



# Community Task Force Meeting #18

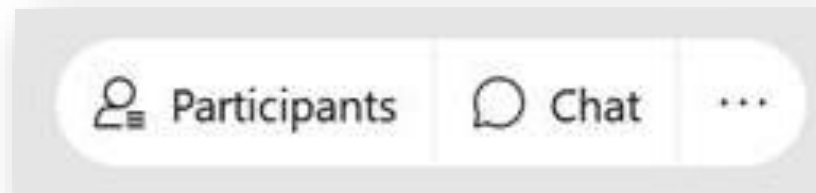
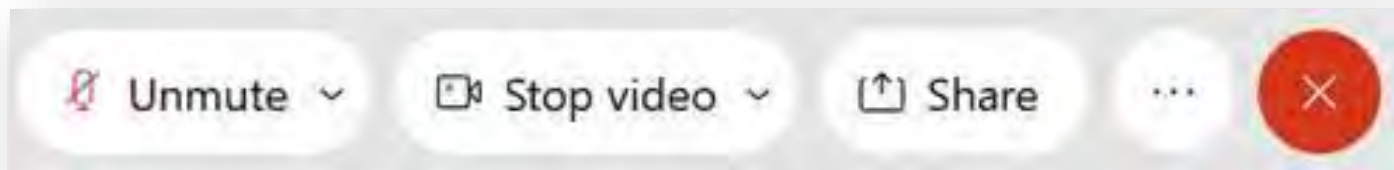
*Members join meeting via  
WebEx link in calendar invite*

*NOTE: Meeting is live to the  
public and recorded*

Department of Community Services  
Transportation Division  
October 26, 2020

# Meeting Protocols

## Using WebEx participation features



*For WebEx tech support call or email Liz Stoppelman:*

*(916) 200-5123*

*Liz.Stoppelman@hdrinc.com*



# Agenda

1. Welcome, Introductions & Housekeeping
2. Public Comment
3. Project Update
4. Site Context
5. Interests Assessment
6. Next Steps



# Introductions and Roll Call

## Community Task Force

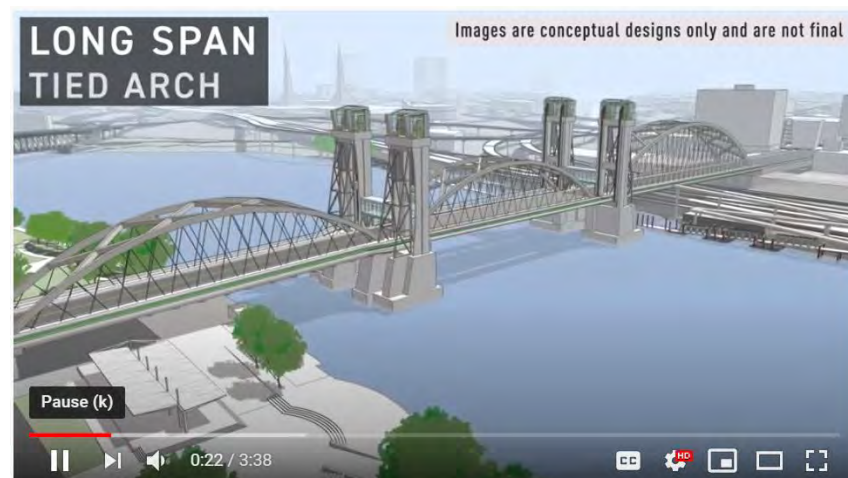
- Amy Rathfelder, Portland Business Alliance
- Art Graves, Multnomah County Bike and Pedestrian Citizen Advisory Committee
- Dennis Corwin, Portland Spirit
- Ed Wortman, Community Member
- Frederick Cooper, Laurelhurst Neighborhood Emergency Team and Laurelhurst Neighborhood Association
- Gabe Rahe, Burnside Skate Park
- Howie Bierbaum, Portland Saturday Market
- Jackie Tate, Community Member
- Jane Gordon, University of Oregon
- Jennifer Stein, Central City Concern
- Marie Dodds, AAA of Oregon
- Neil Jensen, Gresham Area Chamber of Commerce
- Paul Leitman, Oregon Walks
- Peter Englander, Old Town Community Association
- Peter Finley Fry, Central Eastside Industrial Council
- Sharon Wood Wortman, Community Member
- Stella Funk Butler, Coalition of Gresham Neighborhood Associations
- Susan Lindsay, Buckman Community Association
- Tesia Eisenberg, Mercy Corps
- Timothy Desper, Portland Rescue Mission
- William Burgel, Portland Freight Advisory Committee





# Project Update

- **Policy Group Meeting**
  - PA Approval
- **Working Groups**
  - Urban Design + Aesthetics
  - Bridge & Seismic
- **City Permitting Coordination**
- **DEIS Status**
  - January/February Publication





# Site Context





# Project Purpose and Need

- Seismic Resiliency and Emergency Response
- Regional Recovery and Rebuilding
- Long-term Use





# Bridge Design Criteria

## Bridge Seismic Performance Criteria

It's likely that an earthquake-ready Burnside Bridge would be the only functioning bridge within weeks/months following a major earthquake.



### The Burnside Bridge must:

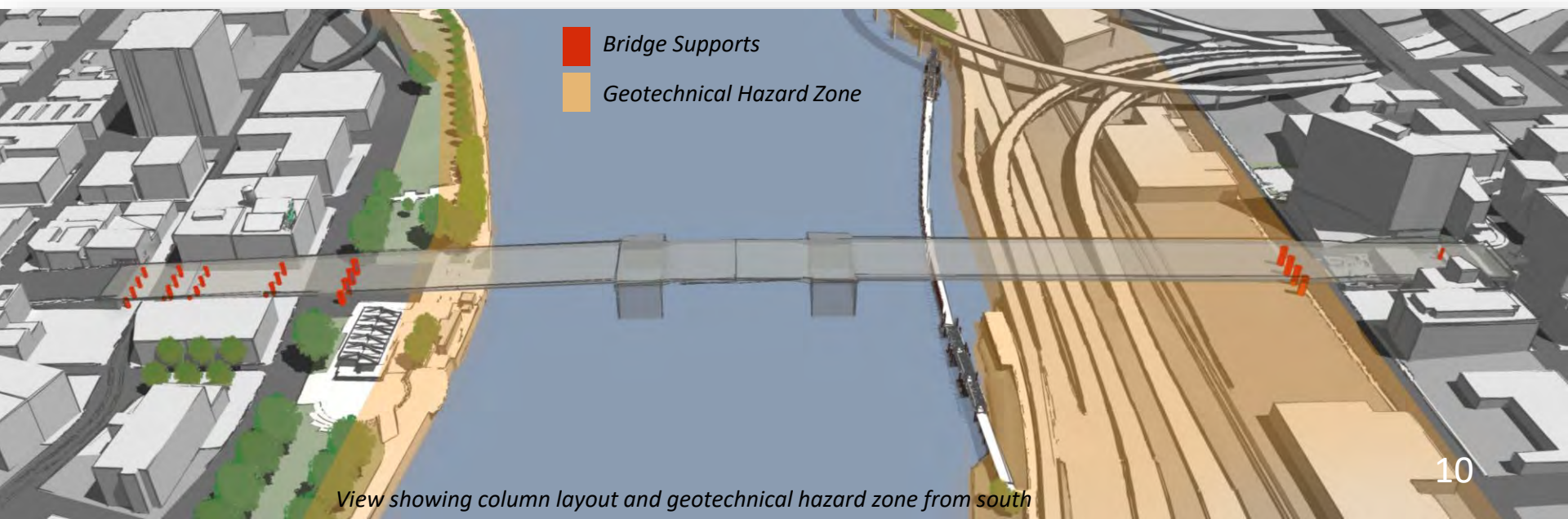
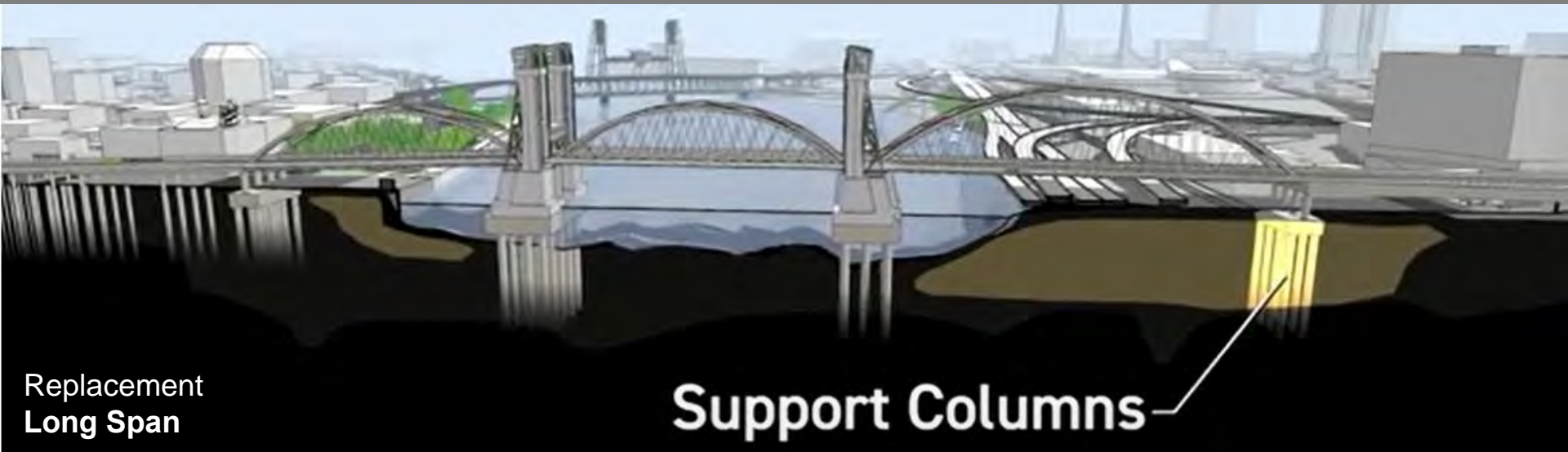
- Sustain only minimal damage
- Be usable to all travel modes on the bridge immediately following the CSZ Earthquake
- Have its movable span operational within 1-2 months of the earthquake
- Allow heavy earthquake recovery, response, and material hauling vehicles to cross





# Best for Seismic Resiliency

Fewer columns in liquefiable soils reduces its risk from soil movement during an earthquake



