



Est. 1873

REPORT TO MAYOR AND COUNCIL

PRESENTED: JANUARY 27, 2020 - SPECIAL CLOSED MEETING
FROM: ENGINEERING DIVISION
SUBJECT: FORT LANGLEY OUTDOOR POOL
ASSESSMENT UPDATE

REPORT: C20-04
FILE: 0810-20-FLCP2

RECOMMENDATIONS:

That Council direct staff to proceed with conversion of the Fort Langley Outdoor Pool to an outdoor community splash pad and spray park;

That Council authorize allocation of \$50,000 previously earmarked for upgrading the Fort Langley Outdoor Pool to detailed planning and design work, including public engagement with respect to the type of spray park and amenities that would be financially viable and desired by the community; and further

That Council direct staff to bring forward the necessary budgetary requirements related to the conversion for Council's consideration of approval as part of the 2021 budget discussions.

EXECUTIVE SUMMARY:

Funding to undertake a condition assessment of the Fort Langley Outdoor Pool (the Pool) was approved as part of the 2019 budget. Primary reasons necessitating the assessment related to ongoing operational challenges, age of the facility and potential likelihood of significant capital expenditure requirements for continued operation. The facility has exceeded its useful life, leading to the recommendation for its conversion to an outdoor spray park, as the most practical and cost-effective option for an amenity within the community, similar to Jackman Park in Aldergrove in 2018/19.

In recent years, the Pool has experienced a number of unplanned closures to ensure public health and safety, and compliance with applicable standards. The assessment undertaken revealed two critical issues that, if unaddressed, would affect Township's ability to secure the necessary operating permit from Fraser Health in the future. These issues relate firstly, to the turnover period exceeding the maximum allowed for an acceptable quality of water for public pools, based on provincial standards; and secondly to the location and overall design and configuration of the Pool as it relates to the need for removal of residue, affecting water quality. Based on available records, these issues have historically resulted in ineffective operation of the Pool with abnormally high periods of unplanned closures.

The assessment identified operational improvements as well as significant capital investments required to provide for public use of the facility in compliance with applicable health and safety standards. The options presented in this report range from minor to major upgrades to the existing facility, to construction of a new facility, and ultimately conversion to a spray park, as recommended at an estimated cost of \$850K. The estimated capital costs for the various options outlined in the report range widely from \$350K to \$1.4M for improvements and upgrades, to up to \$3.5M for full replacement. Subject to Council's approval, staff will proceed with next steps, including obtaining public input on design parameters, to achieve the most desirable and cost-effective facility.

PURPOSE:

To provide Council with an update on the findings of a condition assessment completed for the Fort Langley Outdoor Pool and to seek Council's endorsement of the preferred approach.

BACKGROUND/HISTORY:

The Township of Langley is known for its diverse and well-used aquatic facilities, some of which have become “destinations” attracting users from across the region and beyond. Location of current aquatic infrastructure within the municipality, comprising of two indoor and two outdoor aquatic facilities, as well as five community spray parks, is shown on Attachment A.

Spray parks are outdoor and contain little or no standing water, do not need not be staffed, and can be remotely controlled. The most recent spray park projects were completed in 2017 at Murrayville Community Park (adjacent to W.C. Blair Recreation Centre) and 2018/2019 at Philip Jackman Park.



The Fort Langley Outdoor Pool (the Pool) is situated within Fort Langley Community Park (the Park), west of the Fort Langley Cemetery. The Park amenities include sports fields, caretaker residence, diamond, concession, tennis courts, play area, picnic shelter, change rooms, and community garden. Please refer to Attachment B.

The Pool is typically open seasonally from mid-June to early-September. There is some programming available, per municipal standards, consisting of swim lessons, pool parties, and rentals. Records indicate that most of the attendance relates to public swims. Other programming options are extremely limited, due to size and other related limitations. Further, the attendance at the Pool decreased in 2019 by 21% from the previous year.

Condition Assessment

In 2019, funding was approved to undertake a condition assessment of the Pool located at 23055 St. Andrews Street. The primary reasons for the assessment were to ensure public health and safety, given the challenges experienced with routine operations, age of the facility, and the likelihood for significant capital expenditure.

