

Elmwood Dry Pond and Sanitary Upgrades



Project Background

A Flood Reduction Strategy the City of Edmonton performed in 2006 identified the need for sanitary and stormwater sewer upgrades in west Edmonton. Two upgrades have already been constructed in the Elmwood neighbourhood, including a sanitary sewer drop manhole at 161 Street and 87 Avenue, and a new storm sewer that extends south along 159 Street from 80 Avenue to Whitemud Drive.

In addition to the above improvements, storm and sanitary sewer upgrading projects are proposed for the Elmwood neighbourhood. The stormwater upgrading includes a new stormwater dry pond in the City owned green space located south and west of 80 Avenue and 162 Street.

The sanitary sewer upgrading includes increasing sewer capacity along:

- 80 Avenue from 161 Street to 159 Street
- 83 Avenue from 160 Street to 159 Street
- 159 Street from 80 Avenue to 87 Avenue
- 162 Street from 82 Avenue to 83 Avenue
- 164 Street from 83 Avenue to 87 Avenue

Proposed Dry Pond Project Benefits

The proposed dry pond will reduce the depth of the water that pools in the lane east of 163 Street between 79A Avenue and 80 Avenue during a major rainfall and the risk of flooding to neighbouring homes.

The proposed dry pond project includes a modified curb at the intersection of 80 Avenue and 162 Street, a shallow ditch to the dry pond, and piping to the local stormwater sewer. During major storm events, excess stormwater will flow from the intersection to the dry pond via the swale, and then drain out into the

stormwater sewer within a few hours after the storm event. It is expected this will reduce street ponding in the lane south and west of the existing green space to less than 0.35m.

Proposed Sanitary Sewer Project Benefits

The sanitary upgrades will reduce surcharging in the sanitary sewer system, reducing the risk of sanitary sewer backup into area basements.

The sanitary sewer upgrades include twinning or replacement of existing sanitary sewer pipes to increase the capacity of the sewer system.

Project Timeline

March 2016 – Public Input

June 2016 – Engineering Completion

Fall 2016 – Fall 2017 – Construction

For More Information

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Frequently Asked Questions

General

Q: What was the process to determine the design options?

A: The project team conducted several reviews that included engagement with internal and external stakeholders to validate these proposed designs.

Q: What will be the impacts to traffic in the area of the proposed upgrades?

A: Some road and lane closures will be required during construction. Updates will be provided at a public information session to be held in the community prior to construction.

Q: When is construction scheduled to occur?

A: Dry pond construction is scheduled for the spring to summer of 2017.

Sewer construction at the intersection of 164 Street/ 87 Avenue and 159 Street/87 Avenue is scheduled for Fall 2016 to Winter 2017.

Q: Will there be notifications to residents about road closures?

A: A public information session will be held prior to construction to inform residents about updated construction schedules and road closures.

During construction, the contractor will notify residents of any upcoming disruptions to services and local roadways.

Q: What are the next steps?

A: Utilities Infrastructure will review the community's comments and incorporate them in the final decision on the dry pond project, including potential design modifications. A second public information session will be arranged prior to construction that will include construction timelines and impacts.

Dry Pond Upgrade

Q: Why is the dry pond located where it is?

A: Previous investigations indicate that significant pooling of water can occur within the adjacent lane.

The proposed dry pond location was determined to be the most economically feasible option to reduce flooding at this location.

Q: I'm concerned about the impact this project will have on the greenspace. Is there an option not to build the dry pond?

A: The City is committed to reducing flood risk in flood prone areas. However, the City will seriously consider the concerns and comments of affected residents before making a final decision about construction and design.

Q: Are there options in terms of how the dry pond is constructed?

A: Yes, that is why the City is seeking community input before proceeding. In addition, every effort will be made to return facilities or parkland to their original or better than original status after the dry pond is built.

Q: Will any trees be removed as part of construction?

A: No, the current plan includes protecting the existing trees.

Q: Is there anything that can be done to improve the aesthetic appearance of the dry pond?

A: Amenities may be added to enhance the appearance of the pond, subject to budget considerations. These could include features like park benches.

Q: Are dry ponds safe?

A. A number of factors make dry ponds as safe as possible:

1. The slopes are gentle, anywhere from 5 feet in horizontal length for every one foot of vertical drop.
2. The depth is shallow, normally less than two metres.
3. Dry ponds do not have water in them most of the time.
4. Water that does collect in a dry pond drains away very quickly, often within an hour or two of a heavy rainfall.
5. Hazard signs warn of the safety risk when ponds are wet.

Q: How frequent will the pond fill? How long will it take for the pond to fill/drain?

A: Water will accumulate in the pond only during larger, less frequent storm events. The pond has been designed to meet a 1:100 year standard where it will take about one hour to fill to capacity and 2 hours to drain.

Q. Who will clean up any debris left by the water once it drains away?

A. City crews remove any debris left behind by flood waters.

Q: What activities can occur within the dry pond? Will the slopes be too steep to make it useful for recreation?

A: The proposed side slopes are gentle enough to accommodate City maintenance equipment and should not affect recreational activities. There are no specific regulations on what is allowed within a dry pond in terms of recreational activities.

Sanitary Sewer Upgrades

Q: Why are the sanitary sewer upgrades necessary?

A: The sanitary upgrades are required to reduce surcharging in the sewer system and to reduce risk of basement backup.

Q: Is there any capacity in the sewer system for future development (i.e. infill housing or more multifamily housing)?

A: Although it is not the objective of the project to increase sewer capacity for intensification, there will be increased capacity for some infill development.

Q: What can homeowners do to reduce their risk of flooding?

A: There are numerous ways a homeowner can minimize their risk of flooding. These include, but are not limited to:

- The installation of a backwater valve
- Ensuring appropriate lot grading
- Ensuring timely maintenance of eaves troughs

Q: Will there be any water and sewer restrictions during construction?

A: One part of the preliminary design is to identify potential impacts on water and sewer servicing during construction and methods to avoid service interruptions.

This will be communicated at the pre-construction public information session.