Drainage Services
Flood Prevention Program

Lendrum Place
Community Consultation
November, 2005 Update

How Did We Get Here?

- Major flooding in July, 2004
- Flood prevention becomes top priority
- Commitment to public consultation and education
- At risk neighbourhoods identified
- Public meetings in Sep/04

How Did We Get Here?

- Engineering studies of priority neighbourhoods completed Feb/05
- Community consultations in March and April/05
- flood*proof* launched
- Meetings with other stakeholders through the summer and fall/05
- Detail study of input and options
- Additional data collected and analyzed

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***

Today's Meeting

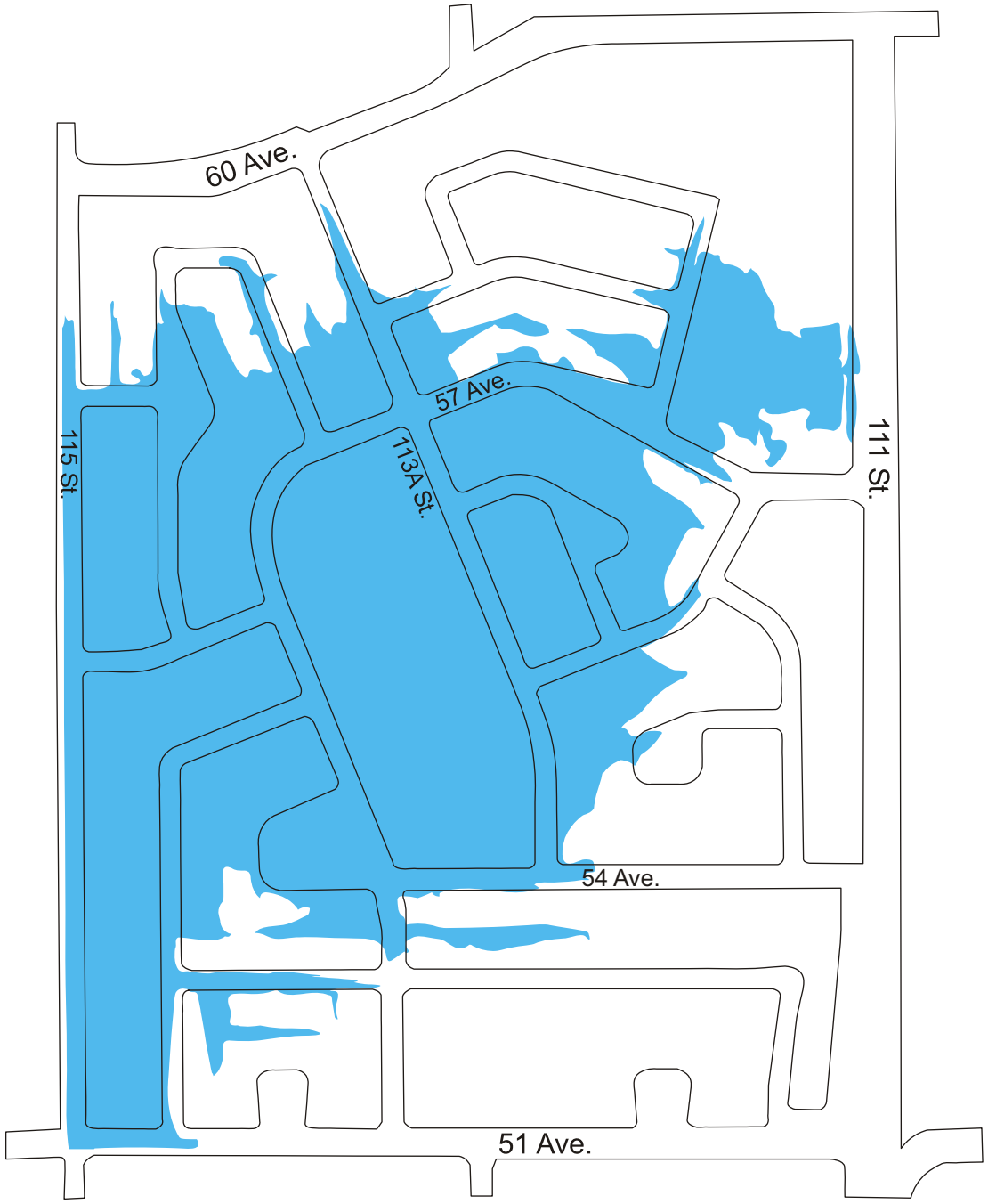
1. **Present recommendations and implementation plan**
2. **Get your input and feedback**
3. **Make necessary adjustments**
4. **Forward package to City Council for budget approval**

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

July, 2004 Flooding

Lendrum Place



Legend

Low Areas

Lendrum Place 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 also contributed to flooding

