

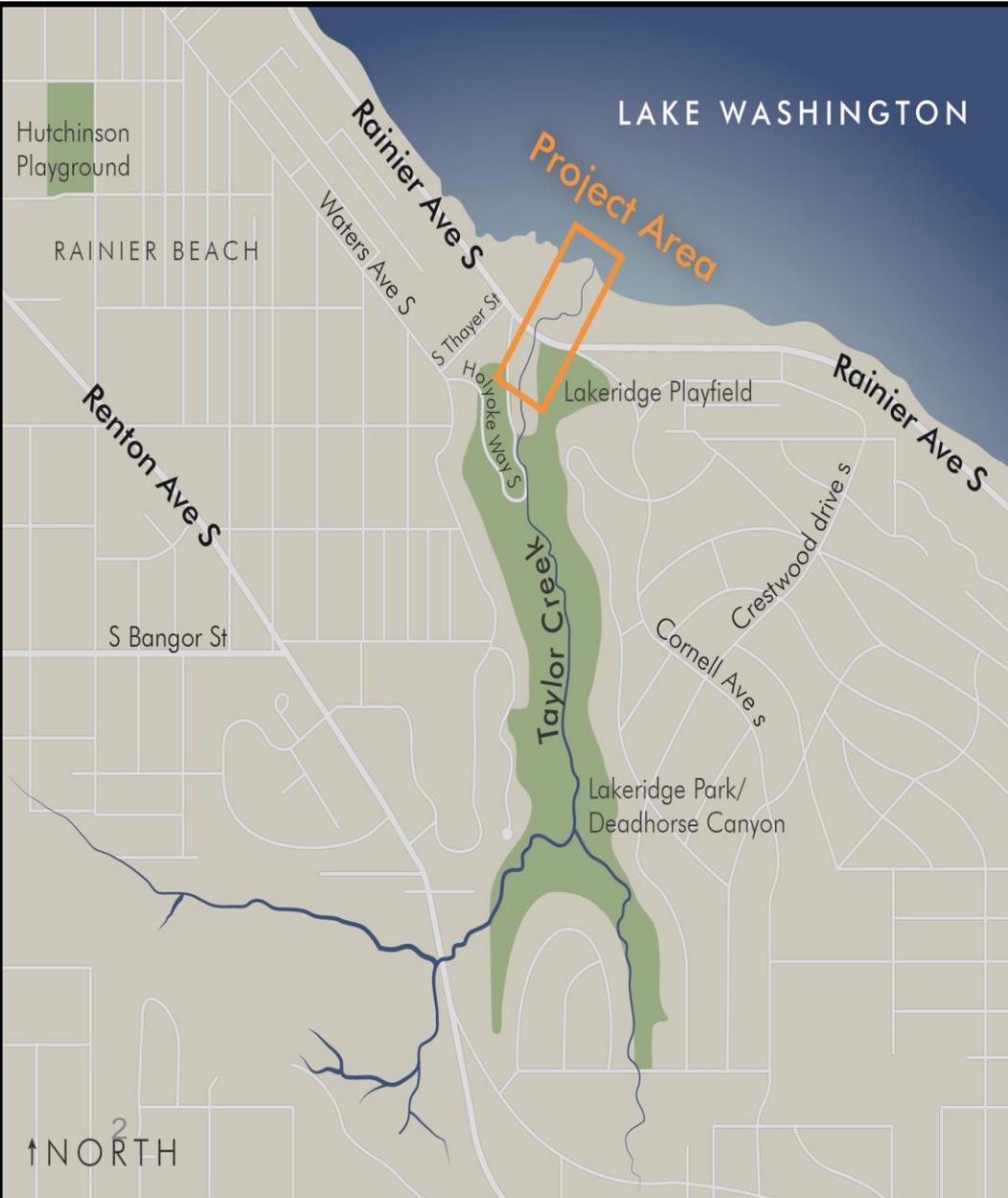
# Taylor Creek Culvert Replacement Project

Seattle Design Commission,  
September 21, 2017



Seattle  
 Public  
Utilities

# Project overview



Taylor Creek in Dead Horse Canyon

# Project area demographics

Southeast Seattle is more ethnically diverse than most areas of Seattle.

