

Drainage Services Flood Prevention Program


Community Consultation Meadowlark and La Perle



How Did We Get Here?

- **Major flooding in July, 2004**
- **Flood prevention becomes top priority**
- **Commitment to reduce flood risk and public education**
- **43 at risk neighbourhoods identified**
- **15 hardest hit – studies and planning in 2004/05**
- **28 others – studies and planning in 2005/06**

How Did We Get Here?

- New  program launched in May/05
- Home Flood Prevention Checkup;
Homeowners Guide to Flood Prevention
- Public education (print, TV, and on the web)
- Education workshops: backwater valves and sump pumps
- Backwater valve subsidy program



Current Status

- **\$146M in flood prevention improvements recommended to City Council on April 25**
- **Council requested report on alternative methods of funding. To be discussed in July.**
- **Public hearing on selected funding alternative & 2007 sewer rates set for September 26**



Today's Meeting

- 1. Present engineering findings**
- 2. Discussion implementation plan recommendations**
- 3. Get your input and feedback**

The image features a vertical banner on the left side with the text "City of Edmonton" in a stylized font. The background of the banner shows a modern building with a glass facade and a large, triangular, lattice-like structure on top, situated behind a body of water.

After Today's Meeting

- 1. Summarize and share input**
- 2. Incorporate input into planning**
- 3. Report progress**
- 4. Keep communities informed as work is completed**