# Long-span Alternative

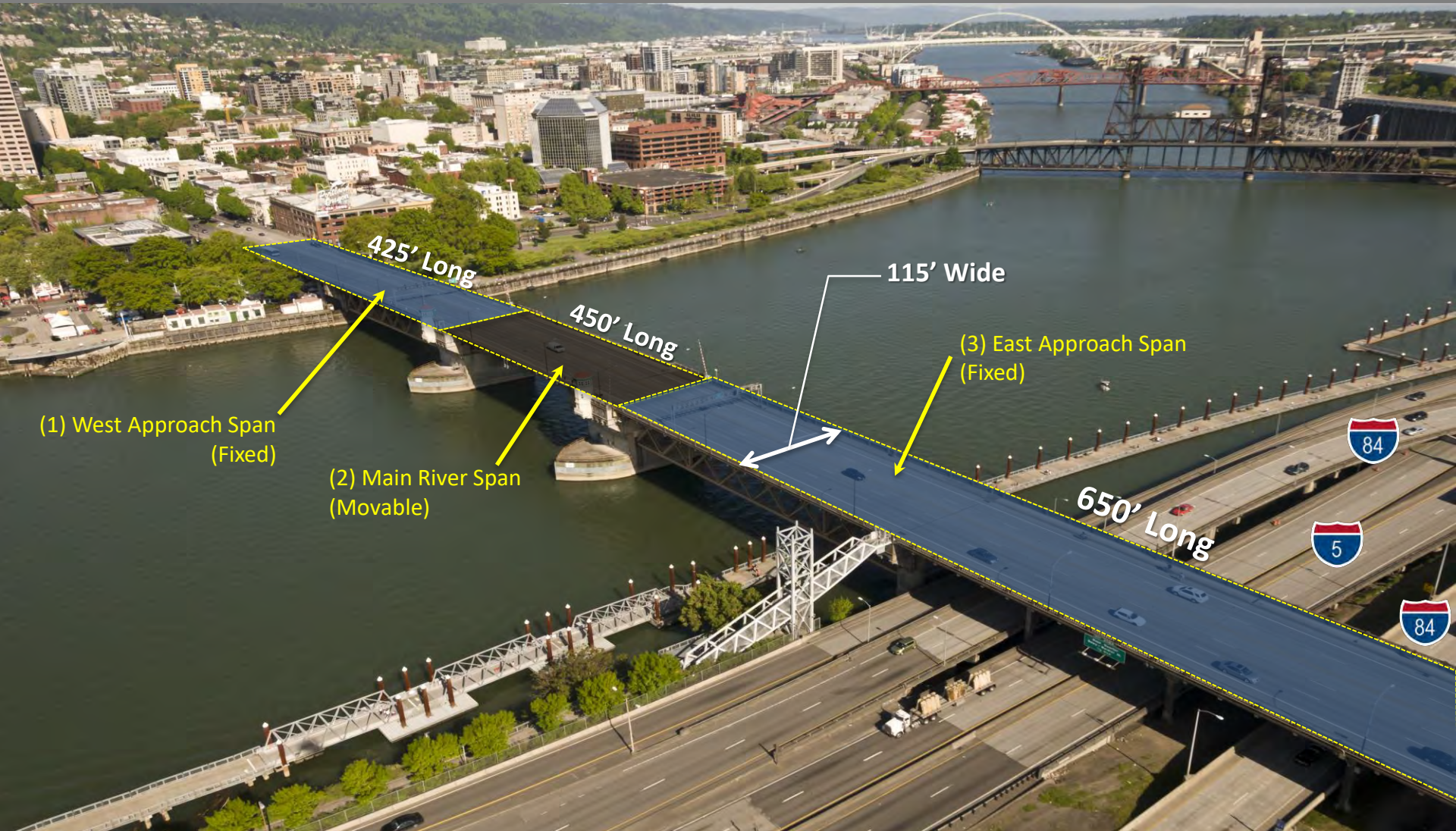
View towards northeast





# Long-span Alternative

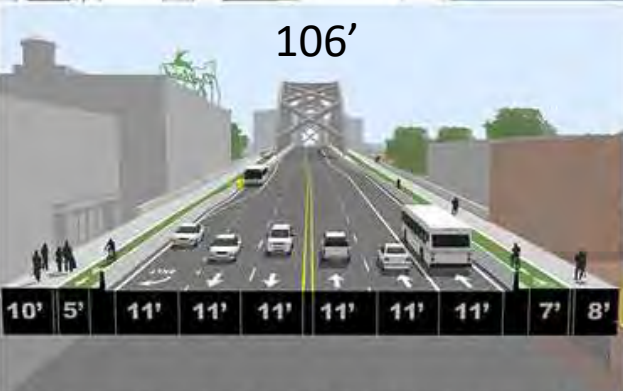
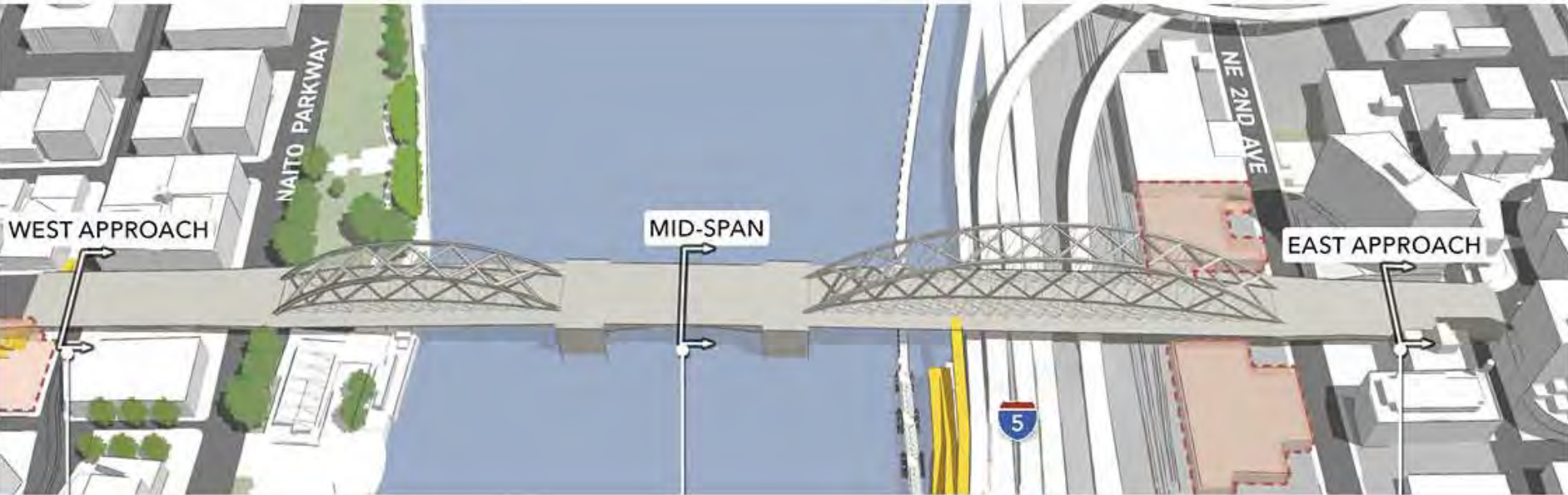
“Three bridges in one”





