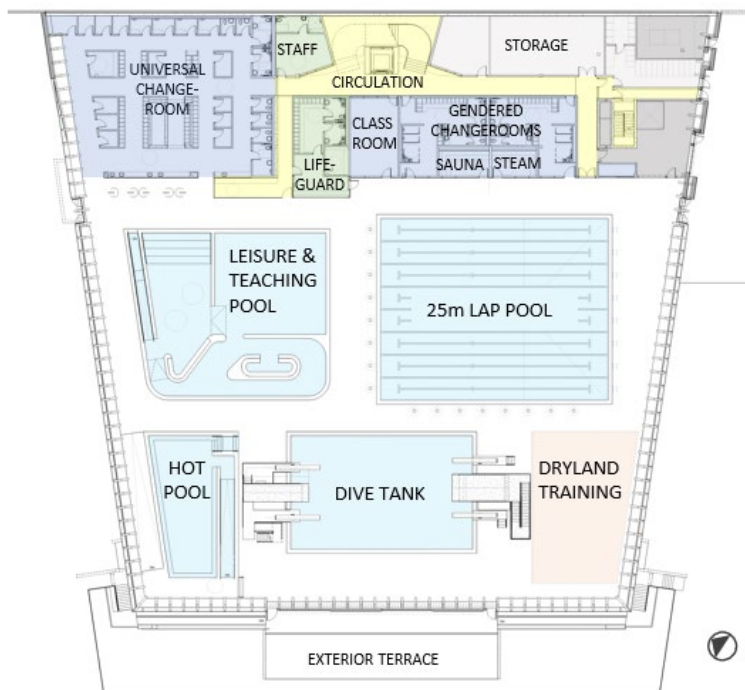
The recommended program as presented represents the collaborative efforts of Park Board and City staff, along with a dedicated consultant team to deliver a program that will best achieve existing policy and deliver a range of much needed recreation services to residents. Should the Board approve the recommendations outlined in this report, Park Board staff will continue to work closely with REFM staff on the detailed design and construction of the renewed Vancouver Aquatic Centre with the anticipated construction start in Q4 2026.

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### APPENDIX A: RECOMMENDED PROGRAM



Street Level Proposed Floor Plan



Deck Level Proposed Floor Plan

Program Element	Existing	Recommendation	Impact
Lap Pool	8-lane 50-meter lap pool	8-lane 25-meter lap pool	Continued support of 8-lane 25-meter competition
Dive Platforms	10m, 7.5m, 5m platforms	10m, 7.5m, 5m, 3m, 1m platforms	2 additional dive platforms, World Aquatics compliant
Synchro Springboards	Two 1m non-synchro and two 3m synchro springboards	Two 1m and two 3m synchro springboards	2 additional synchro springboards, World Aquatics compliant
Leisure Pool	None	Pool with stepped beach entry and ramp, children's play area, and hydro-therapy zone	Added leisure pool program
Teaching Pool	Shallow teaching/tot pool	Teaching pool integrated with leisure pool	Expanded and integrated with new leisure pool
Hot Pool	9sq.m hot pool	125sq.m hot pool	Expanded hot pool
Sauna and Steam Room	Sauna	Sauna and Steam Room	Additional Steam Room
Fitness Centre	140sq.m	465sq.m fitness centre	Expanded and modernized Fitness Centre
Community Multi-purpose Space	None	40sq.m community multi-purpose room	Added multi-purpose community space