July, 2004 Flooding

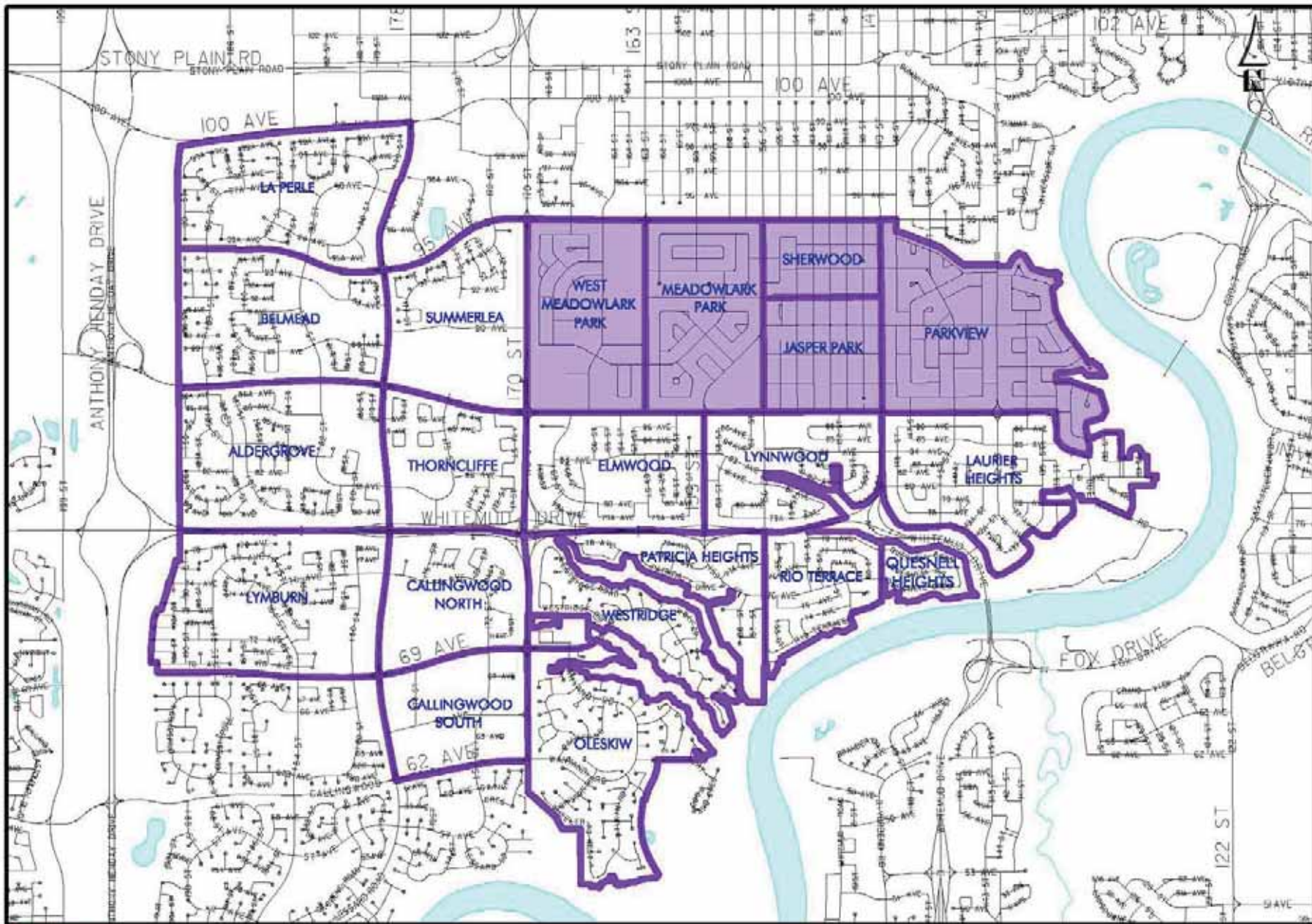
City of Edmonton





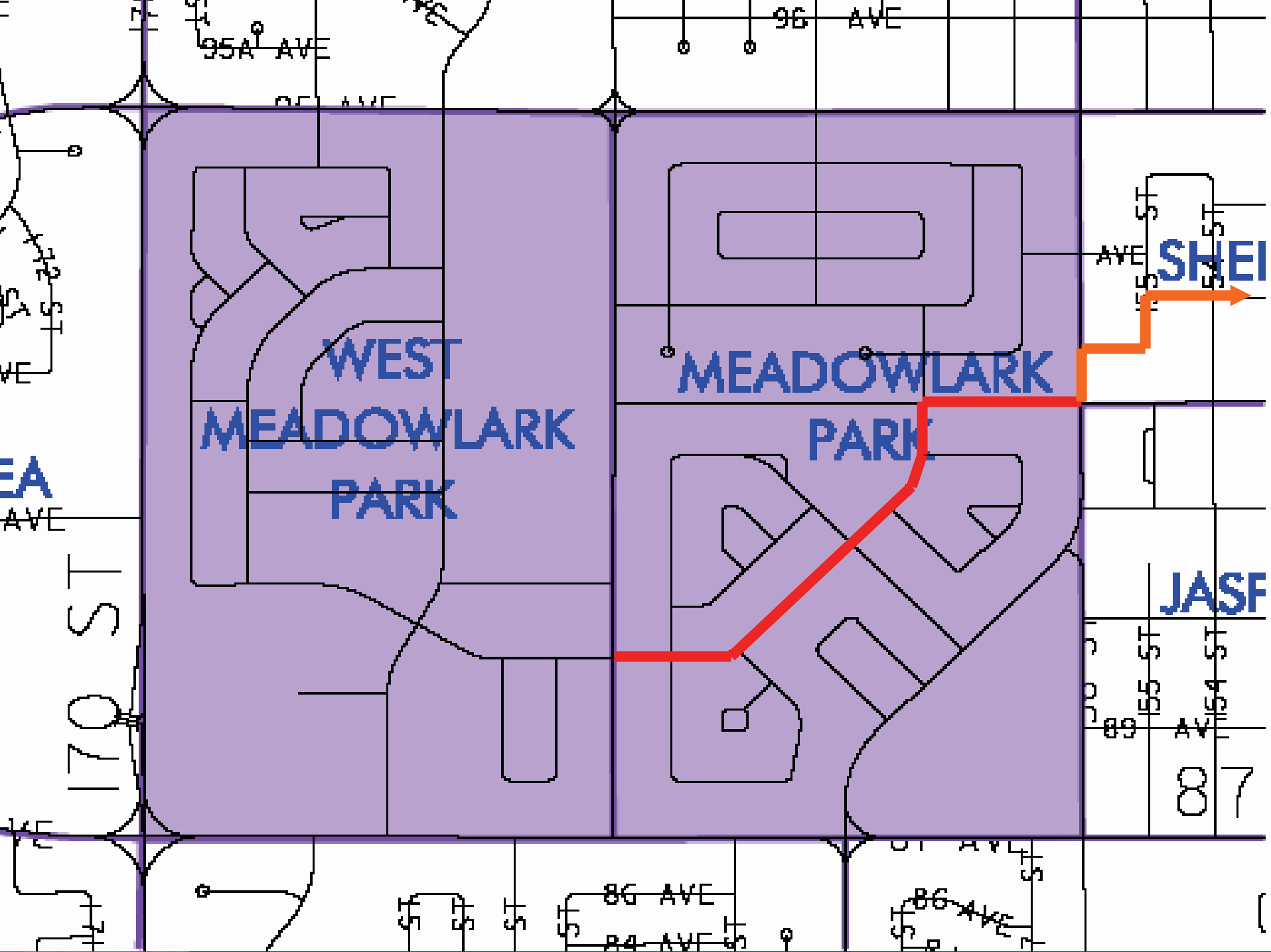
Study Findings

