

# **COMOX VALLEY REGIONAL DISTRICT RECREATION COMMISSION CAPITAL PLANNING WORKSHOP**

**Thursday, March 2, 2023  
9:00 a.m. to 4:00 p.m.**

1. Session Overview & Objectives
2. Confirm/Adopt Goals from February 21 Workshop
3. Capital Projects and Budget (presentation and discussion)
  - a. Review of Capital Development Plan and Financial Forecast Document
  - b. Financial Context – current, opportunities, constraints

4. Situation Analysis

**LUNCH**

5. Determine Capital Project Assessment Criteria
6. Project Analysis (small group work in two sessions)
7. Small Group Report Out

**BREAK**

8. Develop Final List of Recommended Projects & Timelines
9. Conclusion, Wrap-up, Next Steps

Next Meeting

- Strategic and Capital Plan
- Recommendations for Board, budget and public engagement

# COMOX VALLEY REGIONAL DISTRICT

## Financial Forecast and Capital Plan Options

February 2023



 Comox Valley  
REGIONAL DISTRICT

comoxvalleyrd.ca   

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# 1.0 Introduction

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In 2019, the Comox Valley Regional District (CVRD)'s Recreation Commission identified the need for a long-term plan for recreation infrastructure and sustainable delivery of services as a strategic priority. Since then, a number of studies and engagement processes have been undertaken to better understand current conditions, future needs, community interest and more.

This study work and resulting options for future infrastructure upgrades have now been collated and are included in this Financial Forecast and Capital Development Plan.

Included is:



**Aquatics:** A summary of the draft study results, options for moving forward and overview of parameters used to assess these options.



**Ice:** An overview of the growing demand, recent allocation policy reviews and proposed options for expanded/updated ice facilities.



**Field:** An outline of the draft study work completed and proposed options and cost for future facilities and upgrades to current facilities.

The Recreation Commission will meet in a strategic planning session in February and March 2023. The results of that session may serve as a road map, guiding the provision of services for the next 25 years and guiding staff to implement asset management and new improvements to serve our growing community for the next four years.

## **Financial Forecasting**

Financial information in this report is conceptual and intended to help the Recreation Commission weigh options for the purpose of prioritizing community needs. More detailed analysis will be required once the Commission's capital priorities are identified.

Parameters:

- Projected capital costs have been provided by CVRD consultants and these are projected in today's dollars.
- Existing operating expenses are expected to remain relatively constant for each of the aquatic options proposed.
- Incremental operating costs are over and above existing budgeted operating costs. These costs reflect additional programming capacity and include wages, supplies, and estimated indirect costs.
- Debt servicing calculation uses the conceptual capital cost. To remain conservative, the assumption has been made that the infrastructure will be financed using debt. It may be possible to secure future grants.
- Residential per household is based on the typical single-family home as defined by BC Assessment. The assessment value of \$800,000 has been used for this projection. The recreational facilities service is funded primarily with tax requisition.



# 2.0 Aquatic: Financial Forecast and Capital Development Plan Options

## 2.1 AQUATIC STUDY BACKGROUND

The draft Comox Valley Aquatic Strategy was developed in 2022 in response to earlier Facility Condition Assessments which concluded that both the CVRD Sports Centre Pool and the City of Courtenay and District Memorial Outdoor Pool are nearing the end of their expected lifespans.

The study included:

- Review of planning documents including pertinent Official Community Plans, Master Plans, and facility assessment reports
- Evaluating our services based on analysis of aquatic services in other jurisdictions
- Trends and leading practices for aquatics services delivery and programming
- Supply and demand assessment of aquatics
- Community engagement

The draft Aquatics Strategy includes options for analysis that are intended to inform the Recreation Commission in their consideration of capital infrastructure for community recreation services, and to ensure that long-term facility plans align with community expectations for aquatic services. The report will also inform future considerations for the Outdoor Pool operated by the City of Courtenay. However, comprehensive community consultation would occur before any decision is made on specific future upgrades to aquatics services operated by the City of Courtenay or the CVRD.

## 2.2 IMPACTED FACILITIES



### **Courtenay & District Memorial Outdoor Pool (Outdoor Pool)**

Built in 1940, condition assessments indicate this facility is nearing end of life and has little capital value in its assets. It is however, fully operational and continues to provide positive outdoor swim experiences.



### **Comox Valley Sports Centre (Sports Centre)**

Constructed in 1973, the facility includes a 25-metre pool and hot pool. Primary uses include swimming for fitness, aquacise and competitive training.



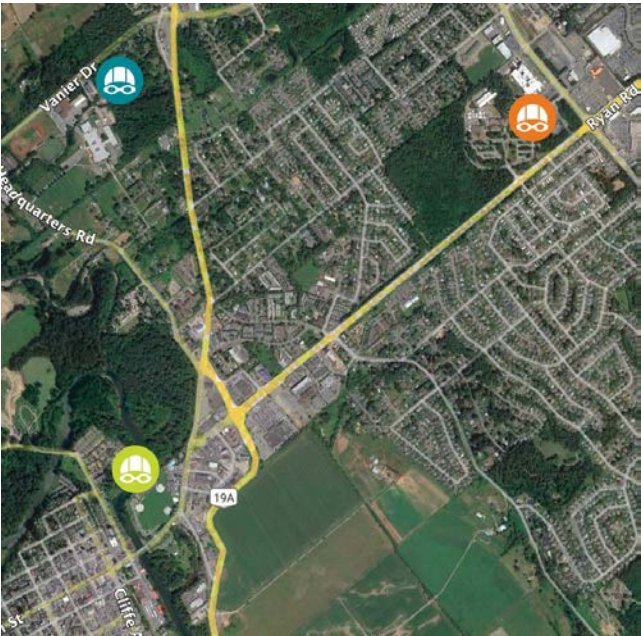
### **Comox Valley Aquatic Centre (Aquatic Centre)**

Built in 1998, the facility offers a 25-metre pool, leisure/wave pool, waterslides, hot pool, sauna and steam room. The Aquatic Centre has a strong focus on leisure-related amenities.



### **19 Wing Pool (CFB Comox)**

While partnerships with this facility exist, and the number of swims is included in the data analysis, this facility is Government of Canada infrastructure and outside the scope of the study.



*Locations of Comox Valley aquatic facilities.*

## 2.3 OPTIONS ANALYSIS

To achieve these objectives, a range of tools and materials were used to encourage as wide participation as possible, and generate constructive feedback from participants with a range of understanding and engagement in recreation.

Capital expenses that would be required in addition to City of Courtenay and Comox Valley Regional District annual operating budgets include:

### OPTION 1: Maintaining Status Quo

- **Outdoor Pool (City of Courtenay): Total cost to taxpayers: \$1 million (immediate investment), \$7.5 million (longer-term investment)**  
Consultants advise that a “status quo” approach may not be realistic given the facility is nearing end of life and investment over a 20-year horizon could be upwards of \$7.5 million. Should this approach be pursued, some investment now will be required to deal with the most pressing items, including the replacement of the main drains and resolution of the leak issue.
- **Sports Centre (CVRD): \$7.5 million**  
The facility is in fair condition and has been well maintained for its age but investment will be required over the next 20 years. The primary focus would be on the replacement of components nearing or at end of life, including HVAC and roofing. Air handlers could be replaced with more efficient units, and insulation added to the roof which would reduce greenhouse gas emissions (GHG).
- **Aquatic Centre (CVRD): \$8 million**  
The facility is in good condition but investment will be required over the next 10 years to deal with items reaching end of life, the majority of which are attributed to upgrading the filter plant and replacing the roof.