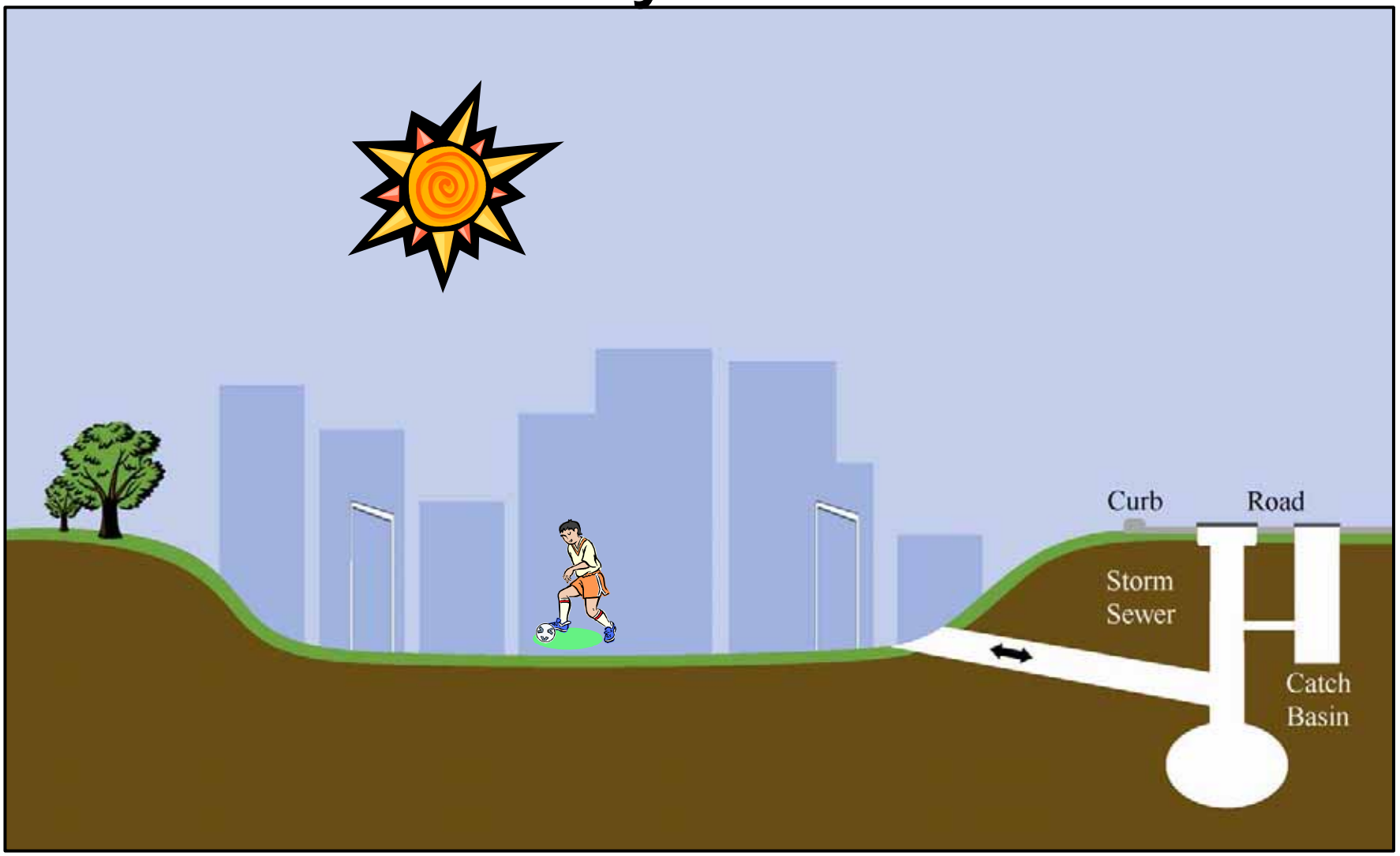
Recommendations for Homeowners

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

What is a Dry Pond?

- **Low Area - collects storm water runoff**
- **Receives storm water from:**
  - Surface drainage
  - Overloaded storm sewer backup
- **Usually takes 4 to 6 hrs to drain**
- **Normally 1 to 2 metres deep**
- **Landscaped to blend in**
- **Can be used for recreation when dry**
- **Common in many cities; some on school sites (incl. Regina, Red Deer & Calgary)**
- **60 in Edmonton, mostly along roadways**

How Do Dry Ponds Work?