# Long-span Alternative

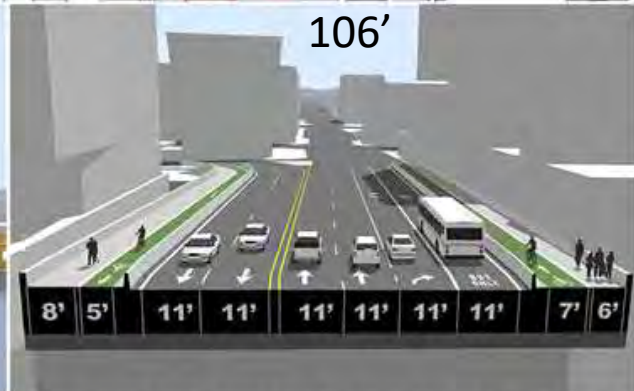
## Typical Sections



LANE CONFIGURATION AT WEST APPROACH



LANE CONFIGURATION AT MID-SPAN



LANE CONFIGURATION AT EAST APPROACH





# Site Context

## West Approach



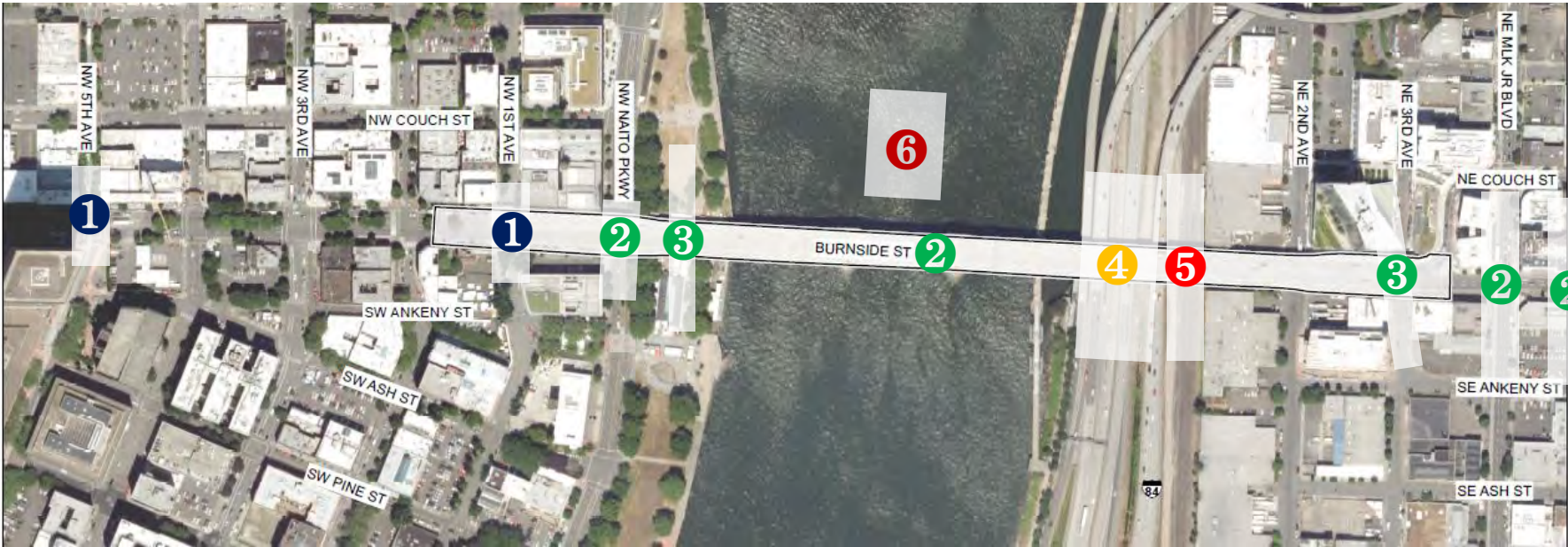
## East Approach





# Project Context

## Existing Facilities - Constraints



1 TriMet Lightrail Service

2 City of Portland Roadway  
(Naito Pkwy, NE/SE MLK,  
NE/SE Grand)

3 City of Portland  
Combined Sewer Overflow

4 Oregon Department of  
Transportation Highway Facilities  
(I-5 and I-84)

5 Union Pacific Railroad Mainline

6 U.S. Coast Guard /  
River Navigation





# Portland Rescue Mission



# TriMet - Skidmore Fountain Station





# Naito Parkway

Minimize disruptions during construction





# Waterfront Park / Ankeny Plaza





# Japanese American Memorial Plaza

## Future Compatibility





# Willamette River

## Portland as a River City



# Willamette River

## Views

Along north side of bridge



Along south side of bridge



On bridge



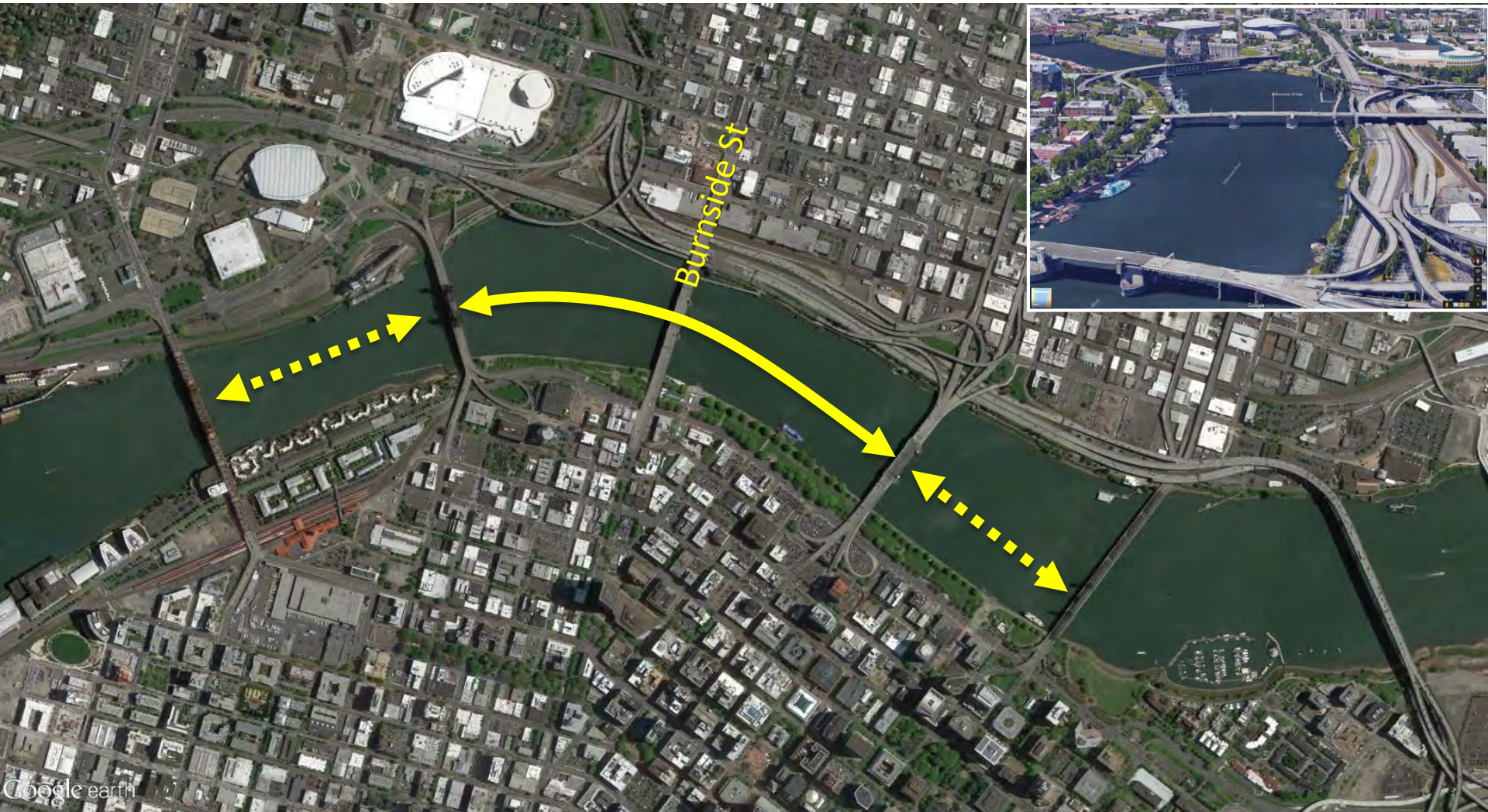
On bridge





# Ship Navigation

## Willamette River's Main Channel Alignment

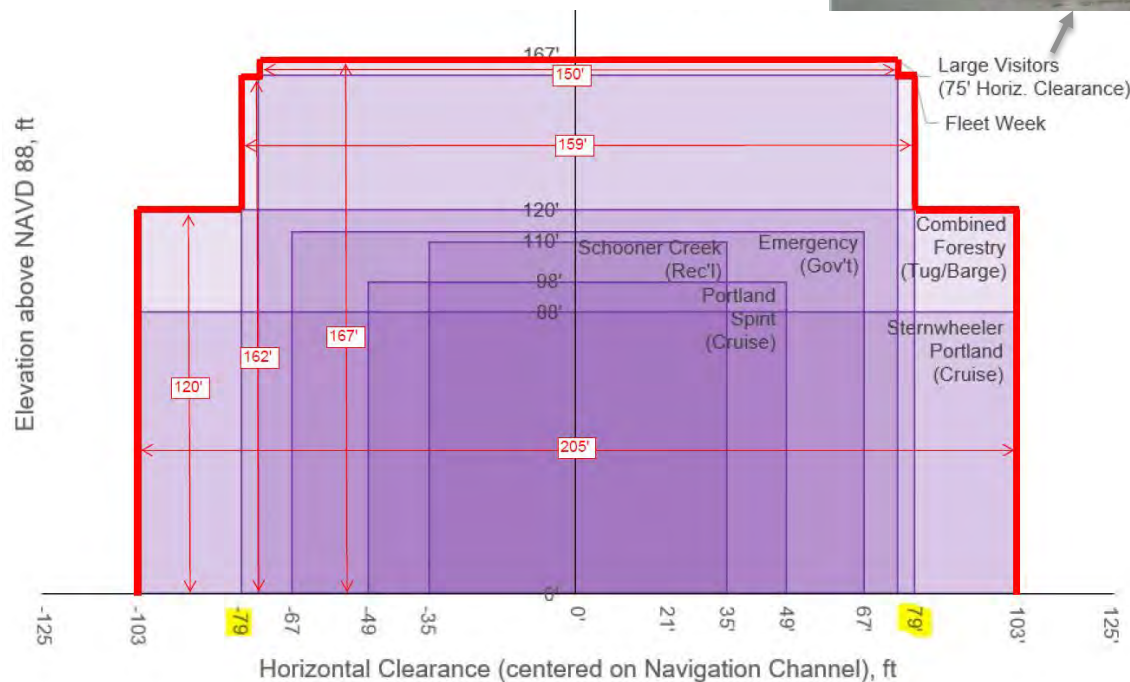
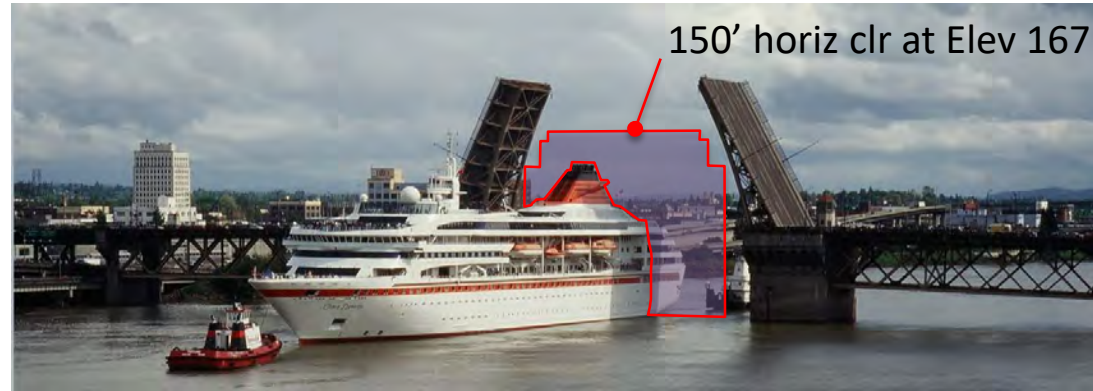




# Ship Navigation

## Mandatory Vertical Clearance Criteria (from USCG)

*The World*  
(in Portland as recently as 2010)



