



# South Park Pump Station

Concept Design Presentation for the  
Seattle Design Commission

December 6, 2018

# Presentation

## OUTLINE

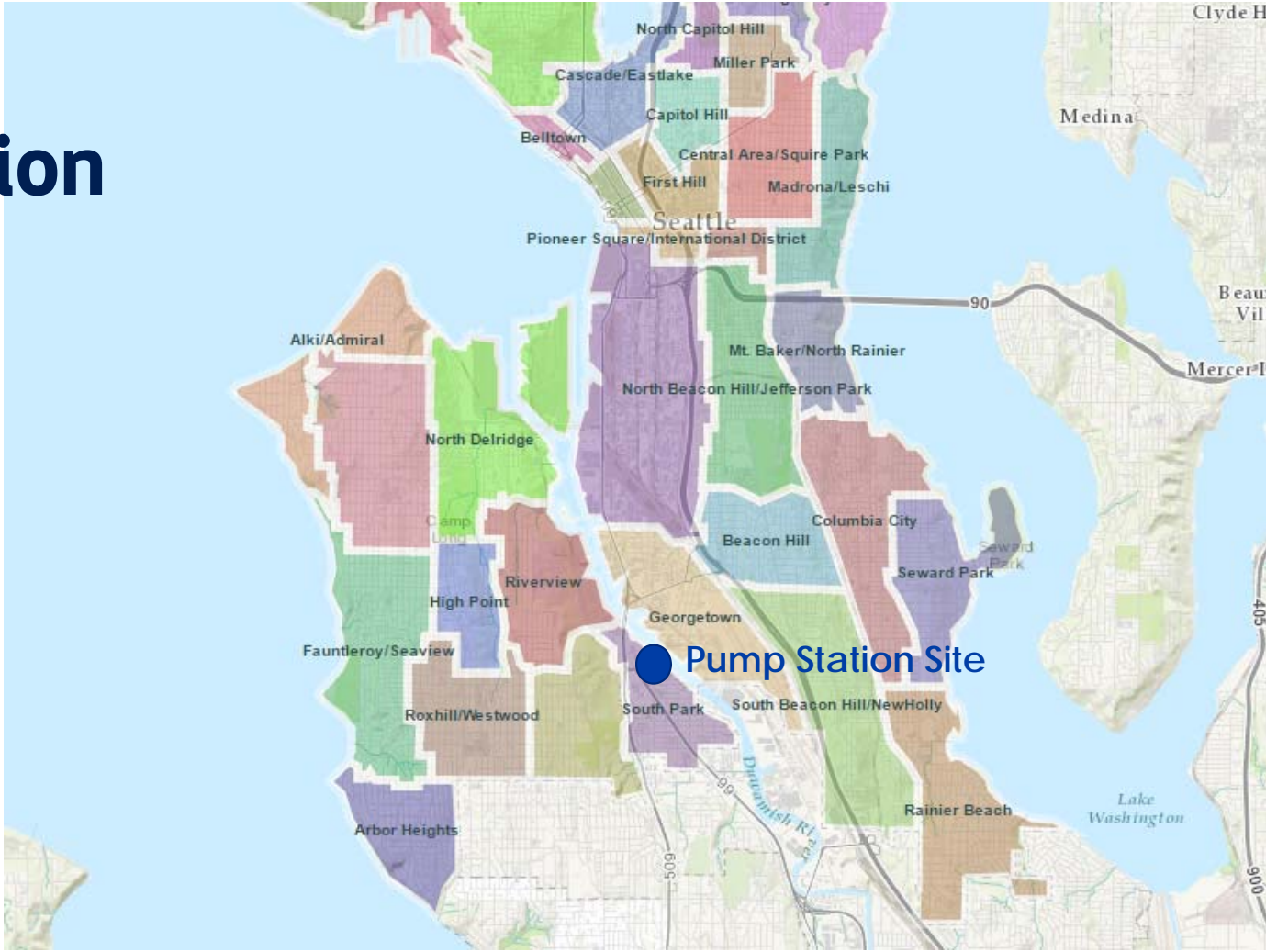
- Project Purpose
- South Park Drainage Program
- Community Themes
- Site Layout Drivers
- Community Experience
- Landscape Concept
- Architectural Concept
- Project Schedule

## PRESENTERS

- **Shailee Sztern**, Project Manager, SPU
- **Meredith Hall**, Landscape Architect, KK|LA
- **Sarah Fischer**, Architect, KPG

