

December 7, 2020

## Multi-Use Aquatic Facility Design, Costs, and Sites

Prepared by: Sarah Tittlemore, GM Community Services

### Report Summary & Recommendation

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GEC and Counsilman-Hunsacker (a subcontractor of GEC responsible for developing the Business Case) have completed the preliminary building design, capital construction costs, and business case to conclude this phase of the project for presentation to Council. Further, this report details options related to a corporate financing plan to finance the City's portion of the capital costs for a future aquatic centre.

Administration is recommending Council approve the design and costing; and that two sites be identified as viable sites for future consideration: Michener North Lands, and the Rotary Recreation Site, pending Council deliberations being concluded on a future of the Michener North Lands and prepare an analysis and report that recommends how to include the project within the 10 year capital plan at a future budget debate.

### Proposed Resolution

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Resolved that Council of The City of Red Deer having considered the report from Community Services dated December 7, 2020 re: Multi-Use Aquatic Facility Design, Costs, and Sites hereby agrees:

1. That the future Multi-Use Aquatic Facility be constructed based on the scope, design and projected capital costing as presented;
2. That the future Multi-Use Aquatic Facility be located at either the Rotary Recreation Site or the Michener North Lands, following supplemental site evaluation by City Administration, to be determined by Council by Q2, 2021; and
3. Directs Administration to continue to find opportunity to recommend placing the Multi-Use Aquatic Facility project in the 10 year Capital Plan for consideration during future budget debate processes, when it would meet Council's budget guidelines and existing debt limit policy.

### Background

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In response to Council resolutions from April 1 and 15, 2019 (see Appendix A), an internal Project Team was struck to begin work on site evaluation and conceptual design for the Aquatic Centre. GEC Architects was hired in the late summer of 2019 to complete a site evaluation and feasibility study, conceptual design, preliminary business case/operating plan, preliminary design and phasing plan.

The Site Evaluation and Location Study report outlines the findings related to each site evaluated. Due to the confidential nature of the initial site assessments, GEC presented the findings on the Site Evaluation and Location Study at the June 22, 2020 In-Camera meeting, and a subsequent Site presentation was made December 1, 2020 at the In Camera Meeting of Council related to the Capital Budget debate. Of importance, the Site Evaluation and Location Study, Design and Costing Reports are rooted in the following key assumptions:

1. Timing:

At the time the study began, the capital budget for the aquatic facility remained in the multiyear capital plan in 2025, therefore the sites were evaluated based on the need to be ready for construction to begin in 2025.

2. Condition of Existing Outdoor Pool:

Based on a review of existing records, as well as an additional Outdoor Pool Condition Assessment conducted as part of this project, it has been concluded that the outdoor pool is at the end of its useful life. It is assumed that the existing outdoor pool will be operated within existing operational maintenance budgets without any capital reinvestment, until it is either replaced by a new outdoor water feature as part of the Aquatic Centre or it fails.

3. Location of new Outdoor Aquatic Feature:

The preliminary business case strongly recommends that in order to realize efficiencies of operations, the new outdoor aquatic feature should be located adjacent to another aquatic operation. This co-location permits the sharing of support amenities such as customer service, change rooms, lifeguards and aquatic technical staff expertise. Additional information and analysis on the operations of the outdoor aquatic feature are considered in the business planning.

4. Variable Capital Costs:

Costs that vary across the different sites that were included in the analysis are:

- Land acquisition
- Site grading and site access
- Construction of surface parking
- Allowances for soil conditions, ground improvements due to poor soil conditions
- Wetland compensation costs
- Site servicing costs (connections to major underground utilities, storm water management measures, electrical, etc.)
- Project development costs such as reclamation and offsite levies

## **Current Situation**

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GEC and Counsilman-Hunsacker (a subcontractor of GEC responsible for developing the Business Case) have completed the preliminary building design, capital construction costs, and business case to conclude this phase of the project for presentation to Council. Based on the scope and concept direction provided by Council at the April 16, 2019 meeting (as seen in Appendix A) GEC designed a building that met this scope, including the following considerations:

**A. Function**

- Enable Hosting Capabilities at the following levels:
  - Swimming - Provincial Level
  - Artistic Swimming - National Level
  - Water Polo - National Level
  - Diving - Regional Level
- Support Sport Excellence

- Be Multi-functional. Flexible configuration of pool areas allows for concurrent uses and programming efficiencies
- Meet Gaps in Aquatic Service
- Be a Regional Asset for Competitive Training and Fitness (which includes Lane Swimming)

**B. Identity**

Facility design establishes a prominent presence in the community which welcomes both Red Deerians and visitors alike

**C. Sustainability**

Design focused on energy efficiency and environmental sustainability to reduce operating costs, increase longevity of facility and promote the City's reputation of both social and environmental consciousness.

**D. Accessibility, Social and Cultural Inclusiveness**

The diverse needs and abilities of all people was included in facility design. The result is an inclusive and accessible environment allowing equitable use for all persons regardless of social or cultural background.

The facility includes a 53M x 25M pool with 10 lanes, ranging in depth from 2.5M to 3.8M with diving platforms at the deep end and two 1.5M movable bulkheads. This competition pool is compliant with FINA standards and Swim Alberta recommendations. The Facility also includes a 25M x 20.6M pool with 8 lanes, ranging in depth from 1.2M to 2.2M to accommodate swim competitions, warm up for aquatic sport competitions, and floor based depths serving local community programming needs. Two hot tubs, steam and sauna amenities, universal change rooms, spectator seating for up to 750 people, storage, sport group dryland training area, and staff supports are accounted for in the design.

