



Committee of the Whole Report

Report Number: PR2024-005
Meeting Date: April 9, 2024
Title: Omemee Splash Pad Feasibility Review
Description: Provide Council with an update on Omemee Splash Pad Feasibility Study and seeking direction on next steps.
Author and Title: Craig Shanks, Director of Community Services

Recommendation(s):

That Report PR2024-005 Omemee Splash Pad Feasibility Review be received, and;

That this recommendation be brought forward to Council for consideration at the next Regular Council Meeting.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

At the Council Meeting of March 22, 2022, Council adopted the following resolution:

CW2022-057

That Report CS2022-04, Omemee Splash Pad Update, be received; and

That funding in the amount of \$100,000.00 be included as a decision unit in the 2023 Capital Budget for the creation of a Splash Pad in Omemee.

As a result of this resolution the following recommendation was made during 2023 (February 14, 2023) budget deliberations.

CR2023-102

That a Servicing Study and Design for a Splash Pad in Omemee, in the amount of \$100,000.00, be included in the Proposed 2023 Tax-Supported Capital Budget, funded from the Asset Management Reserve.

This report addresses this direction.

Rationale:

Council directed staff to conduct a Feasibility Review on the potential of a splash pad location in Omemee. This Feasibility Review has been completed (Appendix A) and was presented (Appendix B) to the community during a Public Information Session on March 19, 2024.

As previously reported, and confirmed in this Feasibility Review, the capital cost for the installation of a splash pad in Omemee would range from \$795,000 - \$1,035,000. Annual operational costs for such an amenity would be upwards of \$50,000 (staff costs included). This would be for a 4-month operational season and provide an approximate 900-hour operational season.

Water usage varies dependent on the features incorporated. Typical usage rates can be as follows:

Water Usage and Flow Volume

- Low Volume – 50 GPM (18,000 GPD)*
- Medium Volume – 75-100 GPM (35,000 GPD)
- High Volume – 130-150 GPM (50,000 GPD)

- * GPM – gallons per minute
- GPD – gallons per day

The above rates are based on 4 to 6 hours of operation. Although the splash pad will likely be open from 10:00am to 8:00pm (to be confirmed), the actual demand of water is not constant. Many flow through spray pads are designed for a flow rate of about 70 to 150 gallons per minute (GPM) when operating. The largest flow through spray pads can use up to 250 GPM; however, this is not recommended.

Water Source

There are three (3) potential water supply options for water provision for a splash pad amenity:

- a. Water Wells
- b. Water Body – Pigeon River
- c. Municipal Water Supply (not available in Omemees)

Health codes that govern pools and splash pads require a potable water source. As such, water must be delivered at a potable (drinkable) level. Treatment would be required for the first two options noted above.

Water Wells

Typical water wells in the Omemees area generate a flow rate of about 8 GPM (36 liters per minute). There is a current drilled water well that services the fire station. This has a yield of about 5 GPM. Reports indicated that the ground water exhibits high iron and sulfur levels. Treatment for these minerals as well as any other impurities would be required.

With a projected flow rate of the water well to be approximately 8 gallons per minute (1 cubic foot per minute (CFM)), a storage tank (or series thereof) would be required. The flow rate of 8 GPM is not adequate for a direct feed to the splash pad. As such, a reservoir tank would be required, with the well providing a trickle feed to the tank. Subject to the fixture and hence water demand requirements, it may be that several wells would be required as well as sufficient storage capacity to support the water demands of the hottest days in the summer.

Testing and exploration into the supply of water from wells is required. It is important to ensure that the existing aquifer is not diminished to the detriment of the other users in Omemees.

Additionally, a pumping system (to feed the fixtures) and a water treatment system would be required. As a comparable, the Elgin Park (Lindsay) splash pad used approximately 10,000 cubic meters in 2023 (approximate 2.2M gallons). This is equivalent to about 100m³ per week. Quantities for 2021 and 2022 are much lower but that is likely due to the COVID-19 restrictions.

A Permit to Take Water may be required from the provincial government.

Pigeon River

An alternate source for water is the Pigeon River. This is a non-potable, raw water source, naturally occurring in the Pigeon River. The water would need to undergo a treatment process to remove impurities, contaminants, sediment, microorganisms, and pollutants. This would require a pumping system and a pre-filtration system to clean the river water. The water would need to be cleaned to a potable, drinkable quality.

Another consideration that must be addressed is the actual treatment process itself. It is unlikely that the treatment could be completed at rates required for the splash pad. As such, storage tanks, similar to well water, would be required.