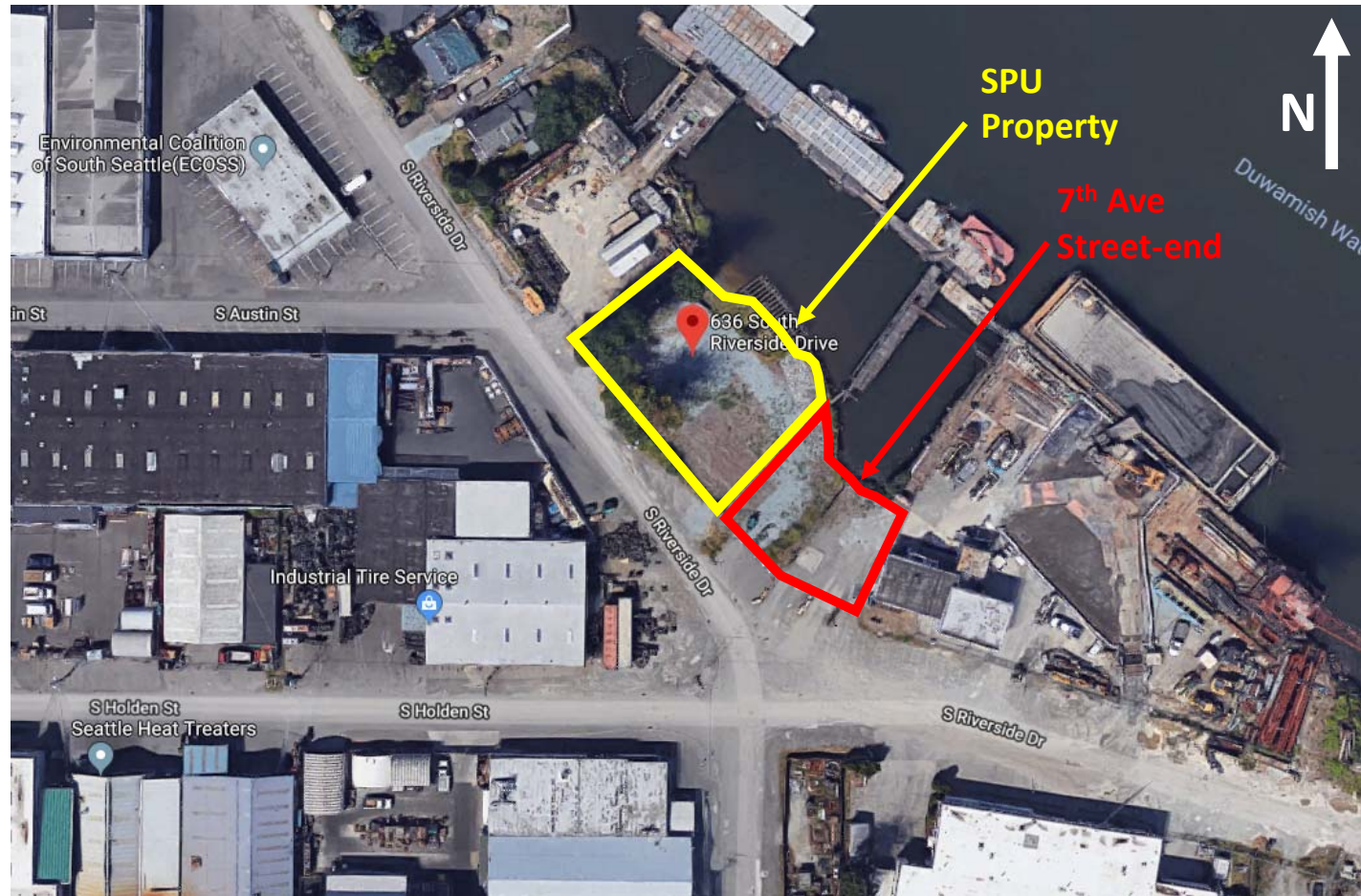


# Location





# Why are we here today?



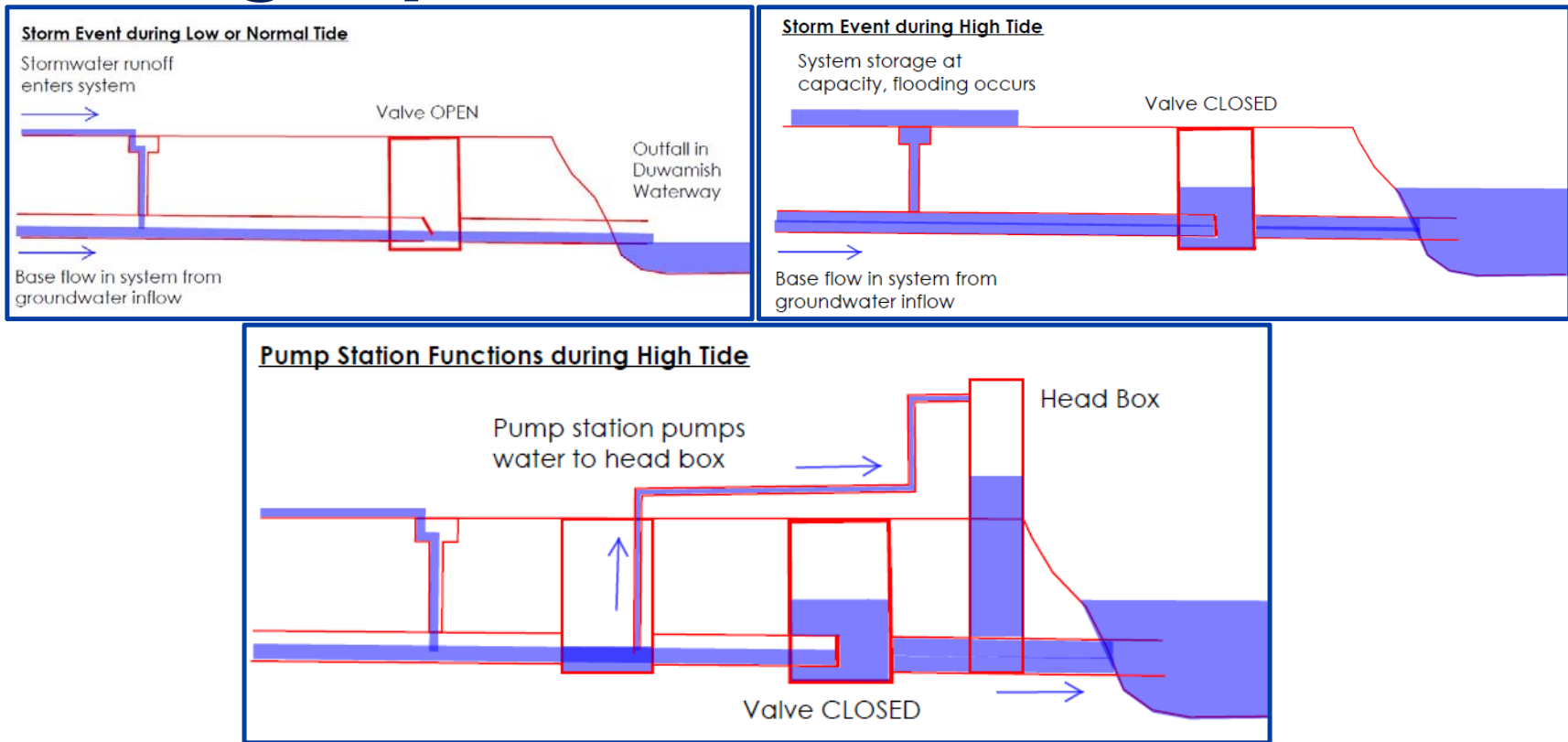


# Project Scope

Reduce flooding in South Park by installing a pump station to pump stormwater from our drainage system into the Lower Duwamish Waterway (via a headbox) during daily high tides.



# Drainage System Function





# SPU Drainage Program

## Pump Station

SPU  
Complete 2021



## Conveyance and Street Improvements

SPU and SDOT  
Complete 2021



## Water Quality Treatment Facility

SPU  
Complete 2025 per EPA consent decree



# SPU Stormwater Drainage Basin

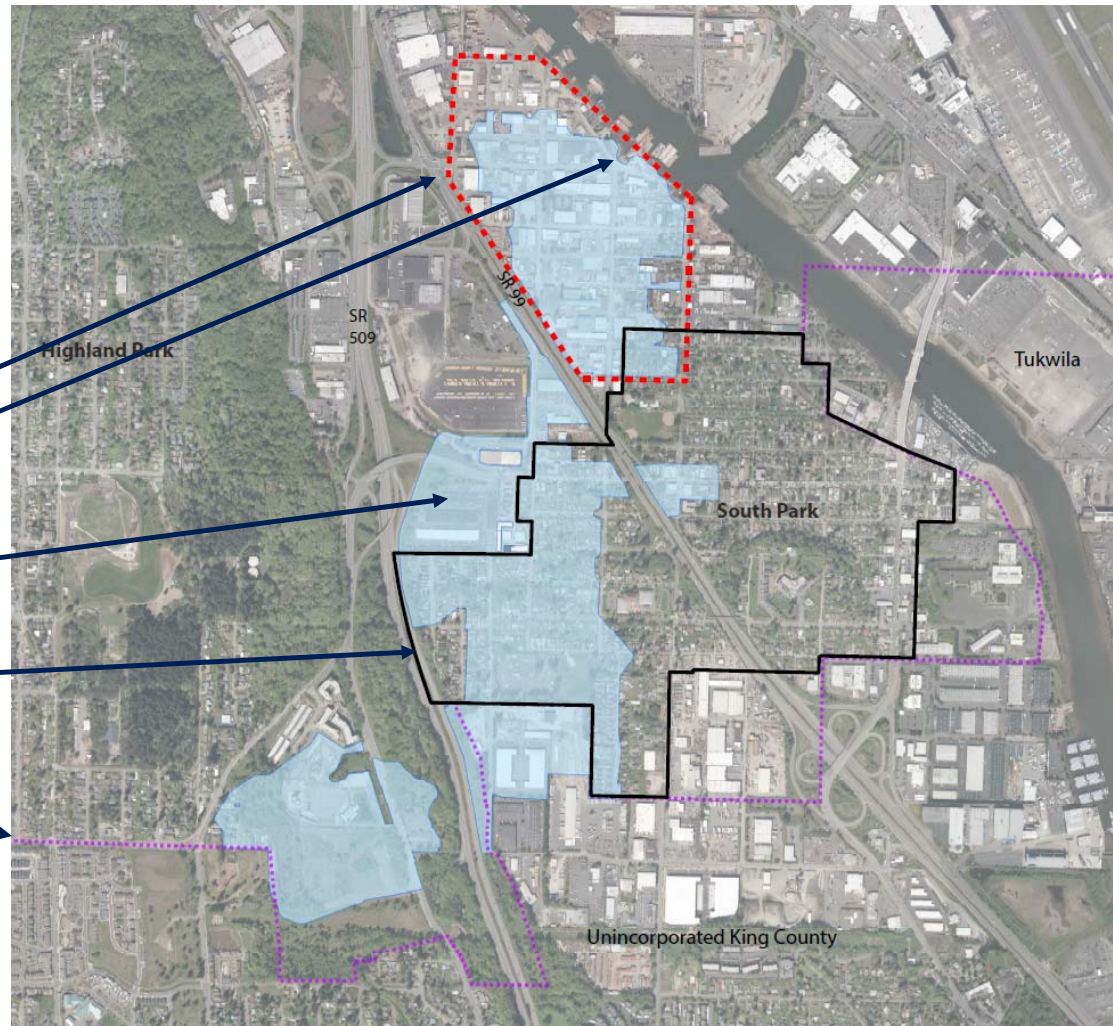
Drainage Improvements

Drainage Outfall

Drainage Basin

Urban Village

City Limits





# Community Themes

- Urban Village
  - Anti-displacement and affordable housing policies
  - Job and economic opportunities
  - Sea level rise adaptation
  - Safety, connectivity and wayfinding
- Industrial Neighbors
  - Public space for lunch breaks
  - Pedestrian safety a concern
  - Facility security a concern

## ***RECENT CONNECTIONS***

- Pacific Pile and Marine
- Machinists Inc.
- Schuchart
- Duwamish Valley Action Team
- Outside Citywide Inter-Disciplinary Team (OPCD-led)
- Center for Community Investment Team (SPU-led)
- Friends of Street Ends



# Site Layout - Major Drivers

- Shoreline District requirements
  - 10 feet of regulated public access
  - 15-foot shoreline protection set back
- Sea level rise adaptation
- Maximize public space
- Facility and site security
- SPU operations and maintenance access





