



Update on the July 2012 Flooding

Southwest Edmonton
Community Consultation

May 9, 2013

Today's Meeting

1. Share additional information on engineering findings concerning last July's storm
2. Discuss various options under consideration regarding flood improvement projects for this area
3. Discuss the benefits and impact of these various options, and the general timing
4. Outline next steps
5. Answer questions/get your input and feedback

After Today's Meeting

1. Summarize and share meeting input
2. Consider community input in work ahead
3. Report on progress and keep you informed
4. Return to the community to present recommendations and get your feedback

Please hold questions until after presentation

How did we get here?

- Major flooding occurred in July 2012
- Flood prevention becomes City's top priority
- Commitment to reduce flood risk and improve public awareness on drainage issues
- At risk neighbourhoods in Mill Woods & southwest Edmonton identified

July 2012 Storms

- 4 extreme storm events: localized, intense, short duration

Date	Rainfall	Duration	Area	Category
July 12	50 mm	90 minutes	south Edmonton	E6
July 14-15	85 to 105 mm	30 hour	southeast and west Edmonton	E3
July 17-18	30 mm	30 minutes	south Edmonton	E5
July 23	20 to 25 mm	30 minutes	south and west Edmonton	E5

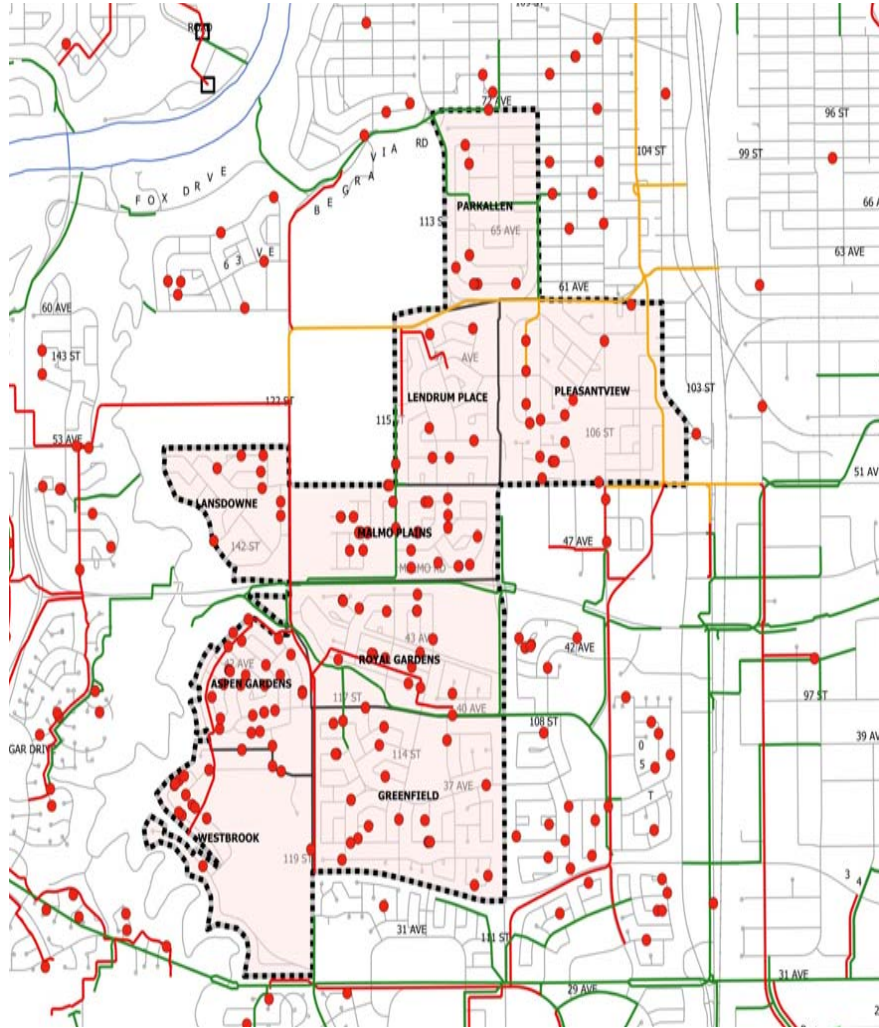
- Area south and west of the city received as much as 240 mm of rain, compared to 90 mm historical total average for July
- The July 12 storm resulted in more than 2.4 million cubic metres of rainfall in the area (2 ½ Commonwealth Stadium)
- 5,700 total calls received by 311 and 1,200 reported flooded basements in the City

What has been our Plan of Action?

