

CITYSCAPE Storm Park

MATTAMY NORTHPOINT LTD. (2020 - PRESENT)

CALGARY, AB

"The Pond G system is a unique hybrid stormwater management approach that has been specifically designed to offer high quality reuse stormwater to support the large regional wetlands within Cityscape. A novel approach to water circulation and treatment was thoughtfully integrated into the existing stormwater management planning to create a high performing system and a community amenity."

Sahil Sharma, Stormwater Engineering Lead, MAGNA ENGINEERING SERVICES INC.

PROJECT CONTEXT

Mattamy Northpoint Ltd.'s Cityscape Stage 3 is a continuation of the ambitious family centric community of Cityscape. The Stage 3 area continued the development themes from previous stages, including the integration of existing alkaline wetlands as part of the community hub. Within Stage 3, Cityscape Pond G emerged as the opportunity stormwater management facility (SWMF) that could offer local stormwater management services while also offering supplementary feedwater to the existing wetland network. Pond G was envisioned as a constructed wetland through the planning process; however, MAGNA's novel approach to stormwater management led the team to consider 'Storm Park' principles which encouraged a greater integration between utility, environment, and placemaking.

MAGNA'S SOLUTION

MAGNA proposed an integrated and hybrid SWMF that utilized traditional pond design methods with innovative passive secondary treatment elements. This approach to detention and treatment offered increased water quality, suitable feed water to the regional wetland network, environmental reserve land use, and a net cost saving to the development. The design approach was a demonstration of creative problem solving that brought forward a unique and site-specific solution for Pond G.

Storm Parks provide multiple community services, including:

- Improved water treatment
- Biodiversity & habitat preservation
- Improved flood protection
- Community cultural ecosystem services

COMMUNITY OUTCOME

MAGNA successfully completed a pioneering project that addresses stormwater issues while enhancing the community's quality of life and biodiversity. This achievement establishes a benchmark for future stormwater endeavors in Calgary and was achieved through cooperation amongst the City of Calgary, Mattamy Northpoint Ltd., and local community organizations. Pond G serves as a great example of utilizing nature-based solutions to accomplish a long sought objective in the city of Calgary.

www.magnaengineering.ca