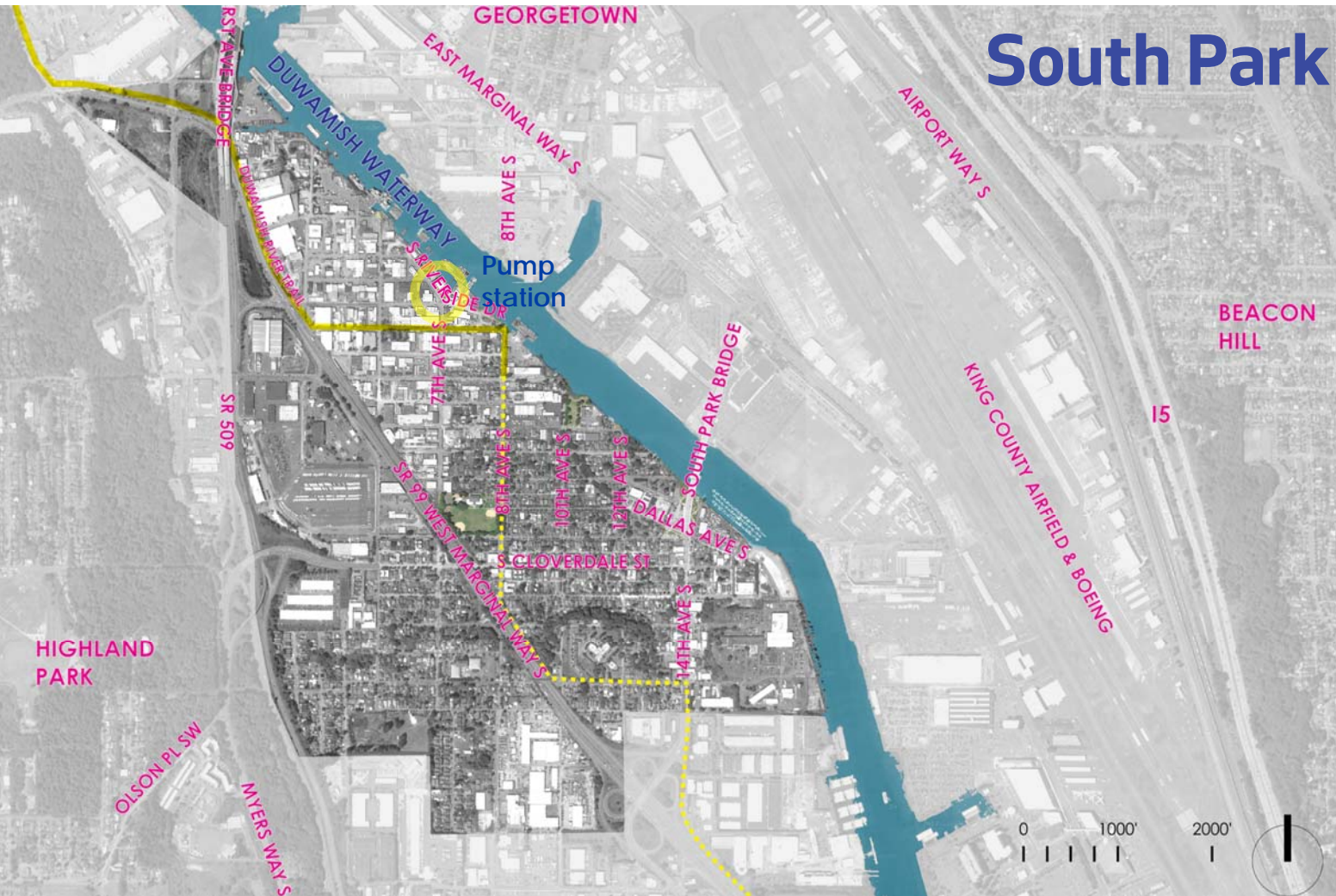


# Community Experience





# South Park neighborhood



12/06/2018

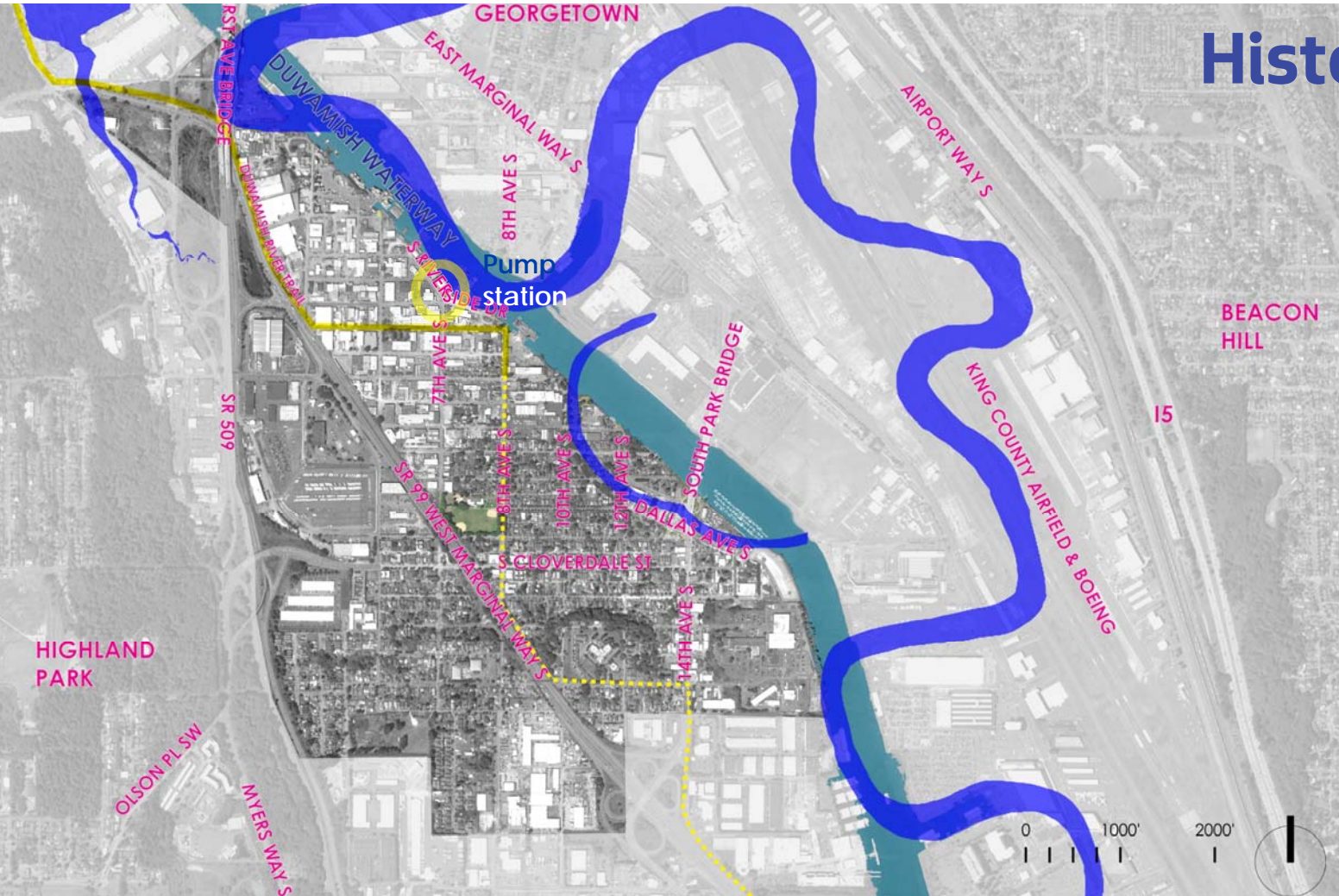
Seattle Public Utilities



City of Seattle

# Historic Duwamish

(before 1913)





