

Flood Control Strategy

Why do properties flood?

- Saskatoon's storm water infrastructure in older neighbourhoods was not built to current standards
- Intense rain can pool in low-lying areas
- Water can be forced up through manholes when the pipes are full
- Climate change may produce more frequent and intense rain



21st Street and Avenue W flooding, 1956

How can we prevent flooding?

Short-term Operations:

- Sweeping debris from streets
- Storm sewer cleaning
- Pipe valves and manhole sealing
- New lining in storm sewers

New Neighbourhood Design:

- Storm water wet and dry ponds
- Improved road design

Benefits of the Flood Control Strategy

- Reduces risk of flood damage to buildings, contents, yards, and vehicles
- Improves street drainage and maintains access for emergency vehicles
- Provides relief for property owners with a history of flooded homes or businesses
- Less health and safety risks
- Reduces risk of business closures

The Government of Canada has contributed **\$21.6 million** to the Flood Control Strategy through the Disaster Mitigation and Adaptation Fund. The total agreement project cost to complete nine projects between 2019 and 2027 in Saskatoon's most flood-prone areas is **\$54 million**.



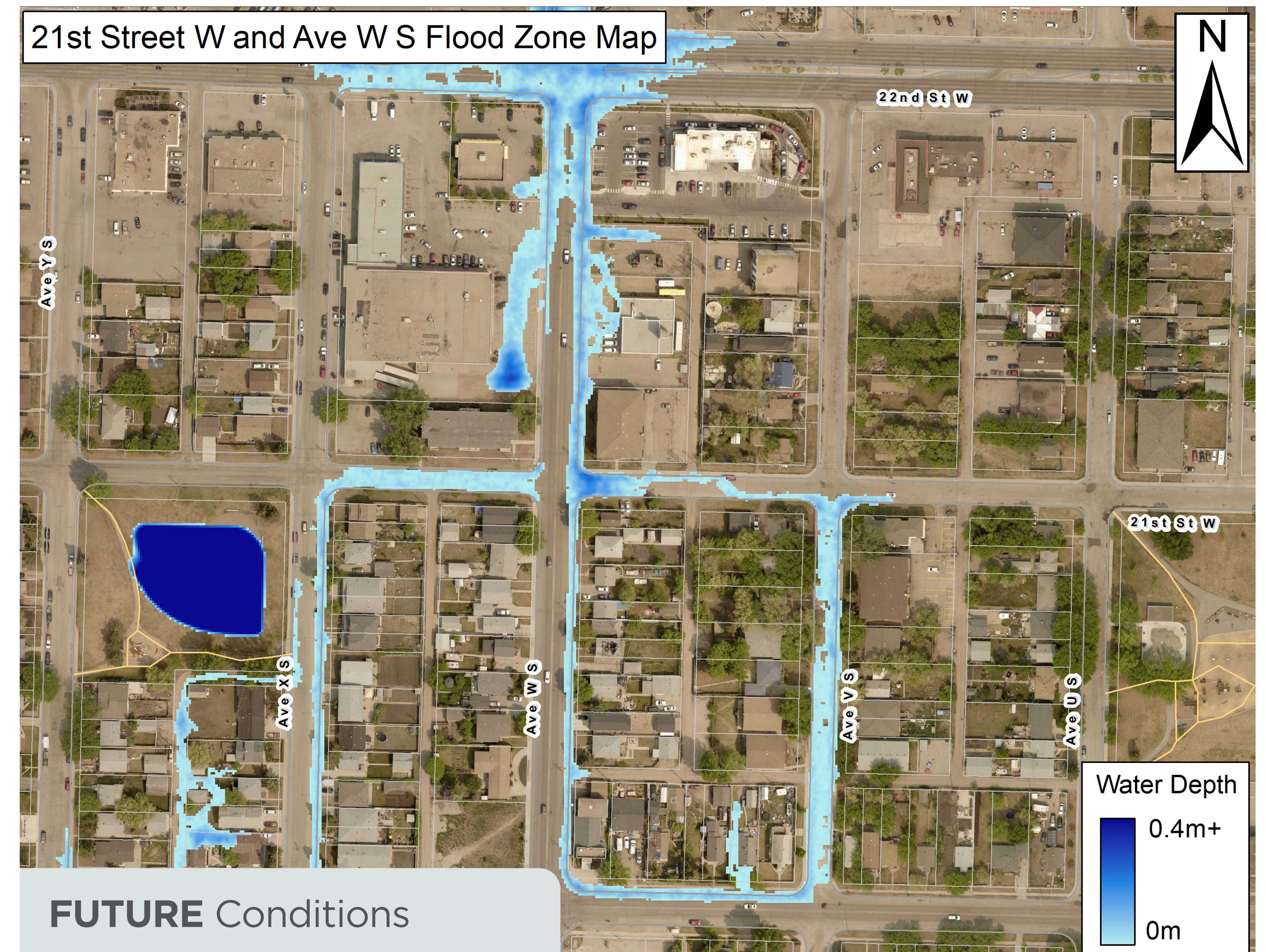
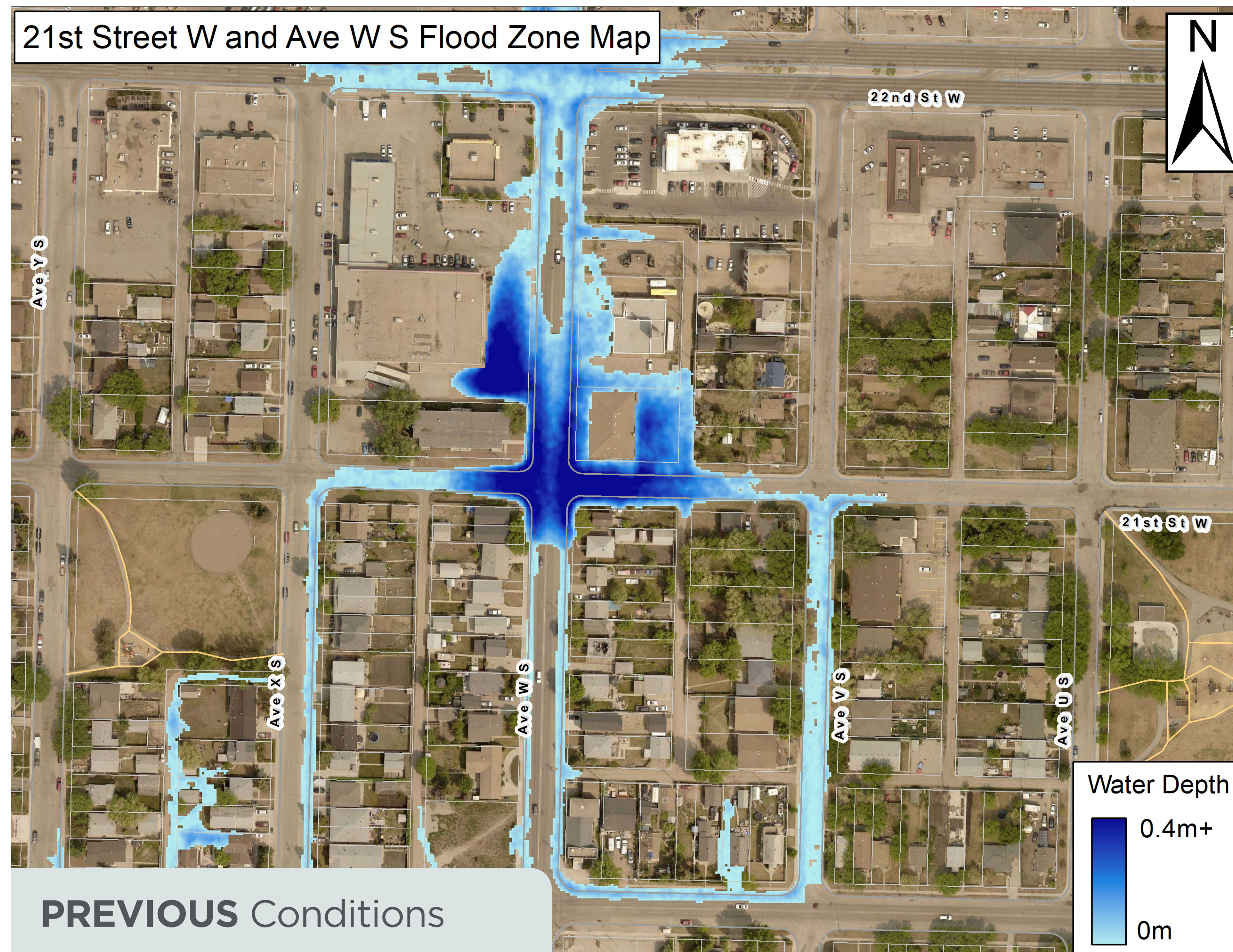
WW. Ashley Park Dry Storm Pond



