Crystal Pool and Fitness Centre Feasibility Study

Summary Report

07 September 2017

Images: Courtesy of Crystal Pool & Fitness Centre

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Executive Summary

The purpose of this Crystal Pool and Fitness Centre Feasibility Study is to assist the City of Victoria with determining a course for future investment in recreation services as they relate to this facility. This is the final Summary Report which documents the process and supersedes previously issued Draft Reports.

In course of this study a multidisciplinary consultant team has collaborated with a city project team comprised of staff and external resources, as well as members of the general public in analyzing current and anticipated community need relating to aquatic and recreation, assessing options for upgrading the current facility or building a new facility to meet this need and confirming the financial implications of those options.

In total **three options** - described in detail within this report - were developed and brought forward to council for consideration:

Option 1 - Retrofit and Rejuvenate What Exists
Option 2 - Retrofit What Exists and Expand Facility and Program
Option 3 - New Construction of Expanded Program

Option 1 addresses the minimal required effort to keep the facility open and operating, whereas Options 2 and 3 both have the ability to address the identified current and future need, but come with different sets of benefits and challenges as well as differing cost and risk profiles.

In October 2016, City Staff presented the findings of the Feasibility Study Draft Report to Council Committee of the Whole for consideration. The outcome was **unanimous council support to recommend the development of a new facility to replace the aging existing facility.**

The implementation plan, which now forms part of this final summary report, has been developed for the replacement facility option, outlining at a high level the recommended next activities and providing an overview schedule.

Photo: Courtesy of Crystal Pool & Fitness Centre

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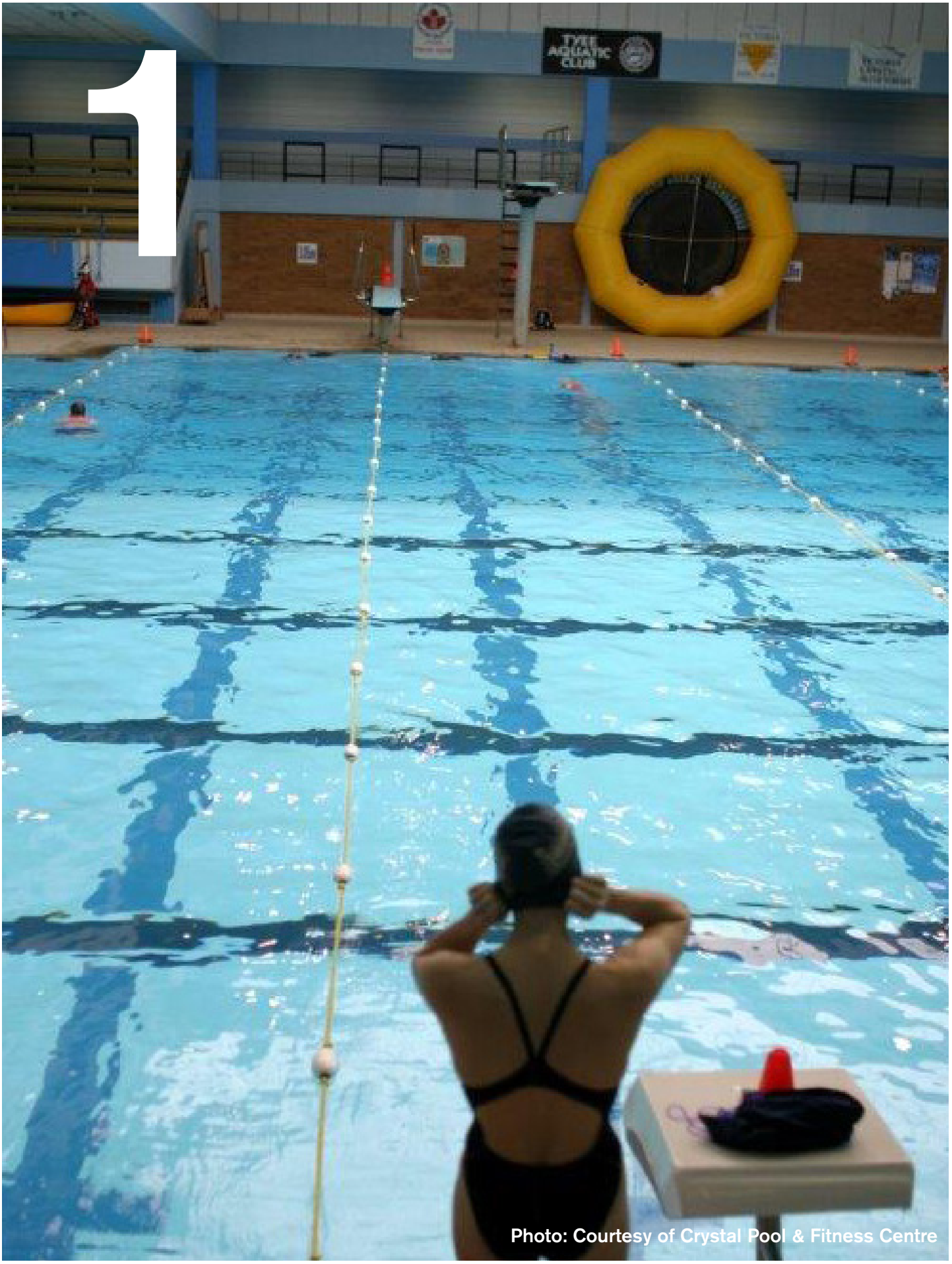
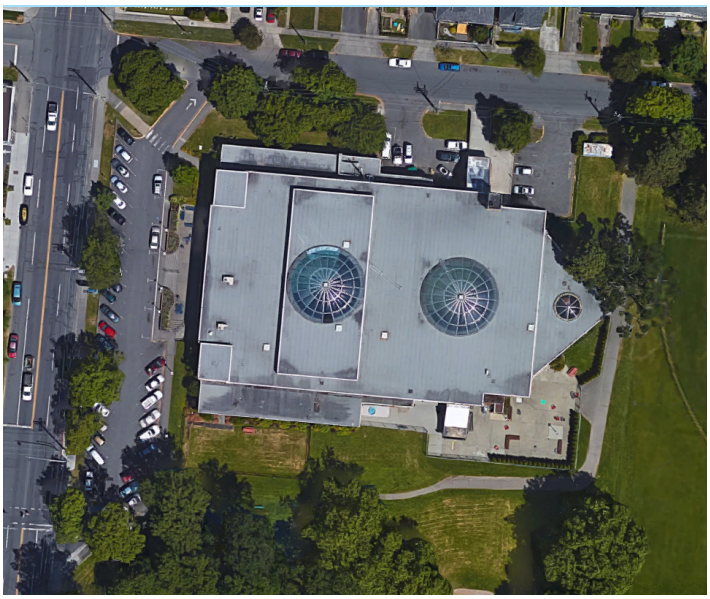


Photo: Courtesy of Crystal Pool & Fitness Centre



Images: Courtesy of Crystal Pool & Fitness Centre

Introduction

The Crystal Pool and Fitness Centre was designed by Victoria architect John Di Castri in 1969 and opened its doors in 1971. The building (approximately 5750 M2 or 62,000 SF) features an 8 lane, 50 metre aquatic facility that includes a water slide and other leisure components as well as multi-purpose spaces and fitness spaces, a weight room, cardio areas and a fitness circuit which were not original to the building. Though the facility has undergone a number of programming and maintenance improvements in the intervening 45 years, it has not been significantly upgraded. Various reviews and assessments conducted over the past few years confirm that at the very least, the building requires considerable investment in the near future to maintain its functionality in its current configuration. However, it may require much more. What it specifically requires is the focus of this study.

When the facility was originally constructed the primary purpose was aquatics and it housed the only 50 metre competition pool in the greater Victoria region. As trends and needs have changed, and other facilities have been built in the region, the purpose and focus of the facility has also changed. The dry-land spaces have been re-purposed to allow weight training and fitness activities and the pool area has been modified to allow for additional play and relaxation features (waterslide, hot tub and sauna), while still allowing for fitness and sport training activities. Although the facility has been maintained to a high standard given available operational funding, some of the its systems and components are approaching the end of their functional lifespan, and the ability to modify and expand dry-land and aquatic spaces to meet new trends and demands is limited.

The facility has undergone an assessment regarding required lifecycle upgrades in 2015. The results of the assessment confirmed that all of the major pool systems were beyond, at or near the end of their useful life. Those results prompted this feasibility study, which is meant to provide city staff and city councillors additional information to inform their decision making process.

With the refurbishment costs for extending the life of the existing facility in the millions of dollars, the city of Victoria faces the critical decision between refurbishing, expanding or even replacing Crystal Pool and Fitness Centre. The focus of this feasibility study is the engagement of stakeholders and the general public towards understanding the community needs, and the reviewing in more detail the technical and financial implications of potential options that can meet these needs through refurbishment, expansion or replacement.

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Image: Courtesy of Crystal Pool & Fitness Centre

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Context for Planning Aquatic Services

The context within which indoor aquatic needs are investigated and planning for aquatic spaces has been undertaken in this project warrants some review. There are several background concepts that require understanding.

Seven Categories of Aquatic Services

There are seven categories of aquatic services under which existing services are assessed and future needs determined. Each requires a slightly different configuration of aquatic spaces, water temperature or operation to deliver the service. They are as follows:

- **Recreational Swimming** (i.e. swimming for fun);
- **Skill Development** (e.g. swim lessons primarily, but also other skills taught in lesson format);
- **Fitness Swimming** (both lane swimming and aquasize classes);
- **Sport Training** (e.g. aquatic sport club training sessions);
- **Special Events** (e.g. swim meets and diving competitions);
- **Therapy and Rehabilitation** (where those that are injured, are frail, or have disabilities are active in water because it supports their body weight; either in a program, or individually);
- **Leadership Training** (e.g. Bronze Medallion, Bronze Cross, NLS courses).

Almost all aquatic services and needs can be categorized under one of the above headings.

Three Modes of Pool Operation

There are also three modes of pool operations as follows:

- **Drop-in**, where individuals and families decide to visit a facility and swim on a case by case basis;
- **Program**, where users pre-commit, through a registration process, to a series of uses that typically involve some instruction or leadership, and are scheduled at a predetermined time;
- **Rental**, where a group rents some aquatic space, and then controls the users and uses of that space.

The seven categories of aquatic service are typically accommodated within the three modes of operation as summarized in **Figure One**.

Understanding the seven categories of aquatic service and how they are met within the three modes of operation is important to the assessment of existing aquatic facilities and in planning for any new aquatic amenities in the City of Victoria.

Three Modes of Operation			
Categories of Aquatic Service	Drop-In	Program	Rental
Recreational Swimming	■		■
Skill Development		■	
Fitness Swimming	■	■	
Sport Training			■
Competitions			■
Therapy and Rehabilitation	■	■	■
Leadership Training		■	

Figure One Accomodating Categories of Aquatic Service Within Three Modes of Operation

Generally speaking, for a City the size of Victoria, indoor aquatic services are provided on a City-wide service level; that is, there will not be a pool in each neighbourhood within the City, but one facility that is centrally located and to which all residents can travel to and use. In other words, while the seven categories of aquatic service each require somewhat unique types of space in which to accommodate them, a single pool will have to suffice to meet all seven categories of service. In turn, that means that prioritization of service categories will be required, as a single pool will not ideally meet all types of aquatic service. It also means that multiple pool tanks will likely be required in the single facility.

Capacity of Indoor Pools

The capacity of Crystal Pool and Fitness Centre to deliver many or all of the seven categories of aquatic service relates to:

- The amount of surface area of the pool tank or tanks;
- The depth of water in the pool tank or tanks;
- Programming and scheduling of the tank or tanks (i.e. different users can accomodate different totals in the same water surface area and depth).
- The total hours available each year.

The Crystal Pool and Fitness Centre is available for use about 130 hours each of 48 weeks each year; for a total of 6240 hours. For such a facility, which attempts to balance all of the seven categories of aquatic service, experience has shown the total capacity for aquatic service can be measured by the formula noted below:

- For water less than 5 feet deep, indoor pools have a capacity to delivery up to 65 swims per year for each square foot of water surface area;
- For water more than 5 feet deep, indoor pools have a capactiy to deliver up to 25 swims per year for each square foot of water surface area.

It should be noted that this is not “legal capacity” which is laid down in the Swim Pool Regulations under BC’s Health Act, and which results in higher capacity than the formula above. In fact, while legal capacity divides pools into water less than and more than 5 feet deep, it focuses on instantaneous capacity rather than annual capacity. The above definition of capacity relates to a typical public pool which must deliver a variety of categories of aquatic service in a typical 6000 to 6500 hours per year municipal operating format.

Economics of Pool Operation

Some important economic aspects of the delivery of aquatic services need also to be understood.

- The Capital Cost of an indoor pool, unlike most other forms of buildings, correlates more directly with the volume of the facility rather than the floor area. This is because, the deeper the water, the more air above the water is typically required, and both water depth and air height are very important and costly considerations when developing an indoor pool, as both require large amounts of mechanical systems (water treatment systems which vary with the volume of water, and HVAC systems for handling highly humid, chemical laden air) associated with those volumes. Two pools with the same floor area can have signficantly different construction costs if one has more deep water and higher ceilings than the other.

- Operating Costs for indoor public pools are highly related to regulations and largely fixed. About 70% of the operating costs of a typical pool are relatively or completely fixed (ie. they don't vary whether there is one person swimming or 40 people swimming in the pool enclosure) and are associated with a minimum number of lifeguarding staff, water quality systems, management staff, insurance, utilities, and staffing a customer service control point; none of which vary directly with the volume of use.

- Operating revenues are variable. In other words, if use increases by 10%, operating revenues go up roughly 10% as the revenue associated with swims in each category of aquatic service is largely constant on a per swim basis.

- Because of the previous two points, it is very important, from an economic and environmental sustainability point of view, to operate a pool as close to full capacity as is reasonably possible. A pool operating at a fraction of its total capacity has a high operating cost, a low operating revenue, and a very high net subsidy and energy consumption per swim. A pool operating close to its full capcity has a high operating cost, a high operating revenue, and a much lower net subsidy and energy consumption per swim. Another way of viewing this relationship is to acknowledge that every additional swim a pool is able to generate will trigger more operating revenue than operating cost and won't increase energy consumption proportionately. That means a community should try to size its pool or pools to meet current and short term future needs, and not the needs of the very long term future, as "overbuilding" capacity in the short term to meet long term needs will likely result in operating subsidies per swim that are so high that they collectively exceed the cost of adding to the existing pool or building another pool far into the future when the community needs it.

All of the above contextual comments are very important in the sizing and configuring of pool spaces and planning for long term aquatic needs. In order to ensure the right kinds and amounts of aquatic spaces are built it is important to consider:

Image: Courtesy of Crystal Pool & Fitness Centre

- The proportion of total aquatic use that will be generated in each of the three modes of operation;
- The proportion of total swims that will be generated in each of the seven categories of aquatic service;
- The total swims that result from the first two bullets above translated into a set of aquatic spaces that will optimally respond to those needs, resisting the temptation to "overbuild" spaces which won't be used for 10- 20 years or more;
- While providing all core aquatic services, attempt to fill gaps in the supply left by other existing pools in the region and not duplicate service in categories which are more specialized and represent fewer swims;
- That as many current and short term needs are met within a context of the least amount of volume of space;
- That all pools will be operated as close to full capacity as is reasonably possible to avoid unnecessarily high subsidies per swim.

The final few points above deal with the Crystal Pool and Fitness Centre operating within a regional market. If a future Crystal Pool and Fitness Centre were to fill gaps left in the regional market place, that would be a good thing from a regional perspective both economically and environmentally. However, if it were to duplicate services where there is already excess capacity in the regional marketplace, and "steel away" swims from other pools, resulting in more excess capacity overall in some categories of aquatic service, that would be a bad thing from a regional perspective both economically and environmentally.

Benefits of Aquatic Services

Although public aquatic facilities are among the most expensive facilities that a community can provide, almost all communities invest heavily in them because of the tremendous benefits that accrue from their use. These benefits contribute to healthy, active individuals and communities and include:

- Water safety – learning how not to drown, one of the most basic of human needs and public services especially for communities close to natural waterways;
- Learning and improving skills in swimming, diving and other water sports;
- Fitness and conditioning in a medium that is least consumptive and least likely to result in injury because of the buoyancy of the water;
- Rehabilitation and therapy services to those with disabilities, injury or frailty;
- Social opportunities in water or on deck that connect people and reduce feelings of isolation;
- Family opportunities to come together in a recreational setting conducive to all family members;
- Mixing segments and subsets of the community with an activity that is worldwide, appeals to people of all ages and abilities;
- Leadership training for young people;
- Extensive volunteering opportunities;
- Special events that rally community identity, spirit and pride;
- Sport Tourism opportunities associated with swim meets.

It is for the above reasons that public aquatic swimming facilities are typically quite highly subsidized. In addition to taxpayers having to contribute to the capital costs of indoor pools, the typical recovery rate for an indoor pool is between 30% and 70%, with taxpayers paying the remainder of the operating costs.

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Image: Courtesy of Crystal Pool & Fitness Centre

The Existing Situation

Introduction to this chapter. Before analyzing how the Crystal Pool and Fitness Centre meets needs, it is important to understand the marketplace within which it operates.

The Regional Marketplace

The Greater Victoria Region, spread over an area of just under 700 km2 has an estimated 2015 population of around 375,000. Victoria, at a population of just under 85,000 is the second largest of the 15 cities, municipalities, unincorporated areas and first nation reserves that make up the region. Saanich, with a population of around 110,000 is the largest municipality, whereas none of the remaining municipalities has a population exceeding 35,000.

There are currently eight municipal public indoor pools in the regional marketplace, as well as two YMCA pools and one University pool. They are listed in Figure Two A. Private indoor pools, mostly associated with hotels and only partially available to the public, have not been listed.

Figure Two A
Existing Public Indoor Pools in the Capital Region

Name of Facility	Municipality in Which it is Located	Agency Which Owns and Operates	Pool Tanks Included
Sooke Pool	District of Sooke	CRD Seaparc (Sooke Electoral Area Parks and Recreation Commission)	▪ 6 Lane 25m Lap Pool ▪ Leisure Pool ▪ Swirl Pool
Juan de Fuca Recreation Centre	City of Colwood	Westshore Parks and Recreation	▪ 8 Lane 25m Lap Pool ▪ Leisure Pool ▪ Hot Tub
New Y Pool in Western Communities	City of Langford	YMCA-YWCA of Greater Victoria	▪ 5 Lane 25m Lap Pool ▪ Leisure Pool ▪ Hydro Therapy Pool ▪ Swirl / Hot Pool
Esquimalt Recreation Centre	Township of Esquimalt	Esquimalt Parks and Recreation	▪ 6 Lane 25m Lap Pool ▪ Leisure Pool ▪ Tot Pool ▪ Swirl / Hot Pool
Victoria YMCA	City of Victoria	YMCA-YWCA of Greater Victoria	▪ 25m Lap Pool ▪ Leisure Pool
Crystal Pool and Fitness Centre	City of Victoria	City of Victoria	▪ Rectangular tank 50m long, by 8 lanes wide with shallow end width extension to 25m by 15m ▪ Small, shallow water leisure tank / teach pool ▪ Swirl / Hot Pool
Gordon Head Recreation Centre	District of Saanich	District of Saanich - Parks and Recreation	▪ 6 lane 25m Lap Pool ▪ Leisure Pool ▪ 2 Swirl / Hot Pools
Saanich Commonweath Pool	District of Saanich	District of Saanich - Parks and Recreation	▪ 8 lane 5m lap pool (with moveable bulkhead) ▪ 6 lane 50m pool, moveable bulkhead generally positioned between shallow and deep with deep end expanded in width to accomodate dive towers ▪ Leisure wave pool ▪ Swirl / Hot pool
McKinnon Pool	Distric of Saanich	University of Victoria	▪ L-Shaped 6 lane 25m x 25m lap pool
Panorama Leisure Centre	Distrcit of Central Saanich	Peninsula Recreation Commission (CRD)	▪ 6 lane 25m lap pool ▪ Leisure Pool
Oak Bay Recreation Centre	District of Oak Bay	Oak Bay Recreation	▪ 8 lane 25m lap pool ▪ Rectangular leisure pool ▪ Swirl / Hot Pool

The Local Marketplace

The City of Victoria recreation department operates a number of indoor and outdoor facilities. Crystal Pool and Fitness Centre is the only city operated recreation centre that offers aquatic and fitness programming. In addition to a downtown pool and fitness operated by the YMCA-YWCA, the residents of Victoria benefit from a number of aquatic and fitness facilities operated by nearby municipalities within very close proximity to downtown, including Oak Bay Recreation Centre, Esquimalt Recreation Centre and the two indoor pools operated by Saanich: Gordon Head and Saanich Commonwealth Place (SCP). All of these are either located conveniently close to Victoria residents and also might offer features that are particularly appealing to specific demographics, such as family oriented warmer water temperatures (Esquimalt) or unique attractions (wave pool and dive tower at SCP).

Figure Two B
Recreation Centres with Fitness, but without indoor pools in the Capital Region

Name of Facility	Owned By	Operated By
Pearkes Recreation Centre	District of Saanich	District of Saanich - Parks and Recreation
Cedar Hill Recreation Centre	District of Saanich	District of Saanich - Parks and Recreation
Henderson Recreation Centre	District of Oak Bay	Oak Bay Recreation

Demographic Profile of Local and Regional Marketplace

The size and demographic profile of a city's and the region's population significantly influence types and number of facilities that are required to meet the community service needs of a given municipality. Fundamental to good facility planning is a thorough understanding of the pace and location of population growth as well as any progressive changes in the population's makeup. There are some changes in the population of Victoria and the capital regional District that have been projected over the next 25 years. The most important influences are summarized below

Regional Demographics

- Growth in the City of Victoria totaled about 5.3% between 2001 and 2006 and 2.5% between 2006 and 2011 (the latest available census data) which is less than the growth experienced in the region during those same periods (5.6 and 4.3% respectively).

- Annual Growth in the region ranged between 0.7 % in 2006 to 1.6% in 2009 before slowing to 0.2 % in 2011 and 0.9 % in 2013, with projections for annual growth in the region to range between 1% through the early 2020's and trending towards 0.5% by 2041 (25 years from now)

- Changes to the regional population's age composition, as with other regions (and Canada as a whole) are projected to show the greatest relative growth in the older age groups over the next 25 years: 75-84 year olds at 117% increase, over 85 year olds at 109% increase and 65-74 year olds at 36% increase. At the other end of the age spectrum, the 25-34 group is projected to grow by only one percent, the 15 - 24 group is projected to grow by only four percent, and the under-15 segment by 26 percent. Below-average growth is also projected for the 55 to 64 age group due to the aging of the baby boomers out of this age range and into the 65-plus cohorts in the coming decades

- While the proportion of the population between 4 and 19 has decreased over the past ten years, the absolute number of children and youth in this age group in the region will still climb in the future from approximately 48500 projected for 2016 to approximately 56500 in 25 years. This is important, as many expensive facilities like libraries and swimming pools receive proportionately higher use from school aged children and their families.

- The proportion of the population over the age of 50 has been climbing and will continue to climb quite dramatically from an estimated 155,100 in 2016 to just under 220,000 in 2041. Given that the needs of older adults are somewhat different than those of other age groups, the "graying" of the region's population represents an important facility planning consideration.

Neighbourhood Demographics

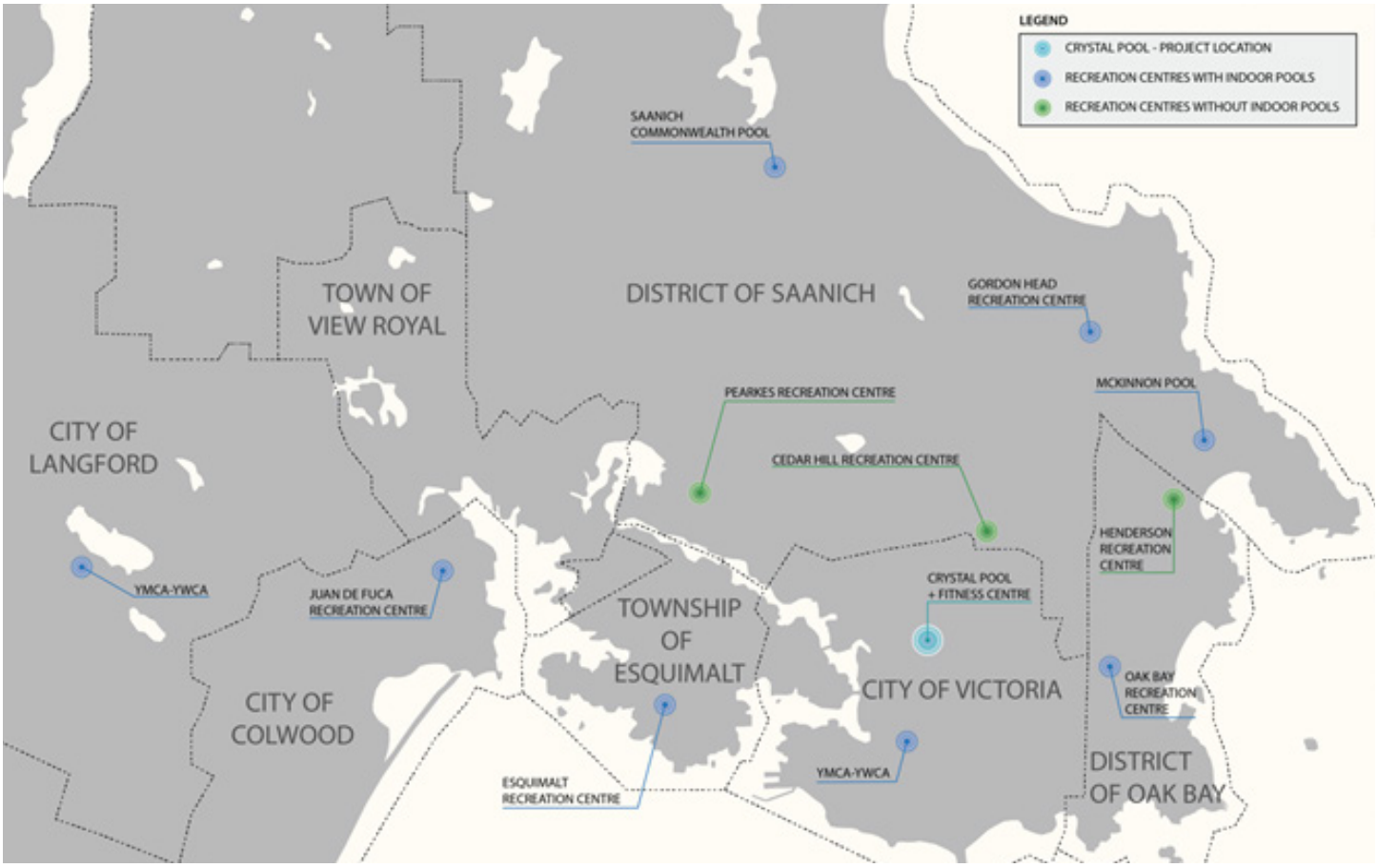
- The immediate Neighbourhood (North Park) has seen varying degrees of growth between 1991 and 2011, averaging out at just under 1% annual growth.

- 7% of the population in this neighbourhood are under 15 years of age (2011), which compares lower to the region (approximately 13% aged 15 and under in 2011)

- 13% of the population is over 65 years of age, which is also lower than the percentage of 65 and older in the region (just under 18% in 2011)

- North Park is a walkable, centrally located neighbourhood: At 33%, North Park has the third highest percentage (after Downtown (41%) and Harris Green (48%)) of the population commuting to work on foot. With 62% it has the second highest percentage of population over 15 commuting by transit, bike or foot, exceeded only by Harris Green (63%) and exceeding downtown (57%), and well above the Victoria average of 48%. These percentages correlate with its central location and the neighbourhood providing the third largest percentage (86.6%) of its housing stock in apartments, after only Downtown (100%) and Harris Green (99.6). It has the highest percentage of rental tenure (77%), well above the city average of 59%.

- Of all neighbourhoods in Victoria, it has one of the lowest percentages of population above 15 years old holding a post-secondary certificate, diploma or degree (55%) and the highest percentage of lone-parent family structures at 28% compared to the city average of 19%.



The Existing Facility

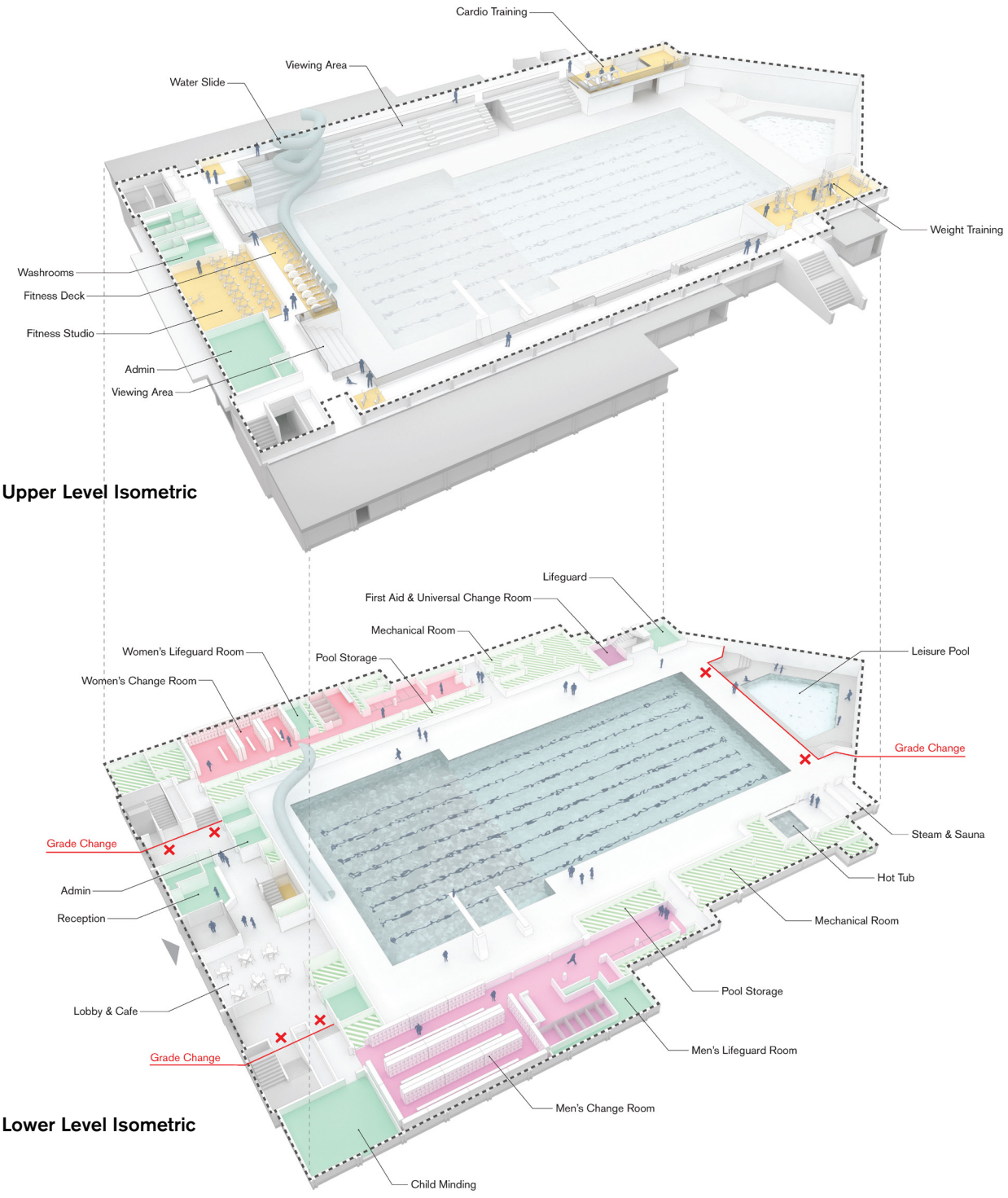
The existing facility is located on the corner of Central Park. All patrons coming to the front entrance must proceed downward one half a storey below grade to effect entry and control. Then they either proceed further down one level to the basement dry floor activity spaces or back up one half a level to the change rooms which are located at grade on the deck level. Alternatively, they can proceed up one and one half levels to the top of the seating area where there is an aerobics room, a weight room, and several areas of fitness equipment around the perimeter which are part of the pool enclosure.