**TOTAL CAPITAL COSTS: \$24 million**

### OPTION 2: Expand Aquatic Centre or New Build

In addition to the status quo, four additional options have been identified for consideration at the February and March 2023 Strategic Planning Sessions for the Recreation Commission. These scenarios were identified by the draft [Comox Valley Aquatic Needs Strategy](#) and are described here at a high level.

- **Option 2A:**  
Addition of new indoor teach pool and hot pool to Aquatic Centre site. Closure of Sports Centre pool.
- **Option 2B:**  
Addition of freeform outdoor leisure pool to the Aquatic Centre site. Closure of Outdoor Pool.
- **Option 2C:**  
Addition of new indoor teach pool, hot pool and freeform outdoor leisure pool to the Aquatic Centre site. Closure of Sports Centre pool and Outdoor Pool.

#### Key Parameters

CVRD and City of Courtenay staff identified these parameters to guide the consultant in developing these options:

- ✓ No increase to the overall water area/capacity.
- ✓ There is a desire by the community for enhanced leisure and wellness experiences.
- ✓ There is a need for universal accessibility.
- ✓ There must be alignment with broader environmental sustainability objectives and corporate climate action plans.



**TOTAL CAPITAL COSTS: \$12 - 35 million**

### OPTION 3: Consolidate Facilities

This option proposes a new build at a yet to be determined location that would include an indoor teach pool, hot pool and outdoor leisure pool. Under this scenario the Sports Centre, Outdoor Pool and Aquatic study would close. Cost estimates do not include land purchase.

**TOTAL CAPITAL COSTS \$87.9 million**

## 2.4 ENERGY EFFICIENCY

It is understood that all options proposed require the closure of one or both aging aquatic facilities at the Outdoor Pool and the Sports Centre Pool. Given that the recreation centres account for 54 per cent of the CVRD's total GHG emissions, this provides an opportunity for substantial energy savings under the CVRD's Corporate Energy Plan.

The Corporate Energy and Emissions Plan requires that new buildings and heavily retrofitted facilities will need to be 'net zero energy ready' which means they will be highly efficient buildings that can easily accommodate future renewable energy add-ons, such as rooftop solar panels, that will enable them to produce at least as much energy as they consume.

Adopting the Province of BC's Step Code (Initiative B1), in addition to constructing buildings to be LEED® Gold equivalent, is a valuable first step towards these important targets to mitigate a significant impact that new construction and existing renovations can have on the CVRD's carbon budget over the next 30 years.

It is worth noting that unlike other classes of buildings, pool operations have such high energy consumption that embedded carbon is considered much less important than ongoing operational climate impacts. For this reason, only GHGs were considered for the purposes of the Aquatic Study. Embedded carbon in new construction materials is acknowledged and would be examined as part of feasibility studies moving forward.

# Aquatic Expansion Option 2A

February 2023

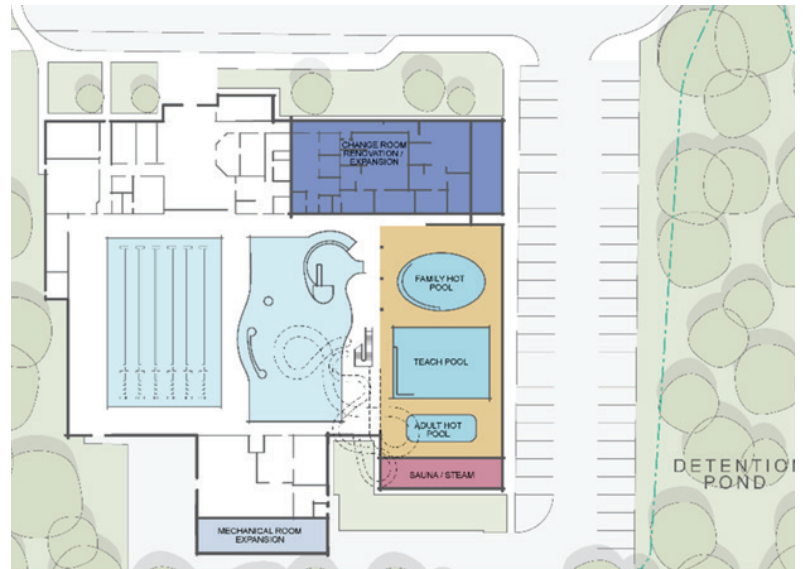


This option incorporates the amenities and programming at the Sports Centre into the current Aquatic Centre site, with a distinct focus on the provision of wellness. It assumes the closure of the aquatic facilities at the Sports Centre.

## Highlights

This option requires a concept study to determine feasibility but could include the following:

- Addition of a new therapy/teach pool (approx. 15m x 15m)
  - Water temperature to be warmer than 25 metre pool, and cooler than leisure pool
  - Suitable for aqua therapy, rehab use and lesson programming
- Additional sauna and steam rooms
- Addition of a second, larger hot pool; allowing the two pools to be run at different temperatures
- Additional deck lounging space
- Modest expansion to existing pool mechanical space
- Potential reconfiguration and expansion of existing change rooms



## Key Considerations

- No increase in water/capacity is required
- Achieves operational efficiencies
- Achieves capital cost efficiencies
- Reduces environmental impact
- Addresses community priorities
- Enhances leisure experience
- Provides universal accessibility



## Energy Savings

Proceeding with this option would allow for the closure of aging aquatic facilities at the Sports Centre and focus on one facility that can be upgraded and improved over time. Renovating or adding to an existing building has the potential to reduce GHG emissions at an operational level. However, a separate view of the Aquatic Centre is necessary to understand overall operational efficiencies for reducing GHG's when updating or replacing existing mechanical plants and related systems.

In addition, the CVRD is currently working with partners on ways to reduce current and future GHG emissions at the Aquatic Centre. Preliminary study results identify the hospital's heating and cooling operational processes as a potential energy recovery source. More information on this study is forthcoming.



# Aquatic Expansion Option 2A

## By the Numbers

**Projected Capital Costs: \$25.8 million**

Debt Servicing	20 year term	30 year term
<b>Annual Total</b>	\$2,093,982	\$1,684,451
<b>Per Residential Household</b>	\$57.75	\$46.45

\*Debt servicing projected in today's dollars and do not include grants

\*Based on assessed home value of \$800,000

## Incremental Costs

	Operating Costs
<b>Revenue</b>	\$124,208
<b>Operating Costs</b>	\$266,337
	<b>-\$142,129</b>

\*Incremental operating costs are over and above existing budgeted operating costs which are expected to remain relatively constant.



## Pros and Cons

### Advantages

- ✓ Reduction of GHG footprint through consolidation of Sports Centre and Aquatic Facilities
- ✓ Additional revenue potential with ability to offer leisure swim opportunities at all times when the pool is open, including during swim lessons and after school for students.
- ✓ Additional space available for special swim event programming
- ✓ Addition of new equipment for pool sports to provide more interest and variety
- ✓ No requirement for additional service, maintenance or custodial staff
- ✓ Achieve scheduling efficiencies by consolidating staff in one location
- ✓ Change room remains in same location for cost savings, with opportunity to expand if required

### Disadvantages

- ✗ No additional capacity added for intermediate and advanced swim lessons
- ✗ No option for lane swim or lessons when 25-metre pool is closed due to swim meets
- ✗ No staffing reduction - additional aquatics staff required to offer new programs and services

# Aquatic Expansion Option 2B

February 2023



This option would close the existing Outdoor Pool and place a new outdoor pool on the parking area to the north of the Aquatic Centre, which would be accessible through the building control zone. It assumes the closure of the Courtenay Outdoor Pool with no expansion of the indoor facilities at the Aquatic Centre.

