



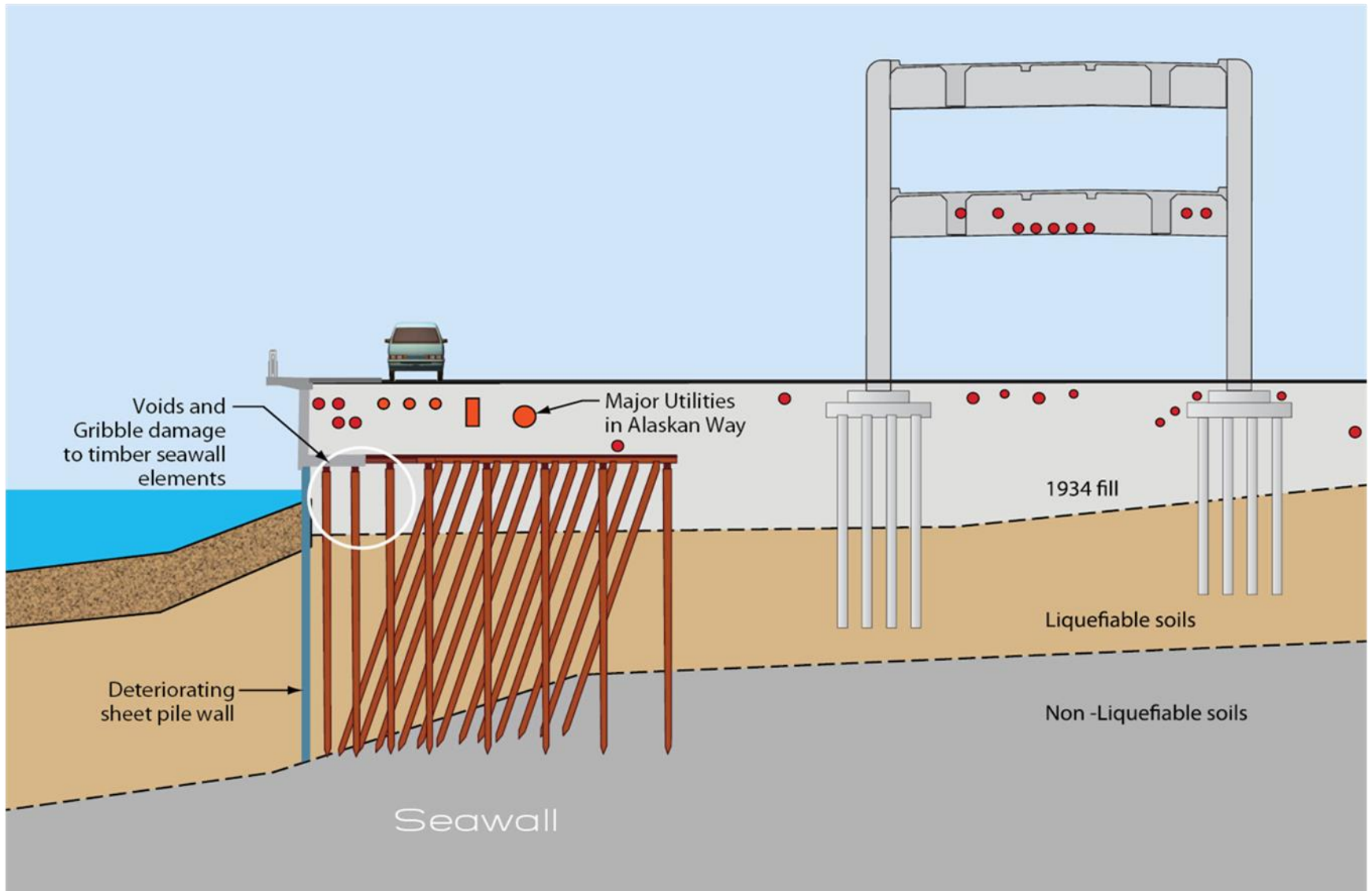
WASHINGTON SOCIETY OF PROFESSIONAL ENGINEERS

September 18, 2018





ORIGINAL SEAWALL

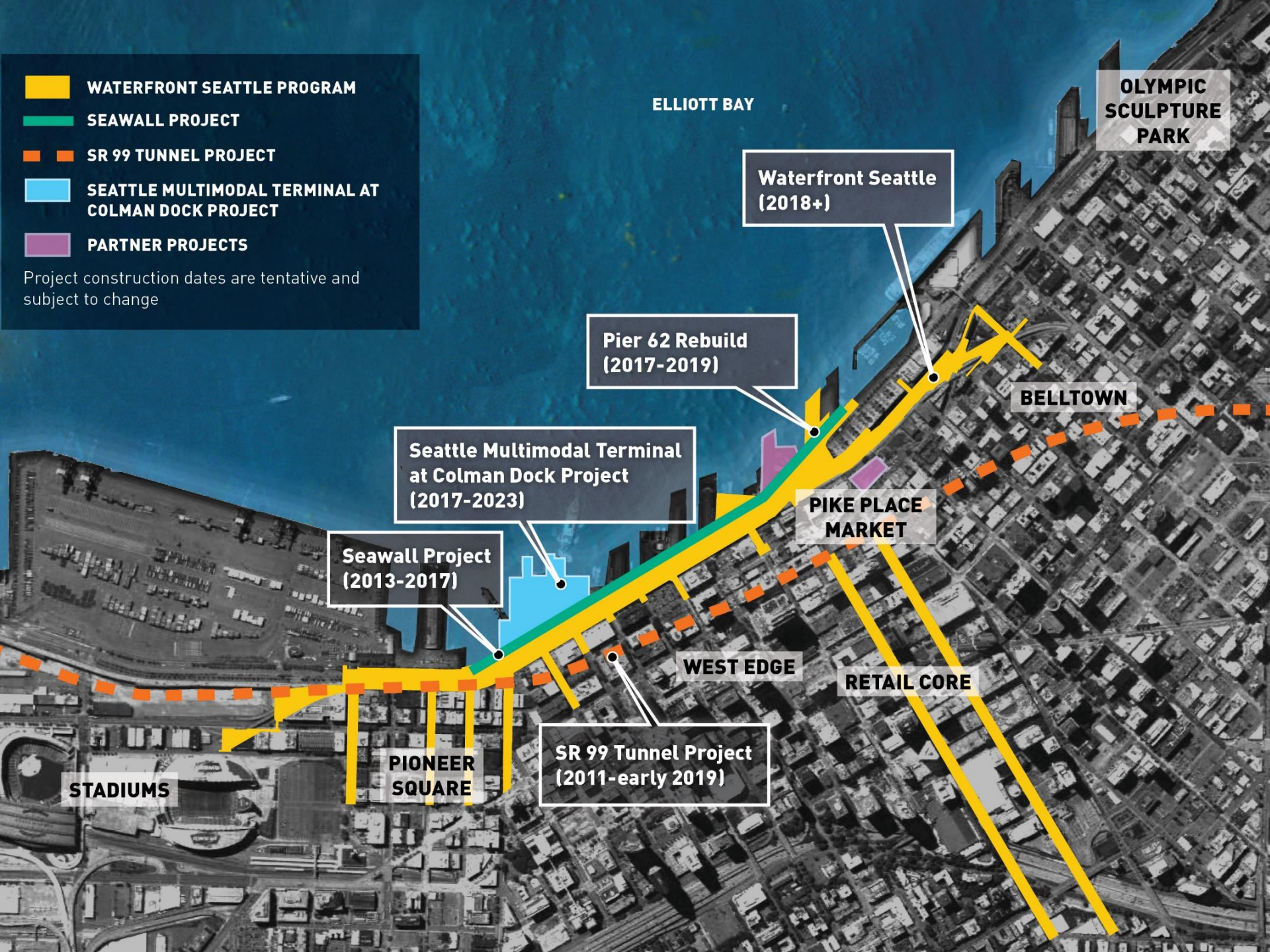






-  **WATERFRONT SEATTLE PROGRAM**
-  **SEAWALL PROJECT**
-  **SR 99 TUNNEL PROJECT**
-  **SEATTLE MULTIMODAL TERMINAL AT COLMAN DOCK PROJECT**
-  **PARTNER PROJECTS**

Project construction dates are tentative and subject to change



ELLIOTT BAY

OLYMPIC
SCULPTURE
PARK

Waterfront Seattle
(2018+)

Pier 62 Rebuild
(2017-2019)

Seattle Multimodal Terminal
at Colman Dock Project
(2017-2023)

Seawall Project
(2013-2017)

PIKE PLACE
MARKET

BELLTOWN

WEST EDGE

RETAIL CORE

SR 99 Tunnel Project
(2011-early 2019)

PIONEER
SQUARE

STADIUMS



Seattle's waterfront park comes into focus

The basic outlines of the ambitious park, really four big parks connected by a promenade, are now emerging. There are very sensible design decisions being made, but can the city pull off such a spectacular plan?

By David Brewster

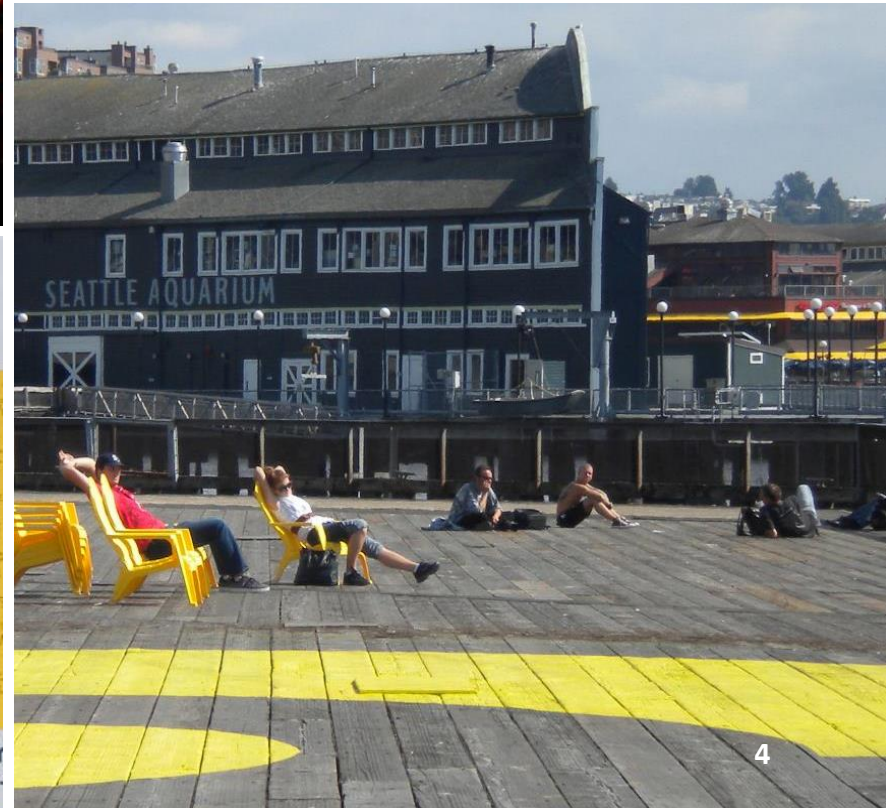
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After all the battles over the Viaduct and the deep-bore tunnel, are we going to manage to create a splendid waterfront park for Seattle? The desire is there, and the setting is certainly spectacular. But it won't be easy, particularly given Seattle's way of building and bungling major projects.

It's now possible to get a better idea of what might happen. After the successful vote for the tunnel last month, the guardedness has been relaxed. Additionally, more details are being filled in, so the design is moving from a generic 26-block esplanade into something far more tailored to the conditions of the spaces. What follows are some of the things I learned from tagging along on a tour put together by the Seattle Parks Foundation and guided by the two principal city officials in charge, city planner Marshall Foster and

