



Bearspaw Flood Prevention Improvements

Public Consultation

April 21, 2009



How did we get here?

- Major flooding in July, 2004
- Flood prevention becomes top priority
- Commitment to public consultation and education
- Bearspaw identified as at risk neighbourhood

July 11, 2004 Flooding





How did we get here?

- Community consultations in 2006 & 2007 to discuss flood prevention options and get input
- Additional study and concept development led to some adjustments
- Here tonight to talk about those changes and the benefits



Today's Meeting

1. Present recommendations and implementation plan
2. Get your input and feedback
3. Make necessary adjustments



After Today's Meeting

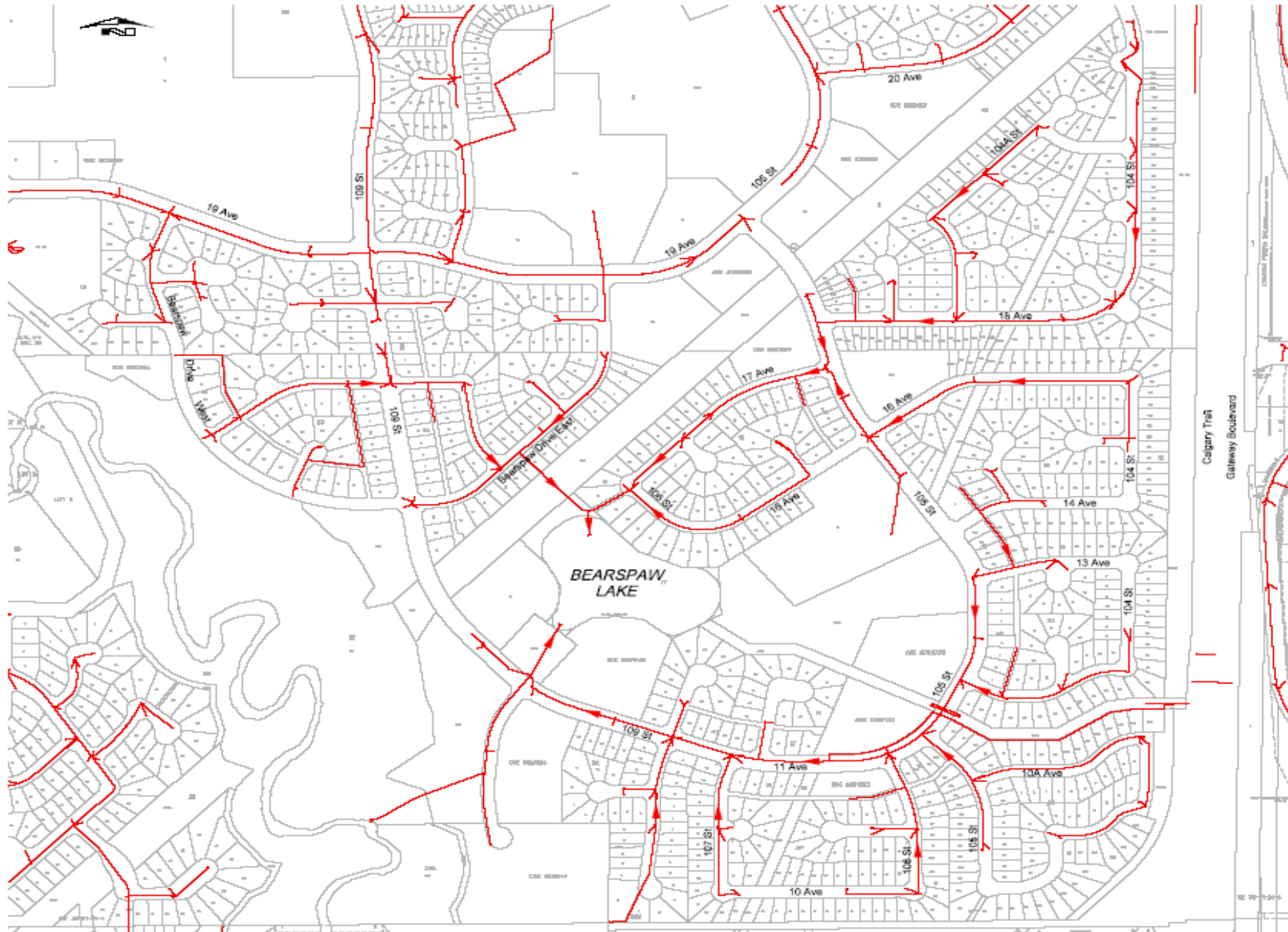
1. Summarize and share input
2. Incorporate input into final plan
3. Report progress
4. Continue community consultation as required until work is completed