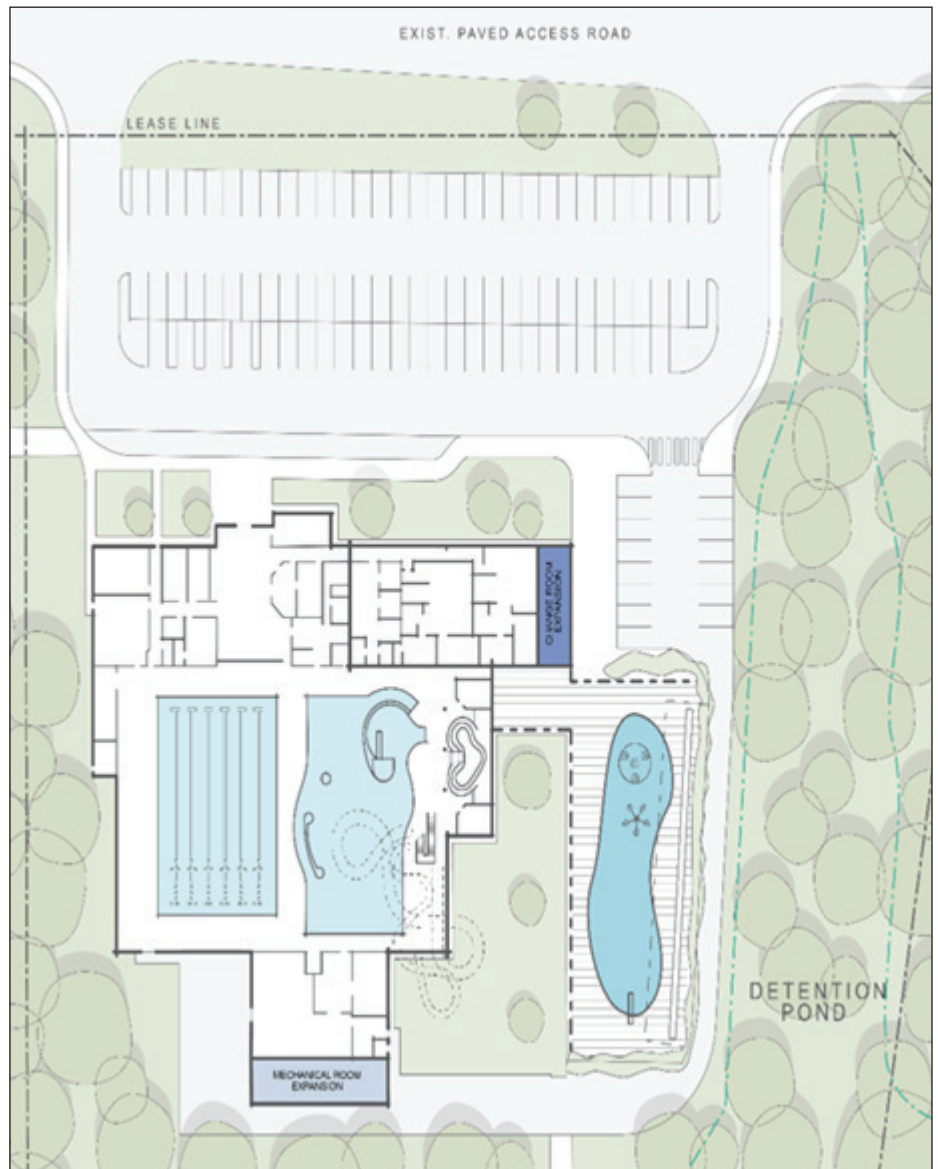
## Highlights

This option could include the following:

- Freeform outdoor leisure pool with an equivalent water area to current Outdoor Pool
- Water features, zero entry and enough consistent 900mm water depth to support some swim lesson programming
- Potential reconfiguration and expansion of existing change rooms to accommodate increased bather load
- Modest expansion to existing pool mechanical space for additions and boilers
- Shade structure, picnic tables and outdoor amenities
- Spray pad

## Key Considerations

- Achieves operational efficiencies
- Achieves capital cost efficiencies
- Reduces environmental impact
- Addresses community priorities
- Enhances leisure experience
- Provides universal accessibility
- City of Courtenay direction on current outdoor pool is essential



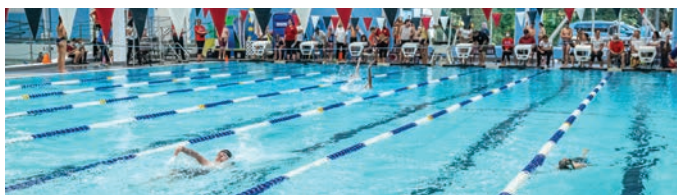
# Aquatic Expansion Option 2B



## Energy Savings

Proceeding with this option would allow for the closure of aging aquatic facilities at the Outdoor Pool and focus on one facility that can be upgraded and improved over time. Renovating or adding to an existing building has the potential to reduce GHG emissions. However, a specific view of the Aquatic Centre is necessary to understand overall operational efficiencies for reducing GHG's when updating or replacing existing mechanical plants and related systems.

In addition, the CVRD is currently working with partners on ways to reduce current and future GHG emissions at the Aquatic Centre. Preliminary study results identify the hospital's heating and cooling operational processes as a potential energy recovery source. More information on this study is forthcoming.



## By the Numbers

**Projected Capital Costs: \$12 million**

Debt Servicing	20 year term	30 year term
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<b>Annual Total</b>	\$973,945	\$783,451
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<b>Per Residential Household</b>	\$26.86	\$21.60
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\*Debt servicing projected in today's dollars and do not include grants

\*Based on assessed home value of \$800,000

## Incremental Costs

### Operating Costs

<b>Revenue</b>	\$80,671
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<b>Operating Costs</b>	\$179,604
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<b>-</b>	\$98,933
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\*Incremental operating costs are over and above existing budgeted operating costs which are expected to remain relatively constant.

## Pros and Cons

### Advantages

- ✓ The project will have an overall moderate-cost impact to the CVRD
- ✓ Reduction of GHG footprint due to closure of the Outdoor Pool
- ✓ Meets community desire for outdoor swimming options in summer
- ✓ Additional revenue option for CVRD to offer outdoor swimming
- ✓ Provides permanent home for summer swim club (currently at Aquatic Centre and 19 Wing Pools)
- ✓ Additional seasonal rental space for school lessons, rentals and adult user groups
- ✓ Additional seasonal space available for special swim event programming
- ✓ Additional seasonal lane swim
- ✓ Addition of new equipment for pool sports to provide more interest and variety
- ✓ Ability to close indoor pool for summer maintenance and continue to offer outdoor swim
- ✓ No requirement for additional service, maintenance or custodial staff

### Disadvantages

- ✗ Limited operation of outdoor pool (May – September)
- ✗ Limited additional space and seasonality only for outdoor swim lessons and rehab programs
- ✗ Additional seasonal staffing requirements – two lifeguards
- ✗ Staffing/operational challenges due to seasonal schedules





# Aquatic Expansion Option 2C

February 2023



This option incorporates the amenities and programming at the Sports Centre into the current Aquatic Centre site, plus the addition of an outdoor pool. New indoor and outdoor amenities would be located to north of the existing facility and would require current parking and access road. It assumes the closure of the aquatic facilities at the Sports Centre and the Outdoor Pool.