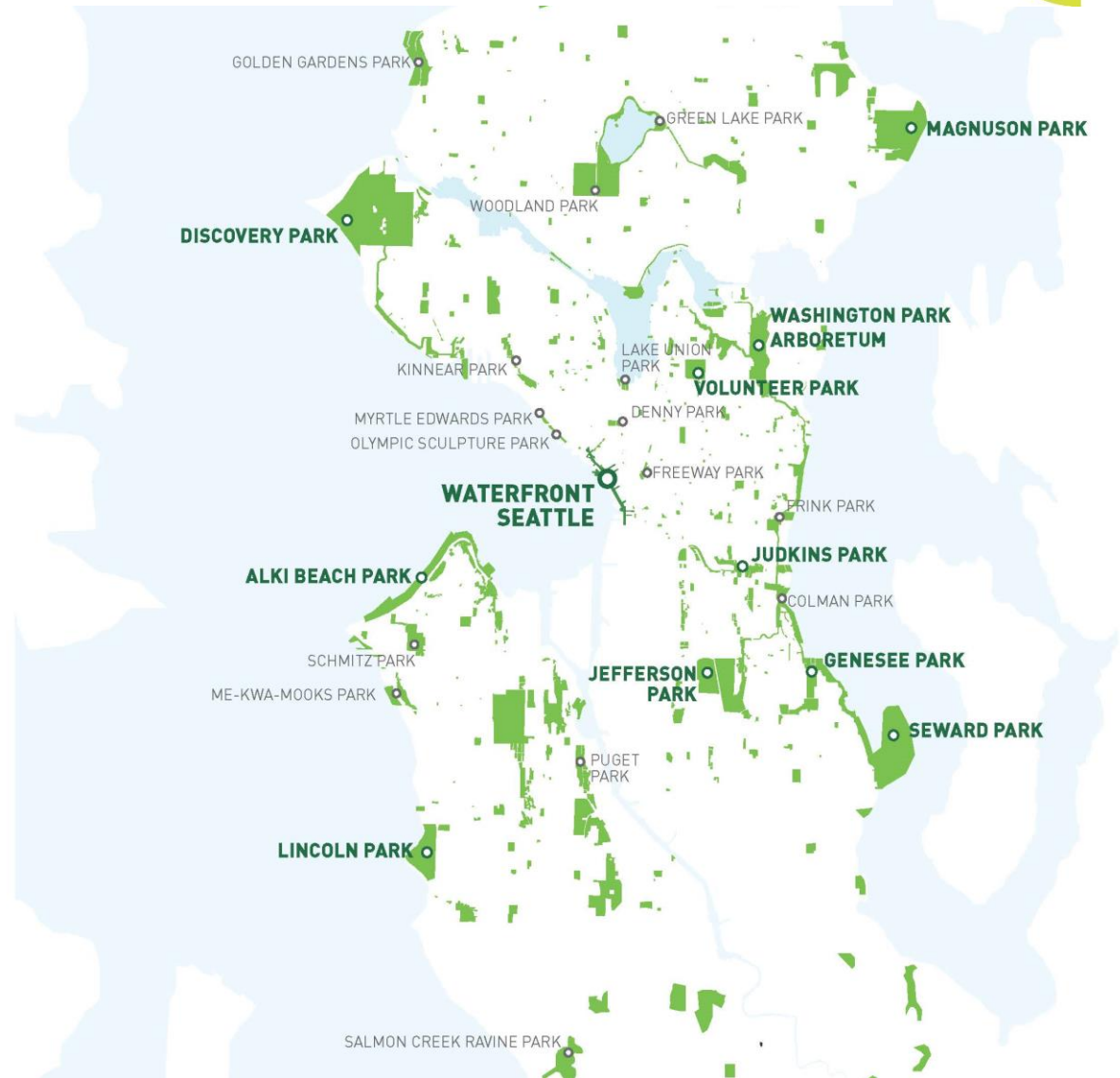


City of Seattle/James Corner Field Operations



WATERFRONT SEATTLE

A NEW DESTINATION PARK



LEGEND

- SEATTLE PARKS
- DESTINATION PARKS

STRATEGIC PLAN



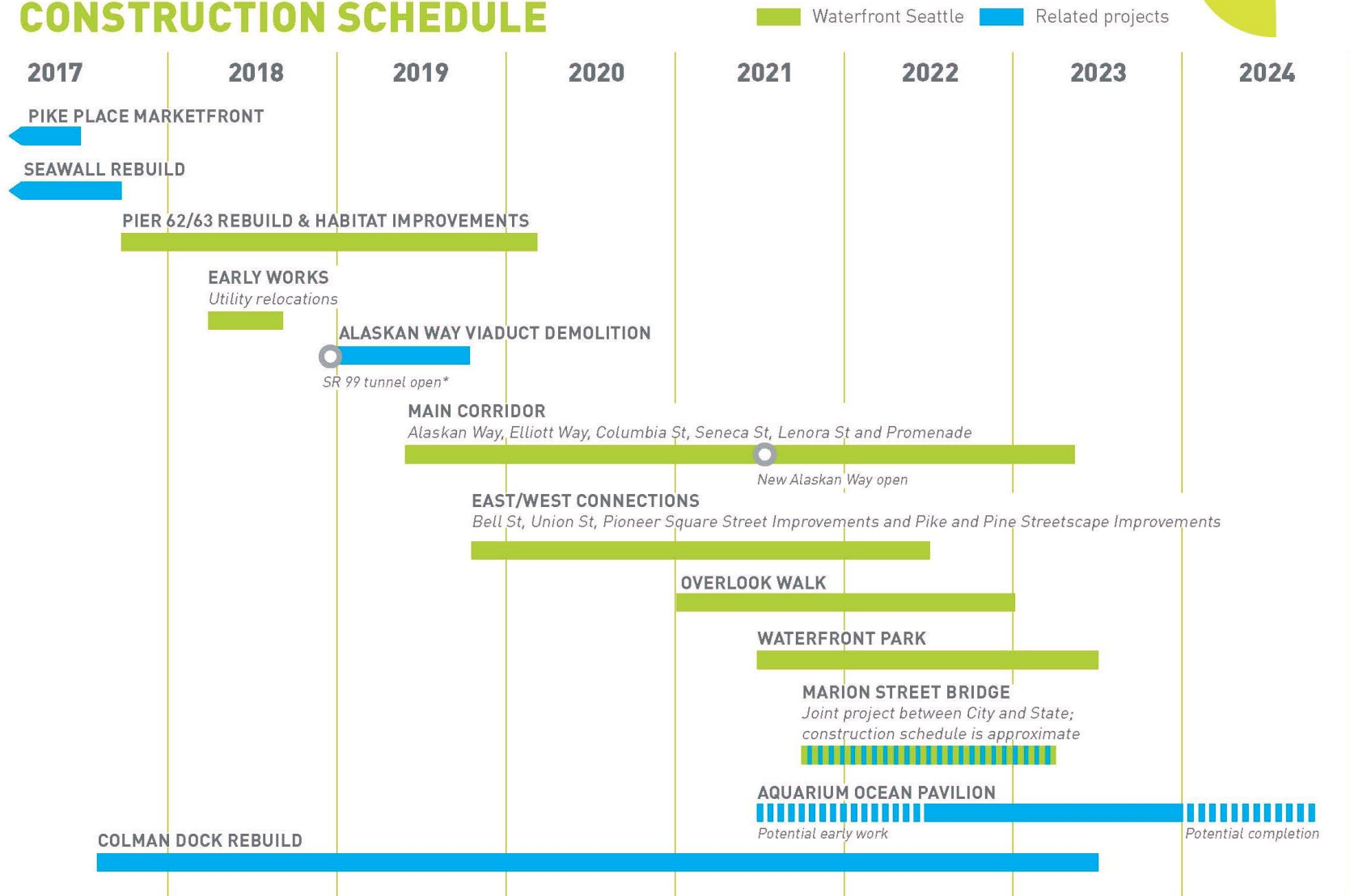
- Built on public input on Framework Plan and Concept Design
- Engaged broader business/philanthropic community in “how we get it done”
- Established public/private funding plan:
 - State and City funding
 - Philanthropy
 - Property owner assessment (LID)



WATERFRONT SEATTLE



CONSTRUCTION SCHEDULE



NOTE: Construction dates subject to change pending: A. completion dates of new SR 99 tunnel and demolition of the Alaskan Way Viaduct; B. ongoing construction sequencing evaluation and assumptions for all projects

*Dependent on Seattle Tunnel Partners contractor schedule

SEAWALL



SEAWALL



SEAWALL



NEW SEAWALL



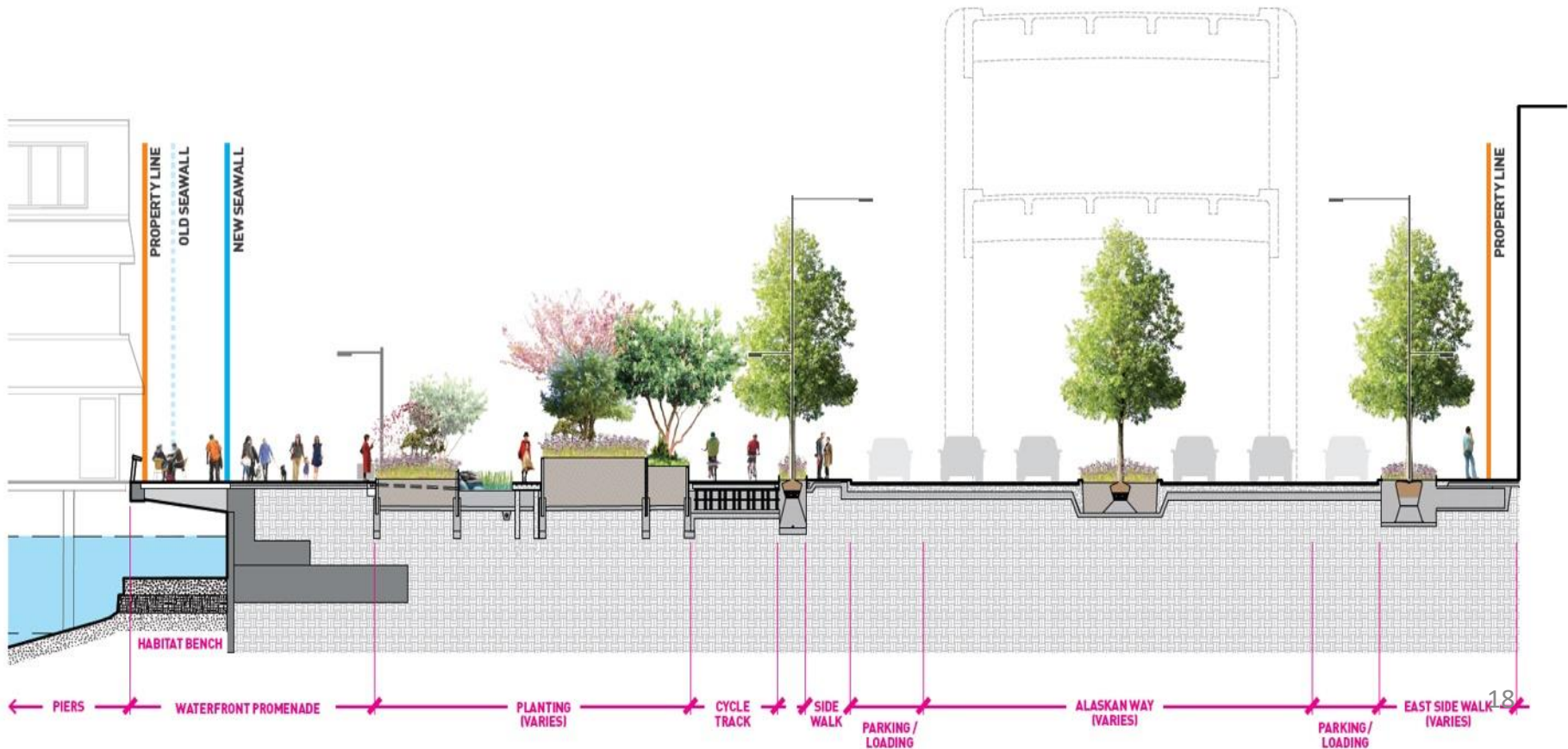


WATERFRONT SEATTLE PROGRAM



RAILROAD WAY	PIONEER SQUARE	TRANSIT HUB	HISTORIC PIERS	CENTRAL PUBLIC SPACE	BELLTOWN
<ul style="list-style-type: none"> 1 WATERFRONT 2 PIONEER SQUARE 3 STADIUMS 	<ul style="list-style-type: none"> 1 ALASKAN WAY 2 WATERFRONT PROMENADE 3 WASHINGTON ST. BOAT LANDING 4 S. KING ST. 5 S. MAIN ST. 6 S. WASHINGTON ST. 7 HABITAT INTERTIDAL ZONE 	<ul style="list-style-type: none"> 1 ALASKAN WAY 2 WATERFRONT PROMENADE 3 COLUMBIA ST. 4 MARION ST. PEDESTRIAN BRIDGE 5 COLMAN DOCK TERMINAL REPLACEMENT 6 YESLER WAY 	<ul style="list-style-type: none"> 1 ALASKAN WAY 2 WATERFRONT PROMENADE 3 SENECA ST. 	<ul style="list-style-type: none"> 1 ELLIOTT WAY 2 WATERFRONT PROMENADE 3 UNION ST. 4 WATERFRONT PARK REBUILD 5 OCEAN PAVILION 6 PIERS 62/63 PHASE 1 REBUILD 7 OVERLOOK WALK 8 PIKE/PINE STS. 	<ul style="list-style-type: none"> 1 ELLIOTT WAY 2 LENORA ST. PED BRIDGE RETROFIT 3 BELL ST. 4 PORTAL PARK

TYPICAL CROSS SECTION



TYPICAL INTERSECTION



HABITAT BEACH



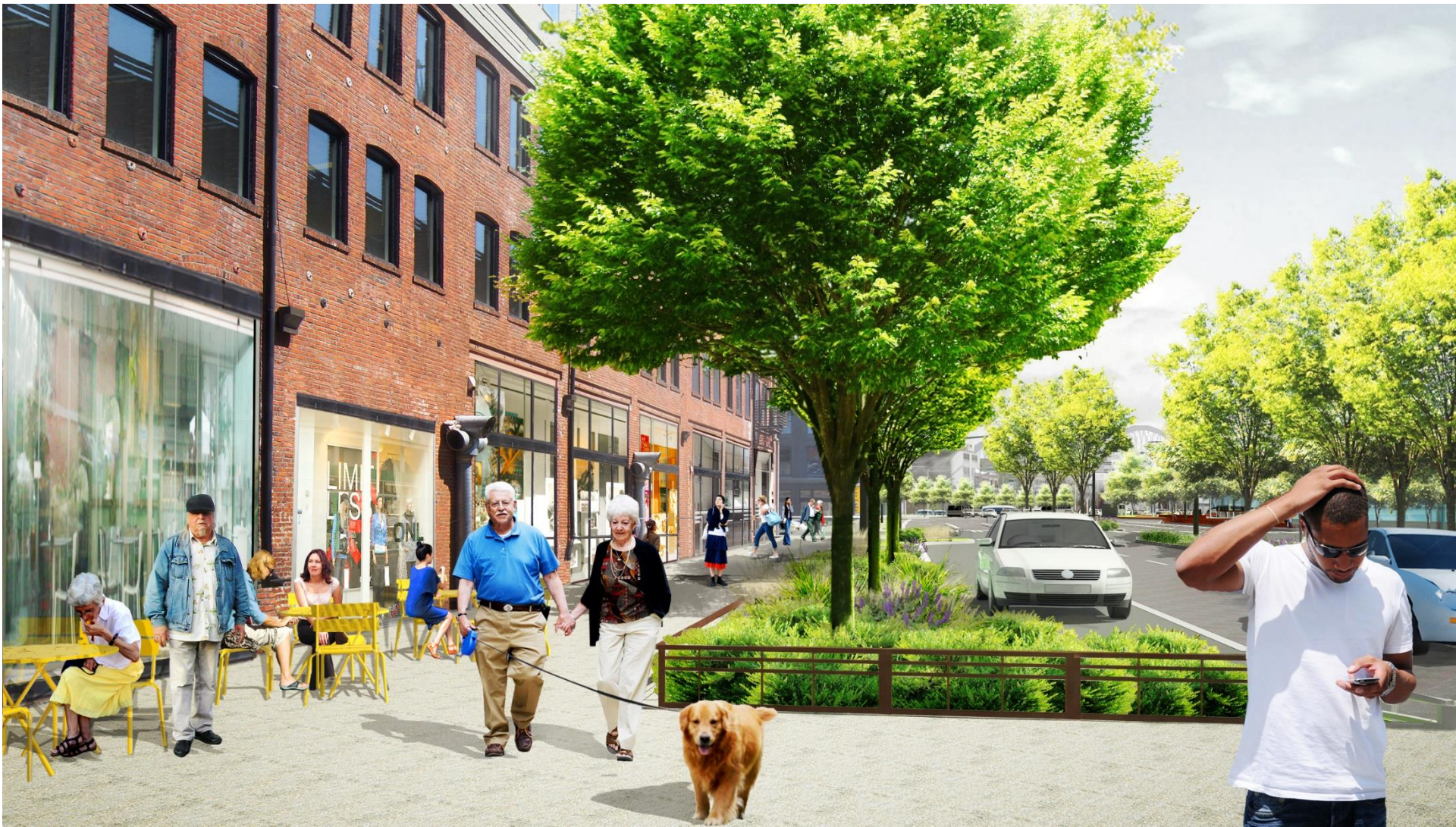
HABITAT BEACH



ALASKAN WAY TODAY (AT MARION)