Pigeon River is considered a provincially significant wetland, and as such, permission to draw this water would be required from several agencies.

Municipal Water Supply

Municipally treated and distributed water is currently not available in Omemee. As such, this is not a viable source for water for the splash pad.

Water Recycling

Given the limited availability of municipal water at this location, a water recycling system may be considered. This could include a holding tank (see above for water source options) and filtration/treatment system and a pump. Generally, splash pads with recycling require a separate building to house pumps and treatment equipment.

Water discharge

There are several methods to deal with the 'used' water. These include:

- Flow Through System - direct to drain
- Flow Through System - repurpose
- Re-circulating System

Flow through System - direct to drain

Sanitary sewer is available to be connected to, but not recommended as it further taxes a near capacity system. Alternatively, the water could be discharged directly into the environment (such as overland or into the Pigeon River). This would require a de-chlorination system to clean the water before dumping into a natural watercourse. Both methods would mean 'dumping' all water with only a single use, putting a higher demand on the water source.

Flow through System - repurpose

For this system, the used water will be collected and used for other purposes. This could include storage for irrigation, separate watering systems or possible grey water for washrooms.

Flow through systems require a constant supply of fresh water.

Re-circulating System

Water is initially pumped or delivered from a water source such as a well or storage tank to the splash pad features. Instead of being discharged, the water is stored, filtered, and treated for reuse in the splash pad. This system requires a high level of testing (similar to a swimming pool) and will likely mandate a full-time staff member on site during the operating hours of the splash pad.

Typical water usage for a splash pad/water park varies widely dependent on the fixtures and features. The standard range would have consumption in the 18,000 GPD – 50,000 GPD. Given that a sufficient treated water source is not available, a holding tank and recycling system would be required. The tank(s) would need to be of sufficient size to supply the fixtures and features and a pumping system and a water treatment system would also be required.

The Feasibility Review also recommends that given the anticipated water demands, a further study into the availability of water to this project is essential if the decision to pursue a splash pad is approved. The use of well water or drawing from the Pigeon River, as well as treatment and storage volumes is critical to the viability of a splash pad in Omeme.

The capital costs projected for this project would be significant, and the splash pad would also require an annual operating budget for a limited season. As well, there is a potential that the possible water source would not be permitted or would in fact run-

dry. For these reasons staff consider the installation of a splash pad in Omemee to be too high of a cost and at too much risk for being non-operational for durations of the season.

During the Public Information Session (attended by roughly 30 members) there were questions regarding the potential need/desire for such an amenity due to the projected costs. It was stated by numerous attendees that a more suitable project for Omemee would be a general enhancement to Omemee Beach Park. These enhancements could address upgrades to the beach area (vegetation removal and accessibility), furniture and amenities, general landscaping, parking lot and construction of pathways within the park. Staff estimate the cost for such a project would be approximately \$500,000 and if Council endorsed would include this in the 2025 Capital Budget for deliberation.

Other Alternatives Considered:

Council could choose to proceed with the installation of a splash pad amenity at Omemee Beach Park. However, due to the cost and the still unknown water capacity items this direction is not recommended by staff.

Should council wish to explore more general beach enhancements, the following resolution should be adopted.

That staff be directed to include in the 2025 Capital Budget submission for the enhancement of the Omemee Beach Park for Council consideration.

Alignment to Strategic Priorities:

The following strategic priorities within the 2020-2023 Kawartha Lakes Strategic Plan are being met within this report:

1. An Exceptional Quality of Life
2. A Vibrant and Growing Economy
3. Good Government

The Strategic Plan is available on SharePoint at the following link:

[Kawartha Lakes Strategic Plan 2020-2023](#)

Financial/Operation Impacts:

There are no financial impacts as a result of this recommendation. Financial requirements will be brought forward as part of the 2025 Capital Budget for deliberation at Council for consideration based on Council direction.

Servicing Implications:

The Engineer's Report addresses all the servicing implications and has provided options for how such an amenity could be delivered in Omemee. This report has considered and researched all options.

Consultations:

Kalos Engineering Inc.

Parks and Recreation Division

Public Information Session

Attachments:

Appendix A – Kalos Engineering Feasibility Review



Appendix A

Appendix B – Public Information Session Slideshow



Omemee Splash
Pad-2024-Rev. 6(3).ppt

Appendix C – PR2023-009 Omemee Splash Pad Update



PR2023-009 Omemee
Splashpad Update.doc

Department Head email: cshanks@kawarthlakes.ca

Department Head: Craig Shanks