## Highlights

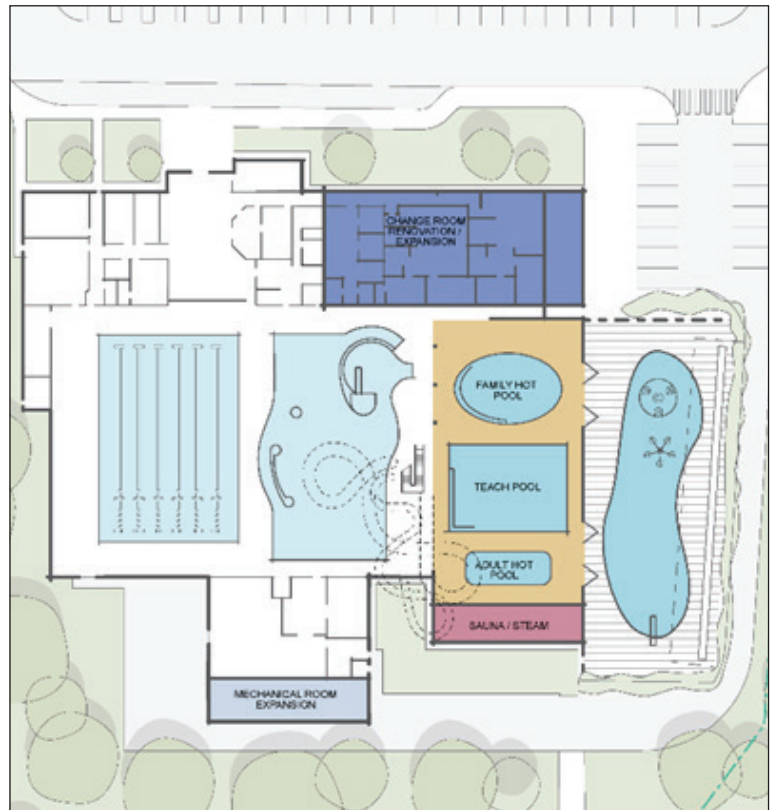
This option requires a concept study to determine feasibility but could include the following:

### Indoor

- Addition of a new therapy/teach pool (approx. 15m x 15m)
  - Water temperature to be warmer than 25-metre pool, and cooler than leisure pool.
  - Suitable for aquatic therapy, rehab use and lesson programming.
- Additional sauna and steam rooms
- Addition of a second, larger hot pool; allowing the two pools to be run at different temperatures
- Additional deck lounging space
- Modest expansion to existing pool mechanical space
- Likely reconfiguration and expansion of existing change rooms

### Outdoor

- Freeform leisure pool with an equivalent water area to current Outdoor Pool
- Water features, zero entry and enough consistent 900mm water depth to support some swim lesson programming
- Modest expansion to existing pool mechanical space for heaters and boilers
- Shade structure, picnic tables and outdoor amenities
- Spray pad



## Key Considerations

- Achieves opera
- Achiev
- Reduces environmental impact
- Addresses community priorities
- Enhances leisure experience
- Provides universal accessibility





# Aquatic Expansion Option 2C



## Energy Savings

Proceeding with this option would allow for the closure of aging aquatic facilities at the Outdoor Pool and the Sports Centre and focus on one facility that can be upgraded and improved over time. Renovating or adding to an existing building has the potential to reduce GHG emissions. However, a special view of the Aquatic Centre is necessary to understand overall operational efficiencies for reducing GHG's when updating or replacing existing mechanical plants and related systems.

## Pros and Cons

### Advantages – Year Round

- ✓ Reduction of GHG footprint by consolidating three aquatic facilities
- ✓ Additional revenue potential with ability to always offer leisure swim opportunities when the pool is open, including during swim lessons and after school for students
- ✓ Additional space available for special swim event programming
- ✓ Addition of new equipment for pool sports to provide more interest and variety
- ✓ No requirement for additional service, maintenance or custodial staff
- ✓ Achieve scheduling efficiencies by consolidating aquatic staff in one location
- ✓ Change room in the same location for cost savings, with opportunity to expand if required

### Advantages - Seasonal

- ✓ Meets community desire for outdoor swimming options in summer
- ✓ Additional revenue option for CVRD to offer outdoor swimming
- ✓ Provides permanent home for summer swim club (currently uses Aquatic Centre and 19 Wing Pools)
- ✓ Additional seasonal rental space for school lessons, rentals and adult user groups
- ✓ Additional seasonal space available for special swim event programming
- ✓ Additional seasonal lane swim
- ✓ Addition of new equipment for pool sports to provide more interest and variety
- ✓ Ability to close indoor pool for summer maintenance and continue to offer outdoor swim
- ✓ No requirement for additional service, maintenance or custodial staff

### Disadvantages – Year Round

- ✗ No additional indoor capacity added for swim clubs – demand continues to grow
- ✗ No staffing reduction - additional staff required to offer all new programs and services

### Disadvantages - Seasonal

- ✗ Additional seasonal staffing requirements – 2 lifeguards
- ✗ Staffing/operational challenges due to seasonal schedule



## By the Numbers

### Projected Capital Costs: \$35 million

Debt Servicing Cost	20 year term	30 year term
<b>Annual Total</b>	\$2,840,673	\$2,285,067
<b>Per Residential Household</b>	\$78.34	\$63.02

\*Debt servicing projected in today's dollars and do not include grants  
\*Based on assessed home value of \$800,000

### Incremental Costs

	Proposed Increase
<b>Revenue</b>	\$204,880
<b>Operating Costs</b>	\$445,941
	<b>-\$241,061</b>

\*Incremental operating costs are over and above existing budgeted operating costs which are expected to remain relatively constant.

# Aquatic New Build Option 3

February 2023



Recognizing that the current building inventory is all older than 20 years, the option of consolidating all the uses at the Sports Centre and the Aquatic Centre into a single new facility should be considered.

## Highlights

Assuming that no further capacity is required, this option could include the following:

- Freeform outdoor leisure pool with an equivalent water area to current Outdoor Pool
- 25 metre indoor main pool
- Leisure Pool with lazy river, tot's zone, zero entry, spray features
- Waterslide
- Adult hot pool
- Family hot pool
- Universal change rooms
- Sauna and Steam rooms
- Pool support spaces
- Other potential driver uses (multi-purpose, etc.)
- Outdoor pool

## Pros and Cons

### Advantages

- ✓ Allow for most significant reduction of GHG footprint
- ✓ Potentially address land ownership challenges of existing sites
- ✓ Optimize programming
- ✓ Offers more lane swimming, rental space, swim lessons, fitness and rehab all year round
- ✓ All recreation opportunities for ice, aquatic and sports court offered under one roof
- ✓ Ability to offer multi-sport programs for lessons and day camps
- ✓ Additional meeting spaces, storage and social spaces

### Disadvantages

- ✗ Highest cost to build
- ✗ A site has not yet been identified
- ✗ Cost to add an outdoor pool would be an additional \$16.1 million
- ✗ Increased staffing requirements including lifeguards, front desk, custodial and facility maintenance

## Key Considerations

- Achieves operational efficiencies
- Achieves capital cost efficiencies
- Reduces environmental impact
- Addresses community priorities
- Enhances leisure and wellness experiences
- Provides universal accessibility





# Aquatic New Build Option 3



## Energy Savings

Proceeding with this option would allow for the closure of aging aquatic facilities at the Outdoor Pool and the Sports Centre, as well as closure of the Aquatic Centre. This would provide opportunities to substantially reduce operational GHG emissions by incorporating more thermally effective envelopes, as well as less fossil fuel intensive, or fossil fuel free mechanical systems. Standalone new buildings could reduce operation GHG emissions by an estimated 75 per cent, driven in part by codes and policies that will make this a requirement of new construction in the very near future.