- 32% Asian decent
- 28% White
- 25% Black
- 8% Hispanic
- 6% Multi-racial

# Local wildlife

- A variety of fish species can be found in Lake Washington including Chinook salmon, Bull Trout, Steelhead, Sockeye salmon, Coho salmon and Cutthroat Trout.
- A bald eagle breeding area is listed in Deadhorse Canyon near the project site, approximately 500 feet from the upstream weir proposed for modification in Lakeridge Park.



Map showing mapped bald eagle breeding area (yellow point), as well as WDFW management buffers of 200 m (purple) and 100 m (blue). Source: WDFW electronic reference

# Why Taylor Creek?



Ongoing sediment deposition

Speeding on Rainier Avenue S

Reported flooding

Poor pedestrian crossing

Fish passage barriers

Streambank erosion

Reported flooding

# Project goals

- Improve the creek channel and surrounding habitat
- Improve fish passage
- Address storm-related sediment deposition at the mouth of the creek to the extent feasible
- Provide public access to the new natural area north of Rainier Avenue South
- Construct corridor safety improvements in coordination with the Seattle Department of Transportation

# What we've done so far

- **Identified project needs** – defined the key problems the project should address
- **Acquired project area** – purchased property at the lower reaches of Taylor Creek
- **Compiled potential solutions** – identified 26 planning concepts
- **Performed initial review** – evaluated planning concepts with regard to technical feasibility, cost-effectiveness, and community and environmental impact. Six concepts were prioritized.

# What we've done so far (cont'd.)

- **Refined concepts** – identified top three concepts, held community meetings for input
- **Established agreement with Seattle Parks and Recreation (SPR)** – once construction is completed, the new natural area will provide public access and will be owned and maintained by SPR

# Early outreach

- In 2011, SPU met with adjacent neighbors to discuss public access at the new natural area
  - **What we heard:** Safety concerns (crime, drug use, camping)
- From 2012-2013, SPU held several community meetings, drop-in sessions and hosted two surveys to ask residents about public access
  - **What we heard:** Approximately 70% of residents expressed a preference for open access; approximately 10.5% expressed a preference for no access
- In July 2013, the Seattle Police Department conducted a public access safety analysis of the natural area
- In August 2013, SPU recommended public access of the natural area
- In May 2015, SPU held an open house to receive feedback on creek alignment

# Proposed project



# Where we are now – natural area design



Seattle Public Utilities

## CHOOSE YOUR SPOT

USE YOUR "DOT" TO SELECT YOUR FAVORITE SEATING OPTION

a. Boulder

b. Log

c. No seating

TAYLOR CREEK CULVERT REPLACEMENT PROJECT

Seattle Public Utilities

## CHOOSE YOUR COURSE

USE YOUR "DOT" TO SELECT YOUR FAVORITE PATH ALIGNMENT

a. Simple Shared Path (Pedestrians + City Vehicles)

- Relatively straight path
- Ends at a wetlands overlook
- More space for natural habitat

b. Compound Path

- Shared path with creek crossing
- Ends at a gravel beach
- More space for natural habitat

c. Separated Paths

- Shared main path
- Separate pedestrian paths that winds through habitat
- Less space for natural habitat

TAYLOR CREEK CULVERT REPLACEMENT PROJECT

# Design goals

- Follow Crime Prevention Through Environmental Design principles
  - Discourage negative behaviors (No parking, restrooms or formal seating areas) to discourage loitering
  - Plant trees and shrubs to allow clear sightlines throughout the natural area
- Use natural materials
- Enhance wildlife habitat
- Allow for educational opportunities