**APPENDIX B:  
LIST OF CURRENT VAC AQUATIC USER GROUPS**

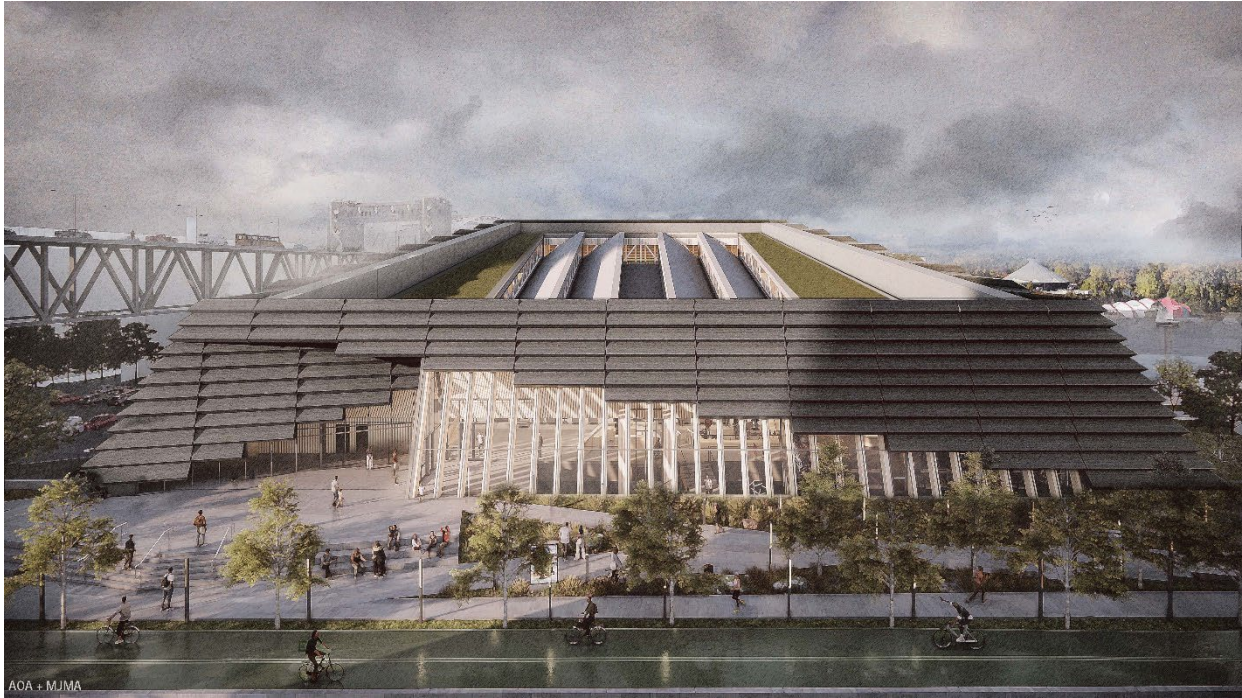
User groups included: BC Diving/Dive BC

- iDive Diving Academy Association
- NOVA Underwater Hockey
- Pacific Life Saving Club
- Pacific Storm Water Polo
- Vancouver Masters Synchro
- Vancouver Pacific Wave Synchronized Swim Club
- Vancouver Vipers Water Polo Club
- Water Polo West
- Whiskey Jacks Water Polo
- Canadian Dolphin Swim Club
- Chena Swim Club
- English Bay Swim Club
- Hollyburn Country Club
- Swim Canada
- Swim Faster
- Tri BC
- UBC Masters Swim Club
- UBC Thunderbirds & High-Performance Swim Team
- West Vancouver Otters Swim Club
- Leisure swimmers
- Swim lesson participants (parent and tot, preschool, children, and adult)
- Aquafit participants

**APPENDIX C:  
USER GROUPS FEEDBACK SUMMARY**

Theme	Feedback	Project Team Response
Diving Program	<ul style="list-style-type: none"> <li>– Generally supportive of proposed design and enhancement to dive program</li> <li>– Provided specific feedback on diving board heights and other technical elements</li> </ul>	Project team incorporated specific feedback to further enhance dive program
Swim Program	<ul style="list-style-type: none"> <li>– Concern about the loss of the 50-meter length pool and potential reduction in capacity for swim clubs who currently use the centre</li> <li>– Concerns around total reduction in usable swim club space throughout the city</li> <li>– Requests for the City and Park Board to consider increasing 50-meter swim capacity elsewhere in the city</li> </ul>	The project team acknowledges the impact of losing the 50-meter pool space and impact on swim group rental availability – the team is committed to working with the user groups to explore relocation opportunities within the overall aquatic system.
General Feedback	<ul style="list-style-type: none"> <li>– Proposed aquatics programming, specifically additional leisure space, meets the needs of the downtown community (including children and seniors)</li> <li>– General concerns about service disruption during construction</li> </ul>	The project team also acknowledges the challenges associated with service disruption for all users and commit to ongoing conversations to support this transition.

**APPENDIX D: RENDERINGS**



*Artistic rendering - North Approach, subject to Board approval*



*Artistic rendering - Lobby and Reception, subject to Board approval*



*Artistic rendering - View from Fitness Centre to Lobby, subject to Board approval*



