# Burke-Gilman Trail Missing Link



Seattle Design Commission – Concept Design (30%) Louisa Galassini, SDOT Project Manager August 3, 2017



#### SDOT's Mission And Vision

Mission: Deliver a high-quality transportation system for Seattle

Vision: connected people, places, and products

Committed to 5 core values to create a city that is:

- Safe
- Interconnected
- Affordable
- Vibrant
- Innovative

For all

#### Presentation Agenda

Project Overview
Concept Design (30%)

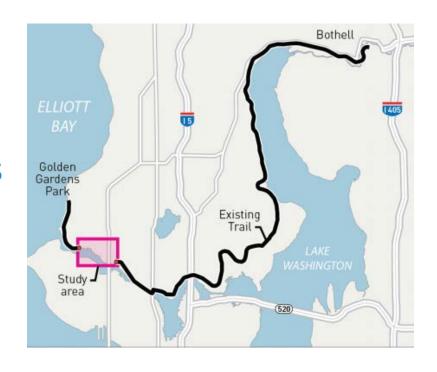
- Design Details
- Schedule & Budget
- Adjacent Projects

1% for the Arts
Questions

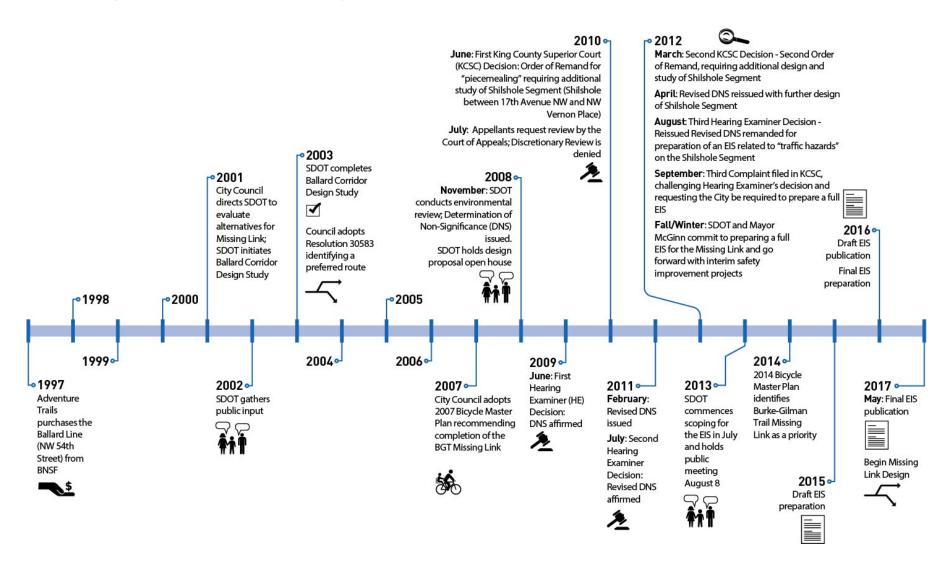
#### PROJECT OVERVIEW

#### Project Vision

Complete the Burke-Gilman Trail to create a safe, direct, and well-defined route for people of all ages and abilities traveling across the City and through Ballard. Improve predictability for motorized and non-motorized users while maintaining safe truck and freight access to local businesses.



#### **Project History**



#### ENVIRONMENTAL IMPACT STATEMENT

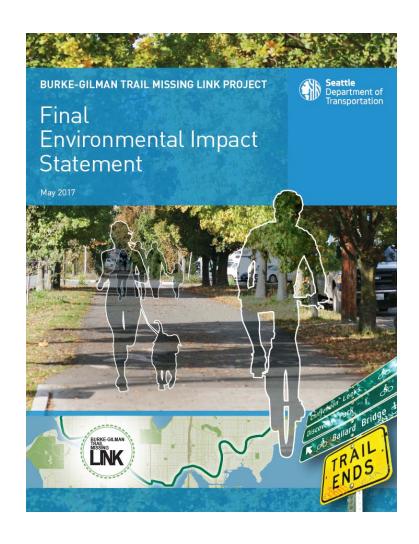
#### Final EIS

#### Evaluated five route alternatives:

- Shilshole South
- Shilshole North
- Ballard Avenue
- Leary Avenue
- Preferred Alternative

#### Assessed potential impacts:

- Traffic and transit
- Parking impacts
- Driveway and loading docks
- Intersections



#### Route Alternatives



## Preferred Alignment



#### Why Preferred Alternative?

- Most direct, shortest, flattest and fastest route through Ballard; Flat is important, as this improves sight-lines and safety for all corridor users
- Route used most often by cyclists and pedestrians to get to the existing
   Burke-Gilman Trail, and would likely remain used if another route selected
- Least number of roadway intersection crossings, which have the greatest potential for conflict between drivers and cyclists or pedestrians
- Least number of rail crossings, which are notoriously dangerous for cyclists and rail operators
- Least impact on, or need to modify, existing driveways or loading docks

### OUTREACH

#### **Public Outreach Efforts**



#### **Public Outreach Efforts**





360 unique comments submitted



**87** door-to-door surveys completed

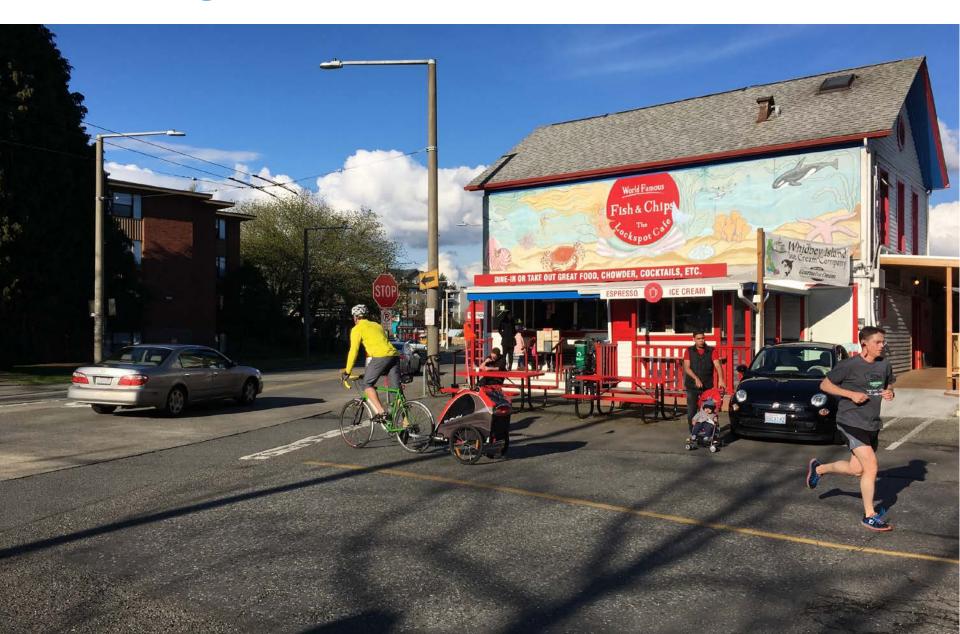
CONCEPT DESIGN (30%)

