

## Carl Schenn Dry Pond Frequently Asked Questions

### **1. Will there always be water in the pond?**

No, the pond is designed to be a dry pond, meaning when the heavy rain stops, the water will drain away and the area will be useful for recreational activities similar to the Centennial Park dry pond/football field at the Uniplex.

### **2. Why is the pond needed?**

This area has been known to flood in localized areas during heavy rainfall events. This is primarily due to the storm sewer mains being overwhelmed which can't drain the water away fast enough causing surface flooding. In some situations, the water can raise high enough to damage properties. The dry pond would temporarily give the place for the water to go during a storm rather than the streets flooding severely.

### **3. Is this Humboldt's first dry pond? Does only Humboldt construct them?**

Humboldt's first and only dry pond was constructed at Centennial Park/Uniplex in 2016. Many municipalities are building dry ponds for storm water storage. A notable recently constructed dry pond is at the WW Ashley Park in Saskatoon.

### **4. How much will it cost? How is it funded?**

The budget for this project is approximately \$1,515,000. Funds have accumulated over several years from the Storm Flat/Base Fee in monthly utility bills.

### **5. What will happen to the playground?**

The playground structures will remain untouched. The north portion of the park is planned to be excavated to create the dry pond. Once completed, the excavated area will be landscaped and established back to useable park space.

### **6. Why isn't the pond somewhere else?**

The Carl Schenn park is well located to relieve the overwhelmed storm sewer in the area. Other locations were considered but were cost prohibitive and/or not owned by the City.

**7. Who benefits from the dry pond?**

The pond will relieve surface flooding for the Barnes Crescent, Dust Crescent and 12<sup>th</sup> Avenue storm mains.

**8. Will the dry pond fix flooding in all areas of the City?**

No, the Carl Schenn Dry pond is a localized storm water solution. Areas like 16<sup>th</sup> Street, 9<sup>th</sup> Avenue will require different solutions in the future.

**9. When is construction expected to begin and how long will it take?**

Anticipating a June 2023 start and will be substantially completed in the fall of 2023. However, this is dependent on the public consultation, final design, budget, tendering, awarding, contractor availability, material availability and weather.

**10. Will the area be big enough for soccer?**

The flatter graded bottom portion of the pond will be roughly 50m wide by 105m long, which can accommodate a single U13 sized (approximately 45m X 75m) or multiple smaller dimension U5, U7 and U9 fields.

**11. How much water will the dry pond hold?**

The pond is designed to hold up to a 100 year storm. In that event, the pond is anticipated to hold 7,000 m<sup>3</sup>.

**12. How deep will the dry pond be excavated?**

On average, the dry pond will be excavated approximately 2.5m (8ft 2") from the existing ground level.

**13. For Comparison, how deep is the Centennial Park/Unipex dry pond?**

Approximately 1.2m (4ft)

**14. How steep will the sides be?** 4:1 slopes all around the dry pond, 4 meters horizontal for every 1 meter vertical. To visualize, the slope is similar to the gradual ditch slopes of newer highways.

### 15. How deep will the water be in the pond?

Based on Computer Models:

Return Period	Rainfall in 1hr	Max Pond Depth		Average Adult Level	Height Relative	Drain Time
2-year	16mm	0.11m	0ft 4in	Ankle		2.5 hrs
5-year	28mm	0.38m	1ft 3in	Below Knee		5 hrs
25-year	46mm	0.75m	2ft 6in	Thigh		8 hrs
50-year	52mm	0.86m	2ft 10in	Below Hip		10 hrs
100-year	60mm	1.00m	3ft 4in	Hip		11.5 hrs

### 16. How do Engineers computer model storms? The City of Humboldt used the City of Saskatoon's historical rainfall data in specialized computer modelling software. Below are examples of storms modelled:

Specialized computer modelling is used to simulate heavy rainfall events. The model that was created used recent LiDAR data (millions of survey points across the City's surface elevations from an airplane) along with a detailed mapping of our pipe network including sizes, slopes, depths, and even material type.

### 17. Will there be a fence around the pond?

During construction yes, after construction there won't be a fence. The area will be open for public use. This is consistent practice as with other dry ponds being constructed.

### 18. Will the pond be a hazard in anyway?

The dry pond will be a grassed landscape and perform similar to other general open spaces in nice weather. When storms arrive, park users are expected to vacate the area as the pond may start to fill. Fortunately, the pond will start to fill gradually giving ample time to vacate. When the pond is filling, the water is not to be played in and patrons must wait until the water has subsided before being able to use the dry pond area again. Signs will be posted noting these risks. The gradual side slopes on all sides make for easy exit. All pipes flowing into the dry pond (outfalls) will have locking grates to prevent access to the pipes. The likelihood of an incident is exceptionally low compared to year-round lakes and ponds.

**19. How often will the pond have water in it?**

The pond will see water discharged to it whenever the stormwater mains that service the surrounding area are overwhelmed and surcharging. A small amount of ponding is expected in a 1 in 2 year rainfall (approximately 4" deep), but will be drained in under two (2) hours once the rain stops. Even in a 100 yr event (approximately 3 ft deep), the pond is expected to be fully drained in under 12 hours after rainfall ends.

**20. Will the pond help Barnes Crescent a lot?**

Significantly, the water which floods Barnes Crescent will be diverted to the Carl Schenn pond during a heavy rainfall event. The proposed improvements will see water ponding in the north end of Barnes Crescent maintained to just above the tops of the sidewalks (in a 100 year event) or lower, and the area cleared of standing water within minutes after rains subside.

**21. Will the dry pond help the flooding on 16th Street.**

The Carl Schenn Dry pond will divert significant water which would otherwise contribute to the 16<sup>th</sup> St and 9<sup>th</sup> Avenue flooding, however minimal benefits are anticipated to noticeably see a difference. Improvements for these areas have been modelled and may be implemented in the future.

**22. Will the park be wrecked?**

The construction will be disrupt the north area primarily as well as the pipe installations along the south west corner of the park. However a landscaping budget and plan have been created to restore and add some features to the park.

**23. Will trees be harmed?**

Acknowledging the importance of the established trees to the area, the dry pond is being constructed within the perimeter tree line that exists. However, some trees will need to be removed or transplanted for the construction. The landscape plan notes new trees to be planted. While the construction is underway, some of the existing trees may be removed or transplanted that are too close together to promote better tree growth.