Utilizing the above as the basis for design, it was determined that the Total Building Area would need to be 10,122 square metres to accommodate aquatics, public assembly, administration, change rooms, dryland training and building supports. (See Appendix B for Floor plan Renderings)

Further, an outdoor aquatic feature is recommended to be co-located at this facility, however it is costed separately to allow greater flexibility and options for Council's consideration.

## Capital Construction based on Site

Per direction received in multiple In Camera meetings, Council has determined two sites be considered: Michener North (pending the results of ongoing negotiations), and Rotary Recreation Site. Two maps are found in Appendix C that outline the Site Specific variables related to the remaining sites. The following is a summary of the building construction costs with site specific considerations:

Site	Facility Construction Cost	Land Acquisition & Site Development Costs	Sustainability, FF&E and Project Soft Costs	Total Capital Costs
Michener North	\$51,600,000	\$12,780,000	\$19,300,000	\$83,700,000
Rotary Recreation Site	\$51,600,000	\$6,100,000	\$18,700,000	\$76,400,000

\*Costs are presented in 2020 dollars and do not include escalation.

All sites require other cost considerations to be factored into the planning as funding for re-purpose of the existing Rotary Recreation Centre and/or an Outdoor Aquatic Amenity.

<b>Additional Facility Capital Costs:</b>	
Rotary Recreation Centre Re-Purpose	\$6,500,000
Outdoor Aquatic Amenity	\$7,400,000

It is noteworthy to mention that local representatives from the Central Alberta Aquatic Committee representing the disciplines of swimming, artistic swimming and water polo (as well as provincial diving leaders) were involved in the vision and design of the facility.

## Analysis

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The design of the building has met the scope as set by Council, and the capital cost of building construction has been projected at \$51,600,000 in 2020 dollars.

Based on criteria established and the evaluation of the all the options, construction of the new Aquatic Centre at Rotary Recreation Park site represents the best value for the City of Red Deer. However, a Parking Impact Assessment was conducted to evaluate the parking-related impacts associated with the new Aquatic Centre at this location. It concluded the following:

- during peak season (June-October) parking supply within 400m would not be sufficient during weekend morning periods primarily due to the Saturday Public Market
- all other times parking supply is adequate within 400m to meet peak and off-peak time periods

It is recognized that since the completion of this study, new information has been received related to the Michener North lands. As the particulars of these lands may impact this final recommendation. Further, Council approved up to \$7million for the Phase I of this project, as well as the Detailed design for the facility. To date, \$6 million remains unspent. This full amount can be applied to the cost of the facility.

## Business Case Considerations and Findings

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The Consultants were asked to address additional impacts under varying scenarios:

1. Should a new Outdoor Aquatic Feature be bundled with an indoor aquatic center (as opposed to a free-standing facility) – or not?
  - it was found that building a standalone outdoor aquatic centre could cost the City of Red Deer significantly more money each year to operate, compared to bundling with an indoor facility.
2. What is the “right size” for a new Outdoor Aquatic Feature?
  - Based on the recommended 10.2 sq. m. per 1,000 residents and using a total population of 106,566, it is recommended to add 1090 sq. m. of outdoor recreation water. In addition to the recreational water space, appropriate deck space, green space, social gathering spaces, and support spaces should also be included to support the user capacity.

3. Knowing the existing outdoor pool is past its viable lifespan, is there a need to replace the outdoor pool?
  - Due to the City losing its only outdoor pool and some of the available recreation water, the analysis shows a gap in aquatic offerings that would require additional outdoor recreation water to be added
4. If the new aquatic facility is built at Rotary Recreation Park, is the existing Michener Aquatic Centre still needed to serve the community's aquatic needs?
  - Due to the additional capacity provided by the new facility, the analysis finds that Michener is not needed to meet the local aquatic demand
5. If the new aquatic facility is built at a new site, are the existing Recreation Centre and Michener Aquatic Centre pools still needed to serve the community's aquatic needs?
  - Regardless of where the new aquatic facility is built, it is assumed that the existing outdoor pool would be decommissioned based on its facility condition assessment.
  - The new indoor aquatic centre with a new outdoor aquatic feature provides the capacity required to support the local aquatic community without the need to operate either Michener Aquatic Centre or the Recreation Centre pools.
6. If the new aquatic facility is not built at the Recreation Centre, and if it is determined that only one of the existing pool facilities is no longer required, which existing pool should be closed?
  - The Michener Aquatic Centre pool is larger than the Recreation Centre pool, but the shallow lanes are not ideal for competitive swimming. And, while it was found that Michener Aquatic Centre has a lower annual operating cost, the Recreation Centre operates at a lower cost per visit and is therefore a better value to the aquatic community.
  - The Recreation Centre provides more services at a lower cost and is controlled by The City of Red Deer. Therefore, the Recreation Centre should be prioritized over Michener if one facility needs to remain operational for city use.