## Preferred Alignment

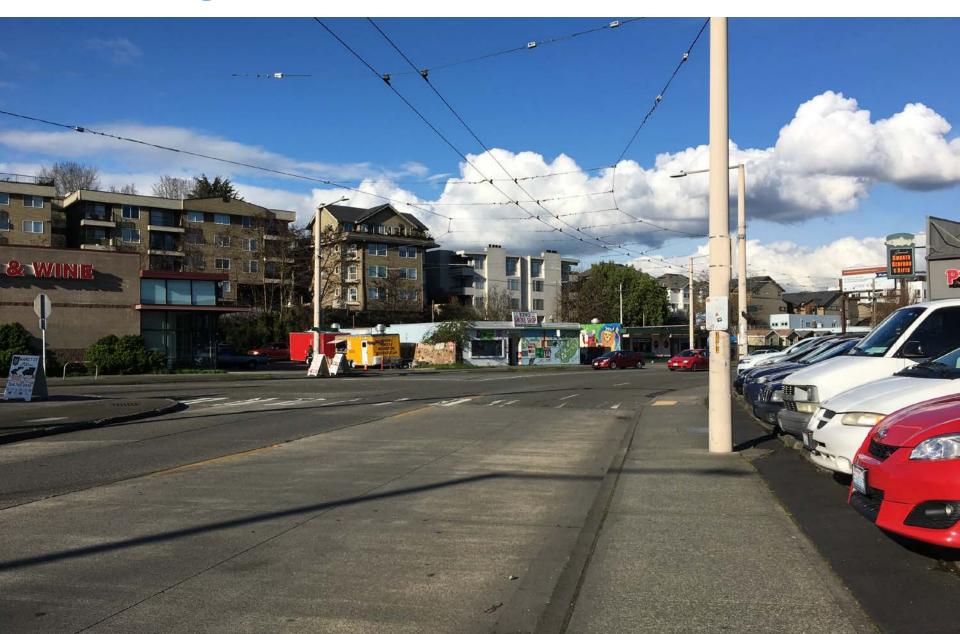


NW 54TH STREET

# Existing (NW 54<sup>th</sup>)



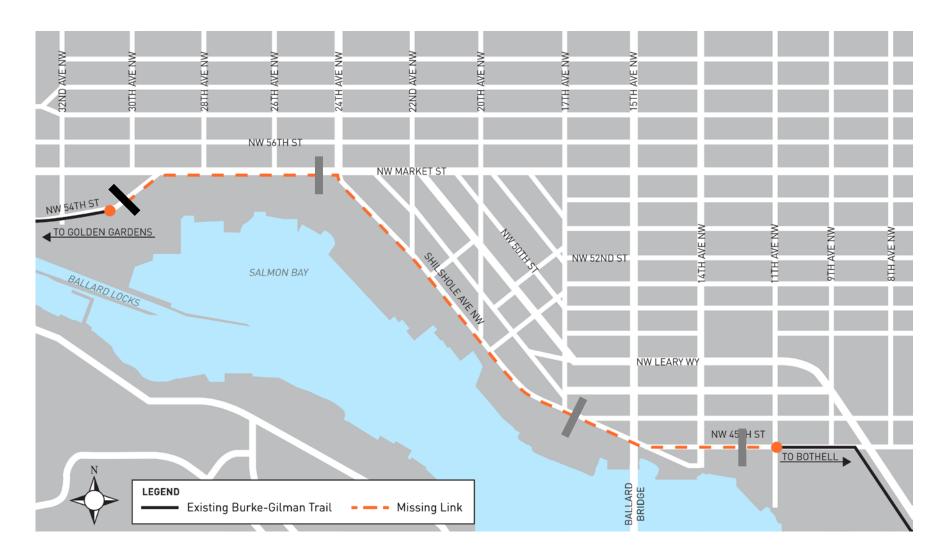
# Existing (NW 54<sup>th</sup>)



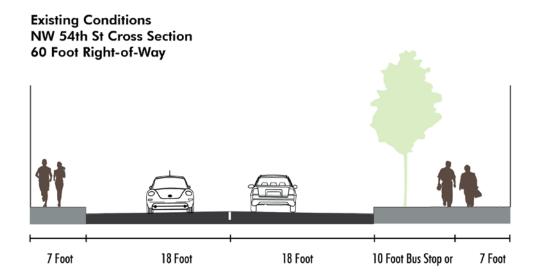
#### NW 54th – Input and Changes

- Maintain charter bus/metro layover parking spaces in front of the Locks
  - This was shown as being removed in the FEIS design, but has been maintained in the 30% design.
- Maintain 10' wide parking lane on north side of Market between 54<sup>th</sup> and 28<sup>th</sup> for Metro bus layover
  - FEIS design had 8'parking lane, 30% design includes 10' parking lane.