## By the Numbers

**Projected Capital Costs: \$87.9 million**  
(does not include purchase of land)



# 3.0 Ice: Financial Forecast and Capital Development Plan Options

## 3.1 BACKGROUND

The 2017 CVRD Indoor Recreation Facilities Masterplan included an addition of a leisure ice pad and a new full-size ice arena for consideration.

In 2019, the Recreation Commission identified a long-term plan for recreation infrastructure and sustainable delivery of these services as a strategic priority for Recreation Services.

In 2022, the CVRD undertook a two-phase engagement process with the general public and with current user groups about ice allocation policy. The results of the survey led to some changes/additions to public programs, including an expanded Comox Valley Hockey League, a trial senior's skate/late-night drop-in hockey program and a new registered para-hockey skill development program for youth. Interest in users for new/more ice was also raised.

## 3.2 KEY DRIVERS FOR ADDITIONAL ICE CAPACITY

### Increasing Demand

- Ice sports such as ringette are experiencing growth
- Comox Valley Hockey League continuing to grow with a substantial waitlist on hand
- Need for more drop-in skate/hockey times before 11 pm
- Growth of youth in the valley will put additional pressure on ice use/needs



### Facility Conditions

Maintenance of Arena 1 ice slab remains a concern and a more thorough analysis is scheduled to be completed during the 2023 off-ice season.



## 3.3 ENVIRONMENTAL CONSIDERATIONS

Recreation facilities account for 54 per cent of the CVRD's total GHG emissions, which presents an opportunity to consider the existing environmental footprint as well as future expansion of ice facilities to meet community priorities.

The CVRD can increase energy efficiency and conservation during the design and construction of new buildings and the profound renovation of existing buildings.

Under the CVRD's Corporate Energy and Emissions Plan, the recreation service will be required to complete a decarbonization plan that will determine the timing and identification of any deep energy retrofits required for existing facilities. Planning for the construction of any proposed new ice surfaces will be integral to the asset management considerations for existing infrastructure at the Sports Centre.



# Sports Centre Arena

## Full Size Ice Rink Expansion

February 2023



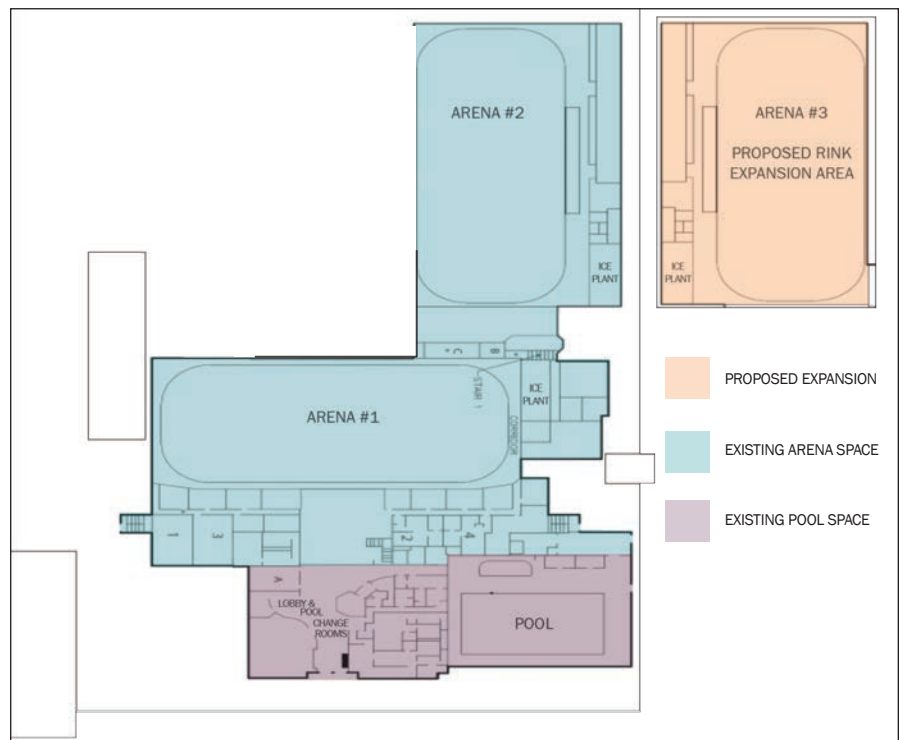
This option incorporates the additional function of a full-size ice rink surface that would be added to the Sports Centre. The new ice surface would be located south of the existing facility (between G.P. Vanier/Arena 2) and would require reconfiguration of the current parking and access road.

### Highlights

- New Building Construction
- Fully enclosed structure
- Full size ice sheet
- Total space required - 34,000 sq. ft
- Up to 6 dressing rooms
- Bleachers – minimal
- New skate shop

### Key Considerations

- Achieves operational efficiencies
- Achieves capital cost efficiencies
- Addresses community priorities
- Enhances leisure experience
- Provides universal accessibility



### By the Numbers

#### Projected Capital Costs: \$16 million

Debt Servicing	20 year term	30 year term
Annual Total	\$1,298,594	\$1,044,602
Per Residential Household	\$35.81	\$28.80

\*Debt servicing projected in today's dollars and do not include grants

\*Based on assessed home value of \$800,000

#### Incremental Costs

	Proposed Increase
Revenue	\$188,499
Operating Costs	\$23,535
	<b>\$164,964</b>

\*Incremental operating costs are over and above existing budgeted operating costs which are expected to remain relatively constant.

# Sports Centre Arena - Full Size Ice Rink Expansion



## Energy and Emissions

As part of maintaining and minimizing the CVRD's operational GHG emissions as part of servicing a growing community, new buildings and heavily retrofitted facilities will need to be 'net zero energy ready' as per the CVRD's Corporate Energy Plan.

Proceeding with this option would expand the existing building to add a new full size ice surface that would meet the CVRD's GHG objectives. This would require the new rink to be housed in a highly efficient manner that can easily accommodate future renewable energy add-ons and enable the newly expanded area to produce at least as much energy as it consumes. While this requirement would apply only to the new ice area, the recreation service will be required to complete a decarbonization plan that will determine the timing and identification of any deep energy retrofits required for existing facilities. Planning for the construction of this new ice surface would be integral to the asset management considerations for existing infrastructure at the Sports Centre.



## Pros and Cons

### Advantages

- ✓ Similar program costs but with a higher revenue potential than leisure ice expansion
- ✓ Accommodates the need for more youth sport group spaces and up to 12 additional adult ice user rental spots/week
- ✓ Can result in some increase to public programming - three more public skating sessions and three hockey league spots/week

### Disadvantages

- ✗ Limited space to expand public programming – focus will be on youth and adult sports
- ✗ Likely will result in overall parking challenges for the site





# Sports Centre Arena Leisure Ice Rink Expansion

February 2023



This option incorporates an additional leisure ice surface at the Sports Centre site. The new ice surface would be located to the north of the existing facility and would not require reconfiguration of the current parking and access road.