ALASKAN WAY EAST SIDE (AT MARION)



HISTORIC PIERS TODAY



HISTORIC PIERS PROMENADE



MARION STREET BRIDGE TODAY



NEW MARION STREET BRIDGE



OVERLOOK WALK, PIERS, ELLIOTT WAY



CENTRAL PUBLIC SPACE

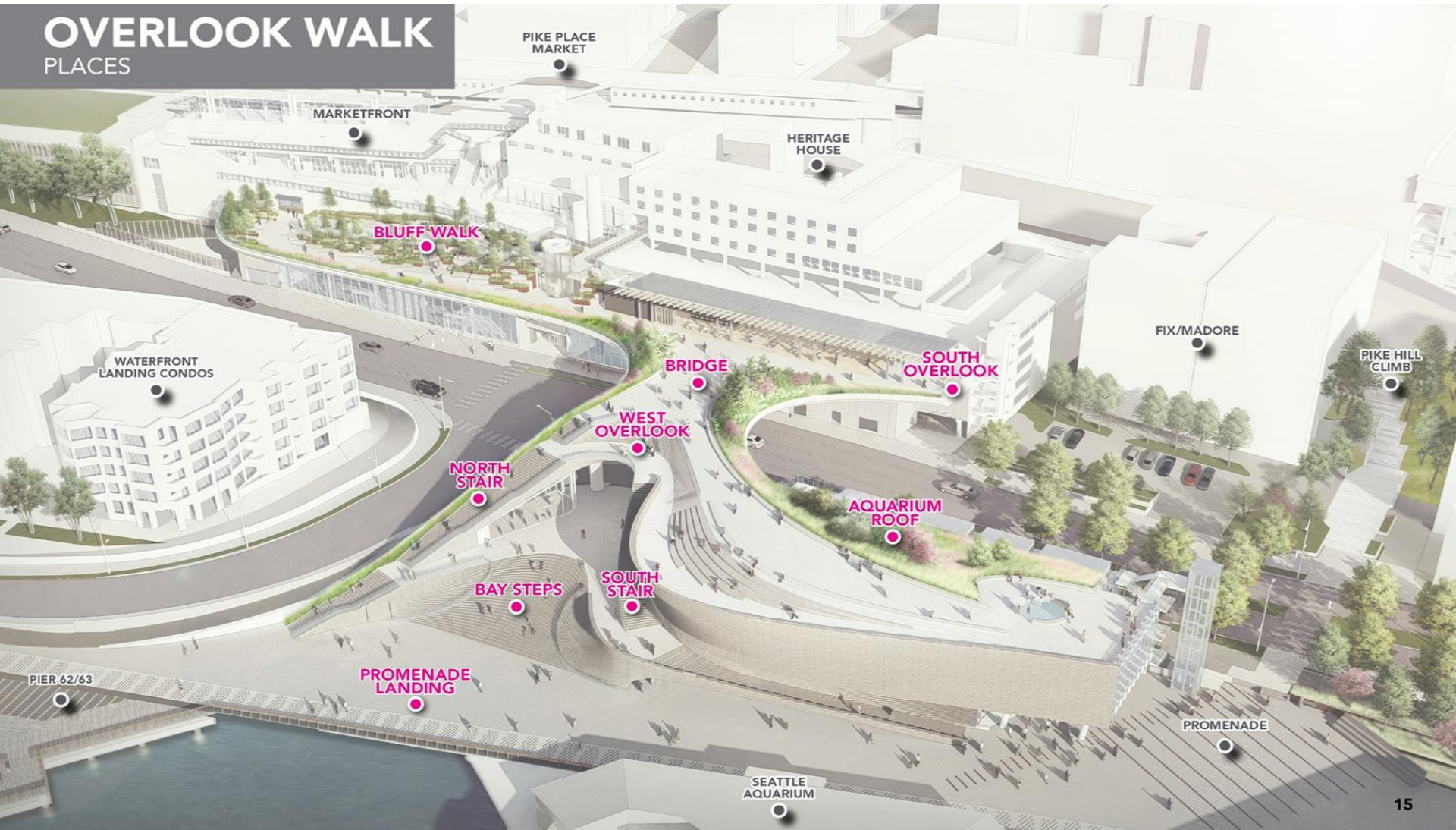
PIKE PLACE MARKET - MARKET FRONT



OVERLOOK WALK



OVERLOOK WALK PLACES



OVERLOOK WALK



OVERLOOK WALK



CAFE & CANOPY

LOOKING NORTHEAST



OVERLOOK WALK



BLUFF WALK VIEW AT LANDING



ENGINEERING CHALLENGES



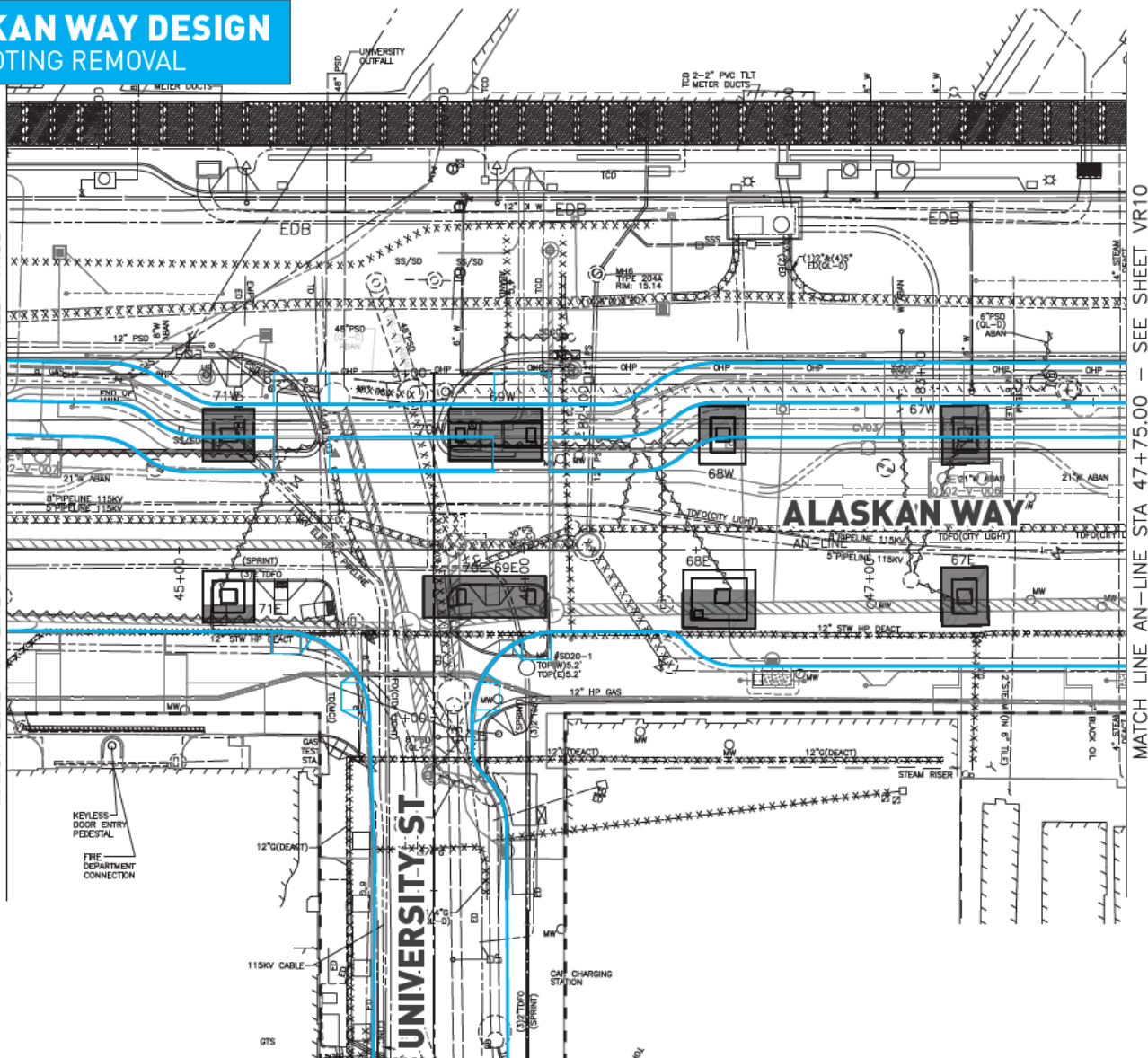
PROPOSED ALASKAN WAY AT UNIVERSITY STREET



ALASKAN WAY DESIGN

AWV FOOTING REMOVAL

MATCH LINE AN-LINE STA 44+50.00 - SEE SHEET VR08



MATCH LINE AN-LINE STA 47+75.00 - SEE SHEET VR10

NOTES:

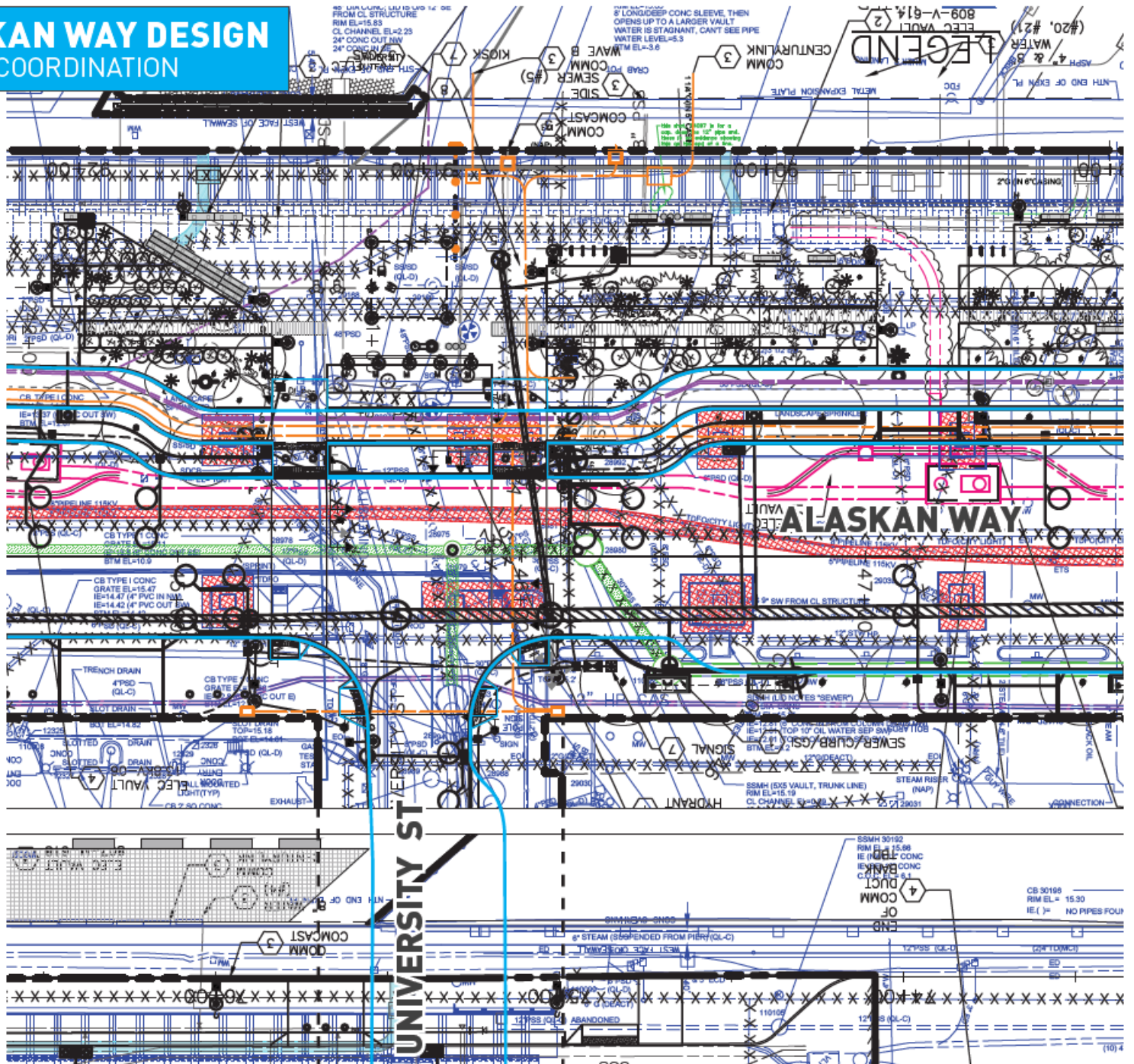
1. REFER TO SPECIALS FOR REMOVAL OF VIAD
2. FOR FOUNDATION REQUIRED, REFER TO SCHEDULE VRD1 THROUGH VRD10
3. WHERE VIADUCT FOUNDATION REMOVAL IS REQUIRED

