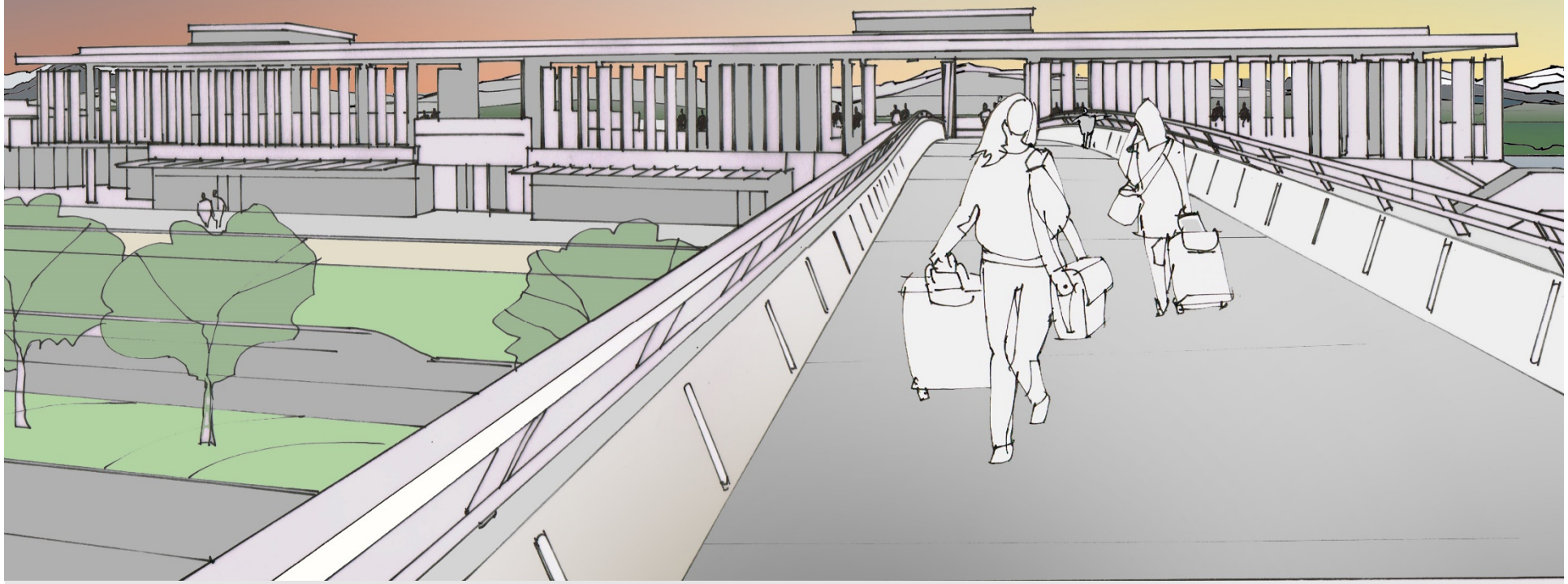
Marion Street Pedestrian Bridge

Seattle Design Commission

January 3rd, 2019



City of Seattle

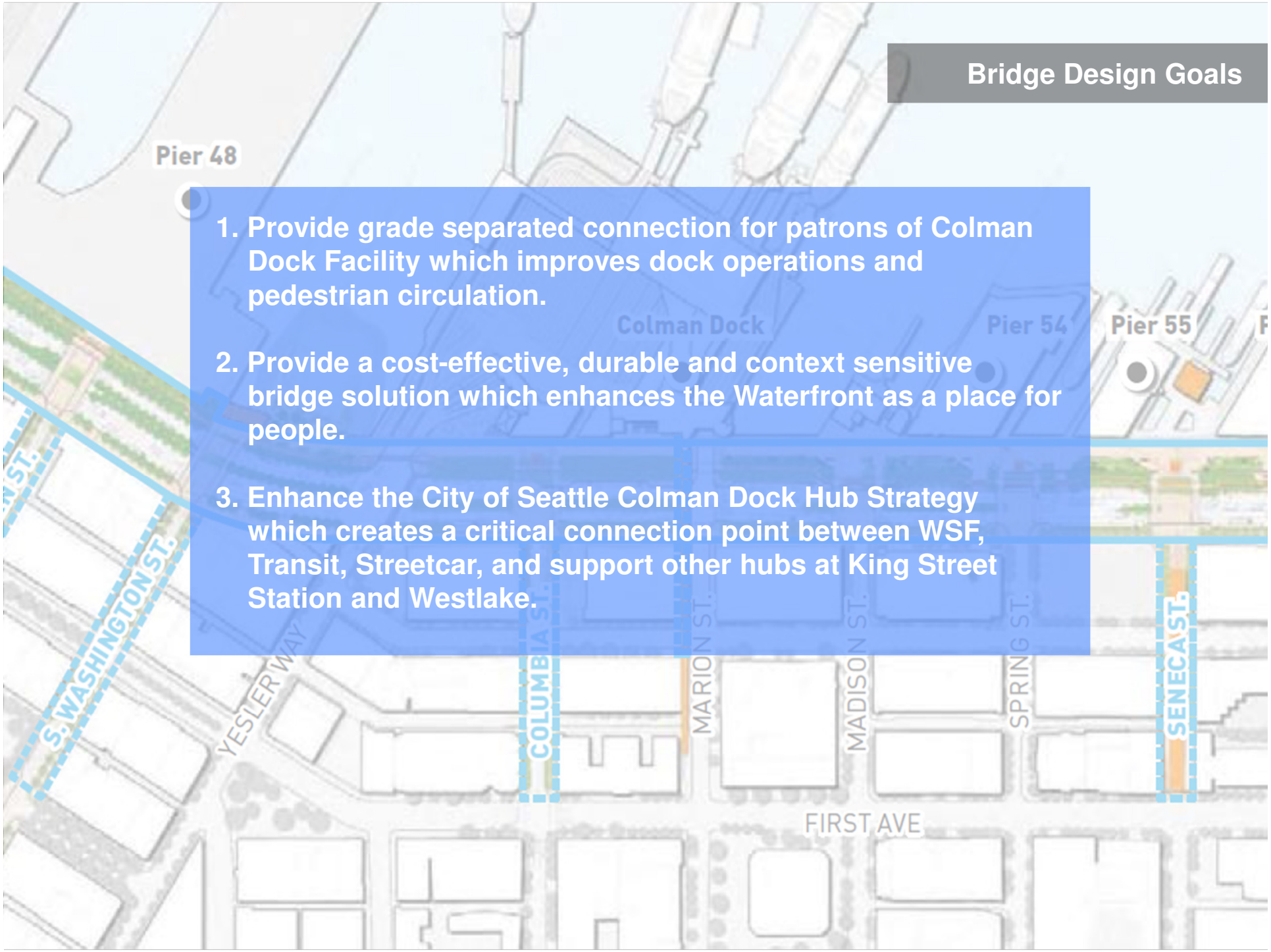
waterfront SEATTLE

WSDOT

Organization Chart

Project is WSDOT funded

Bridge Design Goals



1. Provide grade separated connection for patrons of Colman Dock Facility which improves dock operations and pedestrian circulation.

2. Provide a cost-effective, durable and context sensitive bridge solution which enhances the Waterfront as a place for people.

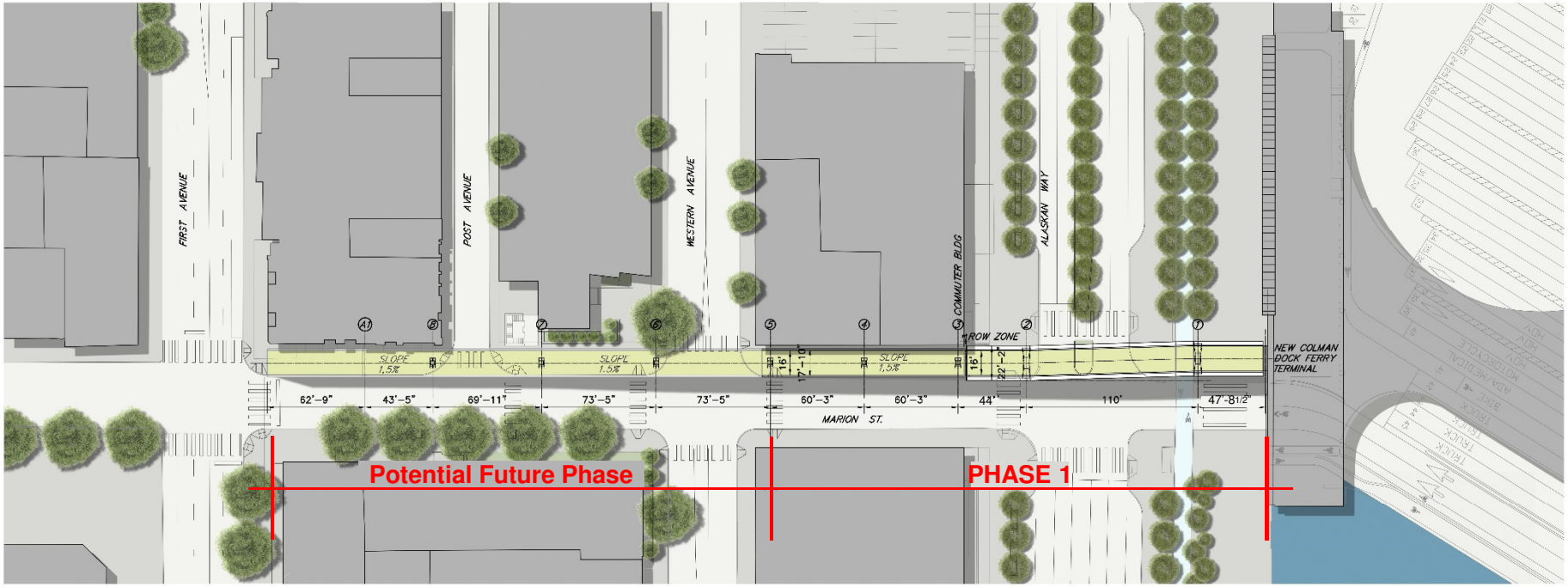
3. Enhance the City of Seattle Colman Dock Hub Strategy which creates a critical connection point between WSF, Transit, Streetcar, and support other hubs at King Street Station and Westlake.

