



Hello



SE Uplift Briefing

Department of Community Services
Transportation Division

June 17, 2024



Why is there a need for a seismically resilient Willamette River Crossing?

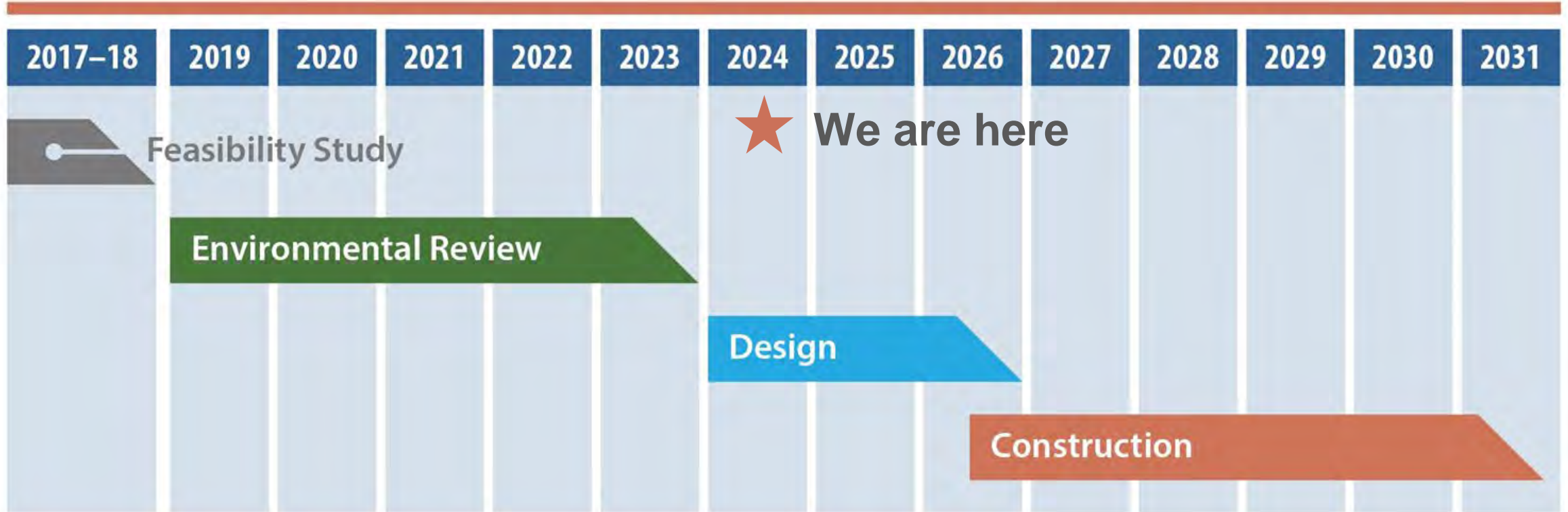
- Regional earthquake risk: 1 in 3 chance of a magnitude 8+ earthquake occurring within 50 years
- Of the 9 downtown bridges, carrying 41 traffic lanes, none are expected to be immediately usable following a major earthquake.
- Need for seismically resilient crossing in downtown for immediate emergency response and regional recovery



Project location and regional emergency transportation routes



Project Timeline

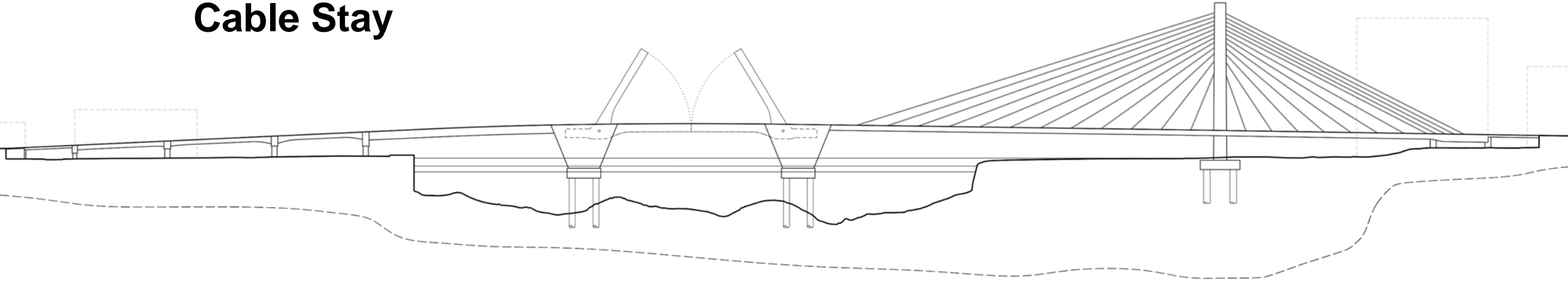


An aerial photograph of a city, featuring a prominent bridge with a truss structure crossing a river. The background shows various city buildings and infrastructure. The entire image is overlaid with a semi-transparent blue filter. The text 'Design Phase' is centered in a large, white, sans-serif font, and 'Bridge Type Options' is centered below it in a smaller, white, sans-serif font.