Amenities in the building include:

- A main tank which is 50M long and has variable width, with the shallow portion about 20 meters wide and the deepest 20 meters is 25 meters wide. That allows for about 90% of the water surface to be configured as an 8 lane 50M pool, or the deepest 20 meters (about 40% of the water surface area) to be configured as an 8 lane 25M pool with the other 60% of shallow water used for other purposes;
- Seating for about 400 spectators, but not all can see the entire 8 lane 50M tank;
- Two separate shallow water tots pools typically with warmer water, with their deck level about 1M below the deck of the main tank;
- A steam room;
- A sauna;
- A whirlpool area;
- A water slide;
- An aerobics studio on the upper level;
- A weight room on the upper level;
- Several areas of the upper level have fitness equipment or boxing equipment or floor exercise area for individual fitness training, spinning and stretching;
- Another fitness area on a lower level below the entry foyer;
- A child minding area;
- A lower level dance studio

In addition, the facility has a wide range of support spaces necessary to operate, manage and control uses and users of the complex.

The Crystal Pool and Fitness Centre has about 8640 square feet of water surface area less than 5 feet deep, and 5000 square feet of water surface area more than 5 feet deep. The total capacity of the existing facility is about 686,000 swim visits per year as calculated in Figure Four. In other words, if there were unlimited demand for aquatic service during each of the facility's 6240 hours of availability, it could only accommodate about 686,000 swim visits during those hours in a mixed use programming schedule attempting to serve all seven categories of aquatic service before the aquatic experience would degrade to the point of failure.



Diagramatic Isometric Representation One

Conceptual Illustration of Existing Facility Layout, Program Areas and Challenging Grade Changes Impeding Accessibility

Figure Four Calculated Annual Operating Capacity of Crystal Pool and Fitness Centre to Accomodate Swims					
Tank	Area of Water less than 5 feet deep in sq. ft	Capacity of Shallow Water	Area of Water More than 5 feet deep in sq.ft	Capacity of Deep Water	Total Capacity
Main Tank	6640	431,600	5000	125,000	556,600
Leisure Tank	2000	130,000	0	0	130,000
Total	8640	561,600	5000	125,000	686,600

The facility also has the capacity to accommodate dry floor uses, with current configuration and programming featuring fitness uses and child care quite prominently and includes other activities such as meetings and dry floor programming. The total capacity for such use is more difficult to measure, but is likely in the range of about 150,000 to 200,000 visits per year in a mixed use programming format with availability of about 6900 hours per year. That is about 25 visits per hour to various fitness stations within the building.

USAGE

The existing facility enjoys about 400,000 visits each year. About 70% of those visits are swim visits (i.e. the visitor puts on a swim suit and enters the pool deck area), a further 25% are dry land fitness related uses (i.e. a user drops into one of the six fitness zones in the facility to use fitness related equipment, or joins a dry land fitness class of some kind) and the remaining 5% are either spectators or use the dry floor areas for a non-fitness reason (usually a meeting, child care or social event).

A summary of the swim visits is provided in **Figure Five**.

Figure Five Breakdown of Indoor Swims in 2015 by Pool and by Category					
	Three Modes of Operation				
Categories of Aquatic Service	Drop-In	Program	Rental	Total Estimated Annual Swims in 2015	Percentage of Swims by Category
Recreational Swimming	30, 000		2, 500	32, 500	11%
Fitness Swimming	66, 500	37, 750	6, 750	111, 000	37%
Skill Development	0	37, 400	4, 200	41, 600	14%
Sport Training	25, 000		67, 500	92, 500	31%
Competitions	0	0	0	0	0%
Therapy and Rehabilitation	15, 000	0	1, 700	16, 700	6%
Leadeship Training	0	300	1, 700	2, 000	1%
Totals	**136, 500**	**75, 450**	**84, 350**	**296, 300**	**100%**

A review of those swim visits shows the following points of analysis.

▪ Total swim visits to the Crystal Pool and Fitness Centre have been relatively stable over the past five years, with some categories increasing while other categories have been decreasing. Although there is clearly excess capacity in the pool during many of its opening hours, especially during weekday afternoons and most 50M lane swim times, total usage has not increased over the recent past to any significant extent.

▪ The largest category of swim visits is for fitness related motives. These include both registered water based fitness classes, and lane swimming in the drop in category. This is slightly larger than typical 50M pools in the province.

▪ The second largest category of swim visits is sport training. The facility is home base to several adult oriented competition swim clubs and triathlon clubs, two winter age class swim clubs and one summer swim club. These groups report more demand than can easily be met in the facility as it tries to serve a broad range of aquatic service needs. There is currently more demand than supply of rental swim lanes for swim clubs.

▪ The third largest category of swim visits is for skill level instruction (mostly swim lessons) and the vast majority of these is by youth. Although high, it is lower than the consultants expected. Typically, long course pools have higher percentage of swim lesson uses and lower sport training and fitness uses.

▪ The fourth largest category of swim visits is for recreational purposes; just having fun. While this is often the largest of the categories in public pools, it is usually somewhat lower in long course pools which typically lean toward sport training and fitness swimming more than multiservice modern municipal pools. The consultants assume that there is a larger market for this category than is being met in the current facility, which does not have the leisure amenities of most modern pools like the Commonwealth Games Pool.

▪ The fifth most significant category of swim visit is therapy and rehabilitation. This is quite typical of public pools in BC, although it is one of the fastest growing areas of aquatic service.

▪ Leadership training makes up only 1% of all swim visits. This is quite typical of all public pools in BC.

▪ The facility is atypical among 50 Meter public pools in BC in that most of the 16 long course pools in BC are justified on the basis of hosting long course swim meets. Although the facility has, in the past, hosted swim meets, and was originally designed to accommodate them, no formal swim meets of any scale have been hosted in recent past. Therefore, such areas as the bleacher seating, which was originally planned for spectator seating is vastly underutilized at present. Saanich Commonwealth Place is a much better competition facility than the Crystal Pool and indeed is one of the best facilities in the country for hosting major swim competitions. So, there is little need in the short term future for a second facility in the region capable of hosting major swim meets.

A review of the non-swim visits shows the following characteristics.

▪ Use of the scattered fitness spaces throughout the facility is reasonably strong and stable, in spite of recurring complaints about poor quality of space. It is estimated that the facility enjoys about 100,000 dry floor fitness visits each year to its five disparate fitness areas. These happen both in individual drop in mode and in group classes.

▪ The remaining dry floor uses are comprised of a wide variety of programs and services that include child care, social events, birthday parties, summer camp uses, and meetings. They likely make up another 5,000 visits each year.

Most indoor pools in Canada are used to much less than full capacity, as full capacity represents more demand than available supply at all hours of the day. The CPFC is also used to less to full capacity. However, many users might not agree. When they use the pool, at peak demand times, they see the facility well used. Also, when the facility is used to a small percent of capacity, users get a very high level of service, and often come to see the that level as optimum use of the space. For example, while a swim club that only rents the number of lane hours that is absolutely needs, might put as many as 10 children or six adults into a 25 meter lane for swim training purposes, adult lane swimmers might get used to only two users per lane and enjoy that as an ideal level of use that they adopt in their minds as "full use".

Figure Six summarizes existing use in relation to capacity for use in terms of aquatic related visits.

Figure Six
Current Use in Relation to Capacity

Size and Configuration of Main Tanks	A main eight lane 50m tank with wider (25m wide) shallow end, and modest leisure tank
Capacity for use in annual swims	686, 000
2015 use in annual swims	296, 300
Proportion of capacity utilized	43%

More intensive analysis of use in relation in capacity shows that the small toddlers pool at the east end of the main tank is the least utilized of all spaces in the building. Although designed for leisure and fun, and used occasionally for that purpose, it cannot compete with the so called leisure tanks in facilities like Saanich Commonwealth Pool, Gordon Head Recreation Centre or Esquimalt Recreation Centre.

The consultants were not in a position to undertake a thorough comparison with all the other indoor pool and fitness centres in the region. However, it is worth noting that the Saanich Commonwealth Place has roughly twice as much capacity as the CPFC but generates about three times the use and revenue in its aquatics and

fitness spaces, and the Oak Bay Recreation Centre has much less capacity in its pool but generates more than twice the use and revenue in its aquatics and fitness spaces than the CPFC.

OPERATING COSTS AND REVENUES

Actual operating revenues and expenditures have been collected for the CPFC for each of the years 2012 to 2015, and these have been combined with the budgeted figures for 2016 to create Figure Seven. At the end of this figure is a calculation of net subsidy per swim visit. This calculation assumes that the pool is core space in the facility (i.e. that is what it was originally designed for) and the dry land services add incremental costs and revenues that generally balance out. In other words, all the fixed costs of the facility are associated with the aquatics side of the operation and all the dry floor services (e.g. fitness and child care and meetings) add incrementally to that core expenditure and bring revenues with them that generally equal those incremental expenditures. In other words, all the operating deficit for the facility is associated with the swim visits.

It is important to note that there are also many other services that are offered from the base of Crystal Pool and Fitness Centre. These include such things as Arena Services, Child and Youth Programming, and Outdoor Recreation. These services have an associated annual operating cost (in addition to the expenses in Figure Seven) in the order of $1.3 million and generate separate revenue in the order of $400,000 per year. In a few cases, there are costs and revenues in these areas that directly impact the operation of Crystal Pool and Fitness Centre where the staff who provide these services are based. However, they have not been included in Figure Seven which attempts to isolate the core operating costs and revenues

Image: Courtesy of Crystal Pool & Fitness Centre

Figure Seven
Summary of Operating Costs and Revenues for Crystal Pool and Fitness Centre 2012-2016

	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Budget	% Increase - decrease over 5 Years
Revenues						
Drop in Use	517, 709	539, 596	571, 056	581, 271	571, 660	10%
Program Registration	197, 684	186, 010	235, 288	275, 332	264, 219	34%
Rental Revenue	121, 016	128, 168	153, 851	131, 653	131, 330	8%
Other User Revenue	75, 111	64, 165	71, 713	71, 142	62, 000	-17%
Other Revenue	893	1, 409	37	2, 486	0	
Total Revenue	**$912,413**	**$919,348**	**$1,031,945**	**$1,061,884**	**$1,029,179**	**13%**
Expenditures						
Administration and Fixed Costs	657, 316	630, 362	699, 282	733, 723	727, 571	11%
Program and Service Delivery	685, 504	636, 000	738, 159	754, 975	808, 546	18%
Utilities	243, 254	283, 173	289, 543	191, 772	234, 465	-4%
Building Operations and Maintenance	566, 576	543, 627	595, 279	651, 599	608, 587	7%
Repairs and Lifecycle Maintenance				32, 140	100, 000	
Total Expenditure	**$2, 152, 650**	**$2, 093, 162**	**$2,322, 263**	**$2, 364, 209**	**$2, 479, 169**	**15%**
Net Public Operating Subsidy	**$1, 240, 237**	**$1, 173, 814**	**$1, 290, 325**	**$1, 449, 990**	**$1, 449, 990**	**17%**
Recovery Rate	**42%**	**44%**	**45%**	**45%**	**42%**	**0%**
Total Visits	295, 000	295, 000	295, 000	296, 000	296, 300	0%
Net Subsidy per Visit	**$4.20**	**$3.98**	**$4.37**	**$4.40**	**$4.89**	**17%**
Total Residents	82, 250	82, 650	83, 975	83, 450	84, 800	3%
Net Subsidy per Resident	**$15.08**	**$14.20**	**$15.37**	**$15.61**	**$17.10**	**13%**

associated with the direct uses of the facility itself. This allows the consultants to compare the operation of the facility with other similarly configured pools and fitness centres.

As **Figure Seven** shows:

▪ Every time someone changes into a bathing suit at the CPFC, Victoria taxpayers currently pay out, on average, about $4.90 in operating subsidy. This is quite typical of indoor pools in BC, although there is a great deal of variance in the province and this is likely better than the average.

▪ The facility costs about $397 per hour to operate in its current format. Corresponding revenue equals about $165 per hour.

▪ If the average revenue per use is about $3.47, the average revenue per hour equates to about 47 visits per hour, which is comparable to the total uses of 296,300 divided by the number of operating hours which is 6240.

▪ When the column totals in Figure Five are compared to the revenue totals in Figure Six, it becomes clear that the most lucrative mode of operation is the drop

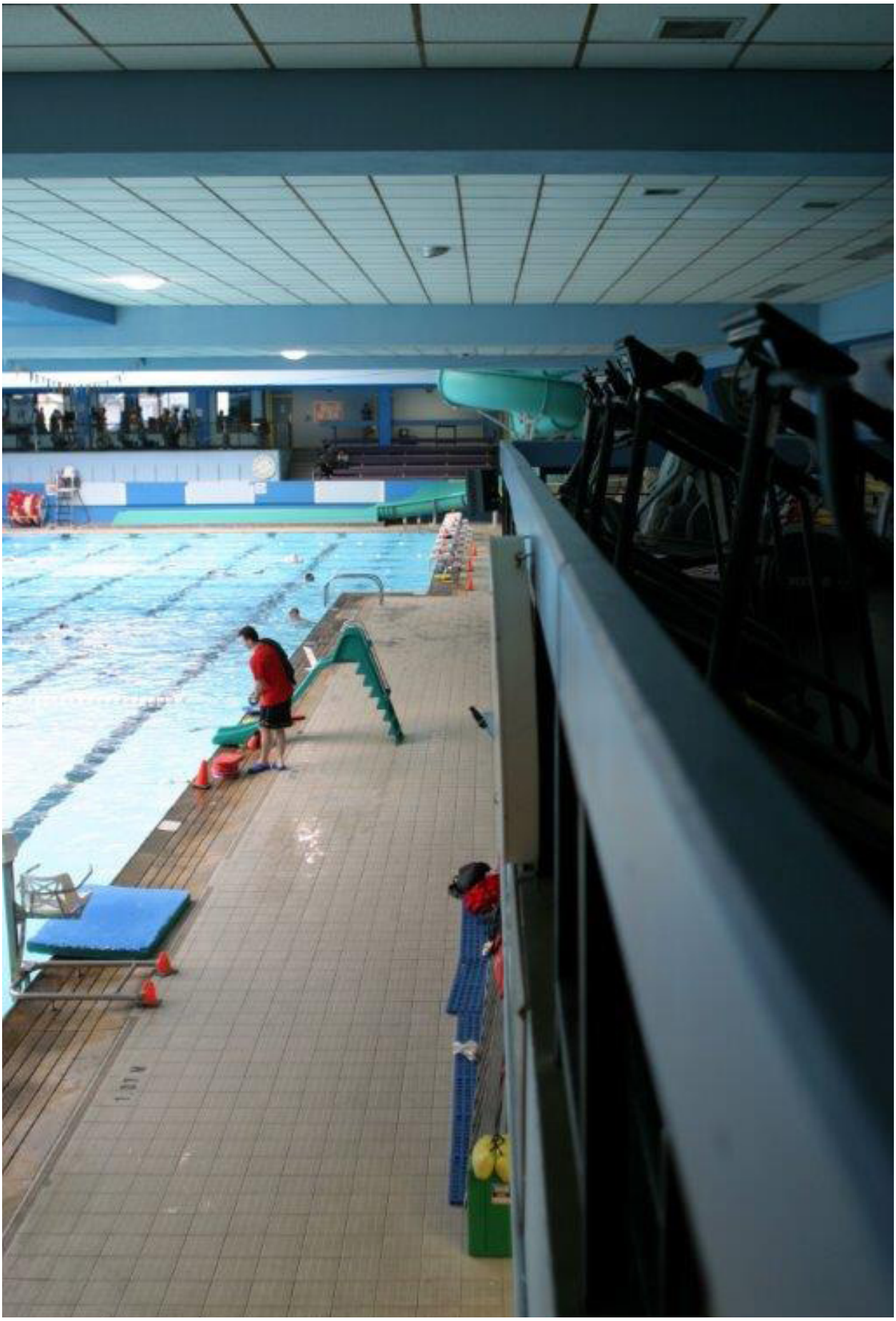


Image: Courtesy of Crystal Pool & Fitness Centre

in swimming (average revenue per swim of $4.25, while the least lucrative mode of use is the rentals to clubs (average revenue per swim of $1.56).

▪ Because the high proportion of users that purchase annual passes, and the high proportion of those that are intensive users, the most intensive users are contributing very little revenue per use. These pass holders and the members of the organized swim clubs are getting the best rates per use of all users.

EXISTING CONDITION

The existing building is over forty five years old and requires upgrades to several building elements and systems. These have been documented in studies commissioned over the last few years, for which reports were provided to the team for this study. An immediate need to invest approximately $315,000 for critical repairs was identified and these repairs have since been completed. An investment of approximately $13 million (in 2016 dollars) to extend the facility life for 15 years was also identified including the specific items below.

Life Cycle Upgrades: $13,000,000 (Refer to Appendix E for Additional Detail)
▪ Replace roof domes and dome assemblies
▪ Replace pool finish and repair rim flow gutter system
▪ HVAC system upgrade/replacement
▪ Filter/Mechanical upgrades
▪ Seismic retrofit
▪ Sprinkler upgrades▪ Electrical upgrades
▪ Reconfiguration of pool drainage to sewer from storm
▪ Civil upgrades

In addition to the above maintenance and life cycle upgrades, several programmatic and functional issues exist within the facility. The existing configuration of the facility over several split levels does not allow seamless access for persons with disabilities and compliance with the building code is achieved through the use of wheelchair lifts at each stair.

Within the building, programs such as the fitness area have been accommodated in spaces that are not well suited for the use. The fitness areas are dispersed, too small for the equipment within them and not separated from the pool environment. Most of the change room area is dedicated to gender specific facilities, which is not in keeping with the current trend towards increasing universal change facilities. The public entry, lobby and administration area are small and there is limited opportunity for food and beverage or retail facilities. Additionally, the general condition of the interior spaces is dated and in urgent need of refurbishment.

4

Image: Courtesy of Crystal Pool & Fitness Centre

Input from User Groups and the General Public

During the initial phase of this study, the consultants and the City of Victoria staff spent a great deal of time and energy soliciting input from the City and Regional residents about their needs for an indoor aquatic and fitness facility in Victoria. Much of the rich detail is provided in Appendicies B, C and D. However, the input was quite consistent and can be synthesized according to several themes which emerged and are paraphrased in the bullets below.

Input from Current User Groups and Users

Input from the stakeholder interviews (Appendix B), staff interviews (Appendix B), Public Focus Groups (Appendix B) and the Sounding Board at Crystal Pool and Fitness Centre (Appendix C) comprised input from current users and those very involved with the existing facility. The most important themes from these two exercises are summarized below.

▪ We really want to keep the 50M pool tank option, because many of us like to swim and train at 50 meters and we also want to retain all the water surface area so that multiple uses can co-exist at the same time. We like the configuration of the main tank now which allows both short and long course swim options at different times of the day.

▪ We really like the ambiance of the existing pool. It feels friendly and usable and has character. We like it the way it is.

▪ We are very concerned that during a renovation project we will be without a pool to use. While any significant period of construction may be tolerable if we know we will get a much better pool, the length of that period is very critical to us.

▪ We really like the existing staff, who the very diverse set of users feel welcome. They treat us more like neighbours and friends than customers.

▪ We are quite concerned that if the pool is replaced, we won't wind up with a 50M tank, and, for that reason, we don't support the option of replacing what we have. Fix it instead.

▪ We are very concerned that the quality of the fitness areas are mostly substandard. The weight room is undersized. The areas around the top level with equipment are exposed to the pool environment which is not good for it, and is too hot and has too high humidity to be good for users. That needs to be fixed. In fact, the entire facility can do a better job of focusing on the health and wellness of patrons.

▪ The facility has to have family change rooms which can be used by a range of citizens that currently have barriers using the female only and male only changerooms.
▪ We are also quite concerned that the complex is not very accessible for users with frailties, or disabilities. The entire building could use some work to make all spaces more accessible.

Input from the Broader Group of Residents of the City and Region

Comments made during community events on popup boards (Appendix B) and the online public survey (Appendix D) comprise the input from the residents of the City and the surrounding region, and is more general in nature, including many comments from current facility users, comments from those who use other pools, and those that aren't pool users at all. The themes that emerged from these two processes are summarized below.

▪ We really believe that a 50M pool is needed in Victoria.

▪ It should be the existing pool renovated and not a new facility.

▪ It needs to cater more to families, recreational uses, health and wellness, and the broadest possible range of community residents, from those with disabilities to elite athletes.

▪ It should have more than just a pool. It needs to be more of a Community Centre, with a variety of dry floor fitness spaces, some food and beverage services.
While the public survey included responses from non-City residents (21%), the majority of the input was from City residents.

5

Image: Courtesy of Crystal Pool & Fitness Centre

Future Needs

Based on all previous sections of this report, the consultants prepared an analysis of what is needed currently and in the foreseeable future, and what impact that would have on the region.

Aquatic Needs

The consultants have concluded that:

▪ A 50M tank is needed. With the current supply of two 50M pools in the region, it is better served than the typical urban centres in the province. However, if only one existed, it would be substandard in terms of service levels. Also, the region has a higher number of competitive swimmers and triathletes per capita than most urban centres in western Canada, and they need a long course training environment.

▪ However, unlike most 50M pools in Canada, there is very little need for long course competitions in the Crystal Pool. Saanich Commonwealth Place is one of the best competition facilities in the country, and it would not be prudent to invest in a second facility in the region that would compete with it. Dividing competitions amoung more than one facility in a region is not cost effective and cannot be justified. Crystal Pool needs a 50M training tank but does not have to invest the additional millions of dollars required to make it a facility that will attract some competitions away from the Saanich Commonwealth Place.

▪ The current facility has use which is atypical of most public indoor pools. Aquatic use of Crystal Pool and Fitness Centre is characterized by quite intensive use (i.e. three or more times per week) by a few thousand very loyal patrons in the sports training or fitness swimming categories, whereas most indoor pools in Canada are used by a wider cross section of users, each using the facility less frequently. The existing facility has an atypically low proportion of recreational swimming, which tends to broaden and expand the number of individuals using the facility, but less frequently than sport and fitness users.

▪ Although the current facility is not used to full capacity, there is more demand than can easily be accommodated during prime time use periods, and these tend to be dominated by sport training, fitness swimming and swim instruction uses. In fact there is more demand for fitness swimming, swim club training and swim instruction than can easily be accommodated in the current operating format with demand during peak periods exceeding supply and capacity during off peak periods exceeding demand.

▪ There is also a great deal of excess demand for recreational swimming, although it is not demand articulated by organized user groups, and therefore, has not been easily documented in the past. In fact, strong demand for use by organized user groups has caused shifts in the operating format over the past decade to increase supply of lane hours for fitness swimming and sport training at the expense of recreational swimming periods. Generally, this has been appropriate, as recreational

uses have been low; not because of lack of demand, but because the pool tank at the Crystal Pool and Fitness Centre is much less appropriate and attractive for recreational swimming and much more appropriate for sport training and fitness swimming. The consultants are convinced that if the appropriate type of recreational swimming experience were provided, there is latent demand in the local marketplace for a great deal more recreational swimming. The consultants have never observed a rate of recreational swimming in an urban centre as low as that experienced at the Crystal Pool and Fitness Centre.,

▪ Recreational swimming is a very important category of aquatic service, as it helps to get those individuals and families that are inactive active and therefore more healthy.

The consultants believe that the total need for indoor swims in the City of Victoria market is currently about 22% more than what is currently being accommodated at the Crystal Pool and Fitness Centre. An increase of this percentage would take the total annual swims to 362,000, which is about 4.3 swims per capita. In the consultants' experience, almost all urban centres in Canada have swim rates between 4 and 8 swims per capita, and the actual rate experienced in each centre depends largely on the supply of indoor pools. In communities which have indoor pools which cater to all seven categories of aquatic service in the appropriate amounts, the rate is closer to the top end of this range. In communities where the pools cater to only a subset of the seven categories, the rate is closer to the lower end of the range. At present, Victoria realizes only about 3.5 swims per capita, which is clearly below this range, and yet it has higher rates of swimming in the sport training and fitness swimming categories than most comparable urban centres. The difference is in the very low rate of recreational swimming in Victoria. The current need is detailed in **Figure Eight.**

Figure Eight
Breakdown of Current Need for Aquatic Services in Victoria in 2016

Categories of Aquatic Service	Three Modes of Operation			Total Estimated Need for Annual Swims in 2015	As Compared to Total Swims experienced in 2015
	Drop-In	Program	Rental		
Recreational Swimming	70, 000		5, 000	75, 000	32, 500
Fitness Swimming	70, 000	40, 000	10, 000	120, 000	111, 000
Skill Development	0	40, 000	5, 000	45, 000	41, 600
Sport Training	25, 000	0	75, 000	100, 000	92, 500
Competitions	0	0	0	0	0
Therapy and Rehabilitation	15, 000	3, 000	2, 000	20, 000	16, 700
Leadership Training	0	300	1, 700	2, 000	2000
Totals	**180, 000**	**83, 300**	**98, 700**	**362, 000**	**296, 300**

The existing facility cannot accommodate the increase in 66,000 swims. In fact, it cannot accomodate much more than the 296,300 swims realized in 2015. Without significant retrofit and/or expansion, the facility will continue to operate at the current level, until one or more of its systems cause a failure and the building has to be shut down for an extended period.

Over time, the consultants believe that the need for aquatic services will grow in Victoria along with growth in the population, trends in the marketplace, and changes in the demographic makeup in the local area. **Figure Nine** summarizes provincial trends in aquatic services and compares them with trends experienced at the Crystal Pool and Fitness Centre.

Figure Nine
Trends in Aquatic Services by Category of Service in BC

Category of Aquatic Service	General Trend in BC	Trend at Crystal Pool and Fitness Centre
Recreational Swimming	Stable	Stable
Skill Development	Stable	Stable
Fitness Swimming	Increasing	Stable
Sport Training	Stable or Declining	Slight Growth
Competitions	Stable	None
Therapy and Rehabilitation	Increasing	Increasing
Leadership Training	Stable	Stable

Based on the rate of growth, the changes to population demographics, and the trends currently being experienced, the likely longer term need for aquatic services is projected in **Figure Ten**.

Figure Ten
Breakdown of Projected Need for Aquatic Services CPFC in 2015

	Three Modes of Operation				
Categories of Aquatic Service	Drop-In	Program	Rental	Total Estimated Need for Annual Swims in 2025	Percentage of Total
Recreational Swimming	80, 000		5, 000	85, 000	21%
Fitness Swimming	80, 000	40, 000	10, 000	130, 000	32%
Skill Development	0	50, 000	5, 000	55, 000	13%
Sport Training	25, 000	0	80, 000	105, 000	26%
Competitions	0	0	0	0	0
Therapy and Rehabilitation	20, 000	8, 000	2, 000	30, 000	7%
Leadeship Training	0	3, 000	2, 000	5, 000	1%
Totals	**205, 000**	**101, 000**	**104, 000**	**410, 000**	**100%**

Dry Floor Needs

The consultants have concluded that:

▪ There is a need to very significantly increase the quality of existing spaces that are being used for all forms of fitness space. This includes spaces which are used for floor exercises as well as spaces which have fixed equipment. This primarily requires isolating the spaces so that air quality can be better managed and noise can be mitigated.

▪ There is also a small need for increased amount of fitness space, but this can be accommodated through the addition of multipurpose space. The public fitness market is quite dynamic at present, with many cities noticing a decline in use of fitness spaces over the past year or two. So, the most prudent approach will be to increase the quality but not to add any significant amount of dedicated fitness space, on the assumption that some additional fitness services can be provided in multipurpose spaces if demand supports it..

▪ There is also a need for increased quality and quantity of multipurpose space. While it is more difficult to quantify exactly how much, and generally one can take the approach that "more is better", it is likely possible to add about x sq. ft. of additional multipurpose space on the existing footprint, and that amount of added space will go a long way in terms of meeting any outstanding needs.

Figure Eleven
Dry Floor Improvement Needs

Type of Dry Floor Space	Currently provided	Recommended Improvement
Fitness - Weight and Cardio	675 m2 Interspersed through facility, partially located in pool environment	Minor Area Increasement Improve Quality / Environmental Conditions
Childminding Room	55 m2	Improved space, minor increase in area
Multi-Purpose - Dance Room	One 50 m2 MP-room (in basement)	Additional MP-rooms are highly recommended: Good configuration would include various sizes: small (140 m2), medium (180m2) and large (230m2), flexible and adjacent spaces. These will support various program offerings. If possible, inclusion of ground-oriented MP-room with separate entrance and outdoor space offers additional flexibility (i.e. expanded child-minding / daycare partnership)
Birthday Room	N/A	recommended MP-Room provide this feature

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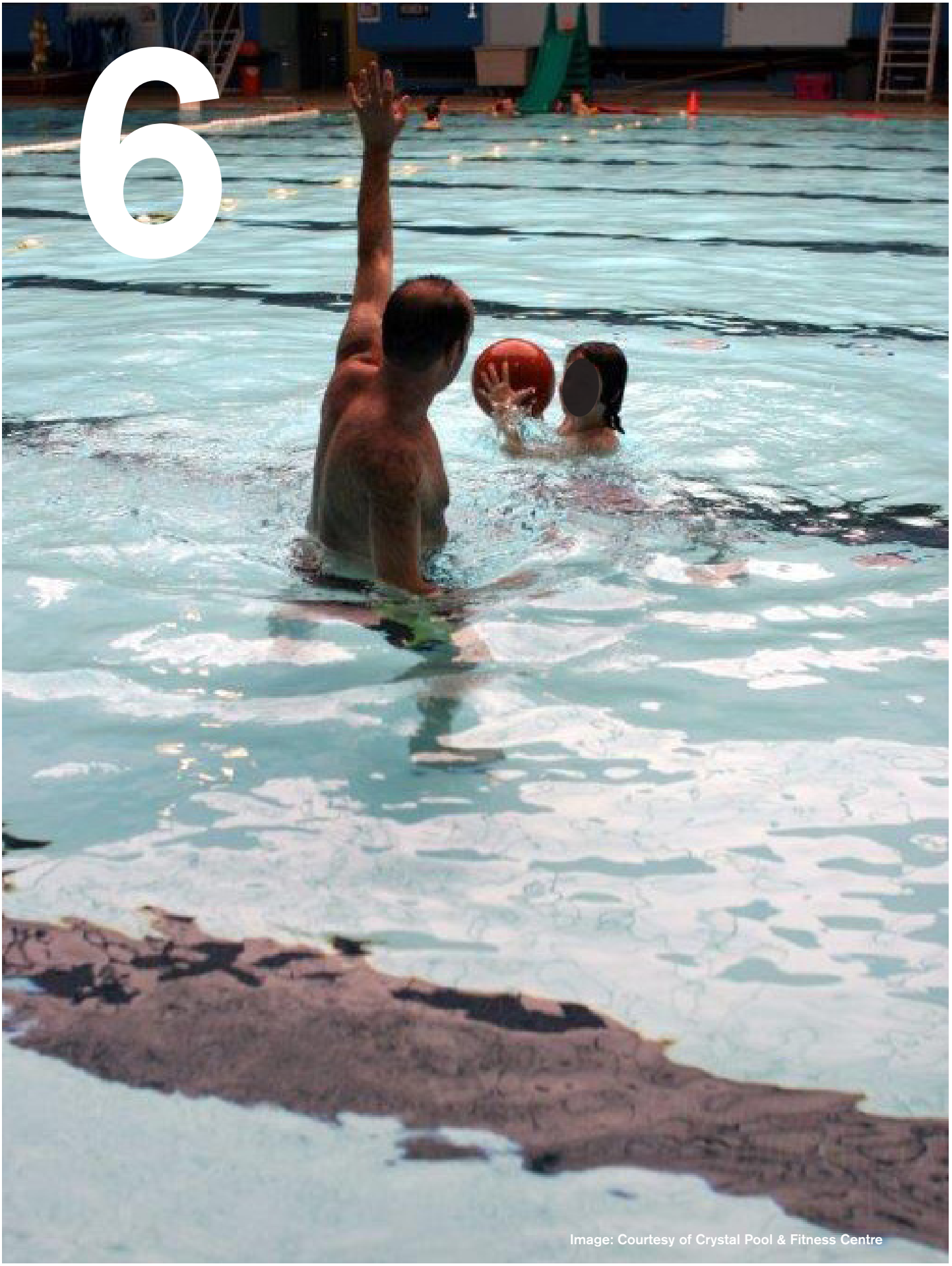


Image: Courtesy of Crystal Pool & Fitness Centre

Optional Responses for Future Need

Introduction

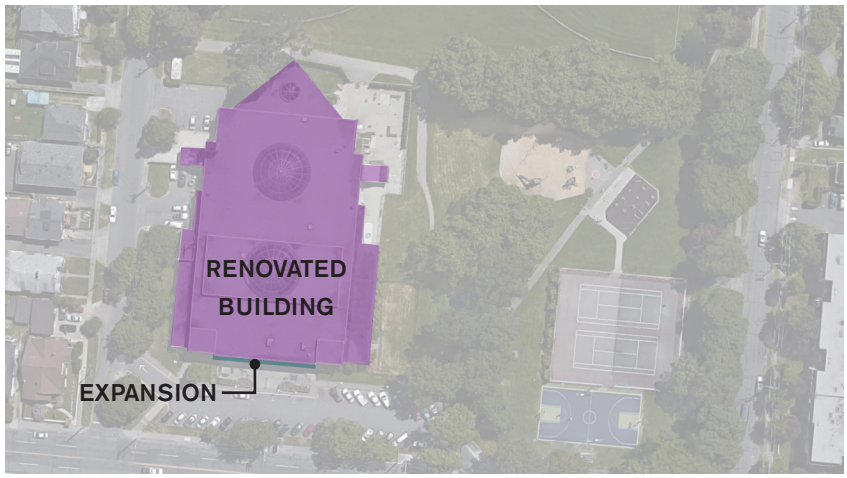
Three options have been assessed as potential response s to the identified needs: two renovation options and one new build option. Both renovation options include remediation of deferred maintenance and known current issues described below as minimally required technical building upgrades. More detail on these technical upgrades can be found in Appendix E.

