

## Flood Control Strategy Update – University of Saskatchewan Joint Project

### ISSUE

The Administration requires City Council approval to proceed with the sixth Flood Control Strategy (FCS) project. The best location for the construction of the dry storm pond is on University of Saskatchewan (USask) land, requiring an agreement with the USask to be completed.

### RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities & Corporate Services recommend to City Council that:

1. The City enter into an agreement with the University of Saskatchewan to construct a dry pond on University of Saskatchewan land to mitigate flooding near the intersection of Cumberland Avenue South and 14<sup>th</sup> Street East;
2. That the sixth Flood Control Strategy be approved for Cumberland Avenue South and 14<sup>th</sup> Street East for detailed design and construction; and
3. That the City Solicitor be requested to prepare the appropriate agreement, including the terms as set out in this report, and that His Worship the Mayor and the City Clerk be authorized to execute the agreement under the Corporate Seal.

### BACKGROUND

In December 2018, City Council approved the implementation of the nine-year \$54 million Flood Control Strategy (FCS) to mitigate flooding in 10 priority areas that have historically experienced frequent flooding. The purpose of this report is to provide an update on the strategy, including the results of the Feasibility Assessment for the sixth project to mitigate flooding near the Cumberland Avenue South and 14<sup>th</sup> Street East intersection, and to request approval to proceed with the project.

The FCS is based on the principles of reducing flood impacts for the maximum number of properties within the available budget while maintaining the existing quality and service levels for both passive and active recreation opportunities in parks where the projects are constructed. The FCS framework that was approved in 2018 includes the following four phases:

- Phase One: High Level Assessment and Location Approval (completed in 2018)
- Phase Two: Feasibility Assessment of each project; City Council to approve projects prior to proceeding to Phase Three
- Phase Three: Detailed Design and Public Engagement
- Phase Four: Construction

The status of the first five FCS projects is provided in the table below:

<b>Project</b>	<b>Status</b>	<b>Details</b>
W.W. Ashley Park Dry Pond	Complete	Open to the public
Churchill Park Dry Pond	Complete	Open to the public
Weaver Park Dry Pond	Substantially Complete	Landscape establishment in progress and will open to the public in Fall 2024
Brevoort Park South Underground Storm Water Storage	Construction	Construction will occur throughout 2024 with the park reopening in Fall 2025
Cumberland Park Dry Pond	Feasibility Assessment	Council approval in May 2024 to proceed with design and construction

The Feasibility Assessment completed for the sixth FCS project proposed to be constructed on USask land, to mitigate flooding near the intersection of Cumberland Avenue South and 14<sup>th</sup> Street East, shows the project is technically feasible and will reduce the flood risk for at least 30 properties during a 1-in-10-year design rain event. The details of the Feasibility Assessment are provided in Appendix 1.

**DISCUSSION/ANALYSIS**

The proposed dry pond to be constructed on USask land will reduce the flood risk in an area with a history of frequent flooding and projected future flooding due to climate change. The current plan is to maintain the existing wet pond on USask land with the dry pond constructed south of the existing wet pond. Expansion of the wet pond may be required to ensure the USask College Quarter storm water management plan is connected to the proposed downstream dry pond and overall storm water system during major storm events. In 2018, the Cumberland Avenue South and 14<sup>th</sup> Street East intersection and surrounding area was rated sixth highest, among the top 30 known high-risk flood locations within Saskatoon, based on the probability of flooding and the number of properties expected to flood during intense rain events.

The first five projects of the FCS have been or will be completed by constructing dry ponds or underground storage within City of Saskatoon (City) park space near the high-risk flood intersections. For this location, there is not a City park or green space with sufficient size nearby. Since 2022, the City has been in discussions with USask representatives regarding this proposed joint project, and in April 2023, the USask Board of Governors approved the concept plan for the project to enter into a contribution agreement with the City.

The primary terms of the proposed City/USask contribution and construction agreement would be as follows:

- USask to contribute the land use to allow construction of the expanded wet pond and dry pond and shall grant the City a license to use the land for the purposes described in the agreement.
- USask to manage and cover the costs of procurement, design, construction, and landscaping relating to any new storm sewer and inlet and outlet connection(s) located on USask land other than the City’s 14th Street East inlet/outlet.
- The City to manage and cover the costs of the procurement, design, and construction for the expanded wet pond and dry pond, and the City’s 14th Street

East inlet/outlet, as well as the landscape maintenance for the wet and dry pond until two years following final completion of the project.

- USask to be responsible for landscaping maintenance once the initial two-year period following final completion has elapsed.
- Construction shall commence approximately February 2025, and shall proceed in a reasonably expeditious manner, and is anticipated to be completed by October 2026, weather permitting.
- The City to ensure appropriate insurance is in place during construction, including adding USask as additional insured.
- USask to ensure appropriate insurance is in place following completion of the project, including adding the City as additional insured.
- USask to grant the City any utility easement required for the City's 14<sup>th</sup> Street East inlet/outlet.
- USask to comply with the relevant provisions of the City's funding agreement with the Government of Canada.
- Each party to indemnify the other in a manner appropriate to their respective roles.