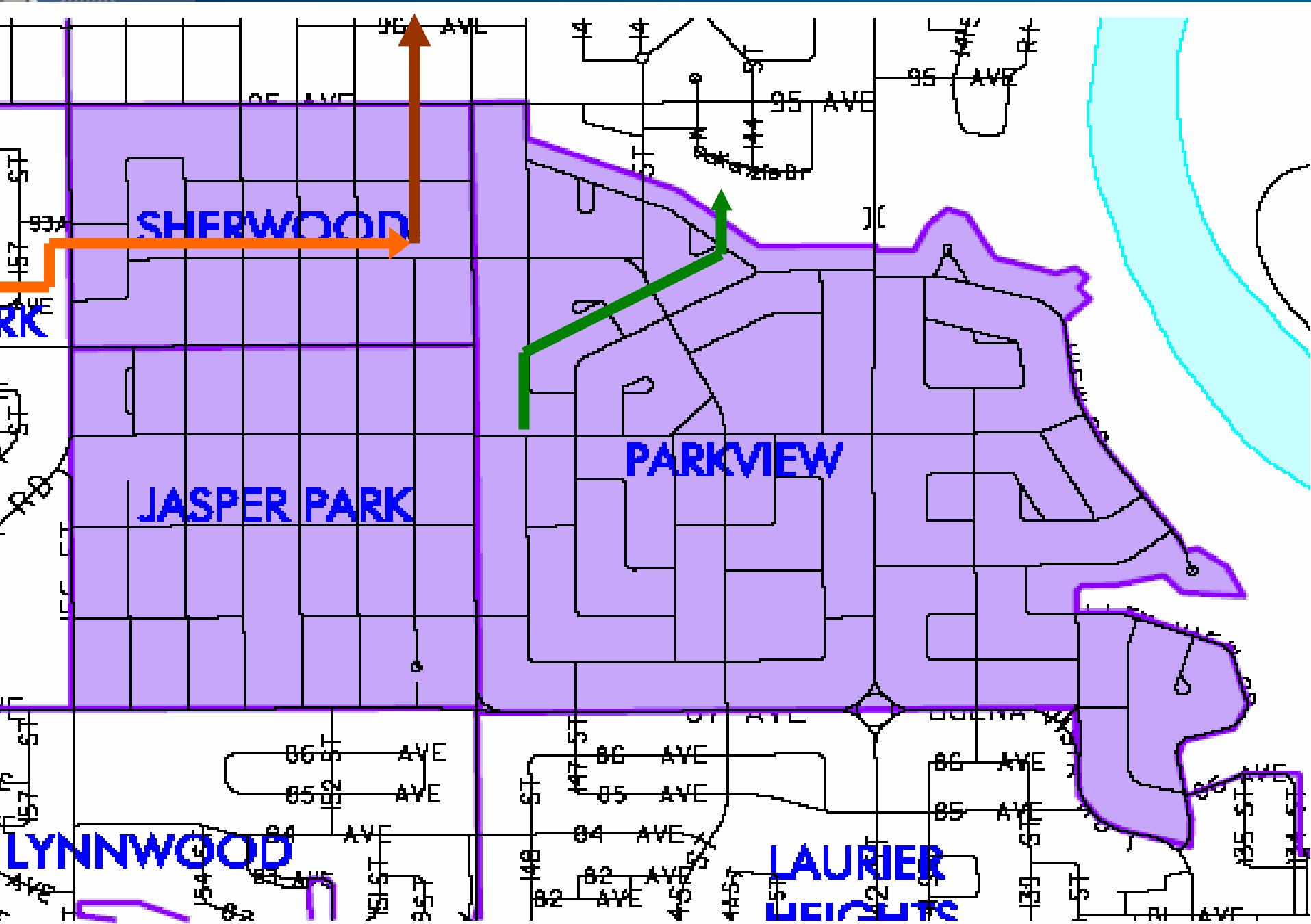
- **Water volume exceeded storm sewer capacity**
- **Stormwater got into sanitary system**
- **Neighbourhood has natural low areas where surface water flows**
- **Poor drainage on private property contributed to flooding**