Option 1 focusses on **rejuvenating the current facility without expanding** the facility or service and program offerings.

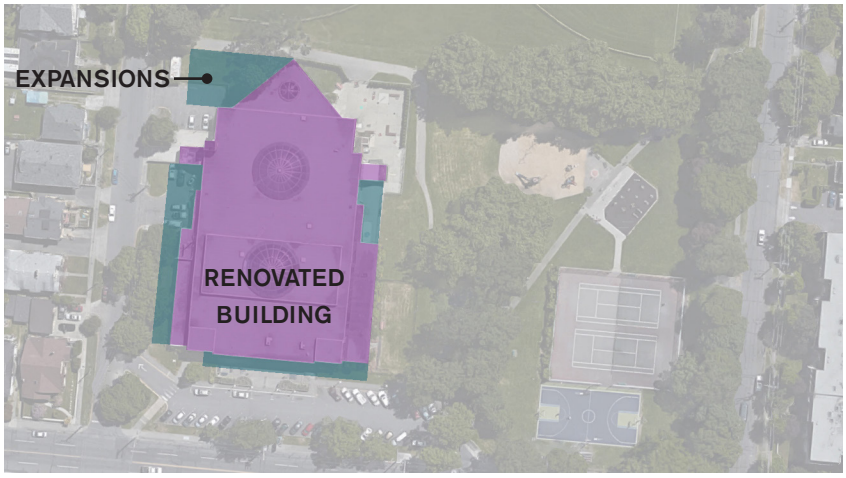
Option 2 not only remediates the known issues and rejuvenates the current program spaces, it also **expands the facility and program offerings** in order to capture latent needs and increase the user base.

Option 3 compares the benefits of offering the same program areas and services as option 2 in a **newly constructed facility on a nearby site** instead of retrofitting the existing building.

We have not considered doing nothing as a viable option. Similarly, we have not included completing only the technically required upgrades without addressing accessibility and life-safety concerns at the same time as a viable option worth considering.



Option 1 Diagram



Option 2 Diagram

Option 3 Diagram

Option 1 - Retrofit and Rejuvenate What Exists

Description and Illustration - Option 1

This option includes renovation within the existing building, expansion over the existing bleachers and a minor expansion to the building's extents. Access for persons with disabilities has been enhanced to meet current code requirements, with the addition of a ramp to the universal change rooms, an elevator to level 2 and a wheelchair lift to the leisure pool. The existing pool tanks, hot tub, steam room and sauna are retained and renovated in their current configuration. Change rooms have been reconfigured to include a large universal change room north of the pool tanks, while gender specific change rooms are located to the south of the pool tanks. Fitness areas have been expanded over some of the existing bleachers and have been environmentally separated from the pool environment. Upper level circulation, however, remains within the pool environment. Additionally, administration areas will continue to be in dispersed locations due to the constraints within the lobby, though modifications have been made to the extents of the lobby and the flow of users through it.

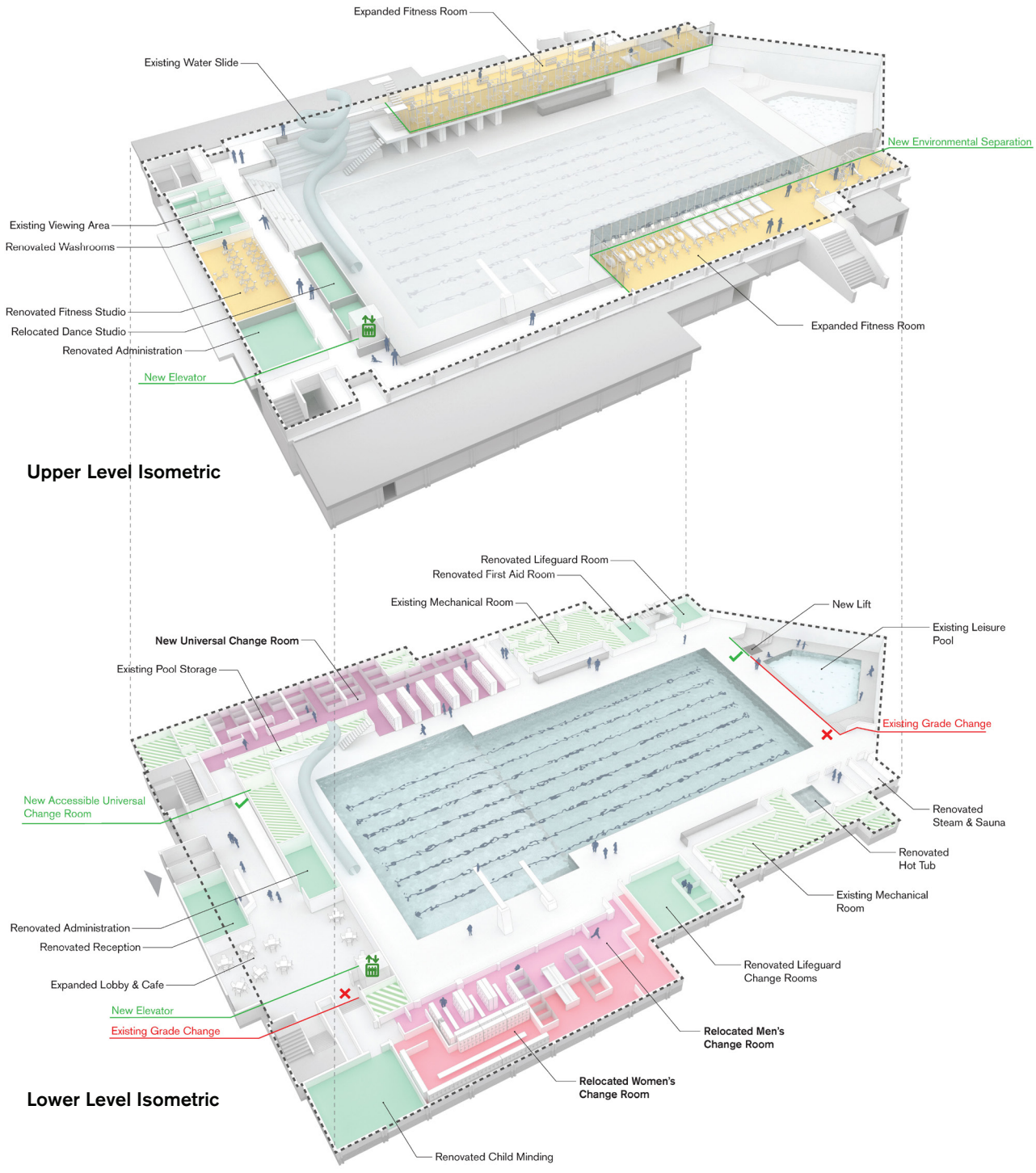
This option includes all the life cycle upgrades required for the facility including replacement of the roof domes, replacement of the pool finish and gutters, upgrades to the mechanical systems, upgrades to electrical systems, upgrades to the pool filters and mechanical systems, seismic upgrade to the building, sprinkler upgrades, reconfiguration of pool drainage and civil upgrades.

Benefits and Challenges - Option 1

This option rejuvenates the existing facility and fixes major deficiencies while limiting the capital investment required. Refurbishment of many critical building elements and systems is anticipated to add approximately 30 years to the useful life of the building, for a lower cost when compared to option 2.

While this option rejuvenates the existing facility and addresses major issues, it does not add any new program to the facility and thus does not include major new opportunities for revenue generation. Leisure pool facilities are also not expanded and thus an anticipated opportunity for increased swims is not implemented. The existing sequence of movement through the building, over several split levels, is not modified to a simpler system. Due to the constraints offered by the existing building, programs such as fitness and administration continue to be dispersed and need to be accommodated within spaces having restricted dimensions.

Working within an existing building carries a higher level of risk through the construction process, arising from the interface of new and existing construction and the possibility of unknown conditions within the existing building. Additionally, renovation of the existing facility will require a service interruption during construction and it is anticipated to take approximately one year after reopening for use to return to predicted levels.



Diagrammatic Isometric Representation Two - Option 1 Rejuvenated Crystal Pool and Fitness Centre

Conceptual Illustration of Option 1 Layout, Program Areas and Features

Operating Costs and Revenue Impact - Option 1

There would be very modest changes to the total operating costs and operating revenues which would result from implementing Option 1. And, what changes would result, would be modestly positive. There would no longer be a need for significant capital repairs and replacements, but this is not really an operating budget issue. And, there would no longer be the significant risk of having to close due to failure of one or more of the building's systems. But that also is not an operating budget issue.

It is most likely that:

- There would be modest increases in revenue due to a slight increase in total usage of the facility due to a higher quality experience of use. That increase would most likely be in the order of 3% to 10%.

- There would be very modest reductions in total annual operating costs due to improved and modernized building systems.

- In combination, the two above shifts could result in a net reduced operating deficit in the order of $50,000 to $150,000 per year, or up to 10%.

- With increased total visits and reduced operating deficit, the net public subsidy per swim would be significantly reduced, likely in the order of 10% to 15%.

Figure Twelve
Option 1 Analysis

Benefits	Challenges
Lowest capital investment required.	No major new amenities or opportunities for new revenue generation.
Reduced operating deficit up to 10% per year	Leisure pools are not expanded.
Increased usage 3-10%	Existing building configuration over several split levels is not simplified.
reduction in per-visit net public subsidy of 10-15%	Fitness and administration remain dispersed through the building.
Interior spaces refurbished and useful life extended by 20-30 years for a lower cost than Option 2.	Higher level of risk due to existing conditions.
	Service interruption during renovation 10-16 months

Capital Costs - Option 1

ESTIMATED CONSTRUCTION COSTS

The Order of Magnitude Estimate has been developed by Advicas Group Consultants Inc. in current (August, 2016) dollars. The estimated capital construction costs and associated soft costs of the proposed options are as follows:

Critical Remediation (Stantec 2015 study)	$13,609,000
Interior Renovation	$5,030,000
Building Expansion	$363,000
New Construction	N/A
Soft Costs	$5,498,000
TOTAL CAPITAL CONSTRUCTION COST	**$24,500,000**

ESTIMATED PROJECT COSTS

For planning purposes, The City of Victoria, in consultation with Advicas has developed total project cost estimates by adding ontingencies and making allowance for escalation assuming mid-2018 start-date.

Cost escalation assuming mid-2018 start date	$6.0 Mio
Construction Contingency (30% for Options 1 and 2; 20% for Option 3)	$5.7 Mio
Project Contingency	$3.6 Mio
Total Project Cost	**$39.8 Mio**
Net Present Value*	$60.9 Mio

*Note: Options 1 and 2 would extend the life of the facility by approximately 30 years, at which time a replacement is likely to be required. The net present value calculation adds the discounted value of that future capital outlay to provide a comparative in current day dollars.

Option 2 - Retrofit What Exists & Expand Facility and Program

Description and Illustration - Option 2

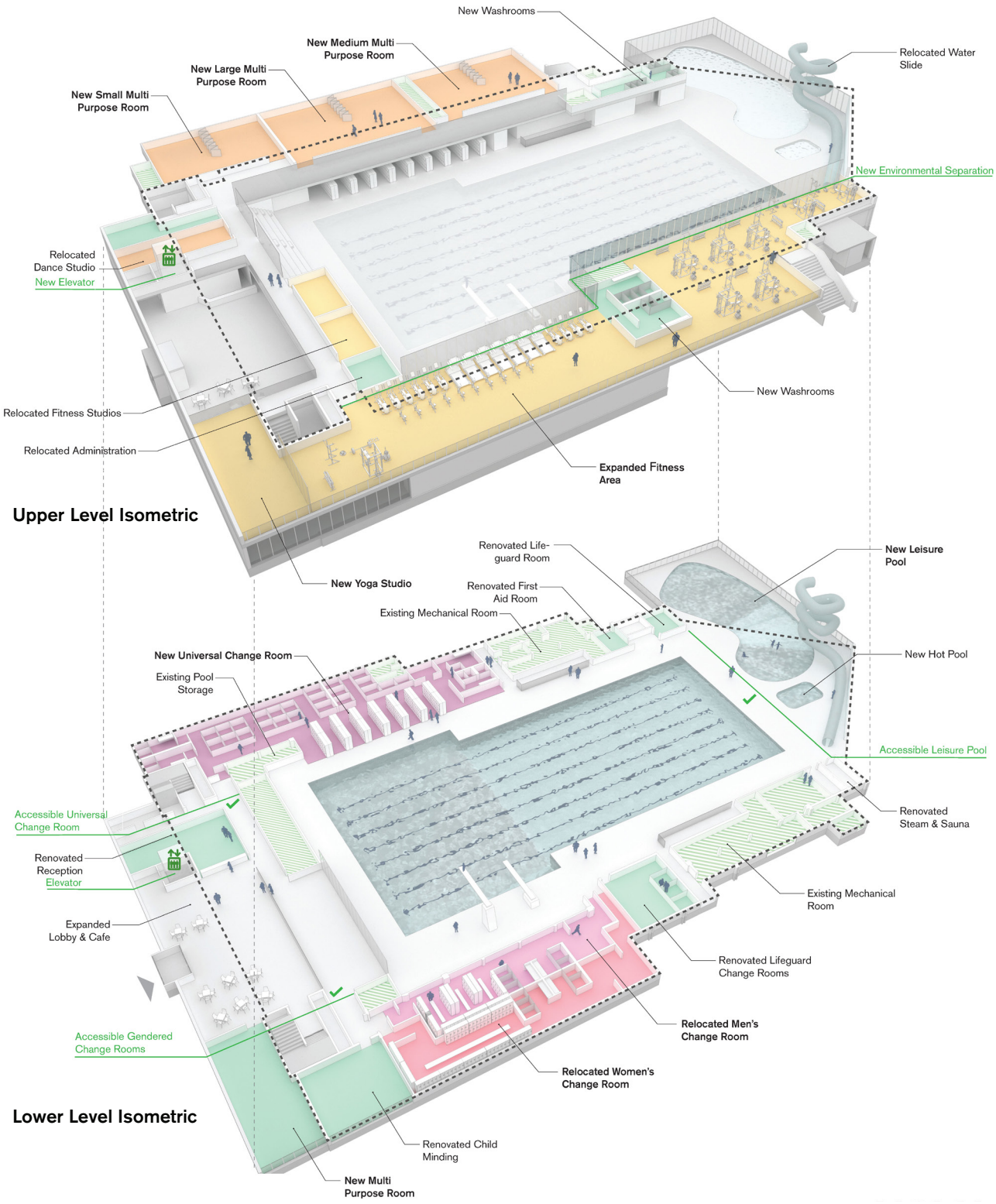
This option includes renovation within the existing building, expansion over the existing bleachers and the construction of an expansion to the building that accommodates larger fitness areas, multipurpose rooms and a reconfigured leisure pool area. The combination of the above measures increases the size of the facility by approximately 1,800m^2. The level of the main lobby has been raised to match the pool deck, to allow seamless access from the street and remove impediments for persons with disabilities. While the main pool tank is retained and renovated, the leisure pool has been expanded, enhanced with new features and combined with the slide and hot tub within an expanded pool enclosure. Change rooms have been reconfigured to include a large universal change room north of the pool tanks, while gender specific change rooms are located to the south of the pool tanks. The second level has been expanded over the change rooms to accommodate fitness and physiotherapy south of the pool tanks and multipurpose rooms north of the pool tanks. Additionally, the lobby has been expanded and reconfigured to include a consolidated administration area, ample public space and a multi-purpose room.

This option includes all the life cycle upgrades required for the facility including replacement of the roof domes, replacement of the pool finish and gutters, upgrades to the mechanical systems, upgrades to electrical systems, upgrades to the pool filters and mechanical systems, seismic upgrade to the building, sprinkler upgrades, reconfiguration of pool drainage and civil upgrades.

Benefits and Challenges - Option 2

This option expands the services and amenities offered to the public within the facility and thus creates new opportunities for revenue generation. The capital investment required for this option will be smaller than that required to build a brand new facility containing an equivalent program. Consolidation of programs such as the fitness areas and administration will improve user experience and increase efficiency. The expanded lobby allows improved access for the public and opportunities for enhanced food and beverage or retail services. Additionally, raising the lobby level up to the street simplifies access and circulation within the facility and removes impediments for persons with disabilities.

The expanded facility would place a higher demand on the limited parking available on the site, without providing opportunities to expand this. Reuse of the existing facility will add less time to the useful life of the building as compared to the construction of a new facility and will include added risk through the construction process, arising from the interface of new and existing construction and possible unknown conditions within the existing building. Additionally, renovation of the existing facility will require a service interruption during construction, though the return to anticipated levels of use is anticipated to be quicker than option 1.



Diagrammatic Isometric Representation Three - Option 2 Renovated and Expanded Crystal Pool and Fitness Centre

Conceptual Illustration of Option 2 Layout, Program Areas and Features

Operating Costs and Revenue Impact - Option 2

By implementing all the improvements in Option 1, and adding the spaces identified in Option 2, the facility would meet a much wider range of uses; about half of them aquatic uses, and the other half being dry floor uses. Total increased usage would likely be in the order of 35% initially and could grow into a higher range over time. That increase in use would translate to an increase in operating revenues in the order of 35% to 38% as visitors also used food and beverage services and possibly utilized more “value added services” like personal training and child care.

The operating expenses would increase in the order of 25% to support the increased size of the facility. The bulk of these additional costs would be to support the much larger leisure tank which would require separate lifeguarding.

The net result would be a reduction in the overall net operating deficit in the range of 10%.

With a net reduction of 10% in the total operating deficit and a net increase of 35% in usage, the net public subsidy per visit would be reduced very significantly, in the order of up to 50%.

Figure Thirteen
Option 2 Analysis

Benefits	Challenges
New amenities and opportunities for new revenue generation.	Higher capital investment will be required for expanded amenities.
Reduced operating deficit up to10% per year	Higher level of risk due to existing conditions.
Increased usage ~ 35%	Increased demand on limited parking facilities.
significant reduction in per-visit net public subsidy of up to 50%	Service interruption during renovation - 16-20 months
Expanded amenities for a cost lower than the construction of a new facility of the same size.	
Fitness and administration are consolideted.	
Expanded lobby allows improved public access and opportunities for enhanced food and beverage services.	
Split levels removed and movement through the facilitiy simplified.	

Capital Costs - Option 2

ESTIMATED CONSTRUCTION COSTS

The Order of Magnitude Estimate has been developed by Advicas Group Consultants Inc. in current (August, 2016) dollars. The estimated capital construction costs and associated soft costs of the proposed options are as follows:

Critical Remediation (Stantec 2015 study)	$13,807,000
Interior Renovation	$4,930,000
Building Expansion	$8,156,000
New Construction	N/A
Soft Costs	$7,507,000
TOTAL CAPITAL CONSTRUCTION COST	**$34,400,000**

ESTIMATED PROJECT COSTS

For planning purposes, The City of Victoria, in consultation with Advicas has developed total project cost estimates by adding ontingencies and making allowance for escalation assuming mid-2018 start-date.

Cost escalation assuming mid-2018 start date	$8.4 Mio
Construction Contingency (30% for Options 1 and 2; 20% for Option 3)	$8.1 Mio
Project Contingency	$5.0 Mio
Total Project Cost	**$55.9 Mio**
Net Present Value*	$77.0 Mio

*Note: Options 1 and 2 would extend the life of the facility by approximately 30 years, at which time a replacement is likely to be required. The net present value calculation adds the discounted value of that future capital outlay to provide a comparative in current day dollars.

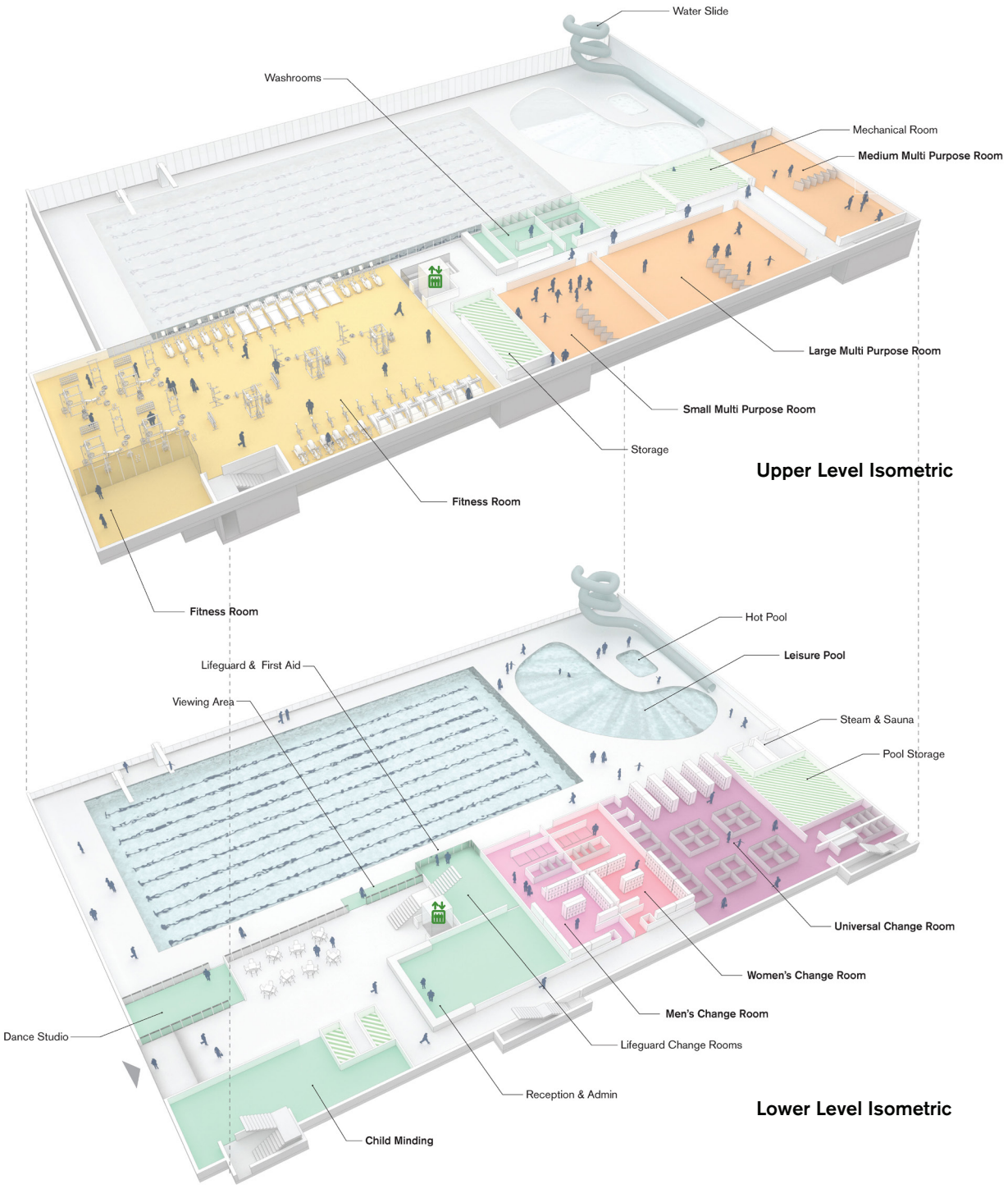
Option 3
New Construction of Expanded Program

Description and Illustration - Option 3

This option includes the construction of a new recreation center to the south of the existing building and the demolition of the existing facility. The proposed configuration for this new facility includes a large glazed pool enclosure containing a 25 meter by 50 meter main pool tank and expanded leisure pool facilities. This volume is adjacent to a two story building that contains all other programs for the facility. The areas required for different programs have been configured to be similar to option 2, to allow direct comparison of between renovation and new construction for an equivalent facility.

Newly constructed facilities can range significantly in program areas, amenities and costs. Recent comparable precedents of new facilities with 50 meter pool tanks in BC include:

- Grandview, Surrey (95,000sf, $43M)
- Guildford, Surrey (112,000sf, $30M)
- Minoru, Richmond (102,000sf, $53M)
- UBC Aquatic ($38.5M)
- Edmonds, Burnaby (95,000 sf, $32M)



Diagrammatic Isometric Representation Four - Option 3 - New Facility on a Nearby Site

Conceptual Illustration of Option 3 Layout, Program Areas and Features

Benefits and Challenges - Option 3

This strategy would allow a continuously operational facility for the public through the construction process and avoid the issues presented by service interruption. A new facility also permits the flexibility to optimize the configuration of programs and spaces to best meet user needs, without the constraints that come with working within an existing building. Opportunities may also exist to provide additional parking within the new building to accommodate the increase in users. The construction of a new facility also involves less risk through the construction process when compared to renovating or expanding an existing building.

A new facility will however require a higher level of capital investment when compared to the renovation and expansion of a similar sized facility

Operating Costs and Revenue Impact - Option 3

If we include the same spaces as those identified in Option 2, the user experience would be very similar to that of Option 2, and the total operating costs and revenues would be very similar to Option 2. While it is possible that there could be some very modest increase in operating efficiency due to more enhanced design, the consultants do not believe that it would be significant, nor would it be prudent to rely on it for decision making.

Figure Fourteen
Option 3 Analysis

Benefits	Challenges
No service interruption during construction.	Highest level of capital investment required.
Flexibility to configure the facility without the constraints of an existing building.	Higher risk of scope creep
New Amenities and opportunities for partnerships and new revenue generation	
Universal Accessibility	
Reduced operating deficit up to10% per year	
Increased usage ~ 35%	
significant reduction in per-visit net public subsidy of up to 50%	
Lower level of risk through the construction process.	
Opportunities for added parking.	

Capital Costs - Option 3

ESTIMATED CONSTRUCTION COSTS

The Order of Magnitude Estimate has been developed by Advicas Group Consultants Inc. in current (August, 2016) dollars. The estimated capital construction costs and associated soft costs of the proposed options are as follows:

Critical Remediation (Stantec 2015 study)	N/A
Interior Renovation	N/A
Building Expansion	N/A
New Construction	$35,100,000
Soft Costs	$9,800,000
TOTAL CAPITAL CONSTRUCTION COST	**$44,900,000**

ESTIMATED PROJECT COSTS

For planning purposes, The City of Victoria, in consultation with Advicas has developed total project cost estimates by adding ontingencies and making allowance for escalation assuming mid-2018 start-date.

Cost escalation assuming mid-2018 start date	$10.3 Mio
Construction Contingency (30% for Options 1 and 2; 20% for Option 3)	$7.0 Mio
Project Contingency	$6.2 Mio
Total Project Cost	**$68.4 Mio**
Net Present Value*	$68.4 Mio

*Note: Options 1 and 2 would extend the life of the facility by approximately 30 years, at which time a replacement is likely to be required. The net present value calculation adds the discounted value of that future capital outlay to provide a comparative in current day dollars.

Comparison of Features Within Each Option

Figure Fifteen
Comparison of Options

Feature	Existing	Option 1	Option 2	Option 3
Main tank (Annual Swims)	50M tank (270,000 swims per year)	50M tank (285,000 swims per year)	50M (300,000 swims per year anticipated)	50M tank (300,000 swims per year anticipated)
Leisure tank (Annual Swims)	185 m2 (30,000 swims per year)	Same as existing (30,000 swims per year)	280 m2 with higher quality (100,000 swims per year)	280 m2 with higher quality (100,000 swims per year)
Hot Tub, Sauna and Steam Room	Yes Hot Tub: 10 m2 Sauna: 10 m2 Steam rm: 10 m2	Refurbished Hot Tub: 10 m2 Sauna: 10 m2 Steam rm: 10 m2	Sauna/Steam refurbished and new enlarged hot tub Hot Tub: 18 m2 Sauna: 10 m2 Steam rm: 10 m2	New Hot Tub and Sauna/Steam: Hot Tub: 18 m2 Sauna: 10 m2 Steam rm: 10 m2
Change Rooms	Moderate quality gender specific change rooms F - 227 m2 M - 280 m2	Upgraded mens and women's plus universal change rooms: Universal - 305m2 F - 135 m2 M - 115 m2	Upgraded mens and women's plus universal change rooms: Universal - 385 m2 F - 135 m2 M - 115 m2	Newly designed and configured mens, women's and universal change rooms: Universal - 395 m2 F - 125 m2 M - 125 m2
Entry and Circulation and Control	Poor 140 m2	Small improvement 200 m2	Significantly Improved 295 m2	Significantly Improved and more efficient- (newly planned for current needs) 305 m2
Opportunities for Food and Beverage and Retail Services	Very basic	Small improvement	Significantly improved	Significantly improved
General Accessibility Throughout Facility	Poor	Significantly improved	Slight improvement over option 1	Optimized and efficient: newly planned to current standards of Universal Accessibility
Dry Floor Visits	100,000 per year	105,000 per year	130,000 per year	130,000 per year
Fitness Areas	Poor quality and dispersed 285 m2	Enlarged and improved spaces but remains dispersed 570 m2	Enlarged and improved spaces that are consolidated and better organized than option 1 = improved user experience 700 m2	Newly design, enlarged, contiguous spaces, optimized for current needs and efficient - highly improved user experience 700 m2

Figure Fifteen Comparison of Options				
Feature	**Existing**	**Option 1**	**Option 2**	**Option 3**
Yoga Studio	Medium quality (area included in Fitness)	Better quality (area included in Fitness)	Better quality and configuration (area included in Fitness)	Better quality and configuration (area included in Fitness)
Dance Studio	Yes 60 m2	Refurbished (basement) 60 m2	Relocated and Refurbished within constraints of expansion 60 m2	Relocated and newly designed without constraints 60 m2
Multipurpose Spaces (Small, Medium and Large)	No	No	Included in expansion small: 140 m2 medium: 185 m2 large: 230 m2	Included in new building small: 140 m2 medium: 185 m2 large: 230 m2
Child Minding	Poor quality 55 m2	Much better quality 55m2	Same as option 1 55 m2	Small improvements over options 1&2 55 m2
Operational Impact:				
Total Revenues	1,000,000	1,050,000	1,350,000	1,350,000
Total Expenditures	2,500,000	2,400,000	2,700,000	2,700,000
Net Operating Deficit	1,500,000	1,350,000	1,350,000	1,350,000
Net Subsidy per Swim*	$4.89	$4.29	$3.38	$3,38
* Assuming dry floor uses are provided with little or no subsidy (once the operation is set up to accommodate aquatics services) then all of the subsidy is attributable to the swim visits.				

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Image: Courtesy of Crystal Pool & Fitness Centre

Additional Criteria to Inform Decision

Construction Period Service Interruption and its Impact on Long Term Use

Note: the consultants' estimates about use and operating impacts for each option pertain to year two of operation after the option opens for use; not year one.