Churchill Park Dry Storm Pond

Cahill Park Area Flooding

2-Year Storm

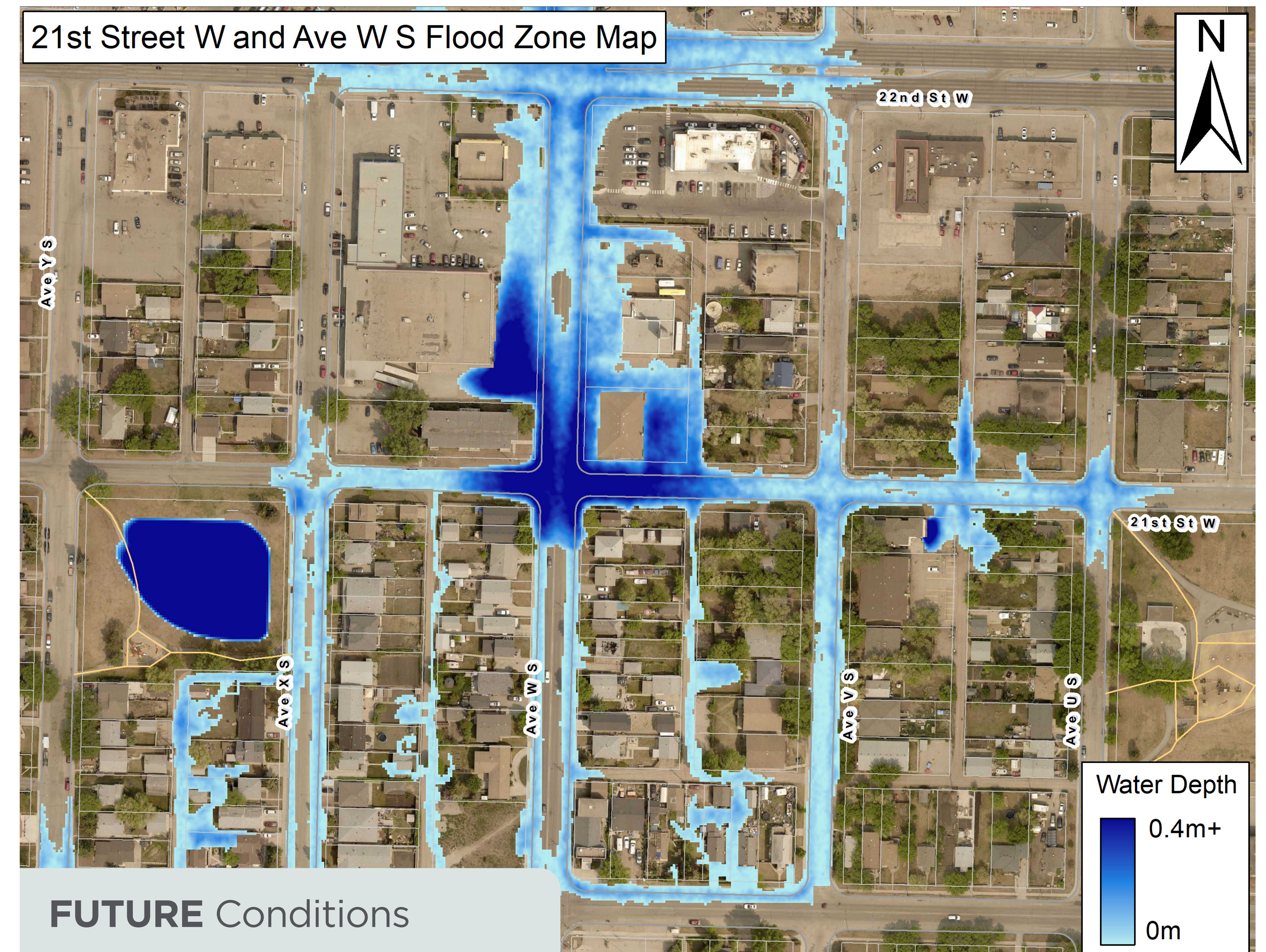
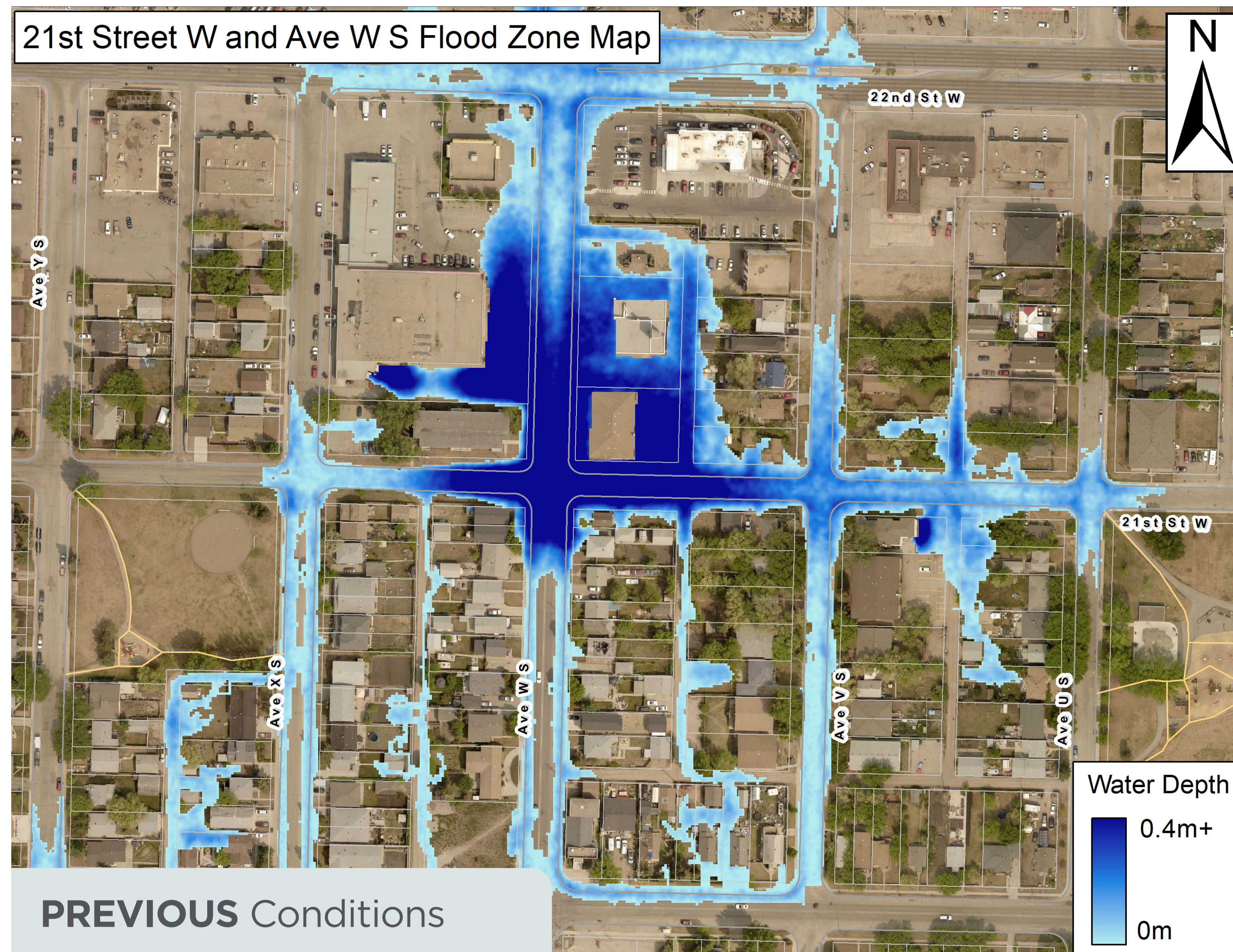