ASSET MANAGEMENT AND PUBLIC WORKS
DRAINAGE SERVICES

STUDY AREA

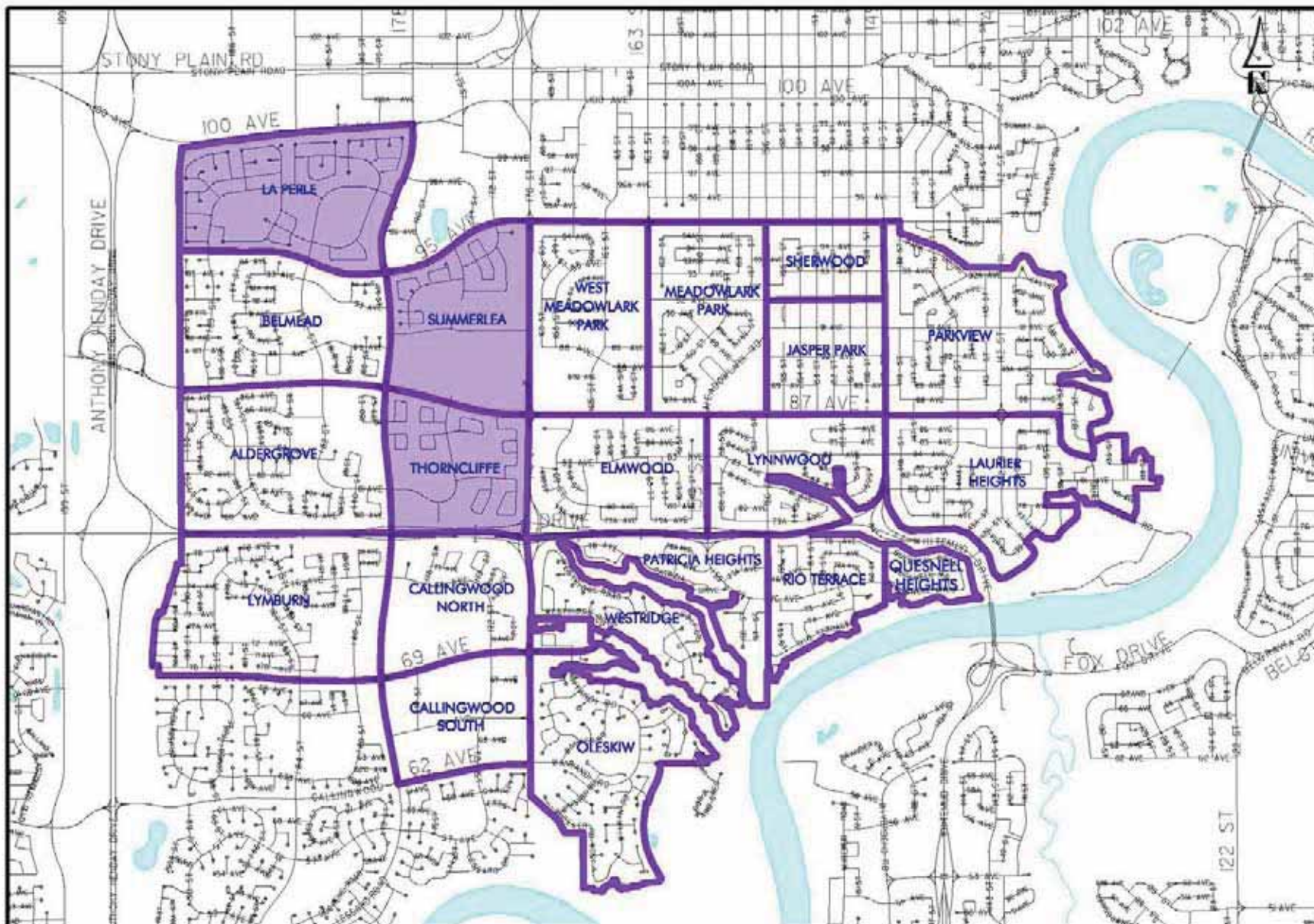






Cost of System Improvements

Local Sanitary Pipe	\$1,100,000
Major Sanitary Pipe	\$2,200,000
Deep Tunnel	\$12,000,000
Storm Piping on 92A Avenue	\$1,800,000
Total	\$17,100,000