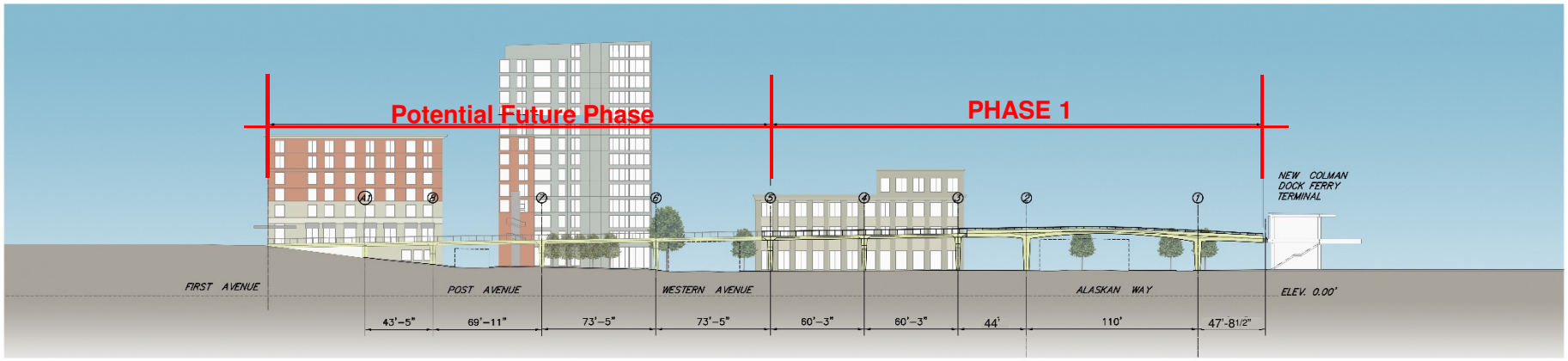
Bridge Design Criteria

1. Minimum width between railings: 16’-0”
2. Minimum height of railings: 42”
3. Minimum Alaskan Way Roadway Clearance: 20-0”
4. Promenade Clearance: 14'-0" to 16'-0"
5. Minimum number of piers in the right of away
6. Safety and Aesthetic Lighting
7. Details and materials compatibility with Colman Dock Ferry Terminal

