



Drayton Valley Brazeau Aquatic Centre

October 20, 2020

Presented by: Mayor Michael Doerksen
Annette Driessen, General Manager of Community Services
Laureen Bida, Chair, Aquatic Committee

Background Information:

- Feasibility Studies
- Community Engagement



Project Parameters

\$21.2M budget

- 8 Lane 25m Pool
- Zero Entry Leisure Pool with Lazy River
- Hot Tub
- Steam Room
- Multi-Purpose Teaching Room
- Change Rooms (Male/Female/Universal)
- Staff Space
- Viewing Gallery Space
- Allocation for future Waterslide
- Climbing Wall

IPD Team

- Town of Drayton Valley
- Brazeau County
- Chandos Construction
- AltaPro Electric
- Priority Mechanical
- Master Pools
- Spartan Steel
- XMG Flooring
- Group2 Architecture
- WSP
- Arrow Engineering
- RJC Engineering
- Stantec

Funding Sources

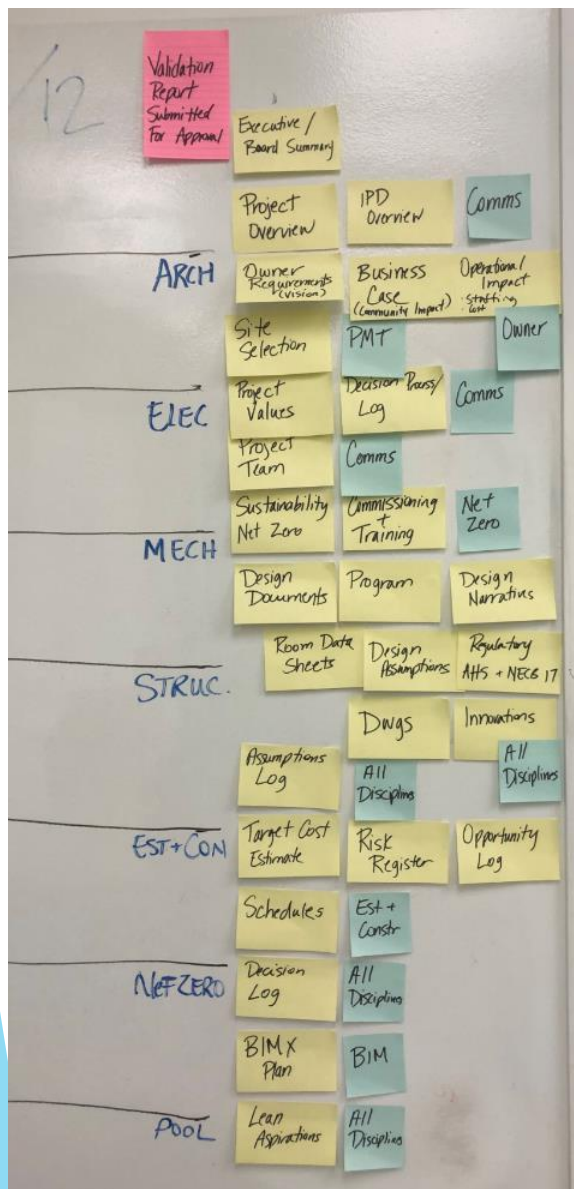
Town of Drayton Valley Contribution	\$ 5,000,000
- includes Provincial MSI Funds	
Brazeau County Contributions	\$ 5,000,000
- includes Provincial MSI Funds	
Investing in Canada Infrastructure Program	\$ 7,584,956
Corporate Donations	\$ 305,217
Capital Revenue	\$ 264,663
	\$ 18,154,836
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REMAINING FUNDS REQUIRED	\$ 3,086,483

Proposed Funding Sources

Community Facility Enhancement Program	\$ 1,000 000
Parkland County - Recreation Capital Funding	\$ 448,192
Corporate Sponsorships & Community Funding	\$ 1,638,291