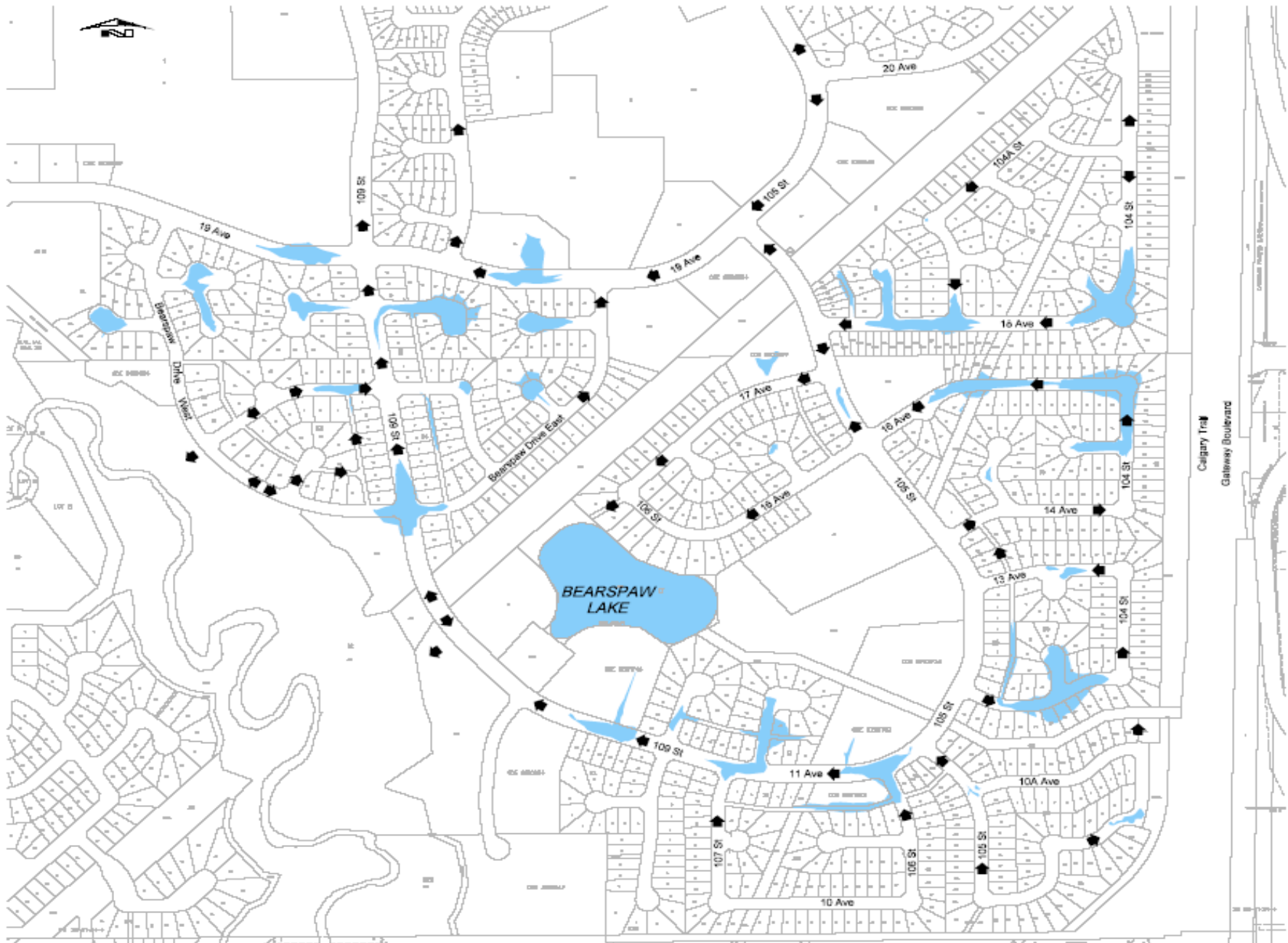
Overview of Project

- Existing system
- Proposed upgrades presented in the past
- Projects current status and changes
- Next steps