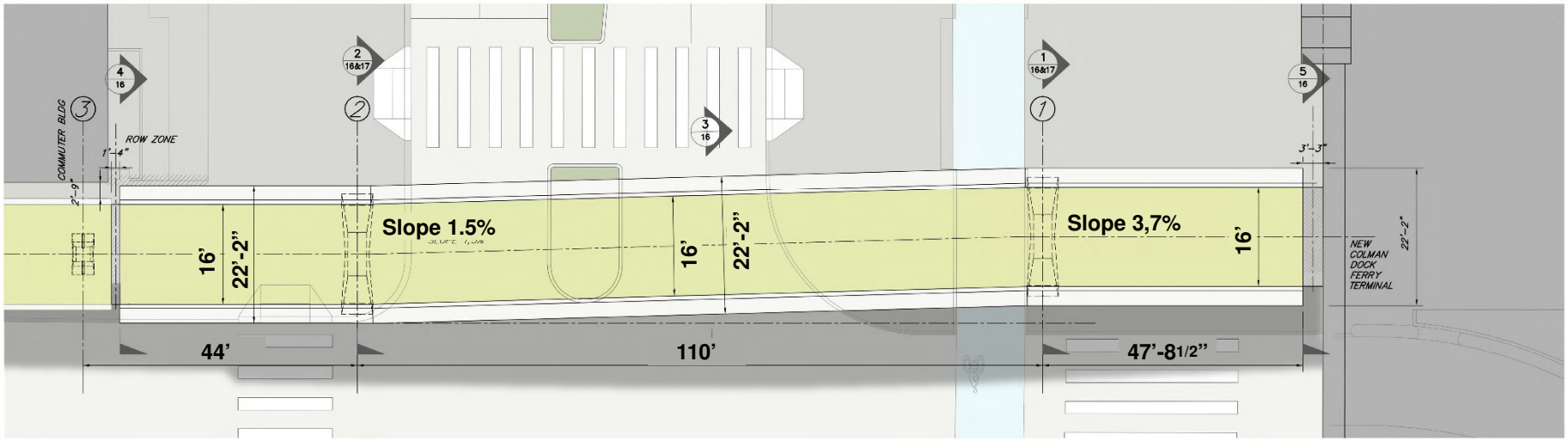
Final Design Update

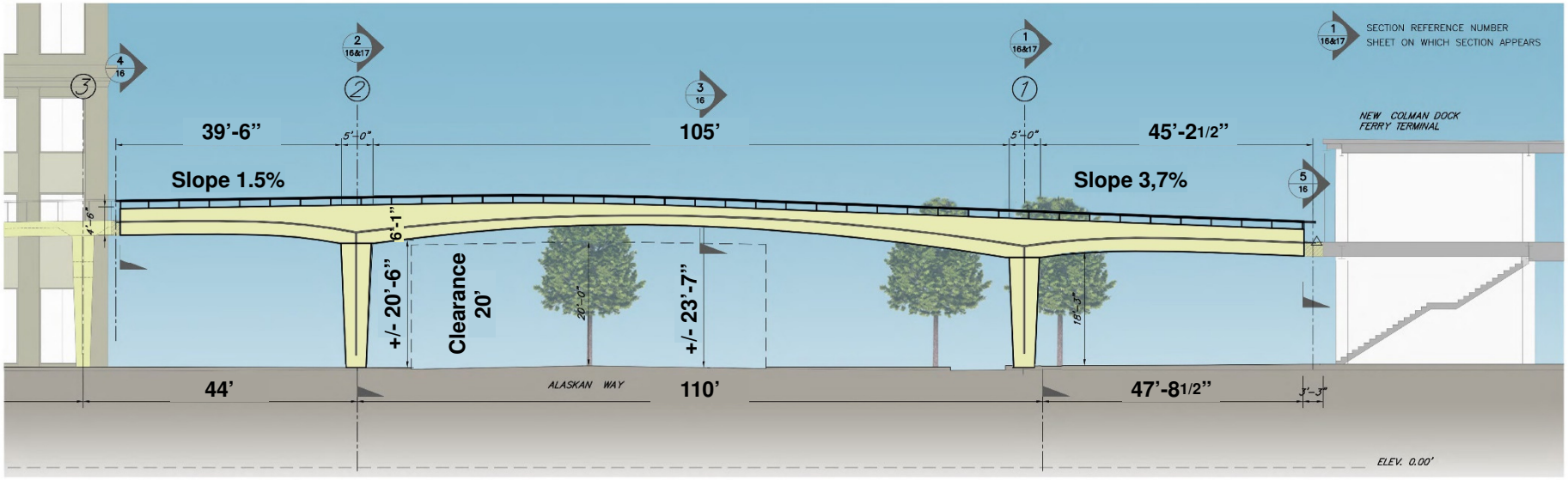
Plan and Elevation



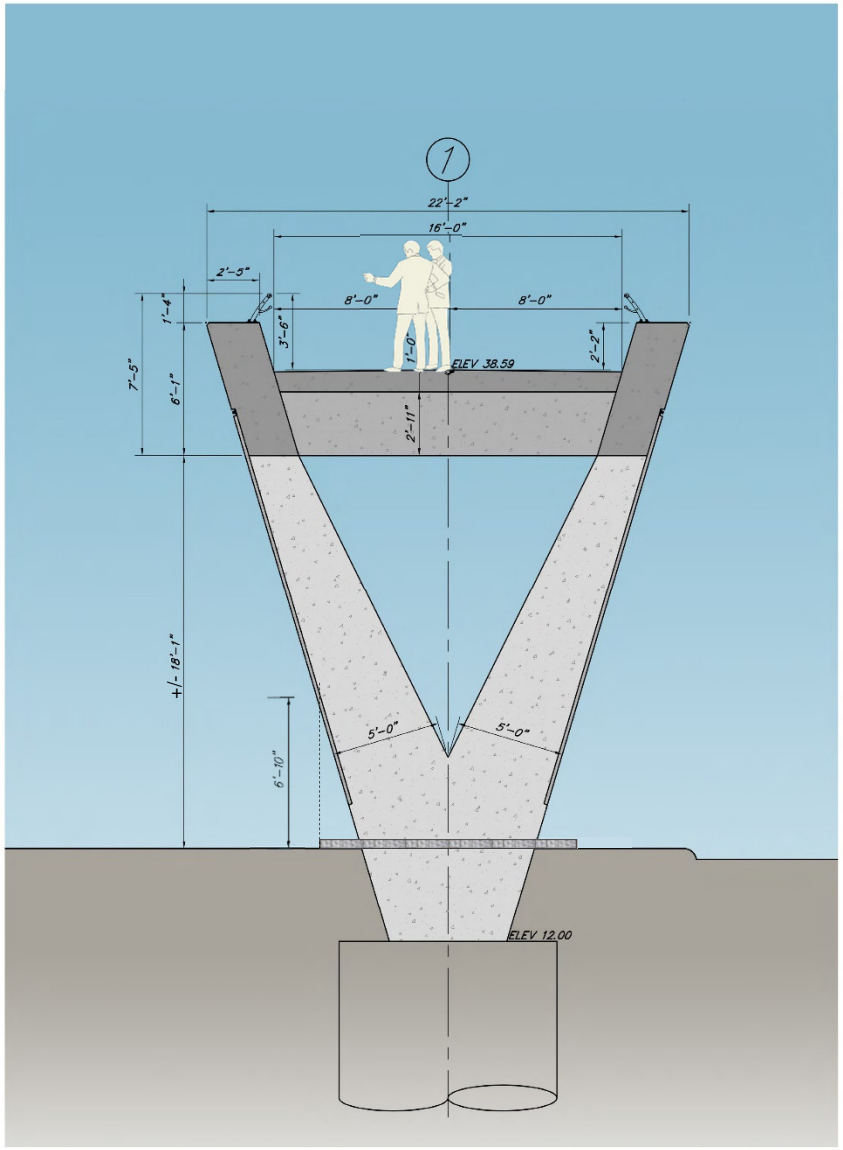


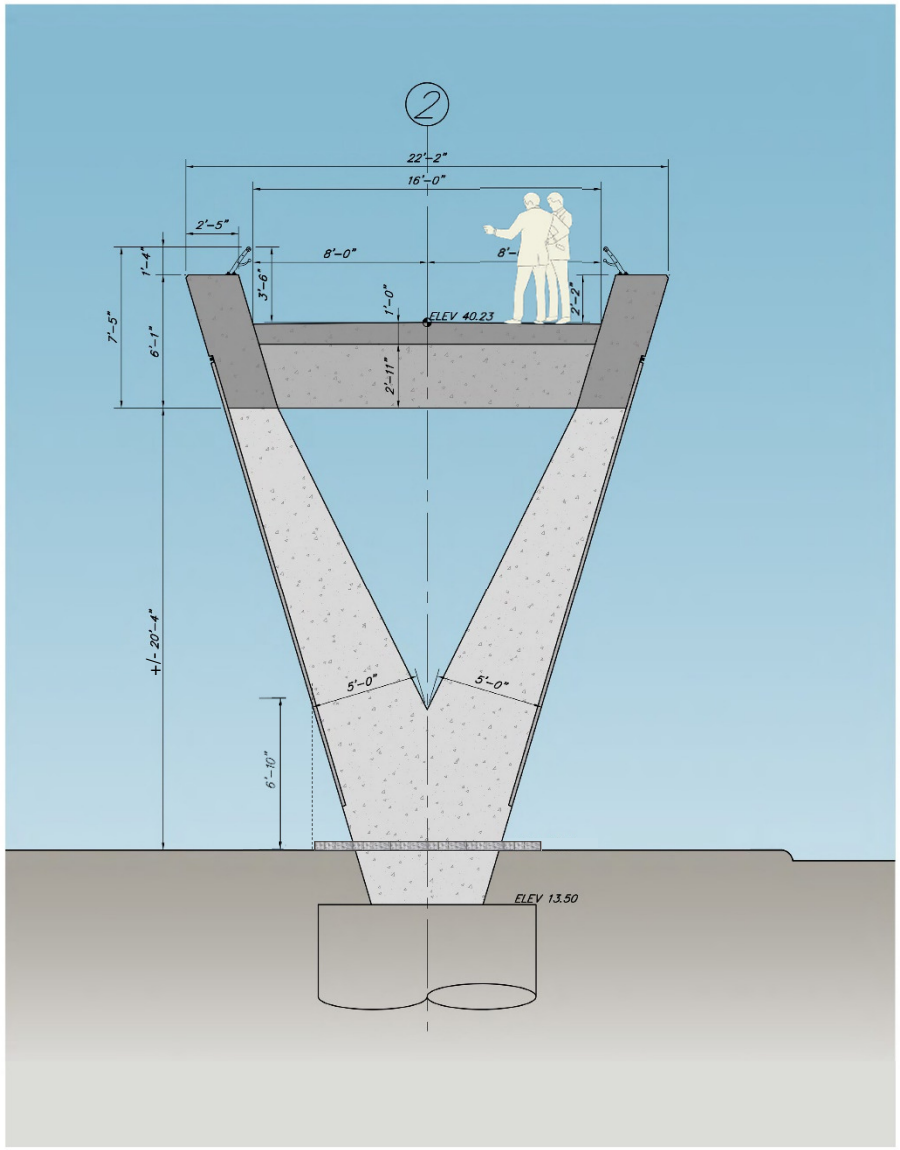
Bridge Plan and Elevation



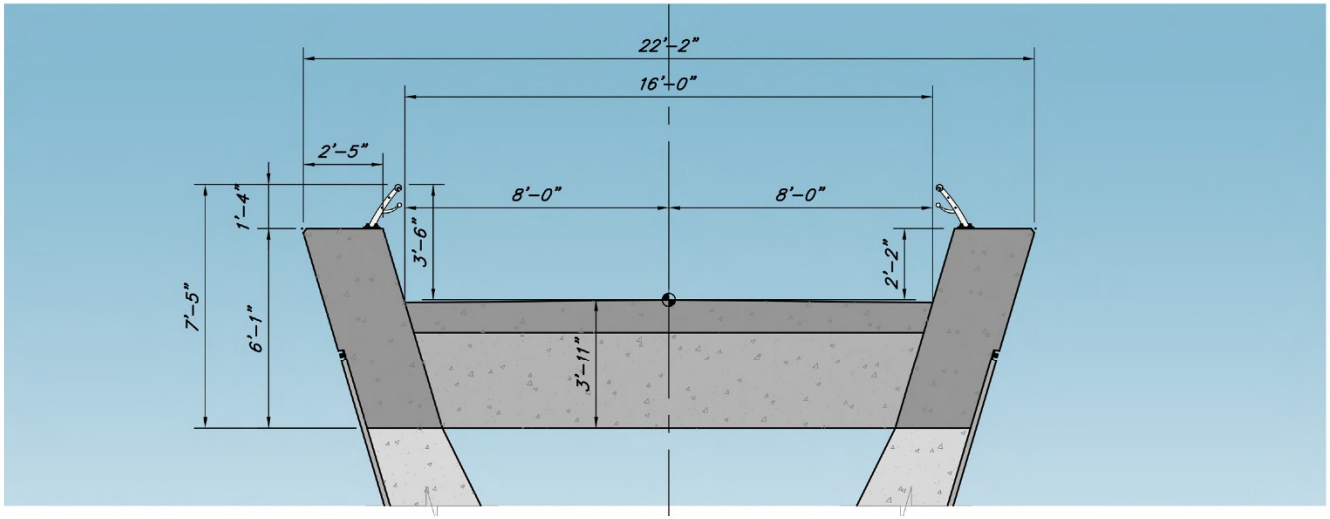


Architectural / Structural Piers - Main Span

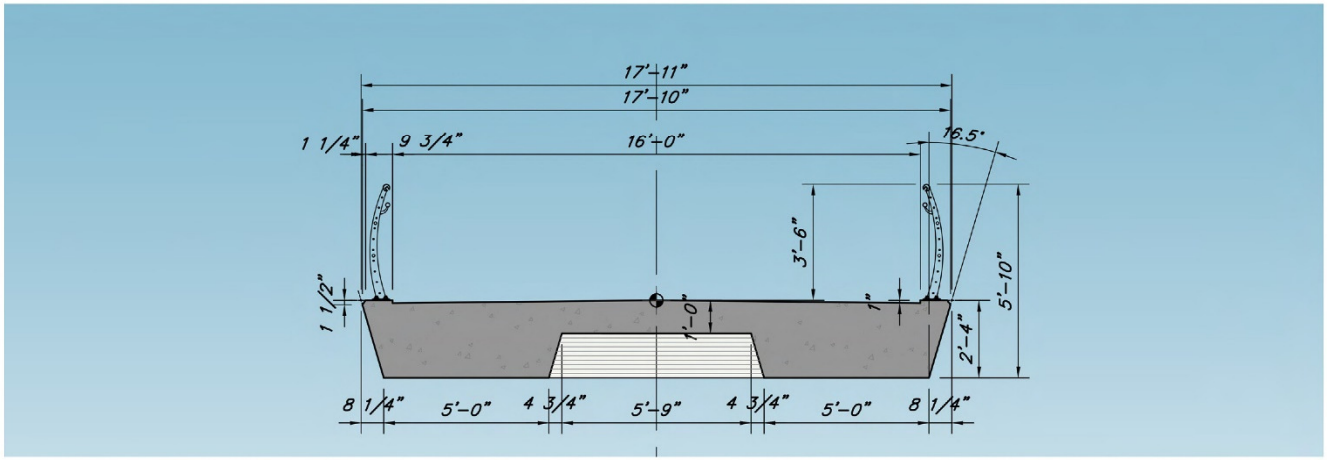




Architectural Sections - Main Span and Approach

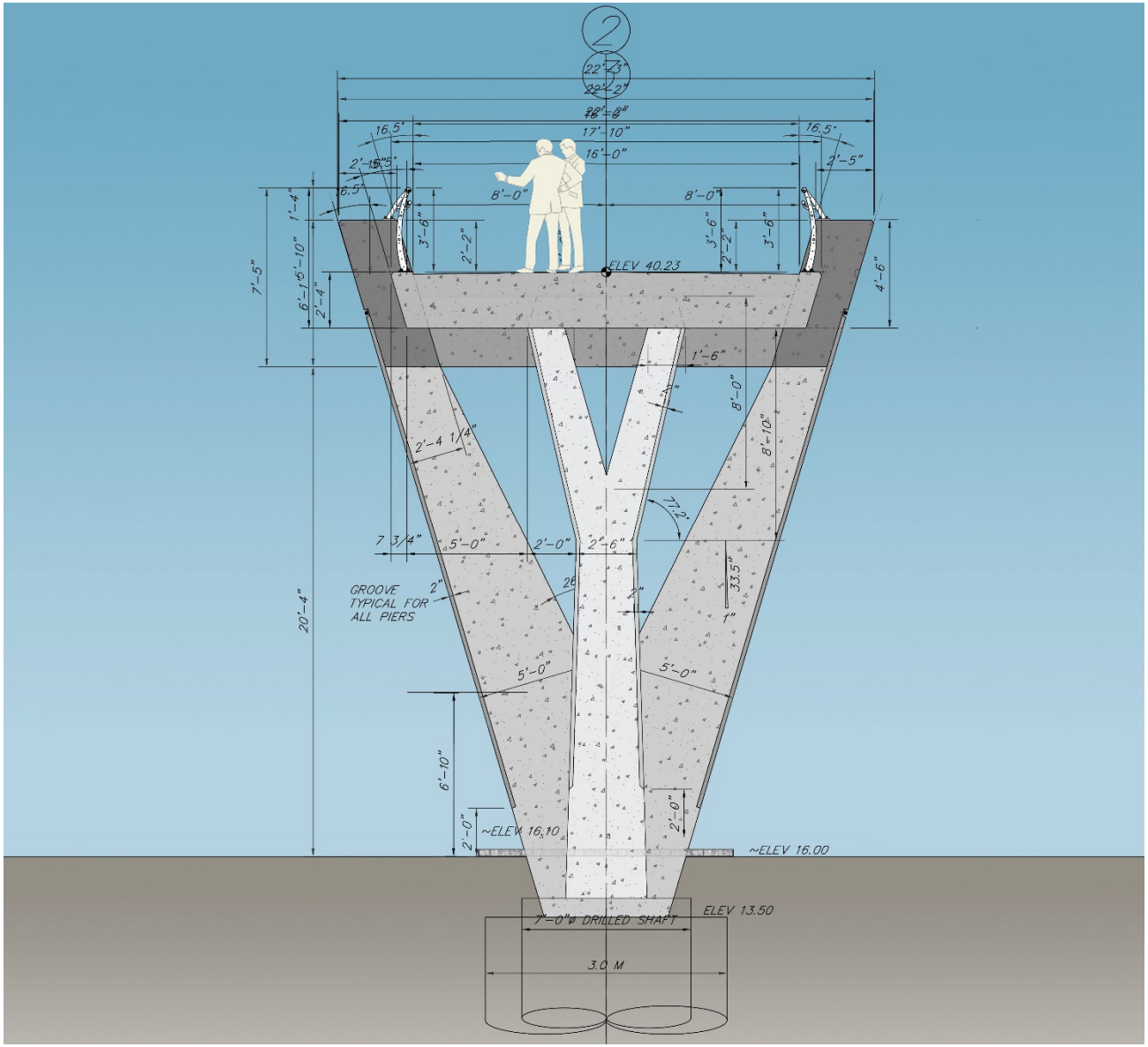


Main Span Section

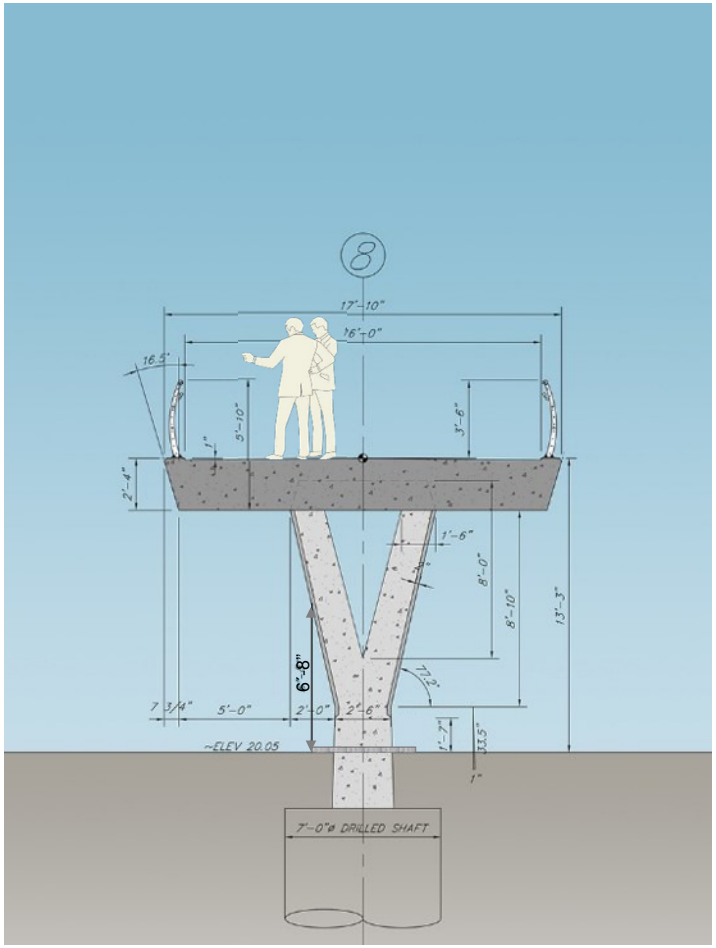