The Pool was constructed in the early 1960's and consists of a single body of water (20 feet x 50 feet) with a small pool building being used to house the mechanical systems. The Pool area, including the small building, has an area of approximately 5,500 square feet. Documentation of the original construction is very limited with several ad-hoc modifications undertaken over the years.

The facility is currently not compliant with current codes and standards as its construction pre-dates such codes and standards coming into effect. These relate to both construction and operation of such facilities, and include the BC Building Code, the BC Plumbing Code, BC Guidelines for Pool Design, and the Public Health Act (Pool Regulations), to name a few. In addition, the Pool does not currently have any accessibility features and does not meet current accessibility standards.

Over the past few years, the Pool has experienced a number of unplanned closures necessitated to ensure public health and safety standards. The assessment revealed two critical issues with the current facility that would likely affect the ability to secure an annual operating permit from Fraser Health and a number of other non-compliant items. Historically, as much as 25% of the operational season of the Pool is believed to have been lost due to unplanned closures to address health and safety concerns.

Critical Issues

The assessment revealed two critical issues as outlined below that must be addressed to the acceptance of the Fraser Health authority:

1. Design Flow Rate - this is the rate at which water must be recirculated or replaced in order to turn over the entire volume of water within a specific period of time. The current turnover period is 9.3 hours, which is 55% higher than the maximum six hours required by the Ministry of Health pursuant to provincial Guidelines for Pool Design. This circulation rate maintains the minimum acceptable water quality for public pools.
2. Skimmers and Returns - typically provided in pools to deal with removal of residue and to address water quality concerns. The current Public Health Act requires skimmers and returns on both sides, which is not the case with the current Pool configuration. Excessive accumulation of sunscreen residue on the Pool surface has been reported as an ongoing concern, affecting water clarity, resulting in the unplanned closures of the facility.

Other Non-Compliance Issues

Beyond the critical issues identified above, listed below are a number of other non-compliance issues revealed as part of the condition assessment:

- Washroom accessibility
- Contrasting edges
- Lack of sanitary connection
- Pool accessibility
- ASHRAE and energy compliance
- Pool grounding
- Pool depth markings
- pH control systems
- Lack of second main drain
- Change room lighting

The items listed above are not compliant with current codes and can be considered 'grandfathered'. However, commencement of any level of capital work will trigger the need for compliance with current standards, which would be expensive and challenging to quantify. The assessment identified both operational improvements needed as well as capital expenditures necessary to maintain the facility as a public pool.

Both operational improvements and some level of capital expenditure would be required in order to secure a provincial operating permit. This would include addressing many of the non-compliant issues as well as the two critical issues discussed above.

DISCUSSION/ANALYSIS:

The condition assessment and subsequent analysis have resulted in identification of four potential options as outlined below. The recommended approach is based on a number of factors, including community needs, participation rates, cost-effectiveness and financial viability.

Option 1: Minimum Upgrades

In recent years, a number of unscheduled pool closures were required due to chemical issues and/or clarity issues, both of which could affect public health and safety. This would be a concern for Fraser Health, the authority issuing the operating permit. As discussed above, these relate to Pool turnover and chemical treatment systems. Work could be undertaken to remedy current turnover and chemical treatment issues as a short-term measure.

While this option would address the most current, and critical, issues at the facility with respect to public health with minimal capital expenditures, it has a relatively high level of associated risk due to the many uncertainties given the age of the facility and lack of documentation. Furthermore, this option does not address other issues such as accessibility and will likely impact the upcoming scheduled operation of the facility for the 2020 opening season.

The challenges with maintaining the facility in its current state are twofold: firstly, with its age, the facility, and associated equipment, exceeding their useful life and being in very poor condition; and secondly, the risks and liabilities associated with operating a public facility, in light of the first issue. The cost to undertake this option is estimated at approximately \$350,000. While this option may appear appealing due to its associated estimated costs, it is not recommended, as it will not address issues in the long term.

Option 2: Major Renovations

Major upgrades to the facility would satisfy the majority of the concerns outlined in the assessment. However, this is not recommended due to the significant costs involved and the relatively low associated benefits. It should also be recognized that such major renovation work is expected to be accompanied by unknown risks, particularly related to the age of the facility and the potential need for replacement of major components such as the pool motor, with implications on other existing mechanical systems.