# 1936 aerial

S FONTANELLE ST

5TH AVE S  
SHORELINE  
STREET END

S WEBSTER ST

S AUSTIN ST

S HOLDEN ST

5TH AVE S

7TH AVE S

S PORTLAND ST

S CHICAGO ST

8TH AVE S

S RIVERSIDE DR

PACIFIC PILE  
PROPERTY

S RIVERSIDE DR

PUMP  
STATION

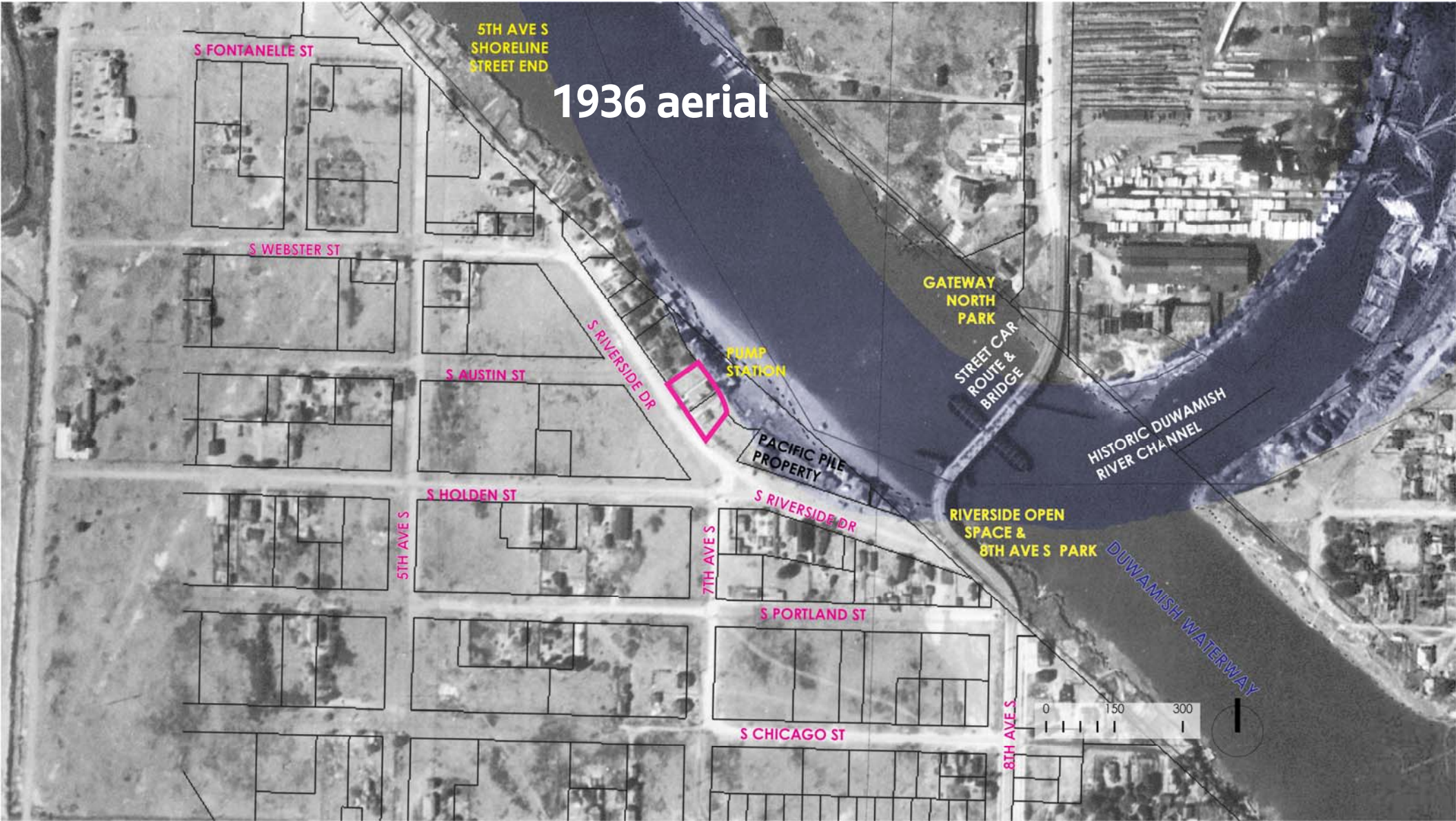
GATEWAY  
NORTH  
PARK

STREET CAR  
ROUTE &  
BRIDGE

RIVERSIDE OPEN  
SPACE &  
8TH AVES PARK

HISTORIC DUWAMISH  
RIVER CHANNEL

DUWAMISH WATERWAY

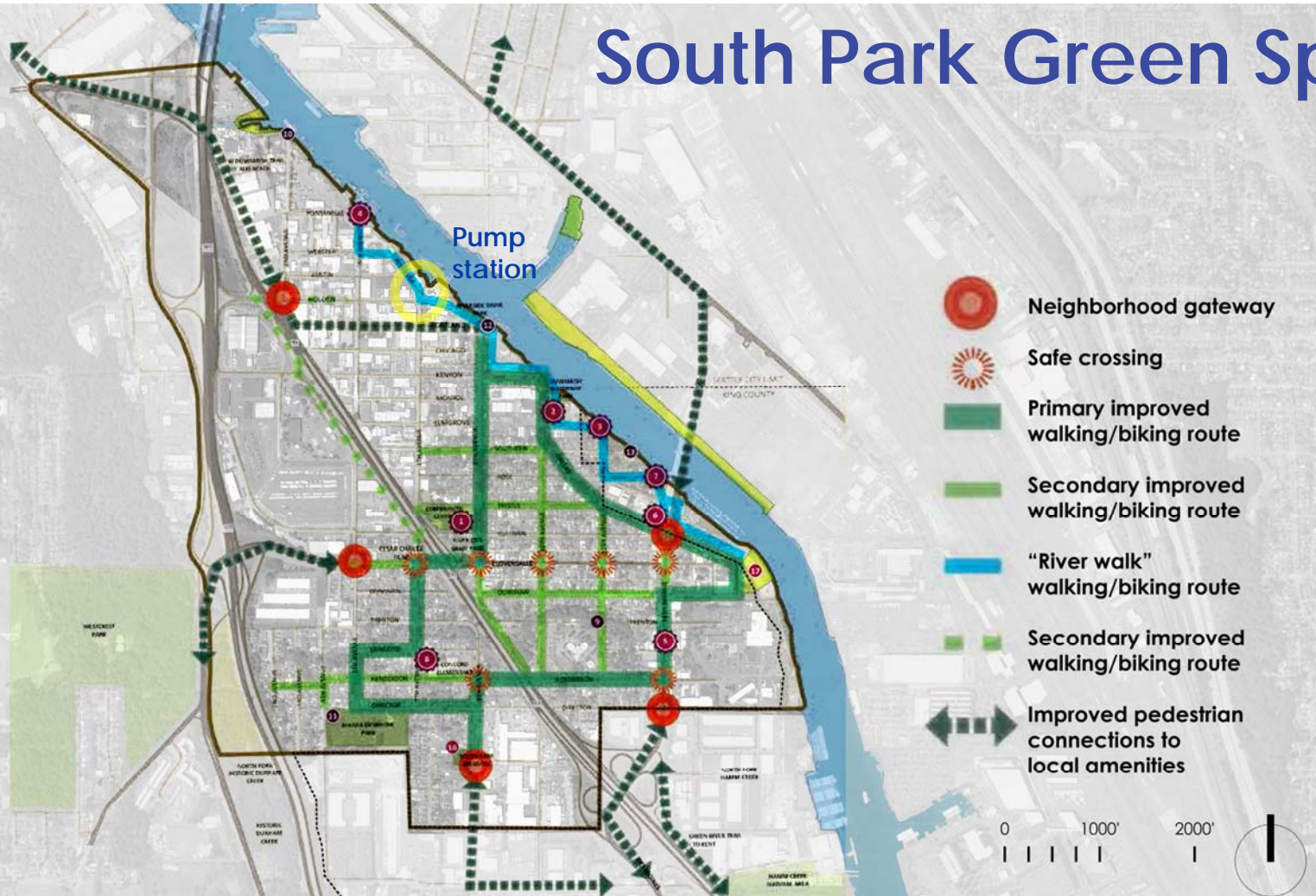




# South Park Green Spaces Vision

(Seattle Parks Foundation, 2013)

Office of Planning and Community  
Development: Outside Citywide  
Duwamish Valley Action Team



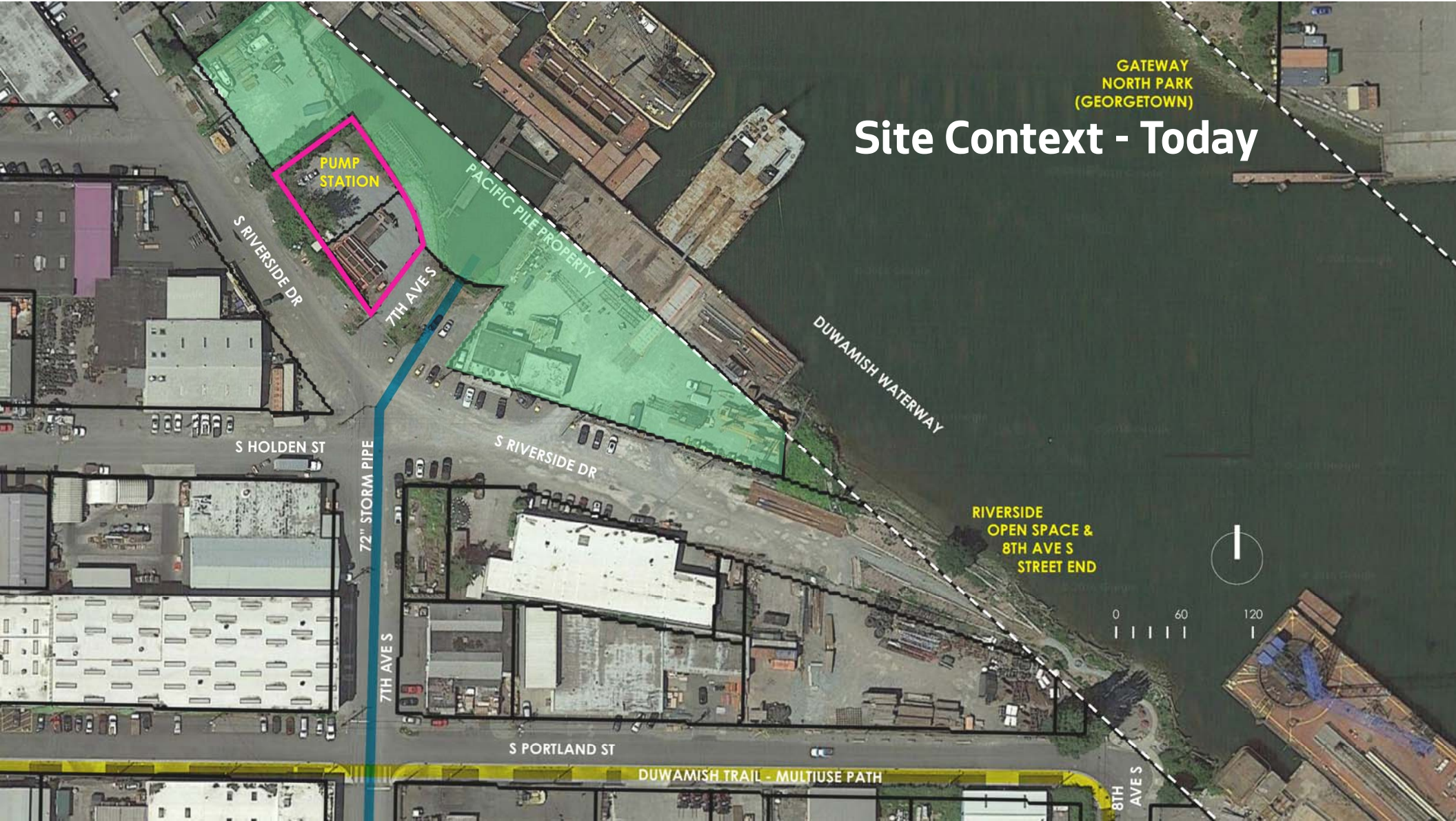
# Site Connection

-  Pump Station Site
-  Planned Sidewalks
-  Duwamish River Trail
-  Existing Sidewalk
-  8<sup>th</sup> Ave S & S Riverside Drive Street End Park





# Site Context - Today



GATEWAY  
NORTH PARK  
(GEORGETOWN)

PUMP  
STATION

PACIFIC PILE PROPERTY

S RIVERSIDE DR

7TH AVE S

DUWAMISH WATERWAY

S HOLDEN ST

S RIVERSIDE DR

RIVERSIDE  
OPEN SPACE &  
8TH AVE S  
STREET END

0 60 120

S PORTLAND ST

DUWAMISH TRAIL - MULTIUSE PATH

8TH  
AVES S





S Riverside St



S Riverside St

# S Riverside Drive & 8th Ave S Street Ends



8th Ave S



# Connection to Duwamish Trail





# Existing conditions







Pacific Pile

S Riverside St

# Riverside frontage (north)



Pump station site (looking east)



Riverside (looking south)