# 30% natural area design concept



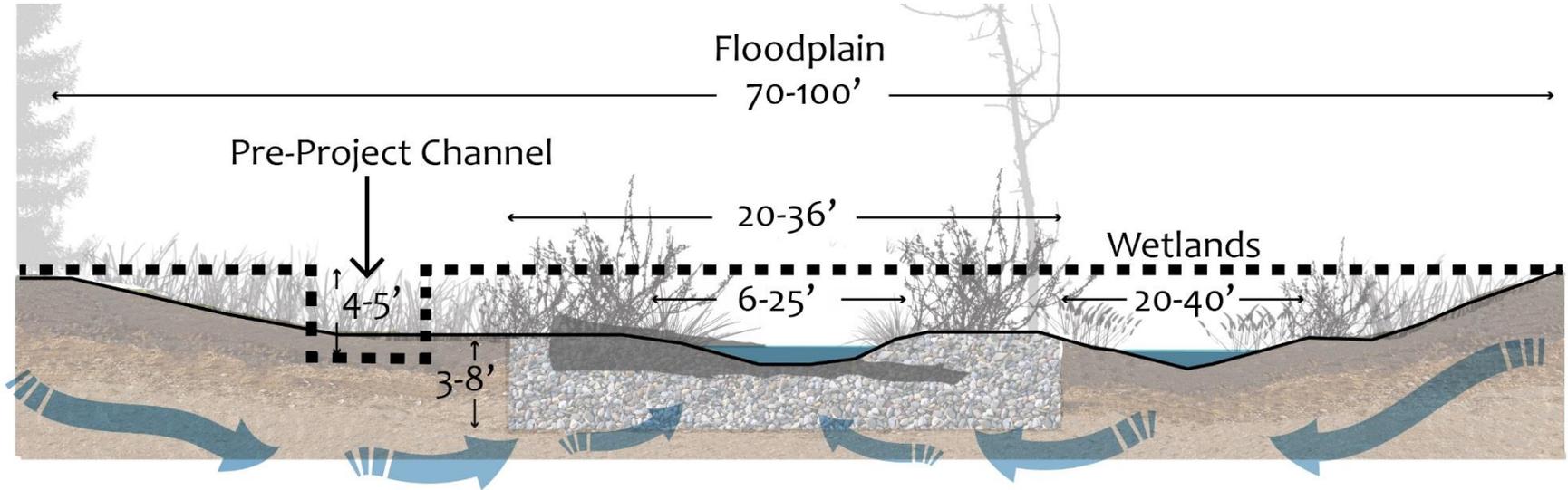
# Creek restoration

Current creek conditions



# Natural area floodplain

Creating new floodplain and fish passable creek, example from Thornton Creek Improvement