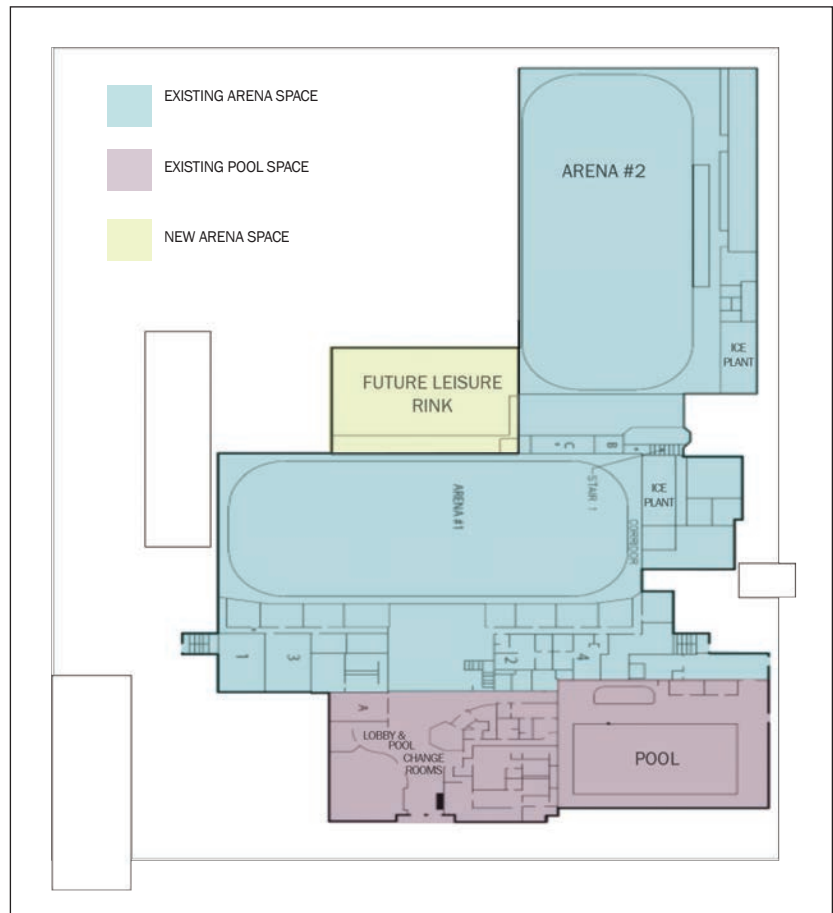
## Highlights

### New construction

- Fully enclosed structure
- Total space required = approx. 7500 sq.ft
  - 6500 sq ft for new ice structure
  - 1000 sq ft for new dressing rooms
  - Minimal space required for bleacher allocation
- Rink boards to accommodate opportunities for minor hockey, ringette, ice skating, skating lessons and goalie sessions.

## Key Considerations

- Achieves operational efficiencies
- Achieves capital cost efficiencies
- Reduces environmental impact
- Addresses community priorities
- Enhances leisure experience
- Provides universal accessibility



# Sports Centre Arena - Leisure Ice Rink Expansion



## Energy and Emissions

As part of maintaining and minimizing the CVRD's operational GHG emissions as part of servicing a growing community, new buildings and heavily retrofitted facilities will need to be 'net zero energy ready' as per the CVRD's Corporate Energy Plan.

Proceeding with this option would expand the existing building to add a new leisure ice surface that would meet the CVRD's GHG objectives. This would require the new rink to

can easily accommodate future renewable energy additions and enable the newly expanded area to produce at least as much energy as it consumes. While this requirement would apply only to the new leisure ice area, the recreation service will be required to complete a decarbonization plan that will determine the timing of deep energy retrofits required for existing facilities. Planning for the construction of this new ice surface would be integral to the asset management considerations for existing infrastructure at the Sports Centre.

## By the Numbers

### Projected Costs: \$5 million

Debt Servicing	5 year term	10 year term	15 year term
<b>Annual Total</b>	\$1,182,986	\$660,155	\$488,125
<b>Per Residential Household</b>	\$32.62	\$18.21	\$13.46

\*Debt servicing projected in today's dollars and do not include grants

\*Based on assessed home value of \$800,000

### Incremental Costs

	Operating Costs
<b>Revenue</b>	\$110,842
<b>Operating Costs</b>	\$25,750
	\$85,092

\*Incremental operating costs are over and above existing budgeted operating costs which are expected to remain relatively constant.

## Pros and Cons

### Advantages

- ✓ Meet increased demand - anticipated use of new ice surface is 12hrs/day, 7days/week
- ✓ Increase to programming for beginner hockey, ringette, figure skating, private lessons and goalie sessions
- ✓ Moving beginner activities opens up more options for advanced programming on existing ice surfaces
- ✓ Increased opportunities for revenue through special events
- ✓ Reduction in the number of staff required to supervise two rinks
- ✓ Repurpose old skate shop for needed storage
- ✓ No additional ice resurfacing equipment necessary
- ✓ Improved safety and customer service
- ✓ Does not require reconfiguration of parking lot and access road

### Disadvantages

- ✗ Similar program costs but with a lower revenue potential than full sheet ice expansion
- ✗ New ice surface will not accommodate adult user groups and hockey
- ✗ Attraction and retention of staff for 12hrs/day, 7 day/week operation
- ✗ If minor hockey and adult programs continue to grow, capacity could become an issue longer term





# 4.0 Fields: Financial Forecast and Capital Development Plan

## 4.1 SPORT FIELD STRATEGY BACKGROUND

Sports Fields Study work commenced in June 2022 and included research and engagement with 11 user groups and 486 residents through a public field use survey. A state of fields condition assessment was completed through the summer and fall. The draft study is now complete and includes recommendations for the locations of a second artificial turf field as per direction from the Recreation Commission in November 2021.

### Key Findings

- 82 per cent of CVRD residents have access to a field within a 10-minute walk.
- Municipal sport fields are generally in much better condition than school sport fields.
- Satisfaction of sports field inventory is relatively strong during the summer months and lower for the winter months.
- There is public support to improve support amenities at sport field sites.

## 4.2 PROPOSED OPTIONS

While the current sport field inventory has remaining capacity, adding a second artificial turf surface is the most efficient and effective way to accommodate future growth and meet user needs. Three sites have been identified as potential candidates and could include:

- 70 x 110 m all weather turf field
- Automatic field lighting system
- Perimeter fencing
- Players benches
- Standard infill



## 4.3 BY THE NUMBERS

Capital Costs for a typical artificial turf project are summarized in the table below:



PROJECTED CAPITAL COSTS: \$5-million			
DEBT COSTS	5-YEAR TERM	10-YEAR TERM	15-YEAR TERM
Annual Total	\$1,182,986	\$660,155	\$488,125
Cost per year, average single-family household	\$32.62	\$18.21	\$13.46

\*Debt costs projected in today's dollars and do not include grants

\*Based on assessed home value of \$800,00

**Factors that may increase costs:**

- Geotechnical condition
- Typical lighting requirement (e.g., location of existing power source, upgrades required, site limitations.
- Preference for alternative infills
- Special runoff / drainage requirements
- Roadway and parking access

#### 4.4 NEXT STEPS

Should the Recreation Commission choose to pursue an additional artificial turf, a geotechnical study and feasibility study for the preferred location(s) should be undertaken to identify capital and operating costs, along with life cycle and asset management considerations. A study would also confirm technical suitability of the site(s) and propose operating approaches/partnerships, specifications, and characteristics.