The length of interruption associated with each option under consideration will have a very significant impact on long term use. User groups indicated in the first round of public engagement that, in order to gain significant improvements they might be able to support not having access to the pool for several months, and in some cases could even support up to one full year. However, if they had to go more than one season of not being able to use the pool, their group would be in jeopardy.

Also, experience suggests that if a pool closes for several months, casual users go elsewhere or stop swimming, and it can take up to one full year to entice them back unless the pool has some significant new aquatic features to attract them back.

- Option 1 – Retrofit –
  Duration of Service Interruption: It is estimated that renovations will shut down the pool operations for a minimum of 10-16 months without significantly increasing costs with complex phasing of the work.
  Impact: Given that the pool would have modest increases in quality of pool using experience on reopening, it could take up to a year or more to gain back the predicted level of use and that could have a negative impact on the first year of operation.

- Option 2 – Retrofit and Add On –
  Duration of Srvice Interruption: It is estimated that renovations and expansion work will shut all or part of the facility for 14 - 20 months.
  Impact: Because of the significant improvements and additional aquatic and dry floor opportunities, it is likely that a "honeymoom" effect will occur. This means that in the first year, total use and therefore deficit could be slightly better than predicted for the longer term future, as previous users come back and new users are enticed into the building to see what is available.

- Option 3 – New Replacement Structure –
  No service interruptions are anticipated if a new site is identified to house the new replacement facility. As such there would be no negative impact on long-term use.

Partnership Potential

During the first round of public engagement, a few partnership possibilities were identified as follows:

- There is interest on behalf of the Greater Victoria Public Library (GVPL) to partner with the City of Victoria. Crystal Pool has been identified by GVPL as a potentially very good site to accomodate up to approximately 930 - 1115 m2 (10,000-12,000 sf) of administrative offices for the GVPL system and an automated service point.The advantages of such co-location include complimentary service provision, a model which has proven successful in many jurisdictions across the Capital Region; as well as the efficient use of City resources to address two emerging infrastructure needs simultaneously. The investment into GVPL spaces as part of the Crystal Pool redevelopment would have the effect of reducing the overall cost to the City relating to future redevelopment of the GVPL Central Branch over the next 5-10 years

- There would likely be interest on behalf of external operators to run daycare programs out of Crystal Pool. While this was not raised during the engagement phase, there is anticipated interest amongst operators and local families for such services if provided. It is also anticipated that such services could be operated cost-neutrally if the city decides to further pursue such use of space within the centre.

- Some local community associations wish to relocate to an enhanced pool structure and create a base of operations at the Crystal Pool and Fitness Centre. They would require office space and would hope to negotiate a partnership whereby they could utilize some of the spaces in an enhanced building to deliver some of their services. This would only be viable in Options 2 or 3.

- There would very likely be some interest on the behalf of local providers of physiotherapy or sports medicine service providers to lease, on a long term basis, some space (currently not identified in the space program) in an Option 2 or 3 project. That would mean adding the space to the project, the capital and operating costs of which would be financed by the lease fees. In fact, while there could be a case for a per sq. ft. lease rate that is higher than the typical market in Victoria (due to the fact that the service provider could have their patrons utilize both the aquatic spaces and fitness spaces for therapeutic programs) experience has shown that such leases in public pools in BC are usually at the local market rate for comparable space in the private sector.

- The Victoria Curling Club made overtures to the consultants to add a curling facility to the enhanced pool building, thereby freeing up the valuable land at the site of the existing curling facility. The Club would hope that the City would build the new curling facilities, financed at least in part with the liquidation of the site of the existing club, and lease the new facilities to the existing Curling Club for a nominal fee to delivery curling during the winters. This could only be considered in Options 2 or 3.

None of the options above are viable in Option 1, and none appear to be so compelling, from a business case point of view, that they constitute a material factor in shifting from Option 1 to either 2 or 3. And, none help to distinguish between Options 2 or 3. Therefore, the consultants recommend that partnership opportunities be set aside until after the decision on a preferred option, and then be revisited to see if there can be a business case proven to add space to accommodate a partner.

Parking and Transportation Considerations

Insufficient on site parking for cars was one of the significant issues that were raised by users during the first round of public engagement. Some work is required to strategize how to deal with this issue. However, the issue has different implications depending on which option is chosen.

- Option 1 – Retrofit – In this case, the issue will remain as it is. The profile of use on completion of the project will be very similar to what it is now, and the options available for dealing with the issue will be the same as they are now.

- Option 2 – Reftrofit and Add On – Overall use will increase approximately 30% so the problem gets magnified. But, as the new facility will have the same footprint as the existing one, there will be no new options for dealing with the problem

- Option 3 – New Replacement Building – In this case, use will increase by approximately 30%, but there may be new opportunities for adding parking with the relocation of the building. One option would be to develop some underground parking around the new water tanks. There is significant operating/maintenance benefit to creating dry side access to water tanks below grade, in order to get access to piping, the walls themselves and light figures. If that dry side access can be combined with parking stalls, there may be reciprocal benefit.

Bicycle Use and Public Transit connectivity

Crystal Pool is well connected to the public transit network with a bus stop in close proximity to the main entry along Quadra Street. Vancouver Street is an Signed Bike Route providing a connection from Central Park (within which Crystal Pool is located) to existing and planned new bike routes throughout downtown Victoria.

Improvements to bicycle parking are recommended as part of all rejuvenation, expansion or replacement options.

Sustainability, Efficiency and Green House Gas (GHG) Considerations

Sustainability is a key consideration in regards to both environmentally conscious new construction and efficient facility operation. However, in order to achieve an optimized solution, it is of fundamental importance that the key determining factor to assess the sustainability of a development is defined. The information provided below summarizes our observations related to comparison for redevelopment of the existing Crystal Pool facility along two such determining factors; energy efficiency and greenhouse gas emissions.

Energy Efficiency

The retrofit Options (1 and 2) presented anticipate a 25% increase in efficiency compared to current performance as detailed in the "Detailed Energy Assessment" produced by Stantec Consulting (dated November 28, 2014).

The Canadian median average swimming pool building is established to be 51% more energy efficient than the existing Crystal Pool facility and 34% more efficient than the retrofit option presented.*

An important consideration when evaluating comparative Energy Use Intensity (EUI) values for pool facilities is that the functional diversity (i.e. the proportion of pool zone in relation to total floor area) can provide significantly different results. It is therefore important that reference values are used from facilities with a similar functional diversity to Crystal Pool, so as to create an 'apples to apples' comparison for evaluation.

In order to obtain a more refined estimate of energy consumption for a newly constructed facility in this climatic environment, additional energy modelling studies would be necessary that do not form part of the current scope of this project.

* (Reference: 'EPA (2016) Canadian Energy Use Intensity by Property Type')

Greenhouse Gas (GHG) Emissions

Calculation of GHG emissions are largely dependent on the fuel source mix used for the services operation of that facility. Both the existing and the retrofitted facility options use gas as the primary fuel source for this building, which results in a relatively high GHG emissions output – as the generation and distribution activities associated with natural gas provide a high emissions intensity.

Conversely, comparative new aquatic facilities which typically employ mechanical systems with a heavier electricity based source mix provide a much lower resultant GHG emissions output. GHG emissions intensity for electricity is far more varied than natural gas, as the source of generation (hydro, coal, nuclear) can vary by location and natural capital. For example, British Columbia has a very low GHG intensity due to the abundance of hydro based generation. Alberta currently has a GHG intensity of approximately 31 times that of BC, due to the more energy intensive forms of generation used.

This interdependency between GHG emissions and mechanical systems employed creates difficulty in direct comparison between retrofitting existing pool buildings and new construction, using GHG as an informative decision criteria. In other words, should GHG reduction be a primary determining factor for decision making, it might be found that retrofitting the existing building with lower emissions based technology and improving energy efficiency through improved building envelope would possibly result in the highest level of GHG reductions.

Without further detailed study of the amount of embodied energy associated with both the existing and new building option, and the technical feasibility and cost impact of moving towards less GHG intensive fuel sources for the operation of Crystal Pool, it is not possible to have GHG emissions meaningfully inform the decision between retrofit (Options 1 and 2) and New Build (Option 3).

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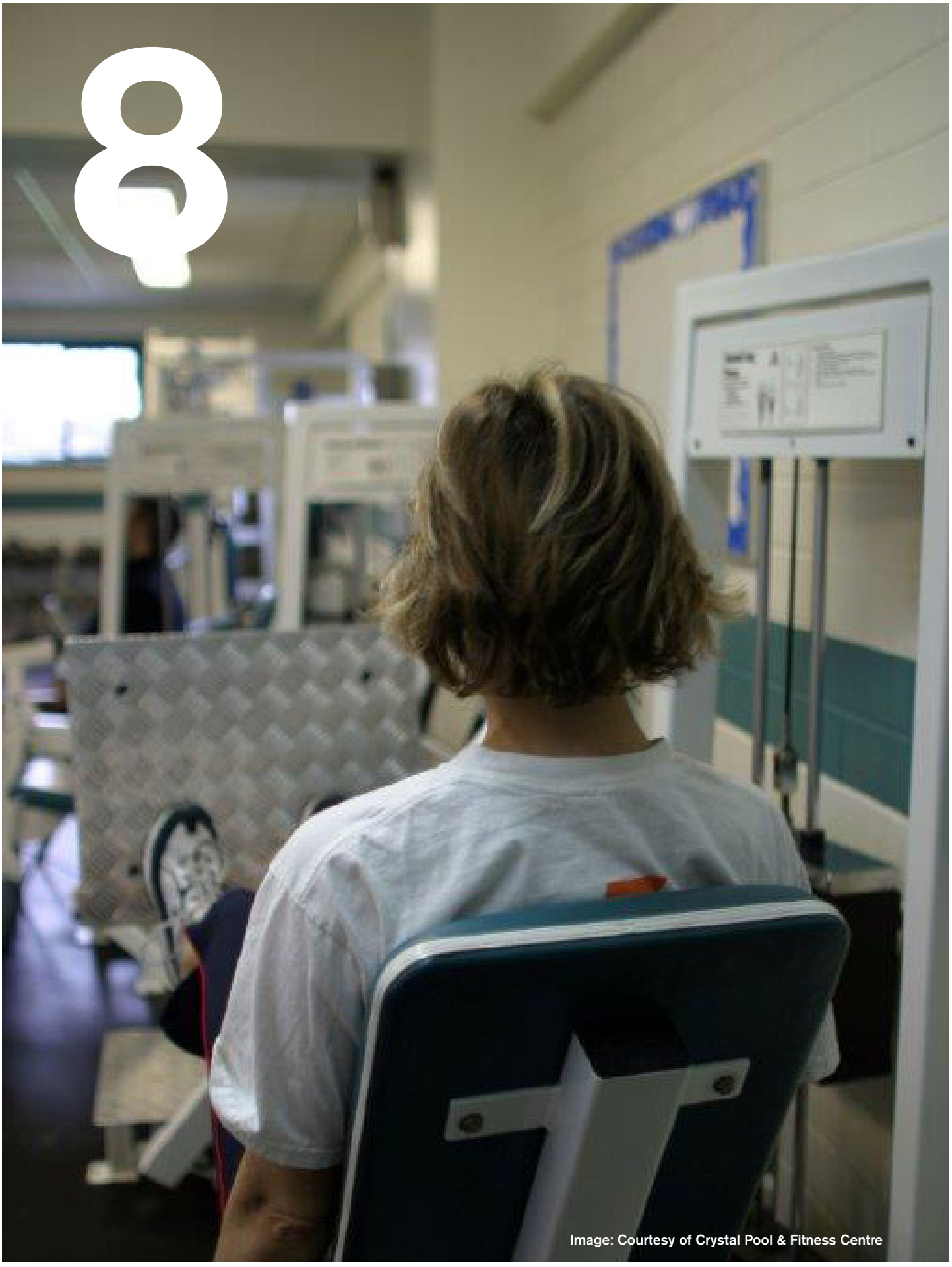

Image: Courtesy of Crystal Pool & Fitness Centre

Decision Support Matrix

Figure Sixteen
Decision Support Matrix

Feature	Existing	Option 1	Option 2	Option 3
Project Cost	Continued Repairs	**$39.8 Mio**	**$55.9 Mio**	**$68.4 Mio**
New Amenities	None	Universal change room Small lobby expansion	Universal change room Multi-Purpose rooms New leisure pool Expanded lobby	Universal change room Multi-Purpose rooms New leisure pool Expanded lobby
Operating Efficiency	Poor	Small Improvement	Significantly improved over option 1 due to increased swims	Slightly better than option 2
Operating Impacts		Operating deficit reduction 10%	Operating deficit reduction 10%	Operating deficit reduction 10%
Increased Usage		Increased Usage 3-10%	Increased Usage 35%	Increased Usage 35%
Per-Visit Subsidy Impact		reduced net per-visit subsidy up to 10-15%	reduced net per-visit subsidy up to 50%	reduced net per-visit subsidy up to 50%
Partnership Potential	Limited	Limited	Possible	Possible
Service Interruption During Construction	Unknown, as system failure may require service interruption	minimum 10-16 months	minimum 14-20 months	None
Risk	High risk of system failure on an unpredictable timeline	Higher risk of encountering unknown conditions through the construction process Higher risk of future system failure of components that were not replaced during renovation	Higher risk of encountering unknown conditions through the construction process Higher risk of future system failure of components that were not replaced during renovation	Lower risk of encountering unknown conditions through the construction process Lower risk of failure of new systems and components before end of expected lifespan
Seismic Code Impacts	1971 Construction - not to seismic code	Improvement to resist approximately 70% of seismic design load anticipated in future BC Building Code. Minimum life-safety to increase likelihood of safe exiting from facility in case of seismic event, remains below current and future Building Code levels of a new-build. No Post-Disaster Option possible	Improvement to resist approximately 70% of seismic design load anticipated in future BC Building Code. Minimum life-safety to increase likelihood of safe exiting from facility in case of seismic event, remains below current and future Building Code levels of a new-build. No Post-Disaster Option possible	Designed to resist 100% seismic design load in future BC Building Code. Post-Disaster (resistance to 150% seismic design loads) is possible, but increases costs significantly.

Figure Sixteen
Decision Support Matrix

Feature	Existing	Option 1	Option 2	Option 3
Lifecycle Reinvestment	About $1M per year spent on repairs and lifecycle issues	Savings of about $750,000 per year on repairs and lifecycle issues	Same as for option 1	Same as for option 1
Estimated Lifespan (As per BOMA life expectancy table) *Items with short lifespans (<15 years, such as Wall and Floor Finishes, Roofing, Communication and Fixtures) are not used for comparison purposes*	Year to year operation	20-30 years for renewed systems 15-25 years for new windows/doors / glazing (~40% replaced) 0-5 years for original windows/doors / glazing (60% not renewed) 40-55 years for non-renewed structure (remaining from original 100 year lifespan)	20-30 years for renewed systems 15-25 years for new windows/doors / glazing (~85% replaced) 0-5 years for original windows/doors / glazing (~15% not renewed) 40-55 years for non-renewed structure (remaining from original 100 year lifespan)	20-30 years for new systems 15-25 years for new windows/doors / glazing (100% new) 100 years for main structure
Energy Use Impact	Building performance considerably below current code standard	Existing wall and floor assemblies with lower performance are retained, but improved (25% improvement suggested by Stantec Detailed Energy Assessment - 2014)	Existing wall and floor assemblies with lower performance are retained, but improved (25% improvement over existing suggested by Stantec Detailed Energy Assessment - 2014)	New wall and floor assemblies will have higher performance and need to meet current, stringent energy performance embedded in building code. (51% improvement over existing suggested by "EPA (2016) Canadian Energy Use Intensity by Property Type"
GHG Impact	Building performance considerably below current code standard	Varies based on choice of mechanical systems - reductions not easy to target without increased investment	Varies based on choice of mechanical systems - some reductions could be targeted within anticipated investment	Varies based on choice of mechanical systems - easier to target reductions if prioritized as a criteria

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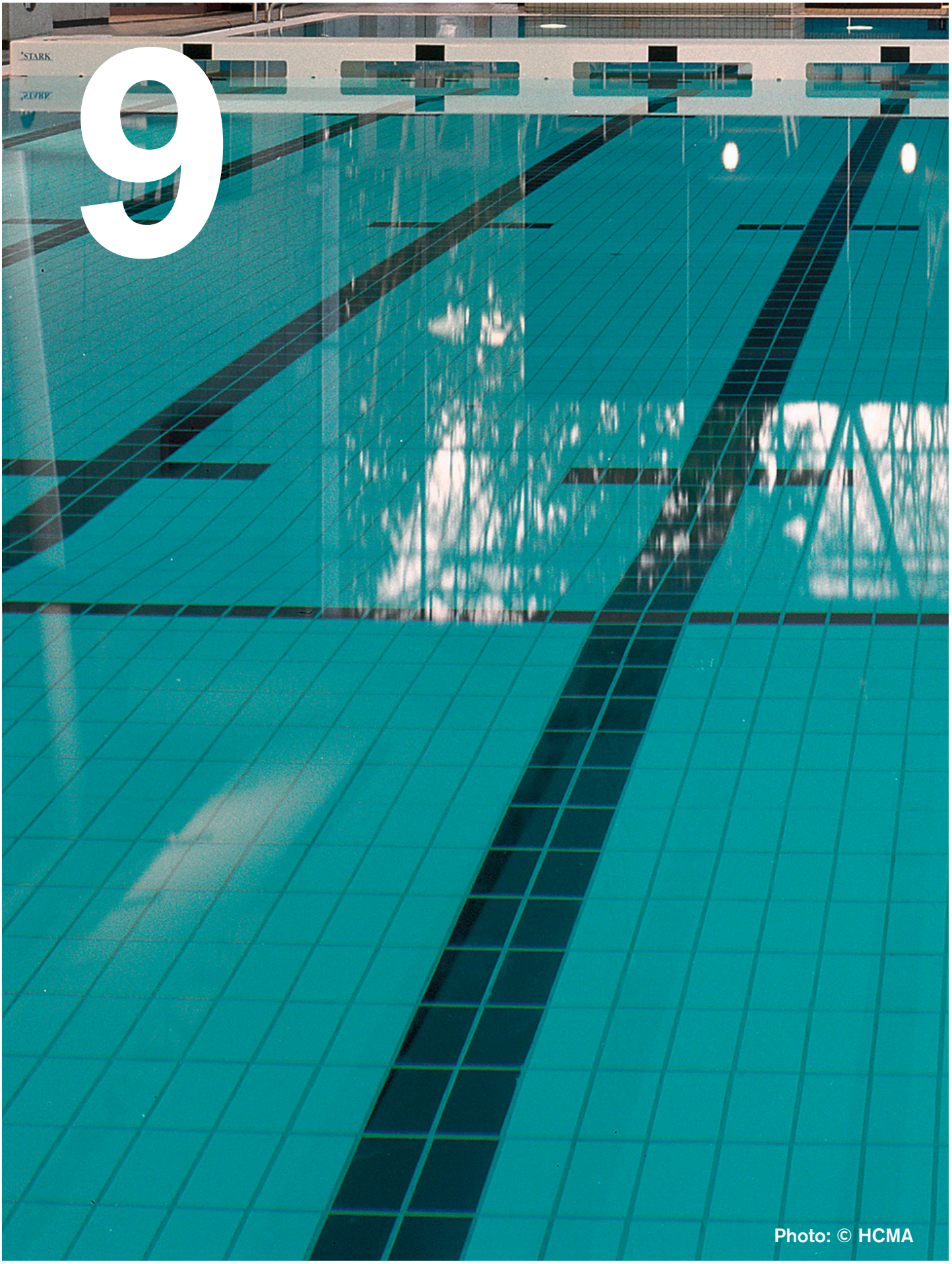
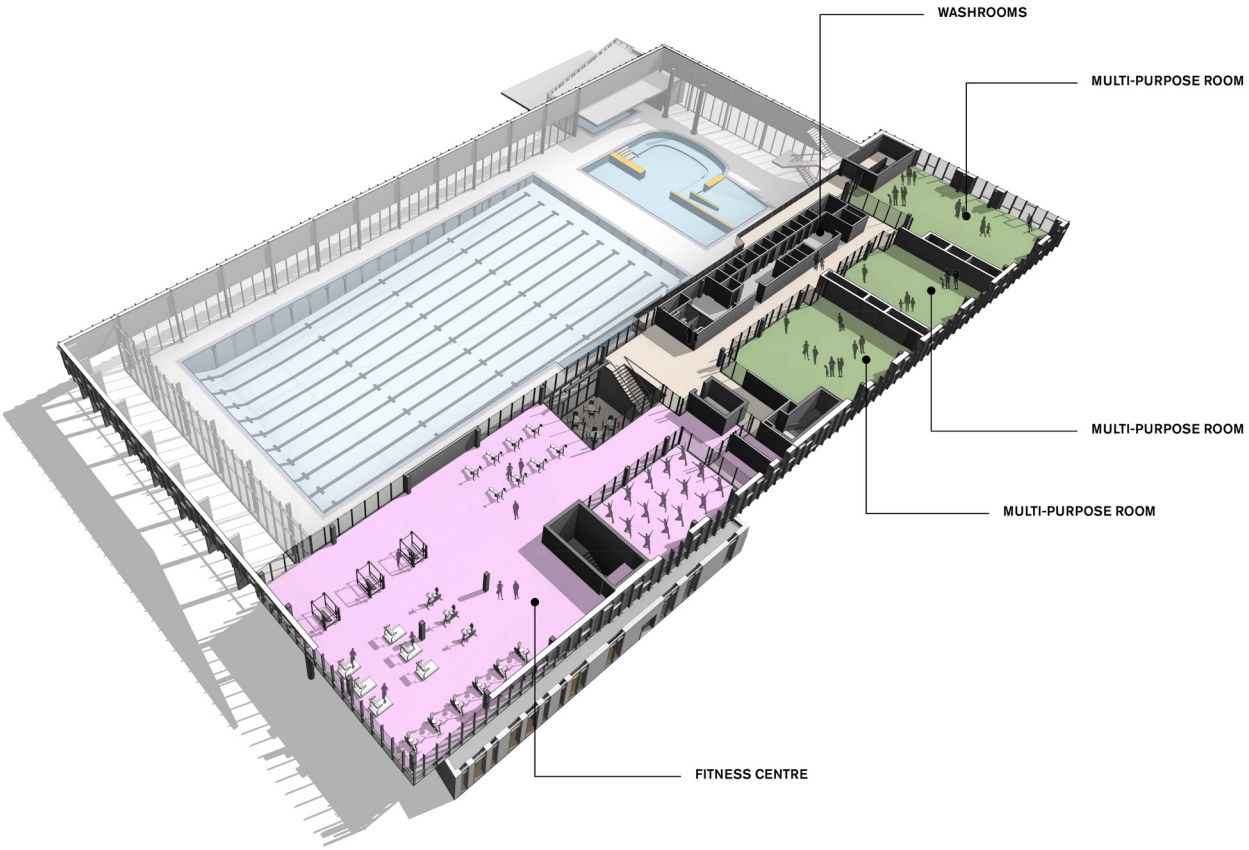
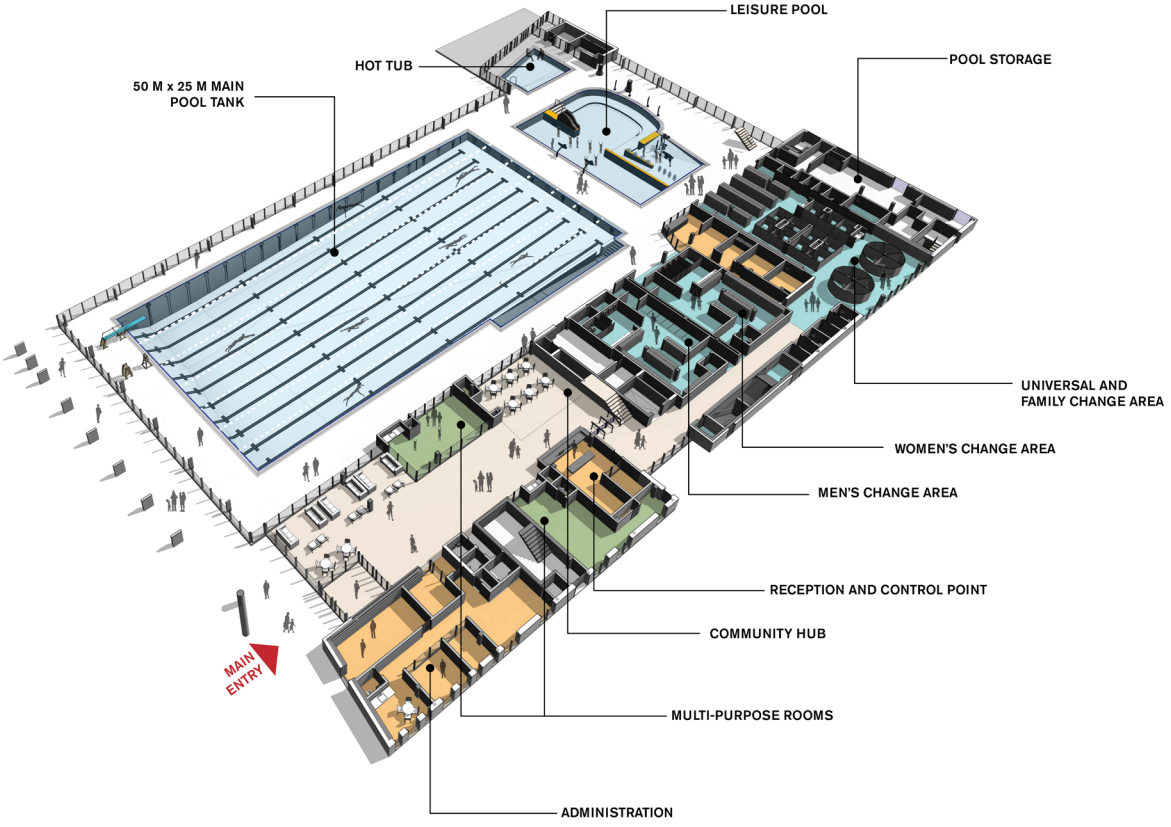






Images: Option 3 being further refined for Implementation

Implementation

This scope of the Feasibility Study describes at a high level the steps to be undertaken in order to implement the selected option: construction of a new replacement facility. This implementation plan recommends an early establishment of an Integrated Project Team within the city. Many of the tasks and steps are currently indicated at a conceptual planning level only and will be further developed and refined in more detail by that Integrated Project Team.

Moving forward the project implementation will be considered in two main stages:

STAGE

A

B

A **Project Definition and Funding Assessment Stage:** Grant applications and/or a referendum will be necessary to secure grant funding and/or to obtain electoral approval for borrowing the necessary funds for this project.

B **Realization Stage:** The implementation scope that follows securing necessary funds and/or a successful referendum on the borrowing bylaw.

Securing grant funding as well as holding a referendum if necessary constitutes a critical milestone in realizing the project, marking the transition from Stage A to Stage B. It is recommended that the City of Victoria balance the need for due diligence in *refining the project information* necessary for successful grant applications as well as for an informed decision by the electorate if necessary with *fiscal prudence* in not spending significant funds on designing a facility that has no approved funding.

Stage A: In regards to further design and investigation effort for Stage A, the following approaches were considered,:

STAGE A APPROACH

A1

A2

A3

Approach 1: **Secured Grants and/or Referendum Prior to Design**. Reduce/ minimize amount of any further investment prior to securing grants or holding a Referendum, but extend overall schedule (10-11 months of design and documentation start only after funding is secured).

- focus on grants and existing information only – no further design

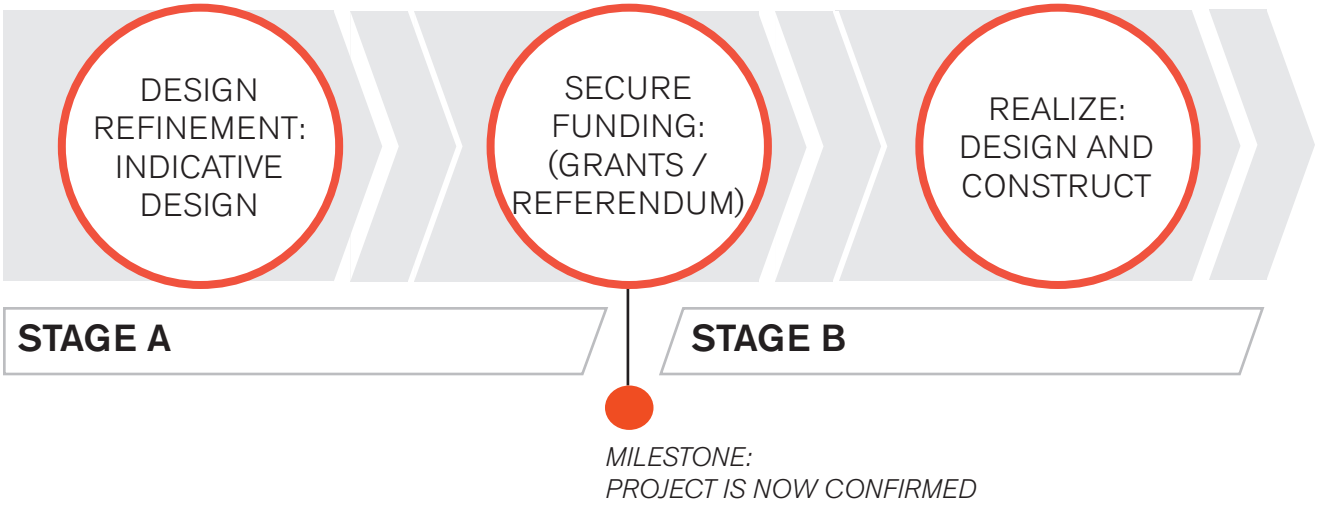
Approach 2: **Design Start Prior to Referendum**. Commence procurement of team and *start design immediately*, prior to secured grants or referendum. Expenditure of up to 25% of anticipated design fee might occur prior to having funding secured through grants or successful referendum, but schedule as presented can be maintained, and grant applications and referendum will benefit from refined numbers and decreased contingencies (DD stage)

Approach 3: Hybrid of above: **limited, indicative design refinement for costing accuracy improvement only** (Expenditure of 5-8% of design fee prior to referendum):

- *advance conceptual images and costs* (without completing SD/DD and associated cost estimates as per Option 1, but with some *minor investment into program refinement, conceptual design and refined costing*)
- Overall schedule may be affected depending on selected project delivery methodology (Design/Bid/Build versus CM Fast-Tracked with sequential tendering)

Approach 3:

The City of Victoria opted to continue with Approach 3: The immediate continuation of an **indicative design** for the new facility with focus on developing a project **vision** identifying project **risks** and refining the project **costs** in advance and in support of securing funding through grants (or referendum if necessary)



The following high level Activity Table outlines the starting point for implementing the new replacement facility. Development of a refined Implementation Plan or Project Plan that expands on these tasks will be completed by the future implementation team.

At this stage the efforts have been indicated as lead by the City of Victoria (COV) if the task relies largely on available expertise inside the City Departments (Parks & Rec, Communication, City Clerk, CMO's Office, Finance or Engineering) and as lead by an Integrated Project Team (IPT) if the effort relies largely on scope being completed by external Consultants.

1 INTEGRATED PROJECT TEAM

Establish within the City a **Project Team** (CoV):
- Project Management
- Communications
- Parks & Recreation
- Finance Dept
- City Managers Office

Establish an **Integrated Project Team** (IPT) to include external consultants.

Much of the necessary expertise to implement the next steps of this project already lies within various city departments, but strategic addition of external expertise and resources might be required. Expertise and experience will be needed in the following key areas:

- Project Management
- Public Engagement and Communication (pre and post funding (grants or referendum)
- Technical (program and facility concept refinement – pre-referendum – expertise might include city staff from varying departments (engineering, parks & recreation, sustainability as well as external consultants (architects and engineers)
- Financial (financing / budgeting (city) and external quantity surveyor (capital cost estimate refinement))
- Policy and procurement (Grant Applications, Referendum procedure if necessary, procurement)
- Senior level city staff (planning, engineering, parks, finance, city managers office, council liaison)

2 PROJECT MANAGEMENT

Retain or designate internally a Project Manager or team of PM's to represent the City's interests in evolving project and lead the Integrated Project Team

Reliance on internal Project Managers or externally sourced Project Manager(s) will be necessary to establish and lead a project team through the next steps.