# Sedimentation management facility

Current site conditions at 10020 68<sup>th</sup> Ave S and 10005 Rainier Ave S

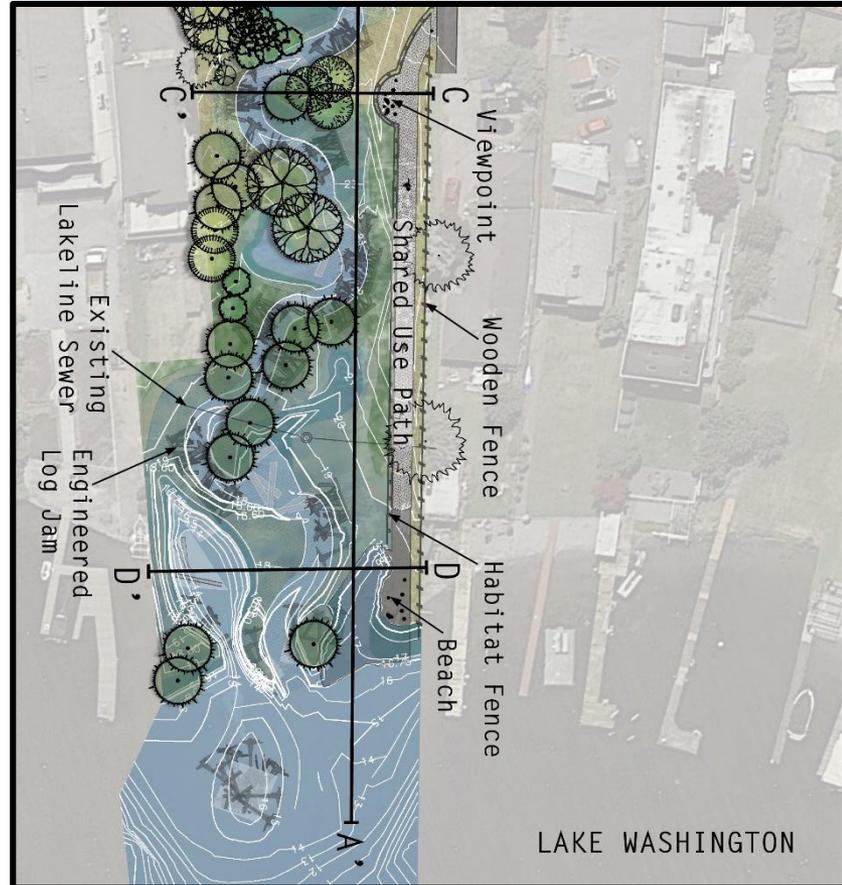
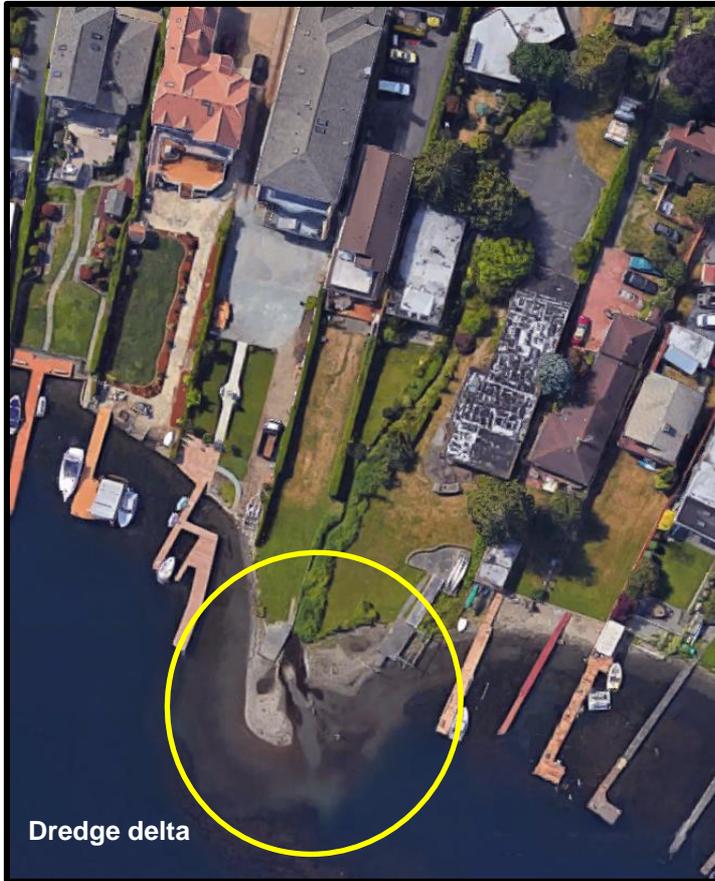