# Sport Field Expansion

February 2023

## Option 1 (Highland Park – Comox)



### Pros and Cons

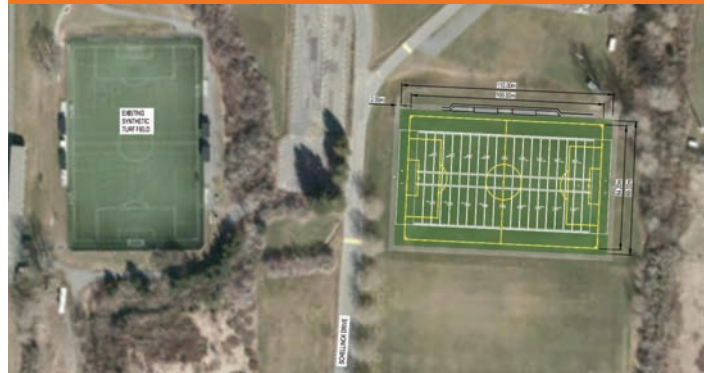
#### Advantages

- ✓ Sporting fields and multi-sport activities located in one place (ball fields, pickleball courts, outdoor lacrosse/hockey box and school gymnasium)
- ✓ Promotes community gathering
- ✓ Greater sense of safety under lighted fields
- ✓ Easily accessible for high school programming
- ✓ Opportunity to provide a synthetic turf field in a different geographic location

#### Disadvantages

- ✗ Parking is limited
- ✗ Neighbourhood concerns – late-night lighting, noise, vehicle traffic
- ✗ Lighting and surface conditions require further exploration additional costs
- ✗ Loss of class A playing field

## Option 2: (G.P. Vanier Secondary School - Courtenay)



### Pros and Cons

#### Advantages

- ✓ Other sporting fields and multi-sport activities located in one place (current all-weather field, track/field, grass soccer fields, pool and arenas, school gymnasium)
- ✓ Comox Valley United Soccer Association to construct fieldhouse beside the current all-weather field
- ✓ Provides required setting/opportunity for tournaments at higher levels
- ✓ Easily accessible for high school programming
- ✓ Promotes community gathering location
- ✓ Ample parking between sports centre and Vanier parking lots
- ✓ Greater sense of safety under lighted fields
- ✓ No Neighbourhood concerns of late-night lighting, noise, vehicle traffic
- ✓ Pre-existing amenities provide an opportunity for some cost savings

#### Disadvantages

- ✗ Both fields in one location may cause questions/ concerns about geographic accessibility



# Sport Field Expansion

## Option 3 (Bill Moore Memorial Park – Courtenay)



## Pros and Cons

### Advantages

- ✓ Sporting fields and multi-sport activities located in one place (ball fields, football field, lawn bowling and outdoor lacrosse/hockey box)
- ✓ Promotes community gathering
- ✓ Greater sense of safety under lighted fields
- ✓ Accessibility option for those unable to access current location at Sports Centre site
- ✓ Large footprint to work with
- ✓ Could accommodate winter baseball, football and soccer with full build

### Disadvantages

- ✗ Parking is limited
- ✗ Neighbourhood concerns – late-night lighting, noise, vehicle traffic
- ✗ Potential challenges with lighting
- ✗ Site conditions suggest this option may incur additional costs



## Other Capital Investment Recommendations

- Use the recommended new sport n system to identify Id enhancement projects on an ongoing basis.
- Enhance washrooms/changerooms and consider lighting at 2 – 4 high use sites.
- Develop a Class A baseball site (Likely through enhancement of an existing site).
- Initiate planning for a ne hub site (Not required for at least 10 – 15 years)





# Multi-Plex Hub

February 2023

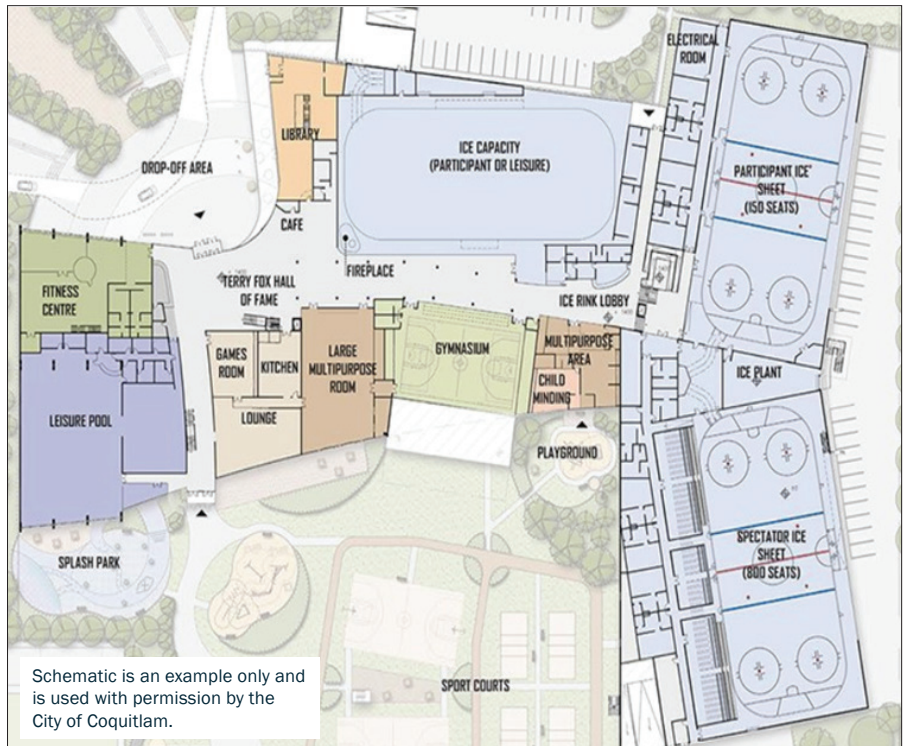


Recognizing that the current building inventory is all older than 20 years, the option of consolidating all the uses at the Sports Centre and the Aquatic Centre into a single new facility should be considered for the future.

## Highlights

Assuming some further capacity is required, this option could include the following in a phased approach if a large enough track of land was secured:

- 2 - 25 metre indoor main pool
- Leisure Pool with lazy river, tot's zone, zero entry, spray features
- Variety of leisure pool spaces including waterslide, hot pools, sauna and steam rooms
- Pool support spaces for programs and clubs
- Other potential driver uses (multi-purpose room, games room etc.)
- Outdoor pool
- Ice Rink(s)
- Community kitchen
- Direct or agriculture/dog training show space with nearby equestrian facilities



## Key Considerations

- Addresses future community priorities currently being discussed
- Enhances leisure and wellness experiences
- Provides universal accessibility and community hub
- Land use planning should commence soon to prepare for this



## Energy Savings

Proceeding with this option would allow for the closure of aging aquatic facilities at the Outdoor Pool and the Sports Centre, as well as eventual closure of the Aquatic Centre. This would provide opportunities to substantially reduce operational GHG emissions by incorporating more thermally effective envelopes, as well as less fossil fuel intensive, or fossil fuel free mechanical systems. Standalone new buildings reduce GHG emissions, driven in part by codes and policies that will make this a requirement of new construction in the very near future.

\*please note this is a staff presented option based on the notion of securing land for the future and was not a major consideration in any of the consultant studies.