- Lead Integrated Project Team meetings
- Develop project plan and project schedule
- Establish project protocols, internal communication and accountability structures
- Review critical project influences: risk register, procurement and construction delivery approaches, funding

3 BUSINESS & OPERATIONS

Establish a core group that has authority to develop and represent the project business plan and operational concerns of the new facility.

Drawing from city management and staff (Parks and Recreation) as well as the Mayors and City Manager's offices, identify a group of point persons that can advance the business case and operational strategies for the new facility:

- Establish ongoing discussions with potential partners (for instance Silver Threads)
- Make overtures to Provincial and Federal Governments about funding partnerships
- Develop a contingency plan in case existing building systems fail before the new building opens

4 FINANCE AND FUNDING TEAM

Establish representation from Finance Dept., City Clerks Office and other departments for financing and funding expertise and strategy

Drawing from city management and staff (Finance, Clerks Office) as well as the Mayors and City Manager's offices, identify a group of point persons that can advance the financial planning and funding model for the project

- Prepare some project cost comparative information in response to Council request
- Develop and maintain project budget with input from other teams
- Initiate referendum process and administer referendum (if necessary)
-

5 COMMUNICATIONS TEAM

Establish representation from CESP (Citizen Engagement an Strategic Planning) as well as outside consultants for expertise on communication and engagement

Drawing from CESP and with support from external consultants (Communication, Technical team, PM) identify group of point persons that can advance the communications strategy and plan for the project

- Project Management
- Public Engagement and Communication (pre and post funding (grants or referendum)
- Technical (program and facility concept refinement – pre-referendum – expertise might include city staff from varying departments (engineering, parks & recreation, sustainability as well as external consultants (architects and engineers)
- Financial (financing / budgeting (city) and external quantity surveyor (capital cost estimate refinement))
- Policy and procurement (Grant Applications, Referendum procedure if necessary, procurement)
- Senior level city staff (planning, engineering, parks, finance, city managers office, council liaison)

6 TECHNICAL TEAM

Establish representation from city and facility as well as outside specialist consultants for expertise on technical design refinement and further project feasibility investigation for risk reduction and more detailed cost information

Drawing from city management and staff (Parks + recreation: Crystal Pool Facility, Engineering, Planning) as well as specialist consultants (Architecture, Structural, Mechanical, Electrical, Traffic, Cost Consultant (QS), Surveyor, Environmental (HazMat)) identify a group that can advance the indicative design for the new facility for purposes of refining the budget and creating infirmation that supports funding (grants and possibly referendum).

- Confirm Site - design refinement can't start without a site
- Prepare Design and Costing Information necessary for funding (grant submissions, referendum)
  - Develop Conceptual Design Refinement: Indicative Design including Architectural, Structural, Mechanical and Electrical concepts (consultants)
  - Review sustainability targets as a key influencer on project costs
  - Engage with feasibility stage stakeholders on new facility regarding scope (key project cost influencer)
  - Elemental Cost Estimate - Quantity Surveyor
  - Ongoing value engineering
- Advise on Methods of project development / procurement (D-B-B, D/B, CM or other) as a key project cost influencer
- Respond to issues raised by IPT and the public as necessary
- Prepare visual and summary information on the indicative design for engagement team, grant applications and referendum (Project vision, program, plans, perspectives, descriptions)
- Procure or complete internally technical site investigations as deemed necessary to asses project risks and refine project budget (site survey, tree survey, arborist, geo-technical investigation, hazardous material investigation (existing building existing and new site), traffic and transit)

7 PROCUREMENT TEAM

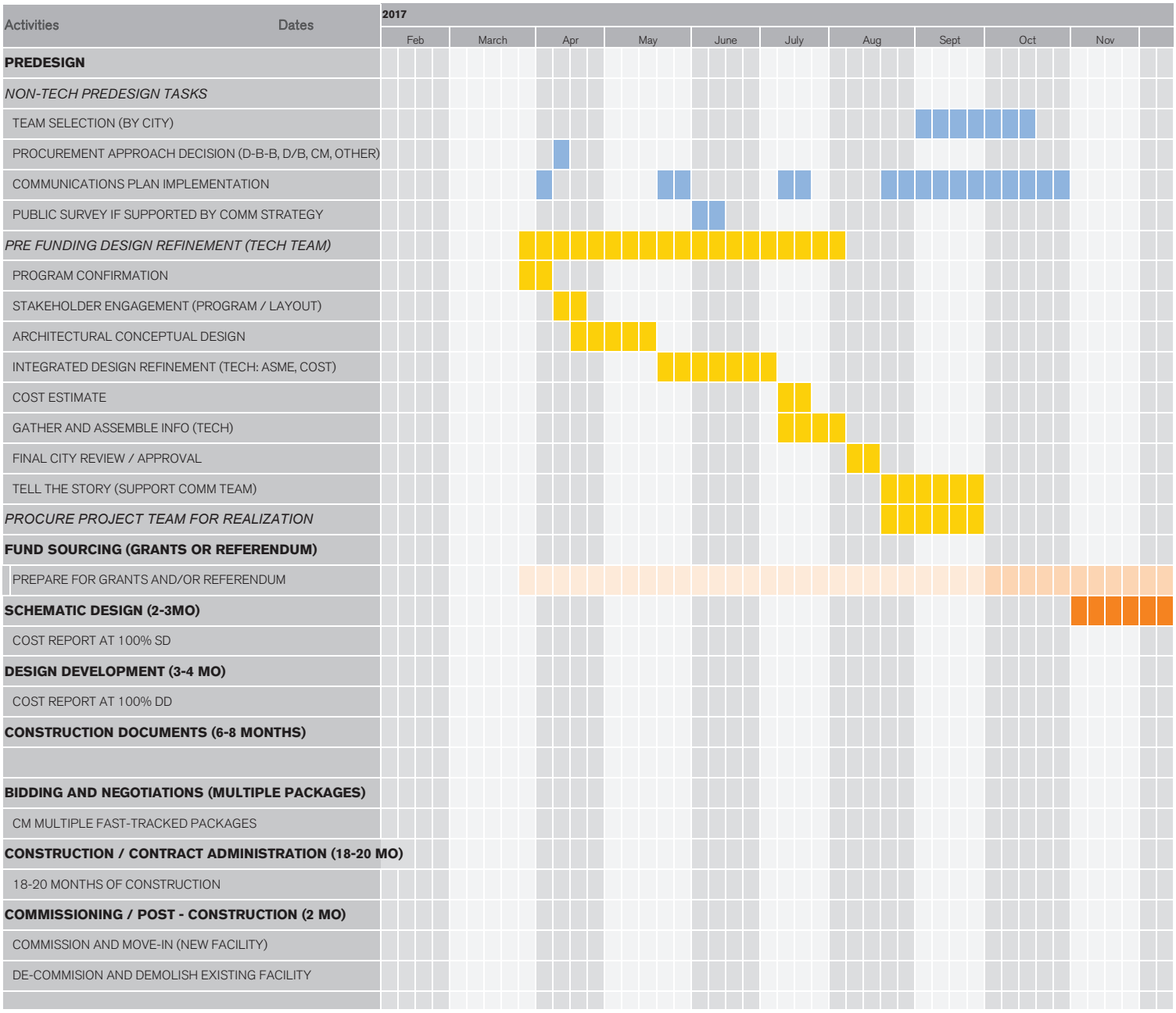
Supply Management Services to advise and support on necessary procurement of expert external support

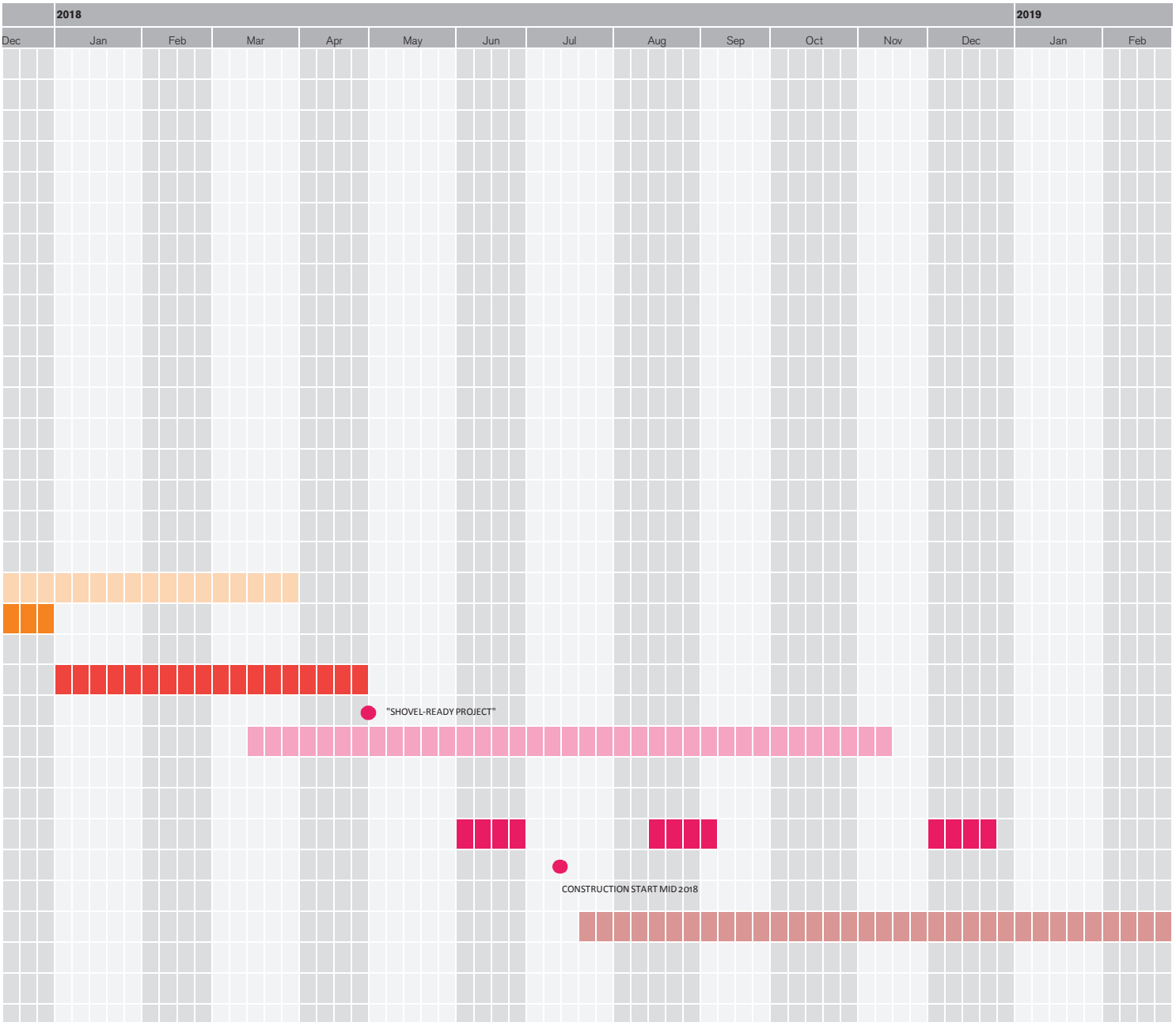
It will be necessary to procure services during the implementation of this project to supplement internal resources:

- Project Manager
- Design Support for Indicative Design and for project
- Communications Strategist
- Technical Specialists for site evaluation and risk review: site survey, tree survey, arborist, geo-technical investigation, hazardous material investigation (existing building existing and new site), traffic, transit
- Policy and procurement (Grant Applications, Referendum procedure if necessary, procurement)
- Senior level city staff (planning, engineering, parks, finance, city managers office, council liaison)
- Contractor (through Tender), Design/Builder or Construction Manager (through RFP)

OVERVIEW PROJECT SCHEDULE

OPTION 3




2018
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"SHOVEL-READY PROJECT"
CONSTRUCTION START MID 2018

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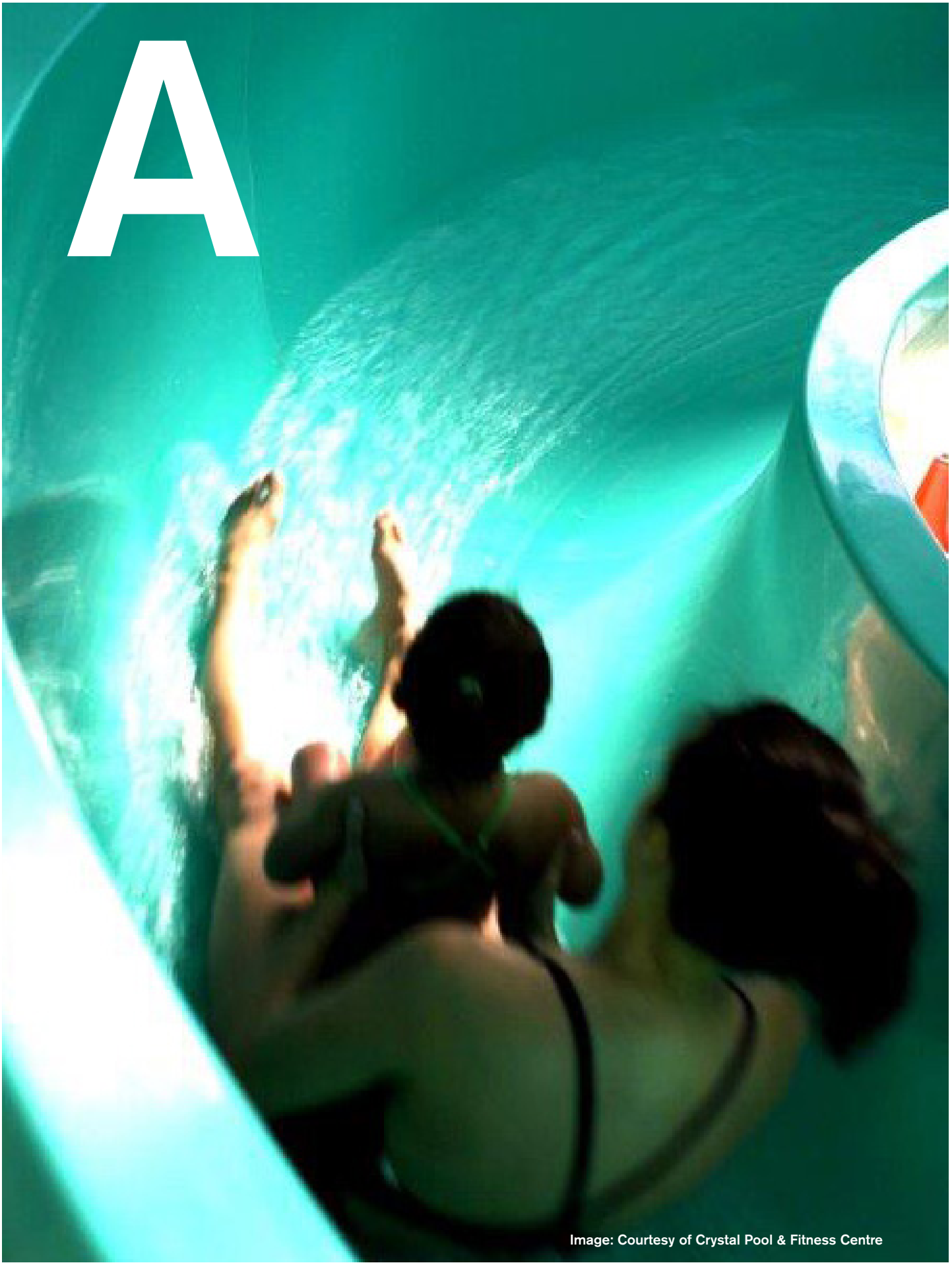

Image: Courtesy of Crystal Pool & Fitness Centre

Appendix

Appendix A - Provision of 50M Public Pools in BC

Figure A -1 summarizes the supply of 50M public pool tanks in BC in 2015. As the Figure shows, the Capital Regional District has more 50M pool tanks per capita than any other region of the province.

Figure A - 1
Summary of 50M Public Pool Tanks in BC

	Population 2015*	# of 50M Pools
Lower Mainland		
Langley Township	116, 863	1
Surrey	526, 004	3
Richmond	207, 773	1
Vancouver	648, 608	2
Coquitlam	144, 668	1
New Westminster	54, 258	1
Unincorporated Areas (including UBC)	26, 941	1
Lower Mainland Total	**2, 513, 869**	**10**
Per Capita Supply of 50 Meter Tanks	**One per**	**$251,387**
Capital Regional District		
Victoria	84, 793	1
Saanich **	110, 803	1
Capital Regional District Total	**377, 809**	**2**
Per Capita Supply of 50 Meter Tanks	**One per**	**188, 905**
Rest of Province		
Kelowna	124, 378	1
Prince George	71, 363	1
Nanaimo	90, 524	1
Kamloops	89, 995	1
Remainder of Province (including all other communities)	**1, 791, 461**	**6**
Per Capita Supply of 50 Meter Tanks	**One per**	**278, 577**
Total Province of BC	**4, 683, 139**	**16**
Per Capita Supply of 0 Meter Tanks	**One per**	**292, 696**

*** According to www.bcstats.gov.bc.ca in 2015**

**** Although Saanich Commonwealth Place technically has two 50m tanks, one is very seldom configured as a 50m tank.**

Appendix B - First Round of Public Consultation

STAKEHOLDER INTERVIEWS

A total of 80 groups were invited to meet with the consultant and provide their input. Twenty-six agreed to interviews, and twenty-four actually showed up for their interview. While the consultants gathered a great deal of useful information from the interviews, only the most important points are recorded herein.

Figure B - 1
Summary of Input from Stakeholder Interviews

Name of Group	Most salient issues, needs and concerns
Quadra-Hillside Neighbourhood Action Committee AND **Quadra Village Community Centre**	▪ The local community has a strong affinity with the CPFC and is very supportive of it remaining in the community. ▪ A great many local individuals and families us it and aren't in a position to use other pools. ▪ The community likely would prefer a more modest project (just keeping what we now have) rather something that the City can't afford. ▪ Just make a decision, rather than studying the problem again.
Turbo H2O Fitness	▪ Need 50m tank, but add more water in the 4-5 foot depth range. ▪ More deck space for transition fitness from water to deck and back to water.
Mercury Rising Tri Club	▪ While the pool is old and basic, it generall meets our needs. ▪ Our biggest problem is the swim lane rental rates which are far too high. ▪ By far, our biggest concern would be significant interruption of access to the facility during construction. ▪ Our secondary concern would be if we had to make do with a 25m tank instead of 50m. ▪ Also, need more parking.
Special Olympics	▪ Building is quite suitable to our needs. ▪ Keep all the water surface area so that we can use it along with other uses at the same time. ▪ Need family change rooms. ▪ Need to make the building more physically accessible. ▪ Would love to host a swim meet. ▪ Put more emphasis on the facility as an all round recreation and wellness centre.

Figure B - 1 (Continued) Summary of Input from Stakeholder Interviews	
Name of Group	**Most salient issues, needs and concerns**
Tyee Aquatic Club	▪ Worst fear is being without a facility for a season or more due to construction. ▪ Very high need for lots of lane hours of rentals (hopefully allowing other uses at the same time) as we are a growing club, with a very wide variety of programs). ▪ Really want a 50m training format for last half of our season. ▪ Fix parking, disable access, food and beverage service, family change rooms, much better fitness areas. ▪ Would like to be able to host competitions.
Friends of Crystal Pool	▪ Retrofit what we have, rather than build whole new facility which would be too costly from a finance, environmental and social perspective. ▪ Add family change rooms, food and beverage service and dry floor spaces like multipurpose rooms, making it a true community centre. ▪ Make all aspects of the building physically accessible. ▪ Repurpose bleacher seating area as it is underutilized. ▪ For sure, keep 50m tank.
Gorge Narrows Rowing Club (through SMU)	▪ We rent two lanes twice per week during the summer now for cross training, and the building currently meets our needs. ▪ In future, we will need more lanes, more months of the year as our program grows. ▪ The facility which is located in a multiuse park represents quite a uniquely attractive set of services in our region.
Silver Threads	▪ We don't use the facility now, but would like to potentially relocate to it and becoming a service providing partner. ▪ We would need access to about 2500 sq.ft of dry floor space.
KATS Youth Tennis	▪ **We don't use the facility now and don't see any potential future use, but *****
Human Powered Racing	▪ Building currently meets our needs. ▪ Our biggest concern would be if there was no pool in the future. ▪ Our second biggest concern would be an interruption due to construction of more than a season. ▪ Whether 25m or 50m - doesn't really matter to us.

Figure B - 1 (Continued) Summary of Input from Stakeholder Interviews	
Name of Group	**Most salient issues, needs and concerns**
Oak Bay Orcas	▪ Facility generally meets our needs now. ▪ However, ideally it would be nice to have a little more access to 25m lane hours during the summer, and to have more dry land training area and more parking. ▪ Also, the bleacher seats are terrible.
Victoria Curling Club	▪ Would love to be part of a project to expand or replace the Crystal Pool, adding an 8 sheet curling facility which will be energy efficient and provide synergies and economics of scale, and a large flat floor space for 3-4 months per year.
Pacific Coast Swimming	▪ A shut down for construction would be a problem but the club would survive, otherwise ditto to all points above.
Private Fitness and Rehab Contractors	▪ Much better access to all dry floor fitness spaces for people with disabilities. ▪ Separated dedicated space for dry floor fitness equipment, spaces that are climate controlled. ▪ Family change rooms. ▪ Better, newer equipment. ▪ Patrons want high quality ambience, equipement and instructors. We have the instructors, but need the other two. ▪ Add parking. ▪ Can we have seamless access to outdoor space, back and forth.
Victoria Youth Paddling Club	▪ Need a large water surface for our C6 safe training trials. ▪ Would also love to use a dedicated dry land training area occassionally.
Oaklands Community Centre	▪ Need more activity rooms (roughly 1000 to 1200 sq.ft.) for our leadership training programs.
Canucks Autism Network	▪ Need family change rooms. ▪ Also need more / better aquatic equipment (e.g. noodles and kickboards).
Recreation Integration Victoria	▪ While the staff does their best to respond to integration challenges in an old building, there is much that is challenging at the facility in terms of physical access. ▪ It will require an understanding and commitment that the facility is for all citizens.

Figure B - 1 (Continued) Summary of Input from Stakeholder Interviews	
Name of Group	**Most salient issues, needs and concerns**
Triathlon Canada	▪ Need to keep the 50m tank for triathlon training. ▪ As we grow Paralympic triathloning we need more access to the building for people with disabilities.
Victoria Masters Swim Club	▪ We would really like to keep lots of water surface area so that we can use lots of lane hours while others area also using the pool. ▪ Would prefer to keep the 50m format, which likely means retaining and retrofitting the existing facility. ▪ Several months or a year of pool use interruption would be painful, but we would make due in order for the long term gain. ▪ Need universal change rooms and more / better dry floor fitness spaces. ▪ Could also use more club storage. ▪ More community meeting space, food and beverage service and a physiotherapy area and a swim supply retail outlet would also be helpful.
Byte Camp	▪ Would love to run our camp out of the facility, but would need to have more access to a multipurpose room to set up computers.
VIHA Pain Clinic	▪ Need to continue to provide aquatic rehab and therapy for the many who need it. ▪ Keep the services affordable; at same level as currently or even lower. ▪ Make the facility more accessible by people with disabilities. ▪ Add dedicated physio area and other sports medicine type services to the facitlity.

STAFF INPUT

The consultants also conducted three meetings with staff groups to gain their insights and views.

Figure B - 2
Summary of Input from Staff Members

Name of Group	Most salient issues, needs and concerns
Facility Program Staff	▪ If we do nothing else, we need to fix the overall physical accssibility issues and add family change rooms. ▪ We'd also really need more dry floor spaces, including a gym, a dedicated larger fitness space, a community kitchen, a licensed child care space and a classroom, to make this a real community centre. ▪ We could also use a community kitchen and an entry lobby that is social and welcoming, better storage, a staff room and more parking.
Facility Customer Service Staff	▪ Must separate fitness into temperature controlled, purpose built space(s), add full accessibility and family change rooms. ▪ Add a gymnasium, food and beverage area, social spaces, more parking, physio area, public washrooms in the foyer, and an accessible washroom on the pool deck. ▪ Keep the community feel, skylights the 50m tank and the sauna. ▪ No chlorine.
Maintenance and Operations Staff	▪ There are four critical building systems that need extensive investment immediately and they are a coating of the pool tank (to stop leaks), new boilers and controllers, repairs to the domes and the water filtration system. ▪ The public doesn't see these but they are becoming critical to the ongoing operation of the building.

PUBLIC FOCUS GROUP

The consultants also conducted four focus groups with members of the public that use Crystal Pool and Fitness Centre. A total of 36 people attended and provided input. The main themes of those events are summarized below:

- What draws us to use CPFC (instead of all the other facilities in our region) include the following:
  - The staff and the community feeling they create
  - The facility is less pretentious – real people use this facility, including a broad cross section of the community
  - The location
  - The fact there is a park that surrounds it and it provides a wide range of opportunities that aren't available at other facilities
  - The 50M tank, one of only two in the region

- We want the pool to do a better job of serving the following roles in our community:
  - Attract and serve more families; especially families with children
  - Become a real community based facility with a broader range of services, adding significantly to the dry floor services
  - Act as a preventative health centre with services for those with disabilities, frailties or injuries

- What is essential in a future CPFC facility:
  - Family change rooms
  - More parking
  - Much better physical accessibility, for people with disabilities
  - Much more and better dry floor fitness spaces, in dedicated climate controlled areas
  - A much more attractive tots pool for family fun and water orientation for toddlers

- What we would also love to see in a future CPFC facility (but may not be able to afford) include:
  - More and larger dry floor multipurpose spaces
  - Possibly a second rectangular tank
  - Some food and beverage service

- Our biggest concerns are:
  - What do we do while the building is under construction or reconstruction?
  - The capital cost will be high
  - We need to keep at least what we have – can't do with less; especially the 50M tank

Appendix C - General Input from Regional Residents

The City staff and consultant team worked together to create a Sounding Board which was posted at the CPFC to solicit general input from patrons and anyone who visited the facility. They also used the same sounding Board to augment other City sponsored consultation events. These were called Pop-Ups. A summary of both are included in this Appendix.

SOUNDING BOARD

A Sounding Board was posted at the Crystal Pool and Fitness Centre. It posed one specific question which was "what is the role that a future Crystal Pool and Fitness Centre should play in our community?" The board invited anyone who wished to answer the question to write their answers on a nearby pad of post-it notes and post the note onto the board for all to read and consider adding their comments. While a full text of the 464 answers is available, the vast majority fell into seven themes which are listed below in priority order from highest incidence to lowest incidence.

- We need a 50 meter pool
- Need universal changerooms and washrooms
- More parking
- Add an outdoor pool
- Add or keep a waterslide
- Keep the skylights
- Add a lazy river

POP-UPS

Sounding Boards were also posted at a number of community events. Each posed the same single question as above (but for a more general audience than just facility users). The boards invited anyone who wished to answer the question to write their answers on a nearby pad of post-it notes and post the note onto the board for all to read and consider adding their comments. While a full details of the 200 answers is available, the vast majority fell into ten themes which are listed below.

- 140 elementary aged school children in various schools in the City overwhelmingly felt that other pools were more attractive than Crystal Pool (their favourite pool was not CPFC although the majority had used it). They enjoyed the leisure pool amenities in these other pools and liked to visit them. They also unanimously felt that the CPFC should be more than a pool; a community centre with a variety of amenities.
- 22 participants in summer camps expressed similar views.

Appendix D - Public OnLine Survey

An online survey was posted on the City's webpage. It invited anyone who wished to provide input to answer a series of questions. A total of 570 completed surveys were received between the dates of June 10th and 30th. While not a controlled random sample, the results are considered to be representative and were helpful in determining needs. They are summarized below.

1. Do you or anyone in our household use a public pool or fitness centre in the region?

Response	Chart	Percentage	Count
Yes	88%	88%	509
No	12%	12%	68
	Total Responses		**577**

1. a) Which ones? Please list all that the household uses.

90% of responses listed Crystal Pool, but about 90% of those also listed other pools.

Of those that listed only other pools, the most popular were:

- Oak Bay Pool
- Saanich Commonwealth Place
- Esquimalt Pool
- The YMCA

1. b) For which type of activities? Please check all that apply.

Response	Percentage	Percentage	Count
Recreational or drop-in swimming	69%	69%	371
Swim lessons	32%	32%	170
Other skill development programs	20%	20%	106
Sport training for water sports	24%	24%	130
Special events and competitions	14%	14%	77
Rehabilitation or therapy	16%	16%	86
Fitness classes in the water	23%	23%	123
Lane swimming for fitness	50%	50%	272
Other (please specify):	10%	10%	55
Total Responses			**540**

1. c) How do you typically travel to the public pool or fitness centre?

Response	Chart	Percentage	Count
By car	60%	60%	330
On foot or by bicycle	34%	34%	187
By public transit	7%	7%	36
	Total Responses		**553**

2. In your opinion, what role should an ideal future Crystal Pool and Fitness Centre play in the community? Please check all that apply.

Response	Percentage	Percentage	Count
A place for fun and entertainment	64%	64%	357
A community gathering place	58%	58%	322
A place to get fit (in the water and/or on land)	92%	92%	510
A sport training centre	58%	58%	321
A special events centre with spectators as well as users	39%	39%	215
Other role (please specify):	15%	15%	83
	Total Responses		**554**

2. In your opinion, what role should an ideal future Crystal Pool and Fitness Centre play in the community? Please check all that apply. (Other role (please specify):)

1	A resource for similar activities or family and individual supports
2	indoor water slides/park but separate entrance because it costs more. Plus a coffee shop, restaurant ad generally a retail section rented out.
3	space to provide services symbiotic to these goals- food, physio,
4	Consider a public private partnership so that a renovated building had some offices for businesses (medical would fit well), low key retail and possibly even some residential
5	A place to access social services, child care, library, public meeting rooms, and enrichment programs
6	training centre for water sports; children's swim clubs, other aquatic clubs
7	A venue for high performance athletes to compete
8	Not sure I don't swim
9	A centre for North Park Neighbourhood Association to use.
10	Health fitness for those of us over 50 and not liking the large crowds that the other pools have. The aging population needs to be able to have access to socialize and exercise in comfortable surroundings with a great instructor like we have at the Crystal Pool. We have been using the Crystal pool for our Family with the two children taking all the swimming lessons, first aid and life guarding available.
11	A place to KEEP fit — used by seniors and those who are ageing
12	It's perfect as it is now
13	a safe place for youth to gather
14	Specialty rehabilitation therapy centre
15	Something for everyone, it is an inner city facility with a variety of user groups. Most importantly it should remain a 50m pool with improvements to bring it up to date and multi-purposed
16	could incorporate other health services and some small commercial that fits with health theme
17	Health services centre
18	Recreational sports programming (squash, basketball, indoor soccer) for adults and kids (we go to Oak Bay for all our kids programming even though we live 100m from Crystal)
19	a place to stay healthy
20	new and improved sports: a wall etc. - update
21	Rehab on land and in the water, like Esquimalt
22	centre for neighbourhood association
23	House a competitive swim club
24	Therapeutic
25	A fitness centre for exercise
26	community meeting rooms
27	where kids can get mentorship in healthy living.
28	Outdoor pool
29	A place for learning new things
30	Remain a pool with cheap late-night admissions so it is accessible to everyone in the community.