Design Phase

Bridge Type Options

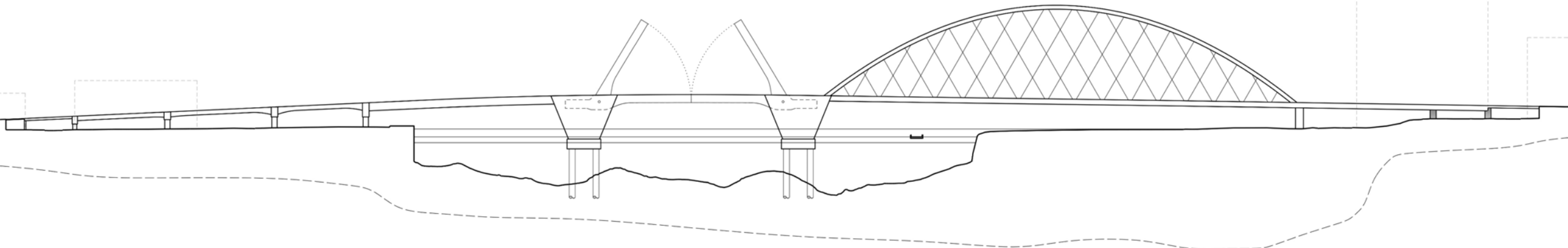
Cable Stay



WEST

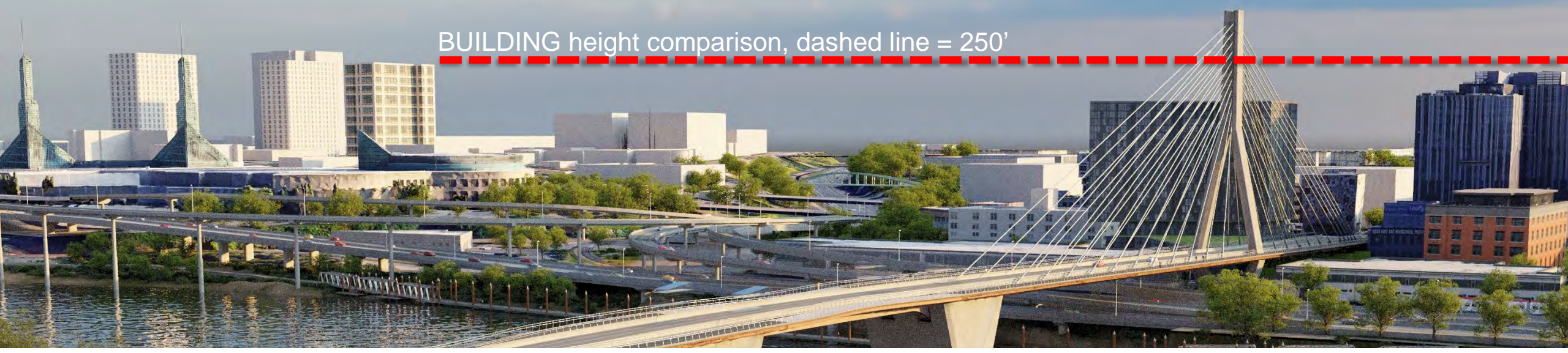
EAST

Tied Arch



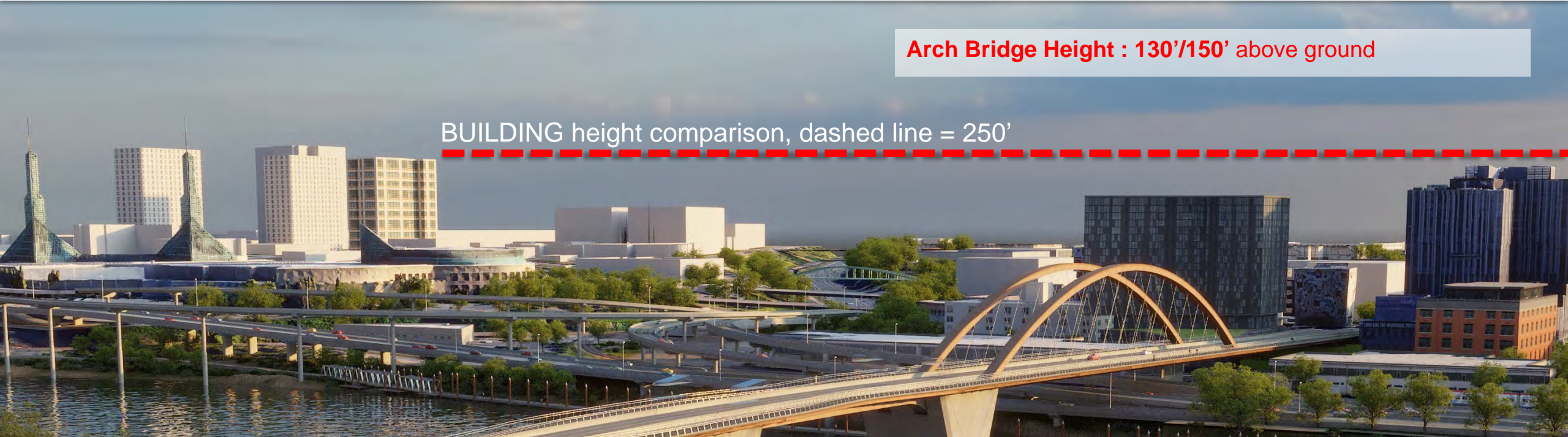
Height comparison

Cable-Stayed Bridge Tower : 290' above ground



BUILDING height comparison, dashed line = 250'