LEGEND:

REMOV

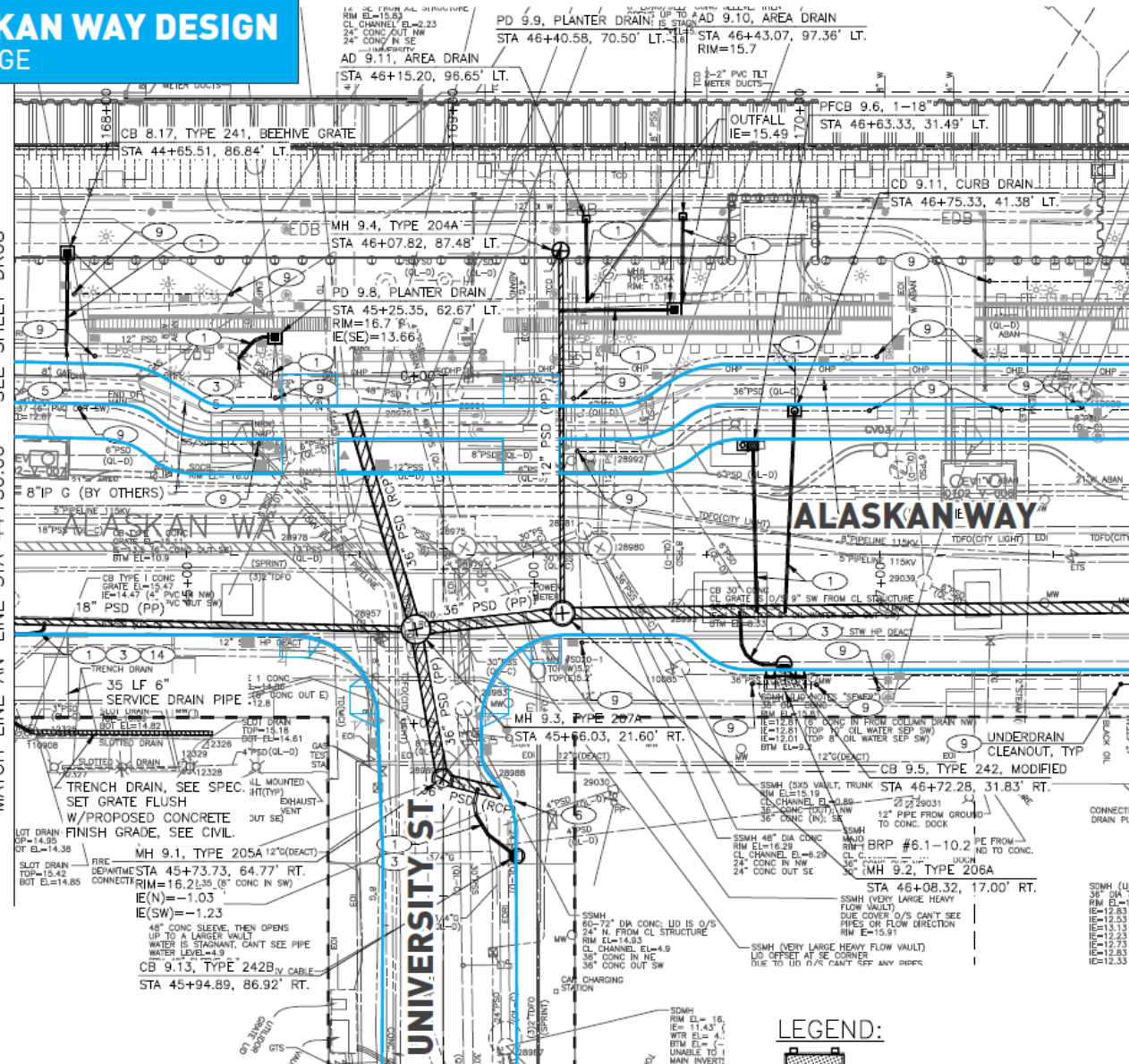
ALASKAN WAY DESIGN

UTILITY COORDINATION



ALASKAN WAY DESIGN DRAINAGE

MATCH LINE AN-LINE STA 44+50.00 - SEE SHEET DR08



MATCH LINE AN-LINE STA 47+75.00 - SEE SHEET DR10

NOTES:

1. ALL DRAINAGE STRUCTURES STATION AND OFFSETS ARE FROM NORTHBOUND ALASKAN WAY ALIGNMENT (AN) UNLESS OTHERWISE NOTED, MEASURED TO THE CENTER OF GRADE AT THE FACE OF CURB. PER STD. PLAN 260A AND 2I
2. REFER TO PROFILE SHEETS FOR ELEVATION INFORMATION FOR ALL MAINLINE STRUCTURES AND CB CONNECTIONS AT LEAST ONE UTILITY CROSSING.
3. DURING TRENCHING AND EXCAVATION FOR STORM DRAIN PIPE AND DRAINAGE STRUCTURES THE CONTRACTOR MAY ENCOUNTER ABANDONED TIE BACKS AND SHORING PILES CONSTRUCTED DURING THE ALASKAN WAY SEAWALL PROJECT.

LEGEND:



PFCB 4-18" (SEE SHEET DD02)



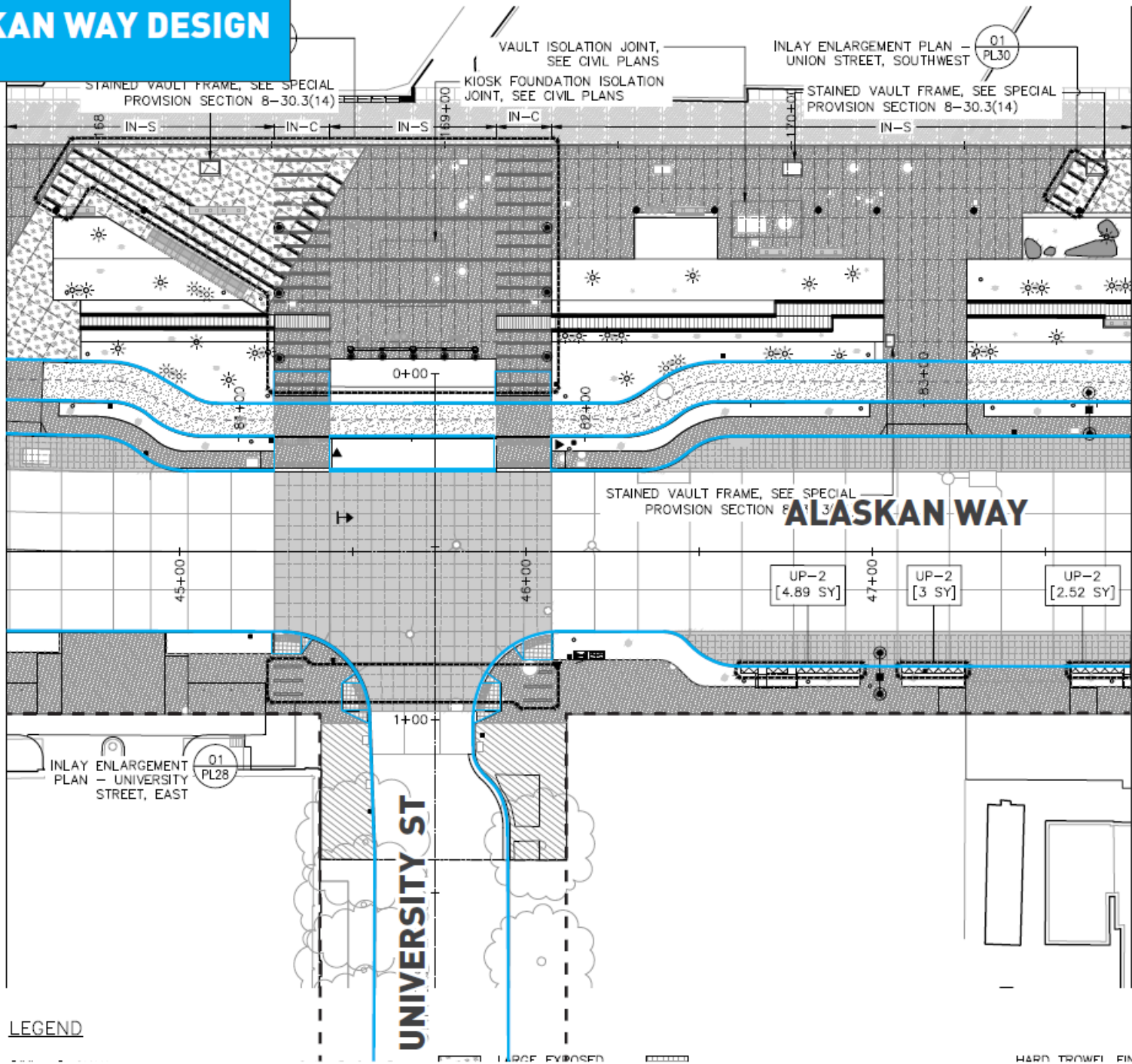
CURB DRAIN (CD) (SEE DETAIL 1 ON

ALASKAN WAY DESIGN

PAVING

[illegible]

MATCH LINE AN-LINE STA 44+50.00 - SEE SHEET PLO8



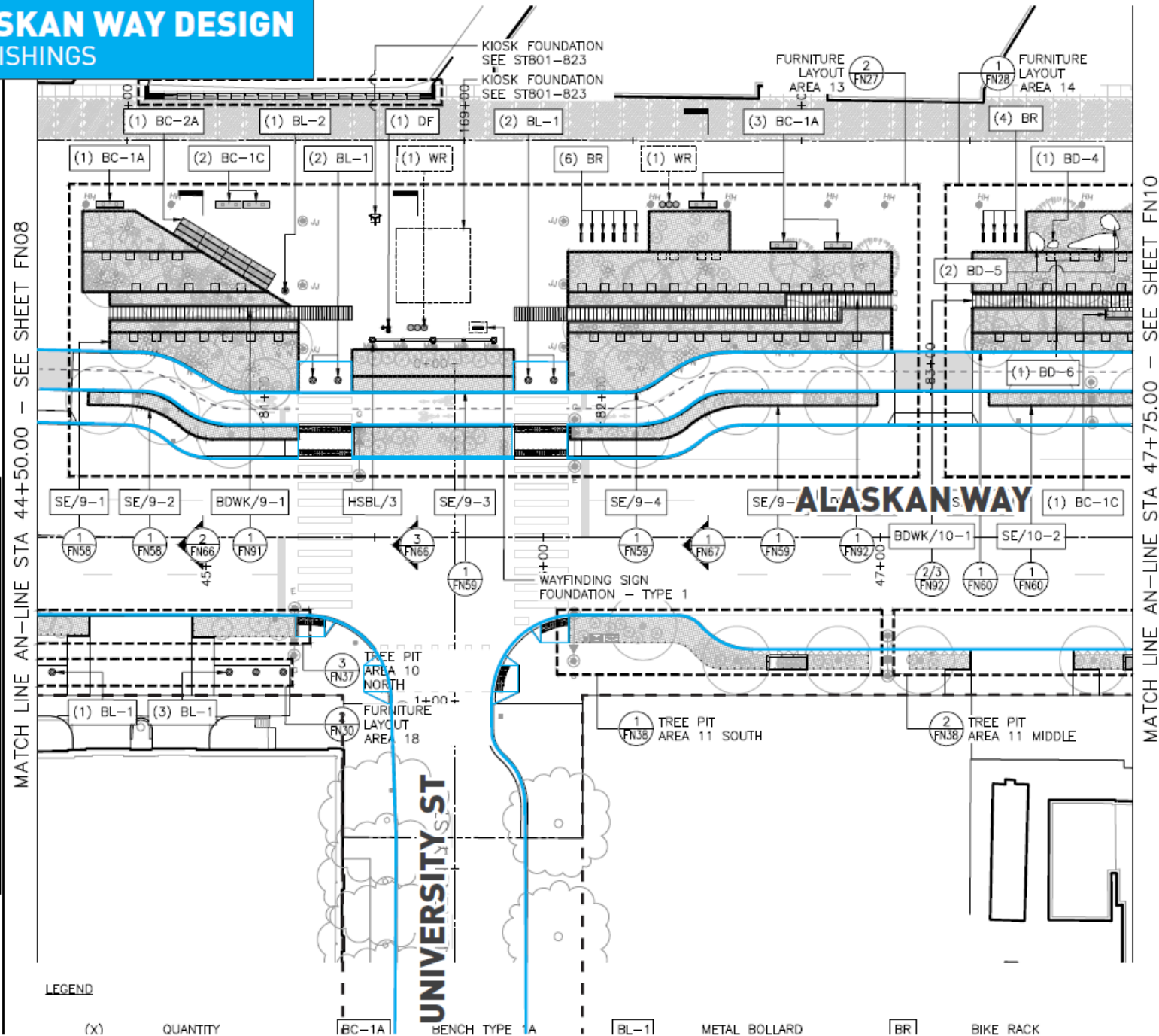
MATCH LINE AN-LINE STA 47+75.00 - SEE SHEET PLO9

LEGEND

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

HARD TROWEL FINISH [IN_0]