Action plan with four key goals:

- Find the main causes of the July 2012 flooding
- Review any previously constructed and proposed upgrades in the on-going 2006 Flood Prevention Program
- Develop viable solutions and obtain funding from City Council to reduce the risk of flooding in the future
- Engage and work with the affected communities to implement the solutions

July 2012 Reported Flooded Basements



Southwest Communities

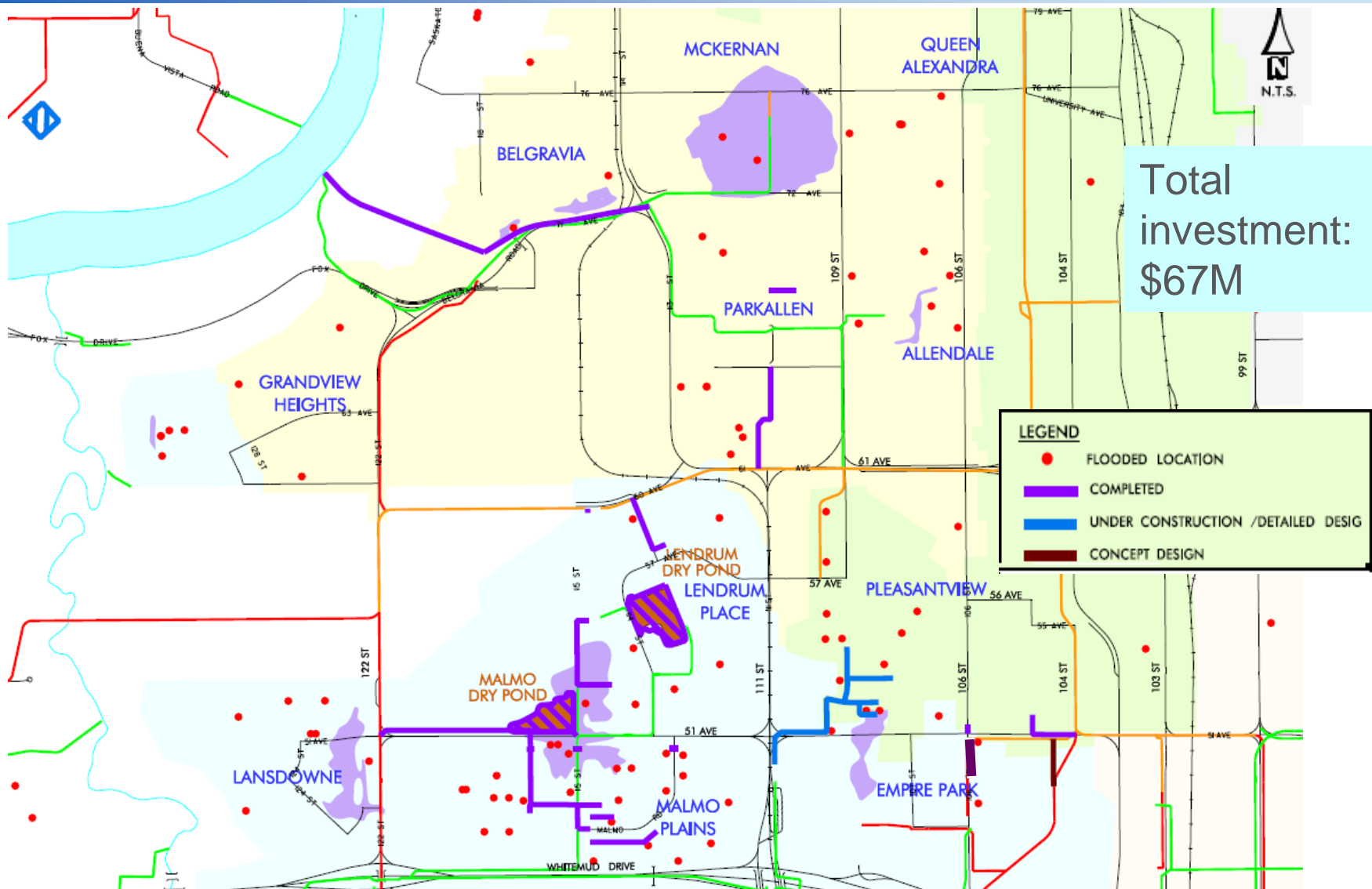
- July 12 storm was unusually severe
- 200 reported flooded basements
- 37% was due to sewer backup
- 60 % was by on-lot sources
- 3 homes were flooded from surface runoff near the Derrick Golf Course