Arch Bridge Height : 130'/150' above ground



BUILDING height comparison, dashed line = 250'

Materials



CONCRETE BRIDGE TOWER



WEATHERING STEEL ARCH

Focus/sightlines

Arch draws eye west



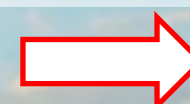
Arch reaches into river view



Cable stay draws eye east



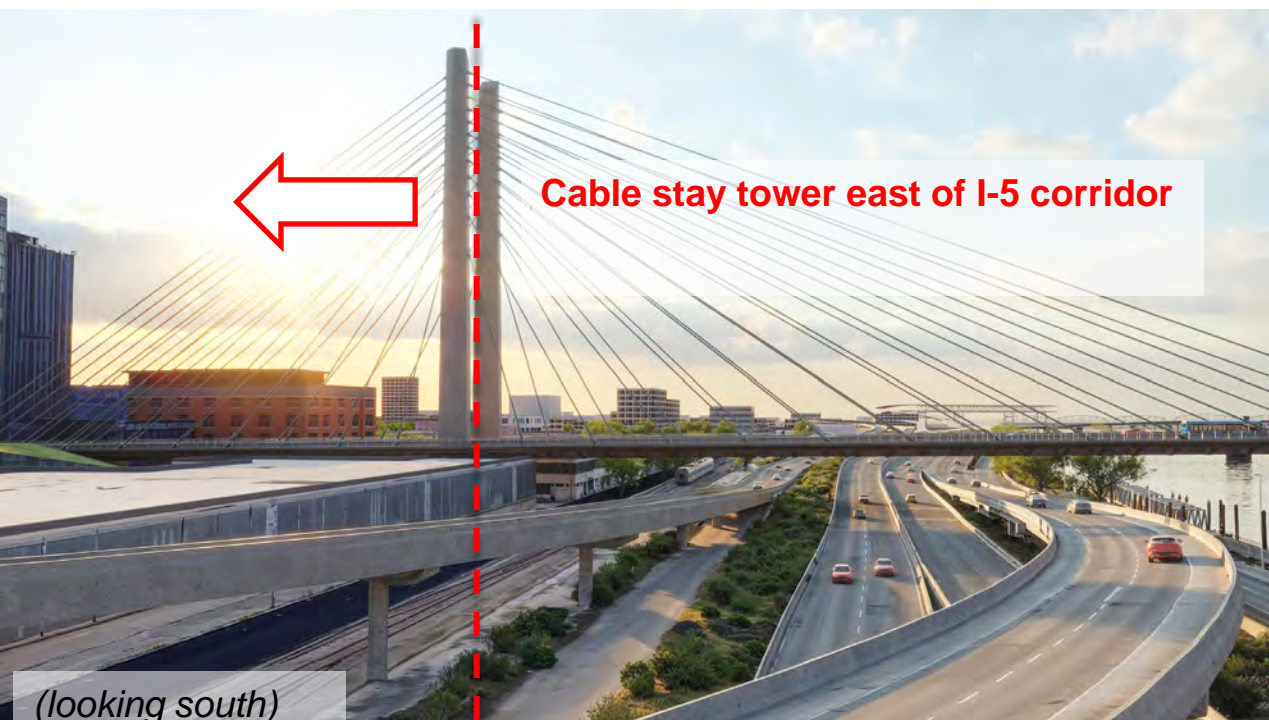
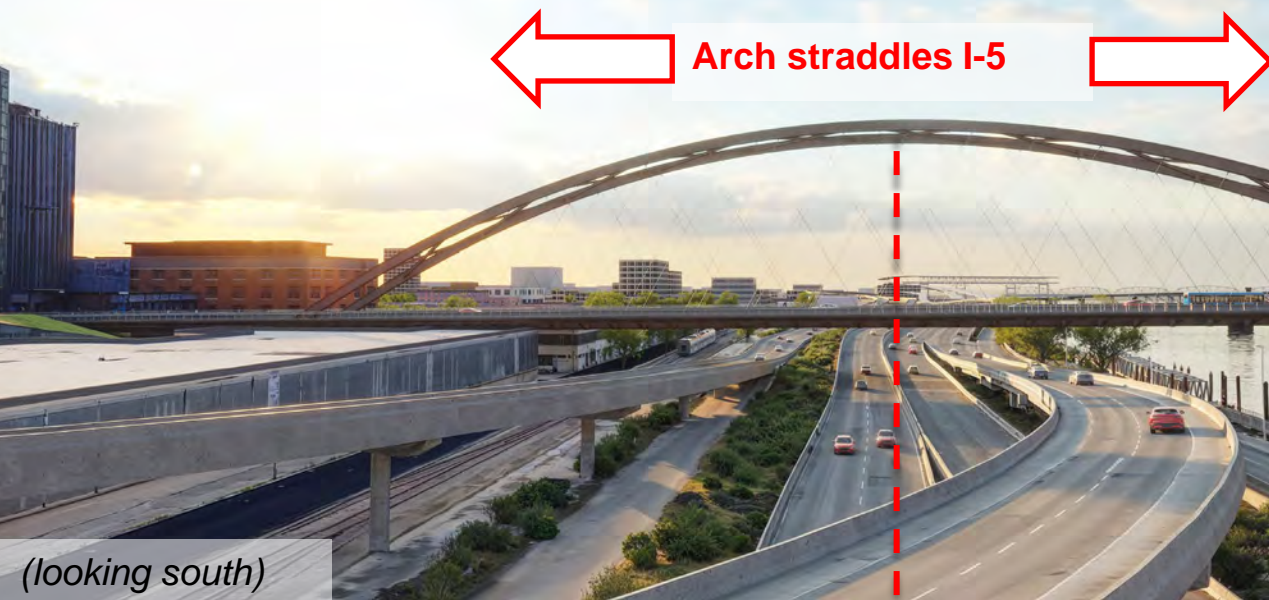
Cable stays retreat from river view