ALASKAN WAY DESIGN
FURNISHINGS

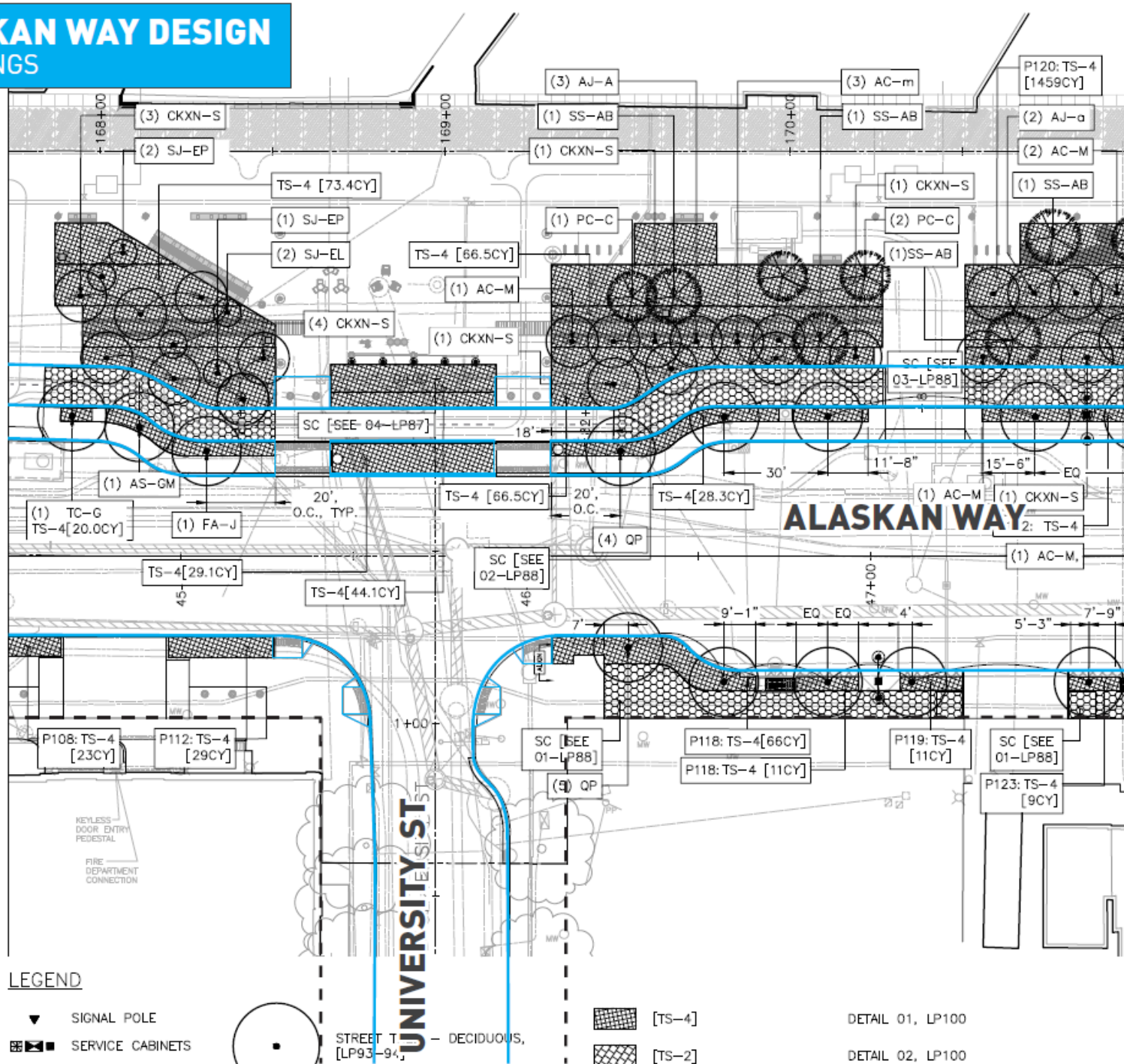


MATCH LINE AN—LINE STA 47+75.00 — SEE SHEET FN10

ALASKAN WAY DESIGN PLANTINGS

VAULT SERIAL NO.	DATE	MARK	NATURE	MADE PHK'D	REV'D
37290			REVISIONS		

MATCH LINE AN-LINE STA 44+50.00 - SEE SHEET LP08



MATCH LINE AN-LINE STA 47+75.00 - SEE SHEET LP09

WATERFRONT CONSTRUCTION: COMMITMENTS

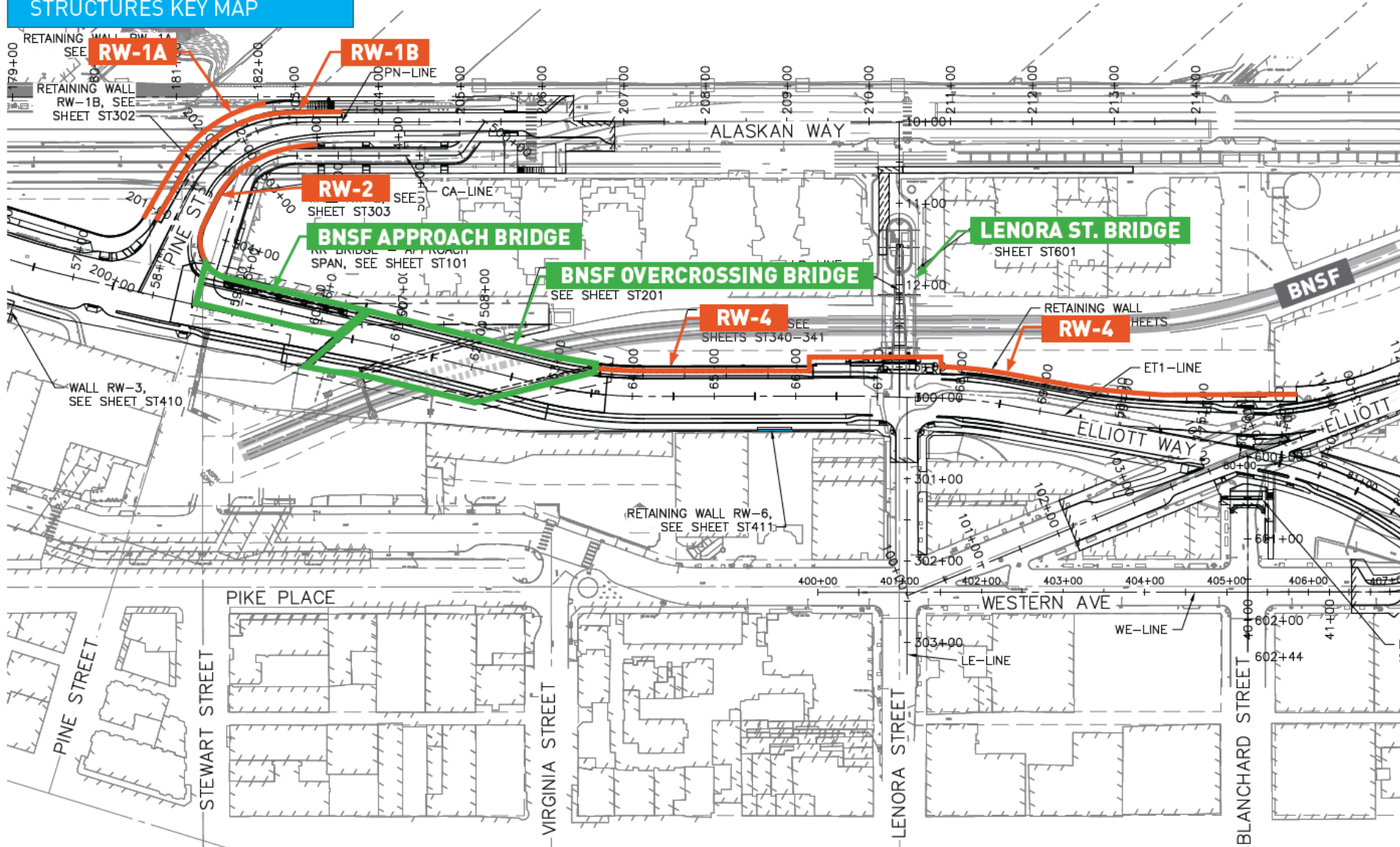


- Provide access through waterfront area for all modes (transit, freight, bicycles, pedestrians, cars)
- Provide access to businesses and residents, including emergency response
- Maintain BNSF, Port cruise ships, and ferry operations
- Maintain major utilities service and reliability
- Provide short-term off-street low-rate parking
- Ensure construction sequencing balances the needs of all projects in the waterfront area
- Coordinate work zones and detour routes with all projects

PROPOSED ALASKAN WAY AT UNIVERSITY STREET



ALASKAN WAY DESIGN STRUCTURES KEY MAP



ALASKAN WAY: STRUCTURAL ELEMENTS

Retaining Walls:

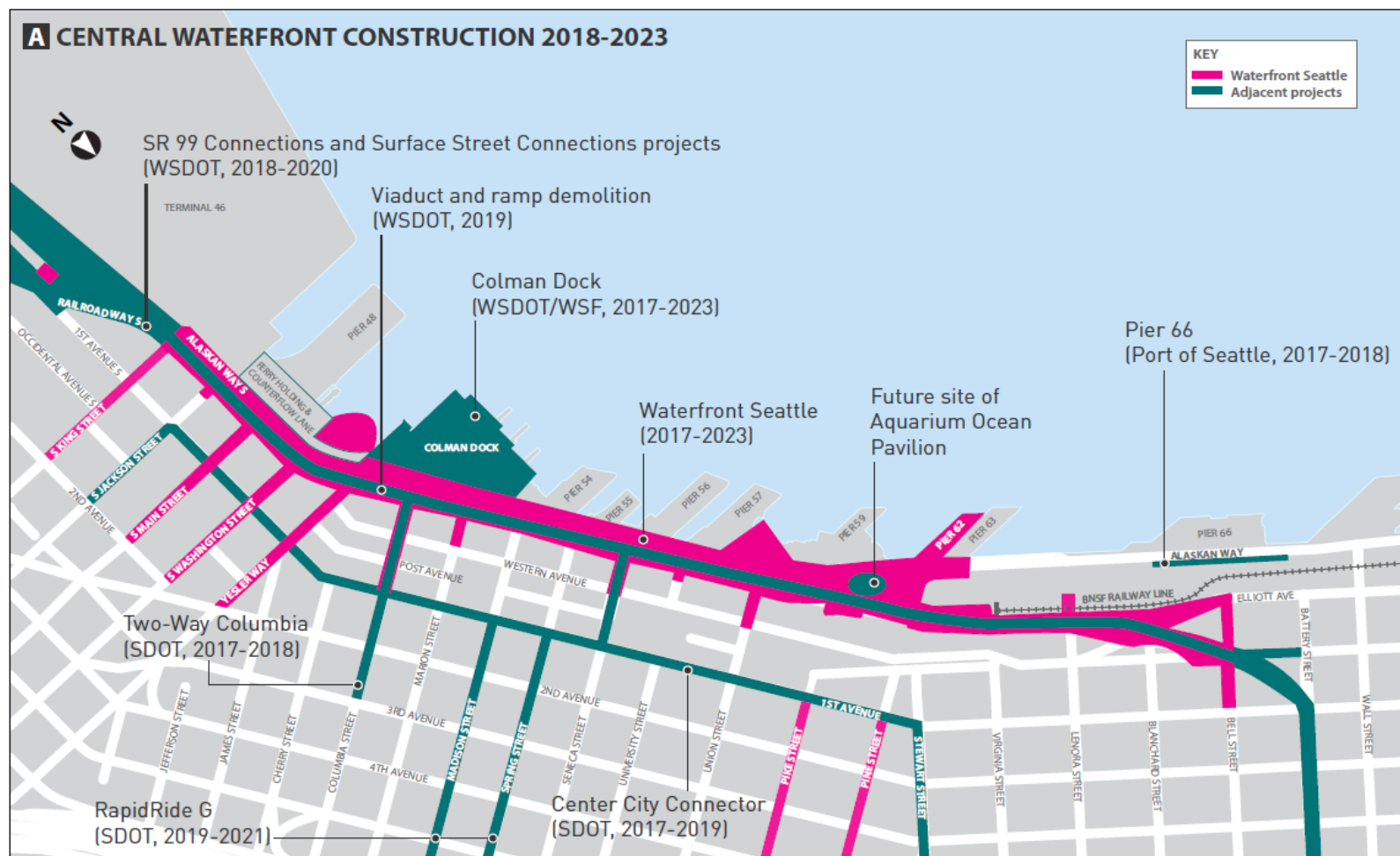
- **RW-1A** – Structural Earth Wall (SEW) (540' long, 20' max height). 2 wall types: full height overlapping precast panels and 5' square precast panels.
- **RW-1B** – Cast-in-place concrete wall (290' long, 8' max height). Located on the south side of Pine St.
- **RW-2** – Structural Earth Wall (SEW) (230' long, 18' max height). Partially backfilled with lightweight flowable concrete (LDCC).
- **RW-3** – Geosynthetic wall (20' long, 10' max height). Temp. wall to support driveway to Pike Market parking garage.
- **RW-4** – Two wall types: Structural Earth Wall (SEW) (230' long, 16' max height) and soldier pile tieback wall (610' long, 45' max height). Steep hillside, adjacent to BNSF RR tracks.
- **RW-6** – Cast-in-place concrete wall (64' long, 3' max height). Located along building near Lenora St.
- **RW-7** – Cast-in-place concrete wall (100' long, 5' max height). Located at Fix-Madore Plaza.
- **RW-8A /8B** – Cast-in-place concrete walls (40' long, 4' max height). Located at Aquarium Plaza.

ALASKAN WAY: STRUCTURAL ELEMENTS

Bridges:

- **Elliott Way Over BNSF RR Approach Bridge:** 170' long x 40' wide reinforced concrete slab bridge supported by shafts and soldier piles.
- **Elliott Way Over BNSF RR Bridge** – 2-span, 245' long x 80' wide prestressed girder bridge with large skews (34 degrees to 62 degrees) at piers supported by large diameter shafts,
- **Lenora Street Bridge** – Structural modifications and seismic retrofit of existing 3-span, 170-ft long reinforced concrete pedestrian bridge built in 1930's.
- **Marion Street Pedestrian Bridge** – Single span, 110' long x 16' wide pedestrian bridge spanning over Alaskan Way to replace the existing walkway from 1st Avenue to the Colman Dock Ferry Terminal.
- **Union Street Pedestrian Bridge** – 3-span, 150' long x 17' wide reinforced concrete box girder bridge with integral stairway and elevator.