What Contributed to the Flooding?

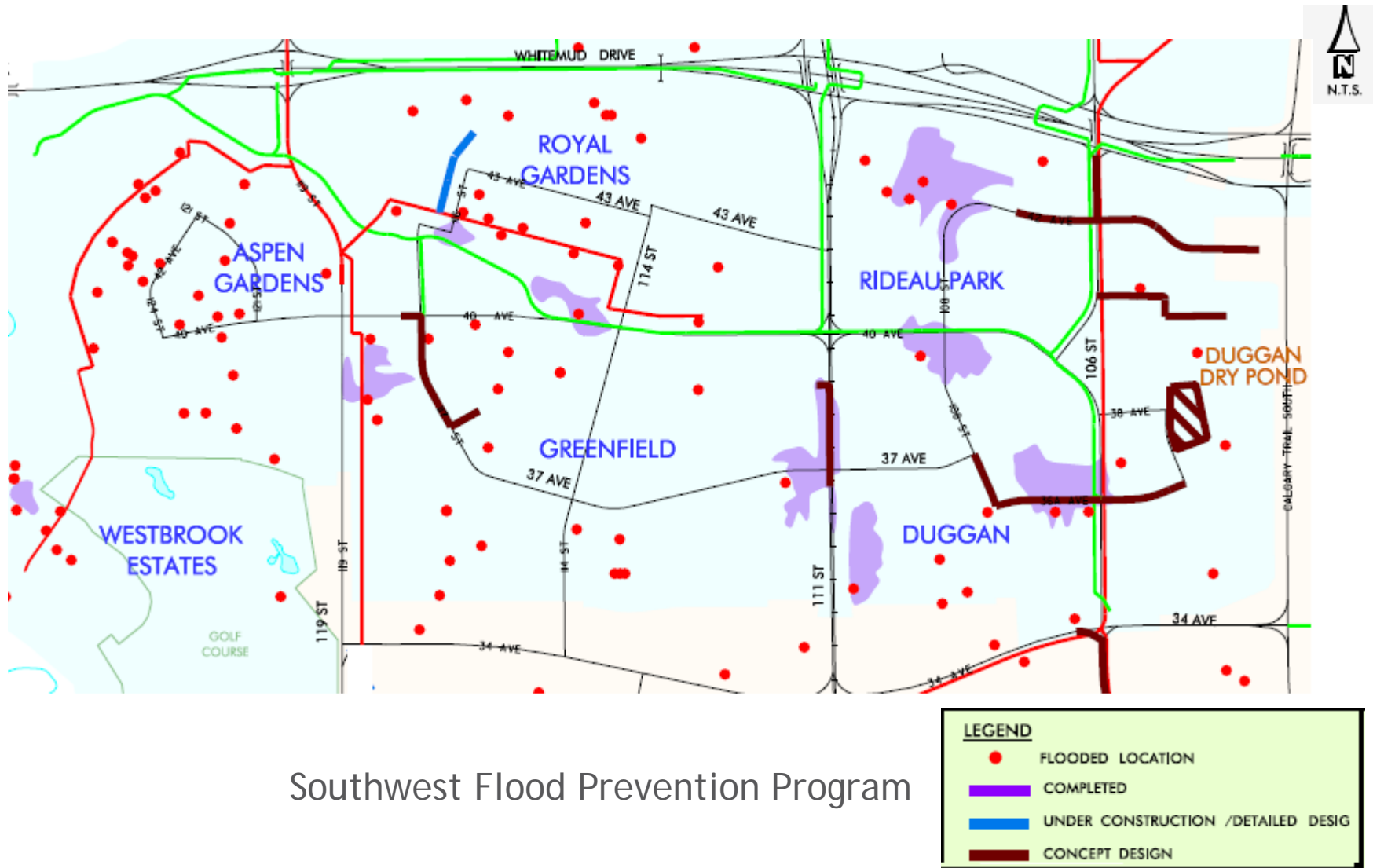
- Water flow exceeded capacity of storm sewer systems
- Surface flooding in trapped low areas inundated the sanitary system, causing sanitary sewer lines to be filled beyond capacity
- Plugging of catch basins with hail and debris
- Lot grading issues and missing downspout extensions
- Malfunction of backwater valves
- Extra flows from weeping tiles