## **Operating Impacts**

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In determining the best strategies to meet the City's need, special attention was placed on ensuring that the Aquatic Centre meets the needs of The City of Red Deer and its citizens and also functions efficiently for centre staff and patrons. Of equal importance, the Aquatic Centre will allow the City to host various aquatic sport competitions and training as well as provide the citizens of Red Deer with options for public lane swim, aquatic exercise, aquatic instruction, and other programs. A balanced system should also include both indoor and outdoor water, as even in colder climates, recreational swimmers prefer to be outdoors during the summer months.

The components of the business case examined varied operating models to evaluate long-term financial viability along with the City's ability to provide aquatic services for the entire community. Based on the recommendation that the new aquatic facility includes an outdoor water feature, the following was determined:

### **Revenues:**

The revenue analysis reviews facility capacity, per capita spending trends, and special user group usage. Projected attendance is based on population trends. The fee structure is based on historical rates provided

by the City of Red Deer that are used to calculate a per capita income. Revenue is estimated, taking recommended fee schedules into account (fees are recommended to increase in comparison to current Recreation Centre and Michener Aquatic Centre rates). All revenue assumptions reflect multiplying attendance by per capita. The revenue assumptions assume that the facility will increase fees every other year to keep up with increasing costs. Additionally, new facilities are increasing marketing efforts in order to increase usage on an annual basis, despite static populations.

**Expenses:**

An analysis of operating expenses includes a detailed budget model for estimating probable expenses for major areas of labor, contractual services, commodities, and utilities. User projections are made based on programming. Expenses are estimated considering hours of operation, attendance projections, local weather patterns, local utility rates, and other key items. Operating data from other facilities in the area were reviewed and considered to form projections.

Operating Projections Year 5	Outdoor Water Feature (stand alone facility)	Outdoor Water Feature (addition to indoor aquatic facility)	Indoor Aquatic Centre
Revenues	\$549,062	\$574,005	\$1,983,592
Expenses	\$723,677	\$595,918	\$5,132,968

\*Note: the first 4 years require higher subsidy as revenues are projected to increase over time.

## Funding Options

During the November 2019 Budget process, Council asked Administration to: (See Council resolutions in Appendix A):

- Explore a corporate financing plan to finance the City's portion of the capital costs for a future aquatic centre.
- Explore a corporate financing plan to finance the City's portion of the operating costs for a future aquatic centre.
- Continue to identify potential federal and provincial infrastructure grants for future aquatic centre.

For illustration purposes, the higher costs as estimated for the Michener North lands has been used (in 2020 dollars) for the analysis as follows:

Total Capital Costs – Michener North option	83,700,000
Less: Remaining funding currently approved	(6,000,000)
Less: Other changes	<u>(2,700,000)</u>
<b>Total for analysis purposes</b>	<b>75,000,000</b>

The pool cost inflates to a cost of \$91 million for 2028.

Assumptions that are embedded in the analysis that follows include the following:

1. Provincial funding – amounts of annual funding for MSI/LGFF (Local Government Fiscal Framework)
2. Inflation
3. Revenue growth – this impacts the estimated debt limit
4. Interest rates – this impacts the cost of debt financing required from the DRR
5. Growth & Amenities contribution
6. Change in cost of project as detailed design is completed
7. Change in projects amount and timing in plan

#### SCOPE

This issue has impact on the corporate financing and budget process for The City which impacts all departments.

#### OBSERVATIONS/CONSIDERATIONS

The results of the updated review of financing are as follows:

#### 2021 Capital Budget

Funding Source Balance Summary	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CPR, DRR, MSI & FGTF	37,837	18,121	11,722	13,345	13,330	16,787	18,278	11,441	18,732	14,576
TOTAL DEBT LIMIT	542,220	544,931	547,655	550,394	553,146	558,678	564,266	569,909	575,607	581,363
Actual Forecasted Debt	349,015	384,273	407,744	413,352	412,730	422,549	419,004	510,815	509,865	518,466
DEBT LIMIT AVAILABLE PER MGA	193,205	160,657	139,911	137,042	140,416	136,129	145,261	59,093	65,742	62,896
% OF DEBT LIMIT USED	64.0%	70.0%	74.0%	75.0%	74.0%	75.0%	74.0%	89.0%	88.0%	89.0%

To determine the impact of the Aquatic Facility, the main lines to look at in the above chart are the CPR, DRR, MSI and FGTF line and the % OF DEBT LIMIT USED line. The CPR, DRR, MSI and FGTF line shows that there is positive balance of \$14.576 million left between these funding sources. Up to this amount of funding could be used to fund the project and lower the debt limit used. Including the pool in the capital plan can not be done in compliance with current council budget guidelines.

#### Recommendations

With the presentation of the data to Council, Administration considers Phase I of the aquatic facility project complete. Based on the findings of Phase I, it is recommended that Council resolves that the future Multi-Use Aquatic Facility be constructed based on the scope, design, and costing as presented.

Administration also recommends that Council formally identify Rotary Recreation Site and the Michener North Lands as the only two remaining viable sites for the construction of the future Multiuse Aquatic Facility, and directs Administration to continue to refine the details related to the sites for Council consideration by Q2 2021.



And further, that Council directs Administration continue to find opportunity to recommend placing the Project in the 10 year capital plan for consideration during future budget debate processes, when it would meet Council's budget guidelines and existing debt limit policy.