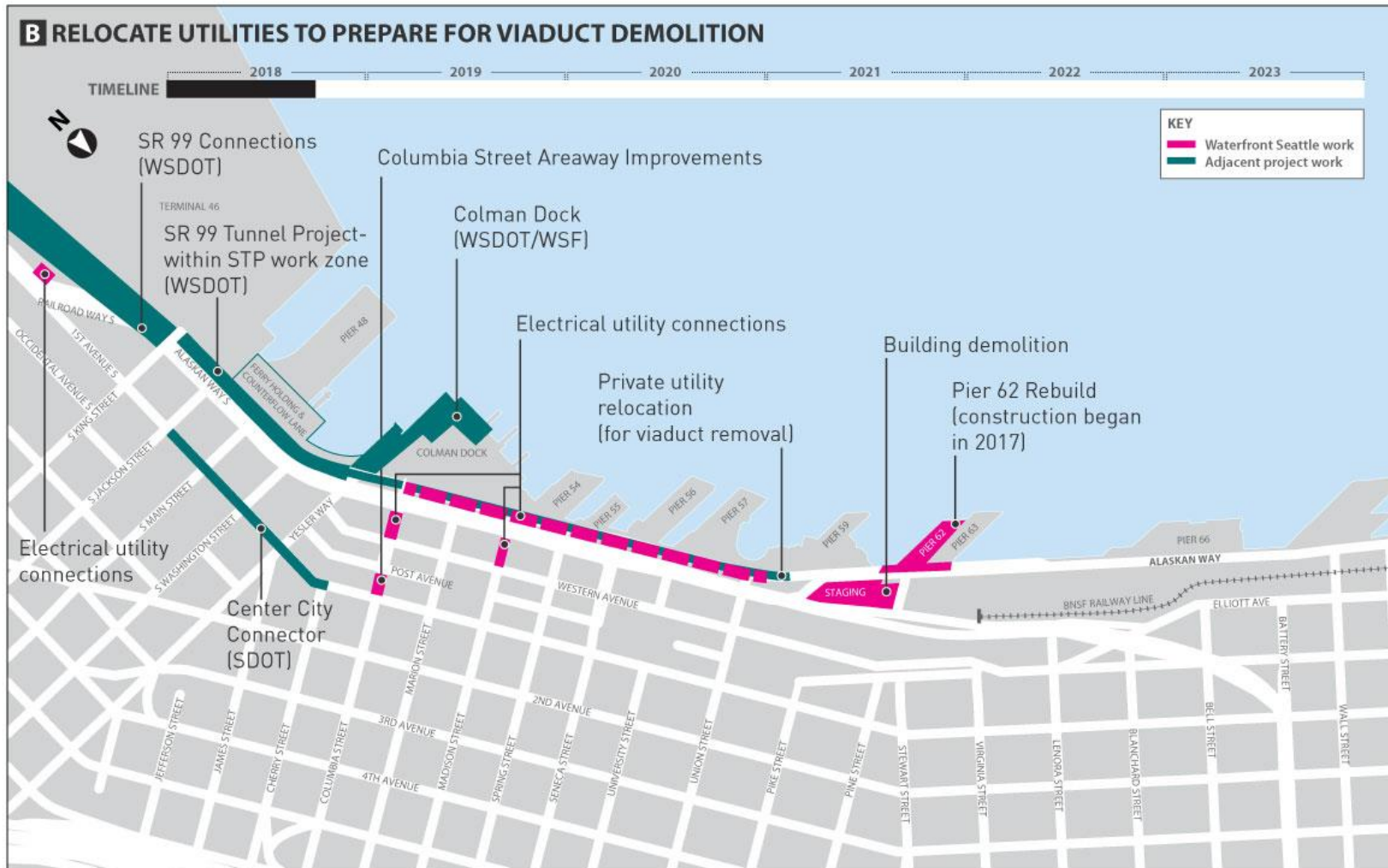
CENTRAL WATERFRONT CONSTRUCTION: 2018-2023



Dates of work subject to change pending: a) Tunnel & AWV Demolition completion dates and, b) Ongoing evaluation of sequencing and packaging assumptions for all projects. Private development not shown; coordination is ongoing.

Last updated: 03/14/18

WORK THROUGH LATE-2018

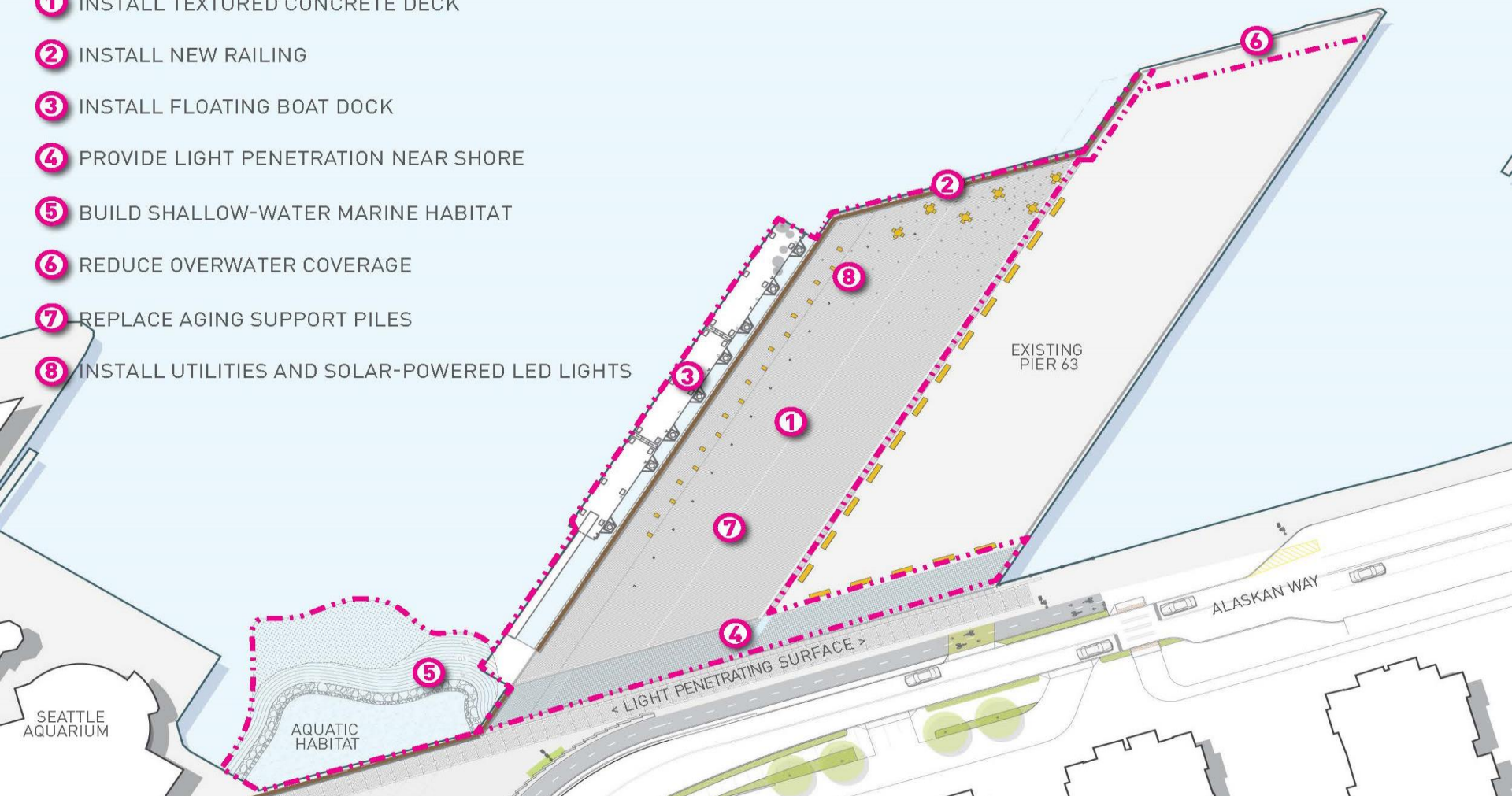


PIER 62 SITE PLAN



LEGEND

- ① INSTALL TEXTURED CONCRETE DECK
- ② INSTALL NEW RAILING
- ③ INSTALL FLOATING BOAT DOCK
- ④ PROVIDE LIGHT PENETRATION NEAR SHORE
- ⑤ BUILD SHALLOW-WATER MARINE HABITAT
- ⑥ REDUCE OVERWATER COVERAGE
- ⑦ REPLACE AGING SUPPORT PILES
- ⑧ INSTALL UTILITIES AND SOLAR-POWERED LED LIGHTS



CONSTRUCTION PROGRESS



COLMAN DOCK HUB AREA STAGING

ALASKAN WAY AND PROMENADE SEP 2017

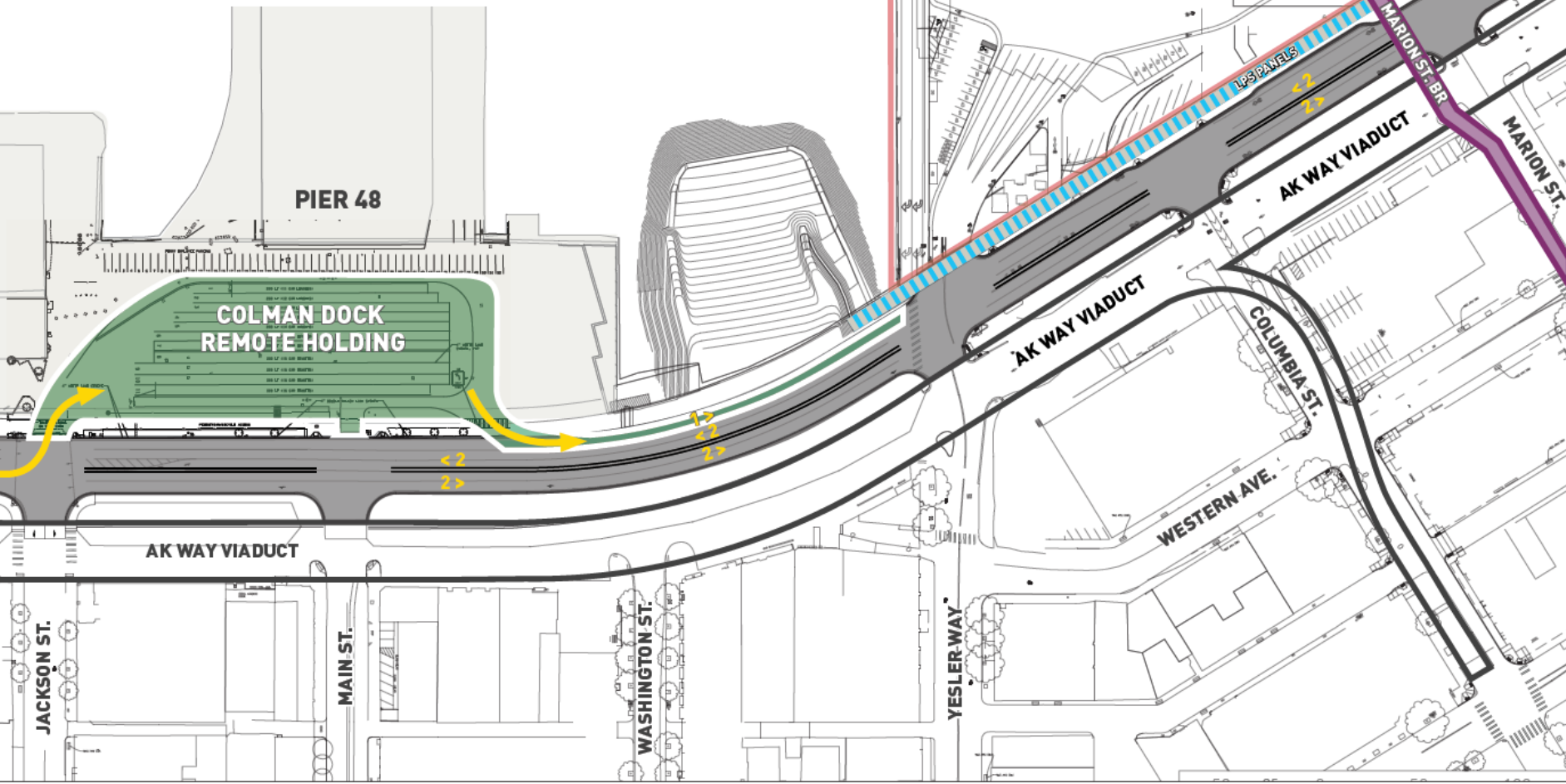
STP ROAD + COLMAN DOCK CONSTRUCTION

TIMELINE:

COLMAN DOCK (PHASES 1 and 2)