What has been done in Southwest?

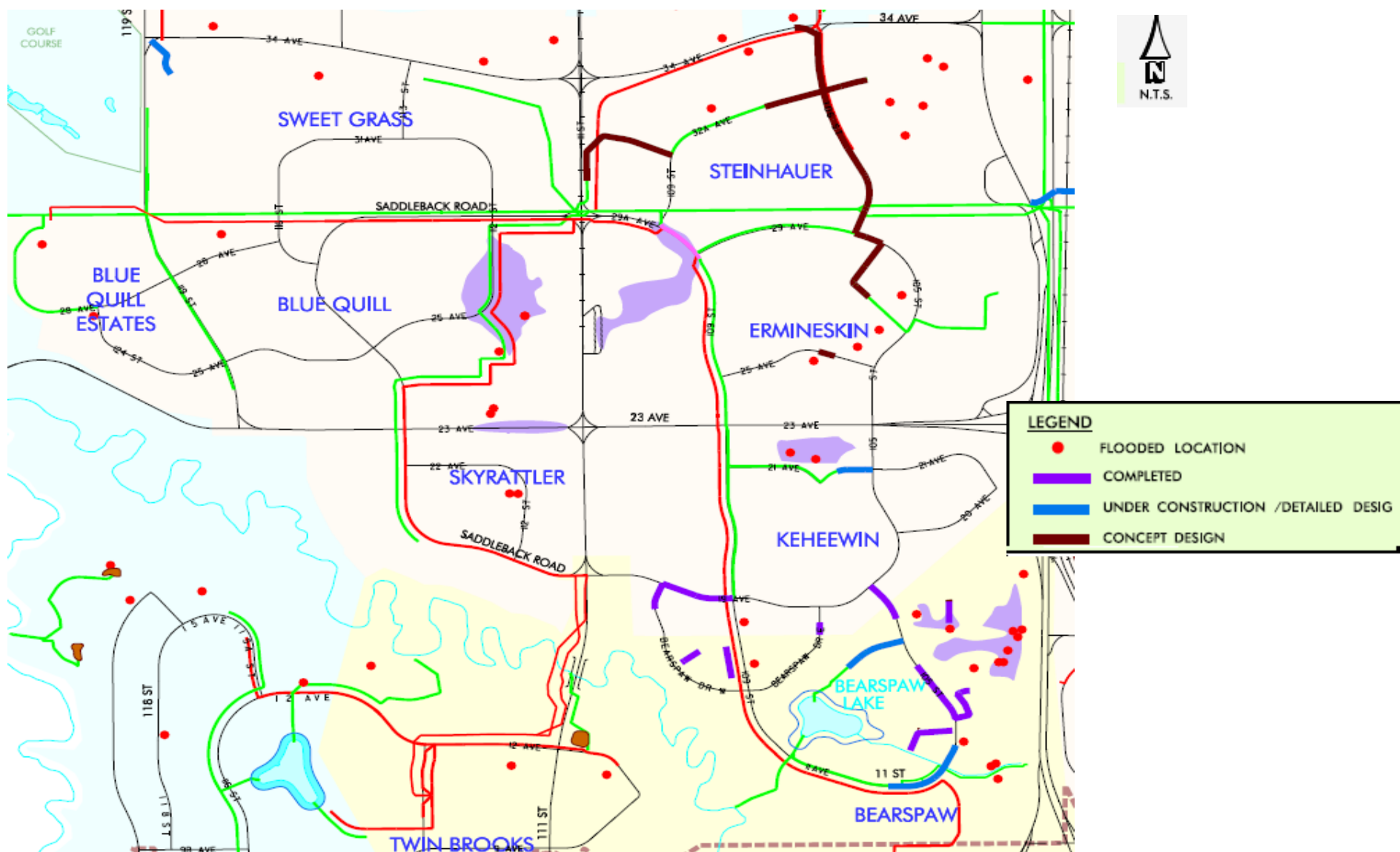


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