# looking across site: northwest from 7th Ave South



# Water views





# 7th Ave South street end



tide vault

looking north



tide vault

looking south



gate to Pacific Pile property

looking east





# Landscape Concept

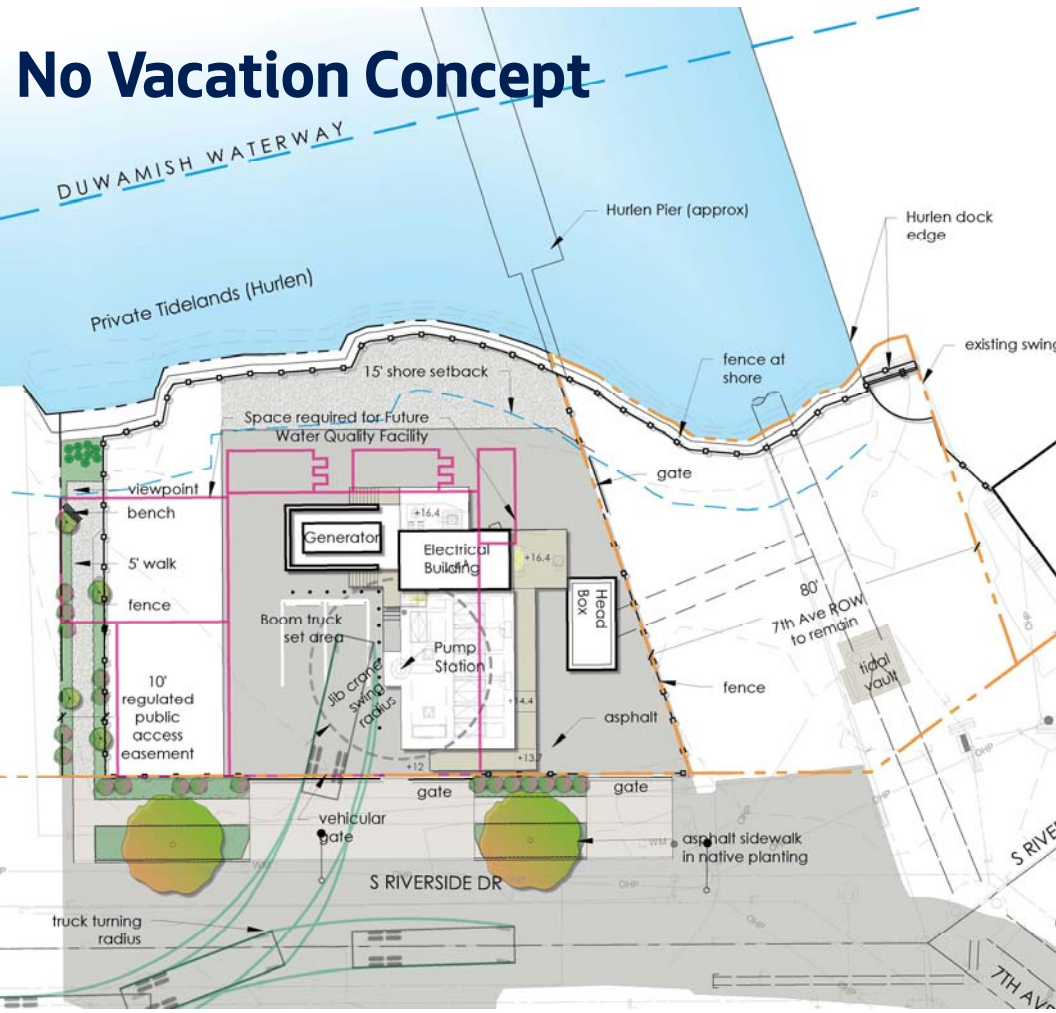
Trillium Park, Toronto



# 2017 Design Commission - Preferred Concept



# No Vacation Concept



# Previous SDC Feedback

## Program

- Demonstrate space needed to build the flood control pump station and related facilities.
- Describe frequency and nature of use regarding the pump station, vehicular access, on-site safety management.
- Show how a no-vacation alternative can accomplish the project goals

## Public Space

- Find a balance between secured, inaccessible space, and space that will be accessible to the public.
- Look for options to provide onsite public space that will provide local public open space and access to the waterfront
- Consider how to maximize or allow water views.
- Consolidate parking and crane access with O&M truck access.

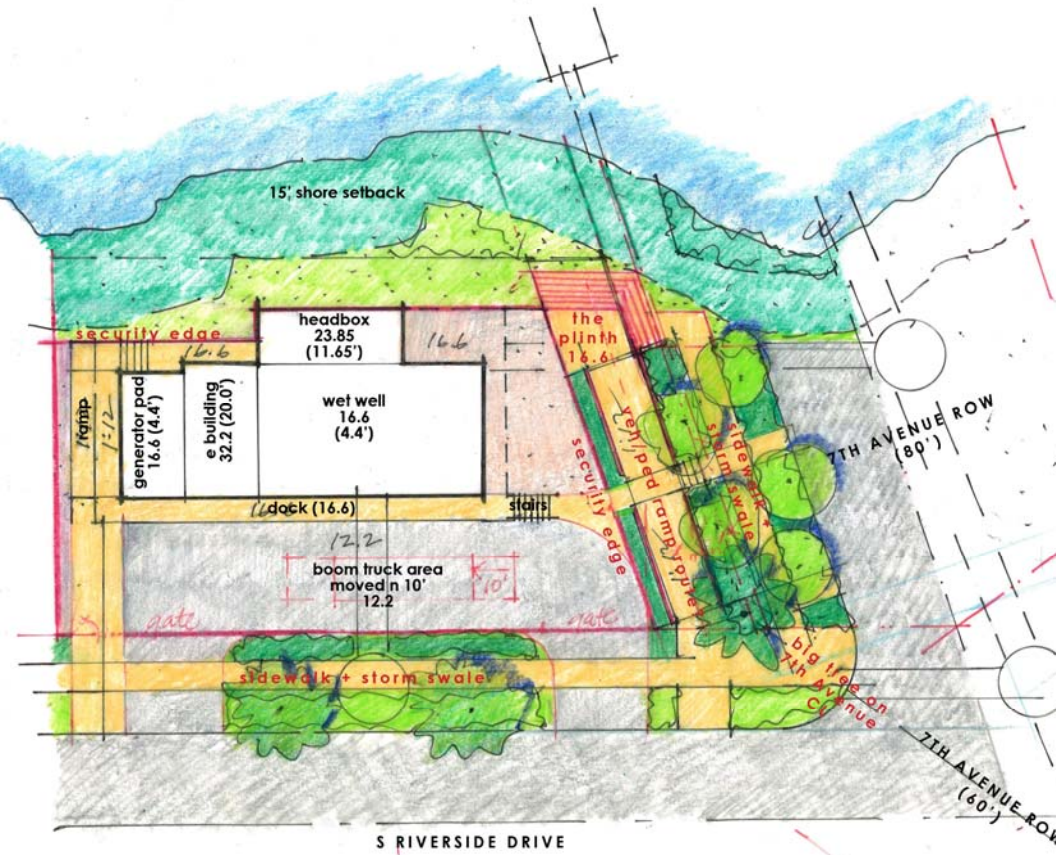
## Neighborhood

- Show whether or not on site sidewalks and landscaping will tie into a larger network of sidewalk and landscaping within the South Park neighborhood.





# 2018 Initial Concept 1 Street side Boom Truck Access



# Concept 2 Pull in Boom Truck Access





# Fall Concept - Clams

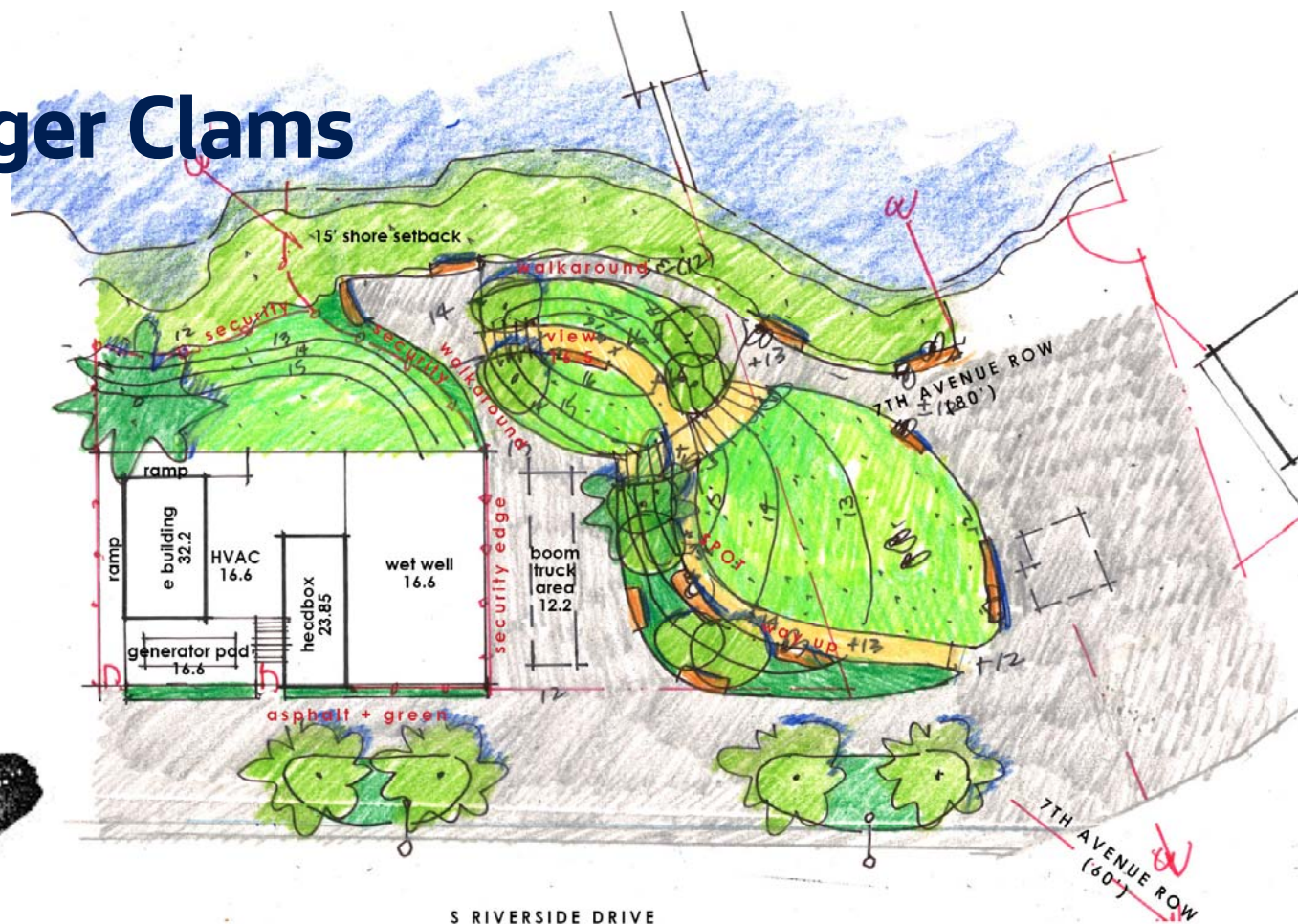
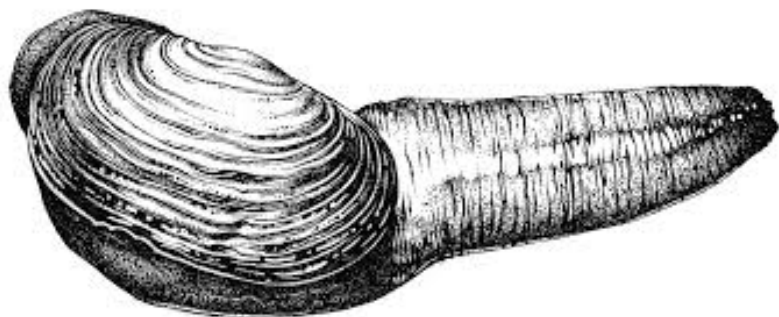
- Reduce project footprint
- Maximize public access
- Raise site along shoreline
- Recognize 7<sup>th</sup> Avenue view
- Maximize views from site
- Recognize shoreline setting
- Landscape stays outside R.O.W.