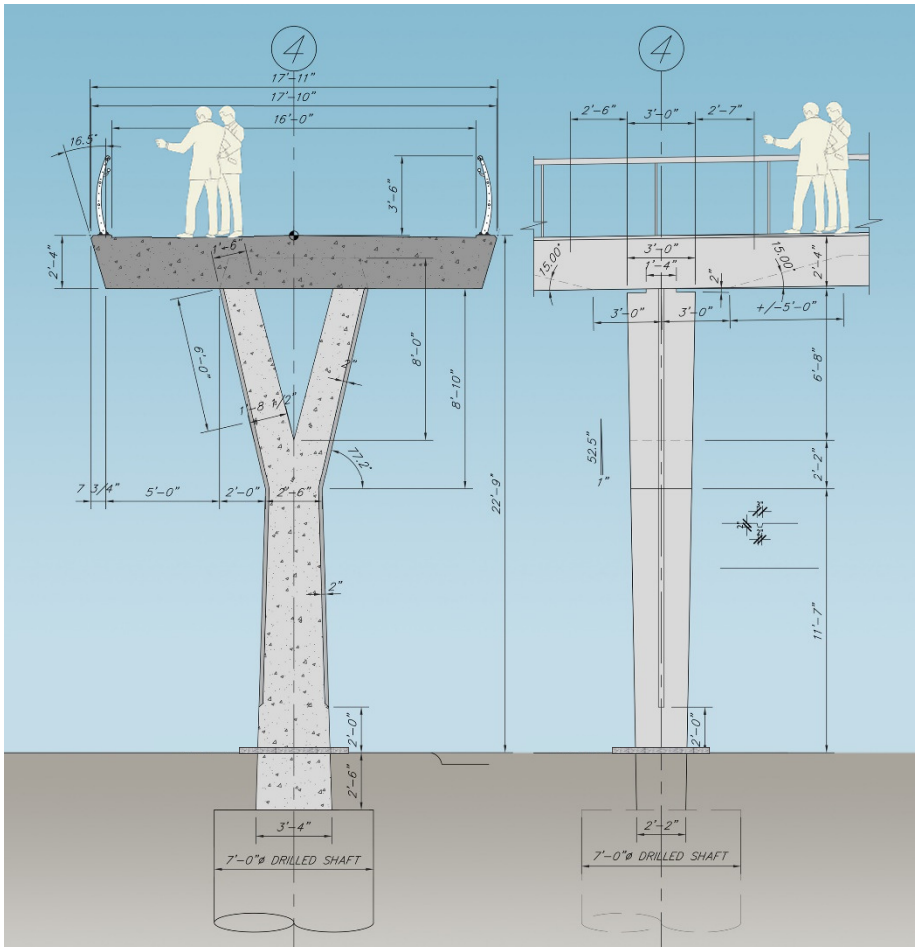
Approach Span Section

Promenade Level Column Placement.
Overall Column Design and V Piers.

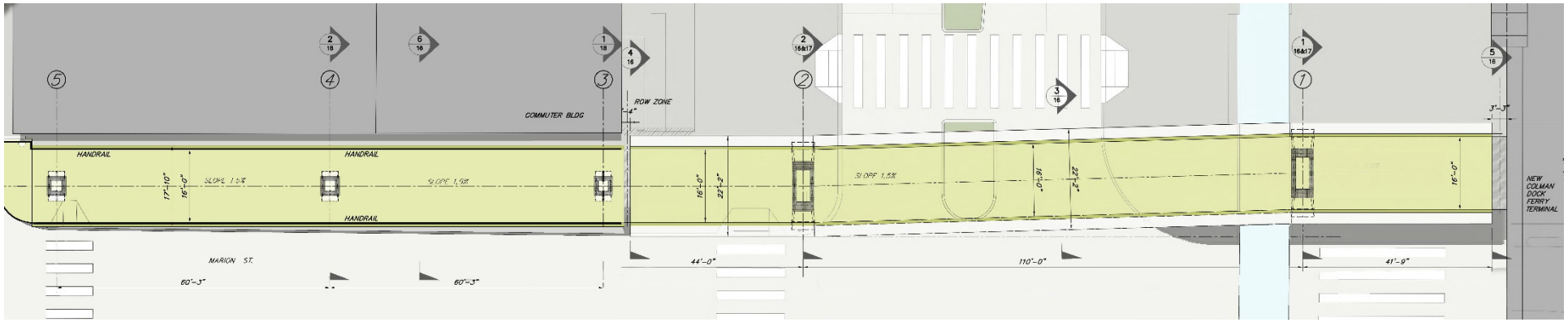


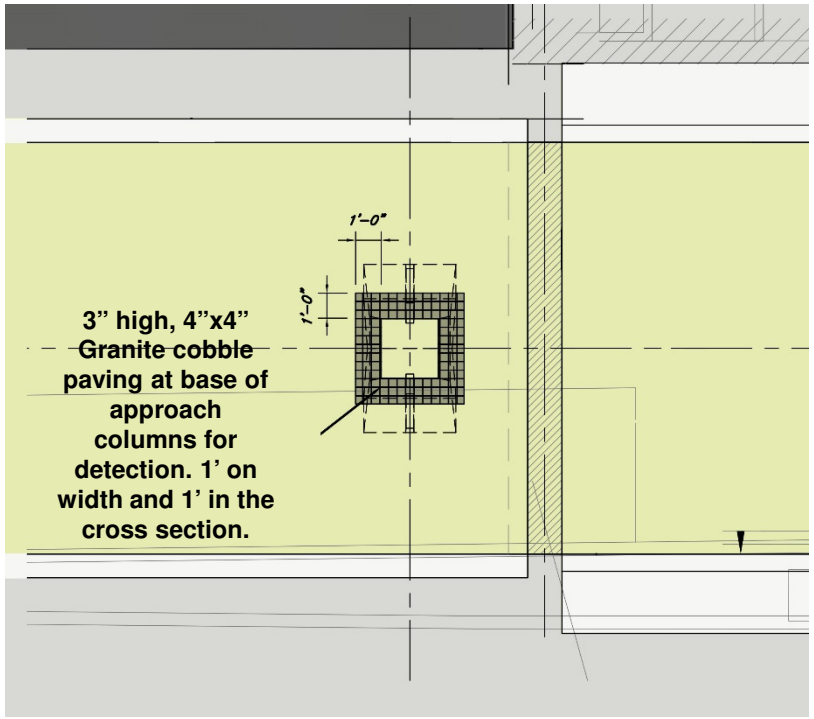
Architectural / Structural Piers – Approach Span



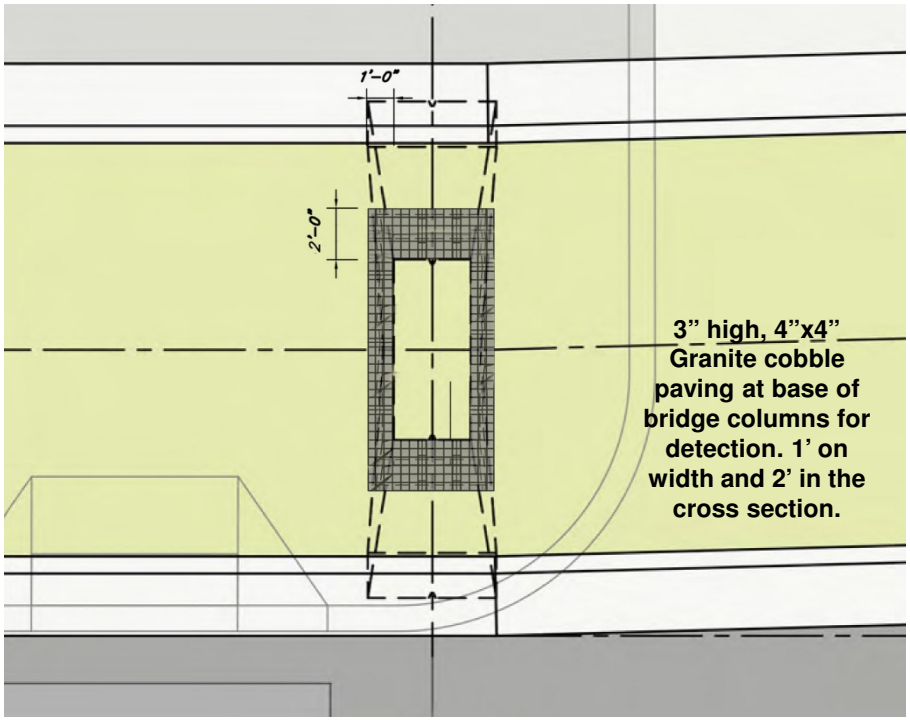


Granite cobble paving for detection



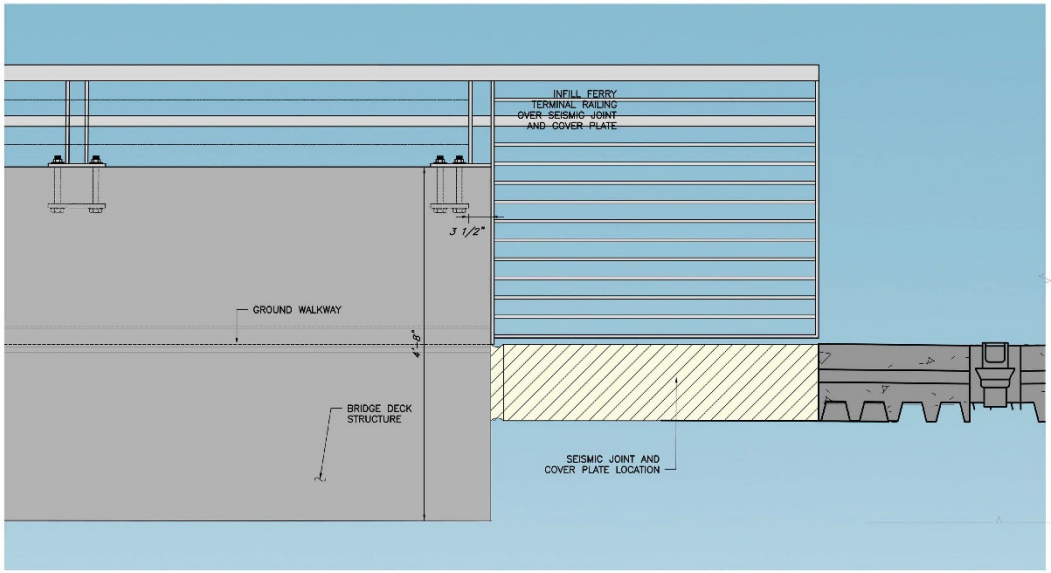


3" high, 4"x4" Granite cobble paving at base of approach columns for detection. 1' on width and 1' in the cross section.