# In-river Pier Protection

## Fender or Dolphin Systems



Dolphin



Fender





# East Bridgehead

A gateway to East Portland





# Eastbank Esplanade Connection

## Urban Design Opportunity





# Crossing over I-5, I-84, and UPRR

A neighborhood connection over key transportation links





# Burnside Skatepark

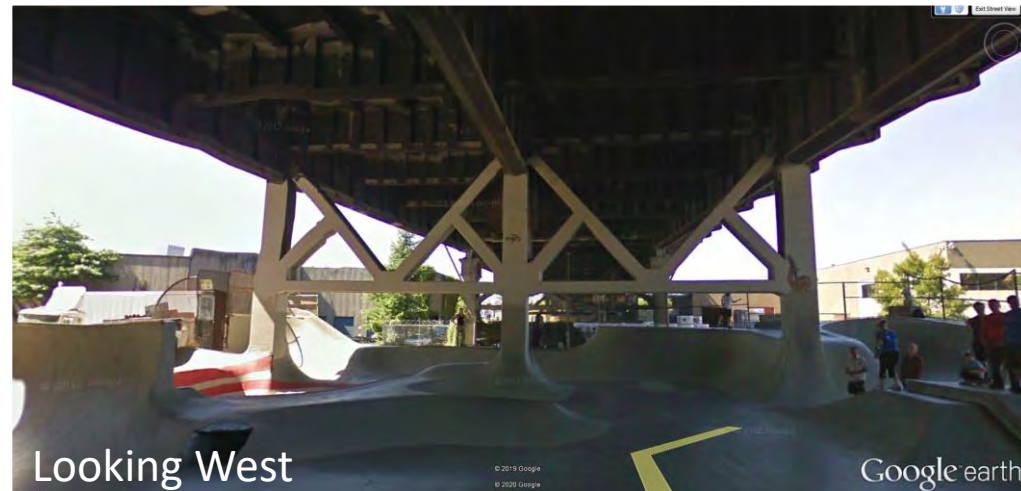
