

**Duggan Dry Pond and Storm Sewer Improvements
Public Information Session #1
Held May 30, 2013 at Duggan Elementary School**

Attendance: 24

Presenters:

- Harry Abbink, Flood Prevention Program Manager, Drainage Services
- David Yue, Principal, Sameng Inc.

Councillor Don Iveson was in attendance.

Presentation

The following is a brief summary of the topics covered in the presentation. The full presentation is available at www.edmonton.ca/floodprevention (click on Public Consultations).

- The Duggan area experienced major flooding (surface flooding and sanitary sewer backup) in July 2004 due to a severe rainfall event.
- The Duggan flood prevention project was established through a study conducted in 2008. It underwent concept design in 2012. In October 2012, Sameng Inc. was contracted to provide engineering services for the project.
- Various improvement options were considered at Concept Design and the construction of a dry pond at Charles Anderson Park with sewer improvements was the most cost effective option.
- At this stage of preliminary design, the improvement recommendations are:
 - Dry Pond at Charles Anderson Park (3 to 4 metres deep)
 - Installation of storm sewer relief pipes at:
 - 105 St. from 36 Ave. to 37 Ave. with inlet southwest of the pond.
 - 104 St. from 39A Ave. to the pond via an existing pathway with inlet to the northeast of the pond.
 - 40 Ave. from 103B St. to 105 St. and along 105 St. from 40 Ave. to 38 Ave. with an inlet/outlet west of the pond.
 - Catchbasin Improvements
 - Sanitary Manhole Sealing
- Three landscaping design options for the dry pond were presented to the public:
 - Passive Park: Open play area with grass - similar to existing conditions
 - Informal Recreation: informal soccer play area, disc golf course, fitness equipment
 - Naturalized Landscape: bio-retention area, native grasses, open play area, sliding area
- The benefit of these improvements is a reduction of surface ponding, reduced likelihood of sanitary backups and basement floods, and less property damage.
- The project is currently at preliminary design. Construction is proposed to start in Spring 2014 with construction completion in Fall 2014. Final commissioning is anticipated in September 2015. A second public information session will take place prior to construction.
- Several recommendations to homeowners were presented with the objective to further protect the homes from flooding.

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- At the end of the presentation, the public was invited to ask questions (see below for Comments and Feedback). The public was then invited to review presentation boards that were displayed around the room, and to fill out the feedback form.

Feedback Form Summary

In the feedback form, the residents were asked to indicate their preferred dry pond landscaping option and any other recommendations that should be integrated in its design. 11 of the 17 respondents (65%) would prefer seeing a naturalized landscape for Charles Anderson Park, with 6 respondents (35%) preferring the informal recreation option. None of the respondents preferred the passive park option.

Comments and Feedback

The following is a brief summary of the questions, comments and feedback from the public, as well as answers provided by the City:

- A resident inquired about the depth of the pond and its level of flood protection. Another resident asked how fast the pond would fill up and empty; the resident has young children playing in the park and wants to ensure that the child has enough time to escape the pond if it was to fill up with water.

The pond excavation depth from the existing road surface will be 3.0 to 4.0m. The pond and storm sewer upgrades will be designed and constructed to provide a minimum 1:100 year level of flood protection for both the storm and sanitary sewer systems in the area. The projected pond water depth, fill rate, and duration of storage in the pond are:

<u>Rain Event</u>	<u>Max. Water Depth</u>	<u>Max. Fill Rate</u>	<u>Time to Fill Up</u>	<u>Total Storage Time</u>
1:2 year	0.2 m	0.1 m ³ /s - 1 cm/min	0.5 hours	5 hours
1:5 year	0.6 m	1.1 m ³ /s - 2 cm/min	1.0 hour	6 hours
1:10 year	1.6 m	2.7 m ³ /s - 4 cm/min	1.5 hours	8 hours
1:100 year	2.5 m	6.1 m ³ /s - 8 cm/min	2.0 hours	9 hours

- A general discussion took place regarding a concern of groundwater or surface runoff collecting in low lying areas at the back of lots between 104 St - 103B St, north of 39 Ave. The residents sometimes have to pump this water to the street. They asked if the City will do something about this drainage concern. Through back and forth discussion, the main answer is that the City is limited to construction in the public right of ways, and drainage concerns on private property cannot be addressed with this project. It would be beneficial to discuss lot grading concerns with the appropriate City department to see how the City could help.
- A resident asked if the community had any input for the dry pond and park landscaping design or did the design team come up with their own ideas. At this point, the design options are developed by the consultant with the City parks and recreation department providing input in regards to existing trees, maintenance, etc. We consider the layout of the pond to try and preserve as much of the existing trees as possible. This meeting is the first chance for the community to provide their comments and opinions.
- A resident mentioned that bike lanes will soon be constructed on 106 St. and asked if there is any way that this could be delayed until after the drainage construction vehicles have left this area to help create less of a traffic jam for entering and exiting the neighborhood. The City will check what the plans are for the bike lanes.

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- The same resident addressed concerns about the noise and traffic that will be created by the construction and pond excavation. The City indicated that when we hire a contractor we have certain standards that we expect them to follow.
- A resident asked about what will be done to the existing road that will need to be excavated and that just received a four inch asphalt lift last year. The asphalt covers the gutters on the side of the road and there are a few areas where drainage is not adequate. Are those areas going to be redone to match that grade? The City mentioned that the current plan is for the excavated areas to be repaved to match the existing grade. The same resident commented that the existing grade doesn't work because there is no gutter left because of how they paved last year. The City and design team will review what can be done to address this concern.
- A resident asked for clarifications on what the pond will look like as the park isn't very big to start with. The City mentioned that deeper dry ponds have been built in similar sized parks, and with landscaping and gentle slopes of about 5:1, the ponds can resemble natural terrain. In some cases, if a sports field is built the pond takes on a more defined shape to accommodate the field.
- A resident asked how far from the existing adjacent roads the pond would start to drop. It will be about 15m to the first drop from the road on 37 Ave. and about 1 to 3 metres from the edge of 105 St. to the start of the slope.
- A resident asked what percentage of the current trees would be removed. The City is trying to keep most of the trees around the edges and some of the trees will be relocated within the park. The current plan is to remove about 3 trees, and relocating about 13 to 16. The City also has a policy that if we have to replace a tree, we will have to replace it with one of equal or greater value.