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Town of Aurora Committee of the Whole Report No. OPS25-004

Subject: Conditional Approval – David English Park

Prepared by: Matthew Volpintesta, Manager of Parks & Fleet

Department: Operational Services

Date: February 11, 2025

Recommendation

1. That Report No. OPS25-004 be received; and

2. That the condition on the approval of Capital Project No. AM-F-0346 – Tennis Court Reconstruction – David English Park, in the amount of \$150,000, be lifted and the project proceed, be approved.

Executive Summary

This report provides information to satisfy the conditional approval of Capital Project No. AM-F-0346 – Tennis Court Reconstruction – David English Park:

- Industry standards for Tennis courts recommend specific cycles of maintenance to ensure surfaces remain safe and playable for users.
- Conditional approval was lifted by Council in 2019, allowing staff to proceed with resurfacing at David English Park within the \$20,000 funding allocation.
- Staff consultation with tennis court industry experts indicated a high likelihood of severe cracking and heaving as a result of drainage issues within the subbase of the courts.
- Asset lifecycles align with estimated useful life timeframes but may be adjusted based on evaluations during routine maintenance and condition assessments.

Background

Industry standards for Tennis courts recommend specific cycles of maintenance to ensure surfaces remain safe and playable for users.

David English Park and the associated two tennis courts with lighting were originally constructed in 2012.

To ensure the Town of Aurora obtains its full expected useful life from its tennis courts, it undertakes two primary maintenance activities. These two activities being resurfacing and reconstruction.

Resurfacing courts involves addressing any hairline cracking, minor undulations and post heaving through spot repair, filling of cracks and reapplication of the plexi-pave surface with new lining. Industry experts recommend that this maintenance be performed every four to eight years under similar conditions, court quality and climatic impacts (warmer climates can endure longer time periods between maintenance cycles); however, in Aurora, our standard is typically seven years.

Reconstruction is typically scheduled to occur on average every 20 years at the end of the tennis court's expected useful life; however, this milestone can be extended based on condition assessment of the infrastructure. A court reconstruction typically involves a full re-build of the court system, including removal and replacement of the base system, new pavement, replacement of post-anchors, fencing repairs/replacement, and a new plexi-pave surface.

During the total lifecycle of a tennis court, it is typically resurfaced two to three times prior to full reconstruction based on condition assessments.

Conditional approval was lifted by Council in 2019, allowing staff to proceed with resurfacing at David English Park within the \$20,000 funding allocation.

The first maintenance milestone for the two courts at David English Park was planned as a resurfacing in 2019, which is in alignment with the typical year resurfacing target of seven years as referenced by the Town's Asset Management Plan.

In June 2019, a report was brought to Council to satisfy conditional approval of a capital project to resurface the tennis courts at David English Park (OPS10-014). Detailed within this report, it was shown that considerable surface issues existed with potential safety hazards present, including a 6 centimetre heaved post. The court deficiencies affected playability and posed serious safety concerns. Upon consultation with an industry

expert, it was noted that soft spots in the sub-base were affecting the drainage and packed base material subsequently resulting in surface cracks, significant depressions, and heaving with protruding concrete.

It was noted in the 2019 report that if resurfacing was not completed within the recommended industry timeframe, cracks would continue to expand, and pooling of water would persist. Without repair, degradation of the surface is prolonged allowing for water penetration and saturation of the base surfacing. These conditions would significantly increase risk to users.

As a result, the tennis court reconstruction would need to be completed in advance of the typical 20-year lifecycle. Costs associated with a full reconstruction of surface, including repair of base, new asphalt and surface coating based on 2019 costs would have been approximately \$100,000.

Analysis

Staff consultation with tennis court industry experts indicated a high likelihood of severe cracking and heaving as a result of drainage issues within the subbase of the courts.

Since the last resurface in 2019, significant upheaval, depressions and surface cracking are again affecting the playability and safety of the courts at David English Park tennis courts. The issues are greater than those observed on other courts and historically not what staff detect when completing condition assessments for this age of court.

As a result of the deficiencies, staff consulted the services of an industry expert in 2024 who noted similar concerns during their assessment. The consultant indicated the issues were being exasperated by either blocked and collapsed drainage tile or an insufficient drainage system design within the subbase of the courts. Also, it was considered that the runoff from the slope on the west side of the court may not have been considered in the design of the original drainage system and potentially be contributing to the issues. It was recommended that a full reconstruction be contemplated to avoid further repetition of the issues. This would include a full removal and replacement of base material, repair/replacement of drainage system including a new surface, post supports and concrete forms.