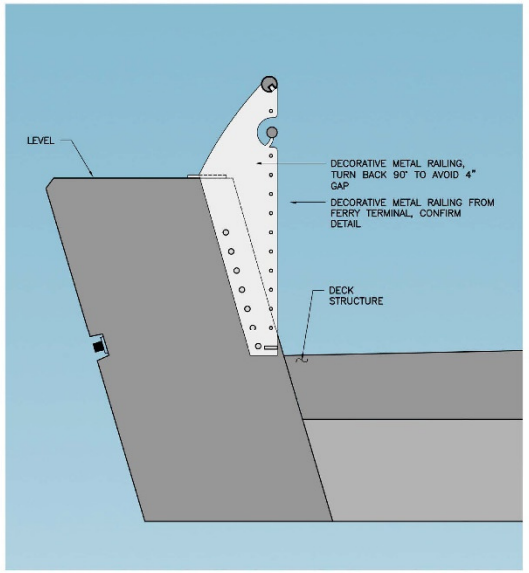


3" high, 4"x4" Granite cobble paving at base of bridge columns for detection. 1' on width and 2' in the cross section.

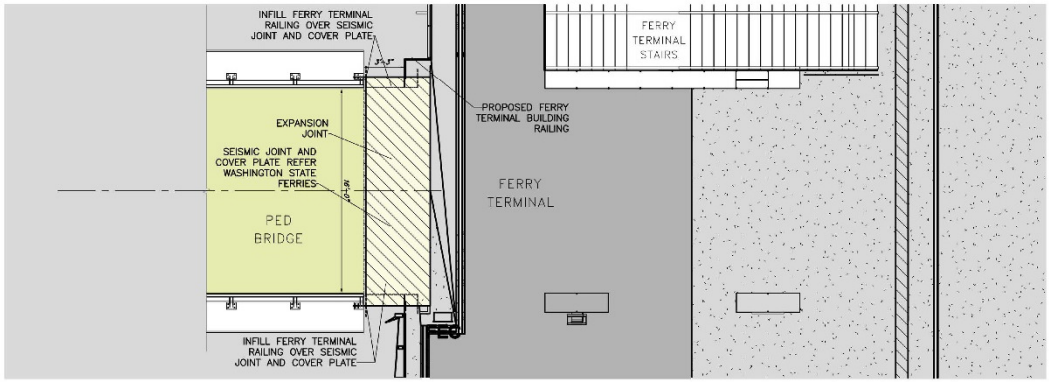
Transition at Colman Dock Ferry Terminal



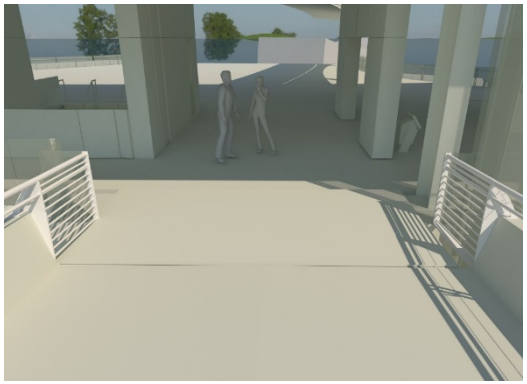
Railing Elevation at Ferry Expansion Joint
SALE: 1 - 1 / 2" = 1'



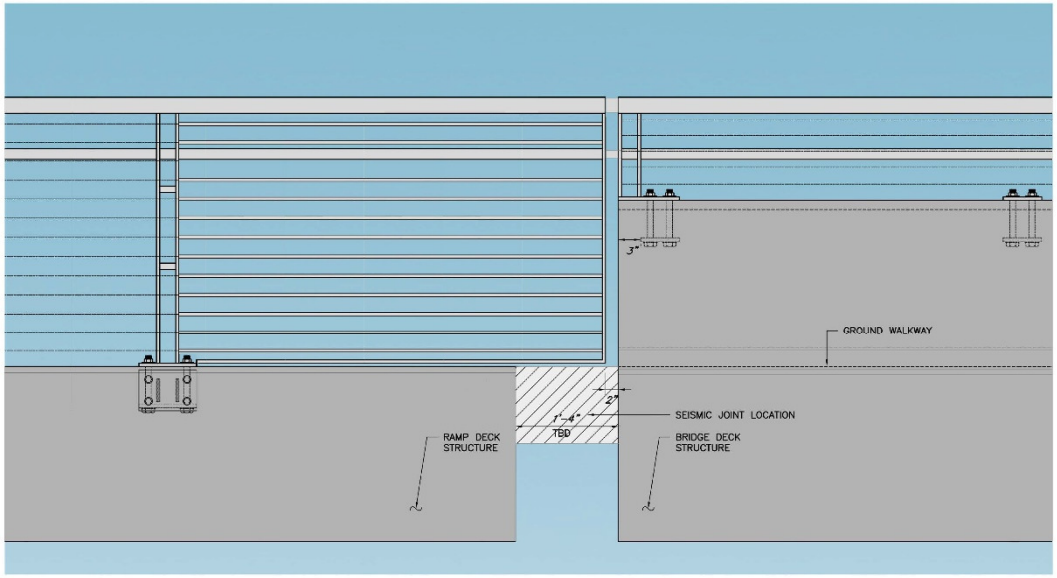
Railing Detail at Ferry Expansion Joint
SALE: 1 - 1 / 2" = 1'



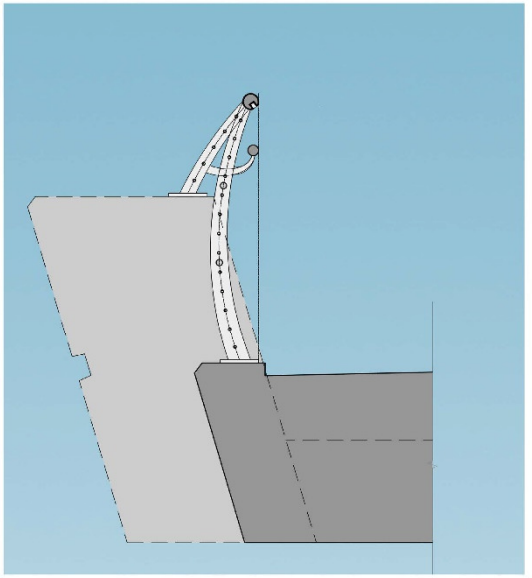
Railing Plan at Ferry Expansion Joint
SALE: 4" = 1'



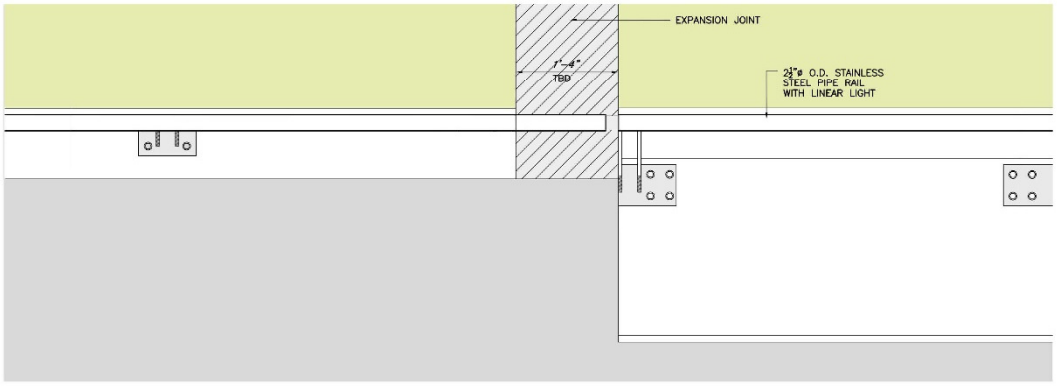
Transition at Commuter Building



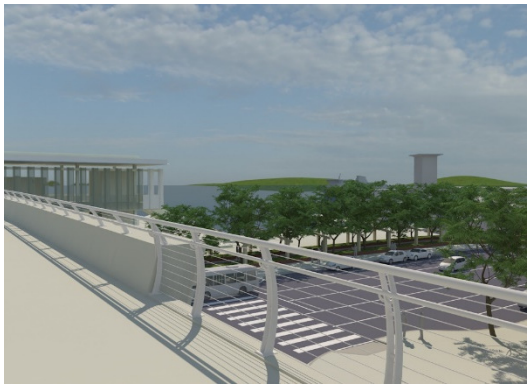
Railing Elevation at Ramp Expansion Joint
SALE: 1 - 1 / 2" = 1'



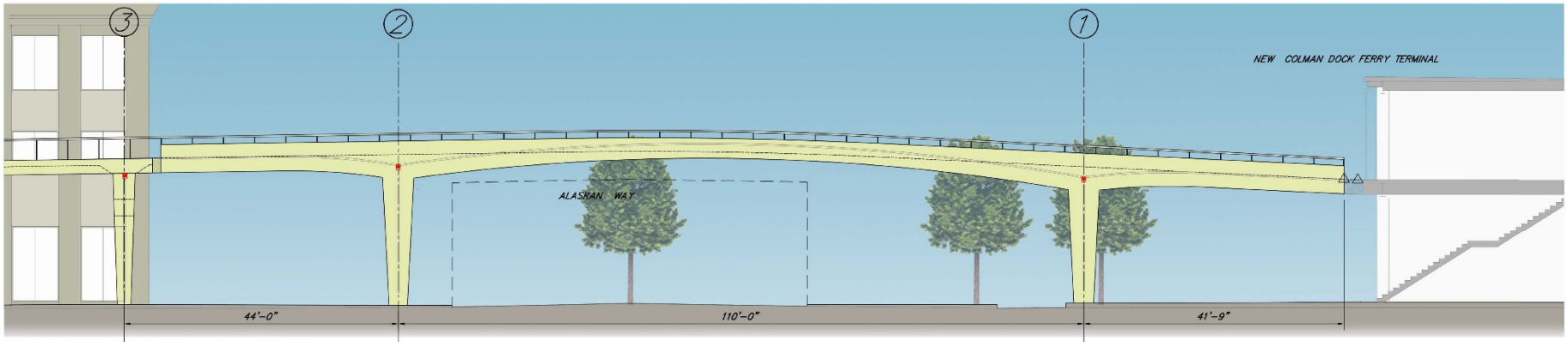
Railing Detail at Ramp Expansion Joint
SALE: 1 - 1 / 2" = 1'



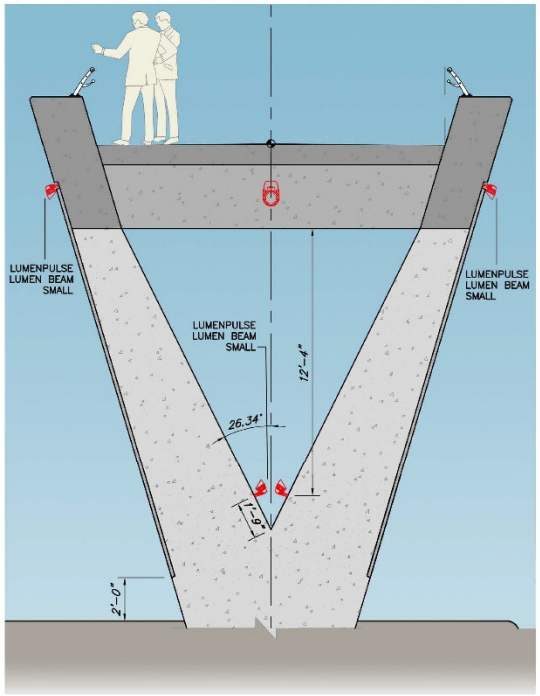
Railing Plan at Ramp Expansion Joint
SALE: 1 - 1 / 2" = 1'