## APPENDIX A – Council Resolution

At the November 19-20, 2018 Capital Budget Meeting, Council passed the following resolution:

Resolved that Council of The City of Red Deer, having considered the 2019 Multi-Year Capital Plan, hereby agrees:

1. The City Council should schedule a debate on the scope and location of the proposed aquatic centre for a decision by Q3 2019; and
2. That City Council move the detailed design costs for the proposed aquatic centre from 2023 to 2019 and 2020 in equal part of \$3.5M as a multi-year approval; and further
3. That the scheduling of the proposed aquatic centre in the Capital Plan remain as outlined pending consideration of items 1 and 2 above.

The 2019-2028 Multi-Year Capital Plan was adopted and contained a budget for construction of the Aquatic Centre in the years 2025-2027.

At the **April 1, 2019 Regular Council Meeting**, Council passed the following resolutions:

Resolved that Council of the City of Red Deer hereby agrees to add consideration of a Land Matter to the April 1, 2019 City Council Agenda.

Resolved that Council of the City of Red Deer having considered a Land Matter, In Camera on April 1, 2019 hereby endorses the revised recommendation as presented In Camera and agrees that the contents of the report will remain confidential as protected by the Freedom of Information and Protection of Privacy Act, Section 24(1)(a).

At the **April 15, 2019 Regular Council Meeting**, Council passed the following resolution:

Resolved that Council of the City of Red Deer having considered the report from Recreation Parks & Culture dated April 15, 2019 re: Aquatic Facility Planning Project – Scope hereby agrees to the Scope for the Aquatic Facility Planning Project as follows:

The Scope/Concept Plan for the aquatic facility will consider the following:

- I. Function:
  - a. Support Councils strategic goal statement “A Chosen Destination”
  - b. Enable Hosting Capabilities. Meet FINA and other relevant governing body standards for hosting sanctioned competitions at the following levels:
    - i. Swimming – Provincial Competitions
    - ii. Artistic Swimming and Water Polo – National Competitions
    - iii. Diving – Regional Competitions
  - c. Support Sport Excellence
  - d. Be multi-functional, support concurrent uses and programming efficiencies

- e. Meet gaps in aquatic service
  - f. Provide essential aquatic services as well as being an important regional asset for fitness, length swimming and competition training
  - g. Consider demand vs capacity
  - h. Incorporate sufficient spectator seating and other spaces to adequately support sporting events (i.e. meet office, deck marshalling space, wet/dry warm up areas, storage)
  - i. Inclusion of an Outdoor Aquatic element (i.e. lap and/or leisure pool)
2. Identity
- a. Support Council's strategic plan goal statement "An Economic Leader"
  - b. Maximize the benefit of the recommended site
  - c. Connect spaces and places
  - d. Support required parking and prioritize active transportation and connectivity
  - e. Design as a civic landmark balanced with fiscal responsibility
  - f. Support best practices in design
3. Sustainability
- a. Incorporate sustainability features and design for long term operational efficiencies
  - b. Explore tested and proven technologies that contribute to environmental sustainability and energy efficiencies
  - c. Site treatments help biodiversity
  - d. Space is flexible and adaptable
  - e. Building operations are efficient and resilient
4. Accessibility and Social Inclusiveness
- a. Designed to be inclusive, welcoming and safe
  - b. Designed to be accessible for all
  - c. Designed to encourage social interaction and community connections.
5. Administration will work with the consultant to deliver the site options, concept plan with options and itemized pricing, estimated capital and operating budgets, utilizing the above scope by June 2020.

**At the November 18, 2019 Capital Budget Meeting:**

Resolved that Council of The City of Red Deer having considered the 2020 Multi-Year Capital Plan hereby directs Administration to:

- 1. Continue the study on the aquatics centre focused on the location and scope only.
- 2. Explore a corporate financing plan to finance the City's portion of the capital costs for a future aquatic centre.
- 3. Explore a corporate financing plan to finance the City's portion of the operating costs for a future aquatic centre.
- 4. Continue to identify potential federal and provincial infrastructure grants for future aquatic centre.
- 5. Work with the province to ensure the City's continued access to the Michener Pool during this process.

With a submission of a report to Council in 2020 in preparation for the 2021 Capital Plan process.

APPENDIX B – Floor Plan Renderings



*Figure 1 Aquatic Facility Concept Plan*

1. Lobby / Gathering Space
2. Customer Services Desk
3. Safe
4. Open Offices
5. Storage
6. Janitorial
7. Aquatic Office
8. Staff Lounge/Lunch Room
9. Data Room
10. Mechanical Room
11. Steam Room
12. Sauna
13. Coaches Change Room
14. Wet Classroom #1
15. Wet Classroom #2
16. Control Room
17. Staff Change Room
18. Natatorium Storage
19. Dry Land Training
20. Communications Room
21. Electrical Room
22. Loading
23. Universal Change Room
24. Competition Pool (53 m)
25. Training Pool (25 m)
26. Hot Tub
27. ATM & Vending Machines
28. Access to Outdoor Aquatic Feature
29. Timing Control Room
30. First Aid
31. Natatorium Storage
32. Universal Washrooms
33. Outdoor Aquatic Feature