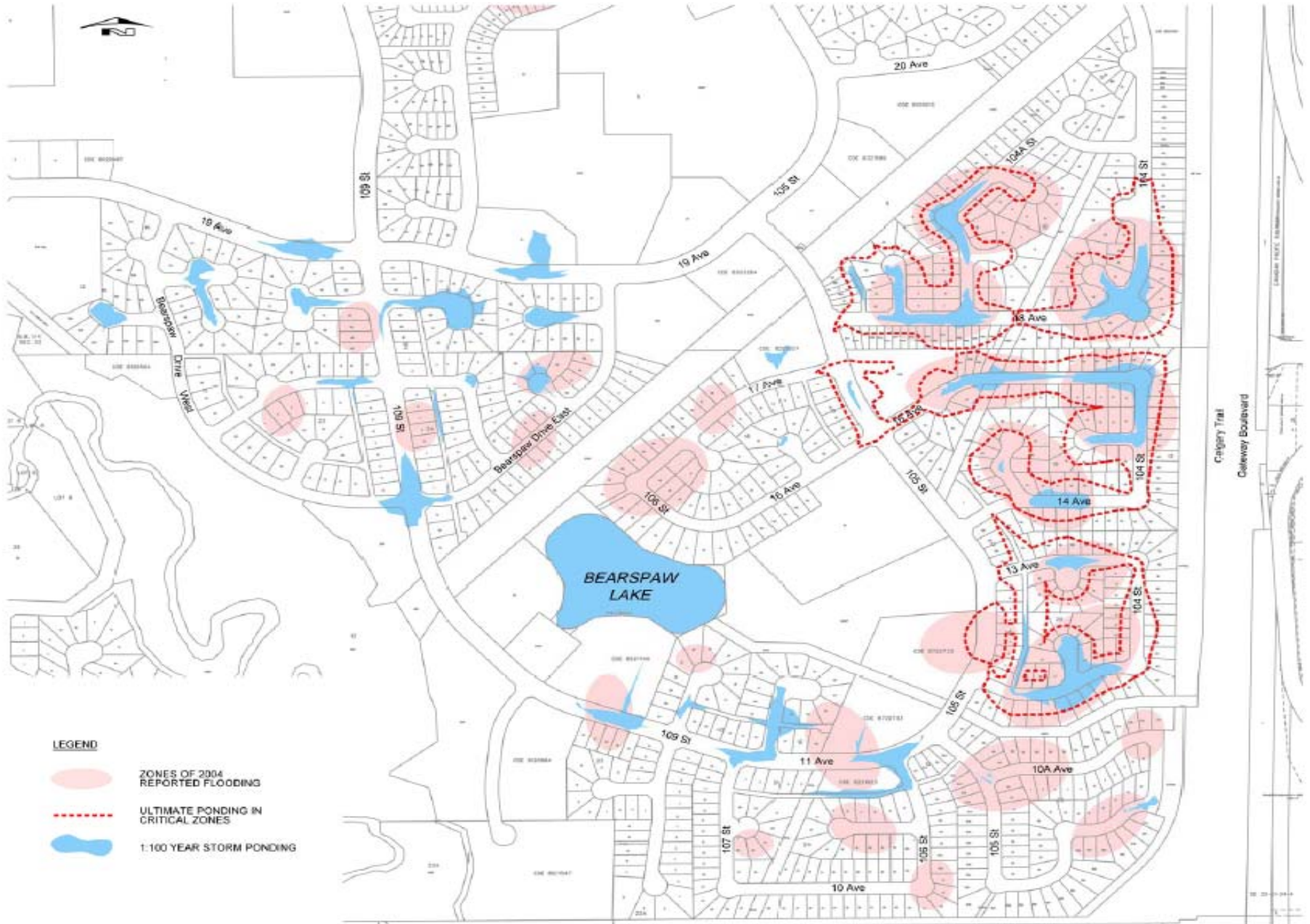
Existing Pipe System



Existing Overland Flow Routes



Existing Drainage System