# Multi-Plex Hub

## By the Numbers

**Capital Costs: \$190 million**  
(does not include purchase of land)

## Pros and Cons

### Advantages

- ✓ Allow for most significant reduction of GHG footprint
- ✓ Potentially address land ownership or ALR challenges of existing sites
- ✓ Optimize programming and operational efficiencies at one location
- ✓ All recreation opportunities for ice, aquatic and sports court offered under one roof
- ✓ Ability to offer multi-sport programs for lessons and day camps
- ✓ Additional meeting spaces, storage and social spaces

### Disadvantages

- ✗ Highest cost to build
- ✗ A site has not yet been identified but could be a priority to start an options analysis
- ✗ Increased staffing requirements including lifeguards, front desk, custodial and facility maintenance



# Capital Options – Summary Chart

## CVRD Financial Forecast and Capital Plan Options



### POOL OPTIONS

	Cost	Page
<b>Option 1</b> Maintain status quo at Outdoor Pool (Courtenay)	\$1 - \$7.5 million	4
<b>Option 1</b> Maintain status quo at Sports Centre	\$7.5 million	4
<b>Option 1</b> Maintain status quo at Aquatic Centre	\$8 million	4
<b>Option 2A</b> – Add indoor teach pool and hot pool to Aquatic Centre. Close Sports Centre pool	\$25.8 million	6
<b>Option 2B</b> – Add freeform outdoor leisure pool to Aquatic Centre. Close Outdoor Pool.	\$12 million	8
<b>Option 2C</b> – Add indoor teach pool, hot pool and outdoor leisure pool to Aquatic Centre. Close Sports Centre pool and Outdoor Pool.	\$35 million	10
<b>Option 3</b> – New build/ location with indoor teach pool, hot pool and outdoor leisure pool. Close Sports Centre pool, Outdoor Pool and Aquatic Centre.	\$87.9 million*	12



### ARENA OPTIONS

	Cost	Page
Full Sheet Ice Rink Expansion	\$16 million	15
Leisure Ice Rink Expansion	\$5 million	17



### FIELD OPTIONS

	Cost	Page
Highland Park	\$5 million	21
G.P. Vanier Secondary	\$5 million	21
Bill Moore Memorial Park	\$5 million	22



### MULTIPLEX HUB

	Cost	Page
New build/new location for Pool, Arena and Fields	\$190 million*	23

\*Does not include land purchase



CAPITAL PROJECTS PLANNING MATRIX						
OPTION	WHAT	TIME FRAME	TOTAL COST	TIME FRAME 1. PLANNING 2. DESIGN 3. CONSTRUCTION	NUMBER OF CRITERIA MET	FUNDING (TAX REQUISITION AND/OR GRANTS)
<b>Aquatics</b>						
<b>#1 – Maintain Status Quo</b>	Outdoor Pool	Immediate	\$1 million	N/A		
		Long Term	\$7.5 million			
	Sports Centre	Extend life for 10 years	\$7.5 million	N/A		
	Aquatic Centre	Extend life for 30 plus years	\$8 million	N/A		
<b>#2-- Expand Aquatic Centre or New Build</b>	2A Addition of new indoor teach pool and hot pool to Aquatic Centre site. Closure of Sports Centre pool.	Short Term	\$25.8 million	1.  2.  3.		

Immediate – Up to two years

Short Term – 2-5 years

Medium Term – 5- 10 years

Long Term 10 – 20 years and beyond

CAPITAL PROJECTS PLANNING MATRIX						
OPTION	WHAT	TIME FRAME	TOTAL COST	TIME FRAME 1. PLANNING 2. DESIGN 3. CONSTRUCTION	NUMBER OF CRITERIA MET	FUNDING (TAX REQUISITION AND/OR GRANTS)
	2B: Addition of freeform outdoor leisure pool to the Aquatic Centre site. Closure of Outdoor Pool.	Medium Term: Decision by City of Courtenay and develop plan for SC	\$12 million	1.  2.  3.		
	2C: Addition of new indoor teach pool, hot pool and freeform outdoor leisure pool to the Aquatic Centre site. Closure of Sports Centre pool and Outdoor Pool.	Medium Term Awaiting City of Courtenay decision and develop plan for SC	\$35 million	1.  2.  3.		
<b>Ice</b>						
Full Size Ice Rink Expansion	New ice surface at Sports Centre south of existing site	Medium Term as extra parking and SD 71	\$16 million	1.  2.		

Immediate – Up to two years

Short Term – 2-5 years

Medium Term – 5- 10 years

Long Term 10 – 20 years and beyond

CAPITAL PROJECTS PLANNING MATRIX						
OPTION	WHAT	TIME FRAME	TOTAL COST	TIME FRAME 1. PLANNING 2. DESIGN 3. CONSTRUCTION	NUMBER OF CRITERIA MET	FUNDING (TAX REQUISITION AND/OR GRANTS)
		permissions to consider		3.		
<b>Fields</b>						
New Artificial Field #1	Highland Park – Comox	Immediate if 5 year borrowing	\$5 million	1.  2.  3.		
New Artificial Field #2	G.P. Vanier Secondary School - Courtenay	Immediate if 5 year borrowing	\$5 million	1.  2.  3.		
New Artificial Field #3	Bill Moore Memorial Park – Courtenay	Immediate if 5 year borrowing	\$5 million	1.  2.		

Immediate – Up to two years

Short Term – 2-5 years

Medium Term – 5- 10 years

Long Term 10 – 20 years and beyond



CAPITAL PROJECTS PLANNING MATRIX						
OPTION	WHAT	TIME FRAME	TOTAL COST	TIME FRAME 1. PLANNING 2. DESIGN 3. CONSTRUCTION	NUMBER OF CRITERIA MET	FUNDING (TAX REQUISITION AND/OR GRANTS)
				3.		
Enhance Fields	Washrooms/change rooms and consider lighting at 2 – 4 high use sites	Short Term due to community engagement	\$200k - \$1.2 million per site	1.  2.  3.		
Initiate planning for a new multi-field hub site (Not required for at least 10 – 15 years)		Immediate but low priority depending on other capital projects		1.  2.  3.		
Enhance little league baseball site access	New fenced fields for little league	Immediate	Up to \$300,000	1.  2.  3.		

Immediate – Up to two years

Short Term – 2-5 years

Medium Term – 5- 10 years

Long Term 10 – 20 years and beyond

CAPITAL PROJECTS PLANNING MATRIX						
OPTION	WHAT	TIME FRAME	TOTAL COST	TIME FRAME 1. PLANNING 2. DESIGN 3. CONSTRUCTION	NUMBER OF CRITERIA MET	FUNDING (TAX REQUISITION AND/OR GRANTS)
Cricket at existing site(s)	Find suitable field for Cricket Pitch	Immediate	\$25,000	1.  2.  3.		
Unstructured play at sports fields	Confirm field allocations and additional programming	Immediate	Minimal			
<b>Multi Plex Hub</b>						
	Consolidate all uses at the Sports Centre and the Aquatic Centre into a single new facility	Long Term	\$190 million not including land	1.  2.  3.		

Immediate – Up to two years

Short Term – 2-5 years

Medium Term – 5- 10 years

Long Term 10 – 20 years and beyond

CAPITAL PROJECTS PLANNING MATRIX						
OPTION	WHAT	TIME FRAME	TOTAL COST	TIME FRAME 1. PLANNING 2. DESIGN 3. CONSTRUCTION	NUMBER OF CRITERIA MET	FUNDING (TAX REQUISITION AND/OR GRANTS)
OTHER PROJECTS						

Immediate – Up to two years

Short Term – 2-5 years

Medium Term – 5- 10 years

Long Term 10 – 20 years and beyond