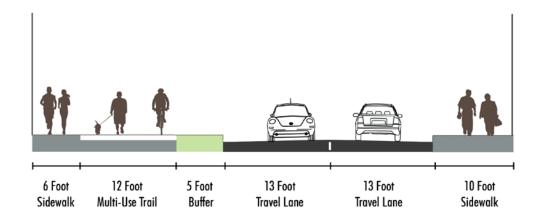
### NW 54th St – Plan/Section Location



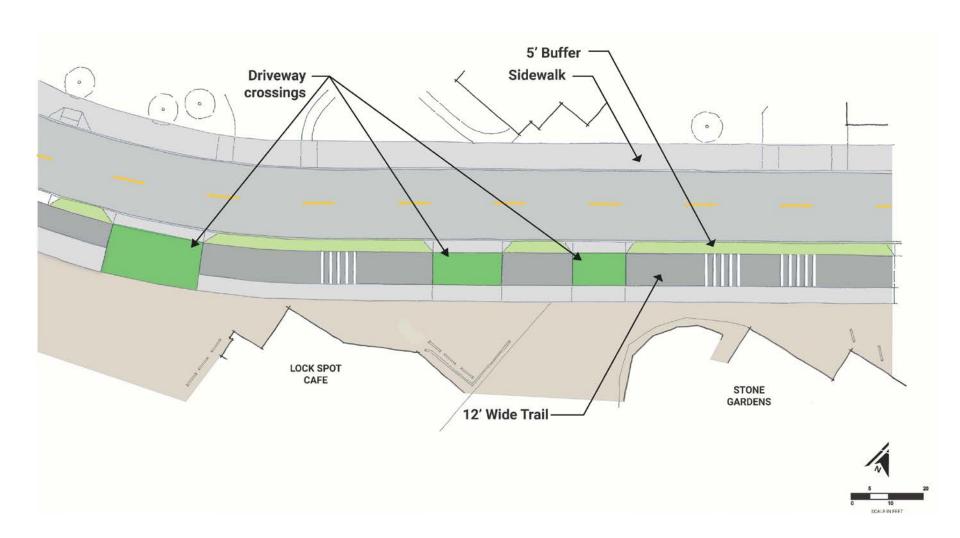
#### NW 54th - Section



Missing Link Proposed Condition NW 54th St Cross Section 60 Foot Right-of-Way



### NW 54th - Plan



#### NW MARKET STREET

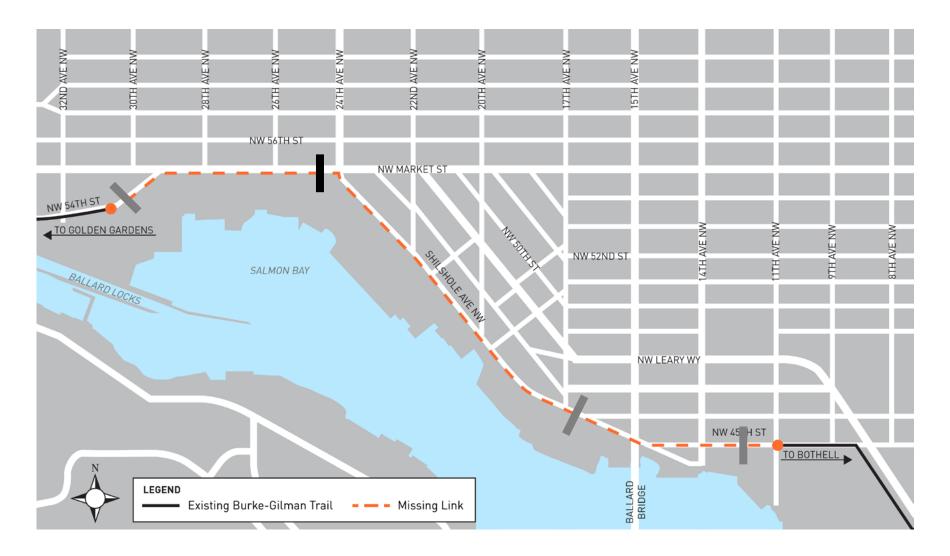
# Existing (Market St)



#### Market St – Input And Changes

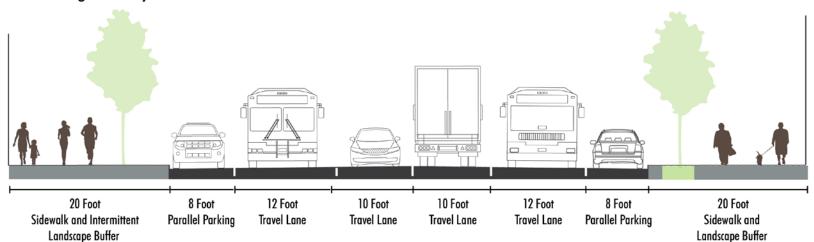
- Add westbound left turn lane at Market/28<sup>th</sup> with protected signal phase
  - Included in 30% design
- Coordinate design/construction with the Nordic Heritage Museum (NHM)
  - Weekly meetings with the Nordic since June 2017, interim and final conditions included in the Nordic SIP and 30% BGT design
- Use concrete instead of asphalt for Market St trail
  - Included in 30% design, internal discussion ongoing

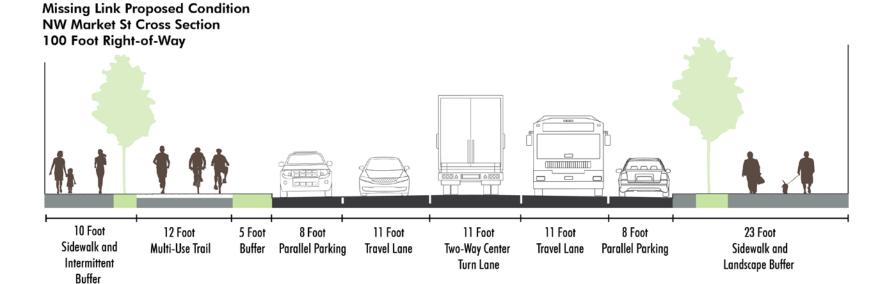
### Market St – Plan/Section Location



#### Market St - Section

Existing Conditions NW Market St Cross Section 100 Foot Right-of-Way





### Road Re-channelization Benefits: Reduced Crashes

4-Lane 3-Lane

# Road Re-channelization Benefits: Reduced Speeding And Collisions

Street	ADT Before	ADT Change	Injury Collisions	Aggressive Speeding (40+ MPH)
Stone Way N	13,900	-6%	-33%	-75%
Fauntleroy Way SW	17,599	+0.3%	-72%	-13%
	12 222	450/	400/	4.50/
S Columbian Way	12,300	+15%	-19%	-46%
Nickerson Street	18,500	-1%	-20%	-93%
NE 125 <sup>th</sup> Street	13,600	+11%	-8%	-69%
	,			
N 130 <sup>th</sup> Street	13,298	+0.5%	-75%	-87%
Ellis Avenue S	9,855	-39%	-24%	-30%