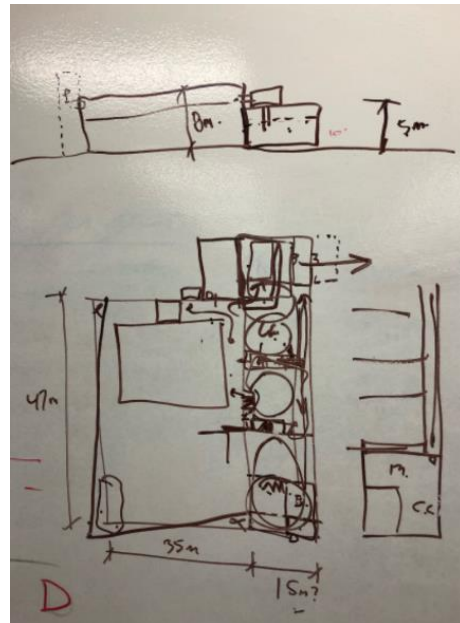
IPD VALIDATION GOAL

**“We can build this building, that does these things,
for this much money, in this much time.”**



Value of IPD

- Risk management/cost certainty/schedule control
- Project Implementation Team (PIT) work collaboratively in the “Big Room” to develop the project and provide concurrent input to other teams
- The client is part of the team and has input into the design decisions as they are being made
- Project costs are regularly checked to ensure the project stays on budget



Aquatic Centre Validation Report

Completed in January, 2020 and adopted by the Town of
Drayton Valley and Brazeau County



VALIDATION REPORT

Drayton Valley and Brazeau Aquatic Centre
Town of Drayton Valley and Brazeau County