### **FINANCIAL IMPLICATIONS**

In 2019, the Government of Canada approved 40% cost sharing of the \$54.1 million estimated FCS eligible expenses up to a maximum of \$21.6 million through the Disaster Mitigation and Adaptation Fund (DMAF). City Council approved Storm Water Utility funding of \$32.5 million (60%) through previously approved increases to the Storm Water Utility management charge.

Through the proposed land and construction access contribution agreement between USask and the City, USask would contribute the land to construct the dry pond while the City would pay for construction of the project through the DMAF agreement. Both USask and DMAF have approved this arrangement to complete Project 6 of the FCS.

The Feasibility Assessment cost estimate for the joint project with USask is \$6.0 million, of which, \$3.6 million (60%) will be funded through the Storm Water Utility, while \$2.4 million (40%) will be funded through DMAF. The table below shows the 2018 FCS agreement estimates compared to the current actual and estimated costs. Based on the updated costs, the FCS is estimated to be \$2.1 million over budget by the end of 2027 due to recent increased construction costs and inflation since the agreement was approved in 2018. The total cost includes 10% (\$3.1 million) contingency for the remaining (2024-2027) project construction. Funding for the City's portion of the FCS is available through Capital Project P.01619.07 Storm Sewer Trunk and Collection Flood Control Strategy. The strategy overages would be addressed through capital reserve allocations within the Storm Water Utility if required.

As part of the proposed contribution agreement between USask and the City, the City would maintain the landscaping of the proposed dry pond for two years post construction to temporarily assist USask transition into maintaining the new asset. The current plan is to include the additional two-year maintenance period (approximately

\$300,000) in the external landscape construction contract; however, this cost would be an ineligible expense through the DMAF.

Project Information			2018 DMAF Agreement			2024 Cost Estimate		
No.	Location	Const. Year	Total Eligible Costs	GOC Eligible Costs	COS Eligible Costs	Total Eligible Costs	GOC Eligible Costs	COS Eligible Costs
1	W.W. Ashley Park	2021	\$5.7M	\$2.3M	\$3.4M	\$3.5M	\$1.4M	\$2.1M
2	Churchill Park	2022	\$10.4M	\$4.2M	\$6.2M	\$5.6M	\$2.2M	\$3.4M
3	Weaver Park	2023	\$7.7M	\$3.1M	\$4.6M	\$5.9M	\$2.4M	\$3.5M
4	Brevoort Park South	2024	\$7.8M	\$3.1M	\$4.7M	\$12.4M	\$4.9M	\$7.5M
5	Cumberland Park	2025	\$3.2M	\$1.3M	\$1.9M	\$3.4M	\$1.4M	\$2.0M
6	USask	2025	\$3.2M	\$1.3M	\$1.9M	\$6.0M	\$2.4M	\$3.6M
7	46 <sup>th</sup> Street	2027	\$4.4M	\$1.8M	\$2.7M	\$5.9M	\$2.3M	\$3.6M
8	Cahill Park	2026	\$3.3M	\$1.3M	\$2.0M	\$6.9M	\$2.8M	\$4.1M
9	24 <sup>th</sup> Street	2026	\$8.4M	\$3.4M	\$5.1M	\$6.6M	\$2.6M	\$4.0M
<b>Totals:</b>			<b>\$54.1M</b>	<b>\$21.6M</b>	<b>\$32.5M</b>	<b>\$56.2M</b>	<b>\$22.5M</b>	<b>\$33.7M</b>

### OTHER IMPLICATIONS

A different internal and public consultation process will be executed compared to past FCS projects as the project will not be constructed on City-owned land. The landscape design will be determined by the City and USask through an external landscape consultant in alignment with the project budget. The dry pond will be designed to drain in 24 hours after a rain event. The proposed storm sewer alignment connecting 14<sup>th</sup> Street East and the dry pond on USask land will include going through the City-owned flankage to the north of 14<sup>th</sup> Street East, which is managed by the Parks Department. No City-owned trees are expected to be removed and the design will limit tree removal on USask land. If any tree removal on City property is required, Bylaw 9957, The Tree Protection Bylaw, 2024 will be followed.

A Crime Prevention Through Environmental Design evaluation will be completed during the detailed design of the project to identify opportunities for the design to minimize crime while being accessible and inviting for the users and surrounding neighbourhood.

The public notification and engagement process will also be different for this project as no City park spaces or programs will be affected. Public notification has and will be by the following:

- The adjacent neighbourhood was notified of this project through a letter in March 2024.
- The City presented the strategy information to the applicable Community Associations in April 2024.
- The neighbourhoods were notified of this report with instructions on how to speak or write to City Council.

- A project engage/landing webpage will be developed for this project to use as a reference to provide project information, but no online video or engagement event will be completed for this project.

### **NEXT STEPS**

Subject to City Council approval, the next steps will be completed:

- Preparation by City Solicitors and execution of the contribution agreement between USask and the City;
- Detailed design, costing, and construction planning for the project (July 2024 to January 2025); and
- Construction (February 2025 to October 2026).

### **APPENDICES**

1. City-USask Joint Project Feasibility Assessment

#### Report Approval

Written by: Mitch McMann, Storm Water Utility Manager  
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Approved by: Angela Gardiner, General Manager, Utilities and Environment

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