31	Group meetings
32	Swim clubs
33	housing, playground, community centre (including kitchen, meeting rooms)
34	Swim Meets
35	Rehabilitation for those with physical and mental disabilities
36	Education programs
37	Housing, child care, after school care, senior's centre
38	Health, sport, community education and information
39	other fitness besides water, indoor & outdoor
40	meeting spaces for community groups
41	promote well being and peace of mind
42	Super wave pool and waterpark like west ed mall
43	Outdoor pool
44	Curling facility
45	a place for fun (not necessarily entertainment)
46	Shut it. Send people to other regional facilities.
47	A much larger weight room with power racks and space for Olympic/compound movements.
48	physical rehabilitation, eg. pool physio programs
49	Full weight lifting equipment
50	Swimming only
51	child recreation and fitness
52	Land-based indoor training and recreation, Cultural meeting place and emergency centre (e.g. earthquake)
53	Child camps, daycare, training, seminars
54	Active living programs
55	Affordable housing (built on top!)
56	A place for swimming competition
57	Health and fitness programs from quitting smoking to losing weight
58	A good sized changing room/shower area.
59	Main rec centre in victoria
60	General recreation programs, birthday parties, enhanced rehabilitation services, seniors area, teen area, gym or space for general recreation programs like dance, martial arts, etc.
61	Good for everybody
62	Gymnastics, computer time, library, trampoline fun,
63	Focus on community orientation". A lot of community engagement now keep that
64	A pool for competing and one for gentle swimming or physiotherapy. No length swimmers preparing to use the lanes.
65	Social gather place
66	Healthy lifestyle. Healthy for the community as well improve the health of families" a place for everyone of all ages
67	Medical health center
68	Affordable place for any populations (young, old, able, disabled, etc) to have physical activities
69	Rehabilitation
70	A place to learn how to swim and water safety
71	Recovery from various medical problems and chronic afflictions. Why was this not included in your list? When it is included below?
72	Birthday party with underwater window! !
73	Swim Club centre
74	use facilities to work with own kinesiologist/personal trainer
75	with commercial space relative to health & wellness
76	Daycare! Holiday camps.
77	Community development, volunteering, activism centre
78	Family friendly
79	rehab/therapy (in water esp.helpful)
80	maybe a large gym for events and dance studio
81	a place where you can go on public computers
82	much more family programming: camps, soccer, etc
83	Rehab & Para training site

3. If a future pool and fitness centre can't do everything, what are the highest priority aquatic services it should provide? Please select up to four priorities from the list below. (Other service (please specify):)

1	water slides/ park
2	please please do not make it smaller than it already is!!!
3	other sports not currently easily available in the community. ie, booking a badminton court. Also needs to have a way better weight room and training facilities.
4	Not sure don't swim
5	spin class
6	accessible to those who are disabled and/or ageing
7	Canoe/kayak rescue/recovery & indoor training
8	Community hub and gathering place - this will help drive and increase usage and improve community health
9	50m pool for swim clubs as well as general public use
10	competitive swim club
11	fitness on land
12	you need ALL of the above. It is impossible to pick only 4
13	ALL the above are relevant. Not fair to have to choose
14	
15	Sauna and steam room for relaxation
16	Dry land activities for community, 50 metre pool for multi us water use
17	Special Swimming events and competitions
18	Club swimming like Masters
19	Exercise centre
20	Strength training and yoga
21	non-water fitness equipment and programming
22	Outdoor pool
23	Rehabilitation/Therapy AND Fitness in water
24	Kayak training
25	Fitness training facilities
26	fitness on land
27	50m AND 25m lanes
28	competitive swim meets
29	Swimming Competition
30	50 metre length - not smaller
31	Swim clubs
32	Gym, steam room
33	Waterslides the island is lacking
34	Gym
35	Curling facility
36	Sauna - Steem Room.
37	None of the above. We can't afford to replace Crystal Pool.
38	Large weight room.
39	Diving
40	Fitness classes
41	Child camps
42	This is a weird list because a pool can do all of these things with good scheduling.
43	good weight lifting gym
44	Dry land recreation and fitness. After school care
45	a much improved fitness centre
46	more parking
47	Good sized changing/shower area
49	Weight room and free-weights
50	If you build the right facility it could be very inclusive and incorporate many of the choices.
51	Personal fitness dry cardio. Swimming for fitness
52	Fifty metre
53	Fitness
54	I think a indoor gym facilities like a basketball court and other activity's

54	I think a indoor gym facilities like a basketball court and other activity's
55	A public space available at all times, so if I pay admission, I'm not told this part is doing lessons and that part is doing a fitness class, etc.
56	Community feel ". Community centre
57	Fitness classes, weightroom, classes for things not related to sports
58	Weight training. Concentrate on providing a good gym.
59	Gym and cardiovascular equipment
60	cardio and weight facilities
61	Sauna, Hot tub
62	Gym
63	why have only 4? Swim lessons are critical, as is recreation.
64	Host to Victoria Masters Swim Club
65	50 meter swimming lane
66	use gym with kinesiologist/personal trainer
67	Fitness room & classes
68	Water safety
69	everyone welcome 24/7 because tot time limits people and lanes should go everyone welcome-- trampoline, books, computers
70	Cardion exercise-Treadmills, bikes
71	fitness dry floor classes/ gym space
72	Summer camps
73	Fitness classes, weights
74	Sauna
75	more family programming: soccertron, rec baseball,

4. If a future facility includes some non-aquatic services, which would be the highest priority services that you would want to add? Please select up to three services from the list below.

Response	Percentage	Count
Dry floor fitness classes (registered program)	57%	306
Access to a fitness gym or studio on a drop in basis	89%	481
Food and beverage services	19%	102
Child care services	35%	189
Multipurpose areas for meetings and programming	32%	174
Physiotherapy services	19%	104
	Total Responses	**539**

5. Please tell us what you would like to see happen to the Crystal Pool and Fitness Centre in the future.

1	Rebuild to include options we cannot offer now for accessibility, dryland space, and offer partnerships with the library and physio, etc.
2	Build a completely new state of the art facility where the fitness area is not in the same area as the pool. Provide indoor facilities for basketball, squash etc. so they can be played year round.
3	Similar to Oak Bay Rec.
4	Better gym
5	Build a new building behind the existing pool, flat roof with rooftop activities, underground parking, indoor water slides/park but separate entrance because it costs more. Plus a coffee shop, restaurant ad generally a retail section rented out. offer municipal bonds to the people of Victoria to help invest in the infrastructure. once the old one is down, rebuild the fields for maximum usage.
6	Want it to continue but either improve it or build new facility including 50m pool and option for portion of pool to be opened up to the outdoors during summers months.

7	Keep 50 metre length. Any chance of partnering with the YMCA. They need more room and the Crystal could use their expertise and programs.
8	update pool and increase workout/ cardio space that is not on the pool deck.
9	I would sincerely hope that a 50 metre pool would stay in place as a lot of us are serious lane & training swimmers. There are enough leisure pools in the Greater Victoria area but only Crystal & Commonwealth offer the bigger pools. Commonwealth 50 metre pool is not available as often since it is used for competition training and swimming.
10	a new 50m pool built or this one renovated if possible
11	be better able to access the gym and equipment with an elevator
12	Expand the dry floor and exercise area and repair anything the pool needs as its size is what makes it easy to work out.
13	Keep it 50m. Have private health businesses rent office space
14	I would like a 100 meter pool - half indoor, half outdoor
15	50 meter pool
16	Replace with another 50m competitive pool.
17	INVESTMENT in the community's recreational opportunities to keep our population healthy. I would like to see it not close due to renovation as even 6 moths or a year closure can get people out of the training groove and can decrease
18	(1) keep 50-metre lanes for fitness swimming; (2) upgrade only systems that are too obsolete to be properly functional.
19	Since money is limited the priority is to have a great swimming pool for lessons, fun and fitness. If/when it is re-developed it would be great to have something more ambitious that included some community multipurpose spaces, dryland fitness facilities, one or two places to eat/drink. Commercial office space for health care businesses. Possibly some low key retail
20	Keep 50 metre lanes. Fix or replace only things that require fixing (new boiler, new pool bottom surface).
21	I would like to see two quality pools: one for lane swimming, and one for family fun which is well-designed (waterslide, lazy river, etc.) Use health- and environmentally sensitive chemicals. Outdoor hot tubs would be a great addition. Child care is also critical – so parents can exercise, but also as a chance to provide badly needed child care spaces for the community. This should be linked with a quality playground at Central Park (nature playground). Fitness space for classes, machines and free weights. These are the basics. Beyond this, I would like to see spaces for lease for events; a clinic (if there is demand), physiotherapy, and spaces to access social services, after school programs, adult educations, etc. Commercial services such as a café and light snacks, opening to the park, would be welcome. Make this a real community hub. Even a library branch if there is demand.
22	More parking; family change room; longer hours, especially on weekends; larger weight and swirl pool upgrades; cleaning of facility should occur weight room; daily cleaning inside and out; security cameras by doors to change rooms & entrance/exit; more signage instructing patrons to shower before entering pool.
23	1. Pool to remain open during rebuild or renovation 2. Maintenance of current 50 m capability or equivalent water volume.
24	Crystal Pool is the main source of recreational programming for our family. We swim at the Crystal Pool three to four times weekly. I hope to see the pool either refurbished or replaced (whichever is the most financially prudent) to ensure that we can continue to use it.
25	I want the 50m pool kept; I want to see refurbishment, a public run facility, updates in keeping with a modest budget; handicap access improved
26	Would love if it could remain a 50 m pool at the nice cool temperature that it is now for length swimming!
27	Renovation
28	There needs to be a family change room as we are no longer able to use the women's change room with my 7-yr old son which is ridiculous as there are stalls and he's in grade 1. We now have to change in the First Aid room which is sometimes in use by others and life guards etc. and has no showers, lockers or anything. It's totally ridiculous. Boys should be allowed in women's change room with mom's until at least 8 years. Way more dangerous to send into men's alone.
29	Rebuild a new facility with lots of gym space
30	Retain and renovate the current building which is attractive, a good fit for Central Park and has architectural merit (John DiCastri design). Ensure change rooms to accommodate families and various abilities. Ensure the pool and fitness centre are open at a variety of hours to accommodate people's different schedules. Ample space for community meetings (e.g. NPNA).
31	Accessible to all in community
32	A more robust gym facility with fewer machines and more room for barbell and gymnastics exercises
33	The existing facility is historically overbuilt with the original design aimed at serving athletic training that ended up taking place at better appointed facilities (in particular, Commonwealth and CARSA). Victoria's Crystal Pool should refocus on community health, recreation and services for families (especially childcare, summer recreation and out-of-school care). There is a surplus of places for athletic training at state of the art facilities in Victoria. This public facility should focus on the local residents (and also providing amenities for people who work in the city).
34	Aquatic programming should no by prioritized over public access to lanes and amenities (hot tub, steam room). As its currently being used, public have very little access to the facility during peak hours because user groups take up the entire facility.
35	A beautiful fitness centre and pool that is accessible for the community.
36	Public ownership and operation only.
37	I hope to see a pool that brings families back who have left to other more exciting facilities in the region.
38	More swimming lanes
39	Be available to have drop ins at same time as lessons, nice for family to be able to do laps at same time and play in pool

	for a while after.
40	Renovation to maintain what we have
41	Maybe something without a pool
42	New multi use recreation facility with a 50m pool.
43	Consider more lane swimming options for the public
44	add a spin class
45	Keep it!!! Its such a valuable space for ling track swimming and the only 50m pool close to a HUGE portion of the population in Greater Victoria.
46	This is a vital community resource and must remain publicly run.
47	I would like to see the old Crystal Pool refurbished for more dry-land opportunities. The pool should stay the same, but there needs to be a family change room added. The building should be reinforced up to earthquake proof standards.
48	more lanes
49	Water Aquatics, the current machine exercise equipment in the upper level, Physiotherapy, both in and out of water. a couple of social activities for the pool patrons, as we have had in the past. and a few more parking spaces would be nice. (Until I'm able to walk from home again, awaiting Knee replacement, hoping it will be as successful as the hip replacement).
50	Please keep the 50-meter lanes. They are only available from Crystal Pool in the city
51	I would like to see it renovated rather than replaced. The pool floor is a bit rough in places. The changing area is remarkably spacious. Parking sometimes a problem; it could use more handicapped spaces! Thank you!
52	I would like to see the pool remain at this location. It is only 45 years old., which is not an old building! IT does need some internal repairs and upgrading. Possibly some more parking. THE back field doesn't seem to be used? Also, the ladies change room could do with more change rooms. There are only two.
53	There is no need to replace a perfectly good facility. Budget for proper maintenance and the building will last for a long time and satisfy many patrons. Don't repeat the Blue Bridge fiasco/sham!
54	Renovation to existing structure. No loss of greenspace to larger facility or parking.
55	Renovations including extra parking and more ladies changing booths
56	I would like to see it become one of the centre's of the community where people gather for fitness, health and recreation purposes. I would also like to see it become a place where competitions can be held so we can attract people to our beautiful city and help the downtown business
57	50m lanes for fitness swimming. Accessible pool and change rooms
58	Maintain a similar style pool as is currently available, both access to a 25 meter and 50 meter for length swimming. This also allows it to be separated easily for many different activities at one time.
59	Make it a legal Olympic sized pool so Tyee doesn't have to infringe upon Island's space to host meets.
60	A unique purpose to stand out from the other rec centres such as specializing in rehabilitation activities or special events/competitions
61	Refurbish or rebuild (feasibility and costing study required to determine which makes most sense; keep the 50m (8 or 10 lane) pool!
62	To keep the 50 metre pool along with a recreational area for children. Add on space for fitness, yoga, meeting space, multi-purpose rooms. Make it a true community centre.
63	Build a new one to increase updated accessibility for all.
64	Improving the community centre aspect will help drive attendance and use. I do feel having a place for lane swimming including 50m is really essential for a community our size
65	Community ..inclusion for all ages
66	Freshened up, and improved parking.
67	Maintain large pool
68	would like to see it retained as a 50 m pool and fitness facility with family change rooms, and addtional facilties for families living in that area
69	It is crucial to maintain what is there- 50 m lanes and fitness classes
70	would like to see the pool stay a 50m pool.
71	Please don't be short sited by building a 25 metre pool. Access to CWP is extremely limited. If building a new facility it is not just during your term of employment it will be for 50 years to come.
72	Keep 50m lanes or the pool will be instantly obsolete under Swim Canada rules
73	New 50 metre pool and complex.
74	Get rejuvenate but stay as a training center for water sports swimming
75	I like this pool the way it is
76	Retain the 50m pool footprint for use of multiple groups. Better fitness/gym area. Gathering place for the community. This is an important part of our city!
77	I would like to see the 50m pool retained. It offers so much more flexibility and use as water fitness classes and fun time can be happening while there are 25m lanes to swim in depending on peak hours and scheduling. Certainly more revenue can be generated by a 50m pool.
78	Please keep the 50m lanes! Add/update the gym facility and create a cardio room.
79	It's really important that Crystal Pool remain a 50 metre pool so that the Victoria Masters have a place to train while the other half of the pool remains open to the general public. The facility does need more parking and it could use some upgrades but, I think it's so important that the pool remain 50 metres in length. That pool is a much needed community centre - while there are lots of things that could be done to improve it, changing it from 50 metres to less would be detrimental and the end of the swim club.

80	50m pool so it can be used by swim teams - now a requirement, minimal closure time
81	I am a Masters club swimmer. If it is not a 50 meter pool it is very likely I will loose my lifelong fitness activity.
82	Retain the 50m pool length, many swim clubs struggle finding 50m pool in the greater Victoria area.
83	The pool is great and should be maintained properly. It should also have more fitness and yoga programs
84	if a new facility is build keep the current facility OPEN until construction is complete
85	Make it a salt water pool
86	A better pool., I use it with special Olympics
87	Be maintained as a 50 metre pool for swimming (ie don't replace with less than 50 metre pool. Either fix this one, or replace with like.
88	a) maintain it, (b) add fitness areas, (c) add child care services that could be connected to aquatic recreation (d) If replacing it, keep a 50M pool. The correct set-up is practical for simultaneous multi-use
89	I'd like it to stay open during any reno/rebuild - it's just too hard to get swim time in another facility. There are plenty of "play" type pools in the region - we need one for people who want to train and Commonwealth is fully booked. The dream would be to have a facility that could hold swim meets (50m ten lanes) - allow teams to train and other programming to still continue (50m, 10 lanes), and still allow all the teams that train there to continue training during the rebuild. I've read that the cost per household for a 50m pool is very marginally larger than the cost for a 25m pool, so it makes sense to have something that would be way more useful (and used) than simply a 25m facility.
90	I've experienced a number of recreational centres in Canada and the U.S. Crystal Pool & Fitness Centre is a unique opportunity in the region. I would like to see the main 50m pool stay as it is -- the multitude of configurations in incredible. I'd like to see a purpose-built addition to house fitness & flex rooms. Perhaps a multi-purpose court would draw more in as well.
91	Keep it the same or add a second pool. It's amazing facility but without an aquatic centre I would use a private club.
92	Keep it a 50m lane swimming pool as it is only one of two in Victoria (Commonwealth is too cold!)
93	Maintain 50 meter pool, closure no more than 90 days.
94	I would like to see a 50 meter pool kept in a new Crystal Pool. The 50 meter pool can allow our swim club Tyee to host competitions, and would all around bring more money in for the community
95	More programming for kids. We go way out of our way to go to Oak Bay because their programming (swim lessons, soccer, etc) is more extensive and more convenient timing. Recreational sports for adults; not everyone wants to run on a treadmill to get fit so I would really appreciate drop-in floor hockey, soccer, basketball, etc.
96	Re-built or re-developed as 50-metre pool with a variety of non-pool sport/recreation options
97	As both of my children have participated in the Tyee Swim Club Program, our family is very interested in this offering. If the Crystal Pool had not been available and an adequate training facility, my children most likely would have had to be transported to Saanich Commonwealth Place. -a rather long commute and not walk/bike friendly from downtown. A 50m length pool is essential in training for national competitions.
98	50m pool that can be divided into two 25m pools.

101	Ensure there is a 50 Meter pool so enough space for everyone!
102	Keep 50m pool
103	As big a pool as can be built, in order to facilitate community demand for swimming.
104	50 meter pool is one of the key attractions please keep it that length
105	I like the setup that is already there, perhaps just modernizing it and expanding it would be great
106	Please focus on supporting swimming. Maintain 50 metre pool. Pools are for swimming! Please don't waste our money on too many extras. It's quite great the way it is. I swam there as a kid. I still swim there and so do my kids. We swim.
107	The tank itself is currently in an ideal formation. Any alterations/renovations that are needed pertain to the surrounding areas including an expansion of the space used for cardio equipment, more fitness rooms, more meeting/community use rooms, and an increase in parking capacity. The 50m lanes need to be preserved at all costs.
108	Build a competition size 50 metre pool. The future of competitive swimming will require access to a 50 m facility. Upgrading this facility would make it a regional hub for competition a training for the many high caliber athletes in this region.
109	Crystal Pool/Fitness be maintained. If a new building is necessary, then it should have the same or more services than present.
110	Preference would be not a long term closure of the existing facility. New pool while existing remains open would be ideal. 50 m pool is very important. It does not need to be fancy and do everything. Support the current programs at the very least. That is the first priority - to keep doing what Crystal does well now, just in an up-to-date facility and some improvements and modernization.
111	Leave it just the way it is. It is why we moved to a place within walking distance of this pool.
112	A great facility just the way it is.
113	There is a lack of 50m pools across the island. A new or revamped 50m pool that can hold competitions will bring enormous value to Victoria. SCP holds so many competitions and is aging. Crystal Pool can begin to take over some of this demand.
114	It needs to have some money put into it to bring up the standards. I drive to Esquilmalt due to the lovely facility. I could walk to Crystal
115	It is very important to me that crystal pool continue to have a 50 Metre competition quality pool
116	I would like to see upgrades implemented that would enable the Crystal Pool to have continued use as it is needed in this neighborhood by those who don't have vehicles to access rec centres farther away.

117	repainted pool, improved lane dividers for 25-metre pool (water-calming), updated locker/changing rooms (more cubicles), ensure security of domes' glass (no risk of it falling into the pool!), more signage/education about conserving water (or timer-operated showers)
118	Keep a modern gym/pool/recreation facility. It would be a good fit with the adjacent basketball and tennis courts and the fields for soccer and baseball and the children' and adults' playgrounds.
119	get maximum use of facility by enlarging facility to suit a growing Victoria
120	Upgrade the facility but keep about the same
121	Updated but like the facilities. Adding a licensed child care centre would be great
122	Family Change Room
123	Public pool and fitness (weights, machines) centre
124	Same as Esquimalt only in my own city
125	50 meter pool size must be maintained
126	Rehabilitation NOT replacement, proper family change rooms, climate-controlled fitness area, more congenial changing area with more privacy cubicles
127	More community space. Maybe a library?
128	updated and at least kept functioning in same capacity
129	I would like to see the place remain and be renovated during Summer months so closures are not very long.
130	An outdoor pool & bigger & make fitness centre bigger!
131	I would like to see it either refurbished or replaced with another 50m tank. The 50 m tank allows multiple activities to be in the pool at the same time therefore serving the diverse needs of the community. The fitness area needs to be moved out of the humid pool environment and more meeting space.
132	Keep the pool and gym!!
133	Upgrade the fitness area. Continue aquatics. Include a cafe.
134	Retain the 50m/25m option for swimming; clean and thoroughly refurbish the pool
135	More programs, updating of facilities, hot tubs and lounge areas, more parking
136	Proper accessible changeroom for mobility challenged and family change
137	stay the same with upgrades
138	This is a marvellous flexible facility as it has 8 lanes of 25 metres across the deep end which leaves the rest of the pool available for other uses such as lessons or public swimming.
139	Do not spend money unnecessarily. There are higher priorities for taxpayers money. Upgrade the pool where it is necessary to be functional, maintain physical dry exercise equipment and better ventilation for ellipticals and treadmills
140	Updated pool and fitness centre- I would prefer to walk with my family to go for a swim in town but currently the pool is so old no one in my family wants to go. They like the lazy river and the children's area.
141	Keep it! Increase funding for maintenance and renos as needed. Add on a family change room as a #1 priority. Ignore parking complaints. People can walk bike and use bus more. DO NOT REPLACE IT. Just fine as long as repairs and maintenance budget is increased.
142	Redevelop to include 50m pool with family change rooms and a food concession
143	Upgrade hot water and shower heads
144	Remain open for swimming
145	An affordable place where people of all income groups can find a program for themselves
146	I want to have a pool in the Victoria area
147	Keep the pool for sure. Only public pool in Victoria.
148	Not change much
149	If necessary, renovate the existing building
150	New and improved!
151	Drop in yoga at more times. Tuesday and Thursday mornings in particular.
152	expansion
153	Renovate or rebuild
154	Refurbish with family change rooms and focus on aquatic exercise with some rooms for community meetings / courses
155	I think it is imperative that Crystal Pool remain as an inner city pool for training and recreation. The fitness centre is also very important to the community. There are a number of competitive swim clubs in the city. Two large clubs train out of Commonwealth and they are already struggling to confirm lane space due to the number of kids in their programs. It is critical and based on demand in Victoria to have another training option closer to town. Crystal Pool has provided that option. The other pools in the city (Oak Bay, Esquimalt) are not suitable training pools and were not designed for that. Keeping a 50m pool at Crystal is important. The focus should be on both a training pool for clubs and as a recreational family pool for Victoria families.
156	I would like to see the long course 50 m pool setup and continued use of the pool for training and recreation in the community. It has been a vital part of my training and I sincerely hope it can be maintained in the future
157	We love Crystal Pool and would like to see it renovated as it seems to be the best way to put money into it. Several upgrades we believe are needed: refurbish tiles in the pool itself (or paint the pool); add extra showers to the women's change room (there is more than enough space to enlarge the women's' showers and add at least two extra shower heads); get rid of junk machines and add a small cafe/snack bar that would sell healthy foods (fruits, salads, power bars, power shakes etc.); enlarge the parking at the rear of the pool to include extra parking spaces.
158	The city needs an outdoor option. Maybe something like UBC. Or Kits pool in Vancouver

159	Maintain the 50 meter pool, separate the dry land fitness equipment from the pool area or glass it in. Add parking down Queen street. Add juice/health bar.
160	Exercise equipment not exposed to the pool area.
161	a dedicated, climate-controlled area, for the cardio machines, weights and aerobic classes.
162	Upgrade the current facility.
163	Renovated or rebuilt so that it's earthquake-proof.
164	Recreation centres and pools are expensive. Crystal Pool has an important role in the community by offering cheap late-night admissions and the L.I.F.E pass. This is so important to low-income households and those in recovery from addictions. Please stay affordable and accessible!
165	Keep the skylights and expand the facility to include family change rooms and have one warmer pool (dive tank?) for physio and rehab services.
166	Easier access to all I'm in a wheelchair and the ramp in back is not cool with and up and especially down. I suggested that you have a sort of Acces off the side of the building and it could be a multipurpose access like moving the registration over to the side thus no longer needing to go down and up to get to the change room making the front available for gym or spare room, maybe even get a second floor in there too.
167	keep the 50M swim AND improve "divergent abilities" (reads disabled to you) ACCESS which is an after thought at best and not all that accessible. In fact I avoided Crystal Pool because of the BAD access and ableism for wheelchair users
168	Provide a 50m pool for sports training, a family swim/rec area, a gym like you have now.
169	Keep it much as it is. Some remodelling and refurbishment is needed, but no fundamental change.
170	Upgrade but keep 50m pool
171	Gymnasium as well
172	Remain publicly owned and operated
173	Expand rather than cut back on what is offered, but remembering always that the Pool itself and pool related activities is what it's all about
174	Add a family change room.
175	Water slide
176	Remain a 50m pool
177	Clean it up. It is extremely dirty as it is used as a shower and washroom for the homeless population
178	Retain it as a publicly operated facility, on the same location, with no reduction in pool size. No corporate sponsorships please.
179	no comment
180	Build a new facility in partnership with the YMCA. Don't try and compete with the Y
181	Expanded fitness facilities.
182	Expend the fitness machines and weights facilities into one area - move punching bag & speed bag into a dedicated area away from pool area where noise can be muffled
183	expanded, updated
184	stay open with both 25 and 50 meter lanes
185	upgraded, keep admission/user prices low, relevant to immediate neighbourhood needs
186	Improve cleanliness, and ventilation of the pool.
187	i like it how it is, just modernize it.
188	To be more like the Commonwealth facility, able to host amateur swim competitions
189	Upgrade
190	an improved lane swimming and competitive pool and keep the 50m and 25 m lengths
191	I would love for it to remain a 50m pool. I would also love for it to have family changing rooms.
192	I'd like to see the pool facility get a renovation. The pool itself is quite old, and it needs to be re-done to be able to incorporate all user groups of the facility.
193	keep offering current services
194	To maintain the pool size/length so as to host competitive swim club practices and events
195	keep the 50 m pool, remove some bleachers for added deck space, public access to washrooms, (like Oak Bay Rec) less creepy changerooms
196	More adult aquatic fitness classes in the evening for people who work during the day.
197	IF it has to be demolished, not till a new one is built, for too many people it is their path to health [aquafit for me] & these classes also give a sense of community
198	A quality competition pool like Commonwealth
199	remodelled or new construction on same site
200	keep existing pool size, remove bleachers, accessible areas, family change rooms, meeting room space, keep green space around building, lots of public consultation
201	Keep the 25m and 50m format
202	Stay Public
203	Would like to see the 50 m pool length unchanged
204	I think having separate air for the gym and pool would be good. And the hot tub is so chemically smelling. Take notes from esquimalts water management, theirs doesn't emanate bleach etc.
205	Cleaner and more modern. Also a 25m pool. New diving blocks

206	Replacement of the facility with a new, state of the art, 50m pool.
207	Either replaced with a similar facility or keep existing and refurbish
208	to continue to have a 50m length pool for recreation and swim clubs
209	keep it
210	I would like the crystal pool and fitness centre to continue as it is with more gym area; a family change room; maybe an area for meetings
211	I would like it to be a community mecca - green space, housing, pool, meeting rooms, bike/car share, fitness/recreation
212	Please, please, please keep the 50 metre pool
213	I would like to see the Crystal Pool retained as a 50 m pool, with a fitness area that is not inside the humid deck space. it would be nice if the 50 m pool was also 25m wide or had a moving bulkhead so that it was more flexible in its usage.
214	Upgrade it
215	More classes in the later evening hours for people who can't make the earlier classes (and aren't going to get up at 6:30 am).
216	I would like to see it stay in the public hands and become a community focussed facility at par with other municipalities, this would keep those that live in the Victoria area having someplace to go without having to travel
217	I would like the gym and aquatic centre to be as nice as the oak bay rec centre
218	Retain the 50 meter pool so we can still have a swim club and competitions
219	partner with the Y. Only one facility needed in th area which the current 2 facilities serve
220	Retain 50 metre pool length. Do not demolish, upgrade existing facility, starting with the behind-the-scenes infrastructure (pumps, pipes, etc.). Retain toonie ($2) swims in evenings and early mornings. Meeting spaces for community orgs. Community allotment garden adjacent to pool.
221	Would like to see a 50m pool maintained. The Victoria area has a lot of swimmers, and should have more than 1 50m competition pool (not only Commonwealth Place).
222	Build a new a new facility. Do not band-aid the old one.
223	be nice to see it be more of a community center
224	Keep all the features which make it a friendly community space especially the lovely sky domes
225	I hope we keep the glass dome ceiling. Certainly, modernizing the pool area would make it so much nicer. I like the suggestions made by the Friends committee.
226	That it evolves into a high use, multi dimensional community resource
227	Expand the weight room, lanes (and/or) times delineating space for leisure/fitness versus competitive (jocks dominating the space)
228	Repair as needed but certainly do not let it disappear. We need it.
229	More up to date equipment for fitness around the pool
230	We need more multipurpose meeting areas that can hold larger numbers (50-150) and is affordable for community groups. I would also like to see the dry floor fitness areas separated from the pool. While the upper areas are good use of space, the air quality isn't very good for exercisers. Would like to see good use of outside areas as they are well used.
231	Spruced up if necessary but we need it!
232	Rehabilitation if possible, replacement if necessary. The facility should have a 50m pool, and focus on keeping Victorians active and healthy.
233	a separate pool and gym area, more options for classes like yoga
234	Replacement with a ~$30 million facility that has a large family pool but a smaller (25M or 37.5M) lane pool
235	demolition and replacement
236	Redeveloped sooner than later. Make a modern facility. A community hub.
237	I would like it replaced with a modern P3 multi-sport complex with modern amenities and services. Some of the field space should be used to accommodate the expansion, and include parking.
238	Replace it
239	I would like to see the size of the current pool maintained and new change rooms updated with warmer temperatures in the change rooms.
240	I would like to see the City of Victoria work with the Downtown YMCA. Both facilities are in need of rebuilding/refurbishing. Why do both when one new facility could serve both client bases?
241	Maintain or build a new 50 m pool; there are not enough in the region for long course swimming
242	Crystal needs a family change room. The fitness area sealed off from pool and with air conditioning. An upgraded food service area that faces the park on one side and the pool on the other. Better access to washrooms from the outside of building.
243	Larger Weight Room and more equipment
244	I'd like to see a new facility that incorporates a full sized pool (as it does now), smaller / warmer pools for lessons and special groups, a proper gym area (what is there now just isn't up to standard). skip the seating; waste of space; not used often enough. I think refurbishing would be too expensive for what we would get.
245	Updated rec centre
246	A modernized version of the existing facility
247	new modern facilities specifically a better gym that is separated from the pool so you're not working out in a sauna
248	Upgrade to current t standards for community recreation
249	Waterslide park
250	Outdoor pool Kitsalano style

251	Add Family Change Room and proper air conditioning to weight room.
252	Salt water pool, expanded gym facilities
253	Renovated and improved on the existing building. Give it a better weight training room.
254	Incorporate curling facility to site
255	I love love love the pool. If it had child minding I would come more often
256	I wish it would match the YMCA in terms of affordability. After swimming at Crystal Pool for years and deciding to invest in pass in order to come daily to use the pool, the Y turned out to be less expensive as they now offer a 25 Dollar plus tax monthly membership that gives me unlimited access to the pool. The membership can be cancelled monthly which I will certainly take advantage of when I go on vacation. The Y is also open on statutory holidays; Crystal Pool is not. Since I am not a Senior yet it would have cost me more to purchase even the Silver annual pass for Crystal pool which has certain restrictions as to when one can use the center. the y membership does not have such restrictions. If Crystal Pool would offer the same as what I got at the Y I would have stayed with Crystal Pool as I like the 50 meter lanes, the y pool is only 25 meter long. But price was my most important criteria. I am only interested in swimming laps, I do not use anything else that is offered in either facility, therefore an even cheaper membership that would be restricted to one visit a day, with a time limit of one hour per visit would be ideal for my use.
257	Please keep it an aquatic facility.
258	Updated facility (LEEDS standards), more on-land fitness offerings.
259	Recreational swimming and lessons, d
260	Better gym equipment
261	a clean facility with GOOD VENTILATION (i.e. a workout area separate from the pool), equipment and facilities in good working condition with adequate space to support the community that uses it.
262	keep pool open. lots of open family swim times.
263	Build a new facility. For everyone to enjoy, with special emphasis to competition. Keep 50m. lanes!!!
264	Build a new facility
265	A larger fitness area with updated equipment. I would also like to see a gymnasium if the renos would support it.
266	I would like Crystal pool to be a community hub that draws people to Central Park. The square, including the pool and park, is a wonderful shared green space. It has lots of potential, and with the right improvements could turn into a true city gem.
267	I will like to see a new building, 50 meter pool, focus on family fun, fitness and lessons.
268	Replace it with a new Firehall, since it is more centrally located than the existing No.1 Hall.
269	A much better/bigger weight room and a better selection of non-aquatic fitness classes (yoga/TRX) included in membership/drop-in fee (like the YMCA).
270	Build a new facility on existing grass areas while keeping the old facility open during construction of the new facility. Design new facility to be more user-friendly: eg the women's showers, toilets and change room is very poorly designed and too far from the stairs into the shallow end of the pool, especially for people having difficulty walking.
271	Affordable memberships
272	Solar hot water and very low to no chlorine water purification.
273	I use the hot tub regularly; upgraded and expanded hot tubs would be great.
274	Clean up the pool and use it as a a family/ recreational swim only it is really hard to take home school children to the pool during school hours
275	Refurbish/up-date the present facility.
276	It really just needs a facelift and for things to get rearranged. It's no fun running on a hot and humid treadmill! Maybe an indoor track around the pool?
277	rehabilitate it
278	renovation is necessary, can the building handle an additional storey with meeting/childcare spaces and track. No PPP replacement! Want this to remain fully public owned.
279	Later weekend hours
280	later weekend hours
281	Clean
282	I suspect the current facility is reaching the end of its useful life. I modern centre for the 21st century makes sense.
283	First, it needs to remain, second, it needs to offer programs and opportunities across the demographic spectrum - much of this is currently offered as it exists.
284	It would be nice to see a hydrotherapy pool specifically for rehabilitation purposes only. The area used for showering should be isolated from the rest of the change rooms and should not be a walk through area to get into and out of the pool area. It is constantly wet and slippery and accidents are waiting to happen if not already occurred.
285	I would like to see the centre continue to have pools for various uses, along with a dry fitness area. I also think the centre is well situated to serve as a community centre for other activities, such as a child drop-in. Perhaps there could also be space for community support services like VIHA or aboriginal groups.
286	At a minimum, maintain current levels of service offered by Crystal Pool. Build new facility on same property, but keep old facility open during construction.
287	Swimming lessons, fitness classes and family services
288	it's vital to have a community centre, including the park, in this part of the city.
289	Stay the same but add childcare
290	Refurbishment to continue to support the myriad of needs of a dynamic community.