A world-renowned Portland asset



2nd Ave



Looking East



Looking West

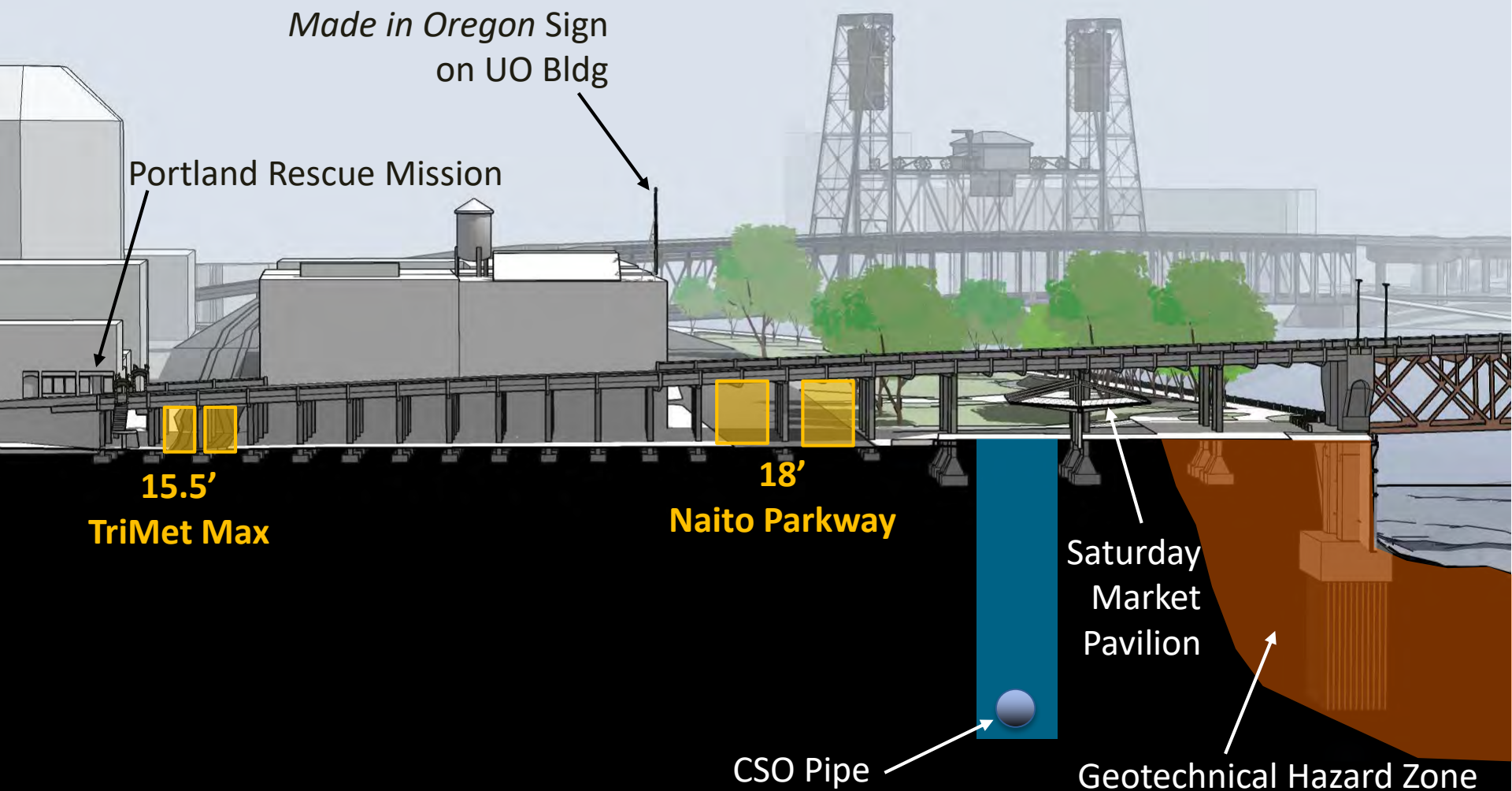


# East Bridgehead



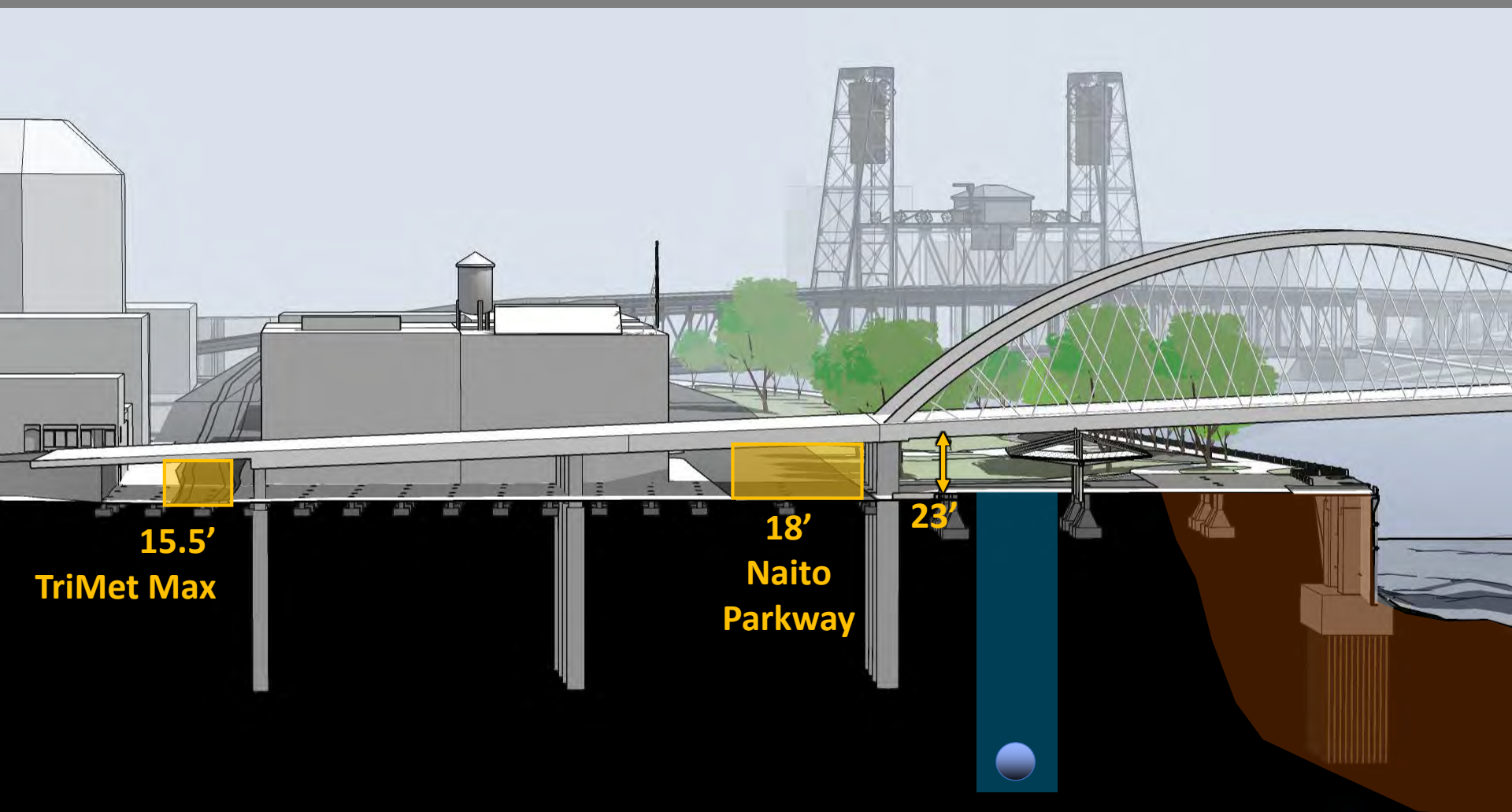
Existing NE Couch St. Approach

# West Approach View: Existing Bridge

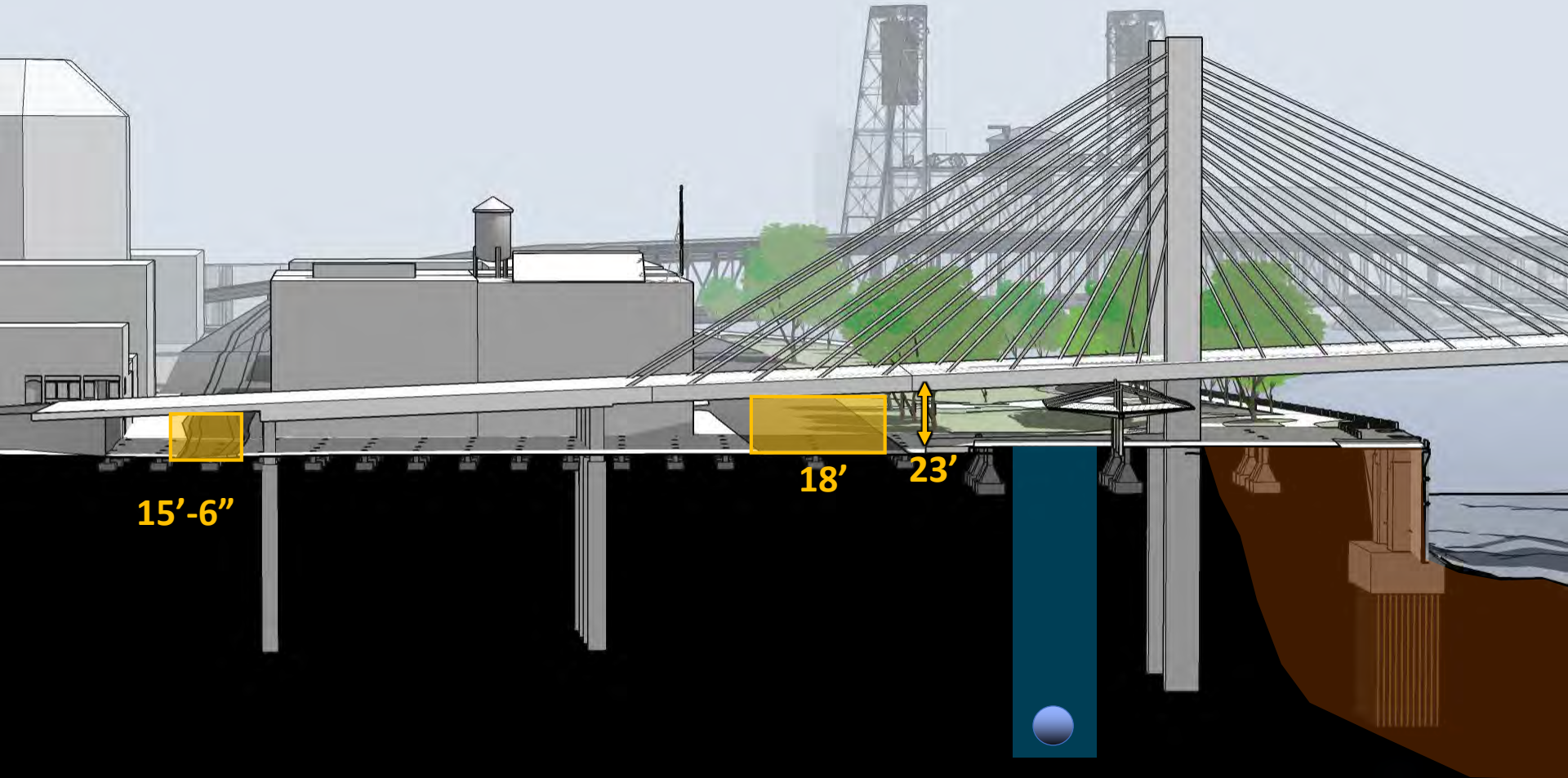




# West Approach View: Tied Arch Concept

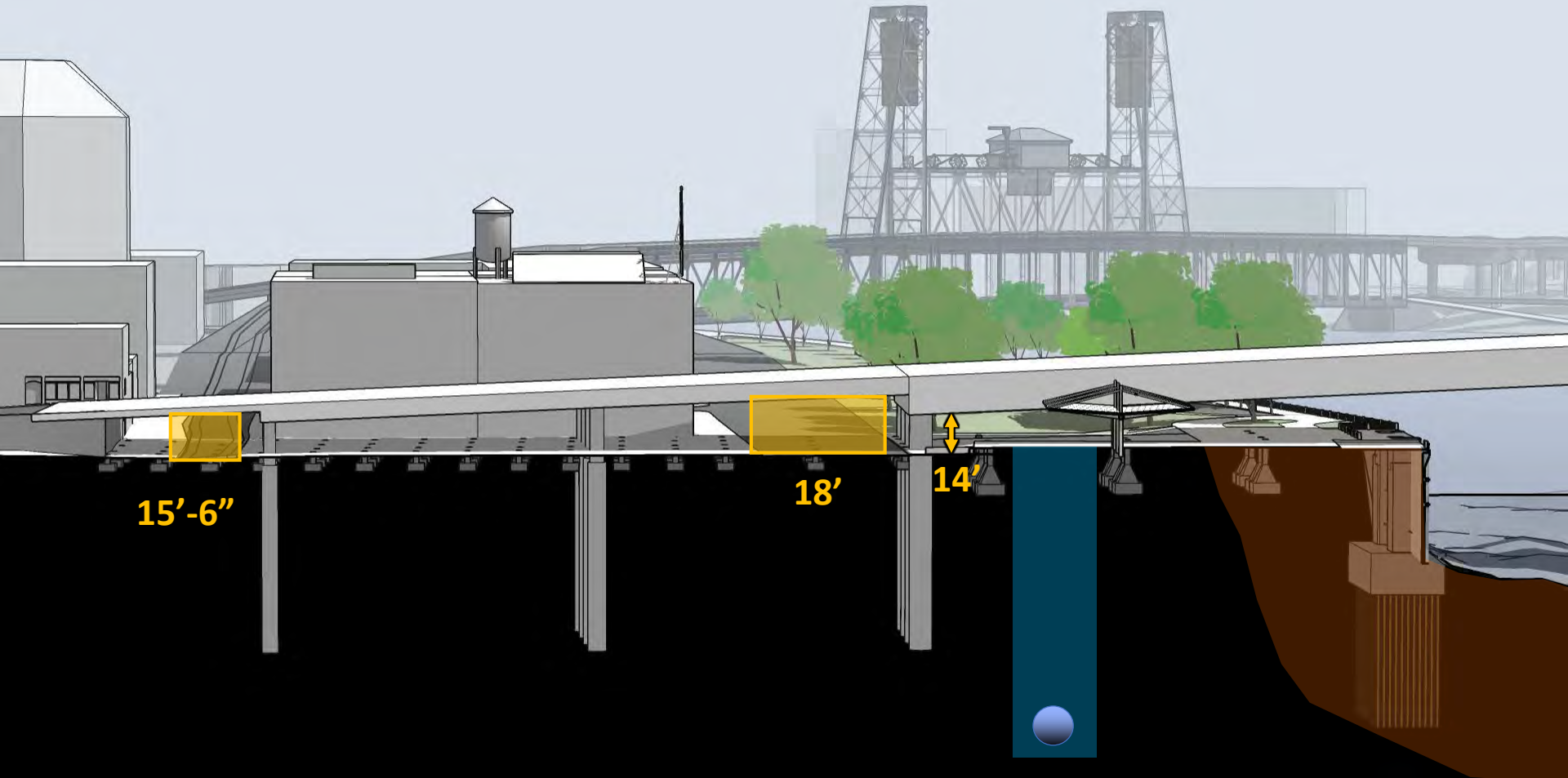