(looking south)

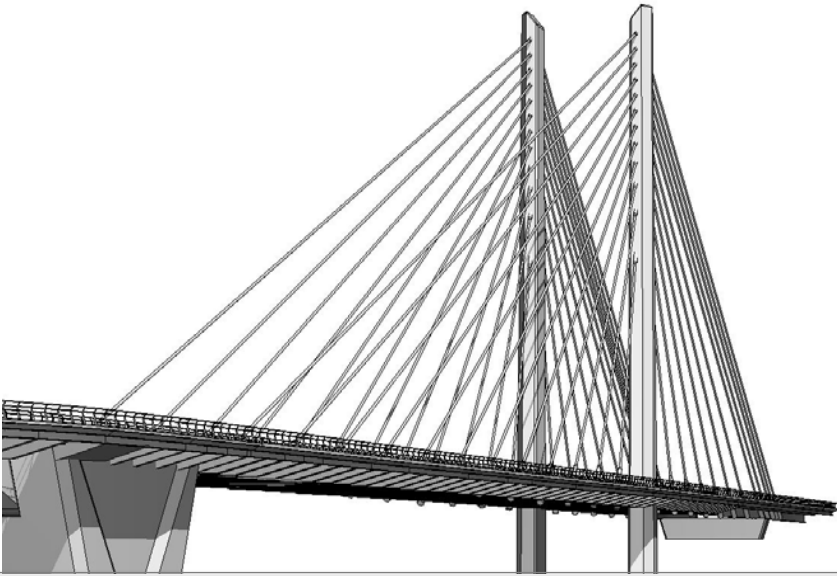
(looking north)