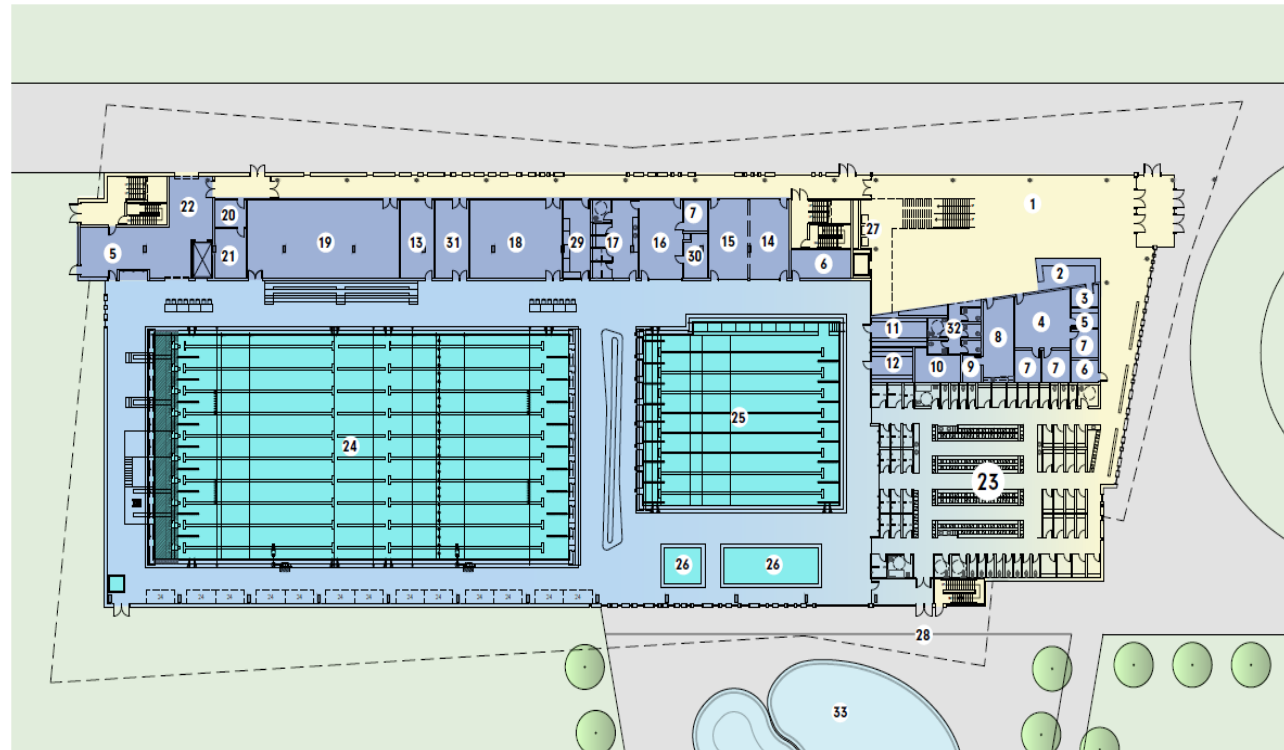
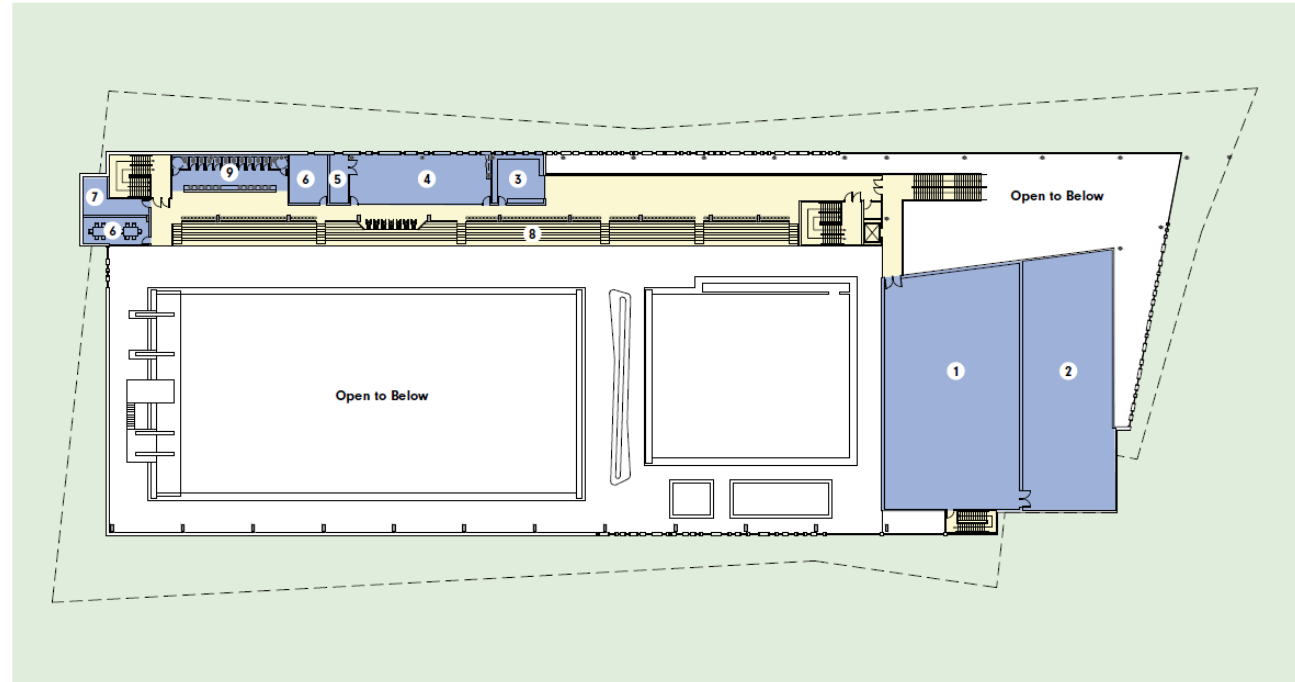


