Midvale Stormwater Facility
Seattle Public Utilities

Design Commission Meeting #2
60% Design  February 2011
Construct a stormwater facility that will:
- Hold up to 3 million gallons of stormwater during heavy storms up to the 25-yr storm event
- Help reduce the potential for flooding from the combined system and public roads to homes and businesses.
- Provide water quality treatment for small storm flows (1–2 cfs) during every rain event
N 107th St & Midvale Ave N. Study Area

- Washelli Cemetery
- Study Area
- N 107th St
- Aurora Ave
- Midvale Ave N
- Northgate
Close up of Flood Prone Area

- Storage Facility
- Maintenance Yard
- Condo/Apt
- Handy Andy
- Condo/Apt
- Cemetary
- Single Family
- Stone Ave N
- Top Soil
- Northgate Way
- Midvale Ave N
- N 107th St
- Flood Area
  - 25-yr Storm
  - 50-yr Storm
  - Dec 07 Storm

- Storm drain
Goal:
Prevent street/property damage from floods by temporarily storing water in stormwater pond.
December 2007 Flood Photos

N 107th St between Midvale Ave N and Stone Ave N

SE corner of Midvale & N 107t St
December 2007 Flood Photos

Intersection of Midvale & N 107th St

Daylight basement apartments
On Midvale south of N 107th St
December 2010 Flood Photos

Stormwater surging out of inlets

Sandbagging homes
Oak Lake – 1897
Existing Building at Proposed Stormwater Facility Site
Existing Site Use
From 30% Design Presentation

- Flat area grass w/ shrubs
- Sloped area w/ shrubs
- Shallow water
- Deep water (3 ft)

Midvale Ave N
Stone Ave N

Trees & sidewalk
Shelf
2:1 slope
3:1 slope

Stormwater Facility
3 – 3.5 million gallons

Trees & sidewalk

Inlet/outlet for big storms
Low flow outlet

Diversion & pretreatment
For low flows (small storms)

Function: ~1–2x / decade, facility will fill with up to 7–ft of water.

Facility will provide water quality treatment for most storm events.
Cross – Section of Stormwater Facility

During very large storms, the facility will temporarily fill with an additional 7-ft of water over approximately 4 hours.
Ashworth Pond—existing detention pond located ½ mile north
Proposed facility will look more like this photo than Ashworth Pond.
60% Design

- Pathway
- Gravel "beach"
- Wetland planting
- Pond 3-5' deep
- 2-ft contours
- Accent planting
- New sidewalk
- Street trees
- Maintenance access
- Underground vault
- Road paving
- Stone Ave N
- Midvale Ave N
- 107
Split Rail Fence – along sidewalk/path
Trees: (insert details from Shane)
Shrubs:
Ground cover:
Accent planting:
Wetland plants:
No lawn areas.
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# Midvale Stormwater Facility: Conceptual Schedule

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Challenges

- Community view: Can we make this an amenity?
- Balance of stormwater detention and open space
- Fencing
- Adjacency to Aurora Ave and informal “transfer station”
FYI – The following slides show “freshly planted” landscapes. I’m not sure if I would use these for Design Commission, but I would want to share them with the Community.
Possible fence option – Stormwater Pond in West Seattle