# Sedimentation management facility

Pond and maintenance access path examples from Midvale Stormwater Facility



# Taylor Creek delta



# Current Culvert Conditions



# Culvert

Culvert under roadway, example from Thornton Creek Improvement



# Street improvements



**Better definition of Rainier Ave S and Cornell Ave S**

**New crosswalk with center-lane refuge islands**

**Sidewalk extension with improved curb ramps**

Lakeridge Playfield 

# Street improvements

Example of crosswalk improvement from Rainier Ave S



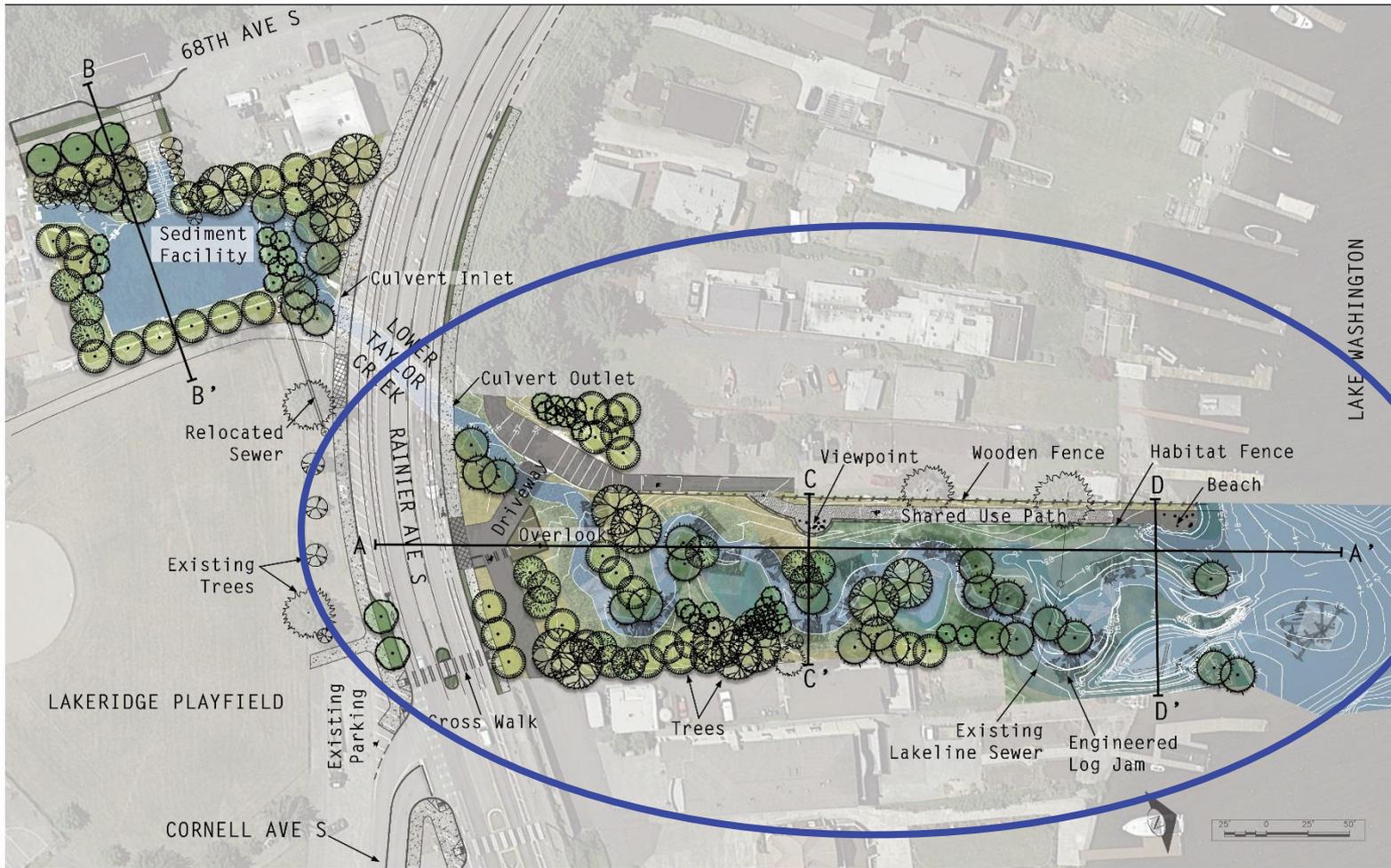
Example of crosswalk improvement from Mercer St