What was Proposed in the Past

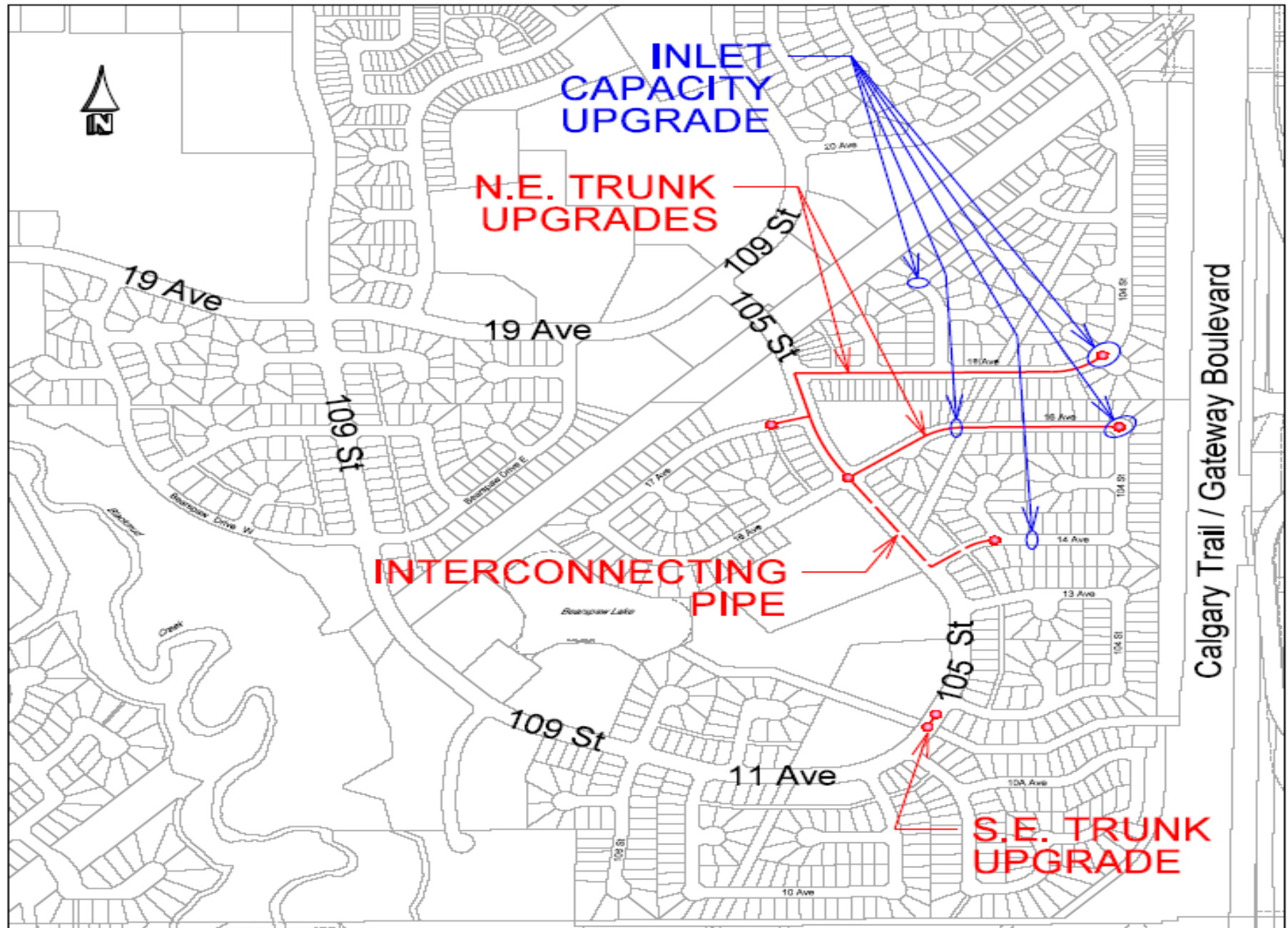
- Concept design
- Combination of lake upgrades and sewer upgrades