# Road Re-chan (Nickerson)





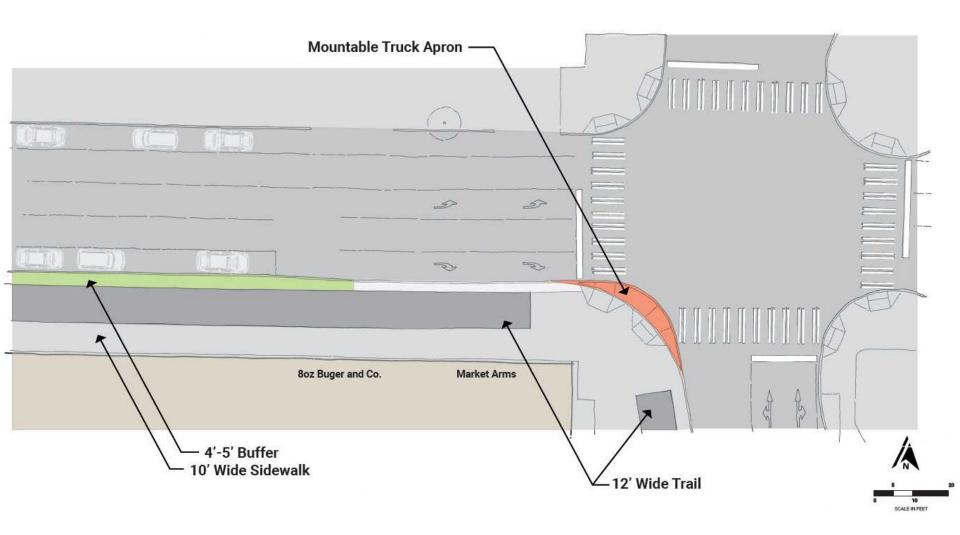
BEFORE AFTER

# Road Re-chan (Stone Way)





#### Market St - Plan

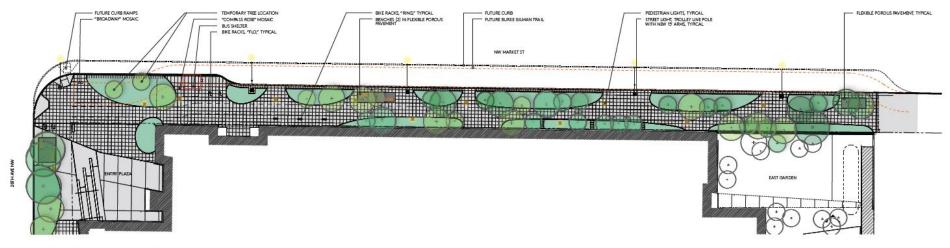


## Mountable Curbs

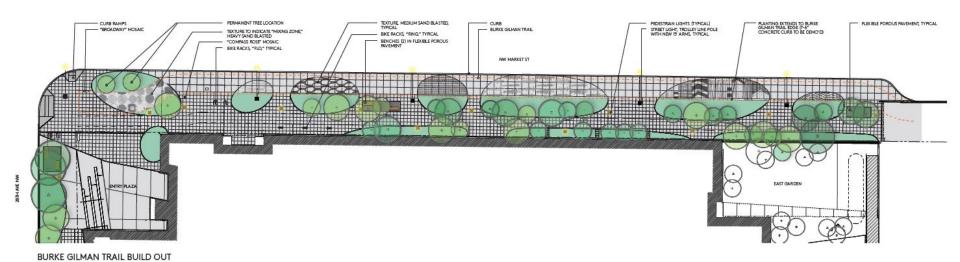




# Nordic Heritage Museum

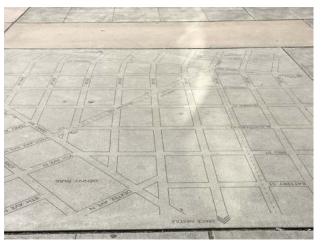


SIP ADDENDUM - INTERIM CONDITION



# Paving Alternatives

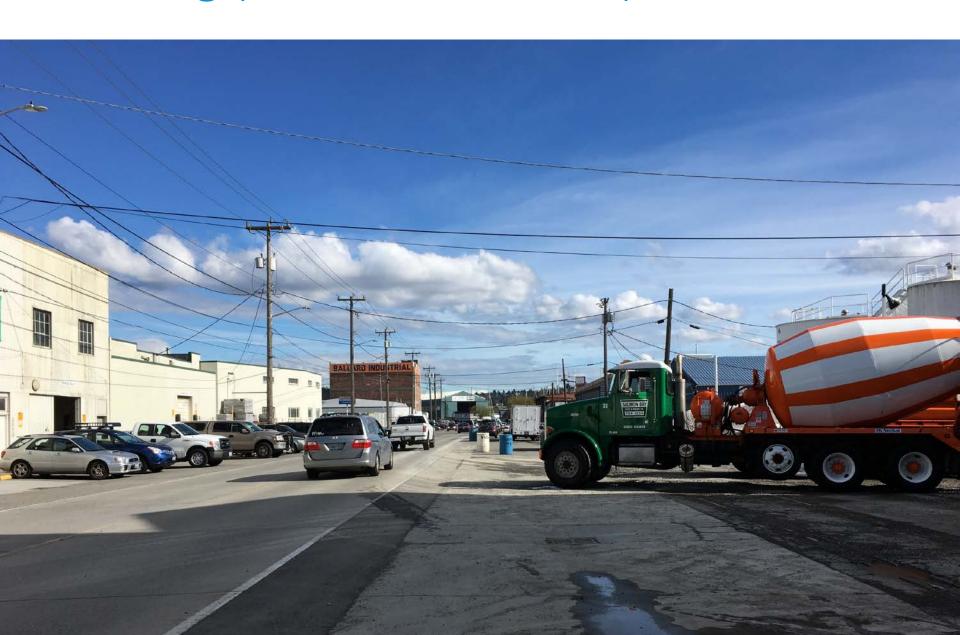




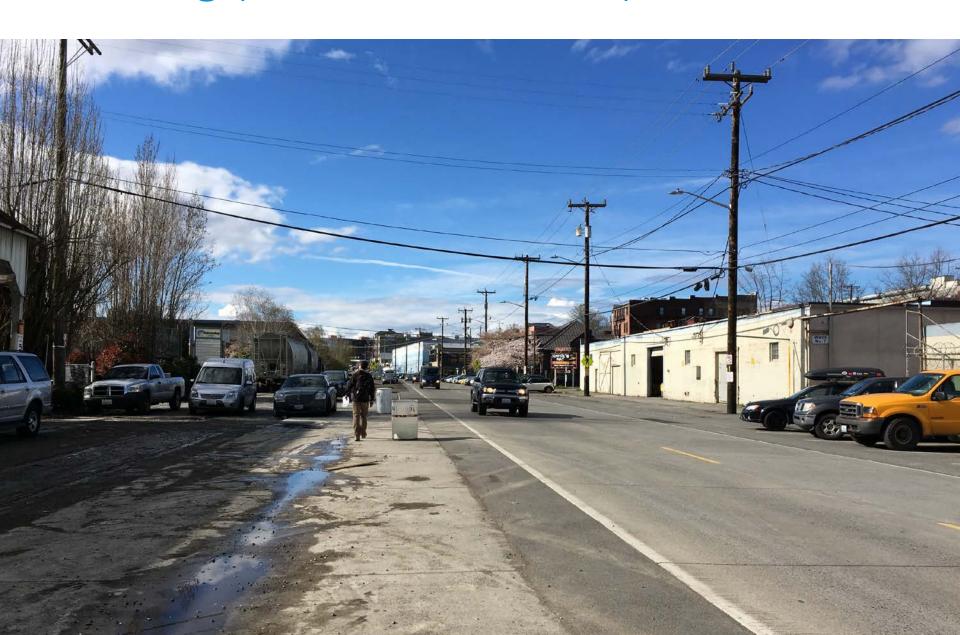


SHILSHOLE AVE NW

# Existing (Shilshole Ave NW)



# Existing (Shilshole Ave NW)



### Shilshole – Input and Changes

#### Maximize parking along Shilshole

- Added striping for parking on north side of Shilshole to maximize number of parking space and better enforce driveways and loading zones
- Confirmation that SDOT will allow unregulated parking south of the trail to remain unregulated
- Approximately 20 stalls added on the 54<sup>th</sup> extension plan
- Add signal and west leg to intersection of Shilshole and Vernon to accommodate future development of Stimson Marina
  - Included in 30% design. New signals should increase frequency of gaps in traffic and improve ability for trucks to enter/exit driveways.
- Improve safety at Shilshole driveways