Rather than pooling on the streets and seeping into nearby basements, water will flow into the dry storm pond before it slowly drains into the storm water system and into the South Saskatchewan River.

Disclaimer: The flood map is for information purposes only and should not be taken as professional advice. The model generating the flood elevations shown on the map is based on a number of assumptions and variables. Actual flood conditions and ponding depths may vary depending on the amount, duration, intensity, and location of the rain event.

Cahill Park Area Flooding

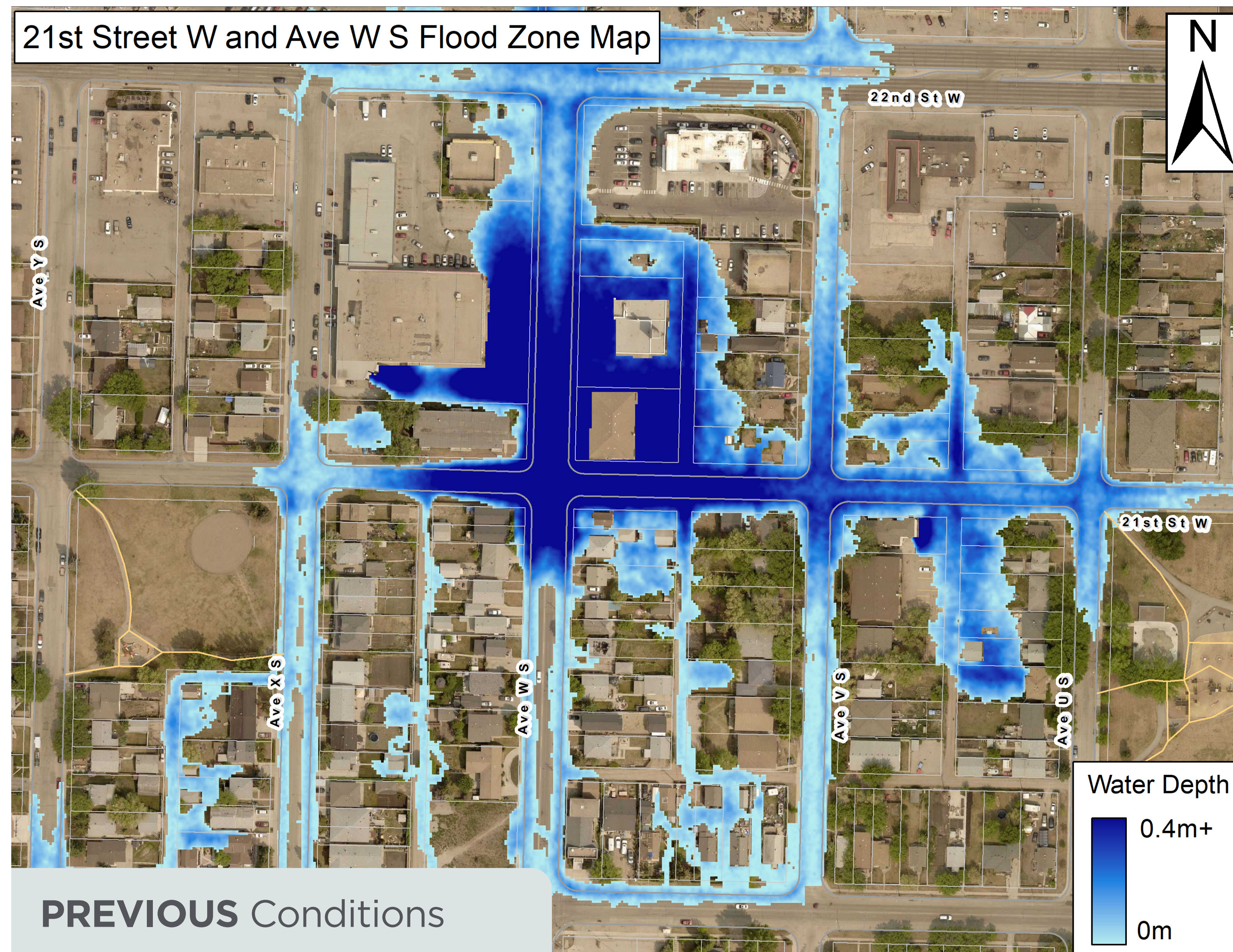
5-Year Storm



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Cahill Park Area Flooding 10-Year Storm