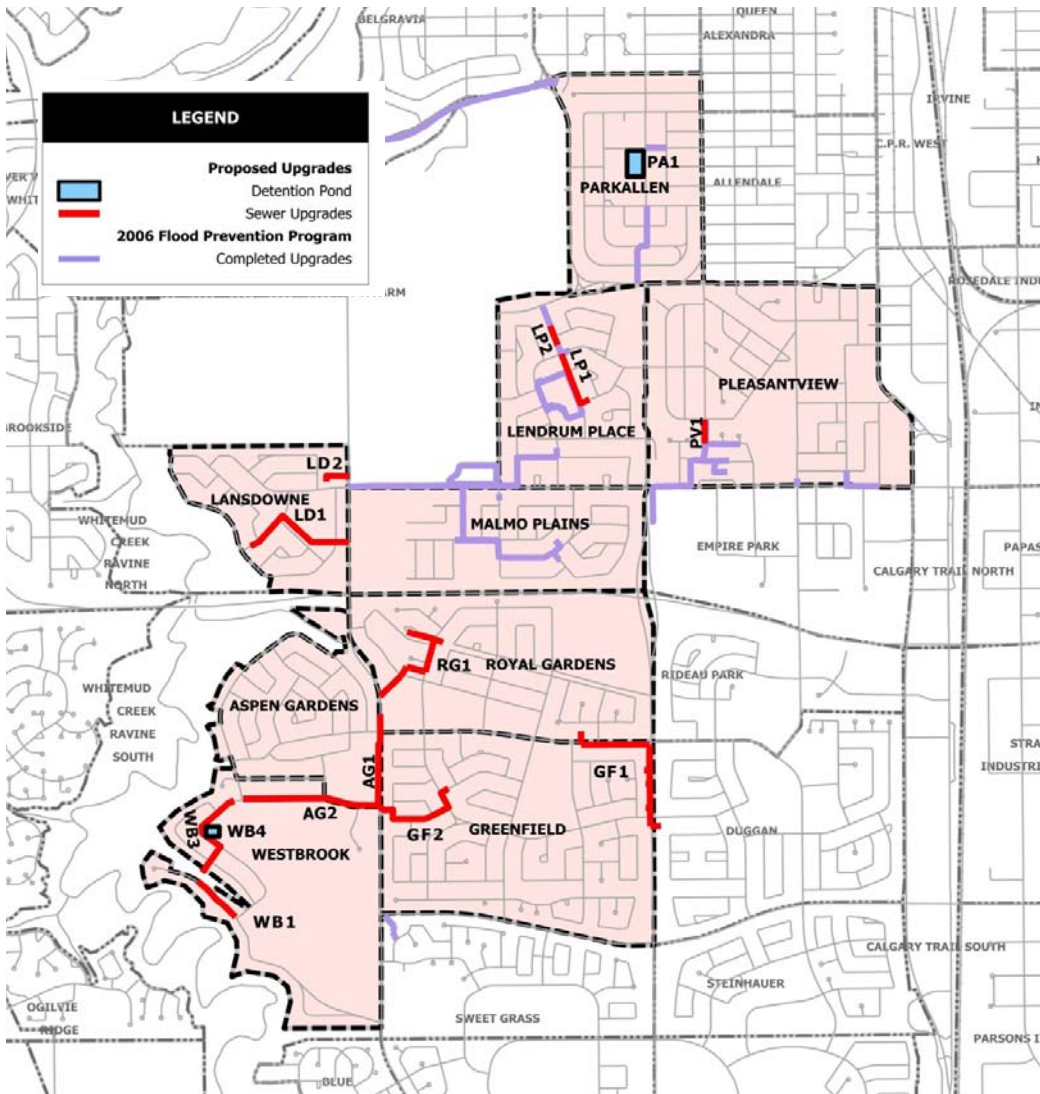


Southwest Flood Prevention Program

What has been done in Southwest?