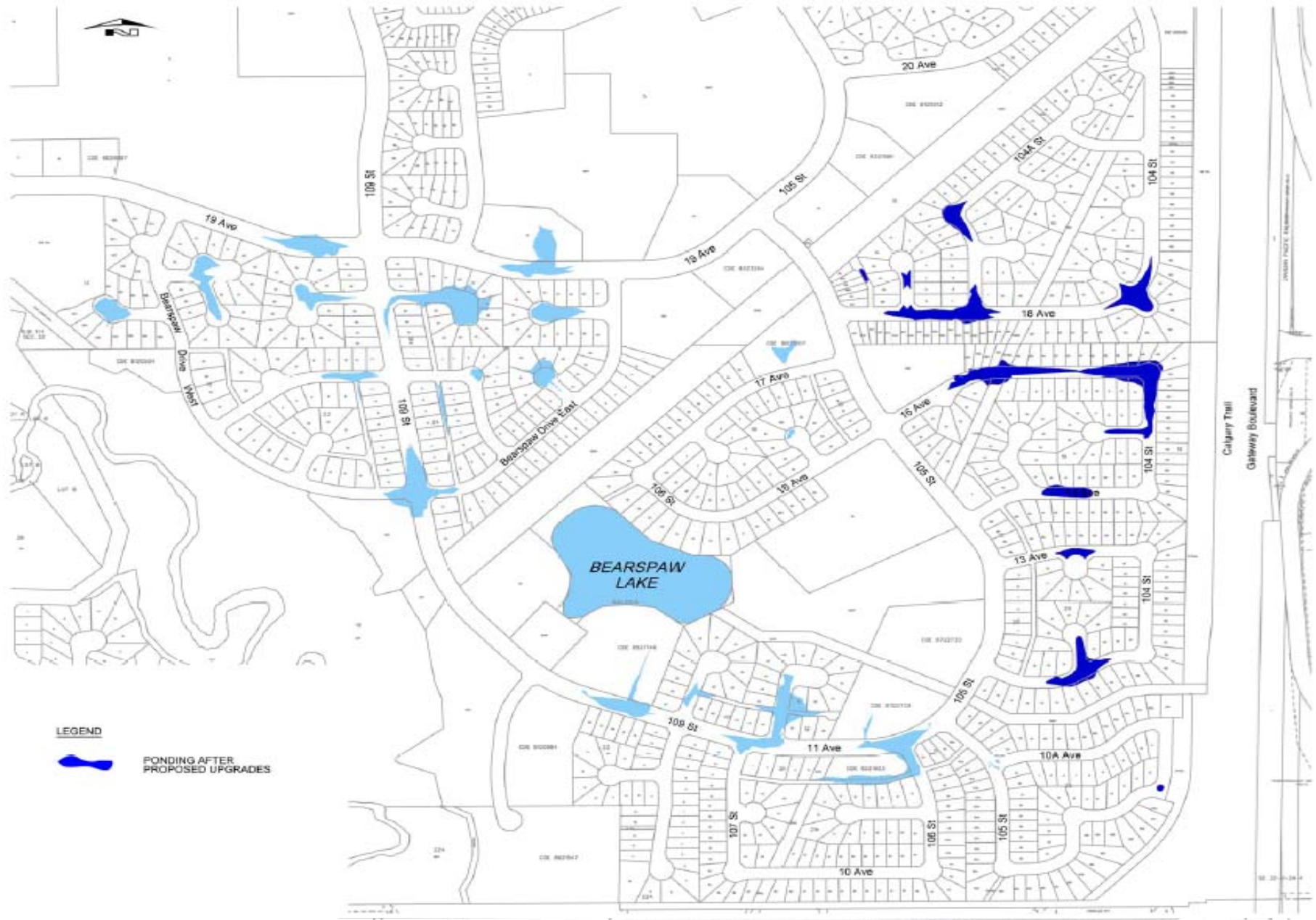
Current Proposal

- Upgrade storm sewers
- Monitoring of sewer system to confirm effectiveness
- Postponement of lake lowering modifications