## 2<sup>nd</sup> Study - Bigger Clams

- Reduce project footprint
- Maximize public access
- Raise site along shoreline
- Recognize 7<sup>th</sup> Avenue view
- Maximize views from site
- Recognize shoreline setting
- Landscape embraces R.O.W.





# New Shorelines

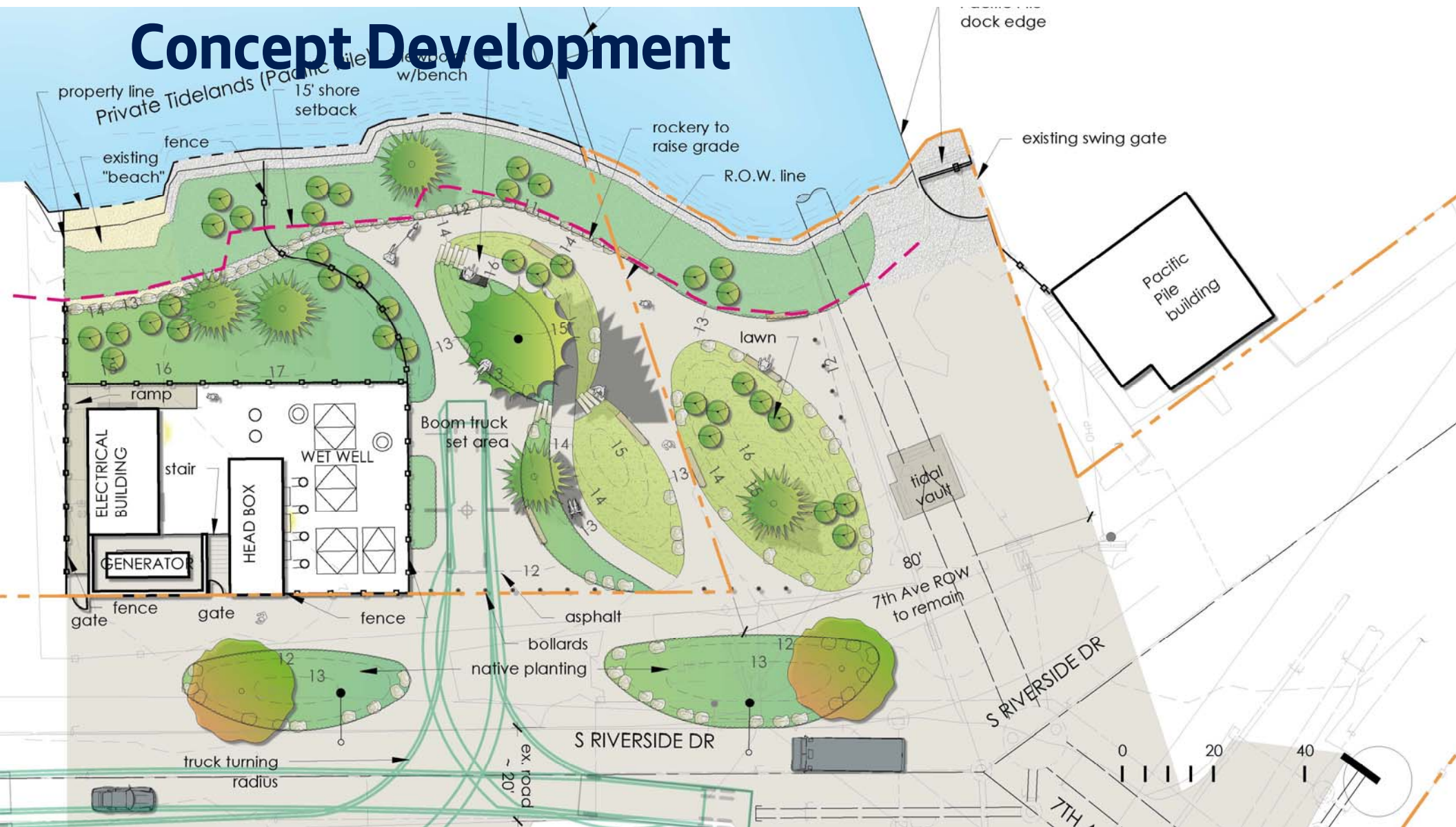


Trillium Park, Toronto





# Concept Development





# Shoreline character



Madrona



Shore pine



Native shore plants





# Materials



Stone slab seats



boulders



Concrete with oyster shell aggregate

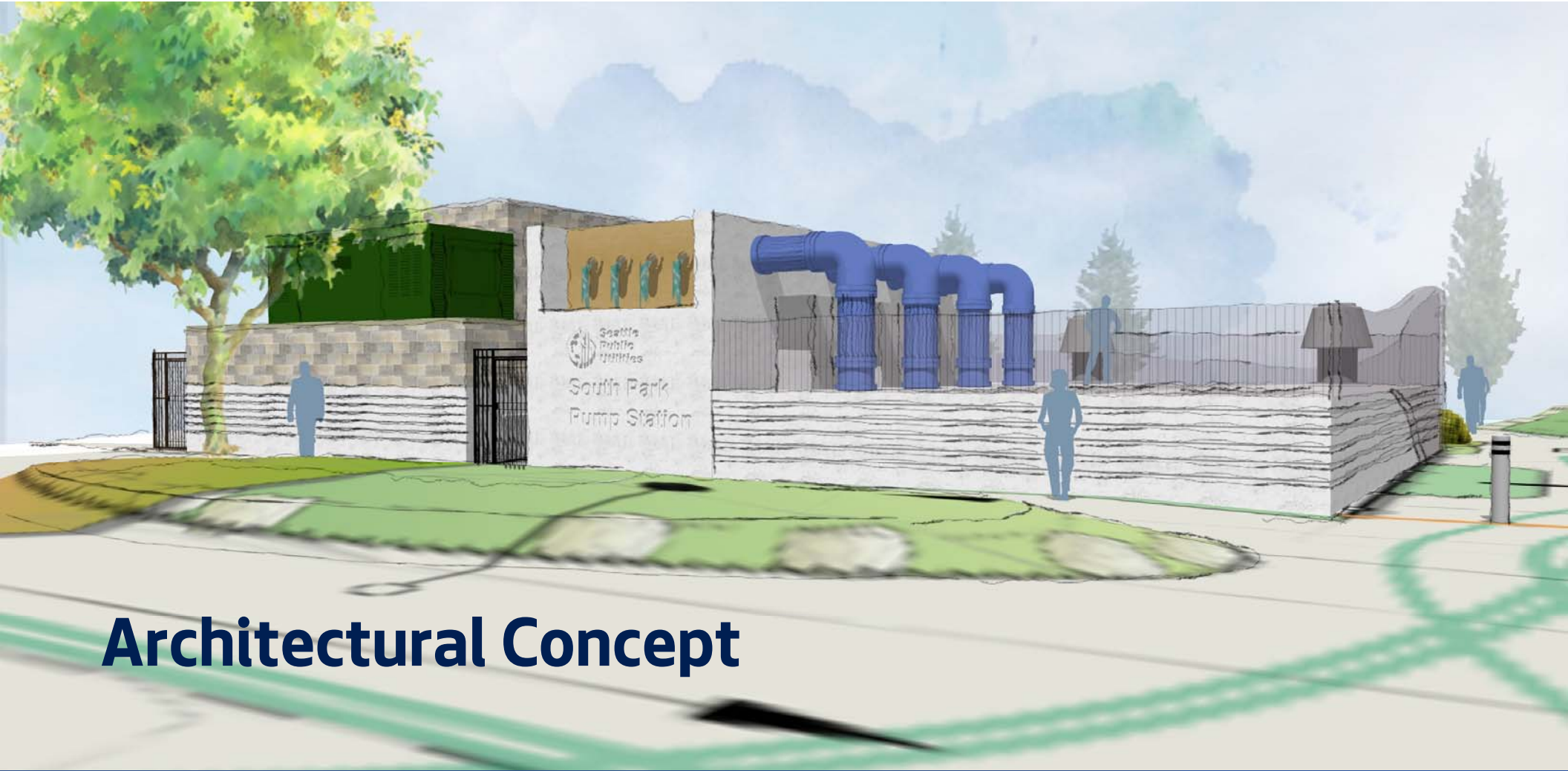


logs



Concrete banding at T-117 superfund cleanup (SCL & SPU)