Focus/sightlines

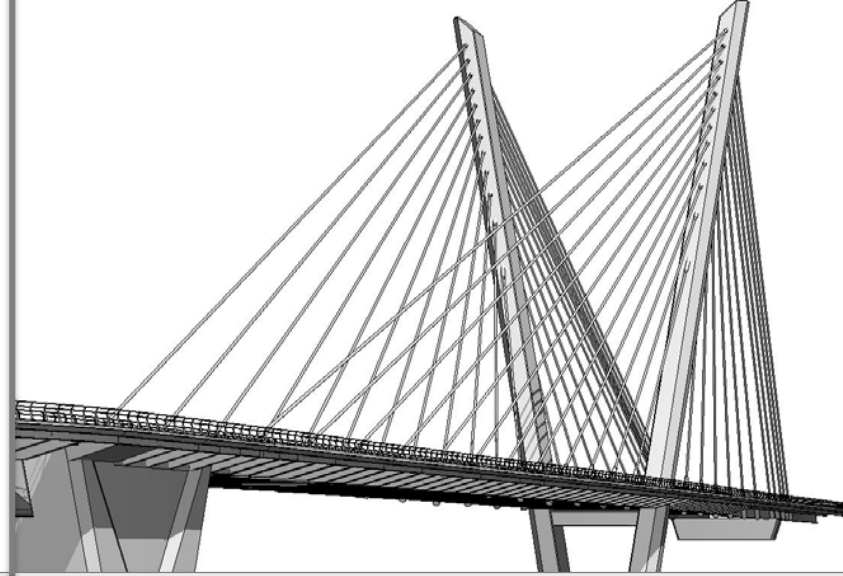


Bridge Type Sub-Options

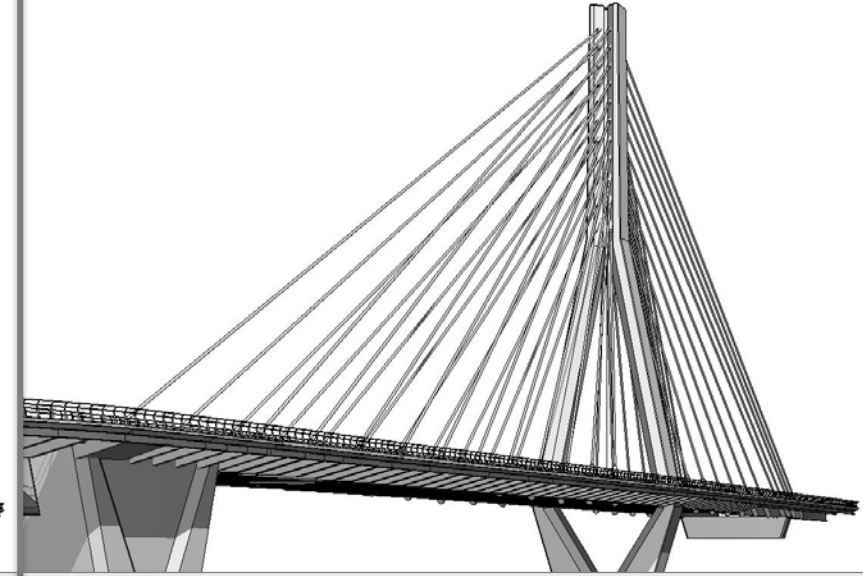
Cable Stay (CS) Bridge Types



Goalpost tower

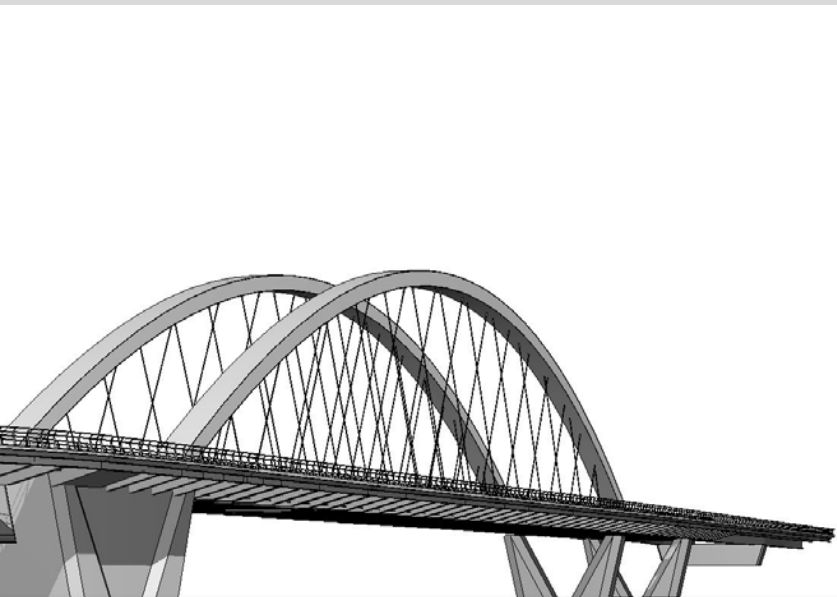


V tower

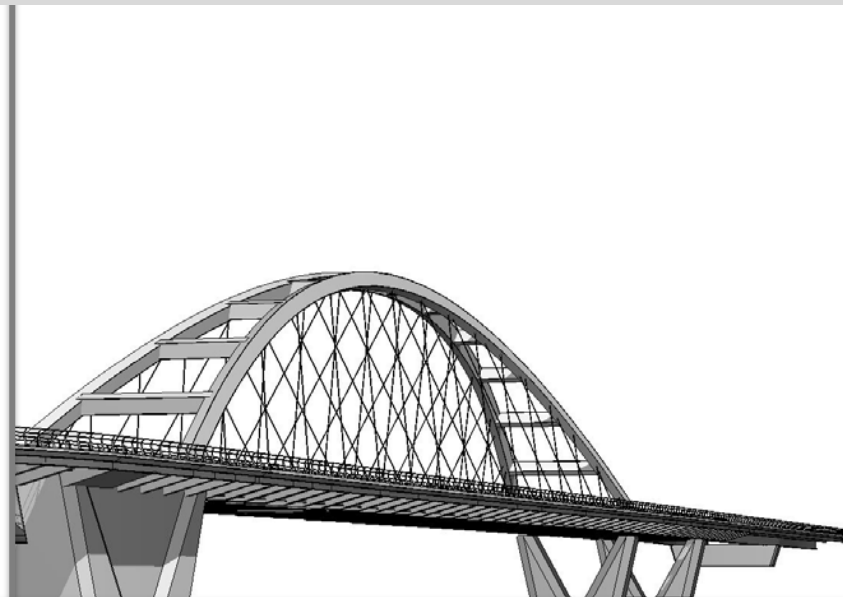


Inverted-Y tower

Tied Arch (TA) Bridge Types



Unbraced through arch



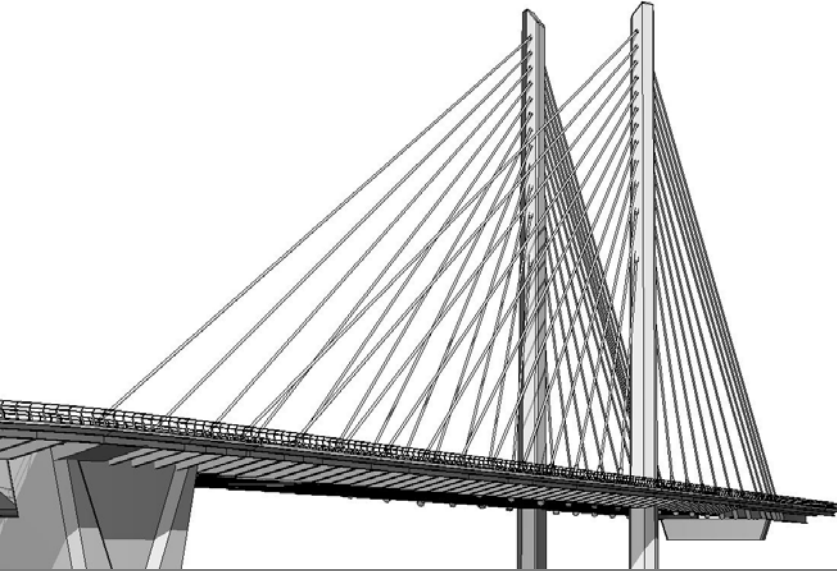
Braced basket-handle arch



Braced vertical arches

Cable Stay (CS) Bridge Types

Goalpost tower



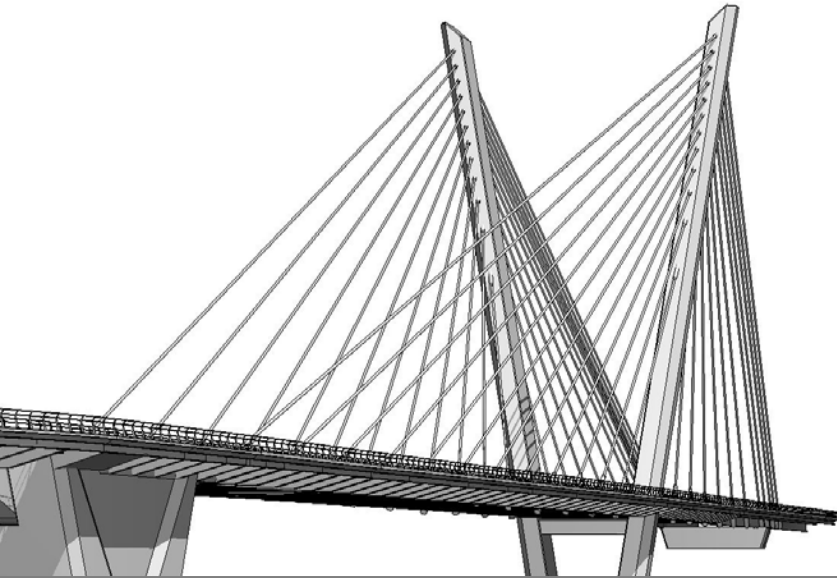
Key Attributes:

- **Dominant feature:** Two vertical towers
- **Uniqueness:** Similar to Tilikum Crossing