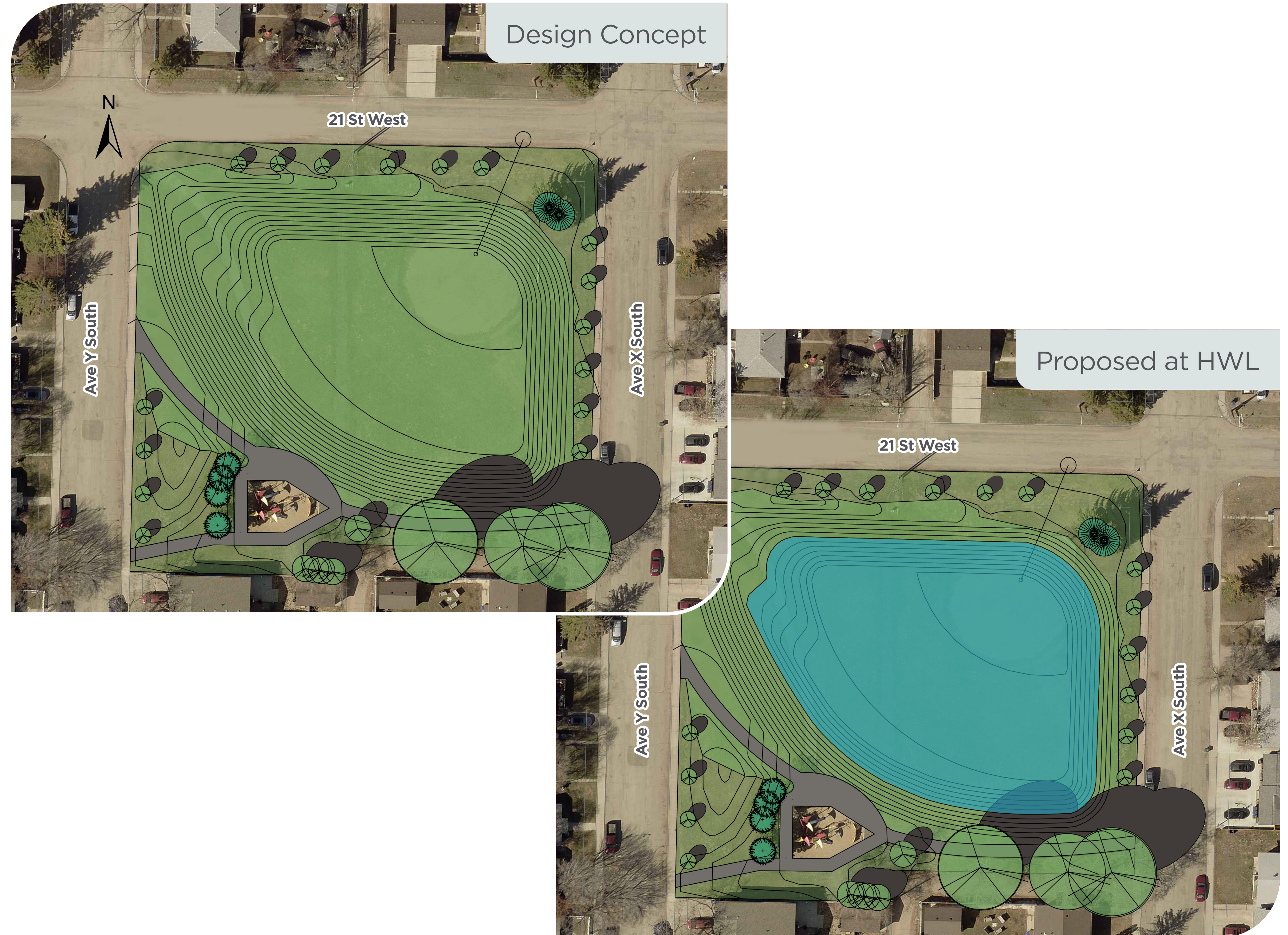


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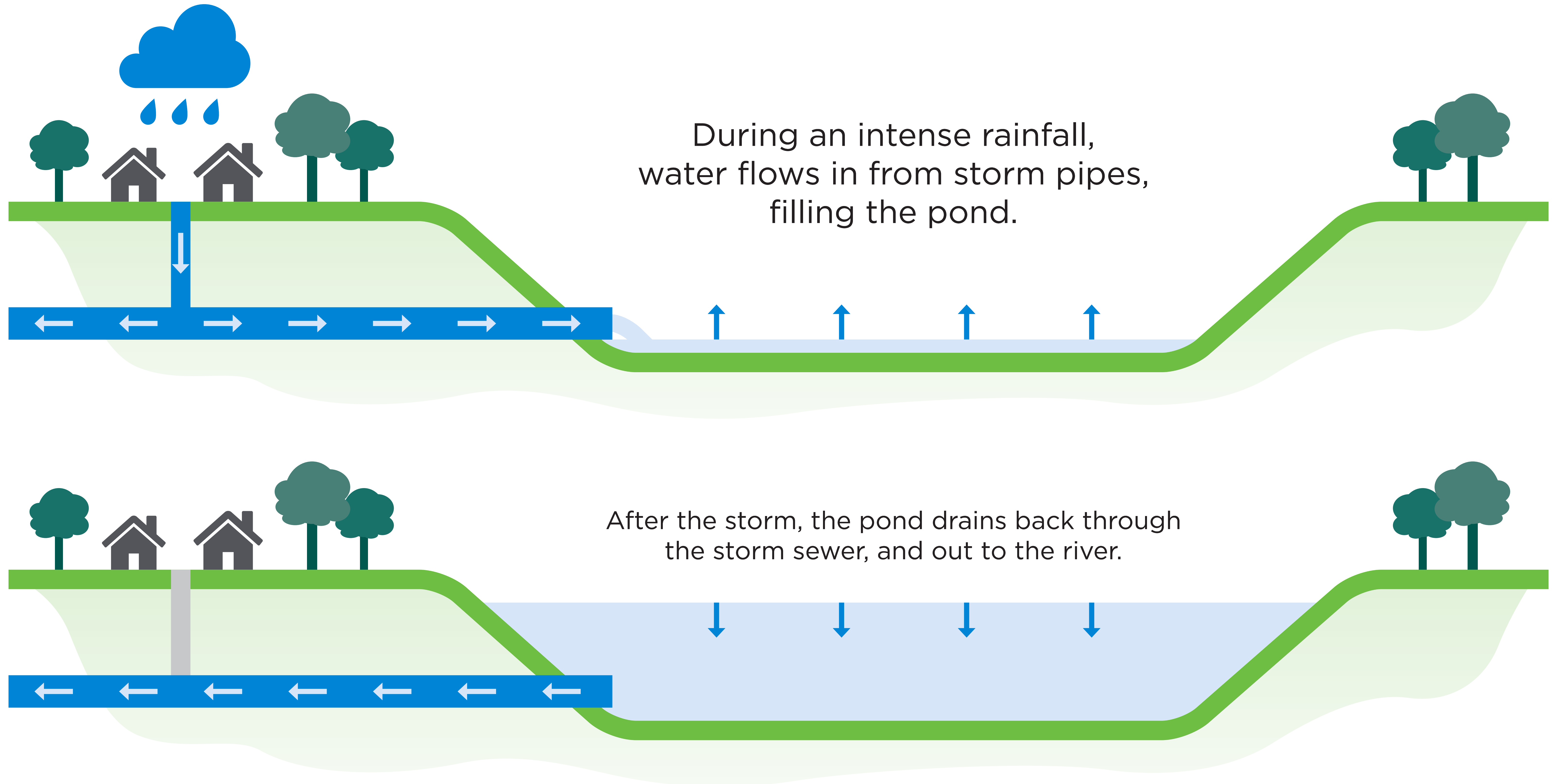
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Cahill Park Dry Storm Pond

- This project will reduce flooding near the intersection of 21st Street West and Avenue W South.
- Storm water will enter the pond through a pipe with a concrete structure in the northeast corner of the park, and drain through the same pipe once the storm is complete.
- At capacity, the pond will hold 2.0 metres of storm water (1-in-10 year rain event) and fill within 40 minutes.
- It will take approximately 4.5 hours to completely drain the pond following an intense rain event.
- The Cahill Park Dry Storm Pond will provide flood mitigation to approximately 10 nearby buildings which experience flooding during a 1-in-10 year storm event.
- When dry, the area will be enjoyed as park and recreational space.