# Pedestrian Circulation



# Lower Taylor Creek Natural Area



# Natural area biological diversity

## Aquatic Habitat

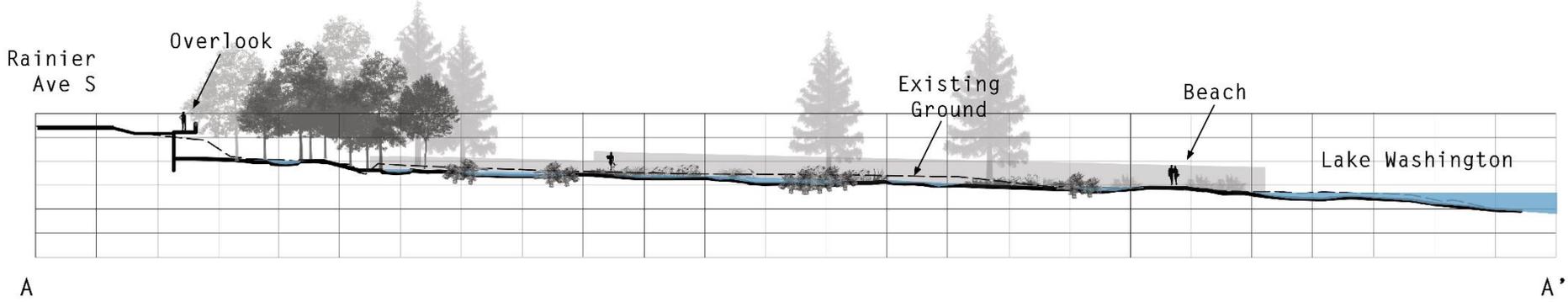


## Forest

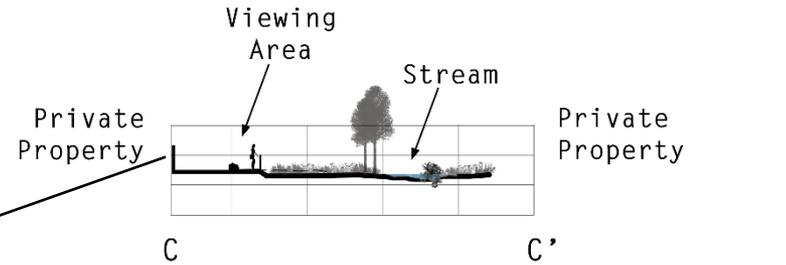


## Wetlands

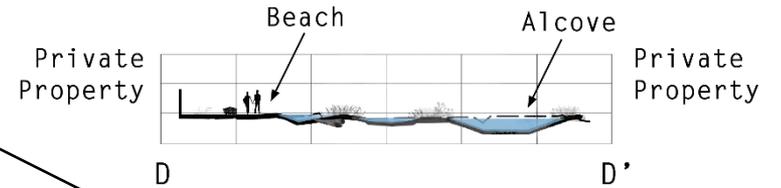




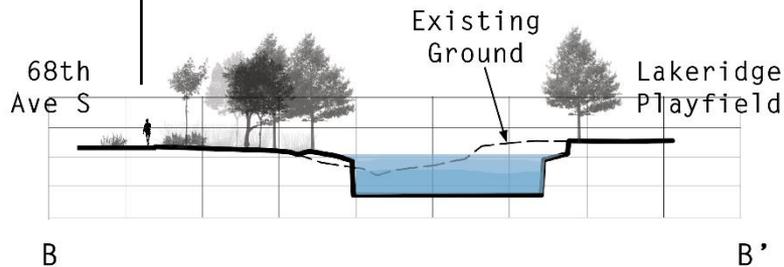
A  
NATURAL AREA PROFILE



C  
NATURAL AREA



D  
LAKE SHORE



B  
SEDIMENT FACILITY

# Thank you!