# West Approach View: Cable Stayed Concept

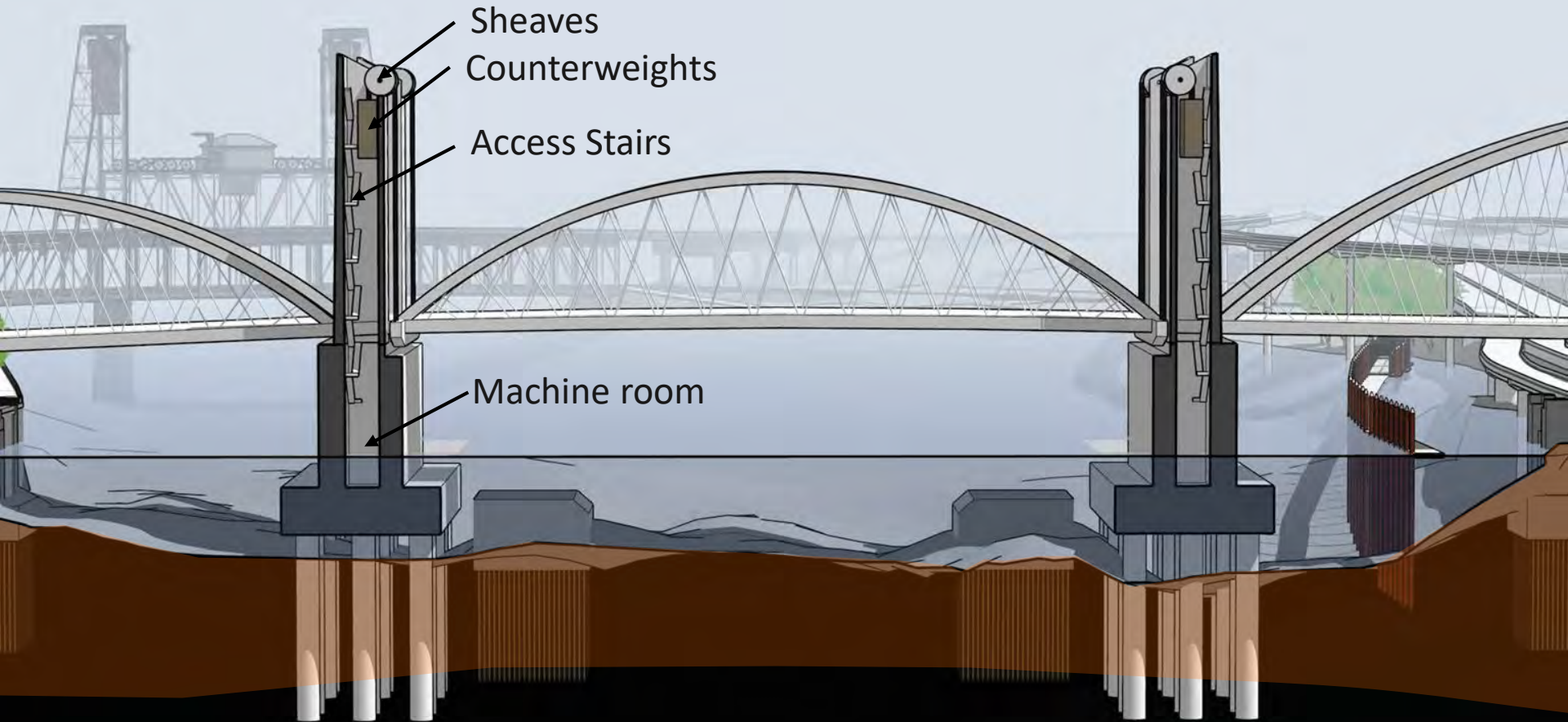




# West Approach View: Steel Girder

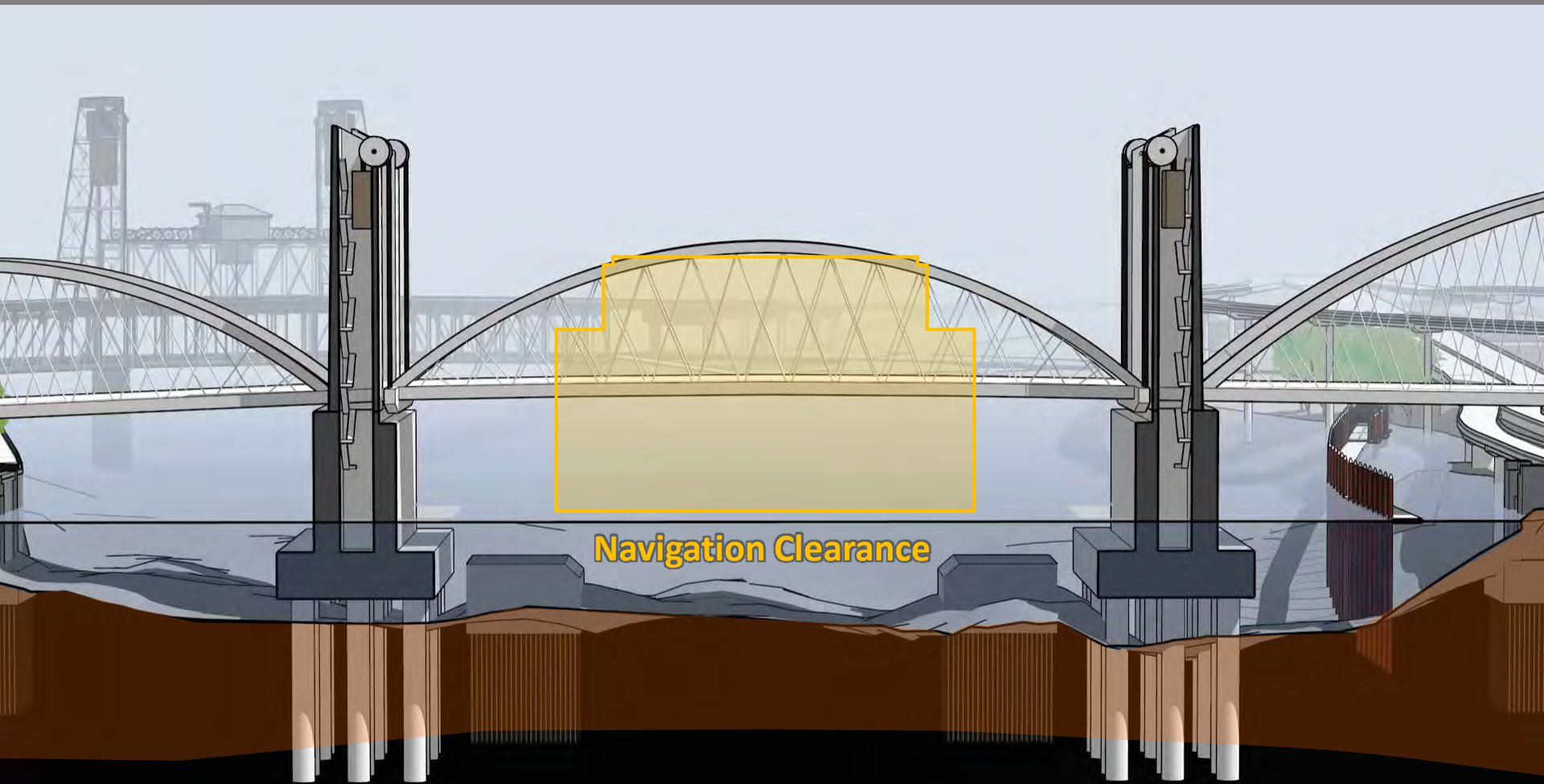


# River View: Vertical Lift + Tied Arch Concept

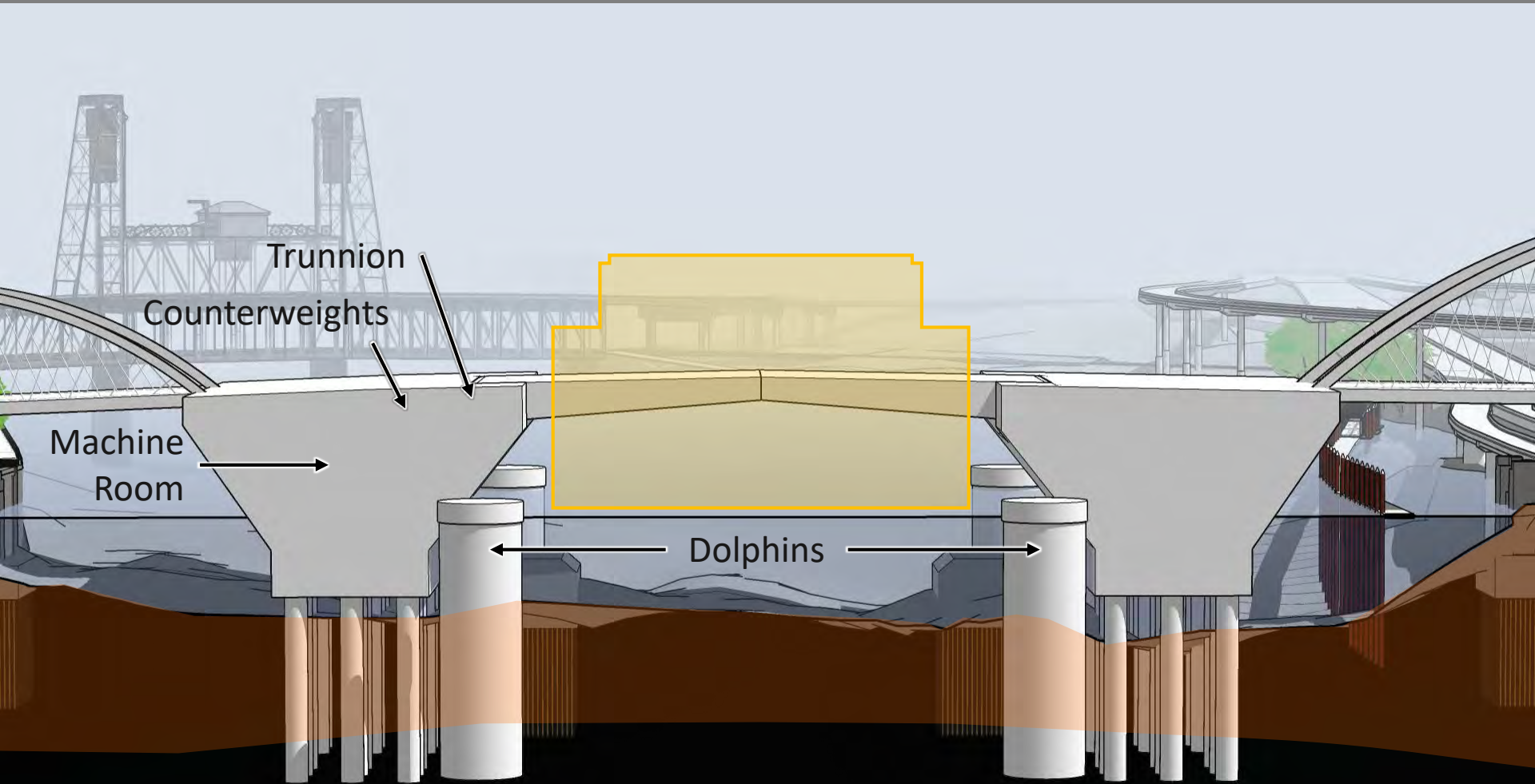




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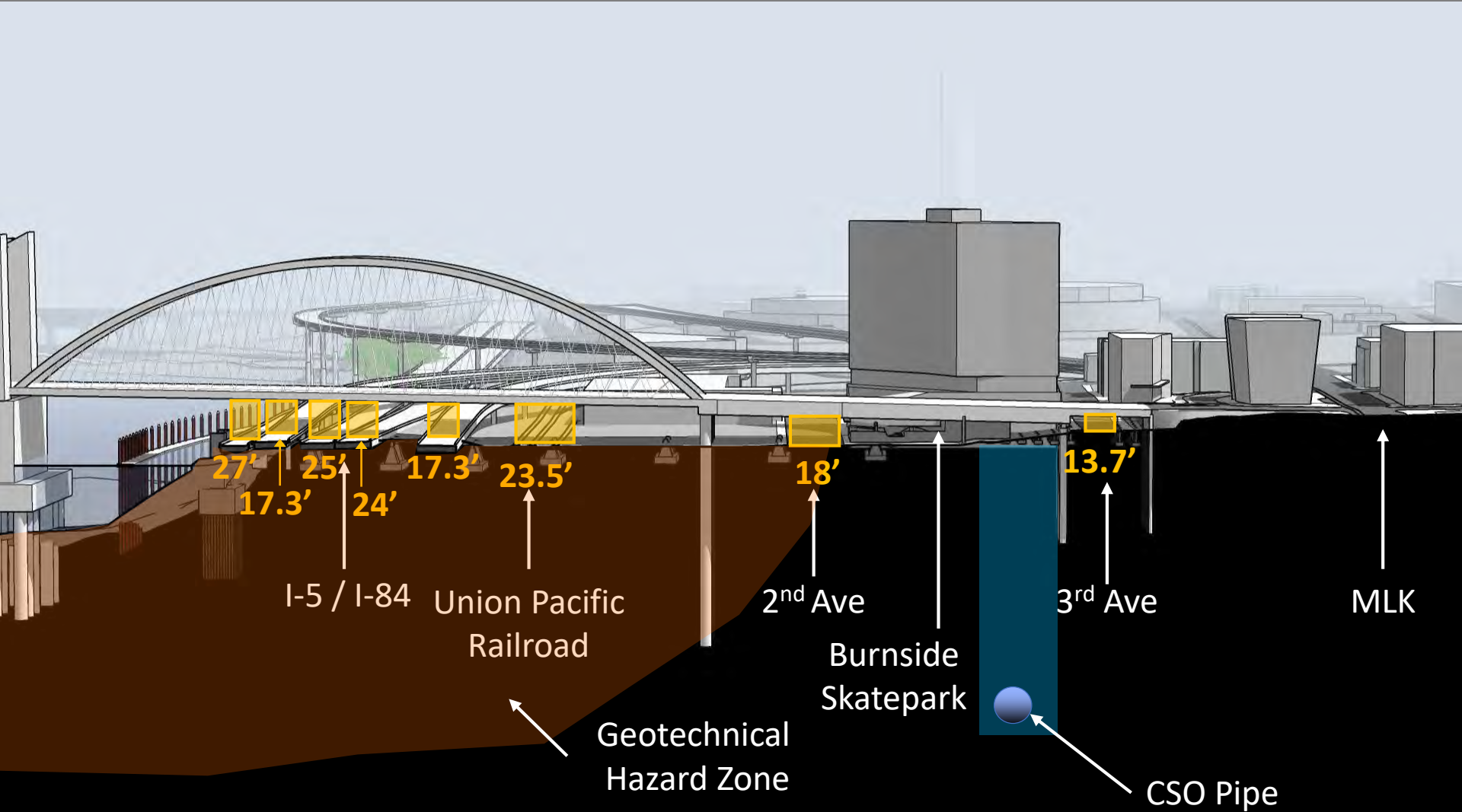