# Architectural Concept



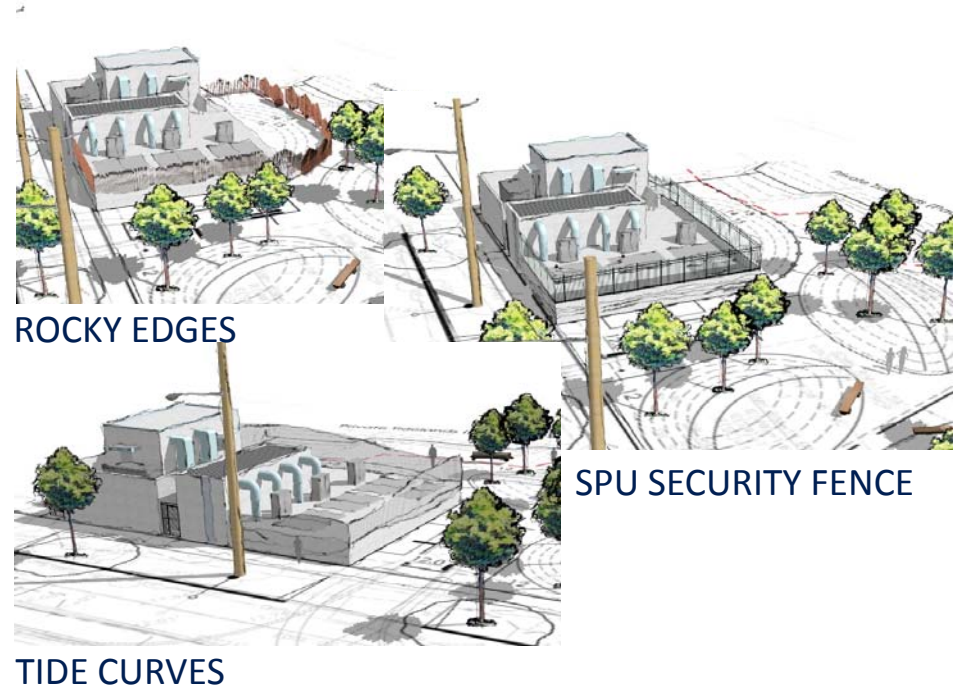


## Fall 2018 – D.I.L. Workshop



- General Comments: Color panels not necessary, more transparency, disconnected from landscape.

## Fall 2018 - Working Revisions

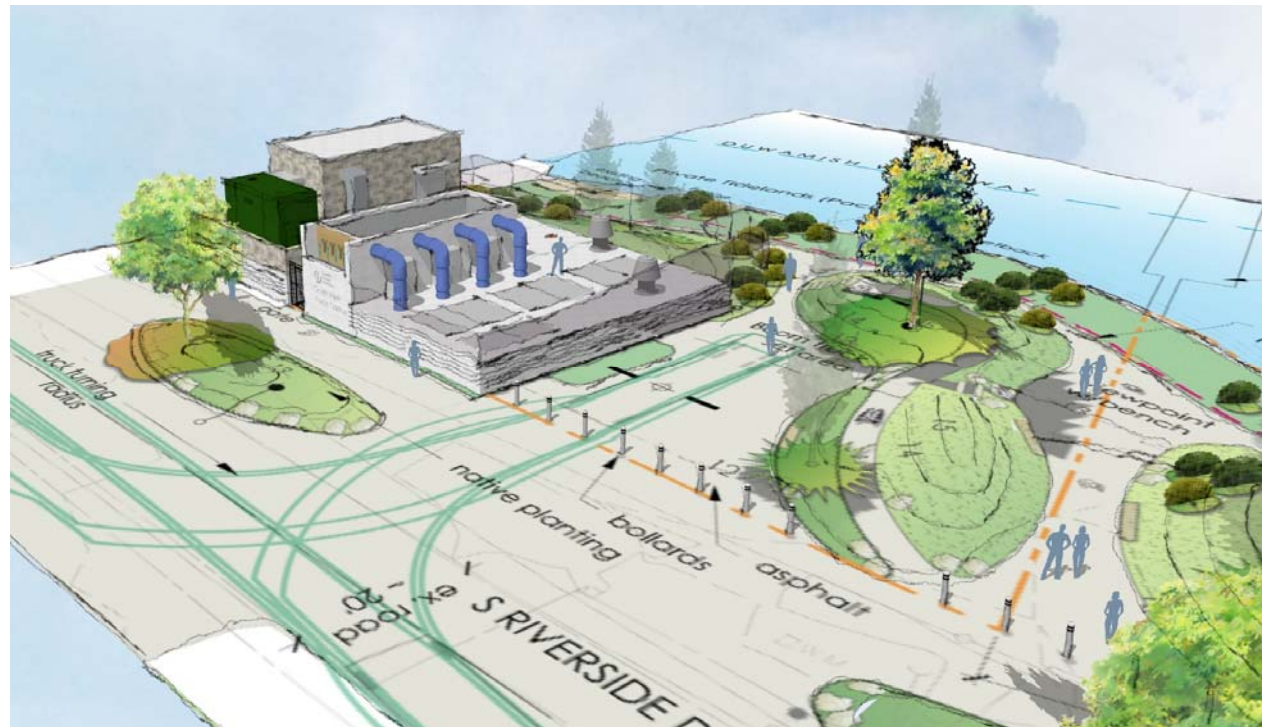


TIDE CURVES

- Proportion, fencing and material studies.
- Team feedback: Tide sine curves, reduced fence scale.

# Architecture Concept - Today

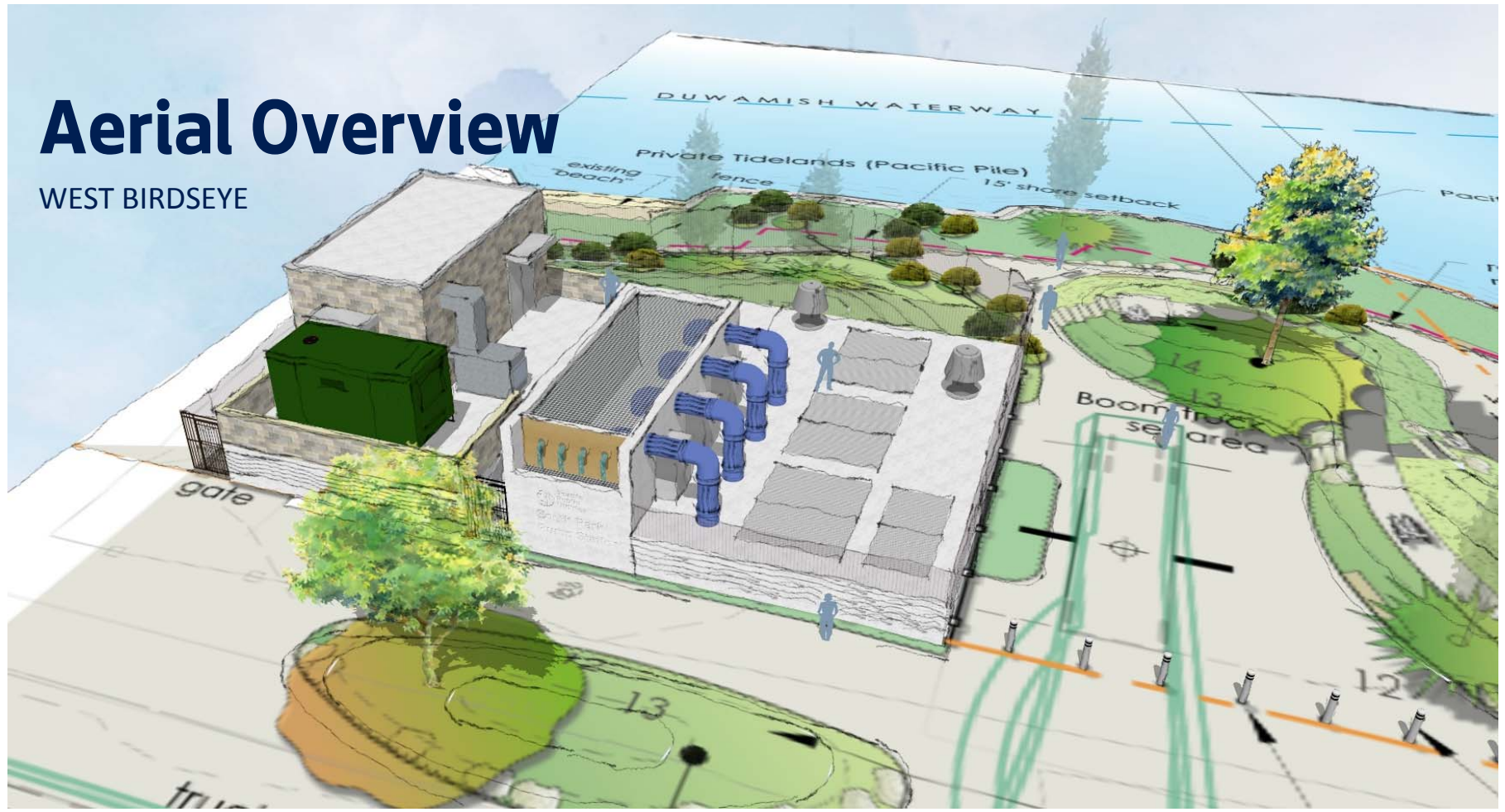
- Compact facility
- Site transparency
- Resiliency
- Stormwater Story