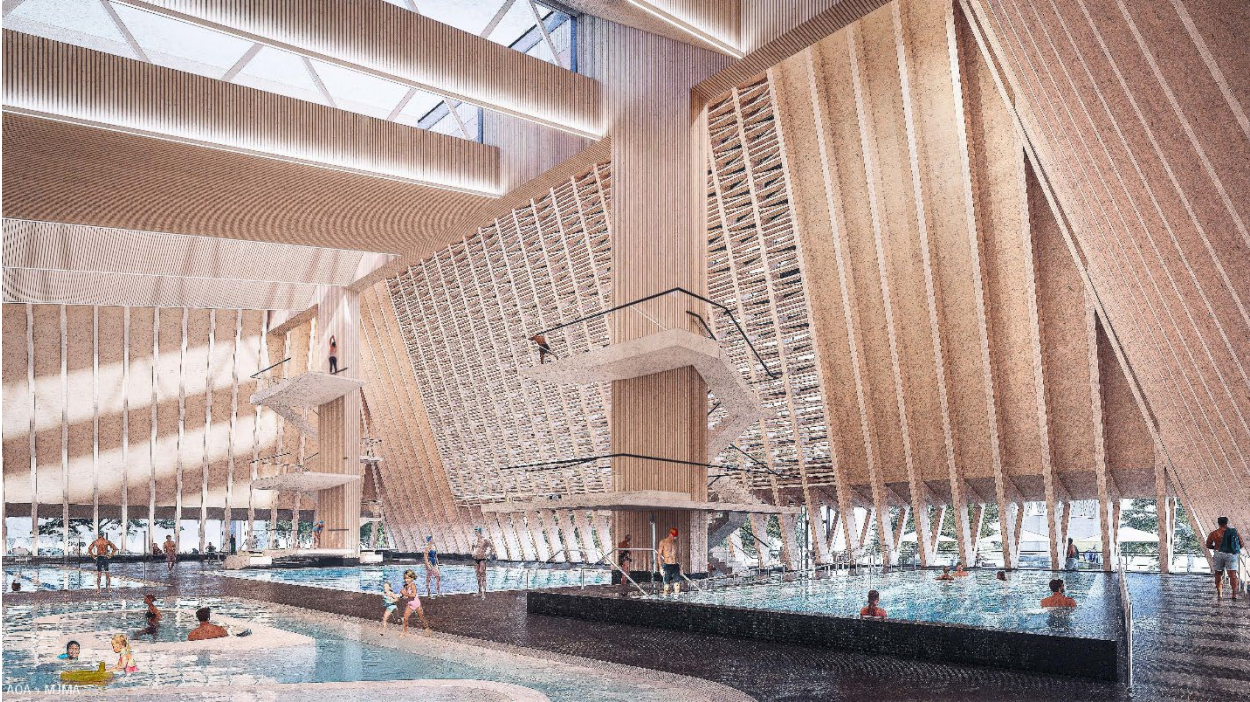
*Artistic rendering - Atrium, subject to Board approval*



Artistic rendering – Fitness Centre (facing South), subject to Board approval



Artistic rendering - Leisure Pool with Viewing Area in Far Distance, subject to Board approval



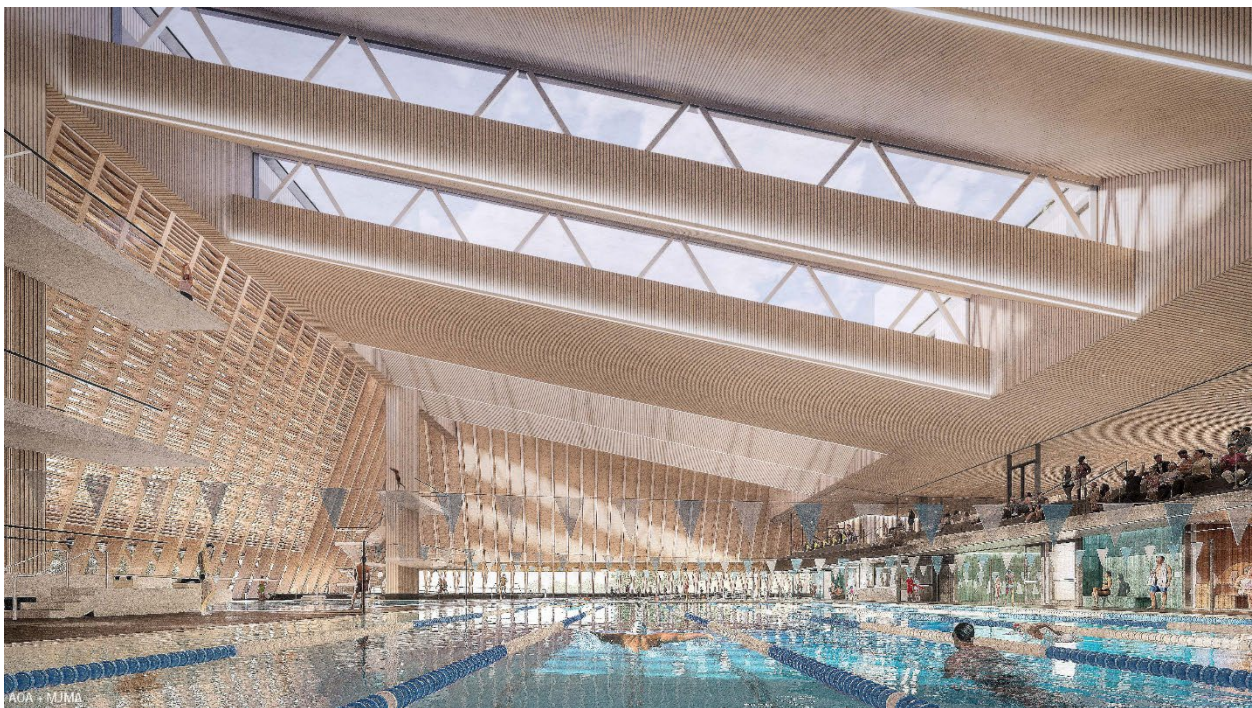
*Artistic rendering - Interior View (facing Southeast), subject to Board approval*



*Artistic rendering - View from Dive Pool (facing North), subject to Board approval*



*Artistic rendering - View of Dive Towers (facing South), subject to Board approval*



*Artistic rendering - Lap Pool (facing West), subject to Board approval*



*Artistic rendering - View from Exterior Deck, subject to Board approval*



*Artistic rendering – Exterior View looking West, subject to Board approval*