# River View: Bascule + Tied Arch Concept

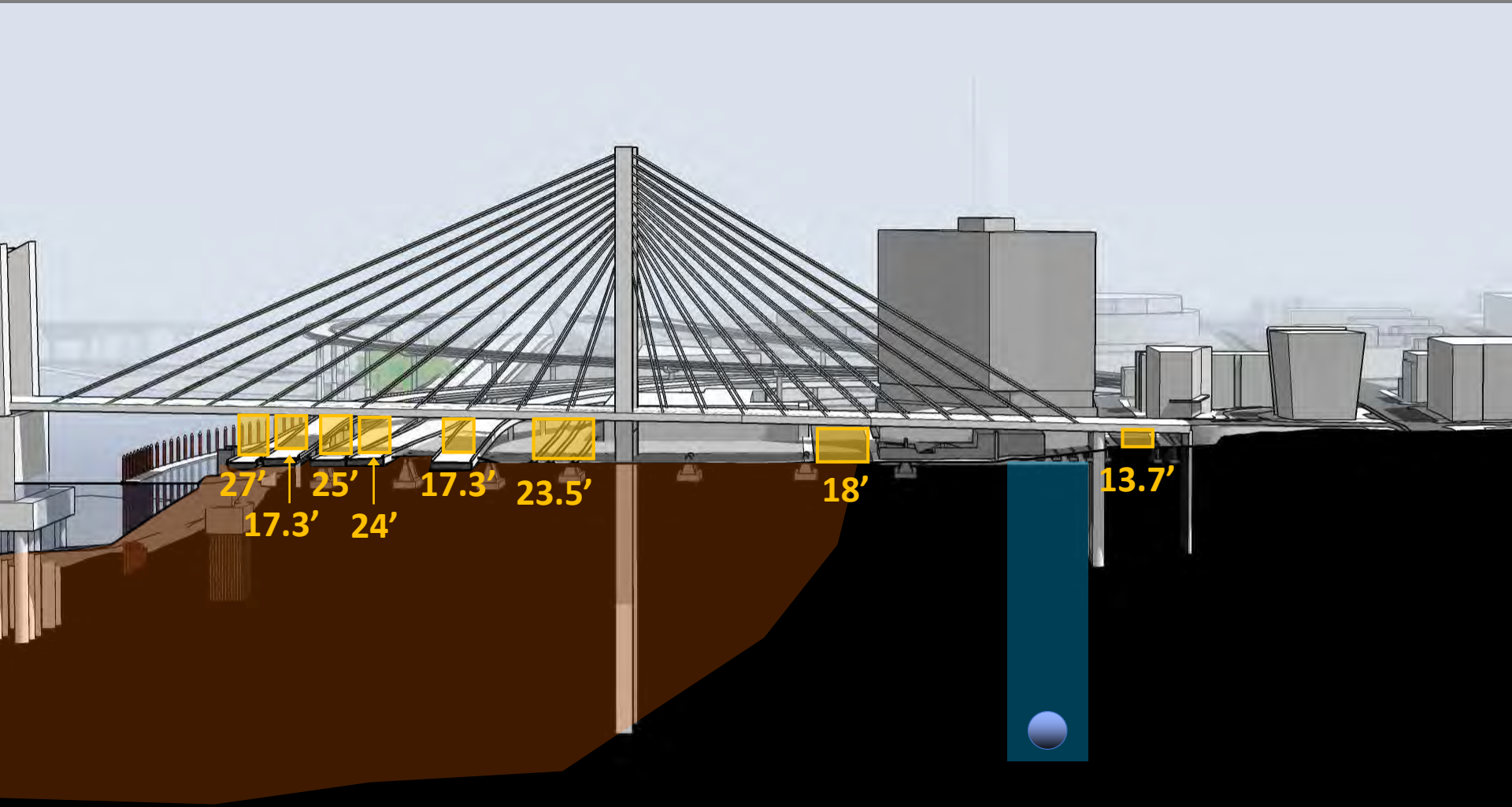




# East Approach View: Tied Arch Concept

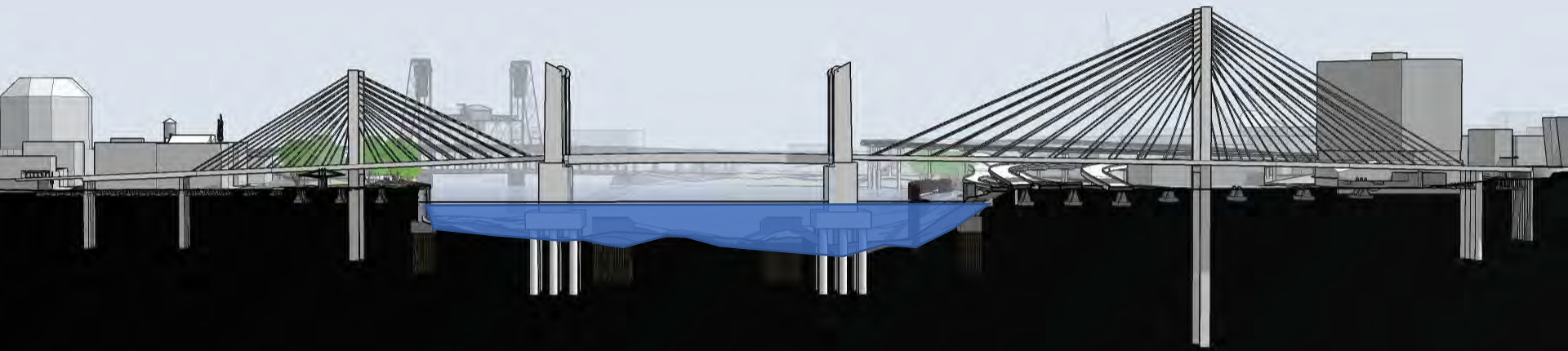


# East Approach View: Cable Stayed Concept

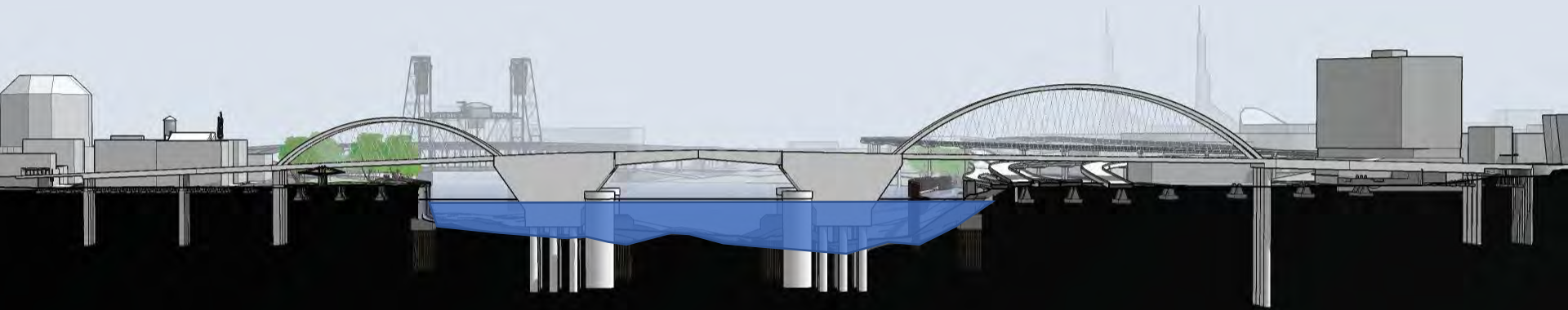




# Vertical Lift + Cable Stayed Concept

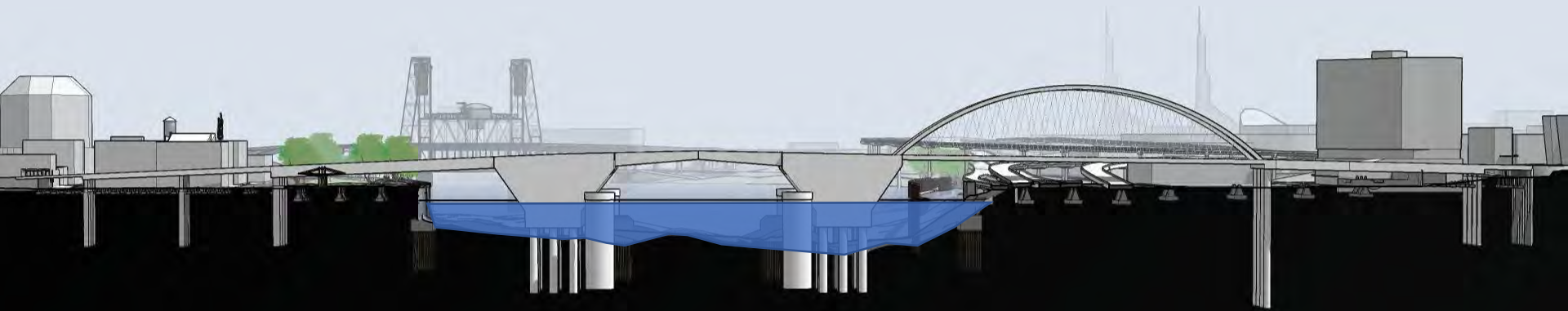


# Bascule + Tied Arch Concept





# Bascule + Arch/Girder Asymmetrical Concept





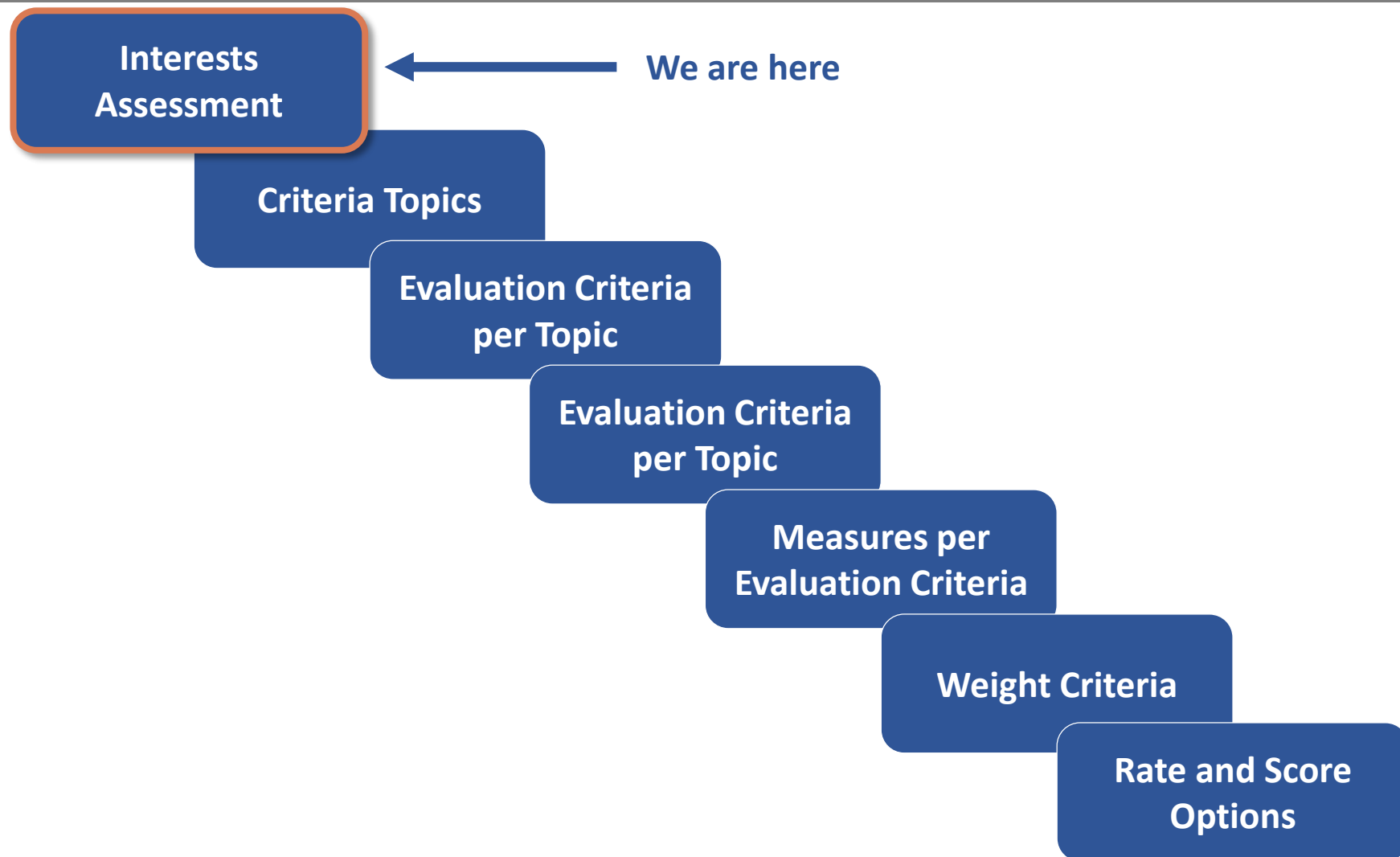
# Questions / Break





# Interests Assessment

Evaluation Process - *Steps in Getting to a Recommended Bridge Type*



# Interests Assessment

Input to inform evaluation criteria development



Multnomah County is creating an earthquake ready downtown river crossing.

April 23, 2015

### INTEREST AND VALUES

Interest and Values that will inform criteria development for Environmental Review Phase

- Businesses and Economy
- Social Services
- Community
- Resources
- Parks
- Historic resources
- Visual and Aesthetics
- Seismic Resiliency
- Cost
- Indirect Impacts to Uses/Buildings
- Natural Resources
- Personal Safety and non-Transportation Safety
- River Navigation
- Emergency Vehicles
- Utilities
- Sustainability
- Transit
- Active Transportation and ADA
- Motor Vehicles and Freight

### DESIGN CRITERIA

Design Criteria (questions to be addressed) during Environmental Review Phase

- Seismic Resiliency
  - Ensure freight, large truck and tracked vehicles can be used in an emergency
  - Design bridge to increase safety for navigation
  - Ensure all modes can use bridge after earthquake
  - Bridge should be operable the same day as earthquake
  - Ensure liquefaction resiliency
- River Navigation
  - Maintain the full width of the shipping channel through the bridge
  - Ensure adequate navigation vertical clearance (a fixed bridge height less than Tilikum Crossing is unacceptable)

### FUTURE TOPICS

Topics to be addressed during a Future Project Phase

- Visual and Aesthetics
  - Integrate the project into the urban fabric
  - Respect the historic value and character of existing bridge, even if it's replaced
  - If bridge is retrofitted, maintain current bridge facade - railing and towers, heritage recognition
  - Environment that is pleasing and enjoyable and doesn't overwhelm
  - Bridge aesthetics
  - 100 years?
  - Instructing







CTF members will automatically be placed in virtual small groups with two project staff per group.



20 minutes for discussion and idea sharing. Project staff will take notes.



60 second warning when breakout sessions are about to end

## Breakout Sessions

*What interests and values does our community feel strongly about that must be considered as we evaluate bridge types?  
We care about...*





# CTF Meetings

## General Focus

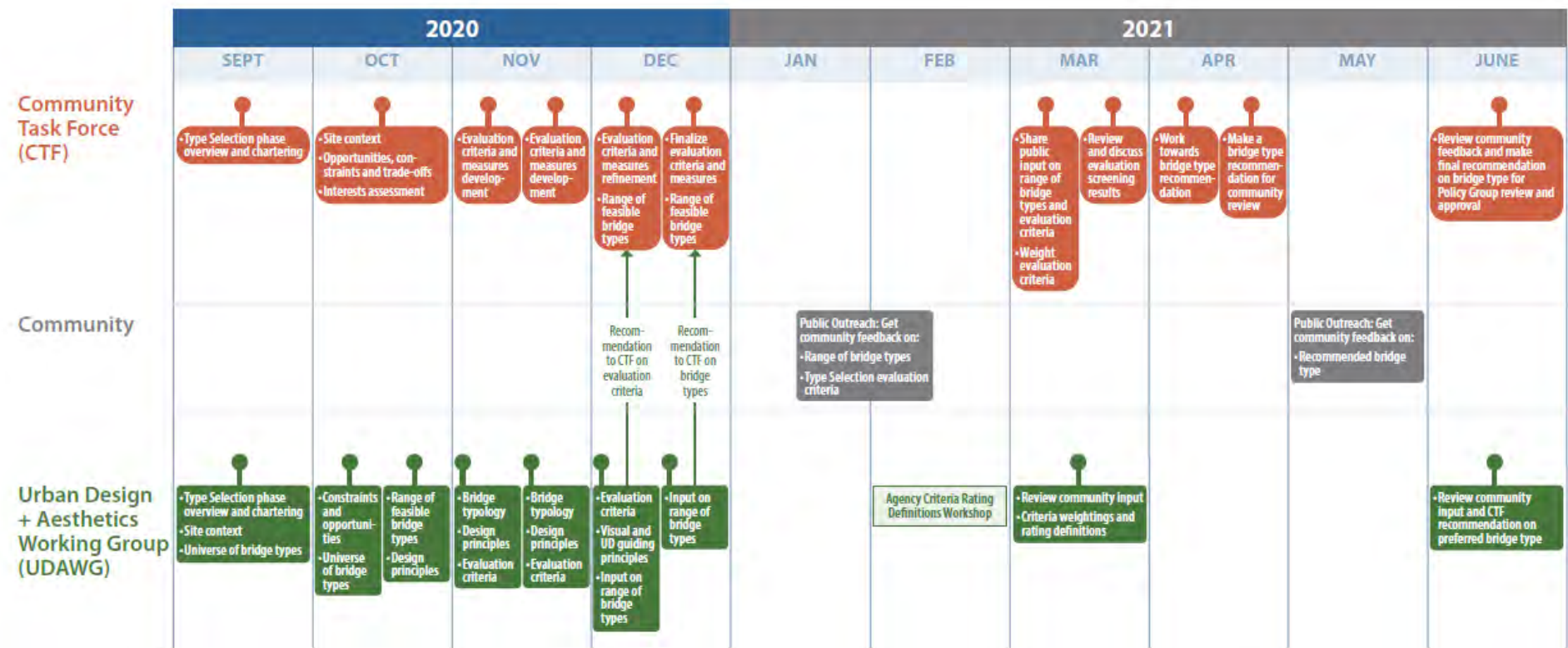
|                                | CTF Meeting Number and Date |                |               |                |               |                |              |               |              |               |               |
|--------------------------------|-----------------------------|----------------|---------------|----------------|---------------|----------------|--------------|---------------|--------------|---------------|---------------|