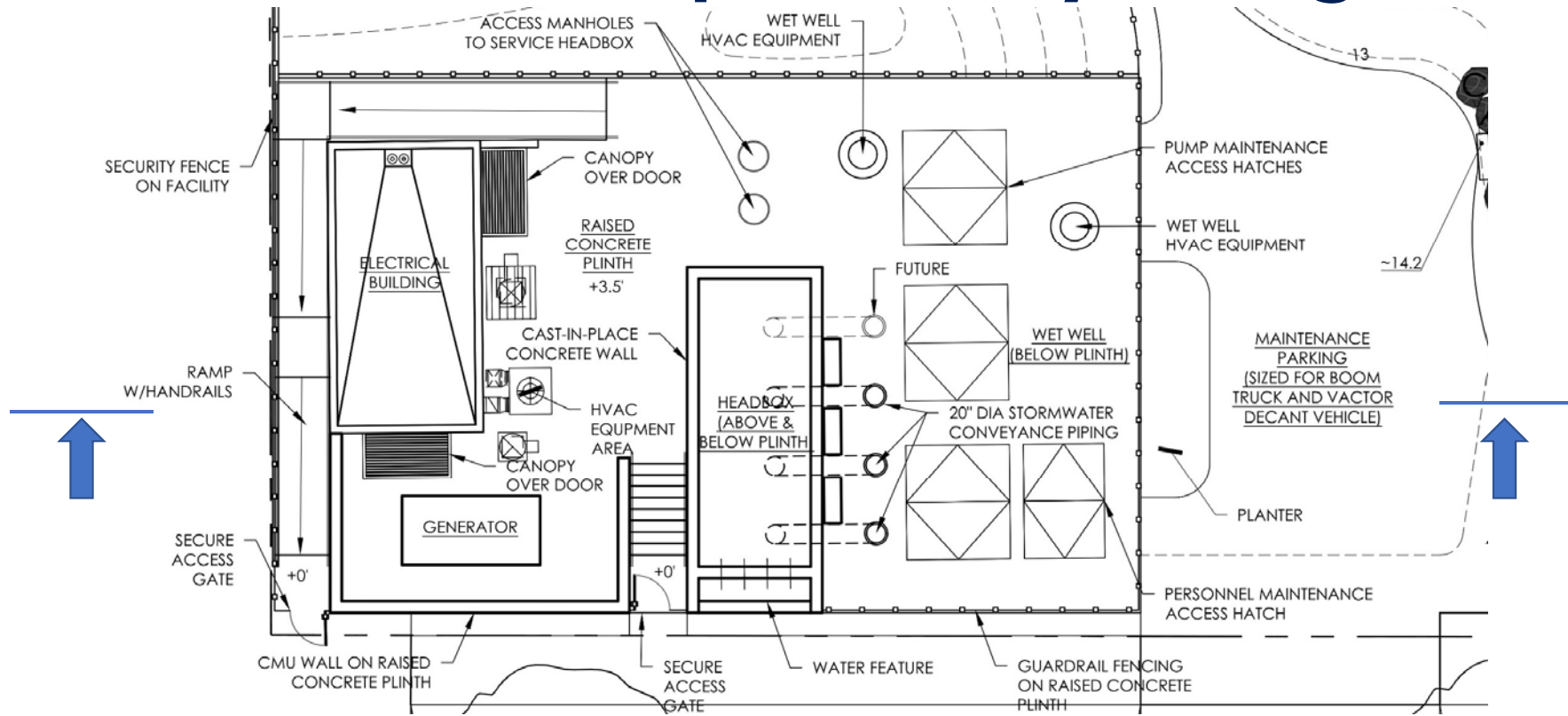


# Aerial Overview

WEST BIRDSEYE

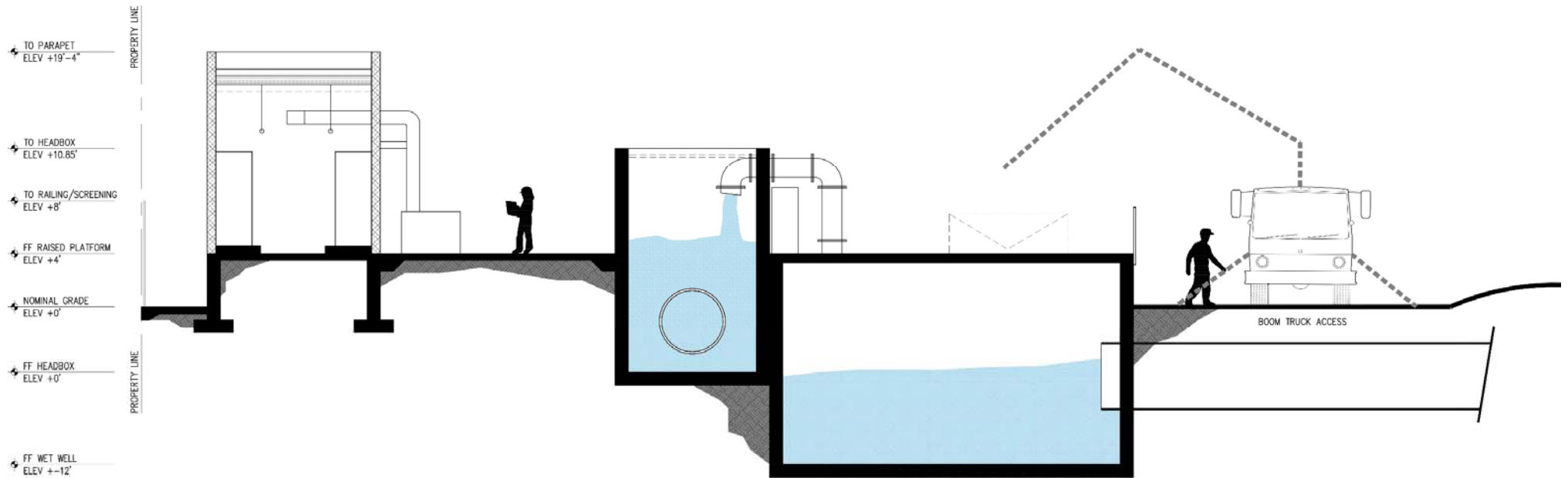


# Architecture Concept - Facility Arrangement





# Architecture Concept - Facility Section



# Perspective - From Southwest

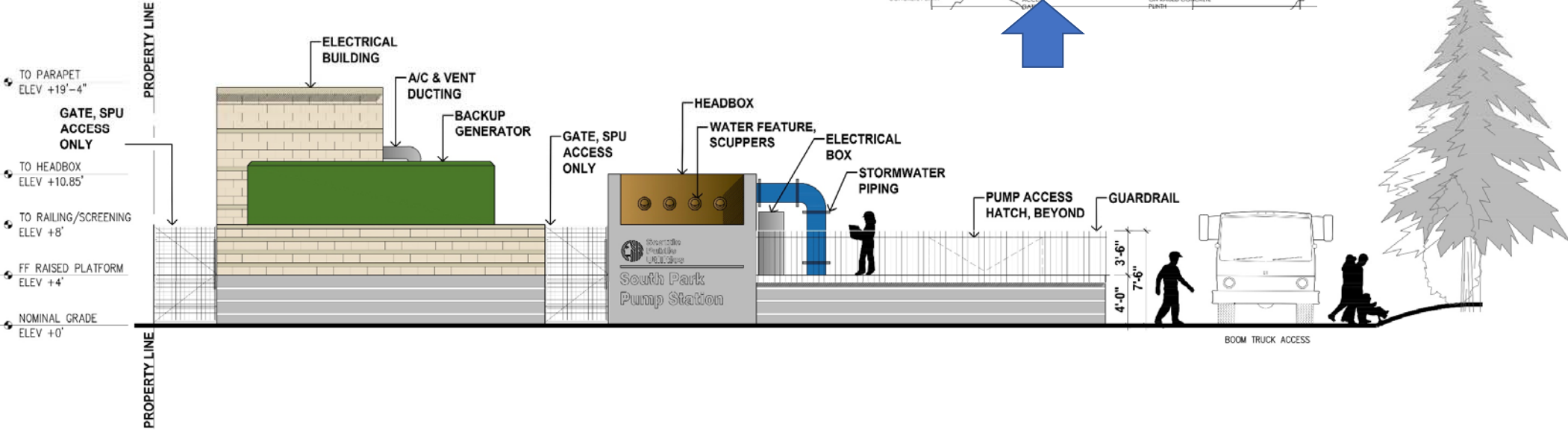
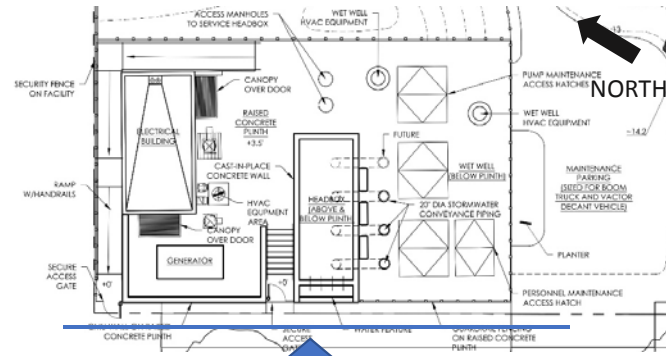




# Perspective - From Northwest

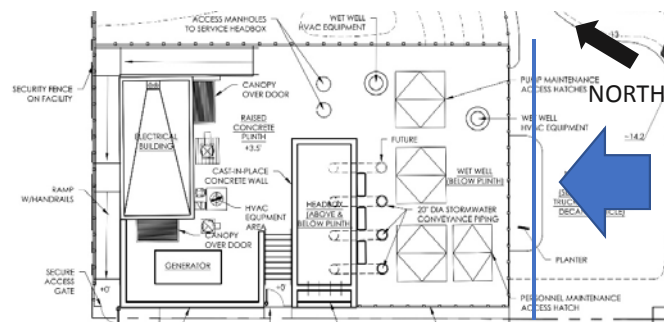


# Elevation - West





# Elevation - South



# Materials



Articulated  
Concrete  
Formwork



Fencing



Ground Face CMU



Stormwater Feature



# Stormwater Story



# Project Schedule