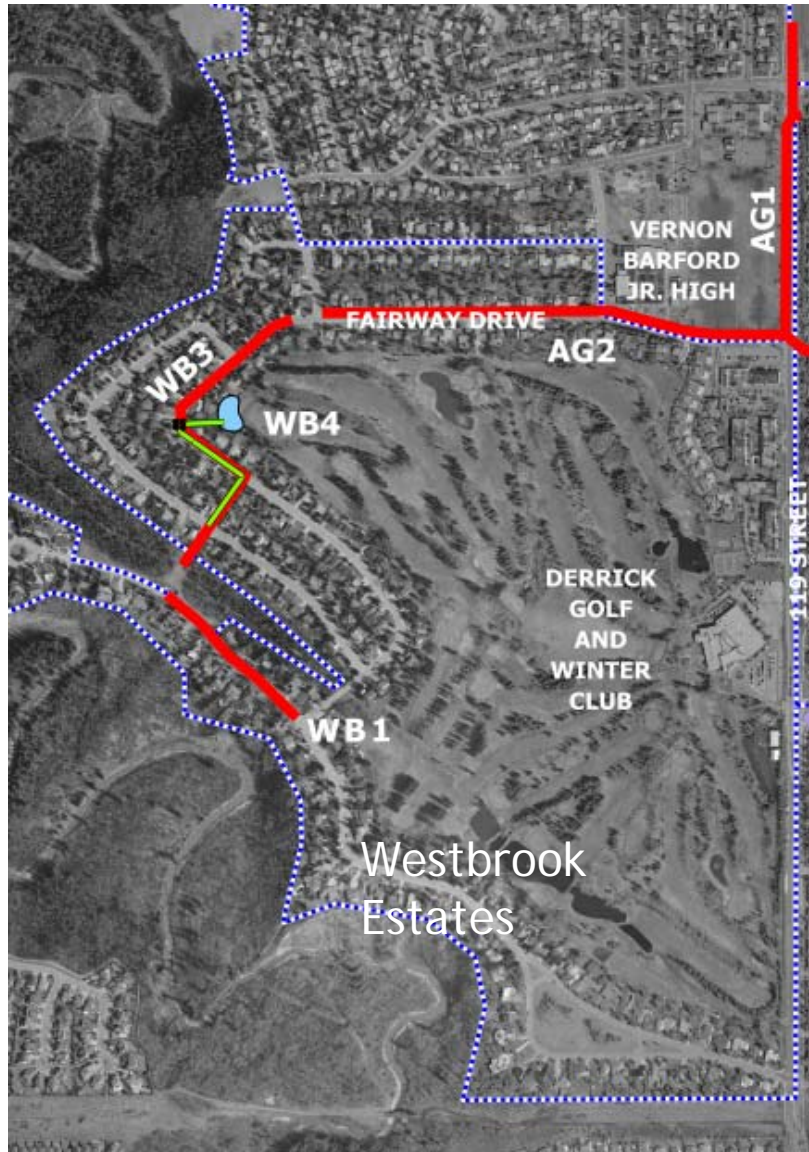


Preliminary System Upgrades



- New sanitary sewer upgrades in Greenfield, Westbrook, Royal Gardens, Aspen Gardens, Lansdowne, Lendrum Place and Pleasantview
- Dry pond in Parkallen at Ellingson Park to relieve the local combined sewers
- Storage pond at the Derrick Golf Course

Upgrades in Westbrook Estates



Sanitary sewers, Pond
and storm sewers
benefit homes in
Westbrook Estates

LEGEND	
	Completed Sanitary Sewer
	Proposed Sanitary Sewer
	Proposed Pond
	Proposed Storm Sewer