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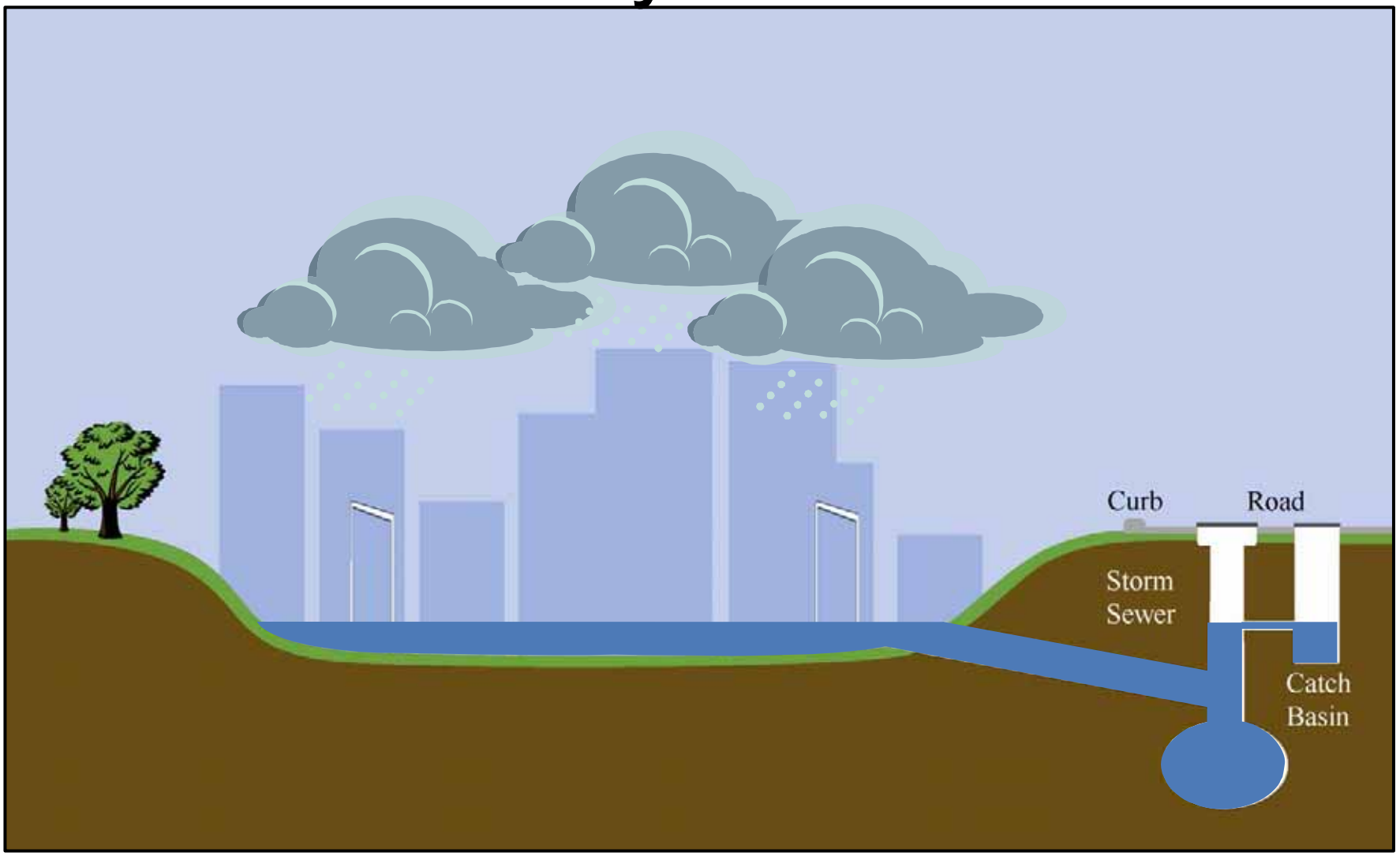

What Do Dry Ponds Look Like?

City of Edmonton

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Dry Pond Safety

- **Built to minimize safety risk**
- **Sides gently sloped**
- **Bottom relatively shallow**
- **Sides and corners pool first**
- **Warning signs**
- **Gradual filling and draining**
- **SCADA remote monitoring system**
  - Alarm will sound when water filling
  - Operations staff will respond
- **Cleanup after each event**


114 St.
X - low spot
668.00
667.00
666.00
SOCCER FIELD
59m X 100m
668.00
667.00
666.00
SOCCER
30m X 55m
SOCCER
30m X 55m
BASEBALL DIAMOND
69m (FOUL LINE)
BASEBALL DIAMOND
69m (FOUL LINE)
666.00
667.00
113 A St.
X - low spot

City of Edmonton

Lendrum School Site

Cost of System Improvements

Sanitary Sewer Upgrade (18 m of 600 mm – by 61 Ave.)	$40,000
Sanitary Sewer Upgrade (300 m of 375 mm – lane E of 115 St.)	$450,000
Sanitary Relief Sewer (287 m of 375 mm – 113A St.)	$550,000
Dry Pond (school yard) (21,500 m3 storage)	$1,240,000
Total	$2,280,000 *
* Note: pending Council approval	

City Wide Implementation Plan

- **Overall, ten year timeframe investing more than $100 million in 43 communities**
- **Focus on most critical needs first**
- **Consult/inform community and others on design and construction, especially surface components like dry ponds**

Lendrum Place Implementation Plan

Manhole Sealing	Complete
Proactive Backflow Valve Program	Ongoing
Flood Prevention Home Checkup Program	Ongoing
Sanitary Sewer Upgrade & Relief Projects	Near Term * (2 – 3 years)
Dry Pond	Mid Term * (3 – 6 years)

* Note: pending Council approval

What's Next

- Continue design work in 2006
- Repeat successful homeowner support programs in 2006
- Complete studies for 28 remaining at-risk communities by Jan/06
- Incorporate all needs into a Flood Prevention Program Implementation Plan
- Present complete package to City Council for approval in spring 2006

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?

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Issues, comments, concerns?

▼▼

Additional information needs?