  - Included 8 flashing LED warning signs for trail users at key locations along Shilshole in 30% design. Locations and method of triggering signs (options include, manual remote, motion activated, bollards, etc.) to be studied further in 60% design

### Shilshole – Input and Changes

#### Improve safety at Shilshole/24<sup>th</sup>

 30% design includes an option to close 24<sup>th</sup> and build a new roadway along the rail line ("54<sup>th</sup> extension"). Still studying WB67 movements or reroutes.

#### Improve rail crossing for bicyclists

Added fencing and widened trail at the crossing

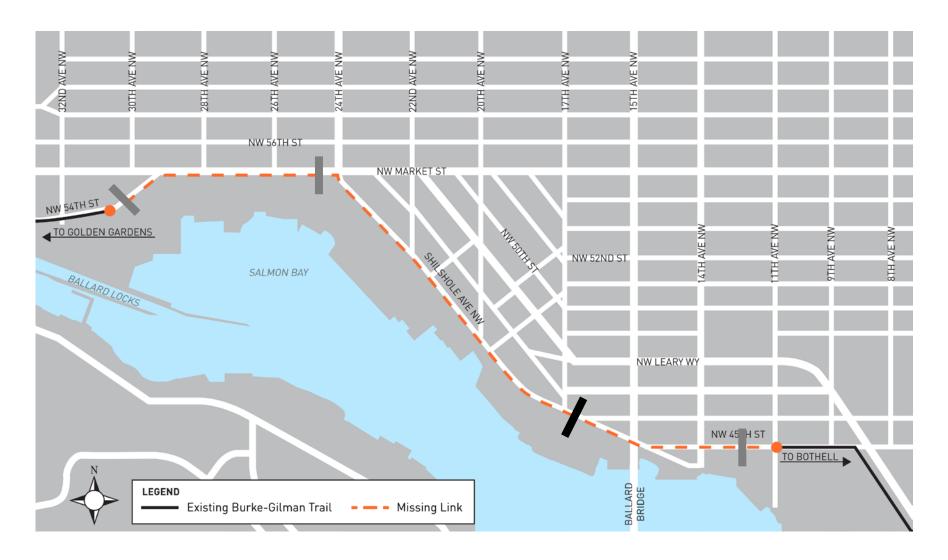
#### Maintain staging and parking space

 20' – 30' of ROW will be unused and unregulated on the south side of Shilshole between approximately Vernon and 46th. This space can continue to be used for staging, loading, and/or parking.

#### Avoid drainage impacts to property owners

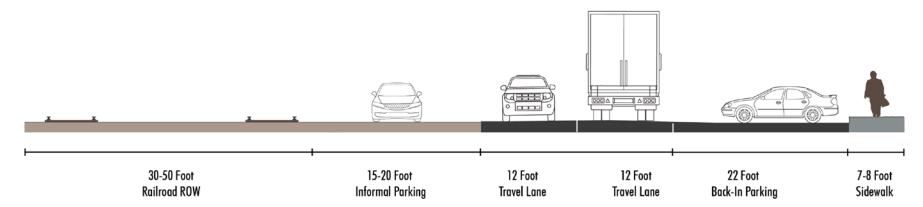
 Trail will drain toward the street and runoff will be captured in SPU managed storm drains.

## Shilshole – Plan/Section Location

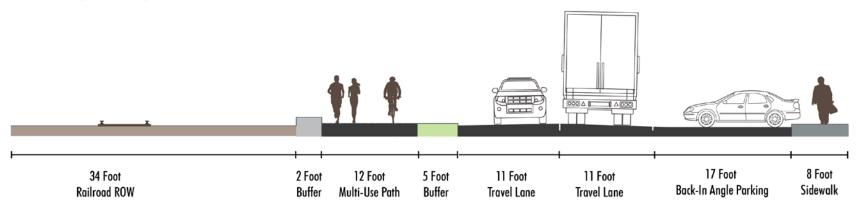


### Shilshole - Section

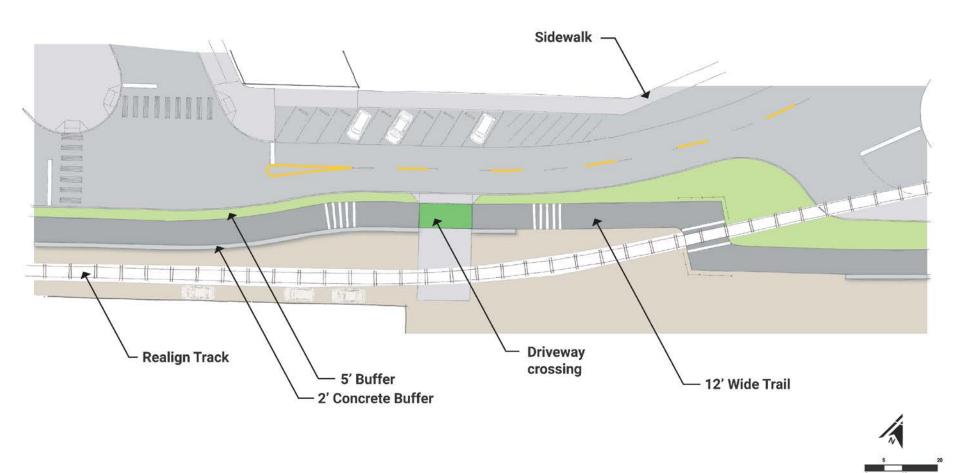
Existing Conditions
Shilshole Ave NW Cross Section
110 Foot Right-of-Way