Sanitary Upgrade in Aspen Gardens

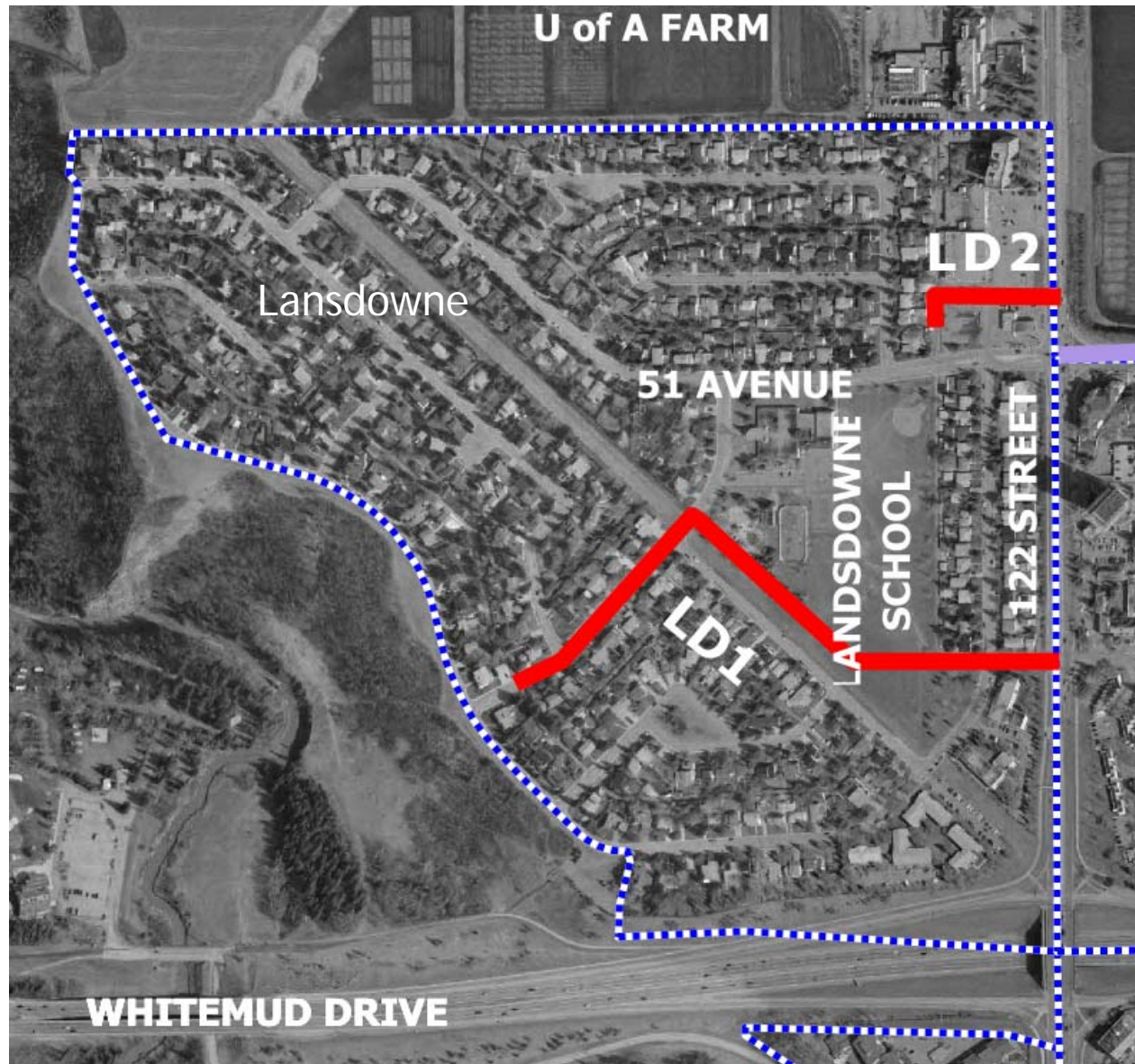


Benefit homes in
Aspen Gardens,
Greenfield and
Sweet Grass

LEGEND



— Proposed Sanitary Sewer

Sanitary Upgrades in Lansdowne



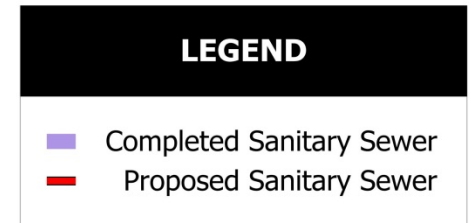
Benefit homes
in Lansdowne

LEGEND

-  Completed Sanitary Sewer
-  Proposed Sanitary Sewer

Sanitary Upgrades in Greenfield

Benefit homes
in Greenfield



Sanitary Upgrades in Royal Gardens



Benefit
homes in
Royal
Gardens

LEGEND

— Proposed Sanitary Sewer

Sanitary Upgrades in Lendrum Place



Benefit homes in
Lendrum

LEGEND

- Completed Sanitary Sewer
- Completed Pond
- Proposed Sanitary Sewer

Sanitary Upgrade in Pleasantview



Benefit homes
in Pleasantview

LEGEND

— Proposed Sanitary Sewer

Dry Pond in Parkallen

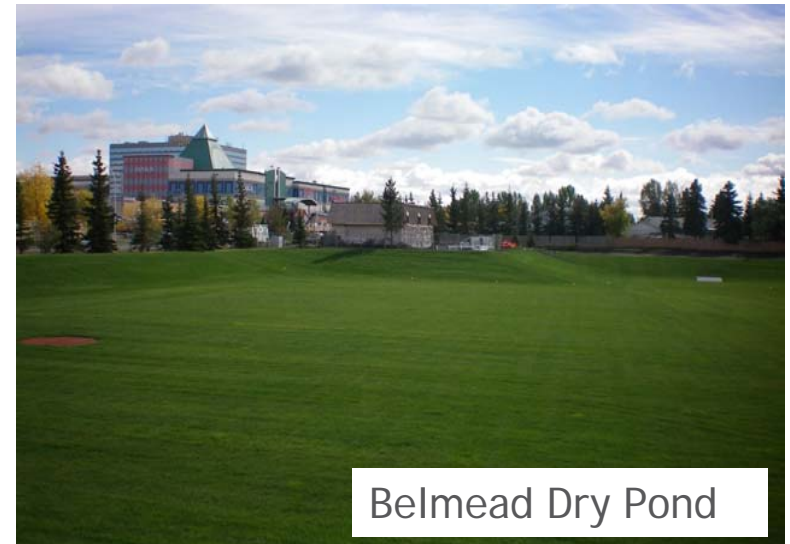


Benefit homes in
Parkallen

LEGEND

- Completed Sanitary Sewer
- Proposed Pond
- Proposed Swale
- Proposed Storm Sewer

Examples of Dry Ponds in the City




These ponds are landscaped to fit into the surrounding communities and are used for recreation when dry

What are the benefits of these improvements?

- Less pooling of water on the surface
- Reduced risk of sanitary backups and basement flooding
- Less property damage
- Savings of time, money and inconvenience

Recommendations for Homeowners

- Install and routinely check backwater prevention valve
- Improve lot grading to get surface water away from property
- Install/maintain adequate eavestroughs
- Channel downspout water to proper place
- Check foundations for cracks and leaks