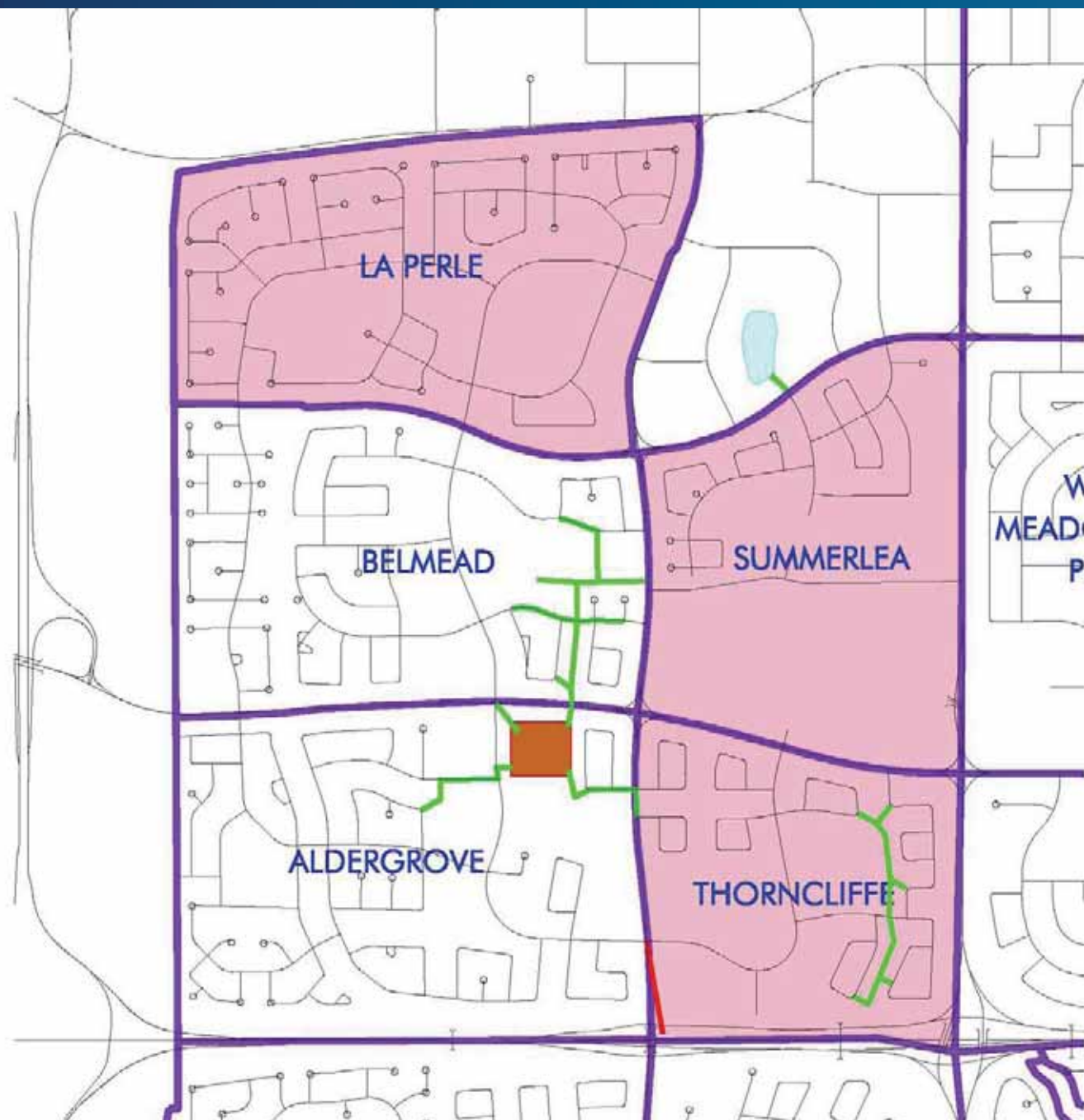
Engineering Findings

- **Water volume exceeded storm sewer capacity**
- **Most flooded basements caused by sanitary sewer backup**
- **Stormwater got into sanitary system via:**
 - Flooded manhole covers
 - Weeping tile connected to home's sanitary sewer