Missing Link Proposed Condition Shilshole Ave NW Cross Section 100 Foot Right-of-Way



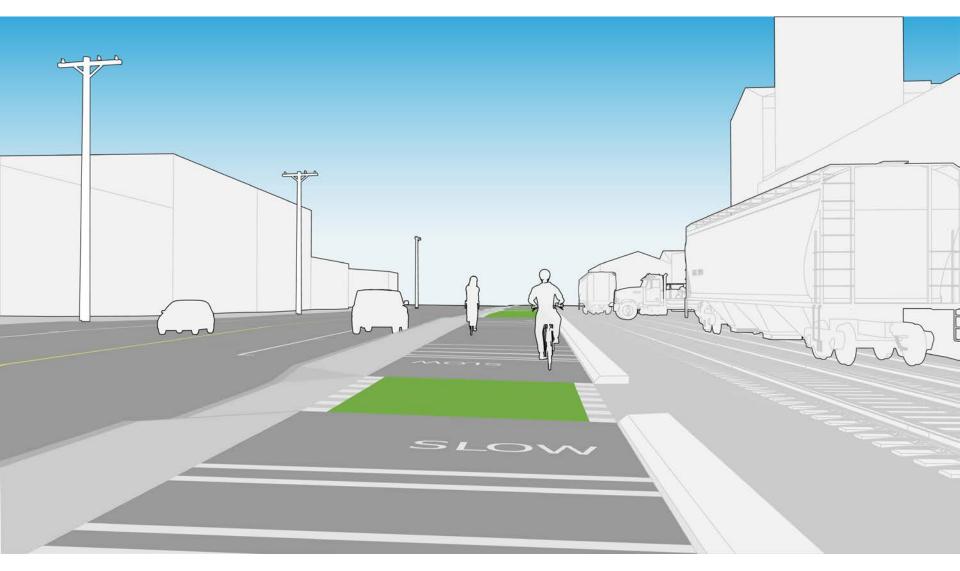
### Shilshole - Plan



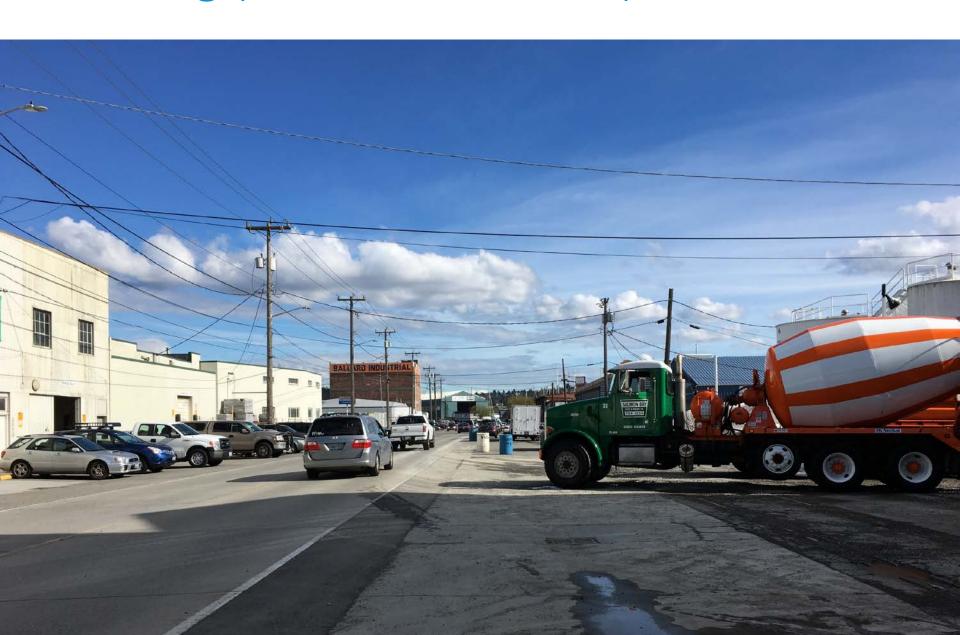


SCALE IN FEET

### Buffer and Raised Trail

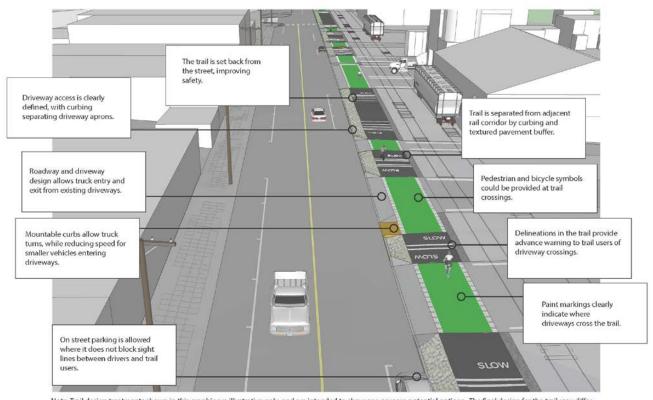


# Existing (Shilshole Ave NW)



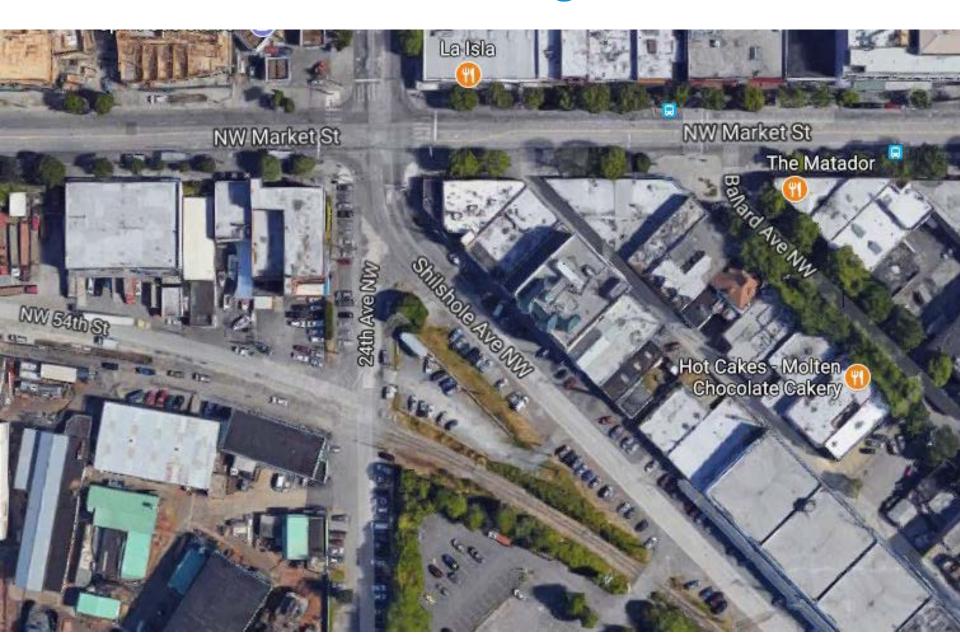
### **Buffer and Raised Trail**





Note: Trail design treatments shown in this graphic are illustrative only, and are intended to show one or more potential options. The final design for the trail may differ from the illustration.