January 15th 2020

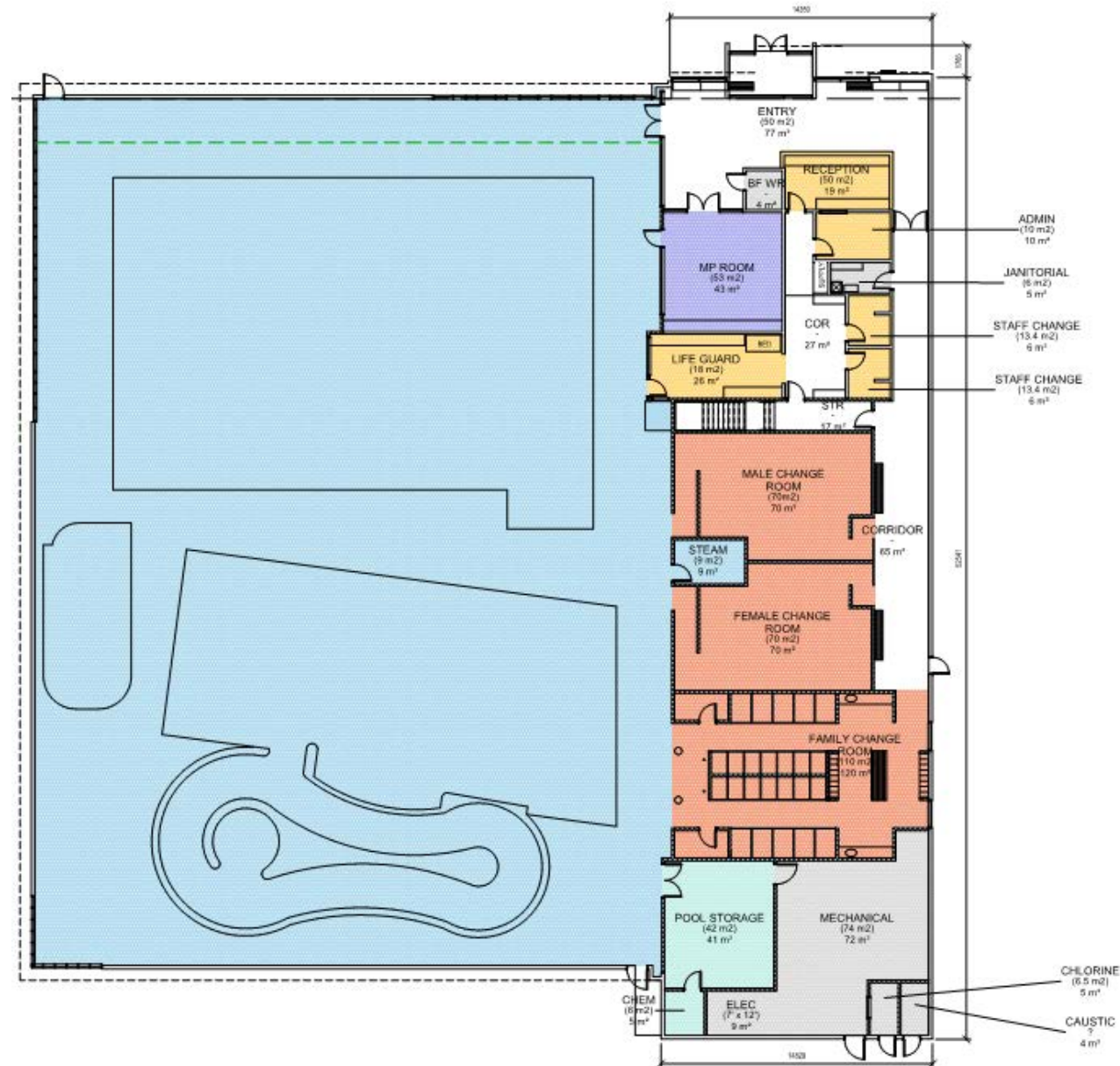
APPROVED BY COUNCIL
ON MARCH 18, 2020

Proposed Site Plan

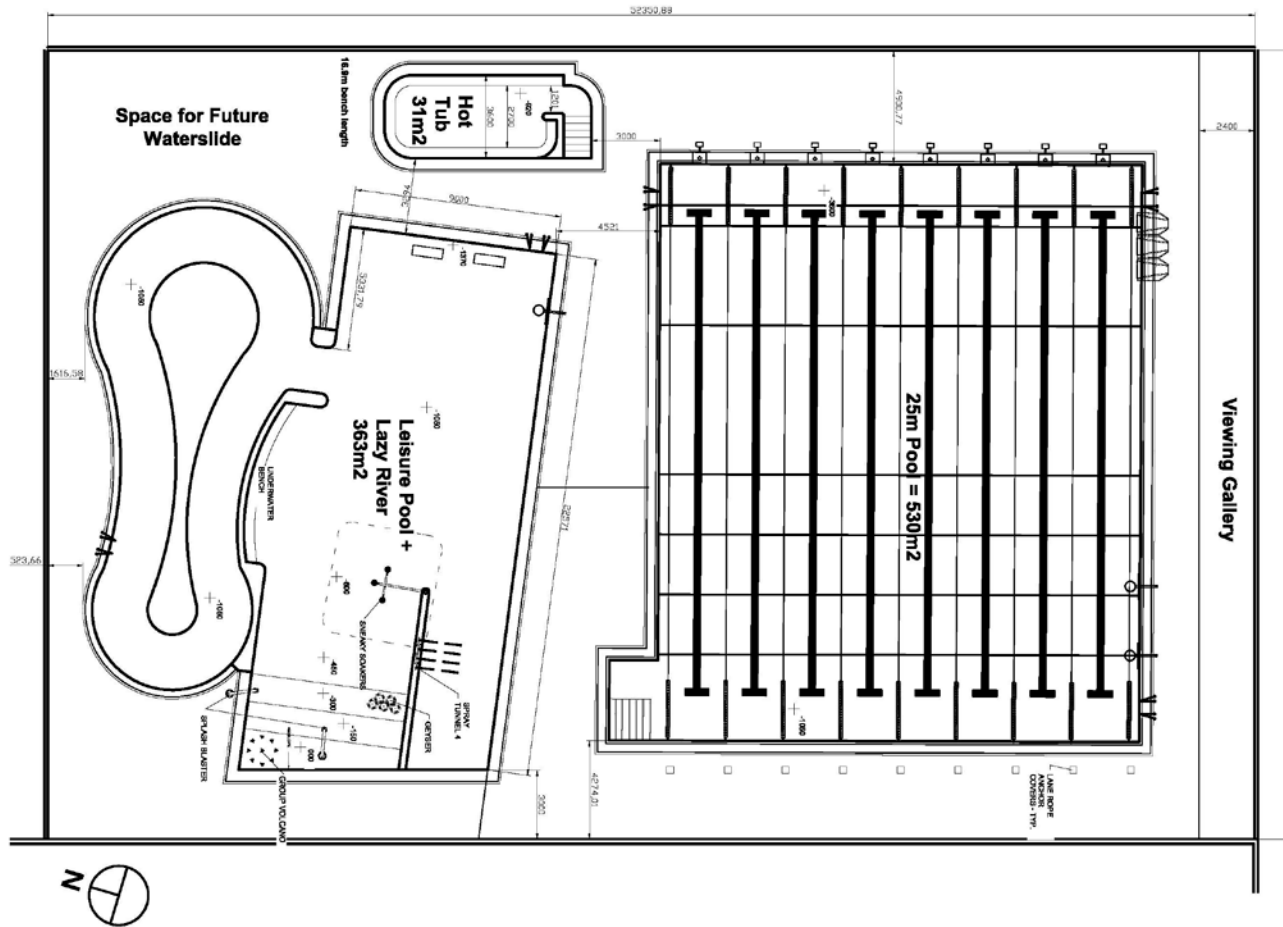


Preliminary Floor Plan

- ADMINISTRATION
- CHANGE ROOM
- MULTI PURPOSE
- POOL
- POOL SERVICE
- CIRCULATION
- SERVICE

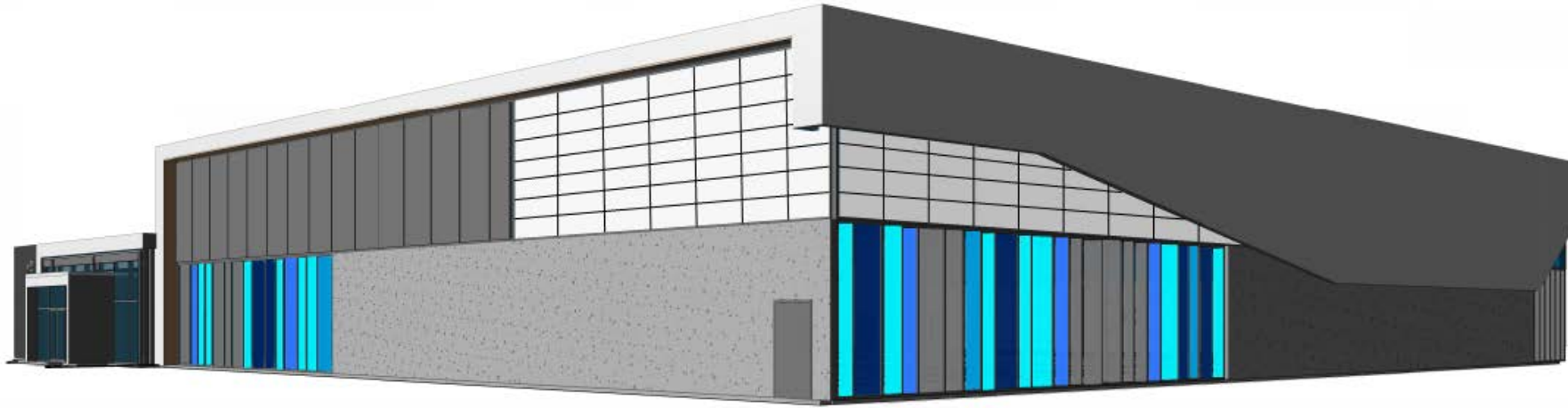


Preliminary Pool Plan



- 8 lane 25m Pool
 - 200 bather load
- Leisure Pool/Lazy River
 - 100 bather load
- Hot tub
 - 20 bather load

Preliminary 3D Massing



Architectural

- Flexible design to allow future additional Recreational Facilities
- Diffused natural light in the pool area
- Resilient materials
- Clear site lines in the pool area

Structural

- Clear-span roof structure over pool areas with no interior columns to provide clear site lines
- Roof structure designed to support photovoltaic panels
- Pools and foundations to take advantage of preferable soil conditions
- Structural components detailed to ensure long-term durability

Mechanical

- Optimize thermal comfort, energy efficiency, ease of maintenance
- Low flow plumbing fixtures
- High efficiency domestic hot water heaters
- High efficiency condensing boiler plant providing space and pool heating
- Air systems incorporating energy recovery
- Integrated building energy management system
- Infrastructure for CHP (Combined Heat and Power) system

Electrical

- Building power is anticipated to be an 800A, 3 phase, 347/600V service with the ability to add approximately 350kW of Solar Energy through roof mounted photo-voltaic panels
- LED lighting complete with dimming capability in public areas
- Lighting placed allowing for easy maintenance, such as lighting over the pool deck for accessibility

Energy Optimization - Net Zero

- The design will optimize energy performance which will result in lower operational costs and the environment will benefit from a smaller ecological footprint
- Focus on ensuring the facility will perform better than the National Energy Code of Canada for Buildings (NECB 2017)
- 350kW of Solar Energy through roof mounted Solar Photovoltaic's
- Combined Heat and Power being pursued to compliment Solar Energy
- EV charging stations is a potential addition

DISCUSSION