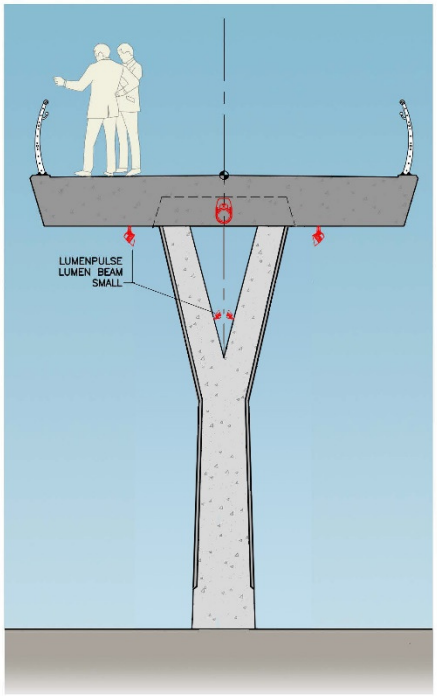
Lighting Design



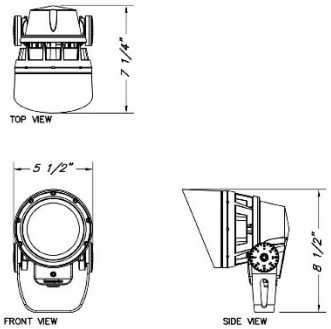
Elevation Lighting - Main Span
SCALE: 1 / 8" = 1'



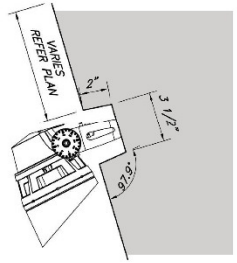
Pier Lighting (Typical of two)
SCALE: 3 / 8" = 1'



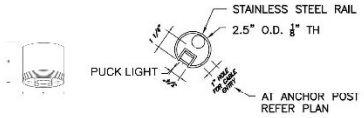
Ramp Pier Lighting (Typical of five)
SCALE: 3 / 8" = 1'



Pier Light Fixture
SCALE: 3" = 1'

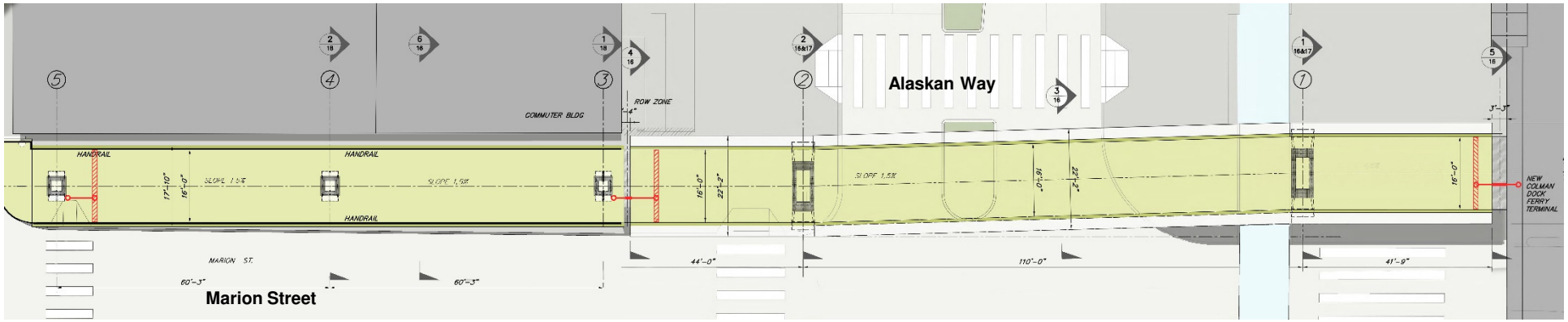


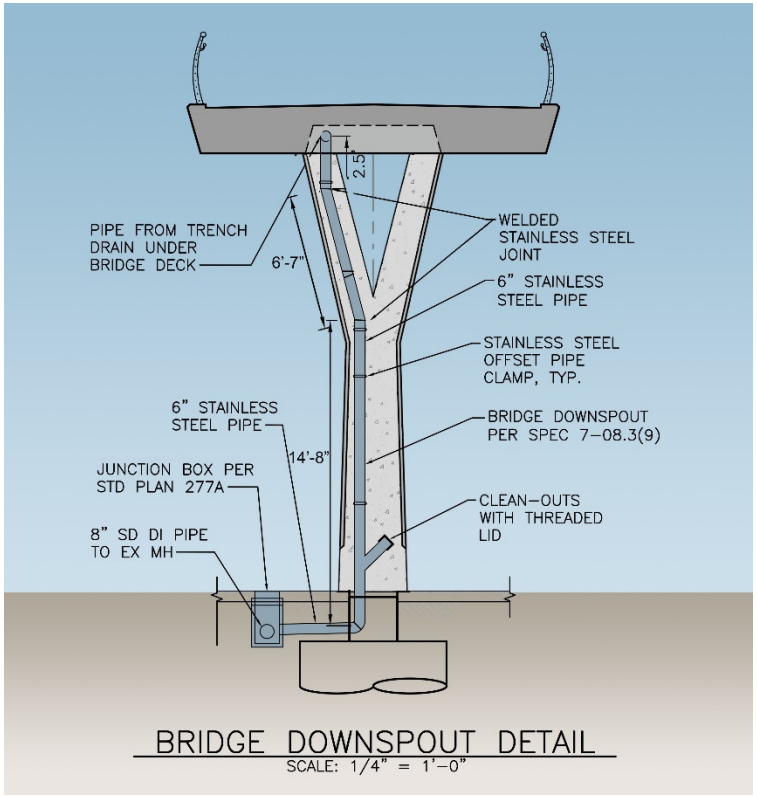
Reveal Lighting
SCALE: 3" = 1'



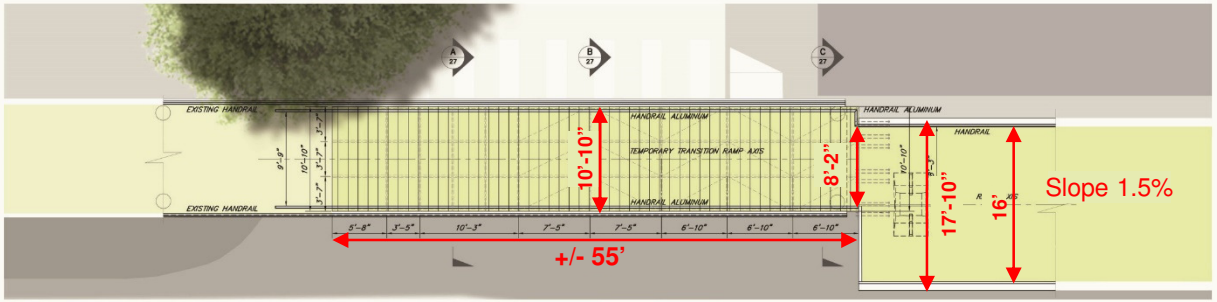
Stainless Steel Rail / PUCK light
SCALE: 3" = 1'

Drainage design

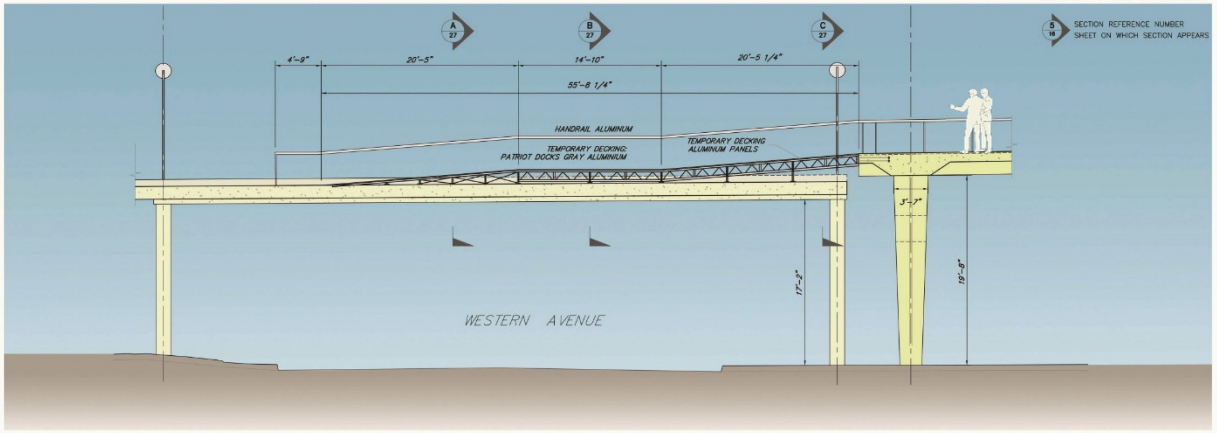




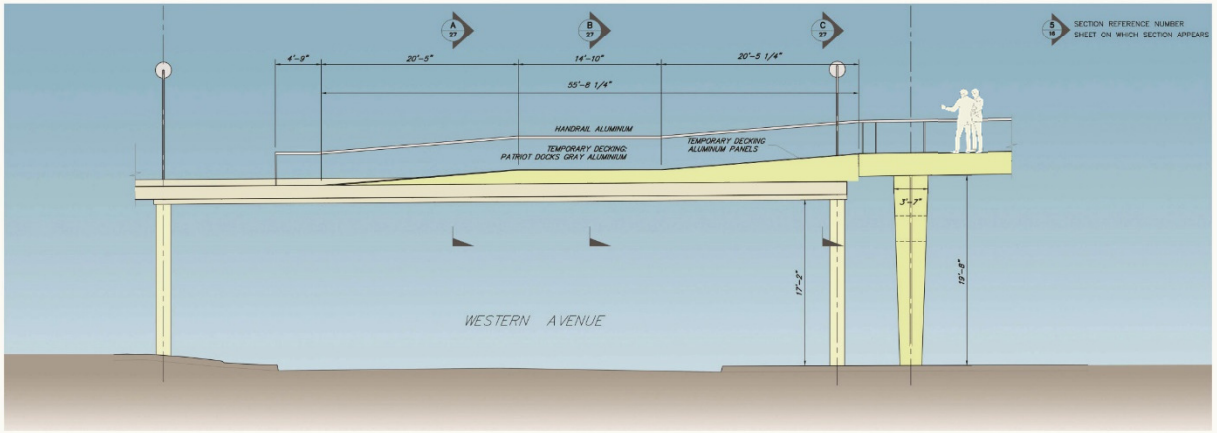
Transition Ramp – Plan and Elevation – 60% plans