## Shilshole / 24th - Existing

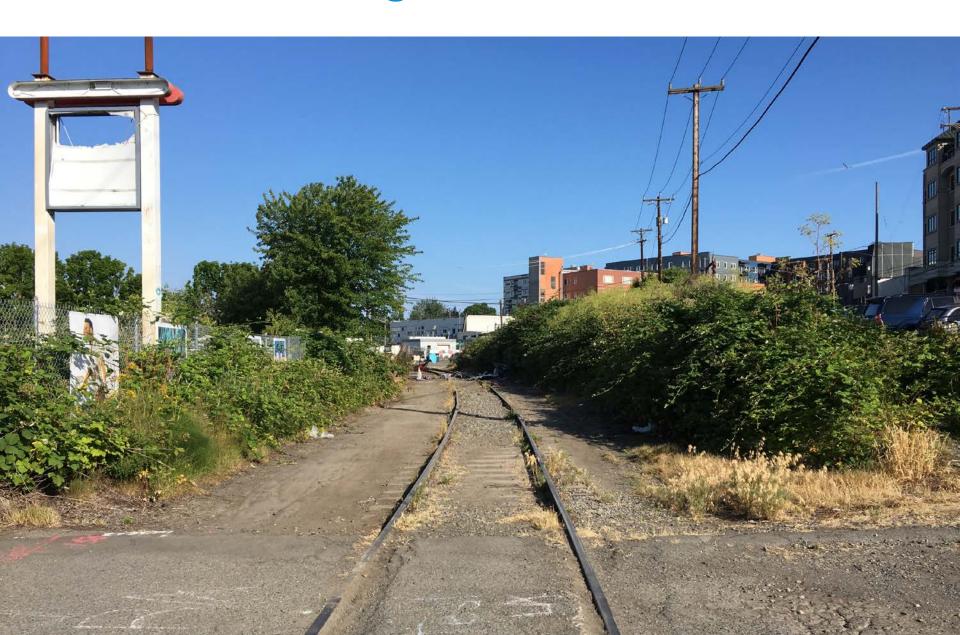


# Shilshole / 24th Existing





# NW 54<sup>th</sup> Existing



# NW 54<sup>th</sup> Extension Proposed



NW 45TH STREET









## NW 45<sup>th</sup> – Input and Changes

- Increase lane width on 45<sup>th</sup> to 11 feet to accommodate larger trucks
  - All lanes shown as 11 feet wide in the 30% design
- Retain loading access for properties on the south side of NW 45<sup>th</sup> between 11<sup>th</sup>-14<sup>th</sup>
  - Locking docks and access points are not impacted in 30% design.
     Route and movement of trucks entering / exiting loading dock to be discussed further during 60% design.
- Maintain 4-way stop at 45<sup>th</sup>/11<sup>th</sup>
  - Maintained in 30% design

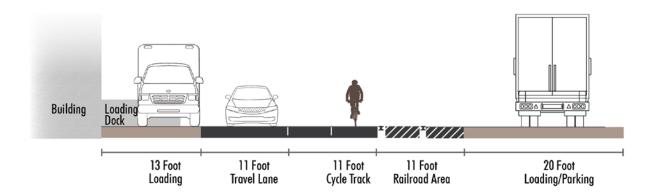
### NW 45th St – Plan/Section Location



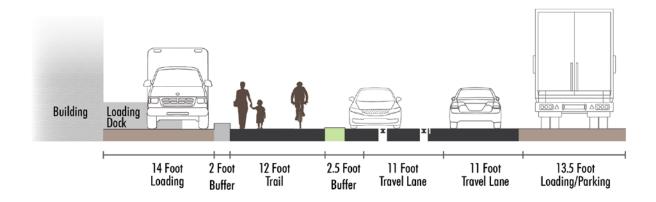


### NW 45th - Section

Existing Conditions NW 45th St Cross Section 66 Foot Right-of-Way

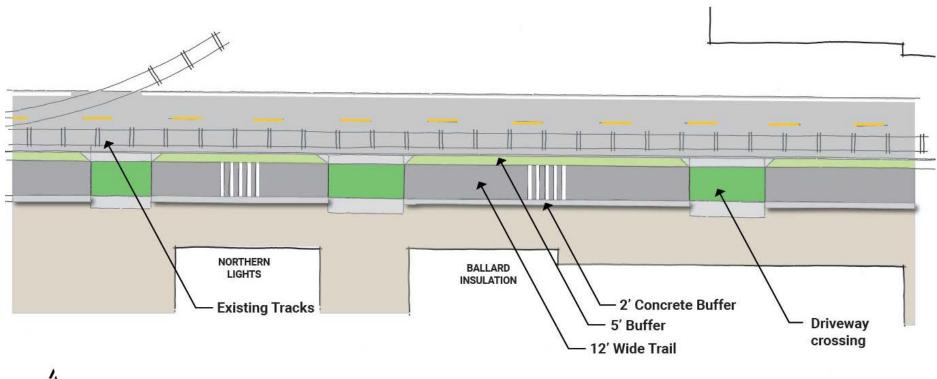


Missing Link Proposed Condition NW 45th St Cross Section 66 Foot Right-of-Way





### NW 45th - Plan





## FULL CORRIDOR

## Corridor Wide - Input and Changes

- Extend 30% design to allow for 3 segment workshops, a public meeting, and the DAC walking tour to occur within this phase. (DAC)
- Run AutoTURN analyses for WB67 vehicles at various driveways
  - We have completed the AutoTURN analyses for all of the locations and movements that were requested. During 60% design, we will refine driveway widths and length of mountable curbs outside driveways limits accordingly.
- Apply for 1% art funding ASAP (May 2017 DAC)
  - A kick off meeting was held with Office Arts and Culture in early July 2017 and confirmation of funding was received in late July 2017.
- Coordinate with nearby bicycle amenities
  - Met with Greenway Program Manager to discuss connections
  - Incorporating intersection improvements into 60% design
  - Considering all-walk at 24<sup>th</sup>/Market to connect to 24<sup>th</sup> bike lanes