DRAFT

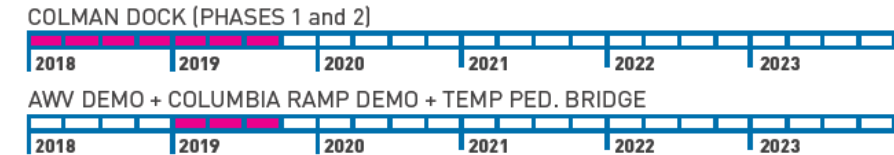


COLMAN DOCK HUB AREA STAGING

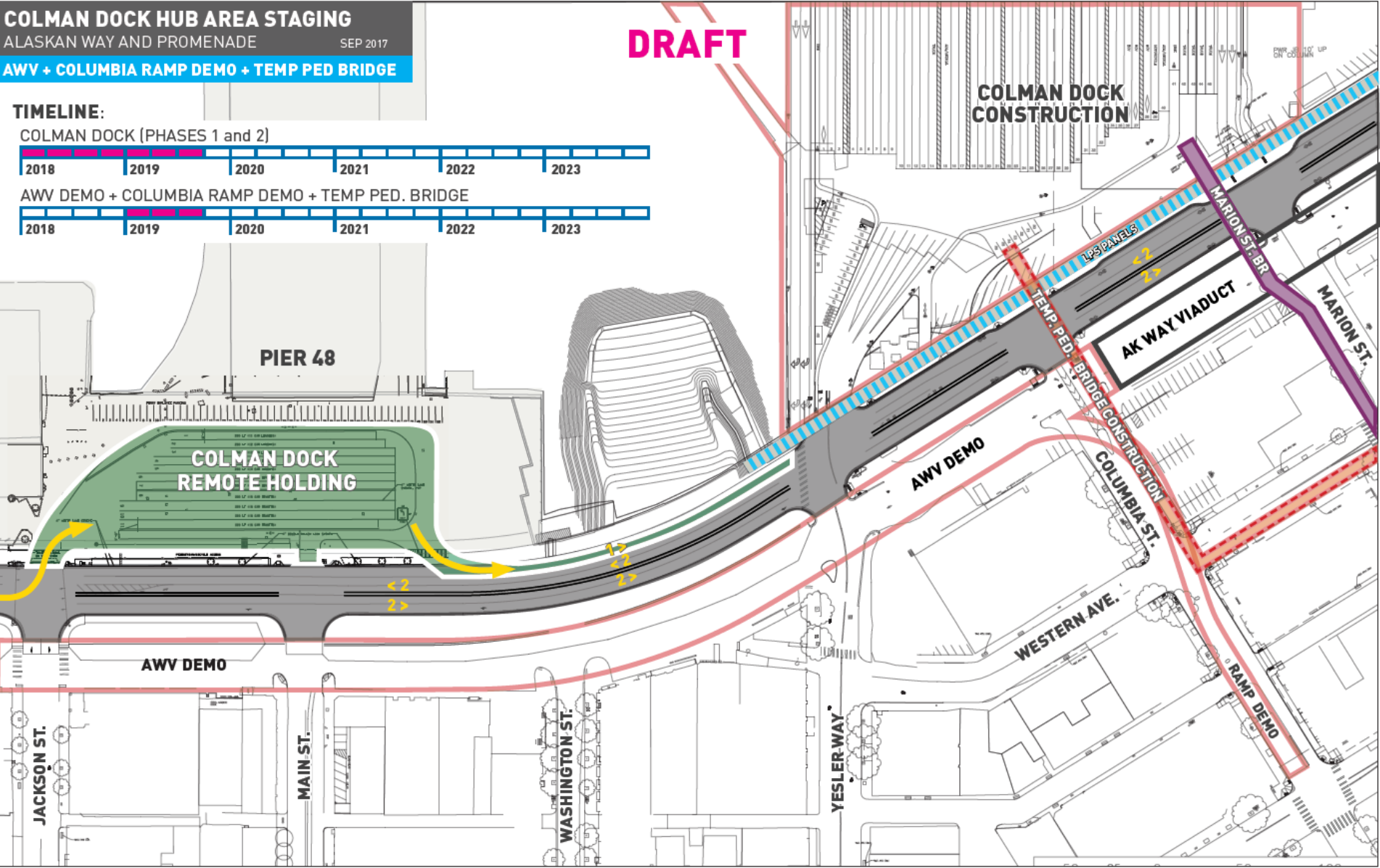
ALASKAN WAY AND PROMENADE SEP 2017

AWV + COLUMBIA RAMP DEMO + TEMP PED BRIDGE

TIMELINE:



DRAFT

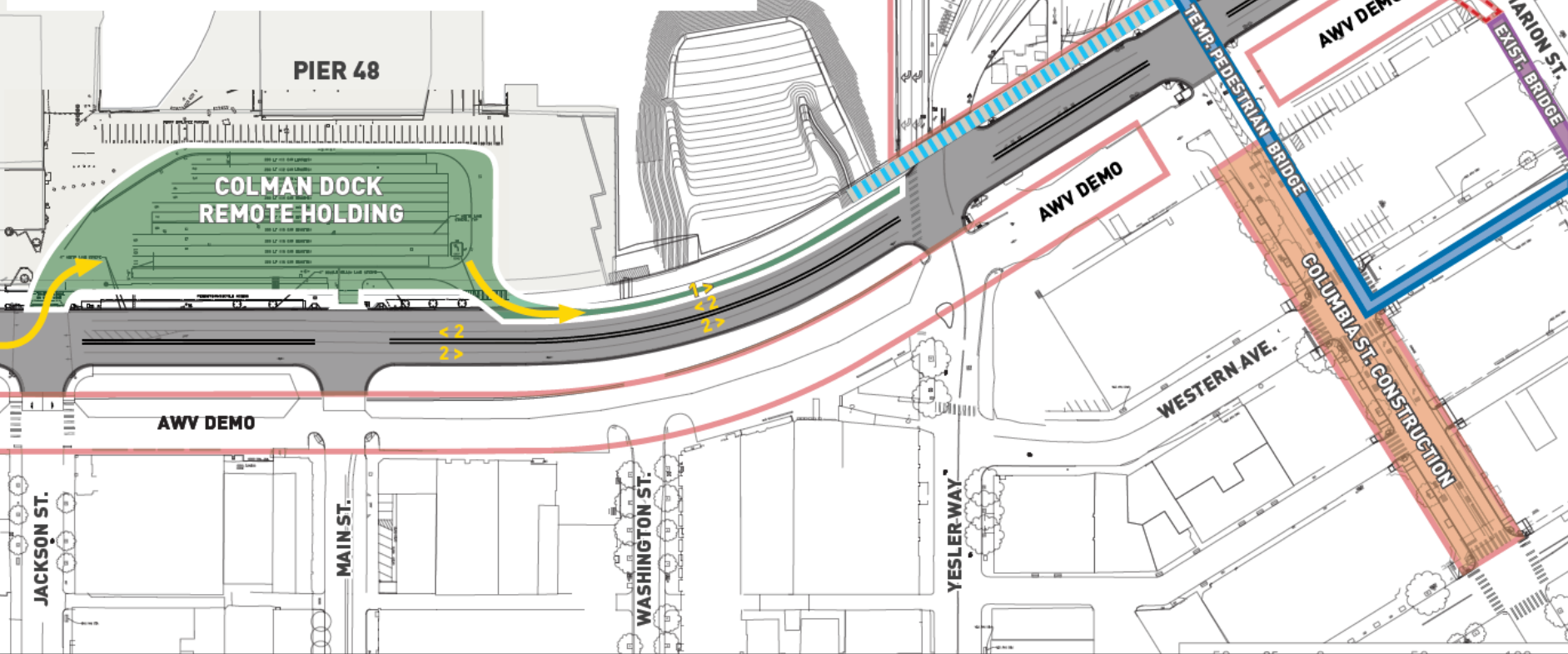
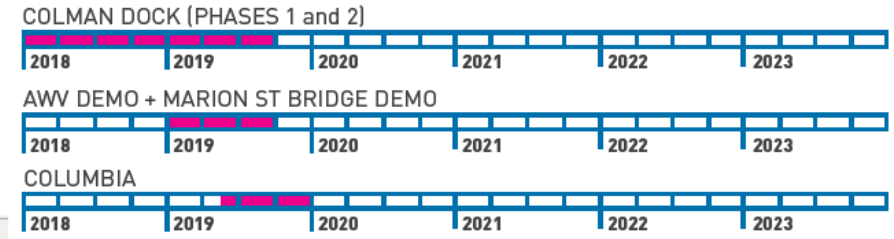


COLMAN DOCK HUB AREA STAGING

ALASKAN WAY AND PROMENADE SEP 2017

AWV + MSB DEMO + COLUMBIA CONSTRUCTION

TIMELINE:



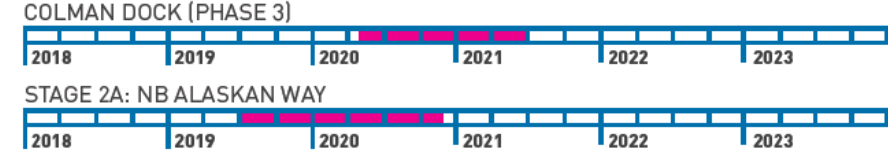
DRAFT

COLMAN DOCK HUB AREA STAGING

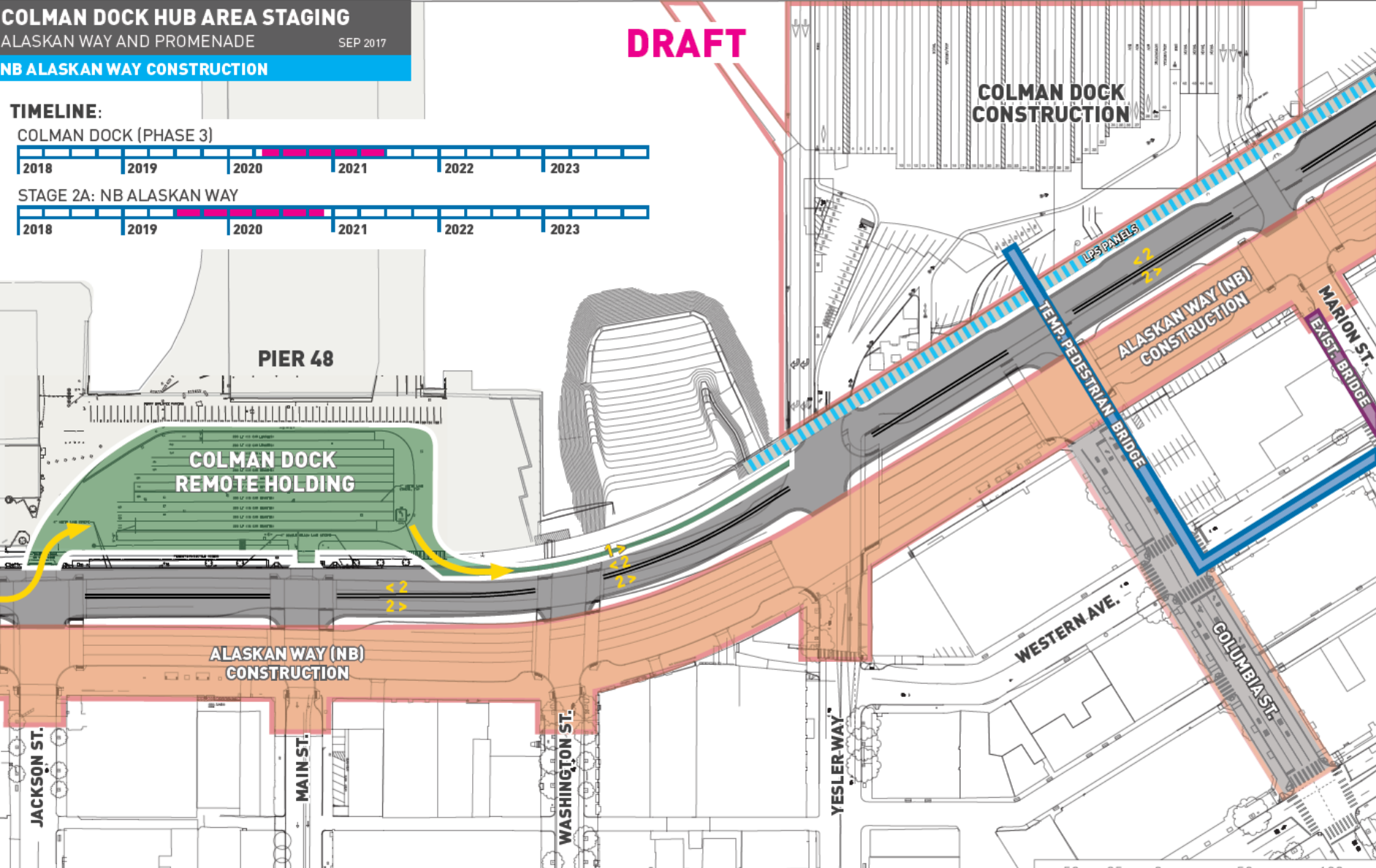
ALASKAN WAY AND PROMENADE SEP 2017

NB ALASKAN WAY CONSTRUCTION

TIMELINE:



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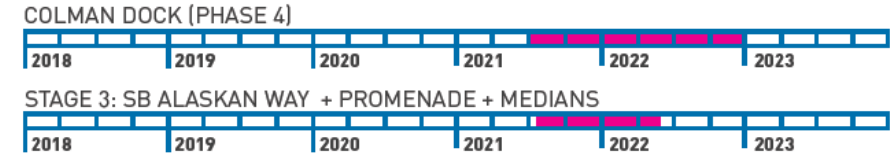


COLMAN DOCK HUB AREA STAGING

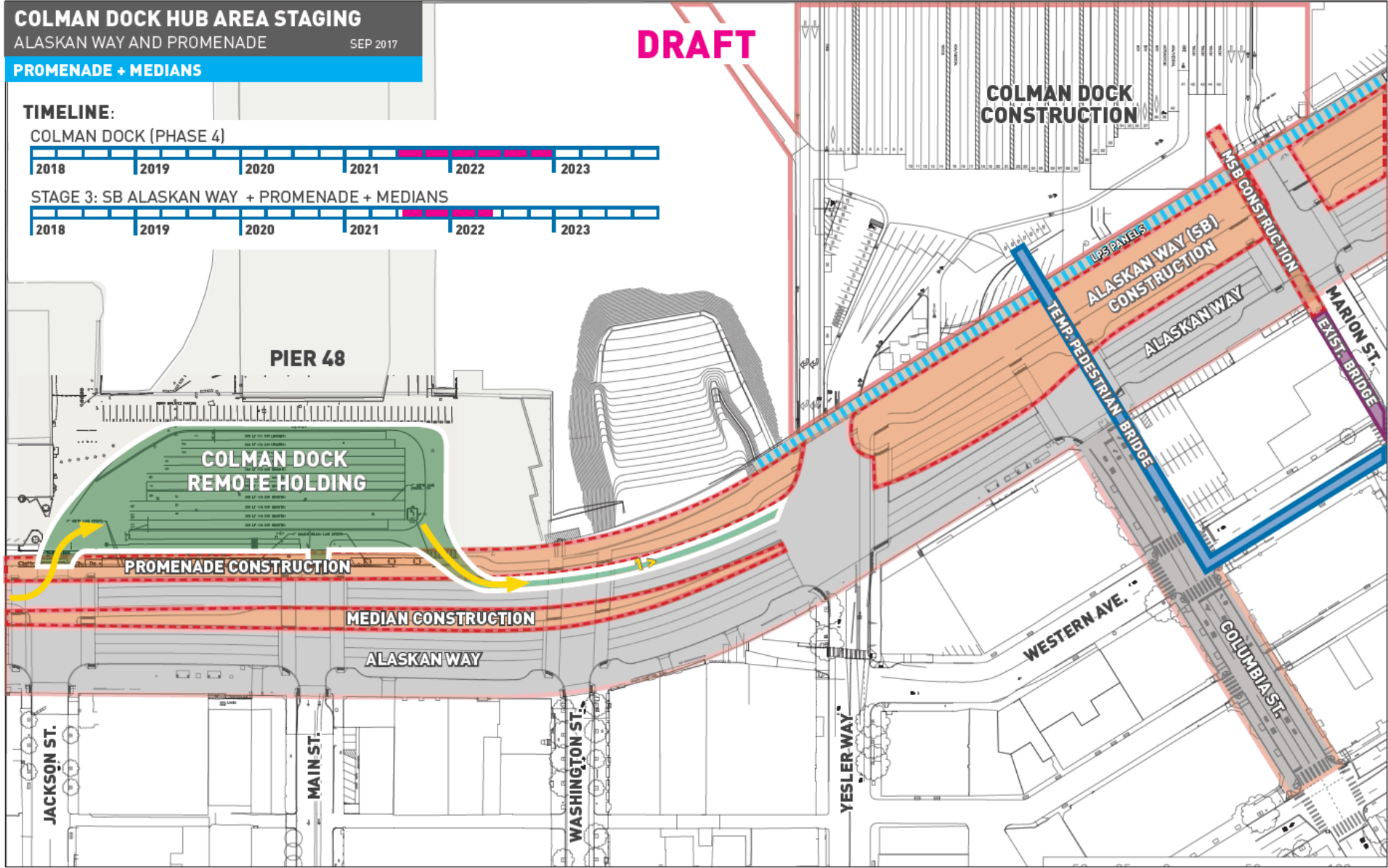
ALASKAN WAY AND PROMENADE
SEP 2017

PROMENADE + MEDIANS

TIMELINE:



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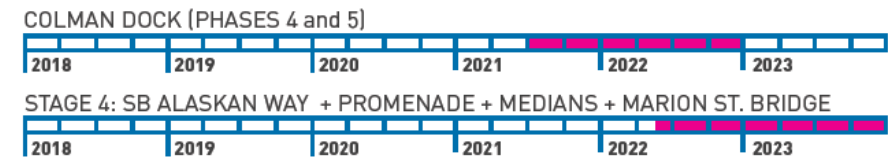


COLMAN DOCK HUB AREA STAGING

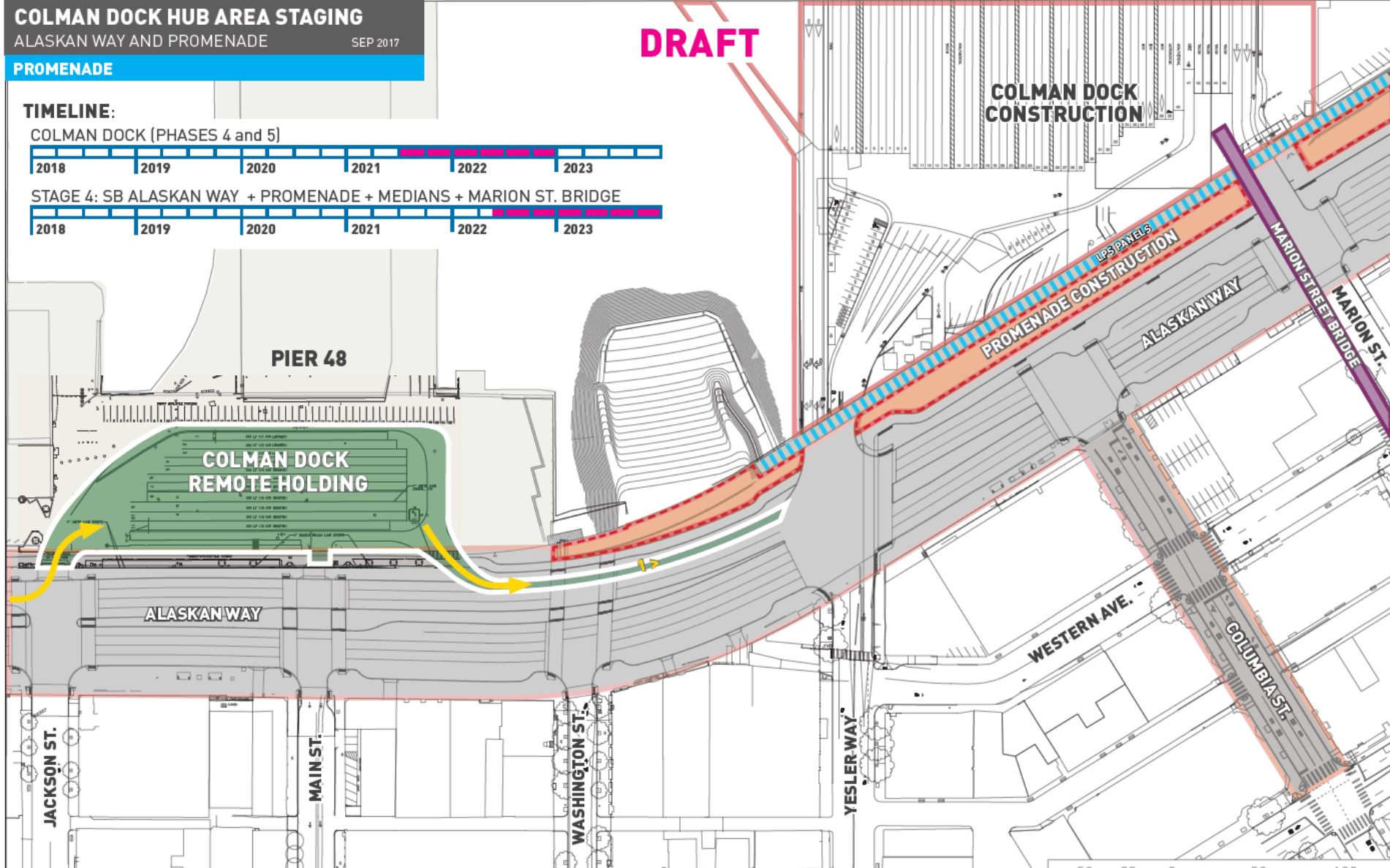
ALASKAN WAY AND PROMENADE SEP 2017

PROMENADE

TIMELINE:



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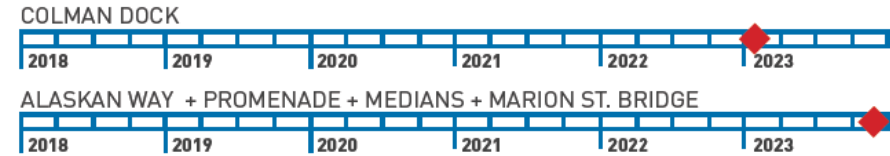


COLMAN DOCK HUB AREA STAGING

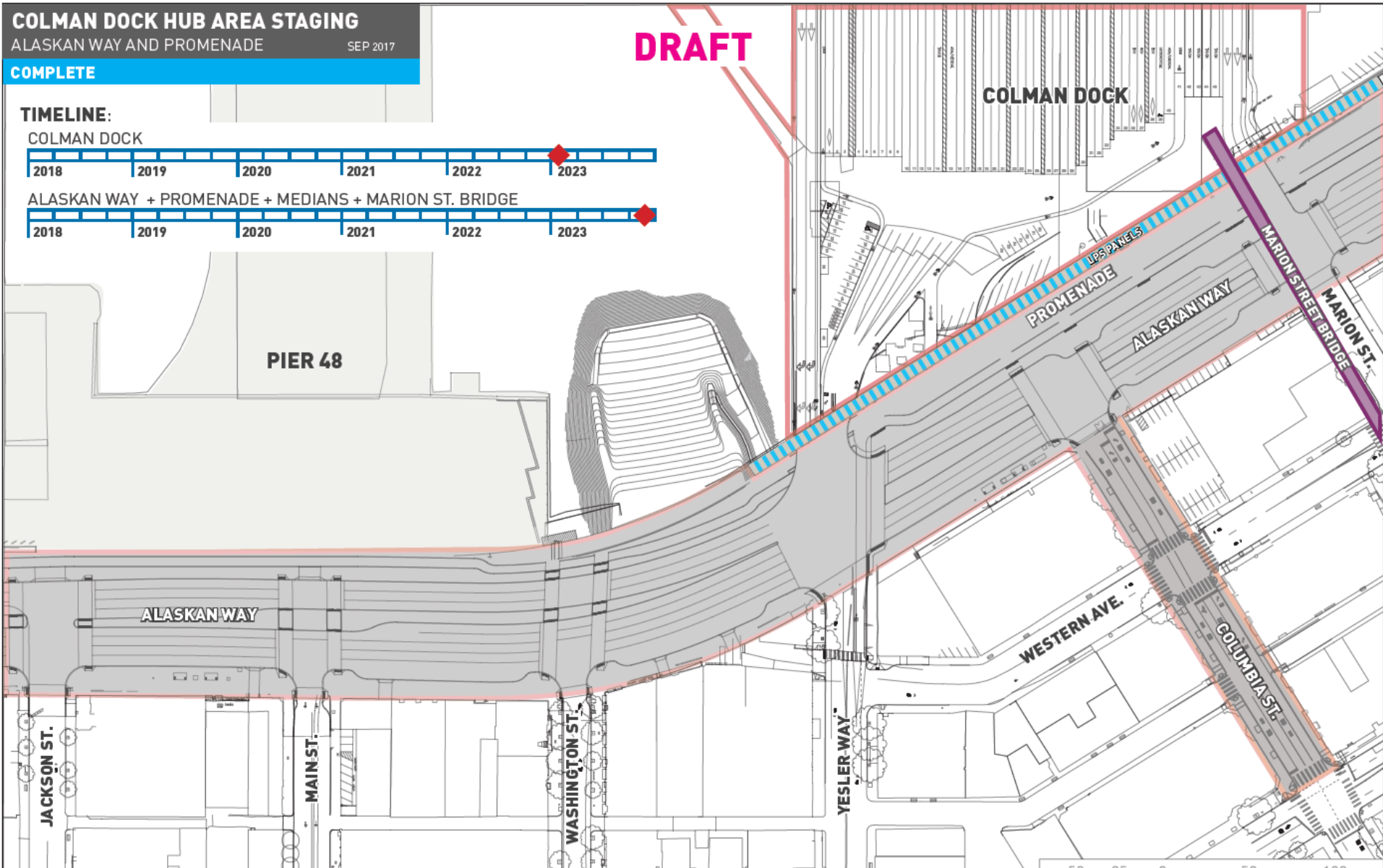
ALASKAN WAY AND PROMENADE SEP 2017

COMPLETE

TIMELINE:



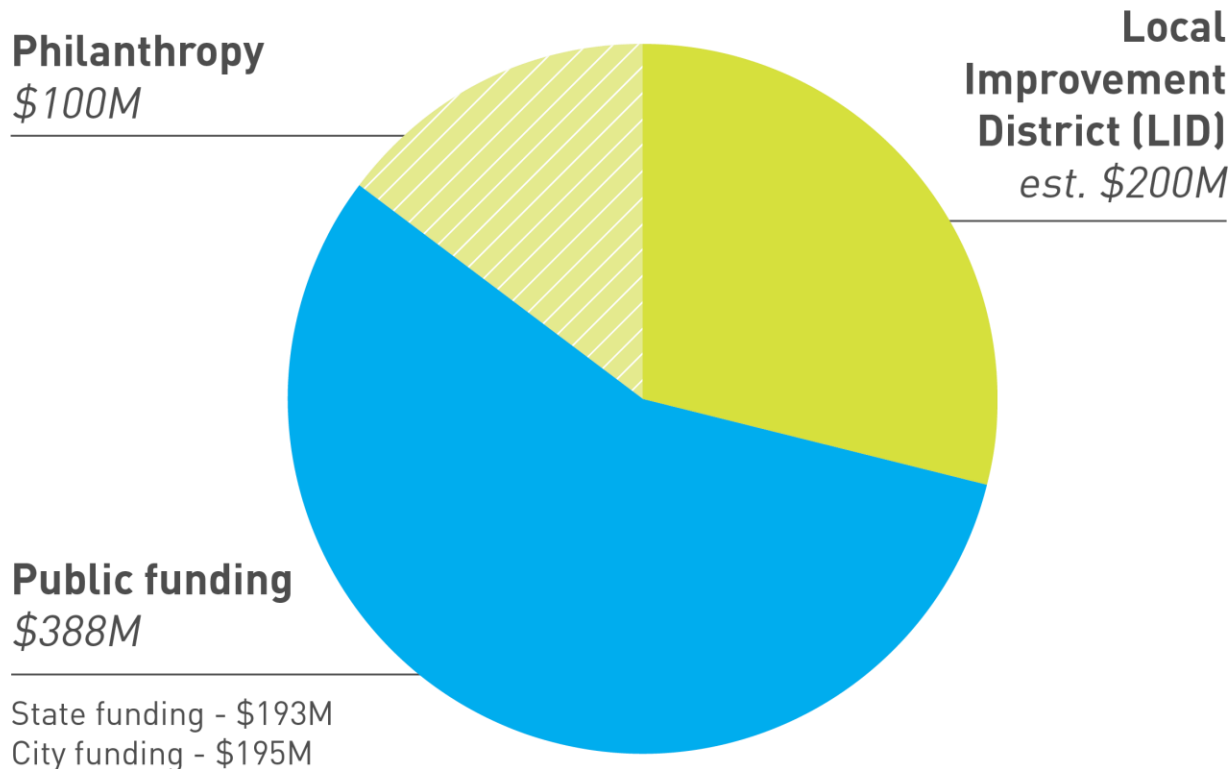
DRAFT



FUNDING



FUNDING SOURCES



TOTAL= \$688M

*Does not include WSDOT-funded Marion Street Pedestrian Bridge over Alaskan Way (pending future agreement)







QUESTIONS?