291	Reinvest in it
292	Larger pool so there's more lane swim opportunities for the public.
293	Keep the shell but Reno the inside
294	Renovate if possible; replace if necessary, keeping a similar footprint on site, but woth a bit more parking
295	Go with the most cost efficient option. If this means renovating the existing pool then this is the right thing to do. If a new facility is the better option then built it to meet other community needs (e.g. a larger building with affordable housing). Involve the private sector in construction and perhaps a bit of service provision (e.g. cafe) but not in operations. This must remain a public owned, publicly run facility.
296	Ideally I would like to leave things as they are and keep maintaining the pool and its facilities and programs if possible, mainly keep the 50m pool as it's only one of few in Victoria!
297	Refurbish existing pool and add more amenities like gym space, daycare, more pool space. If there were room for a hockey rink, that would be a dream come true!
298	as stated the crystal pool has outlived its lifespan although refurbishment would be cheaper in the short term but wouldn't be in the long term cause the money you would save would end up costing more if had to be full replaced another 10 to 15 years later it would be better to demolish it and start from scratch as the population continues to grow their rec facilities are getting plugged up by builind a brand new pool and rec centre with ample parking too would easy the congestions on the other facilities
299	New facility with more options and community space
300	I'd like to see a 50m competition pool, with a fitness facility.
301	Renovations
302	A brand new facility run by the city. If that isnt affordable use the existing footprint and redo the current building
303	I love the pool and fitness centre in North Burnaby, which is near my son's home. I take my grandson there, which is a very friendly family environment. The pool has a wade-in surface which is perfect for kids who are learning to swim. They also have a fitness centre, a range of seating areas, etc. I'd like to see Crystal Pool make room for little kids like Burnaby's facility, as well as provide supports for parents and grandparents who want to maintain fitness in a dry environment. There is also a beautiful lap track behind the pool, outdoors, for walkers, joggers, runners, seniors and kids alike. A library is also next door, making this campus truly community friendly.
304	50 meter pool stays other rec uses added
305	It is a great facility that needs to be brought up to modern standards.
306	I'm 75 yrs old with knee problems. In past yrs I've used the pool a lot but now when I think of taking my grandson I can't find a parking space close enough for me to walk there so we go to Oak Bay pool now.
307	Larger food and drink services so that it encourages the community to hang out.
308	drop in session for people with different abilities, either morning, afternoon or night? like how oak bay has it as well
309	Better rooms fir fitness equipment, family change rooms
310	Significantly upgraded pool, fitness areas and changing rooms either via replacement or renovations. Ensure the pool stays 50m - ozone or salt water would be great!
311	Consider proximity to other fitness facilities
312	Let's keep the pool it is unique
313	Maintain 50 metre pool, more deep water classes, lunch room for socializing after classes
314	A significant pool area with exercise/weight facilities. This complex has good sized changing/shower area.
315	Small food services venue
316	Crystal pool needs family change rooms, improved disabled access, and an expanded drop in fitness area
317	Maintain current programs. Aqua, physio, strength, etc.
318	Leave the 50m pool and its skylights
319	Update the facilities, keep the pool here do not move the location, better steam room, etc..
320	Family changing rooms, significantly larger weight room with ac and more/better equipment
321	Bigger weight room. More a/c for this area.
322	First a 50 meter pool! No fancy domes! No expensive items!
323	Retain 50 metre lanes; renovation NO rebuild
324	It needs too many upgrades to just retrofit. Needs to be rebuilt.
325	Need to build new modern facility
326	Repair and leave the rest
327	Keep this lovely building, maintain current facilities, upgrade as needed and as we are able to afford, value the many upgrades already added over the years, such as the ozone system, the fitness equipment, efforts, etc.
328	Looks good now. Vacuity doesn't have enough money
329	Upgrade the existing facility
330	To be renovated or rebuilt according to needs and costs.
331	Leave it as is
332	Physiotherapy on site
333	Maintain the current pool configuration and change room configuration including access.
334	Trampolines
335	Have a trampoline, computer access, more swim toys, bathing suit store. A pool for your pets and you.
336	Gym space! Indoor basketball court

337	Due for an update!
338	Anything as long as its good
339	Remain as present
340	Family changeroon, same size if replacing, 50m pool more parking
341	Hope there is basketball gym
342	Basketball gym
343	Basketball gym
344	Build a brand new Crystal Pool and use the old one as a gym, conference centre, etc.
345	fix up the current one or build a new aquatic centre there
346	A new waterside or higher diving boards
347	I would very much like to see the existing structure stay. It's a "one of a kind place" that I don't want it replaced by some conventional open steel truss flat roof building like every other facility in town. I would be far more impressed and supportive of imaginative redevelopment using the existing structure to incorporate societies requirements of a modern building!
348	Bigger weight room and cardio area
349	Bigger fitness
350	better security. Keep this place open while building the new facility. More parking people leave when they cant.
351	Keep it very accessible for all (regardless of socioeconomic status, physical ability, race, etc.) and a place where everyone can come to engage in recreation and community
352	Add more parking' bigger gym. Separate equipment from pool. All equipment in one place
353	Continue to caters to all walks of life. It's good right now. Staff are hard working" people are very well looked after.
354	Coffee shop. Renovations. Renew it. Place that sells sport clothes and bathing suits.
355	Keep what we have, and increase the size of weight room
356	Ideally, I'd like to see the building demolished. The current Crystal Pool is awful.
357	I would like to see a safe, inclusive pool/ fitness centre. I don't feel Safe there now.it need seismic upgrading.
358	The layout of the change rooms is good, the cardiovascular machines with a view is nice, keep elliptical machines, FOCUS ON FITNESS, but it doesn't need to be Olympic level... just a nice community pool, keep it simple. Light food fare maybe, or just have a parking spot for a food truck and let them do the food. Coffee and snacks is good enough. Again, sublet. Don't try to be everything to everyone. I like a simple gym with standard equipment, not trendy. An affordable drop-in community gym/fitness option is important, nice to have for physio. On site personal trainers, physiotherapist services would be nice.
359	A really great renovation that keeps the feel of the current facility, and retains the usable elements, but recreates others areas like the gym and entry and incorporates more public areas and meeting areas, as well as a new childminding room and family change room. I would also like to see a sustainable and eco friendly design that uses energy generated from exercise equipment to power the building.
360	New facility. Salt water pool please
361	Don't make it an elite training facility. The city already has one at Commonwealth
362	More outdoor sunlight/windows. An outdoor pool.
363	Inclusive changing rooms for families / transgendered folks etc. - current situation is extremely poor and non-inclusive
364	Expand its welcome environment and specifically become a leader in programs with a focus on diversity
365	I would love to see the outdoor space integrated with the indoor space, bigger pool, more aqua bootcamp classes, bigger hot tub, bigger sauna and steam room, more aqua therapy
366	I would love to see a layout more like the Esquimalt pool. With a large kid pool with fun features visible by the big pool.
367	If the facility cannot be upgraded and then close it and get out of a costly operation. The region is already well served by similar facilities that are a lot more popular with the citizens.
368	Take out bleachers on one side, enclose fitness machines away from humidity into air conditioned room. Provide more poolside shelving to store gym bags. Have steam room adjust steam to come on more.
369	I like the facility as it is. Nothing too fancy. Keep it affordable and accessible.
370	The weight room really needs to be bigger
371	more lunch time drop in fitness, eg. zumba from hours of 11-1
372	Family change rooms and better parking
373	An outdoor water park would be amazing to have for kids. A big enough pool for lanes and a wave pool / kids area. A large fitness area similar to SCP, office spaces for sports organizations
374	continuing great (updated!) light-filled facilities and programs!
375	Keep the 50 m pool but create dedicated space for additional fitness (e.g., not just workout equipment scattered about and around the pool). It has the potential to be a community hub as well, and needs to provide services to a wider range of user (seniors, families with children, and those serious about fitness)
376	More of the same
377	To expand their gym services specifically the boxing area to provide an area that more that one person can use at a time.
378	Keep the pool 50metres and either rebuild or renovate to keep it up to high standards. An outdoor pool option would be amazing, even if there was a second outdoor pool created that was outdoor because there isn't one in this city unlike the mainland.
379	Better space for non-pool exercise
380	Keep it as it is

381	Keep offering the wide range of services that it now offers. You seem to have entirely missed the excellent sauna/steam room/hot tub. You also do not focus on all the informal interaction - the place is a really community itself!
382	Water slides! !
383	I would like family change rooms.
384	Please maintain the 50m footprint of the pool; add family changerooms; acclimatized workout areas
385	Please keep Crystal Pool as a 50m pool so that Victoria Masters Swim Club can continue to use half the pool, while recreational swimming continues in the other half. It would also be amazing if Crystal pool had a removable roof to offer an outdoor pool through the summer - Victoria doesn't have any public outdoor swimming pools. I believe the one at UVIC is the only one.
386	Demolish and bud new
387	Keep the 59 meter lanes
388	Mainly a swimming centre for downtown / Victoria residents. If the community also needs a gathering place then the centre could provide hat too.
389	Keep the 50m length option
390	build a new 50m pool with additional rooms for dry activities and fitness
391	Keep it a 50meter facility
392	Please keep the 50 metre pool
393	What I think is the absolute best idea is some type of outdoor pool connected to the facility perhaps by a sun patio. We have a complete lack of public outdoor pools, and I think this would be a HUGE draw!
394	Please keep the 50m pool size for lane swimming.
395	I feel having a 50 metre pool is absolutely essential given the wide variety of programs and activities currently taking place at the same time all of the time. This multi usage could not be done in a 25 metre pool as effectively.
396	Expanded
397	I would like to see a 50 metre pool retained. One can look out at the pool and see a number of activities taking place in it concurrently which could not be done simultaneously in a 25 metre pool. A 50 metre pool simply allows for a much greater flexibility in booking various uses at the same time and thereby satisfying more of the community.
398	I think the pool should be refurbished as it is an excellent design (50m long by 25m wide). with the ability to simultaneously host multiple activities. For example, our club can use the 25m width while the rest of the pool can be used for lessons or public swimming. I used to swim in Ontario, and there was great difficulty with scheduling as the pools were 25m long and simultaneous activities were not possible. This lead to much competition for pool time with unhappy customers as not everyone could be accommodated. The design of Crystal is unique and the best I have seen. I dont want to lose it! One change that could be made (if the demand warrants) is to add on to the building to provide a gym and more fitness facilities. This could be a separate building attached to the existing building.
399	I love the aquafit classes with John and he is by far the best instructor. I would also like to work with my own kinesiologist/personal trainer, using the gym facilities, for post hip-replacement work, core strength, muscle building, balance, etc. I want to be able to work with my own trainer.
400	Offer pool and fitness options for the community
401	Maintain the 50 metre pool. It's way more versatile than a smaller pool.
402	We are only interested in the pool itself, especially swimming lessons for our little one.
403	Specialize in swimming and other water sports training and fitness. Still have a small area for kiddy pool for young families.
404	Have other children's programming.
405	More modern facility with all of the workout gear in one space and 50 metre lanes open longer in the morning
406	Fix up the existing facility
407	The fitness centre to be amalgamated into one area. The 50 meter pool to be retained as there is only one other in Victoria
408	An improved children's pool. I would use the pool much more frequently if it had a UV sanitization system or other system to reduce the smell of chlorine.
409	Ensure that the 50m pool length is maintained. Very important for swim training.
410	torn down and replace by community housing as per plan submitted by Rec Renewal Committee
411	Dedicated gym area outside of pool area. Redo of pool
412	located more downtown
413	Keep our pool!
414	Replaced for a more up to date recreational facility
415	A 50 metre pool is essential for a city of this size. Many groups use/rent pool space and 25 metres is not large enough. A crucial fact that must be shared: there is a cost to building a new pool, but the difference between a 25 metre and 50 metre pool is a few dollars extra per Victoria household. We NEED to get this information out in order to SAVE OUR 50 METRE POOL.
416	Cleaner facility. The current one is so old & falling apart
417	Essential to maintain the 50 m pool. Refurbish the existing building add family change room area and dry land fitness facility space.
418	I like the facility as it is with a few safety and cosmetic improvements and needed maintenance.
419	I would like to see a community athletic center which includes a 50 meter pool, cardio & weights studio
420	non-chlorine facility that also has CHLORAMINE removal for all water outlets - especially showers and steam room
421	Skating rink

422	In addition to Crystal Pool I would like to see a modern multi-use recreation centre downtown. Perhaps a significant upgrade to the "Y".
423	Later hours of operation
424	Crystal pool is outdated and needs to be replaced. A new Crystal pool should be designed to meet future needs and incorporate superior materials for longevity and most importantly energy efficiency. Renewable energy sources are a must have for present and future operating cost savings.
425	A larger pool (or multiple pools) with more flexibility for drop-ins and fitness swimming
426	Family change rooms and more family friendly
427	A modernized version of the existing facility would be ideal. A slightly bigger weight room would be welcome.
428	Community events, Daycare,
429	Get solar water heating
430	make it big enough to accommodate the next 50 years before we replace it again.
431	maintain a 50 meter pool and continued 50 meter lengths from 11AM - 1PM six days a week including summer
432	Clean it up, make it more inviting for families, increase parking
433	A chlorine-free pools, steam room and sauna.
434	A facility with something for everyone from toddlers to seniors.
435	build a worthy Crystal Pool replacement on the same land while the old structure continues to function
436	Keep the big pool, high ceiling, natural light, install stationary universal weight machine, make weight room more woman friendly
437	Keep the pool large with a high ceiling and not too light; and universal weight stations; make the weight area more open and more women friendly
438	Rebuild - should have been done instead of the bridge.
439	More classes and times
440	Fitness
441	Family change room! Lazy River
442	Nash courts upkept, netting on rims, floors fixed
443	A newer more modern facility with increased pool size, more swimming lessons for children
444	Keep the domes, the sauna, steam, hot tub. Add a wave pool- make inclusive changerooms for families and for non-gender specific folks-- if refurbishment is the chosen option, build a new cardio & strength training centre onto the existing facility + try to minimize closures to keep services available to all---lower its carbon footprint (maybe using methane from sewage?)--create a better entrance for cyclists--open it up on holiday weekends please
445	1) hot tub with clear water 2) hot tub with water jets at neck/shoulder region
446	pool is perfect Only do what is structurally necessary
447	Family changeroom- more accessible for people with disabilities- lanes for swimming- fun swim space for kids swim lessons- wave pool, dance studio, large gym, child care camps in summer winter, before/after school care
448	computers, trampoline, chalk, wave pool, whirlpool, park zipline (similar to one at beacon hill park)
449	Don't replace!! Still lots of life left; would be wasteful. possible more gym/fitness centre space. Build affordable housing instead! People in developing world would kill for this facility
450	Remain a fun safe family friendly facility space. Have designated Family changerooms
451	Ensure 50 metre pool, with glass domes- add small food and beverage service (coffee and muffins at minimum), improve access, improve and update changeroom and washroom facilities, turnstile entry for stats and security,
452	More competitions in a competition pool
453	bigger gym, competition pool- 8 lane 50 m, clean
454	restore current building its a nice structure- needs new family changerooms. Triple size of dry sauna, new boilers, better showers
455	rebuild behind pool and keep this facility open for the construction of new pool
456	better gym equipment, esp. for women The weight room is currently very male oriented
457	I would like to see it updated but continue with the great services and programs they currently deliver
458	get bigger benches in the changerooms to make it safer for children and more sanitary so people don't have to put their belongings on the floor. Also hooks on walls would be helpful for belongings
459	I would like it to remain as is with some cosmetic upgrades
460	should not close for a month or longer
461	My family lives directly across the street from the crystal pool and yet we rarely use it. Instead we travel to Oak Bay Rec because they offer much more family programming. We play co-ed rec league softball and men's hockey. My kids attend summer camps, soccertron, british soccer, and swim lessons there as well. Their scheduling is much more extensive. We also swim drop in elsewhere because Crystal lacks family change rooms and your schedule is so limited. Other than the infant pool, there is no family swim times in the afternoon until 7 - far too late for my 2 and 5 year old. The exercise studio is also quite strange. Please get rid of all those useless stands and centralize the exercise equipment and take it out of the heated chlorinated swimming area (currently scattered throughout the centre on 2 floors).

Appendix E - Technical Upgrades

A Lifecycle Upgrades Report was completed in 2015 by Stantec Consulting identifying a range of critically required technical upgrades required to maintain the facility in an operational condition into the future. Full descriptions are available in the Stantec Design Report, dated January 9, 2015. Any text in quotations below is from the Report. Some information has been taken from Stantec's Detailed Energy Assessment, November 28, 2014. These have been included in Option 1 and 2 with the exception of the roof top solar, which was only included in Option 2. The following is a brief summary of each item.

i. Roof dome

The existing roof domes will be replaced with circular domes that utilize the existing (refurbished) ring beams. The new domes will consist of acrylic panels, battens, spacers and sealant. The replacement will include new parapet flashing and membrane tie in to roof membranes.

"The existing building is of architectural interest and importance to the community. A rehabilitation strategy that preserves the original design intent will maintain the facility's architectural integrity."

ii. Pool finish + gutter

The existing marcite and tile in the main pool, tot pool, swirl pool and deck shower area will be replaced. The refurbishment will include installation of new handrails, ladders, lane rope markers and other miscellaneous elements. All existing pool deck tile will be replaced, including upgrades to the rim flow gutter.

iii. HVAC upgrade + replacement

"The heating, ventilation and air conditioning system (HVAC) at the Crystal Pool is over 40 years old and requires a major upgrade. Most major components are far beyond their expected lifespan and should be disconnected, removed and replaced with new modern energy efficient equipment."

iv. Mech system + filter upgrade

"The current antiquated and corroded filter room equipment, tanks and derelict ozone treatment equipment will be demolished and removed. The equipment is at end of life, and some maintenance procedures necessary on the old equipment and infrastructure are questionable. The new system will consist of open DE filter tanks, UV treatment and chlorine gas injection. This new system of filtration and treatment was chosen based on experience, proven effectiveness and maintenance staff familiarity with the systems."

v. Pool drainage reconfiguration

"The pool and filter tanks discharge to the municipal sanitary drainage system from the large sump in the pool filter room. As the 8" sanitary line and 12" storm lines within the building are corroded from contact with chlorinated water and air, it is recommended to replace them with new piping of the same size."

vi. Electrical upgrades

The main electrical service does not require any upgrades at this time. However, electrical upgrades will include replacement of several panel boards plus upgrades associated with the various mechanical upgrades to HVAC and Pool Mechanical Systems noted above. In addition, upgrades to the fire alarm system, emergency lighting, interior and exterior lighting. The public announcement system requires some modifications to suit the newly renovated areas.

vii. Civil upgrades

There may be upgrades required to the existing storm and sanitary lines once existing conditions are determined. A new fire service connection will be required as a result of the proposed building sprinkler system upgrade.

viii. Seismic upgrades

Structural systems within the building do not currently meet the requirements stated within the building code for seismic resistance. The Seismic assessment undertaken by Stantec indicates the need for new shear walls, additional reinforcement at concrete block structural walls and upgrades to the floor slabs and roof deck.

ix. Sprinkler upgrades

“The Crystal Pool currently has an antiquated sprinkler system in the boiler room and three fire hose stations only.”

Sprinkler upgrades to the building, including a new water main from the street will be included.

x. Roof Solar

‘It is proposed that a solar water heater be installed to offset a portion of the pool or DHW heating demand from natural gas.

The Crystal Pool operation profile is particularly suited to solar hot water heating technology. There is a constant heating demand year round from pool heating and domestic hot water provision, and as such, the solar energy available especially during the summer month, can offset a significant portion of the heating demand.’

The solar hot water system payback period has been calculated at 18.5 years

xi. Boiler Upgrade

“It is proposed that the existing fire tube boilers be replaced by Condensing boilers. Condensing boilers incorporate an additional heat exchanger to extract heat by condensing water vapor from the products of combustion. They operate at a minimum efficiency of around 85% even when not condensing and can achieve efficiencies in the range of 85-95%

Lower return water temperatures lead to more condensation and higher efficiencies. It is recommended that the dual return feature be utilized on the condensing boilers where colder pool and DHW is returned at a lower level on the boiler than the building heating hot water. This will result in higher overall operational efficiencies.."

The Boiler upgrade payback period has been calculated at 6.5 years

xii. Roof Replacement

'The roof is an SBS torch on membrane over 1 inch of board insulation. The current insulation value of the roof is estimated at RSI 0.6, whereas ASHRAE requires RSI 3.5 for new construction.'

It is proposed that the existing roof be replaced with a similar roof membrane over increased, code compliant insulation thickness of roughly 6 inches.

The roof replacement upgrade payback period has been calculated at 22.0 years.

Appendix F - Order Of Magnitude Cost Estimate

Order of Magnitude Capital Construction Costs have been estiated for all three options as per following estimate report.

advicas

Professional Quantity Surveyors
Sustainability Consultants

ORDER OF MAGNITUDE ESTIMATE REVISED

CRYSTAL POOL AND FITNESS CENTRE FEASIBILITY STUDY

VICTORIA, BC

November 09, 2016

Prepared by
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INTRODUCTION

This report sets out the order of magnitude estimate of capital construction cost on the proposed feasibility study for Crystal Pool and Fitness Centre in Victoria, BC.

Project Description

The project comprises proposed options for refurbishment, expansion or replacement of the existing Crystal Pool and Fitness Centre located at 2275 Quadra St, Victoria, BC.

Gross Floor Area

The gross floor area of the existing building is:

Level 0	854	m²	9,192	sf
Level 1	3,857	m²	41,517	sf
Level 2	934	m²	10,054	sf
TOTAL	5,645	m²	60,763	sf

The gross floor area of the new development options are:

Option 1	5,700	m²	61,355	sf
Option 2	7,468	m²	80,386	sf
Option 3	7,546	m²	81,225	sf

The gross floor areas have been derived from detailed measurement of the drawings, measured to the outside face of the exterior walls, based on our interpretation of building floor area. The derived gross floor area is primarily a presentation area developed to record the proposed construction cost per m². We understand that the areas shown in the feasibility study are at variance to the above numbers, we believe due to a different interpretation of constituted building floor area.

A change in the recorded gross floor area will impact the development cost per m² quoted below, but would have little impact on the overall estimate (the majority of the estimate is based on quantities derived independent of the buildings gross floor area).

Taxes

GST is excluded from the estimate.

PST at 7% is included in the estimate.

ESTIMATE COSTS

The estimate costs have been developed in current (November, 2016) dollars. The estimated capital construction costs of the proposed options are as follows:

	Option 1	Option 2	Option 3
Standard Renovation	$3,821,000	$3,758,000	
Enhanced Renovation	$1,209,000	$1,172,000	
Building Expansion	$363,000	$8,156,000	
New Construction			$35,100,000
Stantec's 2015 Options:			
– Roof Dome and Dome Assembly Replacement	$994,000	$994,000	
– Pool Finish and Rimflow Gutter System Repair	$1,629,000	$1,629,000	
– HVAC System Upgrade and Replacement	$988,000	$988,000	
– Mechanical System and Filter Upgrade, Pool Drainage Configuration	$697,000	$697,000	
– Seismic Feasibility Review	$6,246,,000	$6,246,,000	
– Sprinkler System Feasibility Review	$554,000	$554,000	
– Electrical Upgrade	$1,023,000	$1,023,000	
– Civil Works	$89,000	$89,000	
– Basement Level Renovation	$174,000	$174,000	
– Replace existing membrane roof	$621,000	$621,000	
– Replace Boilers	$594,000	$594,000	
– Solar Collectors		$198,000	
TOTAL CAPITAL CONSTRUCTION COST	**$19,002,000**	**$26,893,000**	**$35,100,000**
TOTAL COST PER m²	**$3,333.68**	**$3,601.10**	**$4,651.47**

A breakdown of the estimate for each option is included in Appendix A.

Escalation

The estimate is priced at current market price levels.

It is common knowledge that Vancouver Island was not immune to the major market downturn and saw a major correction in market price levels during the latter part of 2008 and early 2009. A further downward correction occurred in Spring 2010 driven by pressure on pricing levels from mainland contractors pursuing work on the Island.

Since the downturn Victoria has, over the past six years, seen a slow recovery, culminating in 2015, to a return to the Island historical escalation norm of 3 to 4% per annum. Since early 2016 the Victoria market has undergone a major change. Construction activity has accelerated with numerous major projects under construction, bringing with it an inherent labour shortage, and an upward pressure on market price levels.

This is a new evolving market condition; industry is reporting increases as high as 10% in some trades. This is partly offset by trades holding to more modest increases, often through competition from offshore trade bids. We recommend the Client make provision for the following increases through to 2018:

- 2016 Nov to Dec – 1.7%
- 2017 – 8.0%
- 2018 – 5.0%
- 2019 – 4.0%

BASIS OF THE ESTIMATE

We have assumed that the work will be tendered competitively in one contract.

In all cases the estimates are based upon our assessment of fair value for the work to be carried out. We define fair value as the amount a prudent contractor, taking into account all aspects of the project, would quote for the work. We expect our estimate to be in the middle of the bid range to ensure that funding for the work remains adequate for the duration of the project.

It should be noted that Advicas Group Consultants Inc. does not have control over the cost of labour, materials, or equipment, over the Contractor's methods of determining bid prices, or over competitive market conditions. We define competitive conditions in the project as attracting a minimum of four general contractors' bids with a minimum of two sub-trade tenders within each of the sub-trade categories. Accordingly, Advicas Group Consultants Inc. cannot and does not warrant or represent that bids will not vary from the estimate.

Contingency Reserves

Contingency is an allowance specifically identified within our elemental cost analysis to meet unforeseen circumstances, and represents an assessment of the financial risk relating to this project. As detailed design information becomes available, this risk will diminish and the contingency allowances will accordingly reduce.

Design contingency is introduced into the estimated cost at the earliest estimate stage and is a measurement of the amount and detail of the design information available. As the design develops and systems and material selections are fixed, the amount of the contingency allowance is reduced and is absorbed into the measured elements. On completion of contract documents, at tender stage, the allowance is normally reduced to zero.

Our determination of this risk level and the amount of the contingency allowance is the result of many years of cost planning, on over 4,000 construction projects, and of monitoring the increasing design information that occurs during the design phase. The design contingency is not a discretionary cost element.

A design contingency allowance has been included, calculated at 10% of the construction costs, to provide for unforeseen items arising during the design phase.

No allowance has been made for construction contingency. This typically provides for unforeseen items arising during the construction period – such as field conditions, coordination discrepancies – which will result in change orders and extra costs to the contract, other than changes in scope.

No allowance has been made for project contingency. This is a contingency, held by the Client, to be used at his discretion to fund specific Client driven changes to the project scope, conditions, etc.