|                                | 2020                        |                |               |                |               |                | 2021         |               |              |               |               |
|                                | #17<br>(9/21)               | #18<br>(10/26) | #19<br>(11/9) | #20<br>(11/23) | #21<br>(12/7) | #22<br>(12/21) | #23<br>(3/1) | #24<br>(3/22) | #25<br>(4/5) | #26<br>(4/26) | #27<br>(6/21) |
| Orientation and Chartering     | ■■■■■                       |                |               |                |               |                |              |               |              |               |               |
| Interests Assessment           |                             | ■■■■■          |               |                |               |                |              |               |              |               |               |
| Selection Criteria Topic(s)    |                             |                | ■■■■■         | ■■■■■          | ■■■■■         | ■■■■■          |              |               |              |               |               |
| Selection Measures             |                             |                |               | ■■■■■          | ■■■■■         | ■■■■■          |              |               |              |               |               |
| Criteria Weighting             |                             |                |               |                |               |                | ■■■■■        |               |              |               |               |
| Evaluation                     |                             |                |               |                |               |                |              | ■■■■■         | ■■■■■        |               |               |
| Bridge Type Recommendation     |                             |                |               |                |               |                |              |               |              | ■■■■■         | ■■■■■         |
| Technical Design Criteria      |                             | ■■■■■          |               |                |               |                |              |               |              |               |               |
| Menu of Bridge Types           |                             |                | ■■■■■         | ■■■■■          |               |                |              |               |              |               |               |
| Range of Feasible Bridge Types |                             |                |               |                | ■■■■■         | ■■■■■          |              |               |              |               |               |

↑  
We are HERE



# Next Steps

## Community Task Force Workplan





# Next Steps

## Upcoming CTF Meetings

- **November 9:**
  - Criteria topics
  - Bridge types
- **November 23:**
  - Evaluation criteria per topic
  - Bridge types refinement
- **December 7:**
  - Measures per evaluation criteria
  - Range of feasible bridge types
- **December 21:**
  - Finalize criteria and measures
  - Range of feasible bridge types



# Thank you!