- **Experience on bridge:** Visual openness throughout with a sense of passing by or between towers
- **View from I-5:** Transparent and open
- **View from river:** Appears further east; unobtrusive within view of river channel



Cable Stay (CS) Bridge Types

V tower



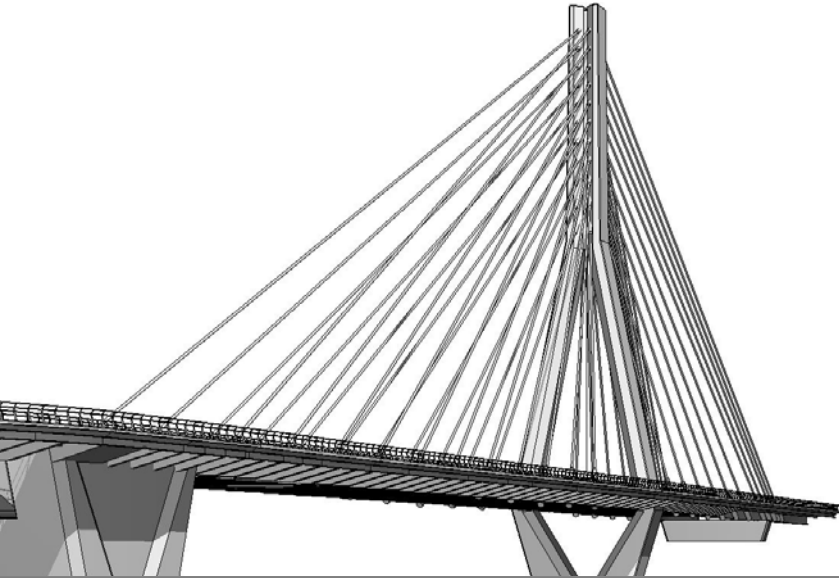
Key Attributes:

- **Dominant feature:** Two externally leaning towers that create a V-shape
- **Uniqueness:** Unique to Portland's existing downtown bridges
- **Experience on bridge:** Visual openness throughout with a sense of passing by or between towers
- **View from I-5:** Transparent and open
- **View from river:** Appears further east; unobtrusive within view of river channel