Given the age of the facility, it is estimated that cost premiums associated with this option, estimated at approximately 30%, would significantly reduce the cost-effectiveness of the renovations. This results in a diminishing business case outcome for this option, given its limited seasonal operation and public attendance. In addition, as with option 1 above, major renovations will likely result in risks associated with uncertainties. The cost for this option is estimated at approximately \$1.4 M.

Option 3: Facility Replacement

Full facility replacement with an outdoor pool will be the most expensive of all the options. Before a detailed cost can be provided, a clear scope (e.g. pool size, features, filtration systems, other amenities, programming) would be required. Operations and maintenance functions need to be identified, site constraints (e.g. cemetery expansion, utilities, parking), etc. will need to be established for a suitable budget.

Having said that and assuming replacement of the facility with a similar sized facility, offering the same level of service, is estimated at between \$2.0 to \$3.5 M. This option is not recommended due to the significant capital costs associated with this option, limited seasonal use, staffing, site constraints and attendance records.

Option 4: Conversion of Pool to Spray Park

Conversion of the pool to a spray park is a potential option and would be similar to the conversion of the Aldergrove Outdoor Pool to an outdoor spray park located in Philip Jackman Park. Based on the Philip Jackman project, the cost estimated for this option is approximately \$850,000.

This option is recommended due to its advantageous cost-benefit, recognizing the Pool has far exceeded its useful life, is no longer in compliance with relevant regulations, presents a number of safety risks and is extremely expensive to replace. It is considered to be the most practical and cost-effective option with a variety of operational advantages. With respect to implementation, decommissioning and/or abandoning existing services will avoid most of the challenges associated with renovation work and their associated unknown risks. In terms of operations, spray parks offer the following advantages over an outdoor pool.

- Typically do not require staff attendance for use (depending on design and services provided). This will reduce operational costs.
- Do not require protective fencing, which, together with the absence of staffing requirements, allow the spray park to be open as part of the park, extending opportunities for use to evenings and mornings, as well as allowing the park to feel more generous and expansive.
- Operate in the off season is a real advantage in the Lower Mainland’s mild climate – allowing it to serve as dry play terrain for toddler skateboarding and small bikes.
- Users can simply drop-in with no admittance fee.
- Water is not heated so no natural gas required.
- Offer an opportunity for all ages to gather and play.
- Provide residents with respite from the summer heat.

Subject to Council’s approval, staff would commence planning and design of the conversion, including community consultation with respect to various elements and design details of the spray park, using funding currently available. Recognizing that the facility will not be operational for the 2020 season, staff will aim to complete detailed design based on public input and bring forward a capital budget request for Council’s consideration as part of the 2021 budget process, with the ultimate goal of completing the new spray park in 2021.

Financial Implications:

The annual revenue and operating and maintenance costs for the past two years is presented in the table below. It should be noted that the maintenance costs in 2019 were lower as much of the larger repair work was deferred pending completion of the condition assessment.

Revenue + Operating and Maintenance

Year	2018	2019
Revenue (Admissions/Program)	\$54,604	\$57,702
Expenditure (Operations/Maintenance)	\$95,925	\$80,928
Total	-\$41,321	-\$23,226

The four capital investment options discussed in this report are summarized below.

Options	Option 1	Option 2	Option 3	Option 4
Description	Minimum Upgrades	Major Renovations	Facility Replacement	Conversion of Pool to a Spray Park
Capital Cost	\$350,000	\$1.4 M	\$2.0 to \$3.5 M	\$850,000

Based on the analysis, Option 4 is recommended as it provides the lowest financial risk and maintenance costs.

Respectfully submitted,

Harb Chohan
 DIRECTOR, SUSTAINABILITY AND FACILITIES
 for
 ENGINEERING DIVISION

This report has been prepared in consultation with the following listed departments.

CONCURRENCES	
Division / Department	Name
FINANCE DIVISION	K. Sinclair
PARKS AND RECREATION	C. Blair

ATTACHMENT A Current Aquatic Facility Locational Map

ATTACHMENT B Fort Langley Outdoor Pool Context Map

ATTACHMENT B

Fort Langley Outdoor Pool Context Map