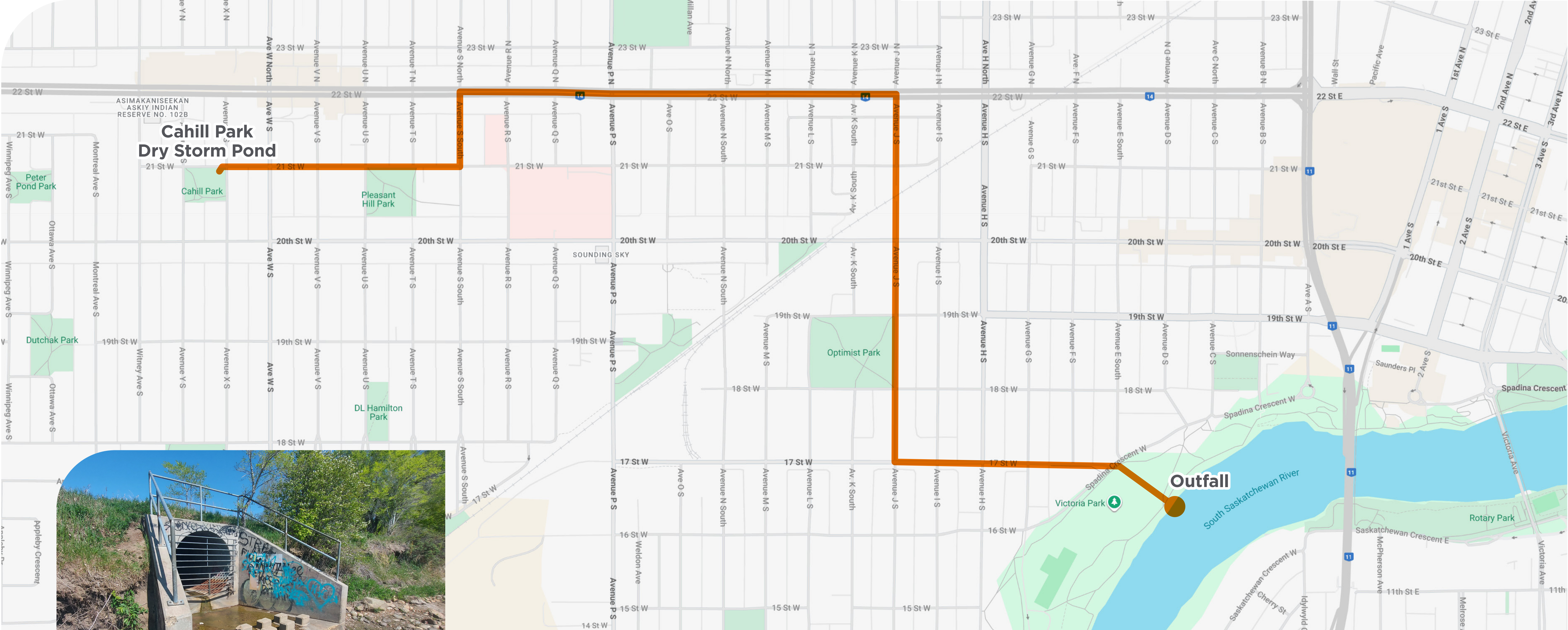
How Dry Storm Ponds Work



Project Timeline

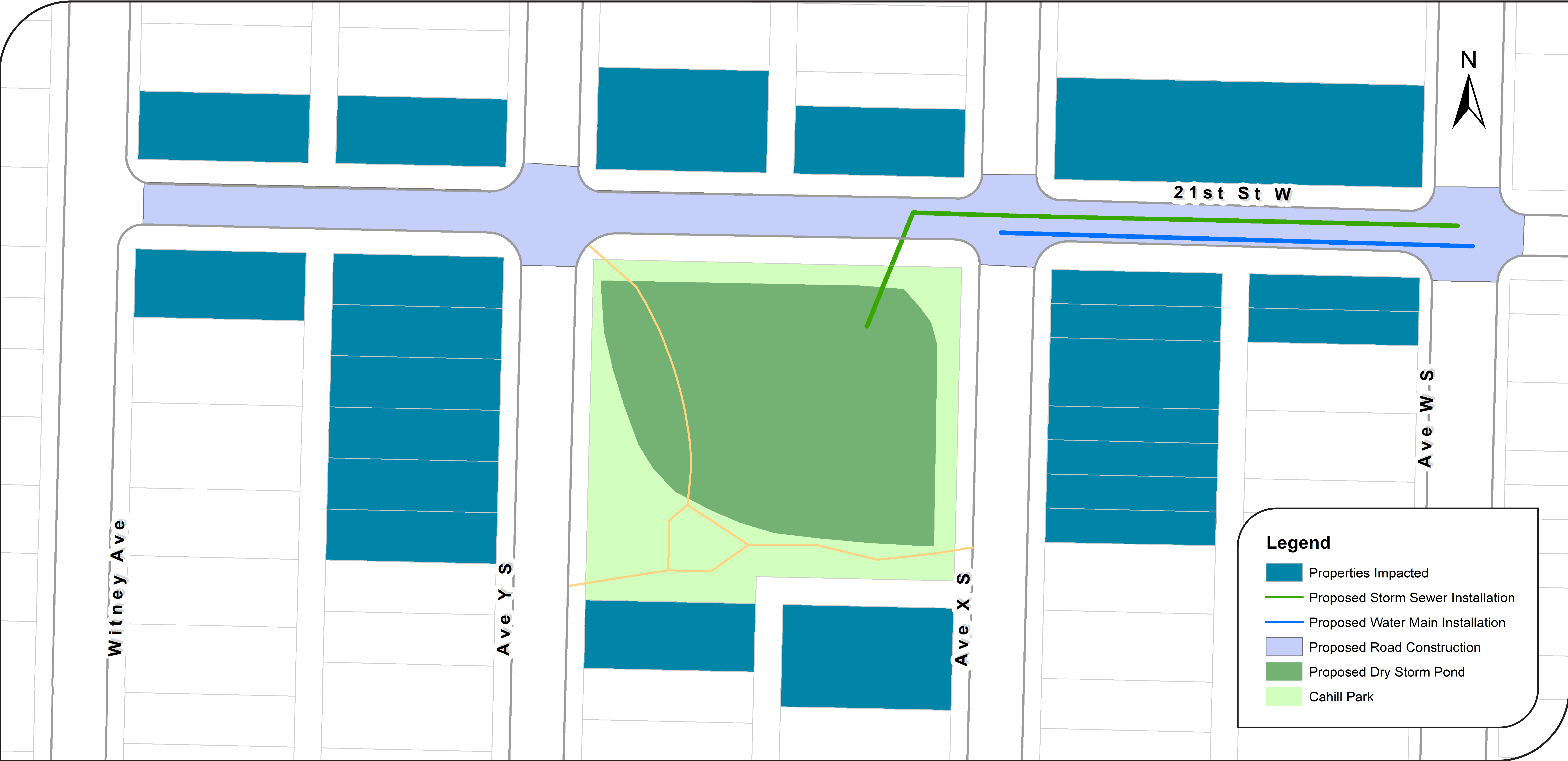
- July 2024 – April 2025 Feasibility Assessment
- April 2025 – May 2025..... Presentation to Community Associations
- June 2025 City Council approves Cahill Park Dry Storm Pond Project
- July 2025 – November 2025 Project design and presentation to neighbourhood
- February 2026 – April 2026 Pond excavation and shallow utilities relocation
- May 2026 – October 2026 Storm sewer construction and landscaping
- October 2026 New dry storm pond is substantially complete and functional but fenced off until Fall 2027 to allow landscaping to establish
- Fall 2027 Official opening of Cahill Park Dry Storm Pond and new park space

Storm Water Flows to the 17th Street Outfall



➤ Storm water that accumulates in the pond drains into the South Saskatchewan River.