Figure 2 Building Organization and Layout: Main Floor Plan

1. Mechanical Room
2. Roof Area for Mechanical
3. Servery
4. Multi-Purpose Room
5. Storage
6. Meeting Room
7. Janitorial
8. Spectator Seating
9. Universal Washrooms



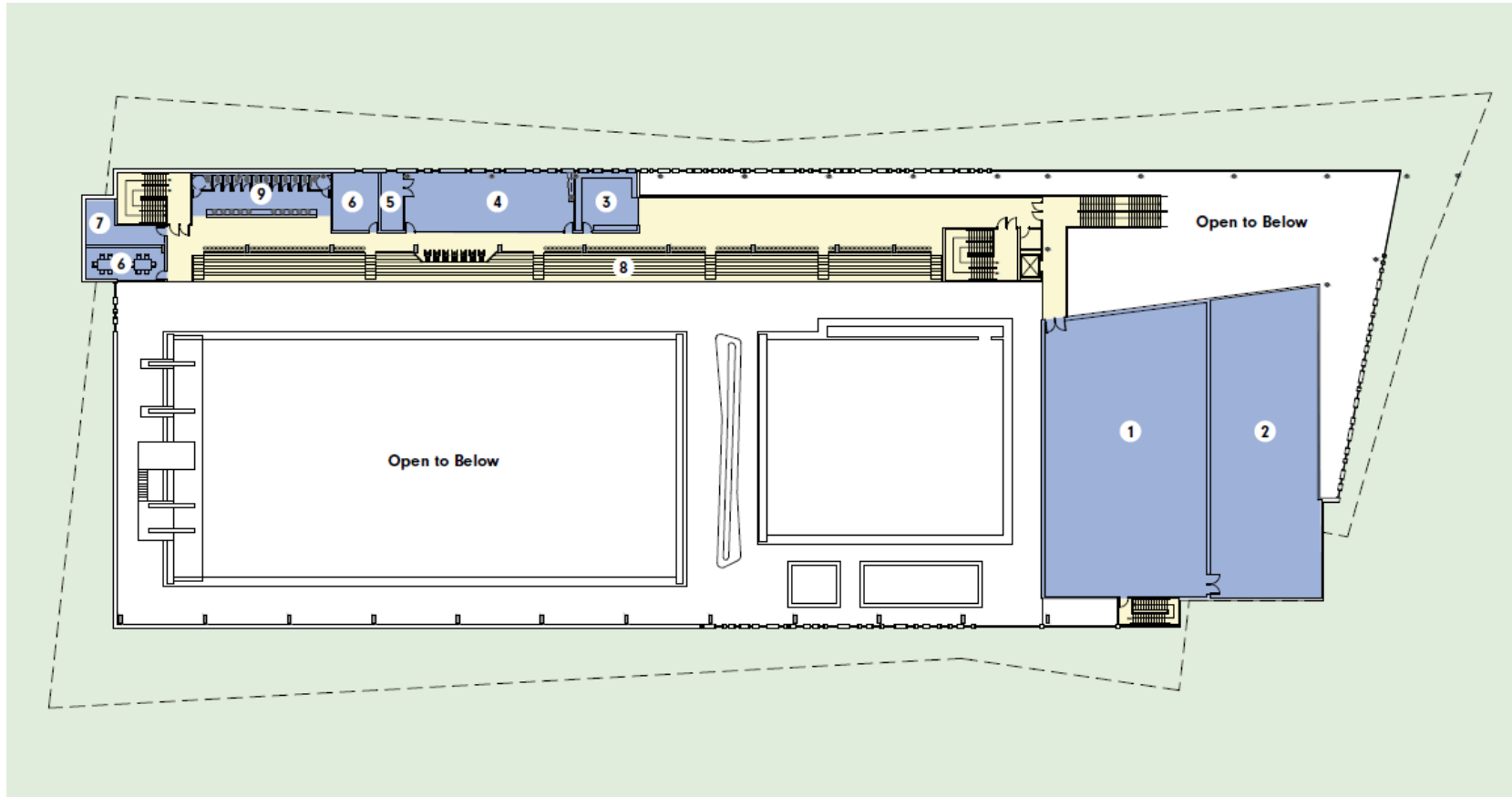


Figure 3 Building Organization and Layout: Second Floor Plan

- Swim Alberta estimates that Provincial Swim Competitions will have 600 spectators
- Current design accommodates 750 spectators to allow for viewing of both pools
- Spectator seating is designed as top loaded bench seating to enhance sight lines