Cable Stay (CS) Bridge Types

Inverted-Y tower



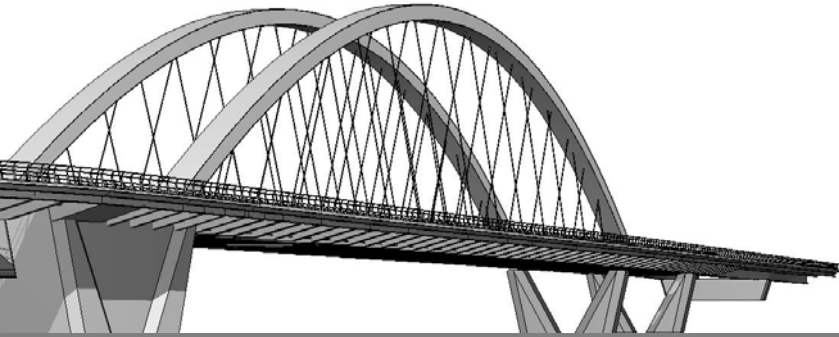
Key Attributes:

- **Dominant feature:** Triangular shaped tower that extends to a single column
- **Uniqueness:** Unique to Portland
- **Experience on bridge:** Visual openness with sense of gateway passage under tower
- **View from I-5:** Transparent and open
- **View from river:** Appears further east; unobtrusive within view of river channel



Tied Arch (TA) Bridge Types

Unbraced vertical arch



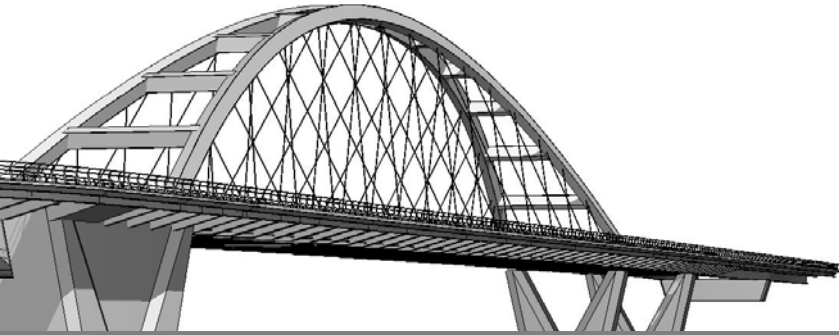
Key Attributes:

- **Dominant feature:** Parallel vertical arches, open at top
- **Uniqueness:** Unique to Portland
- **Experience on bridge:** Open portal
- **View from I-5:** The feeling of passing under an archway while approaching it from I-5
- **View from river:** Distinct arch connecting to in-water pier within view of river channel



Tied Arch (TA) Bridge Types

Braced basket-handle arch



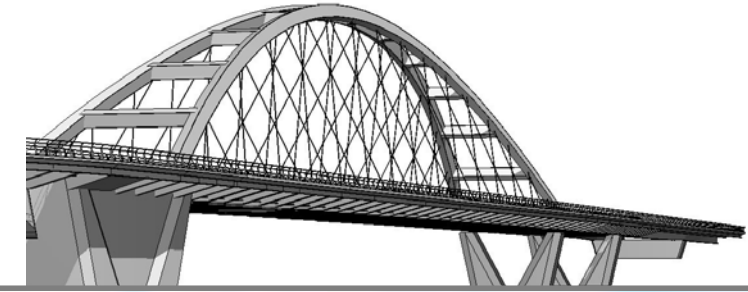
Key Attributes:

- **Dominant feature:** Arches slant inward and meet at the top of the arches
- **Uniqueness:** Unique to Portland's existing downtown bridges
- **Experience on bridge:** enclosed or latticed portal
- **View from I-5:** The feeling of passing under an archway while approaching it from I-5
- **View from river:** Distinct arch connecting to in-water pier within view of river channel