Proposed Construction Footprint



Cahill Park Excavation Extents and Tree Removals

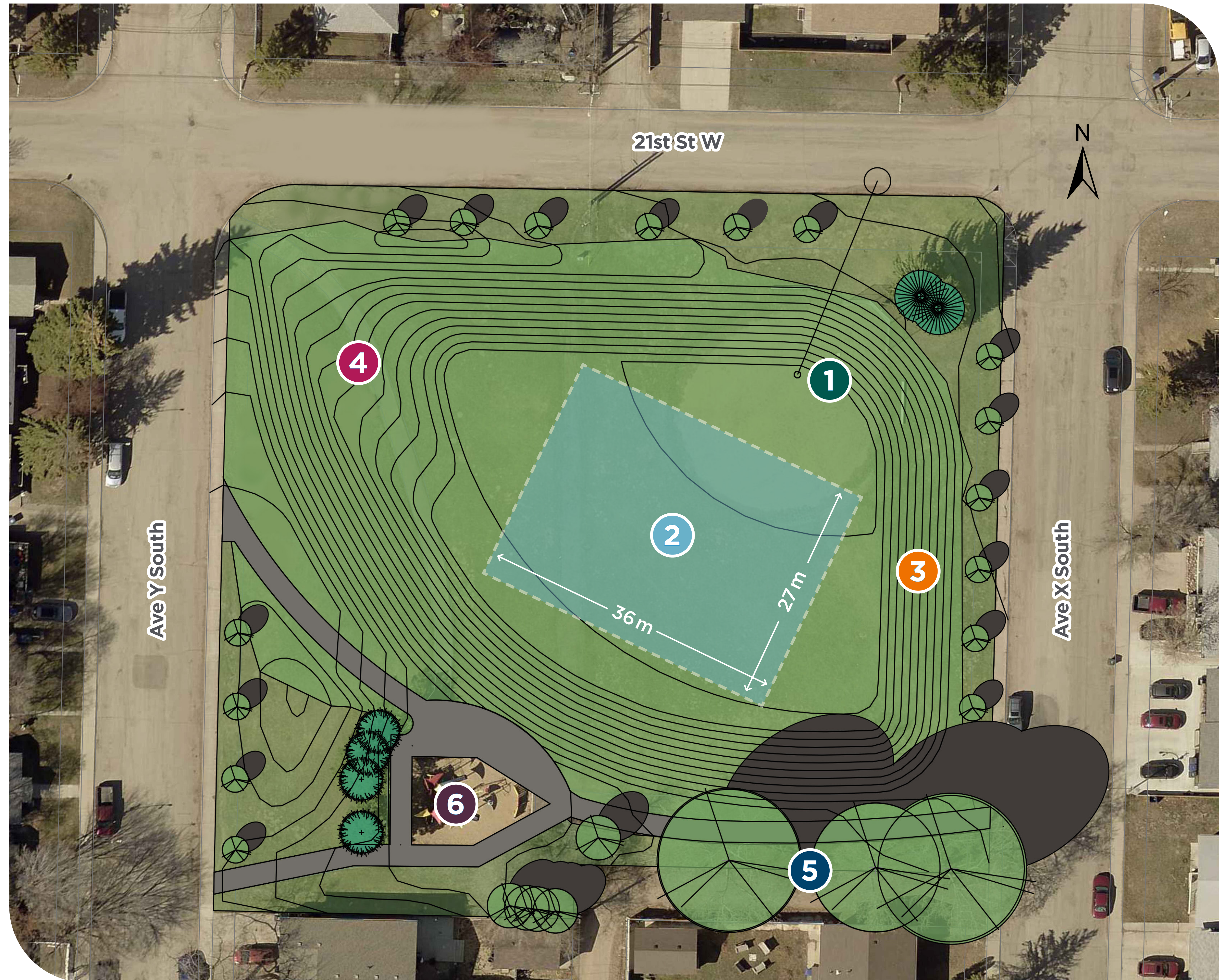
Legend

-  Limits of Excavation
-  Trees to be removed



Cahill Park Concept Design

- 1** Northeast inlet-outlet will include a concrete structure, similar to W.W. Ashley, Churchill, and Weaver Park projects.
- 2** A 36 m x 27 m multi-purpose field will be constructed in the bottom of the dry storm pond.
- 3** Pond will be constructed with 3.5:1 side slopes, depth of 3 to 4 metres.
- 4** Informal access will be provided to bottom of pond from the northwest end of the park through an 8% sloped grass pathway.
- 5** Proposed design will limit the number of trees to be removed. Mature trees will be prioritized to remain where possible considering pond capacity and park recreational use requirements. Tree replacement will be incorporated into the landscape design, with new planting locations still to be determined.
- 6** The existing playground area in the southwest end of the park will remain, with sightline improvements being planned to improve safety in the area.



Flood Control Strategy Past Success

The first project in the City's Flood Control Strategy, a dry storm pond in W.W. Ashley Park, successfully mitigated flooding when over 60 mm of rain fell over four hours on June 20, 2022, with a significant reduction of ponding water compared to a similar rain event in August 2017.

The Cahill Park project is designed to provide similar results of flood mitigation to the residents of Meadowgreen and Pleasant Hill.

Broadway Ave & Taylor St



Dufferin Ave & 1st St



Lansdowne Ave & 1st St