- Flood Prevention Checkup Program (for advice call: 780-944 - 7777)



Flooding caused by heavy precipitation, melting snow, or runoff may pose problems for all kinds of properties. Older and newer houses may be at risk for flooding if proper precautions are not taken. The City encourages all builders and homeowners to take preventive measures to avoid flooding. This booklet contains information on:

- Why homes flood
- Protecting your home from flooding
- Eavestroughs, downspouts and weeping tile
- Pipes, sump pumps and backwater valves
- Improving lot grading
- Maintaining your home drainage system

More information on the Flood Proofing program can be obtained by calling 780-496-5591. The 24-hour Drainage and Sewer Trouble hotline can be accessed by calling 311. Additional information can be viewed online by visiting our website at www.edmonton.ca/floodprevention

floodproof
Flood Prevention Program

Edmonton
THE CITY OF

Edmonton
THE CITY OF

February 2010

The Homeowner's Guide to Flood Prevention
HOW TO IDENTIFY PROBLEMS & MAINTAIN YOUR HOME'S DRAINAGE SYSTEMS

Next Steps

- Continue the engineering assessments to refine and prioritize the identified upgrades and estimate construction costs and impacts
- Consult and work with stakeholders on the use of the identified land parcels for stormwater management dry ponds
- Develop an Expanded Flood Prevention Program and present to City Council for funding approval in the Fall
- Consult/inform communities and others on design and construction progress

Clarifying Questions?



Issues, comments, concerns?



Additional information needs?