Plan View - Transition Ramp

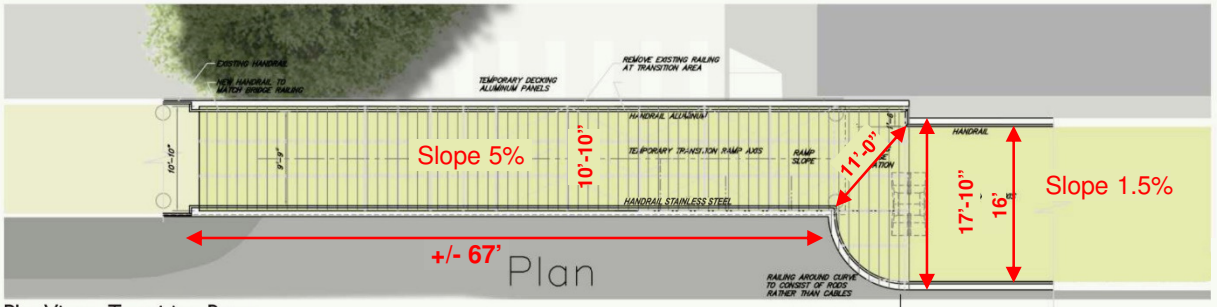


Elevation - Transition Ramp

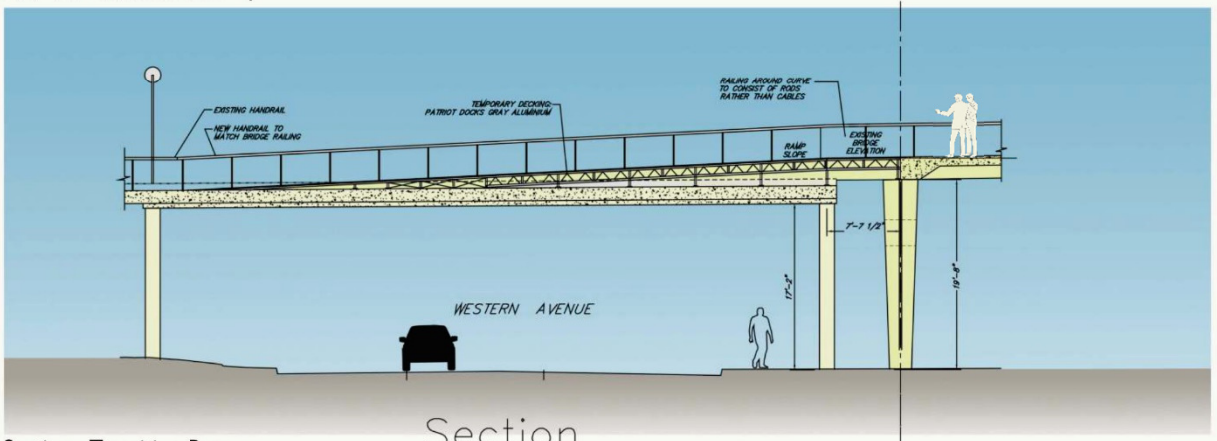


Elevation - Transition Ramp

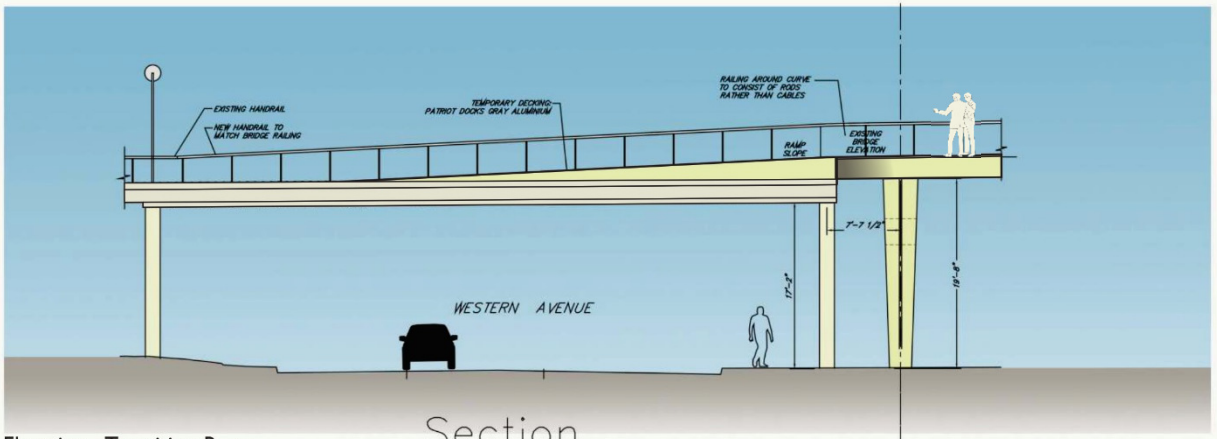
Transition Ramp – Plan and Elevation – 90% plans