Proposed Pipe Upgrades



Effect to Surface Water Ponding

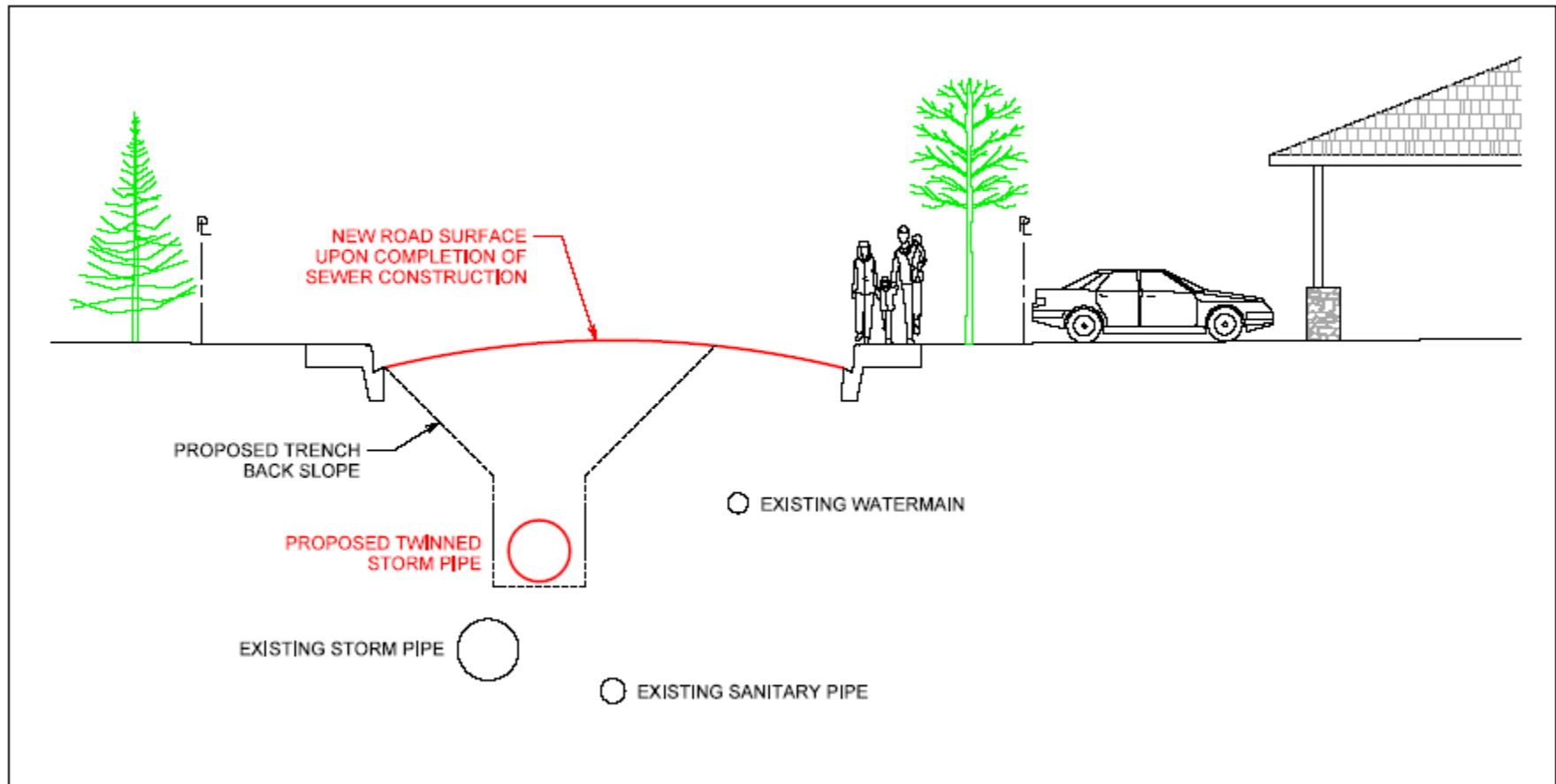




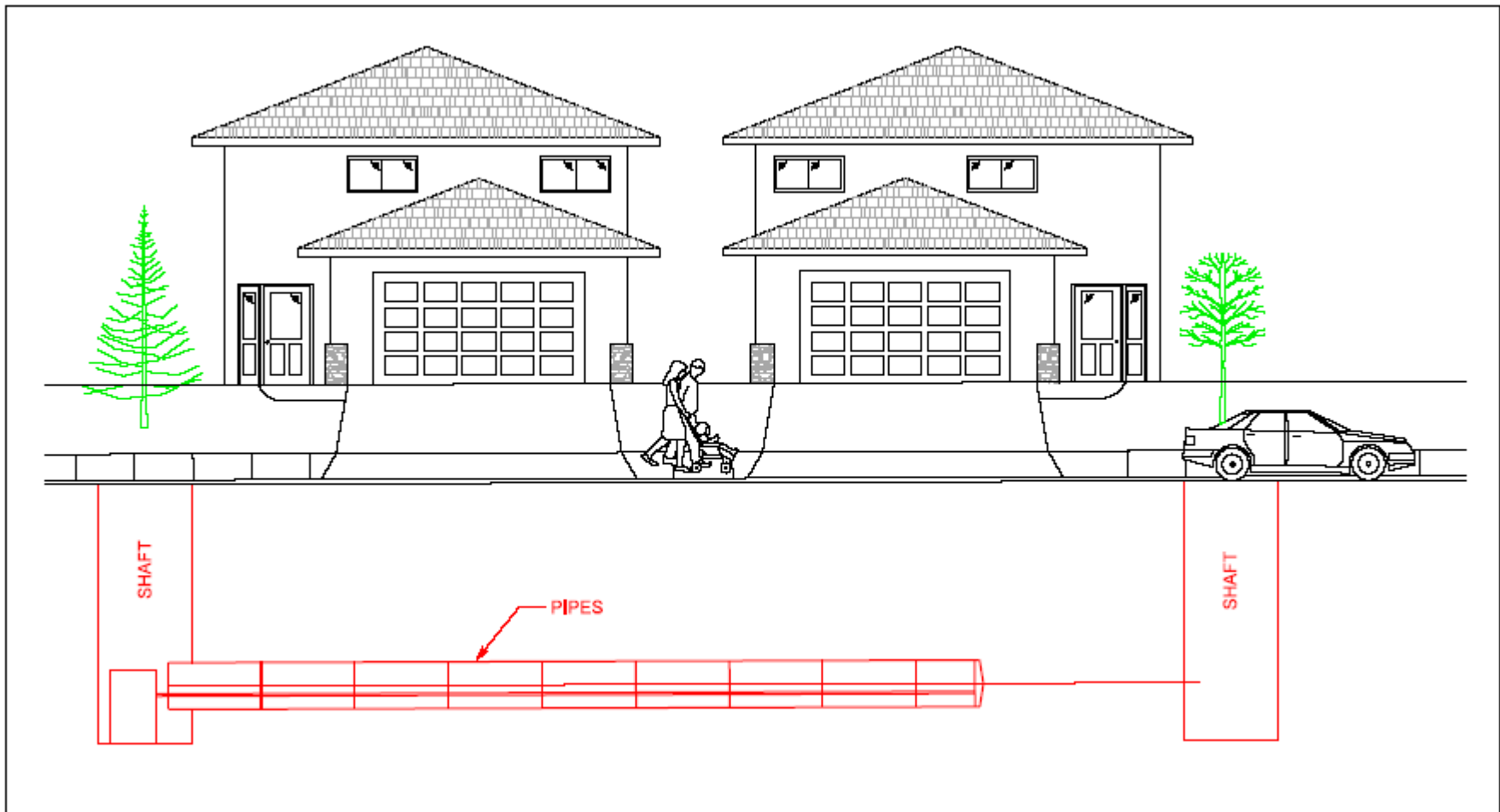
Effect on Bearspaw Lake

- The total volume of water draining into the lake will be unchanged
- The upgrades will allow the water that is ponding on the streets to get to the lake faster
- Upgrading of the sewers will have no effect on the water levels of the lake.