Engineering Findings

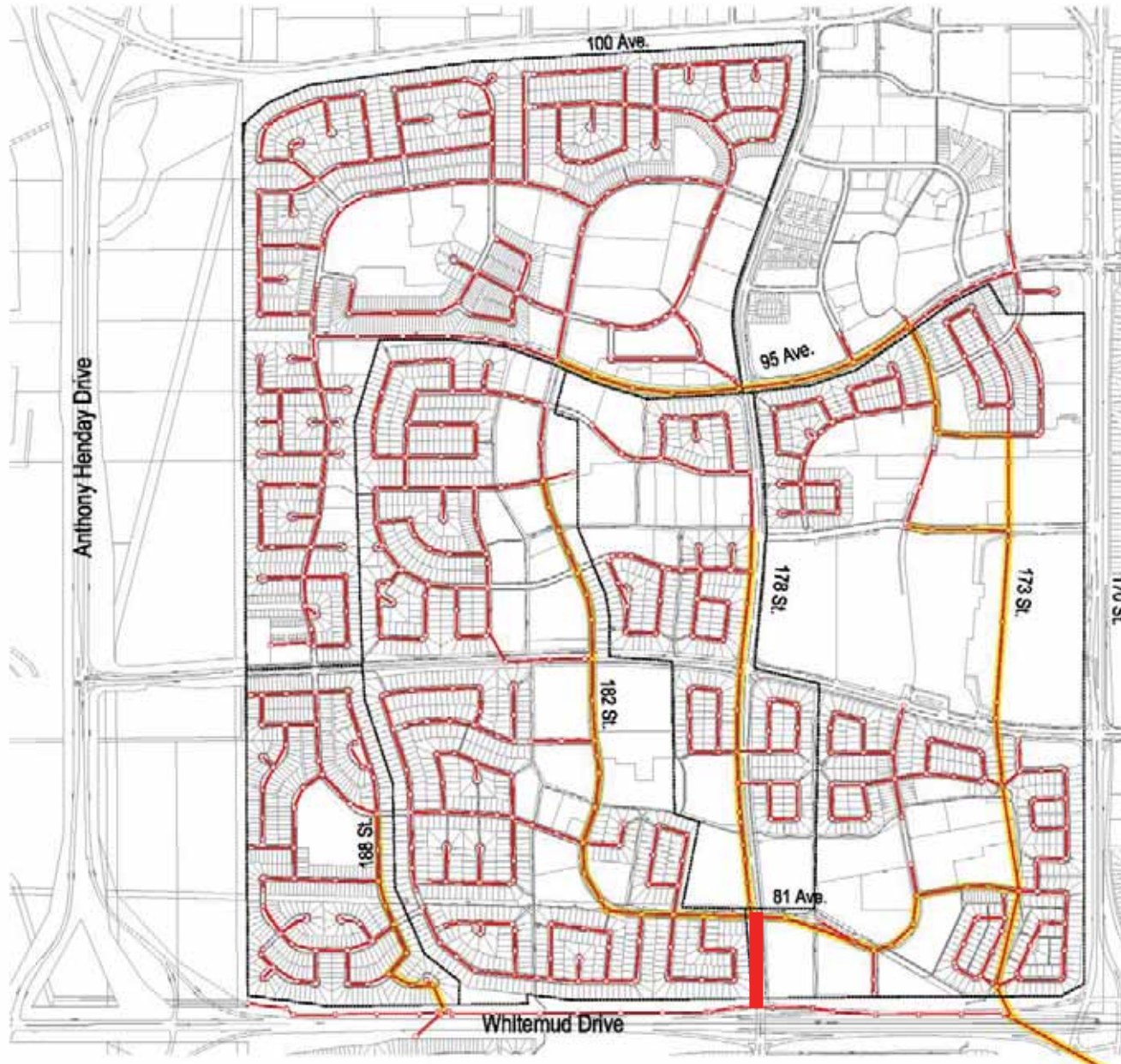
- **Common characteristics of flooded homes**
 - Many homes had yard elevations above the street curb of 0.5 metres or less
 - homes had landscaping or lot grading that caused water to drain toward the house
 - Houses with no roof leader or extensions were less than recommended length
 - Only 3% had backflow prevention valves





Legend:

- Existing Storm Pipeline
- Catchment Boundary
- Storm Trunk



Legend:

- Existing Sanitary Pipeline
- Catchment Boundary
- Sanitary Trunk



Cost of System Improvements

Sanitary manhole sealing	
Arrowhead Trail Regrading	\$2,431,000
Sanitary relief pipe	(\$1,706,000)
Summerlea stormwater diversion	\$3,654,000
Total	\$6,085,000

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What Does it Mean?

- **Better flood prevention requires joint effort from homeowners and City**
- **System improvements needed; involves significant time and expense**
- **Cooperation needed from others who manage or own private property**
- **Support needed from community to move ahead**



Homeowner Options

- **Improve lot grading to get surface water away from house**
- **Install/maintain adequate eavestroughs: 6 inch wide trough recommended**
- **Set in place downspouts: 1.5 metre extensions**
- **Install backflow prevention valve**



What are the Benefits?

- **Quicker overall drainage**
- **Less pooling of water on the surface**
- **Less likelihood of basement flooding**
- **Less property damage**
- **Savings of time, money and inconvenience**



Discussion and Feedback

Clarifying Questions?



Issues, comments, concerns?



Additional information needs?