Documentation

The estimate is based on the following:

- HCMA Architecture + Design
  - Drawings SK02a, SK02b, SK02c, SK02c — Received August 17, 2016
  - Revised drawings SK02a, SK02b, SK02c, SK02d — Received August 19, 2016
  - Email re. additional items to be included — Received October 31, 2016
- Emails and telephone discussions with the design team during the preparation of the estimate

Exclusions

The following items are excluded from the capital construction cost:

- Loose furniture, fittings and equipment including:
  - Office furniture and equipment
  - Kitchen furniture, appliances and equipment
  - Pool furniture and equipment
  - Artwork, artifacts or murals
  - Audio visual and media equipment, projection screens
  - Fitness and gymnasium equipment
  - Refuse containers, waste bins etc.
  - Window furnishings
  - Cable TV equipment
  - Televisions
  - Telephone equipment
  - Computer hubs, computers, server
- Removal and relocation of loose furniture, fittings and equipment from the construction zone prior to construction work commencing
- Relocation and reinstallation of loose furniture, fittings and equipment upon completion of construction work
- Costs associated with temporary relocation, i.e. decanting and relocating staff from the construction zone
- Storage costs
- Communications and security
- Rock excavation
- Site development
- Exterior envelope except where affected by upgrade work
- Separate prices
- Client Administration costs
- Clerk of Works, Client Project Manager
- Land acquisition costs
- Offsite costs
- Material testing
- Premium costs associated with environmental contaminants
- Traffic study costs
- Survey fees
- Financing costs
- Legal fees
- Client Insurances costs
- Development cost charges and development permit fees
- Phasing of the work
- Out of hours working
- Consultants' fees and expenses
- Construction contingency
- Project contingency
- Escalation
- GST

APPENDIX A
ESTIMATE BREAKDOWN

Crystal Pool Upgrades

Order of Magnitude Revised DATE: 09-Nov-16

	QUANTITY	UNIT	RATE	COST
Option 1 - Standard Renovation	1,859	m²	$2,055.41	$3,821,000
Level 0:				
Fill in Lower Fitness Area including removing and infilling pool and provide new slab and finish to match Lobby	67	m²	$303.72	$20,349
Level 1:				
Reconfigure entry Lobby and Admin areas and add elevator	367	m²	$1,457.51	$534,905
Renovate Women's Change, Staff Change, washroom, showers and storage into Universal Change Room, washrooms, shower, utility and storage	418	m²	$2,022.46	$845,389
Renovate Men's Change, Staff Change, washroom, showers and storage into Men's and Women's change rooms, washrooms, showers and Life Guard Change	400	m²	$2,070.90	$828,359
Refinish First Aid Room	16	m²	$516.82	$8,269
Refinish Life Guard Room	18	m²	$511.38	$9,205
Refinish Steam Room	9	m²	$1,320.78	$11,887
Refinish Sauna Room	9	m²	$1,320.78	$11,887
Level 2:				
Upgrade Women and Men washrooms including corridor	80	m²	$2,586.10	$206,888
Reconfigure Fitness Loft to create access corridor	96	m²	$1,468.91	$141,015
Renovate Office to upgrade partition and door to glazed wall	64	m²	$810.28	$51,858
Upgrade existing remaining West bleachers with new set of bleachers and new glass handrailing	66	m²	$691.62	$45,647
Remove existing railings to existing remaining North bleachers and reconfigure/extend existing stairs to water slide	46	m²	$393.66	$18,108
Reconfigure existing Cardio into part of expanded Fitness	58	m²	$1,243.30	$72,111
Reconfigure existing Weight Training into part of expanded Fitness	73	m²	$995.34	$72,660
Remove existing railings to existing corridor and replace with glass guardrail	72	m²	$257.55	$18,544
Site Overheads		10.00%		$289,708
Office Overheads & Profit		9.00%		$286,811
Design Contingency		10.00%		$347,360
GST				Excluded
Option 1 - Enhanced Renovation	310	m²	$3,900.00	$1,209,000
Level 2:				
Remove sections of North bleachers and infill with new suspended floor including footings for expanded Fitness area	150	m²	$2,914.04	$437,106
Remove South bleachers and infill with new suspended floor including footings for expanded Fitness area	103	m²	$2,717.22	$279,874
Remove sections of West bleachers and infill with new suspended floor including footings for Office, Elevator and Lobby Fitness area	57	m²	$3,503.90	$199,722
Site Overheads		10.00%		$91,670
Office Overheads & Profit		9.00%		$90,754
Design Contingency		10.00%		$109,913
GST				Excluded

Crystal Pool Upgrades

Order of Magnitude Revised

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	QUANTITY	UNIT	RATE	COST
Option 1 - Building Expansion	55	m²	$6,600.00	$363,000
Level 1:				
West expansion to increase area of entry Lobby and Admin	55	m²	$4,998.85	$274,937
Site Overheads		10.00%		$27,494
Office Overheads & Profit		9.00%		$27,219
Design Contingency		10.00%		$32,965
GST				Excluded
Option 2 - Standard Renovation	1,884	m²	$1,994.69	$3,758,000
Level 0:				
Fill in Lower Fitness Area including removing and infilling pool and provide new slab and finish to match Lobby	67	m²	$303.72	$20,349
Level 1:				
Reconfigure entry Lobby and Admin areas	367	m²	$1,149.38	$421,823
Renovate Women's Change, Staff Change, washroom, showers and storage into Universal Change Room, washrooms, shower, utility and storage	418	m²	$2,029.51	$848,334
Renovate Men's Change, Staff Change, washroom, showers and storage into Men's and Women's change rooms, washrooms, showers and Life Guard Change	400	m²	$2,070.90	$828,359
Renovate Child Minding	56	m²	$1,497.77	$83,875
Refinish First Aid Room	16	m²	$516.82	$8,269
Refinish Life Guard Room	18	m²	$511.38	$9,205
Refinish Steam Room	9	m²	$1,320.78	$11,887
Refinish Sauna Room	9	m²	$1,320.78	$11,887
Level 2:				
Remove Women and Men washrooms and convert to part Admin and Ballet	80	m²	$1,238.77	$99,101
Remove Fitness Loft and Office to create upper Lobby opening	160	m²	$1,100.67	$176,107
Upgrade existing remaining West bleachers with new set of bleachers and new glass handrailing	66	m²	$691.62	$45,647
Remove existing Cardio and convert into Men's and Women's washrooms and Janitor	73	m²	$2,651.71	$193,575
Reconfigure existing Cardio into part of expanded Fitness & Physio	73	m²	$995.34	$72,660
Remove existing railings to existing corridor and replace with glass guardrail	72	m²	$257.55	$18,544
Site Overheads		10.00%		$284,962
Office Overheads & Profit		9.00%		$282,113
Design Contingency		10.00%		$341,670
GST				Excluded

Crystal Pool Upgrades

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	QUANTITY	UNIT	RATE	COST
Option 2 - Enhanced Renovation	333	m²	$3,519.52	$1,172,000
Level 2:				
Remove North bleachers and infill with new suspended floor including footings for circulation space	170	m²	$2,198.62	$373,766
Remove South bleachers and infill with new suspended floor including footings for expanded Fitness & Physio area, & part WC's	103	m²	$3,047.50	$313,893
Remove sections of West bleachers and infill with new suspended floor including footings for Fitness offices	60	m²	$3,353.57	$201,214
Site Overheads		10.00%		$88,887
Office Overheads & Profit		9.00%		$87,998
Design Contingency		10.00%		$106,576
GST				Excluded
Option 2 - Building Expansion	1,823	m²	$4,473.94	$8,156,000
Level 1:				
West expansion to increase area of entry Lobby and Admin including new elevator	201	m²	$3,029.98	$609,025
West addition for new Daycare	75	m²	$2,798.88	$209,916
Remove Leisure Pool at East and expand area with new Leisure Pool	384	m²	$4,892.30	$1,878,644
Level 2:				
Remove roofing at North and expand upper floor for new multi-purpose rooms	519	m²	$3,008.87	$1,561,606
Remove roofing at South and expand upper floor for expanded Fitness & Physio, and part WC's	371	m²	$3,068.58	$1,138,443
Expand upper floor for part new Admin and Ballet	69	m²	$3,977.46	$274,445
Create part upper Lobby opening including elevator	120	m²	$2,025.45	$243,054
West expansion for expanded Fitness & Physio	84	m²	$3,202.14	$268,980
Site Overheads		10.00%		$618,411
Office Overheads & Profit		9.00%		$612,227
Design Contingency		10.00%		$741,475
GST				Excluded
Option 3 - New Construction	7,546	m²	$4,651.47	$35,100,000
Demolish existing facility and level site for play areas	5,645	m²	$175.00	$987,875
Asbestos abatement	5,645	m²	$50.00	$282,250
New pool, recreational and fitness facility at SW corner	7,546	m²	$4,150.00	$31,315,900
2016 code upgrade	7,546	m²	$200.00	$1,509,200
Site development to existing facility footprint - Allowance	1	item	$1,000,000.00	$1,000,000
Site Overheads				Included
Office Overheads & Profit				Included
Design Contingency				Included
GST				Excluded

	QUANTITY	UNIT	RATE	COST
Roof Dome and Dome Assembly Replacement	423	m²	$2,349.88	$994,000
Demolition:				
Remove existing (3) domes and dispose off-site	1	item	$22,000.00	$22,000
Cut back and remove roofing, flashings, etc. around domes	119	m	$100.00	$11,900
Cut back gypsum bulkhead to expose tension ring, structure including temporary support - 3 domes	1	item	$5,000.00	$5,000
Remove and dispose existing mechanical exhaust at centre of domes	3	no.	$1,500.00	$4,500
New Work:				
Repair existing tension rings - Dome 1 & 2	99	m	$180.00	$17,820
Repair existing tension rings - Dome 3	20	m	$75.00	$1,500
Prep and repaint tension ring - Domes 1 & 2	99	m	$20.00	$1,980
Prep and repaint tension ring - Domes 3	20	m	$20.00	$400
New structural steel curb (W310 x 46), circular - Dome 1 & 2	99	m	$650.00	Excluded
New structural steel curb (W310 x 46), circular - Dome 3	20	m	$650.00	Excluded
Reposition the existing tension ring 200mm above roof membrane -Domes 1 & 2	2	no.	$5,000.00	$10,000
Reposition the existing tension ring 200mm above roof membrane - Domes 3	1	no.	$4,000.00	$4,000
Supply and construct three new domes on ground with new aluminum structural frames to match existing Character , with new pressure system and new acrylic ¼ thick inch domes , and aluminum ring standoffs to be mounted to refurbished steel ring beam . Includes security fencing on the ground to protect the domes during construction:				
Dome 1 & 2 area on plan	391	m²	$1,100.00	$430,100
Dome 3 area on plan	32	m²	$1,100.00	$35,200
New mechanical exhaust fans and associated ductwork (3 domes)	3	no.	$5,000.00	$15,000
Mobile Crane rental (3 domes)	1	item	$7,500.00	$7,500
Disassemble scaffolding	1	item	$5,000.00	$5,000
Reinstate/make good roofing, flashings, insulation, etc.	119	m	$600.00	$71,400
Perimeter roof drainage with splash pads	119	m	$100.00	$11,900
New interior painted gypsum bulkhead with sloped top to Dome 1 & 2	120	m	$400.00	$48,000
Moveable maintenance access ladder for Dome 1 & 2	2	no.	$6,400.00	$12,800
Moveable maintenance access ladder for Dome 3	1	no.	$2,700.00	$2,700
Roof anchors - Excluded	1	sum	$30,000.00	$30,000
Extend vertical supply ducts and new supply grilles	1	item	$5,000.00	$5,000
Site Overheads		10.00%		$75,370
Office Overheads & Profit		9.00%		$74,616
Design Contingency		10.00%		$90,369
GST				Excluded
Pool Finish and Rimflow Gutter System Repair	1,240	m²	$1,313.71	$1,629,000
Main Pool:				
Remove existing marcite and tile lines finish to pool floor and walls	1,351	m²	$29.00	$39,179
New scratch coat, waterproof membrane and marcite finish to walls and floor	1,351	m²	$350.00	$472,850
Premium over marcite for tiled lines and markings	1	item	$70,000.00	$70,000
Replace existing new expansion joint sealant in pool	224	m	$25.00	$5,600
Replace existing rim flow with new system including concrete curb	154	m	$935.00	$143,990
Replace existing tiled deck	734	m²	$300.00	$220,200
Premium over tile deck for steps	2	loc.	$2,000.00	$4,000
Replace existing steps in pool with new ramp and steps including handrailing	1	item	$63,600.00	$63,600
New brass supply outlets to wall and floor	1	item	$30,000.00	$30,000
Remove and reinstall existing ladders	4	no.	$450.00	$1,800
Remove and reinstall existing starter blocks	8	no.	$200.00	$1,600
Replace diving platforms	2	no.	$15,350.00	$30,700
Remove pool's existing accessible lift and return to Owner	1	no.	$150.00	$150
Remove existing wall lighting and conduit in rim overflow	32	loc.	$50.00	$1,600
Remove and re-install pool fixtures to be re-used, make good	1	item	$1,000.00	$1,000

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	QUANTITY	UNIT	RATE	COST
Training Pool:				
Remove existing tile finish to pool floor and walls	171	m²	$35.00	$5,985
New scratch coat, waterproof membrane and marcite finish to walls and floor	171	m²	$350.00	$59,850
Premium over marcite for tiled lines and markings	1	item	$8,000.00	$8,000
Premium over marcite for tile steps and working around pool toys	1	item	$2,000.00	$2,000
Replace existing rim flow with new system including concrete curb	47	m	$935.00	$43,945
New brass supply outlets to wall and floor	1	item	$7,500.00	$7,500
Remove and re-install pool fixtures to be re-used, make good	1	item	$2,500.00	$2,500
Swirl Pool:				
Remove existing tile finish to shower floor and hot tub including sunken seating and steps	20	m²	$35.00	$700
New scratch coat, waterproof membrane and tile finish to walls and floor	20	m²	$480.00	$9,600
Premium over tile for sunken seating and steps	1	item	$1,500.00	$1,500
Tile finish to walls	35	m²	$200.00	$7,000
Site Overheads		10.00%		$123,485
Office Overheads & Profit		9.00%		$122,250
Design Contingency		10.00%		$148,058
GST				Excluded
HVAC System Upgrade and Replacement	5,645	m²	$175.02	$988,000
Boiler Room Demolition				
Disconnect and remove existing mechanical equipment as follows:				
Remove existing crawlspace exhaust fan	1	no.	$120.00	$120
Remove and relocate existing domestic hot water recirculation pump	1	no.	$300.00	$300
Remove and relocate domestic hot water shell and tube heat exchangers, typical of 2 and rack	2	sum	$2,470.00	$4,940
Disconnect 3 boiler flues and remove common boiler flue duct up to roof termination	3	sum	$350.00	$1,050
Remove existing water feature circulation pumps	3	no.	$250.00	$750
Remove existing whirlpool circulation pump	1	no.	$250.00	$250
Remove existing main floor and second floor heating circulation pump	1	no.	$250.00	$250
Remove existing north fan room pre-heat coil circulation pump	1	no.	$250.00	$250
Remove existing main pool heat exchanger circulation pump	1	no.	$250.00	$250
Remove existing tots pool heat exchanger circulation pump	1	no.	$250.00	$250
Remove existing domestic hot water heat exchanger circulation pump	1	no.	$250.00	$250
Remove abandoned heat pump system circulation pump	1	no.	$250.00	$250
Remove abandoned heat pump system heat exchanger	1	no.	$750.00	$750
Remove all abandoned heat pump circulation piping where accessible throughout the building	1	sum	$7,500.00	$7,500
Remove existing control panel	1	sum	$700.00	$700
Remove existing hydronic heating primary loop header piping, piping accessories and control components	1	sum	$40,000.00	$40,000
New hydronic heating primary loop header piping, piping accessories and control components	1	sum	$42,100.00	$42,100
Remove hydronic piping accessories up to perimeter of boiler room. Mark and maintain existing piping at boiler room perimeter for new construction connections	1	sum	$4,570.00	$4,570
Remove existing sprinklers and sprinkler piping back to water entry statior	1	sum	$1,000.00	$1,000
Remove existing perimeter drainage sump pump	1	no.	$150.00	$150
New boiler flu up thru existing chimney to rooftop weather cap	1	sum	$10,000.00	$10,000
New DHW plate and frame heat exchanger	2	no.	$10,000.00	$20,000
Relocate DHWR pump	1	no.	$350.00	$350
Relocate existing DHWT	1	no.	$4,225.00	$4,225
New exhaust fan	1	no.	$2,500.00	$2,500
New sink	1	no.	$3,200.00	$3,200
New Domestic heating circulation pump with VFD	1	no.	$1,500.00	$1,500
New Tots pool circulation pump with VFD	1	no.	$1,599.00	$1,599

	QUANTITY	UNIT	RATE	COST
New water feature circulation pumps	3	no.	$1,500.00	$4,500
New Basement zone circulation pump with VFD	1	no.	$1,500.00	$1,500
New North Fan Room zone circulation pump with VFD	1	no.	$1,500.00	$1,500
New Main Pool heating circulation pump with VFD	1	no.	$1,500.00	$1,500
New Main and Second floor heating circulation fan with VFD	1	no.	$1,500.00	$1,500
New sump pump	1	no.	$10,000.00	$10,000
Allowance for valves and trim for hydronic heating system upgrade	1	sum	$50,000.00	$50,000
Replace with new DDC controls	1	sum	$5,250.00	$5,250
Remove existing and replace with new louver and motorized fire damper	1	sum	$4,200.00	$4,200
Main Pool Fan Rooms (N & S)				
Disconnect and remove existing fan room equipment as follows:				
Remove existing supply air fan	2	no.	$10,000.00	$20,000
Remove existing filter rack	2	sum	$200.00	$400
Remove existing pre-heat coils	1	sum	$750.00	$750
Remove existing exhaust air fan	2	sum	$5,000.00	$10,000
Remove existing supply, return, exhaust and outside air control dampers and actuators	6	sum	$500.00	$3,000
Remove existing pre-heat coil circulation pumps, piping and pipe accessories up to perimeter of fan room. Mark and maintain existing piping at fan room perimeter for new construction connections. South fan Room only	1	sum	$2,500.00	$2,500
Remove existing ductwork and fittings up to fan room perimeter. Mark and maintain existing ductwork at fan room perimeter for new construction connections	2	sum	$2,000.00	$4,000
Remove existing fire hose cabinet and standpipe back to water entry station	2	no.	$400.00	$800
North Fan Room - New				
New pre-heat coil interconnected to heat recovery coil	1	no.	$2,500.00	$2,500
New heat pipe	1	no.	$12,000.00	$12,000
New Pool Hall supply fan	1	no.	$35,000.00	$35,000
New pool hall exhaust fan	1	no.	$25,000.00	$25,000
New filter rack	1	no.	$3,000.00	$3,000
New automatic dampers and actuators	3	no.	$2,000.00	$6,000
New heat recovery circulation pump	2	no.	$2,000.00	$4,000
New DDC controls	1	no.	$10,500.00	$10,500
South Fan Room New				
New pre-heat coil	1	no.	$2,500.00	$2,500
New heat pipe	1	no.	$12,000.00	$12,000
New Pool Hall supply fan	1	no.	$35,000.00	$35,000
New pool Hall exhaust fan	1	no.	$25,000.00	$25,000
New filter rack	1	no.	$3,000.00	$3,000
New Tots Pool heat recovery circulation pump	1	no.	$2,000.00	$2,000
Replace automatic dampers and actuators	3	sum	$2,000.00	$6,000
New DDC controls	1	sum	$10,500.00	$10,500
Re-balance	1	sum	$8,000.00	$8,000
NW & SW Fan Rooms Demolition				
Disconnect and remove existing fan room equipment as follows:				
Remove existing supply fan	2	sum	$2,500.00	$5,000
Remove existing exhaust air fan	2	sum	$2,500.00	$5,000
Remove existing supply, return, exhaust and outside air control dampers and actuators	4	sum	$250.00	$1,000
Remove existing pre-heat coil circulation pumps, piping and pipe accessories up to perimeter of fan room. Mark and maintain existing piping at fan room perimeter for new construction connections	2	sum	$2,500.00	$5,000
NW Fan Room - New				
New Change Room exhaust fan	1	sum	$7,500.00	$7,500
Supply fan	1	sum	$7,500.00	$7,500
New control dampers	2	no.	$1,200.00	$2,400
New pre-heat coil including pumps and valves	1	no.	$8,000.00	$8,000
New heat pipe	1	no.	$5,000.00	$5,000
New DDC controls	1	sum	$4,500.00	$4,500

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	QUANTITY	UNIT	RATE	COST
SW Fan Room New				
New Change Room exhaust fan	1	sum	$7,500.00	$7,500
Supply fan	1	sum	$7,500.00	$7,500
New control dampers	2	no.	$1,200.00	$2,400
New pre-heat coil including pumps and valves	1	no.	$8,000.00	$8,000
New heat pipe	1	no.	$5,000.00	$5,000
New DDC controls	1	sum	$4,500.00	$4,500
Basement Maintenance Area				
Exhaust fans/systems	1	sum	$5,000.00	$5,000
Exhaust fans	2	no.	$1,200.00	$2,400
Ductwork and accessories	1	sum	$24,750.00	$24,750
Plumbing				
New roof drains	11	no.	$2,000.00	$22,000
Pool water supply fixtures	64	no.	$250.00	$16,000
New WC near front entrance	1	sum	$9,350.00	$9,350
Miscellaneous				
New DDC controls	2	sum	$18,750.00	$37,500
Re-balance	1	sum	$6,000.00	$6,000
Primary heating system pumps	2	sum	$6,000.00	$12,000
New clothes dryer vent	1	no.	$3,000.00	$3,000
Exhaust fan over tots pool	1	sum	$8,000.00	$8,000
Sump equipment	1	sum	$5,000.00	$5,000
Remove expansion tanks	10	no.	$2,000.00	$20,000
New expansion tank	1	no.	$15,000.00	$15,000
Vacuum outlets	1	sum	$5,000.00	$5,000
Site Overheads		10.00%		$74,925
Office Overheads & Profit		9.00%		$74,176
Design Contingency		10.00%		$89,836
GST				Excluded
Mechanical System and Filter Upgrade, Pool Drainage Configuration	5,645	m²	$123.47	$697,000
Disconnect and remove existing pool equipment as follows: Remove existing tots pool heat exchanger Remove existing main pool heat exchangers (2 no.) Remove existing tots pool level control tank Remove existing main pool circulation pump Remove existing vacuum pump Remove existing main pool dry DE feeder Remove existing soda ash tank Remove existing main pool chemical feeder Remove main pool sump pump Remove main pool level control tank Remove existing tots pool DE filter tank Remove existing tots pool circulation pump Remove existing pool system control panel Remove pool system piping and piping accessories up to perimeter of boiler room mark and maintain existing piping at boiler room perimeter for new construction connections Remove all existing sanitary drainage piping servicing main floor plumbing fixtures and drains to be replaced with new	1	sum	$55,000.00	$55,000
New Pool Equipment				
Filter systems	1	sum	$190,000.00	$190,000
Main pool and tots pool water pumps	1	sum	$15,000.00	$15,000
New piping, valves, pump etc. in pool filter room	1	sum	$45,000.00	$45,000
Filter tank level valves	1	sum	$6,000.00	$6,000
Filter tank for tots pool and trim	1	sum	$50,000.00	$50,000
Filter room sump equipment, replace pump, valves, etc.)	1	sum	$17,000.00	$17,000
New Main Pool plate and frame heat exchangers	2	no.	$15,000.00	$30,000
New pool water heat exchanger pump	1	sum	$4,500.00	$4,500

	QUANTITY	UNIT	RATE	COST
New Tots Pool heat plate and frame heat exchangers	2	no.	$15,000.00	$30,000
New water sampling station	1	sum	$5,000.00	$5,000
New DDC control center	1	sum	$10,000.00	$10,000
New sump pump	1	sum	$7,500.00	$7,500
New swirl pool UV filter	2	no.	$7,000.00	$14,000
New DE tank and injector for tots pool	1	sum	$4,500.00	$4,500
Ozone Room Demolition				
Remove all existing ozone system equipment and piping as follows: Remove existing ozone reaction/contact tanks Remove existing ozone bypass pumps Remove existing ozone residual off gas destructor Remove existing ozone generator Remove existing ozone control panel Remove existing ozone monitor Remove existing ozone room exhaust air grilles ductwork and rooftop exhaust fans Patch and repair wall penetrations and roof areas affected by equipment removal (see Architectural) Remove existing domestic water supply piping to ozone room. Cap at take-off from water main	1	sum	$20,000.00	$20,000
UV systems	1	sum	$25,000.00	$25,000
Site Overheads		10.00%		$52,850
Office Overheads & Profit		9.00%		$52,322
Design Contingency		10.00%		$63,367
GST				Excluded
Seismic Feasibility Review	5,645	m²	$1,106.47	$6,246,000
Structure:				
1500x4600x600 concrete pad footing r/w 20M e.w., t&b - interior/perimeter	1	no.	$4,600.00	$4,600
1500x4000x600 concrete pad footing r/w 20M e.w., t&b - exterior	2	no.	$2,900.00	$5,800
1500x4700x600 concrete pad footing r/w 20M e.w., t&b, epoxy anchored to existing footings - interior	1	no.	$5,200.00	$5,200
63.5 Ø (#20) Gewi pile x 10m drilling depth - new exterior footings	8	no.	$5,000.00	$40,000
63.5 Ø (#20) Gewi pile x 10m drilling depth - existing perimeter strip footings, exterior work	13	no.	$5,200.00	$67,600
63.5 Ø (#20) Gewi pile x 10m drilling depth - new interior footing	3	no.	$6,500.00	$19,500
63.5 Ø (#20) Gewi pile x 10m drilling depth - existing perimeter strip footings, interior work	12	no.	$6,500.00	$78,000
Break up/remove hard/soft landscaping and reinstate on completion of substructure work	4	loc.	$6,000.00	$24,000
Break up/remove slab on grade and reinstate on completion of interior substructure work	4	loc.	$1,200.00	$4,800
Excavate to basement level for new footings or access to existing footings, backfill with engineered fill	2	loc.	$15,000.00	$30,000
Excavate to for new footings or access to existing footings, backfill with engineered fill	2	loc.	$3,000.00	$6,000
Excavate for footings in existing interior space and backfill excavation with engineered fill	12	loc.	$1,000.00	$12,000
Gewi piles mobilization and demobilization, temporary access for interior work	1	item	$15,000.00	$15,000
900mm thick concrete buttress including formwork and reinforcement - exterior	54	m²	$995.00	$53,730
400mm thick concrete buttress including formwork and reinforcement - interior	54	m²	$1,450.00	$78,300
Premium over interior buttress for cutting back and make good/tie-in floor and roof	1	item	$4,000.00	$4,000

	QUANTITY	UNIT	RATE	COST
300mm thick (35 Mpa) concrete wall cast against existing concrete wall including formwork and reinforcement, drill and epoxy every 2nd bar to existing wall	92	m²	$1,000.00	$92,000
Two dywidag bars drilled and epoxy anchored into existing concrete and connected to steel plate	4	loc.	$3,000.00	$12,000
C12 x 25 drag strut collector to underside of existing slab with 19mm Ø resin anchors @400 o/c	31	m	$400.00	$12,400
Weld end of C12 x 25 strut to embedded plate at new shear wall	2	no.	$400.00	$800
Steel roof deck repair as SD#2	2,456	m²	$65.00	$159,640
Drag strut 150x150x6.4 collector angle to masonry with Hilti anchors @400 o/c, Tek screws @150 o/c to underside of roof deck	44	m	$310.00	$13,640
125x75x6.4 angle between roof joists c/w #12 Tek screws to underside of roof deck @75 o/c and welded to 127x127x6 HSS drag strut collector	355	m	$490.00	$173,950
18 gauge flat strip around openings secured with #12 Tek screws @200 o/c	423	m	$40.00	$16,918
FRP strips to underside of existing pre-cast planks	546	m²	$130.00	$70,980
Upgrade connections of lateral roof bracing at roof girders and columns - field weld 50x50x6.4 HSS to each end of girder	14	no.	$700.00	$9,800
Tie-in buttress wall to drag strut with Dywidag bars	4	no.	$1,550.00	$6,200
250mm thick concrete wall cast against existing stairs concrete wall including formwork and reinforcement, drill and epoxy every 2nd bar to existing wall	56	m²	$950.00	$53,200
Remove existing masonry partitions and replace with steel studs partitions as URM #1	1,697	m²	$120.00	$203,640
Reinforce existing masonry wall - as marked up dwg A11	1,038	m²	$350.00	$363,300
Reinforce existing masonry walls as 1/A12	362	m²	$350.00	$126,700
2016 code ugrade	5,645	m²	$300.00	$1,693,500
Architectural:				
Re and re due to seismic upgrade - Allowance	1	item	$710,000.00	$710,000
Mechanical:				
Re and re due to seismic upgrade - Allowance	1	item	$179,000.00	$179,000
Electrical:				
Re and re due to seismic upgrade - Allowance	1	item	$107,000.00	$107,000
Hazardous abatement	5,645	m²	$50.00	$282,250
Site Overheads		10.00%		$473,545
Office Overheads & Profit		9.00%		$468,809
Design Contingency		10.00%		$567,780
GST				Excluded
Sprinkler System Feasibility Review	5,645	m²	$98.14	$554,000
Fire sprinklers	1	sum	420,000	$420,000
Site Overheads		10.00%		$42,000
Office Overheads & Profit		9.00%		$41,580
Design Contingency		10.00%		$50,358
GST				Excluded

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		QUANTITY	UNIT	RATE	COST
Electrical Upgrade		3,480	m²	$293.97	$1,023,000
Service and Distribution					
Panels:					
	208v panel boards	8	no.	$2,500.00	$20,000
	installation	8	no.	$3,990.00	$31,920
	grounding and bonding	1	sum	$15,000.00	$15,000
	drip shields to existing equipment	1	sum	$12,000.00	$12,000
	HV isolation switch	1	sum	$24,000.00	$24,000
Feeders/Conduit:					
	allowance for minor changes to existing feeders	1	sum	$15,000.00	$15,000
	3#8 27mm				
	3#6 27mm				
	3#4 35mm				
	3#3 35mm				
	3#1 41mm				
Mechanical Connections					
P1 - P2B, CH1-2, B1-3, AHU1 - 5, EAHU1 - 2, AC-OD-1/AC-ID-1 - 5, SF1 - 10,	H1 - 5, UH1 - 12, CFH1 - 9	1	sum	$70,000.00	$70,000
	connections				
	disconnects				
	starter				
	starter - install only				
Lighting, Devices & Heat					
Lighting:					
	allowance for devices below	1	sum	$208,800.00	$208,800
	unknown				
	wave fixture				
	installation				
	branch wire to basement	1	sum	$10,000.00	$10,000
Exterior Lighting:					
	SLED	15	no.	$750.00	$11,250
	PLED	9	no.	$750.00	$6,750
	fixture installation	24	hr.	$237.50	$5,700
	wiring in place				
Emergency Lighting:					
	exit lighting	25	no.	$398.47	$9,962
	emergency lighting	30	no.	$286.30	$8,589
	batt	6	no.	$400.00	$2,400
	wiring for above	610	m	$20.00	$12,200
Switching:					
	allowance for devices below	1	sum	$52,200.00	$52,200
	light switch				
	light switch - oc				
	conduit and wire				
Minor electrical/mechanical:					
	allowance for devices -heat tracing/receptacles	1	sum	$52,200.00	$52,200
Systems					
Fire Alarm system:					
	allowance for devices below	1	sum	$55,680.00	$55,680
	F.A Panel /F.A. Annunciator				
	strobe				
	gong				
	gong/strobe combination				
	pull stations				
	smoke/heat detectors				
	flow sensor/tamper switch				
	conduit and wire for above				
PA System:					
	allowance for - testing and commissioning of system	1	sum	$17,400.00	$17,400
General conditions:					
	testing and commissioning of above systems	1	sum	$64,105.10	$64,105

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	QUANTITY	UNIT	RATE	COST
general conditions - mobilization/demobilization	1	sum	$70,515.60	$70,516
NIC				
communications				
Security				
Site Overheads		10.00%		$77,567
Office Overheads & Profit		9.00%		$76,792
Design Contingency		10.00%		$93,003
GST				Excluded
Civil Works				$89,000
New 150mm fire service from existing city of Victoria main to building	26	m	$115.00	$2,967
Replace existing 200mm sanitary service with new 200mm PV from building to existing main	83	m	$150.82	$12,533
Replace existing 250mm storm drain service with new 250mm from building to existing city system	26	m	$210.00	$5,418
City charges for new fire hydrant assembly by City of Victoria Forces	1	sum	$10,000.00	Not Reqd.
New fire department connection in existing concrete planter	1	sum	$15,000.00	$15,000
City connection fees for water, storm and sanitary	1	sum	$30,000.00	$30,000
Remove existing Siamese connection	1	sum	$1,500.00	$1,500
Site Overheads		10.00%		$6,742
Office Overheads & Profit		9.00%		$6,674
Design Contingency		10.00%		$8,083
GST				Excluded
Basement Level Renovation	784	m²	$221.94	$174,000
Replace existing masonry flue with metal flue, steel stud shaft	14	m	$800.00	$11,200
Remove existing masonry partitions	175	m²	$30.00	$5,250
Premium over removing masonry partitions for removing single door	3	lvs.	$50.00	$150
Premium over removing masonry partitions for removing double doors	1	prs.	$80.00	$80
Make opening in existing masonry partition for new single door	1	no.	$500.00	$500
Remove miscellaneous existing fittings and fixtures	1	item	$3,000.00	$3,000
190mm thick concrete block partition	208	m²	$200.00	$41,600
Single door and frame including hardware and finish	4	lvs.	$1,300.00	$5,200
Double doors and frame including hardware and finish	5	prs.	$2,100.00	$10,500
Make good existing concrete floor slab, level/clean	300	m²	$25.00	$7,500
Make good ceiling	300	m²	$10.00	$3,000
Paint/re-paint walls	657	m²	$14.00	$9,198
Millwork	1	item	$20,000.00	$20,000
Miscellaneous metals	1	item	$15,000.00	$15,000
Site Overheads		10.00%		$13,218
Office Overheads & Profit		9.00%		$13,086
Design Contingency		10.00%		$15,848
GST				Excluded

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	QUANTITY	UNIT	RATE	COST
Replace existing membrane roof	3,550	m²	$174.93	$621,000
Remove existing roof membrane, fibreboard including roof upturns, edge flashings	3,550	m²	$25.00	$88,750
2 ply SBS membrane, thermal protection board	3,550	m²	$85.00	$301,750
Make good at parapets, sloped crickets, wall intersections, scuppers and premium for roof top equipment, etc. - Allowance	1	item	$80,000.00	$80,000
Site Overheads		10.00%		$47,050
Office Overheads & Profit		9.00%		$46,580
Design Contingency		10.00%		$56,413
GST				Excluded
Replace Boilers				$594,000
Demolition of existing boilers	1	sum	$45,000.00	$45,000
New boilers allowance	1	sum	$280,000.00	$280,000
Installation	1	sum	$125,000.00	$125,000
Site Overheads		10.00%		$45,000
Office Overheads & Profit		9.00%		$44,550
Design Contingency		10.00%		$53,955
GST				Excluded
Solar Collectors				$198,000
Solar collectors and supports allowance	1	sum	$100,000.00	$100,000
Tanks, pipes and pumps	1	sum	$50,000.00	$50,000
Site Overheads		10.00%		$15,000
Office Overheads & Profit		9.00%		$14,850
Design Contingency		10.00%		$17,985
GST				Excluded

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