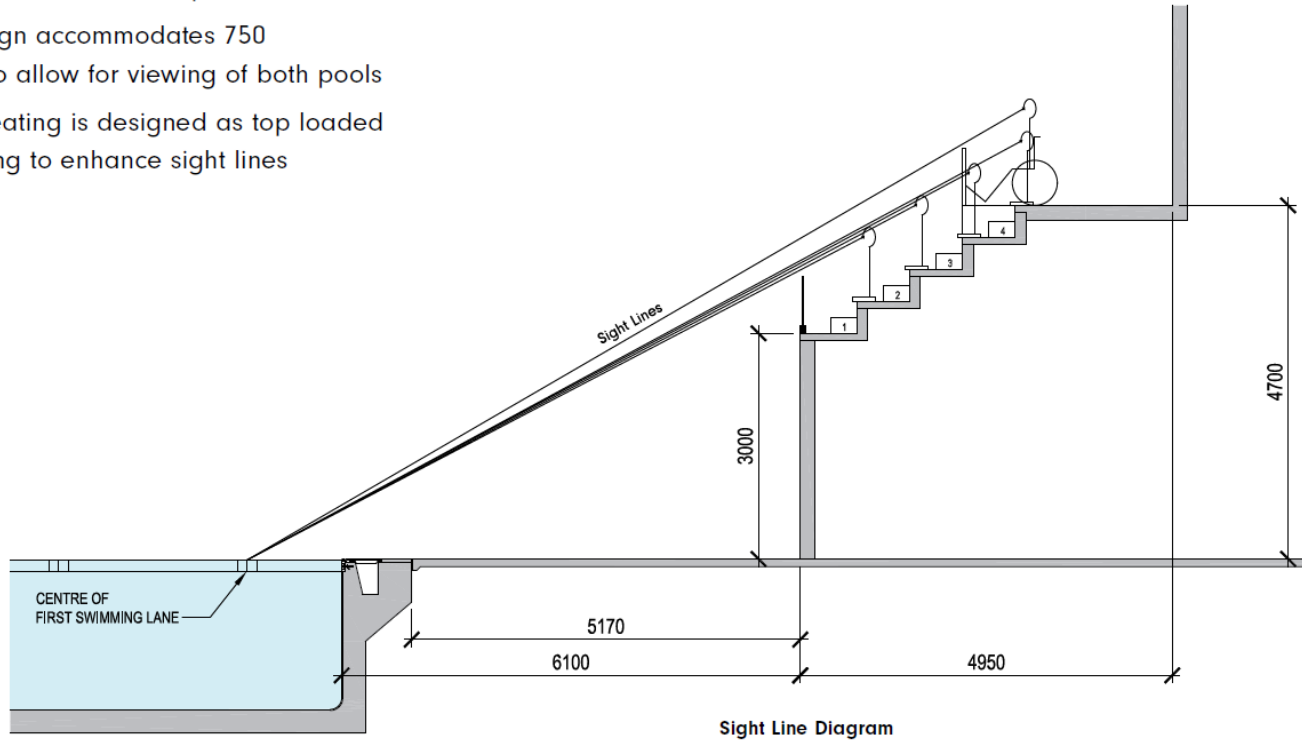


Figure 4 Building Organization and Layout: Spectator Setting





*Figure 5 Exterior Design Concept: View of Main Entrance*





Figure 6 Interior View of Natatorium