While resurfacing could be considered, it was expected that while general spot repairs, crack filling and new plexi-pave could be made to the pavement, the core issue would again repeat, with a high probability each calendar year would bring new cracks in different places, causing ad-hoc repairs, and potentially worsening in severity.

In preparing for the 2025 Capital Budget projects, staff considered the continuing repair, associated risks and geographic service level. Since David English Park fills a significant service ratio in the south-east portion of town, staff weighed the risk of continuing to make reactive repairs to the pavement cracking, versus the benefit of a full reconstruction. It was decided that a reconstruction ahead of the 2032 plan date would serve as a better return on investment due to the likeliness of cracking to repeat thus rendering the new plexi-pave surface deficient. Estimated yearly repairs to cracks when they would appear would range between \$2,000-\$3,000. These additional costs, when added up over the six to seven years, were also considered by staff in concluding reconstruction was the most viable option. Therefore, a capital project was included in the 2025 budget to install a weeping tile system to address drainage and fully reconstruct the courts with a funding request of \$150,000.

It should be noted that the cost estimate and budget required to resurface the courts is \$40,000. As indicated, if resurfacing was considered, it would not alleviate the core issue of drainage. While the resurfacing would deal with the issues in the short-term, the Town would likely see the infrastructure deteriorate ahead of the seven-year milestone of reconstruction earmarked for 2032. This does remain an option should Council not wish to proceed with funding the full reconstruction works.

Asset lifecycles align with estimated useful life timeframes but may be adjusted based on evaluations during routine maintenance and condition assessments

On September 24, 2024, Council approved an updated Asset Management Plan for the Town which was compliant with the final phase requirements of the provincial municipal asset management regulation.

This updated Asset Management Plan included the documentation of defined levels of service for all its capital asset categories, including its parks infrastructure, upon which all future asset management decisions are to be based. These tennis courts were found to be trending below acceptable service levels for useful life and in this instance, it became clear this tennis complex would not meet its intended lifecycle as its condition had fallen below acceptable levels, resulting in the courts planned reconstruction being expedited. This aligns with strategies used to inform the life of service of an asset as recently adopted within the Town's 2024 Asset Management Plan.

Advisory Committee Review

Not applicable.

Legal Considerations

The Town is responsible for ensuring proper maintenance and safety of its tennis courts. If the tennis courts fall into a condition of disrepair or poor maintenance, it will lead to a higher risk of injury, accidents and damages, which may result in an increase in claims. An increase in claims would likely negatively impact the Town's insurance costs.

Financial Implications

Capital Project No. AM-F-0346 – Tennis Court Reconstruction – David English Park was included as part of the 2025 Capital Budget that was adopted by the Town. This project included \$150,000 in budget authority that was allocated conditionally subject to a report back to Council, being funded from the Parks Asset Management Reserve.

Staff recommend that Council lift its condition on Capital Project No. AM-F-0346 – Tennis Court Reconstruction – David English Park and allow this project to proceed.

Communications Considerations

There are no communications considerations as a result of this report.

Climate Change Considerations

As climate change continues to impact the daily lives of Aurorans, whether you work, live, or play in our Town, outdoor recreation opportunities play a key role. As the Town continues to invest in resilient solutions to address climate change, outdoor amenities, parks, and playgrounds serve as space to enjoy nature in a manner that promotes eco conscious design and use.

Link to Strategic Plan

The reconstruction of the tennis courts at David English Park supports the Strategic Plan Goal of Supporting an Exceptional Quality of Life for All, by encouraging an active and healthy lifestyle.

Develop a long-term needs assessment for recreation programs, services, and operations to match the evolving needs of the growing and changing population.

Alternative(s) to the Recommendation

- 1. Council could decide to fund resurfacing of the courts rather than full reconstruction as recommended. Cost of resurfacing is \$40,000.
- 2. Council may provide alternative recommendation.

Conclusions

This report details the current conditions and proposes key maintenance milestones for the tennis courts at David English Park. As described above, staff are of the opinion that reconstruction of the courts drainage system would mitigate recuring issues. While it is explained that a traditional resurface of the plexi-pave system could temporarily mitigate the courts to a safe standard, it is expected that, without addressing the drainage issues, a resurfacing may extend playing life with almost certain likeliness of cracking and upheaving to occur before the typical seven-year lifecycle.

Attachments

Attachment 1 – Photographs of 2019 Conditions

Attachment 2 - Photographs of 2024 Conditions

Previous Reports

No. OPS19-014 Tennis Court Resurfacing, David English Park, June 4, 2019

Pre-submission Review

Agenda Management Team review on January 23, 2025.

Approvals

Approved by Sara Tienkamp, Director, Operational Services

Approved by Doug Nadorozny, Chief Administrative Officer