

## **DRY PONDS COMMON QUESTIONS AND ANSWERS**

**Q1. Are dry ponds safe?**

- A. A number of factors make dry ponds as safe as possible:
1. The slopes are gentle, anywhere from 5-10 feet in horizontal length for every one foot of vertical drop.
  2. The depth is shallow, normally less than two metres.
  3. Dry ponds don't have water in them most of the time.
  4. Water that does collect in a dry pond drains very quickly, often within an hour or two of a heavy rainfall.
  5. Hazard signs warn of the safety risk when ponds are wet.
  6. Warning devices in the pond's drainage grates notify Drainage Services when it is filling with water. Staff can be dispatched as necessary to ensure the site is safe.

**Q2. Who will clean up the mess left by the water once it drains away?**

- A. City crews would come and clean up any debris left behind by flood waters.

**Q3. Will any recreation facilities or parkland be lost?**

- A. No. Anything that existed before can be replaced to its original or better than original status after the dry pond is built.

**Q4. Have the schools or community leagues approved this?**

- A. No, we are in discussions with them at the present time. Local residents and other stakeholders must approve the development of a dry pond in principle before Drainage Services will proceed.

**Q5. Are there other alternatives?**

- A. Yes very large underground pipes or a very large underground storage tank could be built. However, a dry pond would act more quickly and be more effective in collecting and holding excess stormwater. Also, other options would cost many more millions of dollars. Because of the cost, these options would take much longer to implement or may be delayed indefinitely.

**Q6. Why is a dry pond being considered for my neighbourhood?**

- A. Dry ponds are being recommended in some neighbourhoods because they have chronic street flooding problems in naturally depressed areas. A dry pond is the best way of collecting and holding this excess water and keeping it away from homes.

**Q7. How long does it take to build a dry pond?**

**A.** It can take anywhere from 3-6 months to build a dry pond, depending on the size.

**Q8. Are dry ponds common?**

**A.** Yes. Many cities have dry ponds. There are about 60 in Edmonton with most of these next to roadways. Some, like Regina, Red Deer and Calgary have dry ponds on school grounds. While dry ponds have not been placed on school grounds in Edmonton in the past, one was recently built at King's University College at 91 Avenue and 50 Street. It is used as a soccer pitch.

**Q9. Will the community have a say about how a dry pond in the neighbourhood will be built?**

**A.** Yes. Drainage Services will not build a dry pond in a residential area unless the community agrees to it. For dry ponds on school sites, Drainage Services would form a Dry Pond Advisory Committee composed of a cross-section of stakeholders to make sure design and construction is sensitive to the needs of local residents, schools and community leagues.

### What is a Dry Pond?

A dry pond is a drainage feature that can help reduce surface flooding. It is a man-made depression that captures stormwater runoff during a heavy rainfall. In some cases, it may also collect water from an underground stormwater pipe that has exceeded its capacity. Normally they are one to two metres deep. They can be any width or length. The pond is dry most of the time, hence the name ‘dry pond.’

A dry pond can be located on parkland, next to roadways or on recreation or school fields. Once constructed, the entire site is fully landscaped to blend into local surroundings. When dry, a pond can be used for sport, recreation or leisure purposes.

### How does it Work?

Water collected in a dry pond during a rainstorm is held there until stormwater pipes are able to drain it away. This can take anywhere from one to six hours after a heavy rainfall. This is done by gravity via drains built into the bottom of the pond.

A dry pond is built to minimize safety risk. The sides are gently sloped, it is kept relatively shallow and signs warn of any potential water hazard. Recreation fields are graded so stormwater pools in the corners and along the sides first. This helps keep fields dry and drains them more quickly when they do become flooded.

### Who has Dry Ponds?

Dry ponds are a common drainage feature in many cities. There are about 60 dry ponds in Edmonton with most of these next to roadways. Some, like Regina, Red Deer and Calgary have located dry ponds on school grounds. While dry ponds have not been placed on school grounds in Edmonton in the past, one was recently built at King’s University College at 91 Avenue and 50 Street. It is used as a soccer pitch.

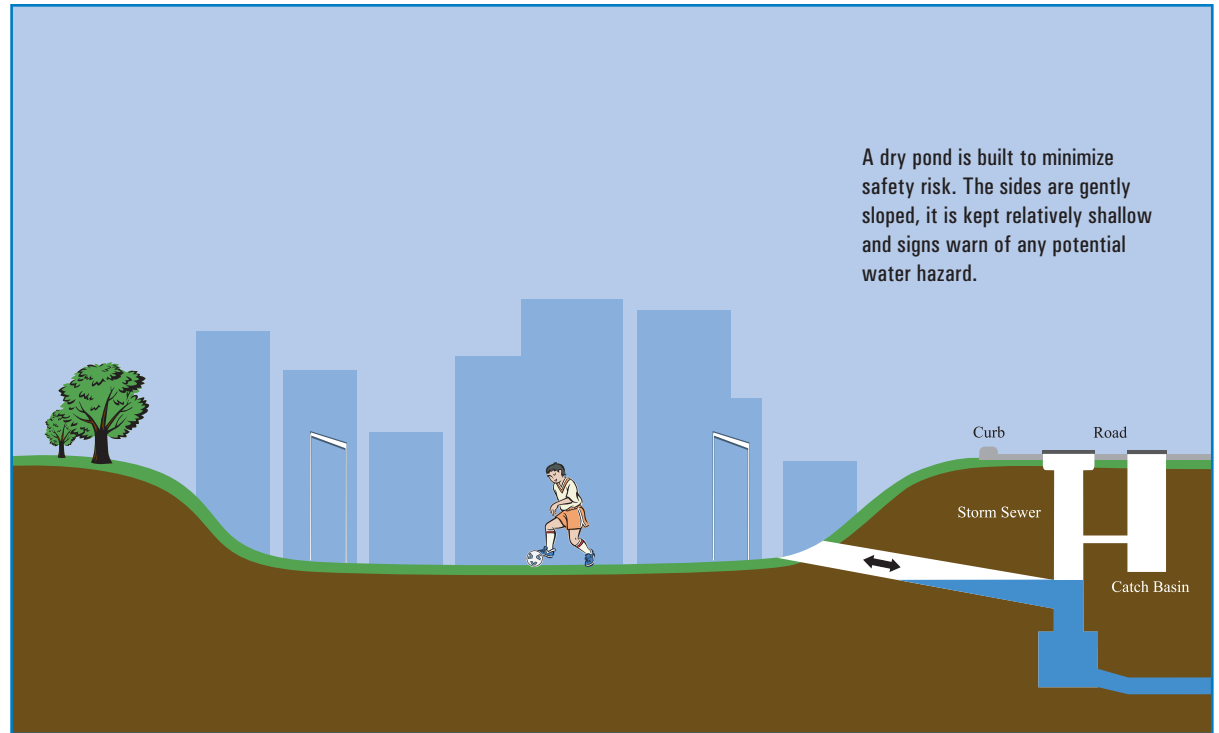
Drainage Services has investigated dry ponds in other cities to fully assess their safety and effectiveness. Consultation is continuing with residents, parkland staff, school administrators and others regarding the potential installation of dry ponds.



# HOW DRY PONDS WORK

## BEFORE HEAVY RAINFALL

A dry pond can be located on parkland, next to roadways or on recreation or school fields. Once constructed, the entire site is fully landscaped to blend into local surroundings. When dry, a pond can be used for sport, recreation or leisure purposes.



## AFTER HEAVY RAINFALL

A dry pond captures stormwater runoff during a heavy rainfall. In some cases, a dry pond may also collect water from an underground stormwater pipe that has exceeded its capacity.