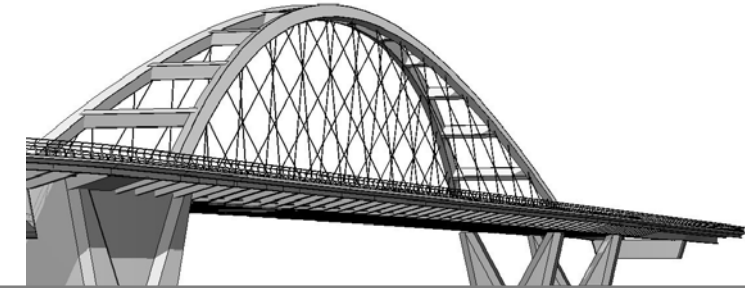
Braced basket-handle arch

Two size options: **short** or **long**



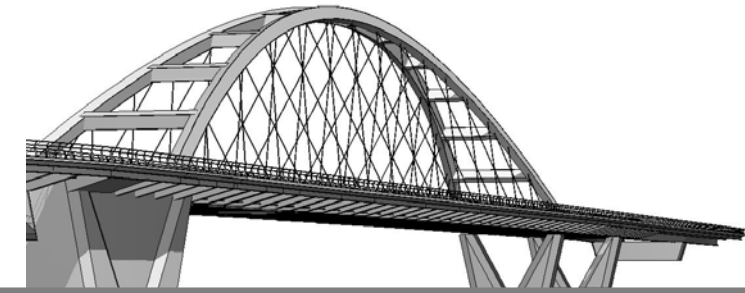
Braced basket-handle arch

Two size options: **short** or **long**



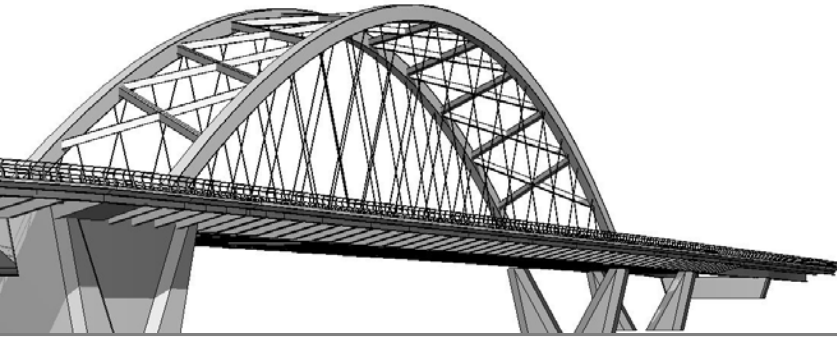
Braced basket-handle arch

Two size options: **short** or **long**



Tied Arch (TA) Bridge Types

Braced vertical arch



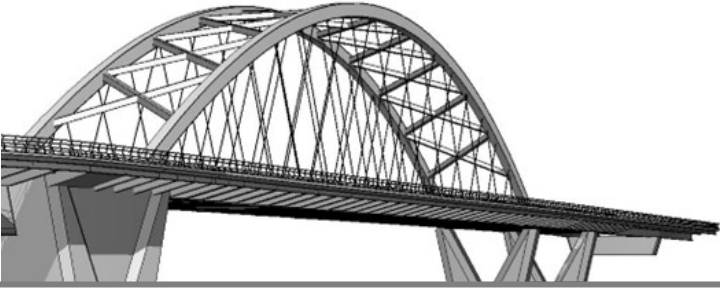
Key Attributes:

- **Dominant feature:** Parallel vertical arches connected on the top by crisscrossed braces
- **Uniqueness:** Similar to Fremont Bridge in Portland
- **Experience on bridge:** Enclosed or feeling of going through a portal
- **View from I-5:** The feeling of passing under an archway while approaching it from I-5
- **View from river:** Distinct arch connecting to in-water pier within view of river channel

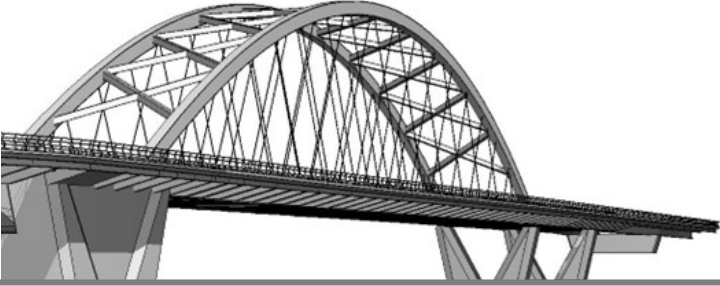


Braced vertical arch

Two size options: **short** or **long**



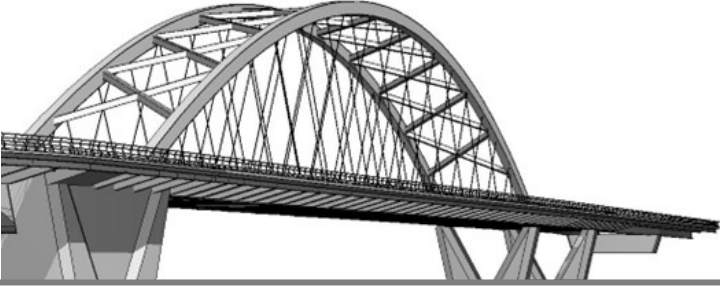
Braced vertical arch



Two size options: **short** or **long**



Braced vertical arch



Two size options: **short** or **long**



Comparison Views



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches



Goalpost tower



V tower



Inverted-Y tower



Unbraced through arch



Braced basket-handle arch



Braced vertical arches

The background is a blue-tinted photograph of a cityscape. In the foreground, a large steel truss bridge spans across a wide river. The city buildings and hills are visible in the background, all rendered in a monochromatic blue color. The text 'Community Engagement' is overlaid in the center in a white, bold, sans-serif font.

Community Engagement

Summer Outreach Events

Online Open House & Survey – July 1st – 31st

Webinars: July 9th, 5:30-6:30 p.m. & July 11th 12-1 p.m.

A night out at OMSI with the Burnside Bridge team: July 11th, 6-8 p.m.

Breakfast on the Bridge: July 12th, 7-9 a.m.

Portland Saturday Market: June 29th & July 13th, 10 a.m.-5 p.m.

Stay informed! Sign up for newsletters at www.BurnsideBridge.org



Questions?

An aerial photograph of a city bridge over a river, with a city skyline in the background. The image is overlaid with a semi-transparent blue filter. The text "Thank you" is centered in the foreground.

Thank you