### Corridor Wide - Still in Progress

#### **SEGMENT 1**

- Consider safety treatments at Market/26<sup>th</sup>
- Minimize impacts to Market Arms / 8oz Burger outdoor seating
  - In order to maintain 6' clearance on the sidewalk the Market Arms fencing would need to be moved back 1 foot. The 8oz Burger fence would need to be moved back 2.5'-3' or removed.
- Consider all-way walk phase at Market/24<sup>th</sup> to improve bicycle and pedestrian connections
- Consider reducing eastbound right turn lane queue length at Market/24<sup>th</sup>

#### **SEGMENT 2**

- **Need for and potential locations of flashing LED signs.** If selected, need to determine trigger method (options include, manual remote, motion activated, bollards, etc.) to be studied further in 60% design.
- "54th extension" WB67 movements, potential reroutes, and continued outreach

#### **SEGMENT 3**

Address new frontage improvements in front of Seattle Maritime

## Signal Changes



### Parking Concerns

- FEIS as a worst case scenario estimated at 344 parking stalls lost
- Initial counts on the 30% design show approximately
   160 stalls lost (less than half of the original estimate). This can still go up or down!
- We were able to gain stalls at the Ballard Locks, along the proposed NW 54<sup>th</sup> extension road, and along the north and south sides of Shilshole

### Sustainability

- Improved pedestrian and bicycle accessibility
- Compliance with SEPA
- Stormwater management, reduction in runoff
- Potential use of planting in the buffer, which would reduce impervious area
- LED specified where lighting is proposed (more sustainable than traditional high-pressure sodium)
- MMA paint specified vs thermoplastic (plastic based)
- Construction efficiencies (NHM, SPU, Greenways)
- Pollution prevention plan (TESC)

### SCHEDULE AND BUDGET

### Schedule

### 2017-2019 project milestones

Concept Design (30%): Late July 2017

Schematic Design (60%): Mid-September 2017

Design Development (90%): Early November 2017

Construction Documents (100%): Late December 2017

Construction: May 2018 - May 2019

# Budget



COMPLETED EXTENSION PROJECTS	\$ 15.9M
Golden Gardens Park to 60th	\$ 4.7M
60th to Ballard Locks	\$ 3.4M
3 Locks to 11th	\$ 4.8M
(Prior Missing Link design)  11th to 8th  Misc Corridor Improvements	\$ 2.4M \$ 0.6M
CURRENT EXTENSION PROJECTS	\$ 15.0M
Environmental Impact Statement Locks to 11th (Current Missing Link design)	\$ 2.5M \$12.5M
TRAIL EXTENSION (ALL)	\$30.9M



### ADJACENT PROJECTS

### Seattle RapidRide Program

We're delivering 7 new RapidRide corridors by 2024 to advance the Levy to Move Seattle's promise of 72% of residents having 10-minute or better transit service within a 10-minute walk from their home.



#### RAPIDRIDE KEY FEATURES

#### **DEDICATED BUS LANES**

Bus-only lanes separate buses from traffic, increasing speed and reliability.



#### **ENHANCED BUS STOPS**

RapidRide stations include realtime arrival information, larger shelters, lighting. and other amenities.



#### OFF-BOARD FARE COLLECTION

buses move faster as riders can pay fares without waiting in line.



#### SPECIALIZED BUSES

RapidRide buses offer more capacity and lower floors for easier loading and unloading.



#### SMART SIGNALS

Transit signal priority extends or activates green lights to reduce waiting times for buses at



#### **BIKE AND PEDESTRIAN** CONNECTIONS TO TRANSIT

Improvements to crossings, neighborhood greenways, and bike lanes will help people get to new RapidRide lines.

#### LINE OPENING PRELIMINARY TIMELINE

2019	2020	2021	2022	2023	2024
<b>6 Line</b> Downtown Seattle to First Hill to Madison Valley	H Line Downtown Seattle to Delridge to Burien	Roosevelt Downtown Seattle to Eastlake to Roosevelt	Market Ballard to Wallingford to U-District	Fremont Downtown Seattle to Fremont/Ballard to Northgate	23rd Mt Baker to Central Area to U-District
		Rainier Downtown Seattle to Mt Baker to Rainier Beach			

### Bicycle Connections



### **Greenway Improvements**

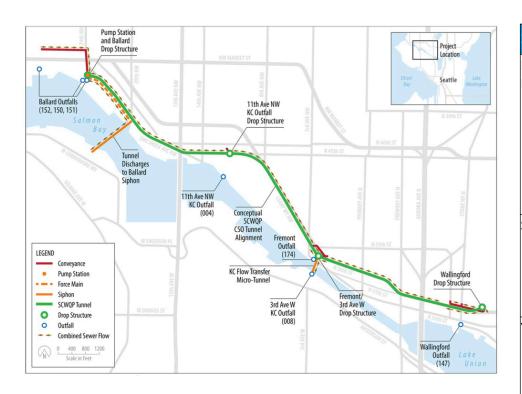








## Ship Canal Water Quality Project



Subproject	Description
Ballard Early Works Package	<ul> <li>Site Remediation</li> <li>Watermain</li> <li>New Electrical</li> <li>CSO Outfall Replacement</li> <li>24th Ave Pier Replacement</li> <li>Street end Closure (for</li> </ul>
Shilshole Pipe	<ul> <li>construction only)</li> <li>54" CSO pipe in ROW to KC         Ballard Siphon (on Shilshole between 24th and Dock Place)     </li> <li>Constructed under BGT contract</li> </ul>
Tunnel	<ul> <li>2.7-mile tunnel to hold stormwater and some sewage during heavy rains</li> <li>Launch Pit at former Yankee Diner Parking Lot, spoils will be hauled by barge</li> <li>Drop Shaft at 11th/45th will require temporary rerouting of Burke-Gilman Trail</li> </ul>
Tunnel Effluent Pump Station (TEPS)	Site and Building Construction

1% for the Arts

### 1% for the Arts

- Funding approval granted from the Public Arts Advisory Committee (late July)
- Artist selection process is underway (led by SDOT Art Manager, Kristen Ramirez)
- Early ideas: Wave Rave Cave relocation, creative industrial signage, buffer improvements, Calypso





### QUESTIONS?

louisa.galassini@seattle.gov www.seattle.gov/transportation/BGT\_MissingLink.htm