APPENDIX C

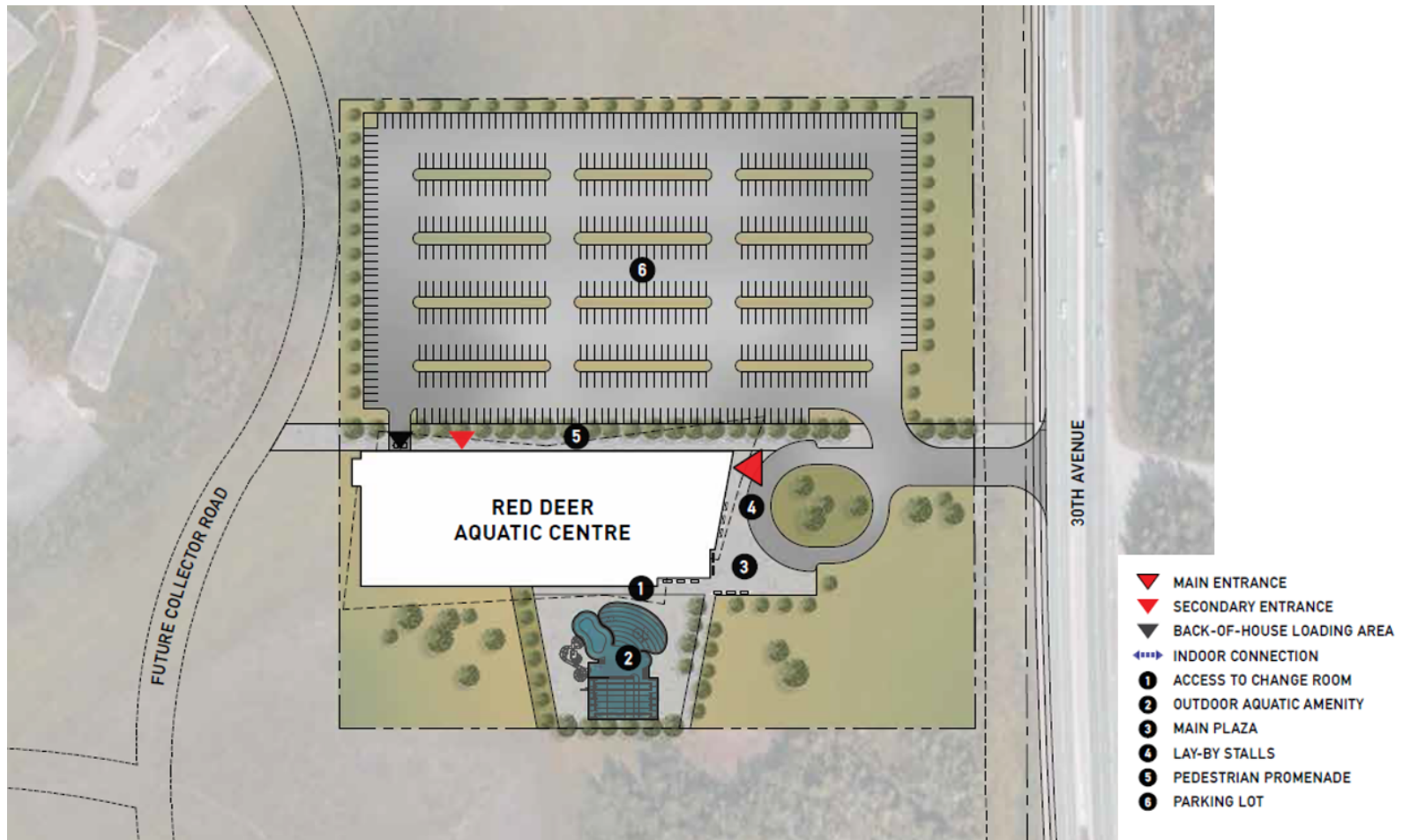


Figure 8 Site Design: Michener North

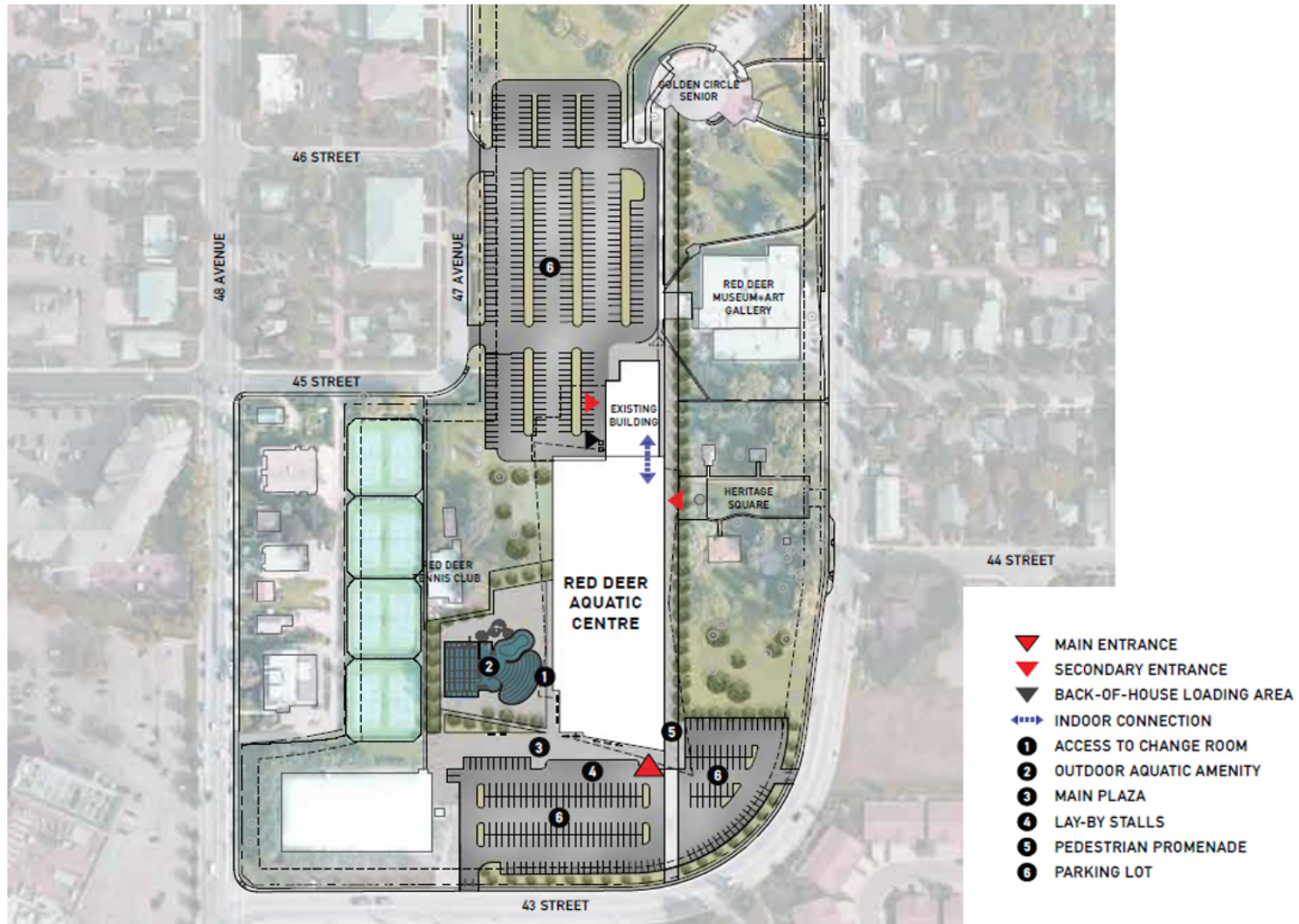


Figure 10 Site Design: Rotary Recreation Park