Open Trench



Trenchless



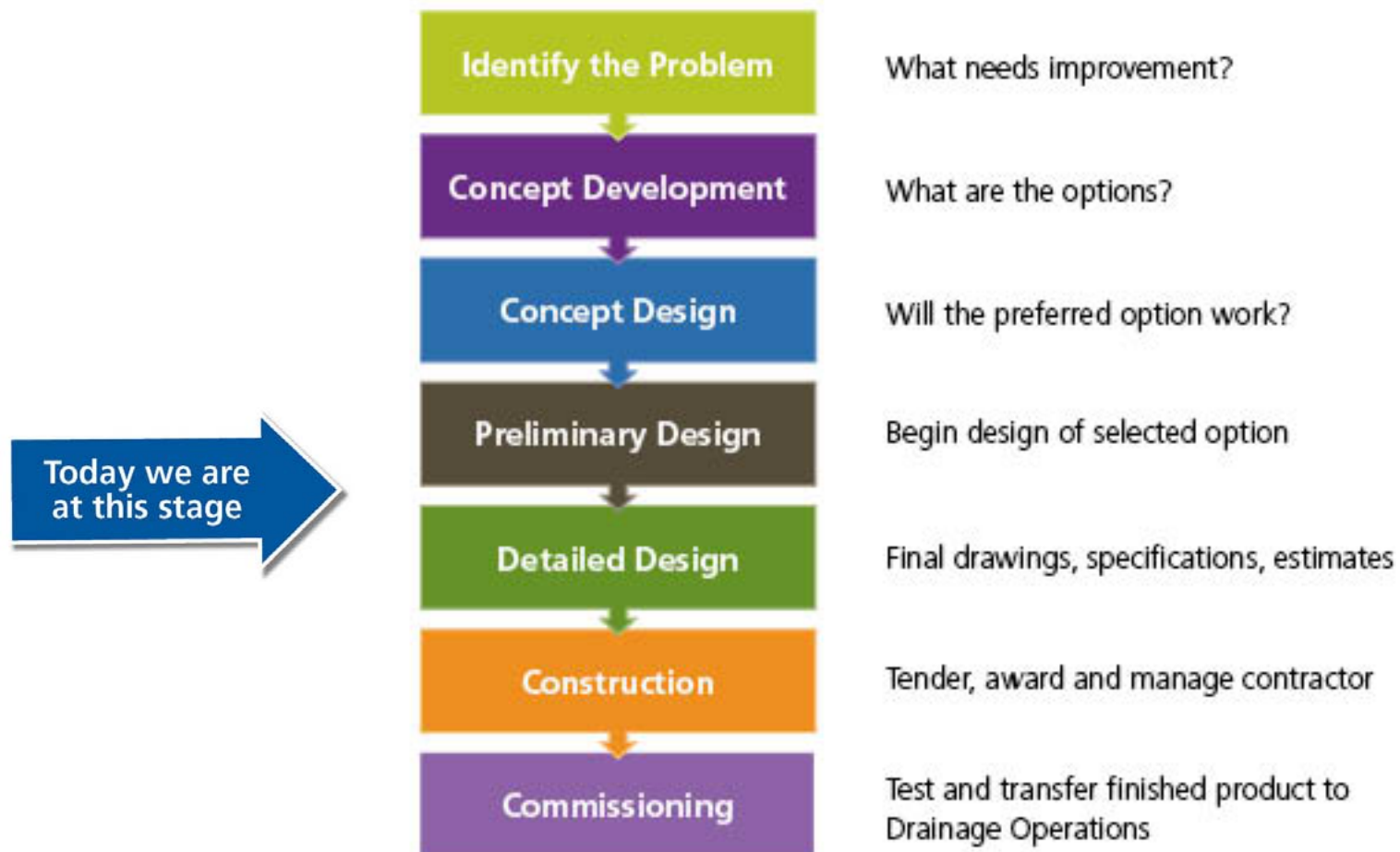


Pro/Cons of Construction Methods

	Pro	Con
Open Trench	<ul style="list-style-type: none">• Faster to complete• New road surface• Cost effective	<ul style="list-style-type: none">• Disturbance to Vehicular/ pedestrian traffic• Noise
Trenchless	<ul style="list-style-type: none">• Less disturbance to Vehicular/ pedestrian traffic• Can be used in areas where open trench is not possible.	<ul style="list-style-type: none">• Less cost effective at proposed relatively shallow depths• Noise

Drainage Services Engineering Project Life Cycle

Every engineering project goes through a number of stages before it is finally constructed and completed. At certain points in the project life cycle we would like your input before proceeding to the next stage.





- Construction proposed to proceed in Fall 2009 or Spring 2010

Flood Prevention Program

- Backwater valve homeowner subsidy program
- Home Flood Prevention Checkup
- Information bulletins, notices and education material to residents
- Ads, stories and educational information in print, on TV, in newspapers and on the web.
- Backwater valve education workshops
- *Homeowners Guide to Flood Prevention*



Recommendations for Homeowners

- Improve lot grading to get surface water away from house
- Install/maintain adequate eaves troughs
- Channel downspout water to proper place
- Install backflow prevention valve



QUESTIONS ?

Ken Chua, MSCE, P.Eng.
Drainage Services, Design
and Construction
(780) 496-5545

Derek Melmoth
Drainage Services, Public
Services
(780) 496-5662

Patrick Hallonquist, P.Eng.
Scheffer Andrew Ltd.
(780) 732-7800



Discussion and Feedback

Clarifying Questions?



Issues, comments, concerns?



Additional information needs?