Plan View - Transition Ramp

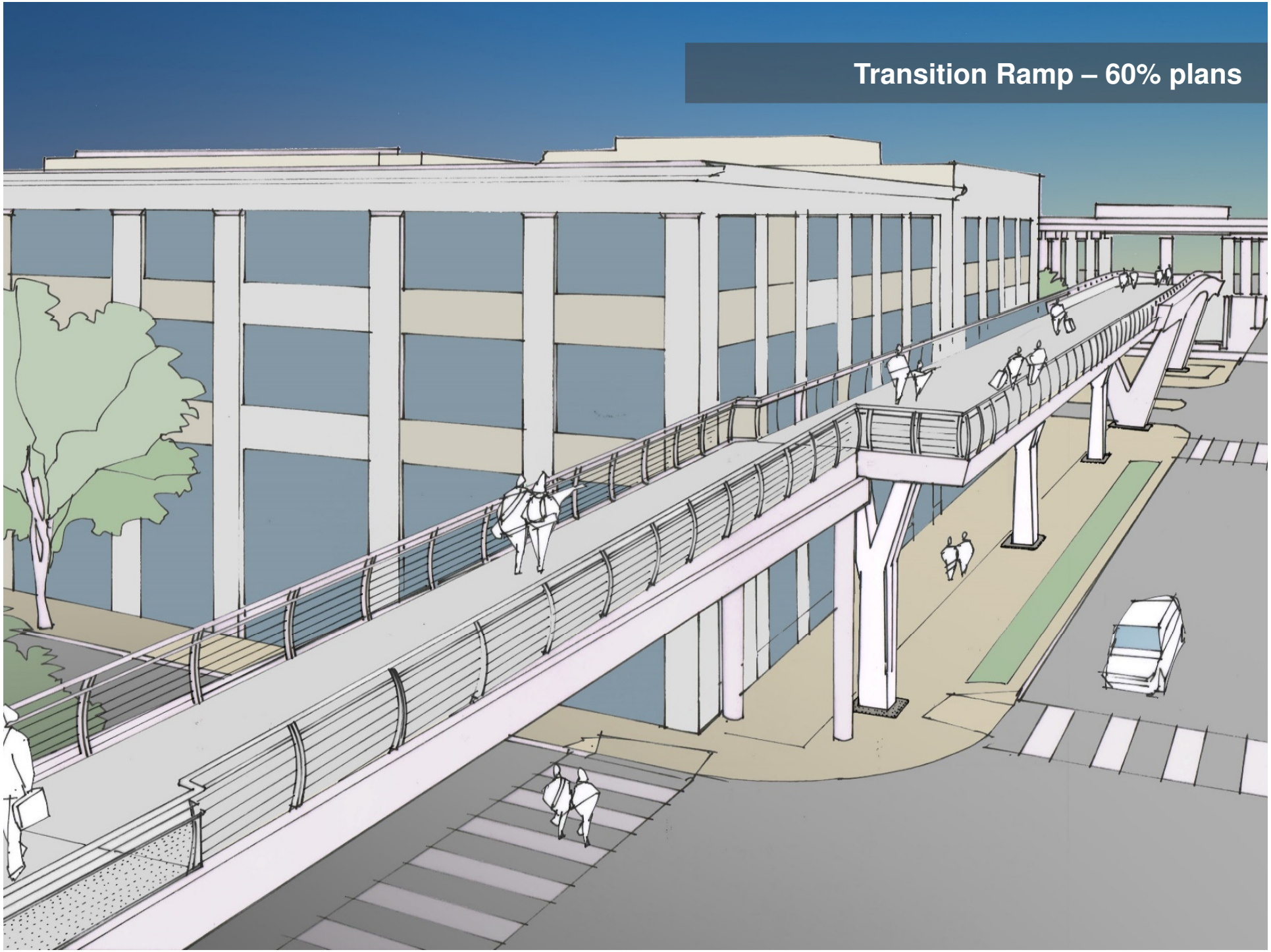


Section - Transition Ramp

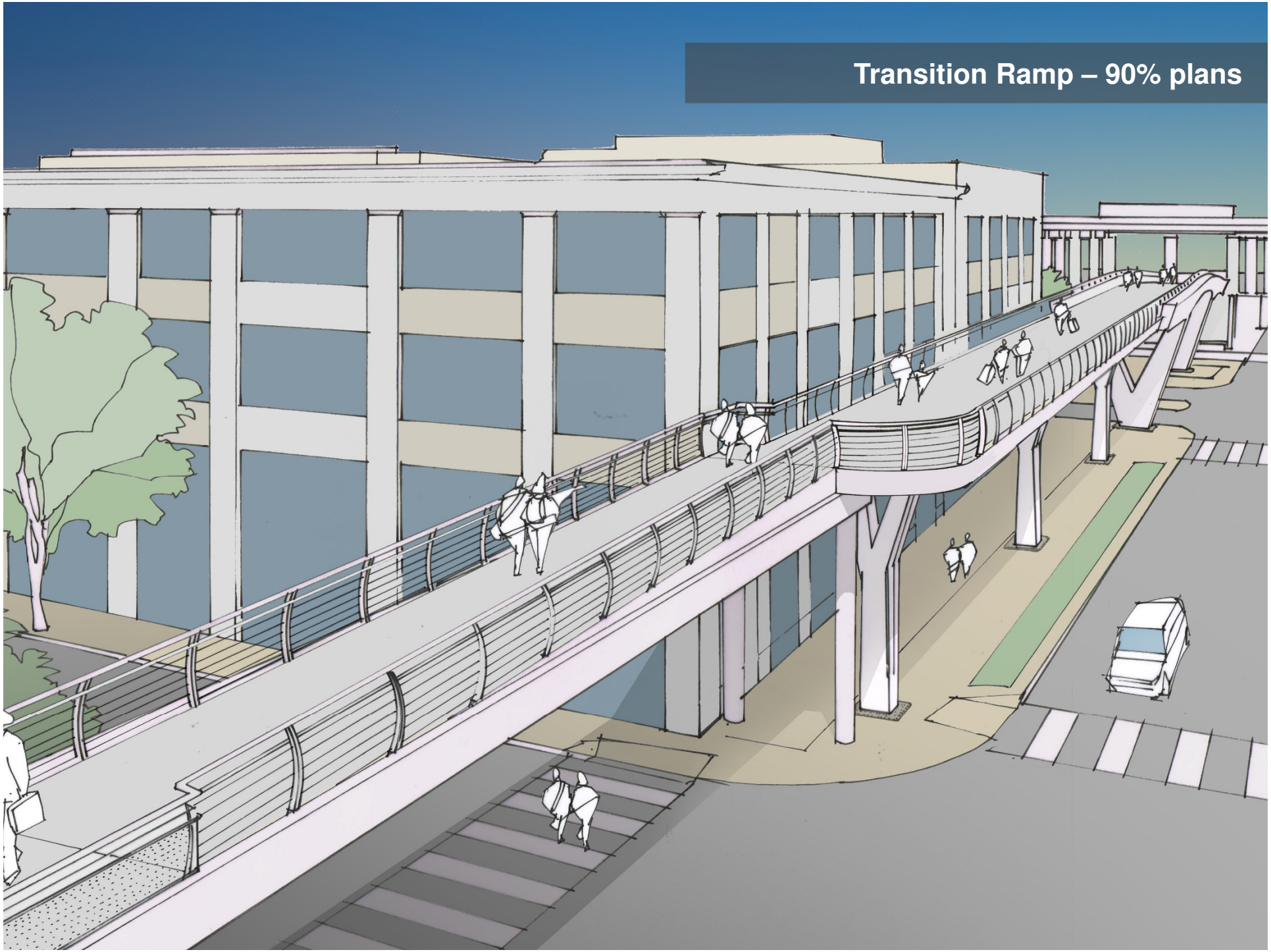


Elevation - Transition Ramp

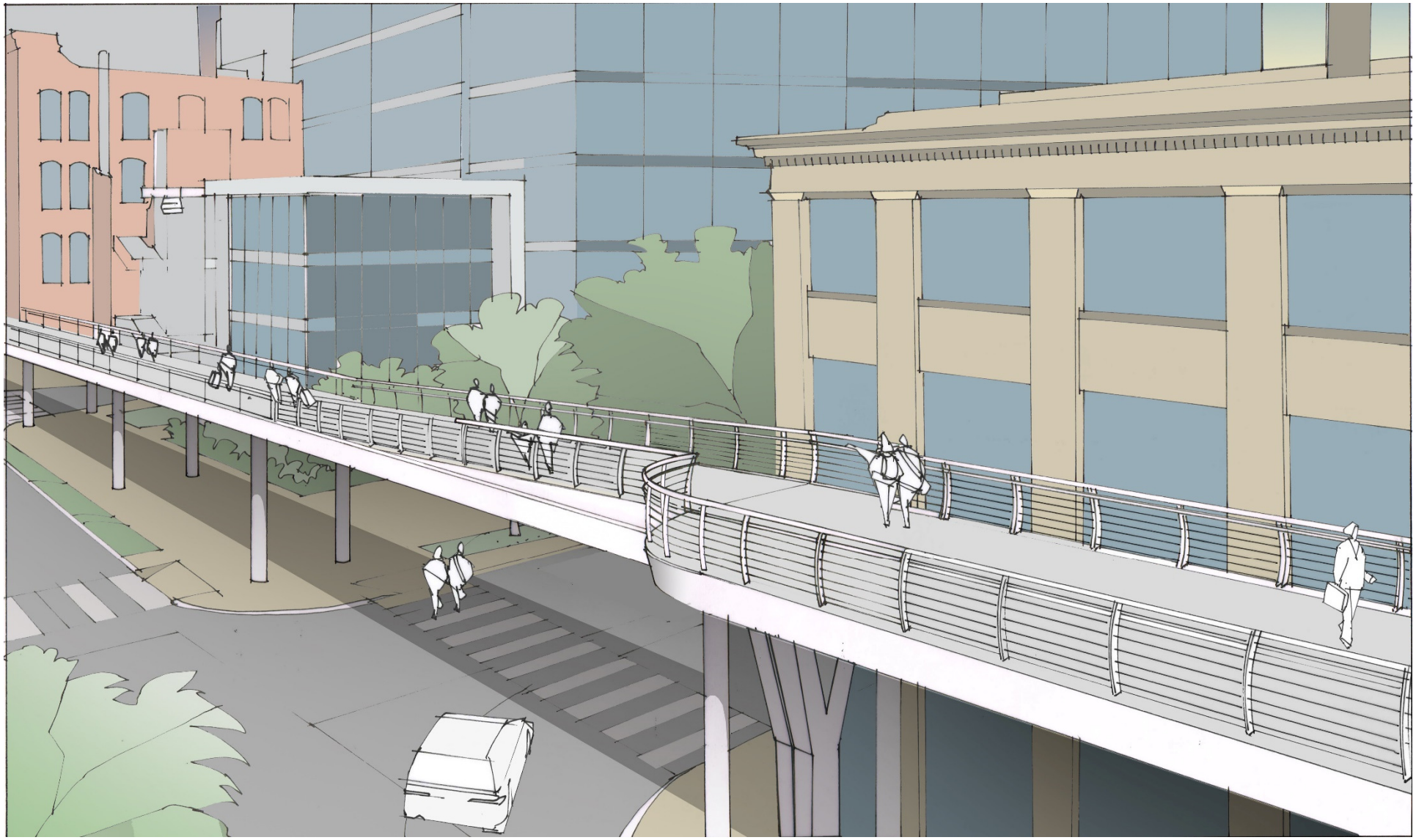
Transition Ramp – 60% plans



Transition Ramp – 90% plans

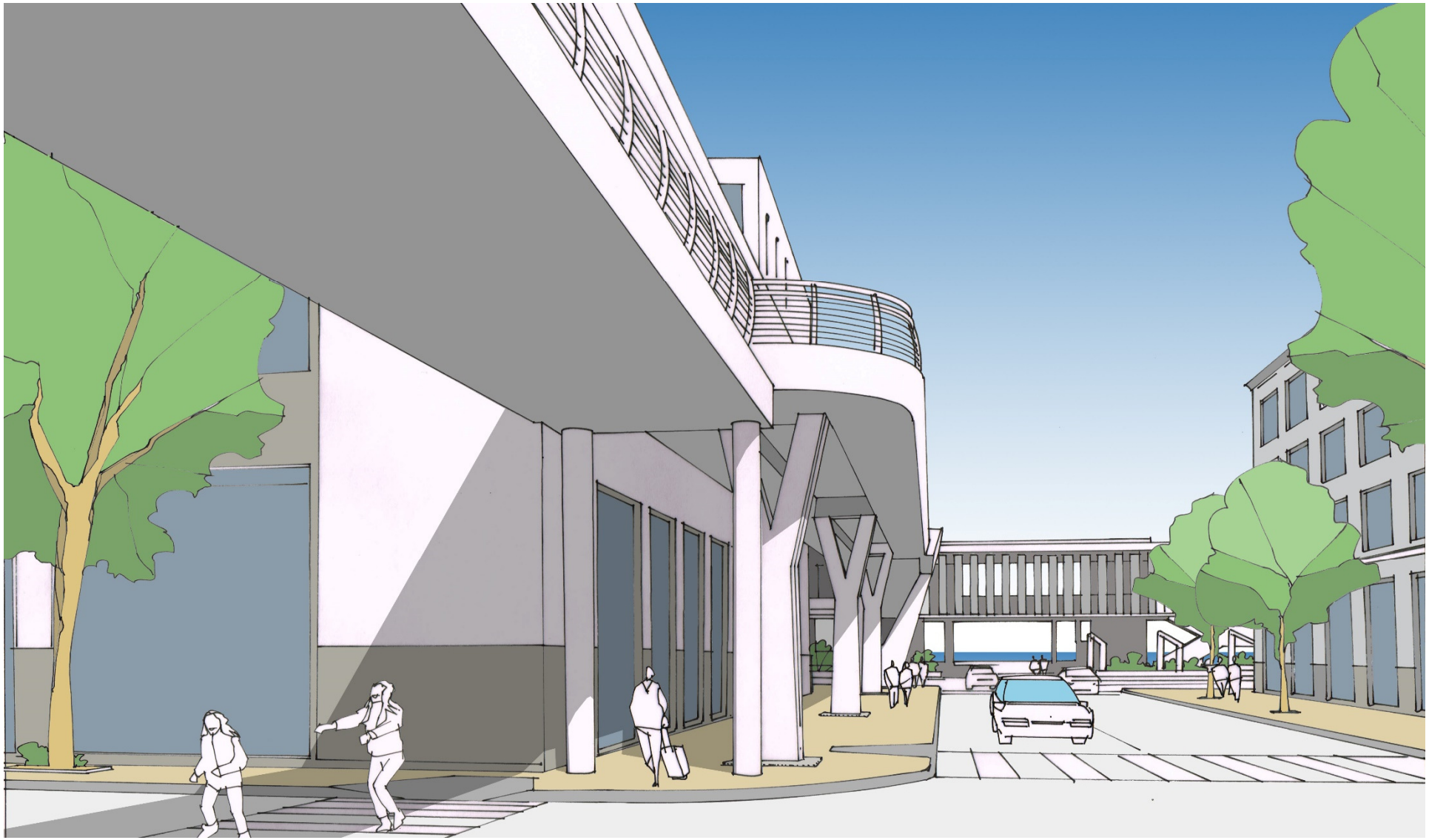


Transition Ramp



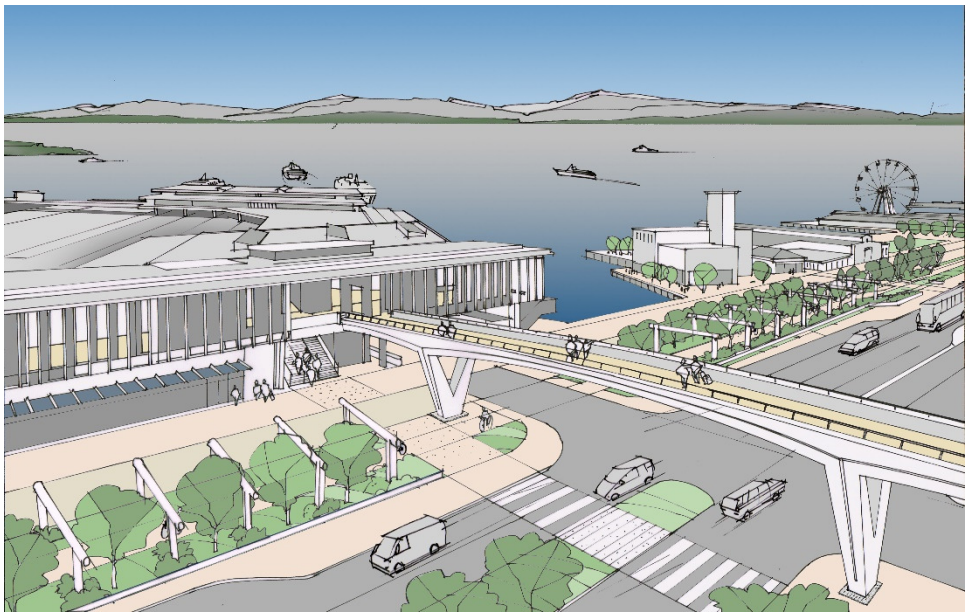
Transition Ramp

Transition Ramp



Transition Ramp

Sustainability Strategy



- MOBILITY:	Pedestrian bridge will create a more attractive, wider and sustainable link between the Ferry Terminal and Downtown. Promotes active transportation modes. Incorporation of ADA. Scenic viewpoints.
- MAINTENANCE:	Use of low maintenance materials and products like high strength concrete, stainless steel and LED lighting. Lowest life cycle cost and long life expectancy.
- ECONOMY:	Bridge design is very efficient minimizing the size of all elements as much as possible increasing constructability. Coordination with adjacent future projects to prevent repeat utility relocations.
- RE-USE/RECYCLE:	Will use SDOT standard practice recycling of demolished concrete/metal debris when existing bridge is removed

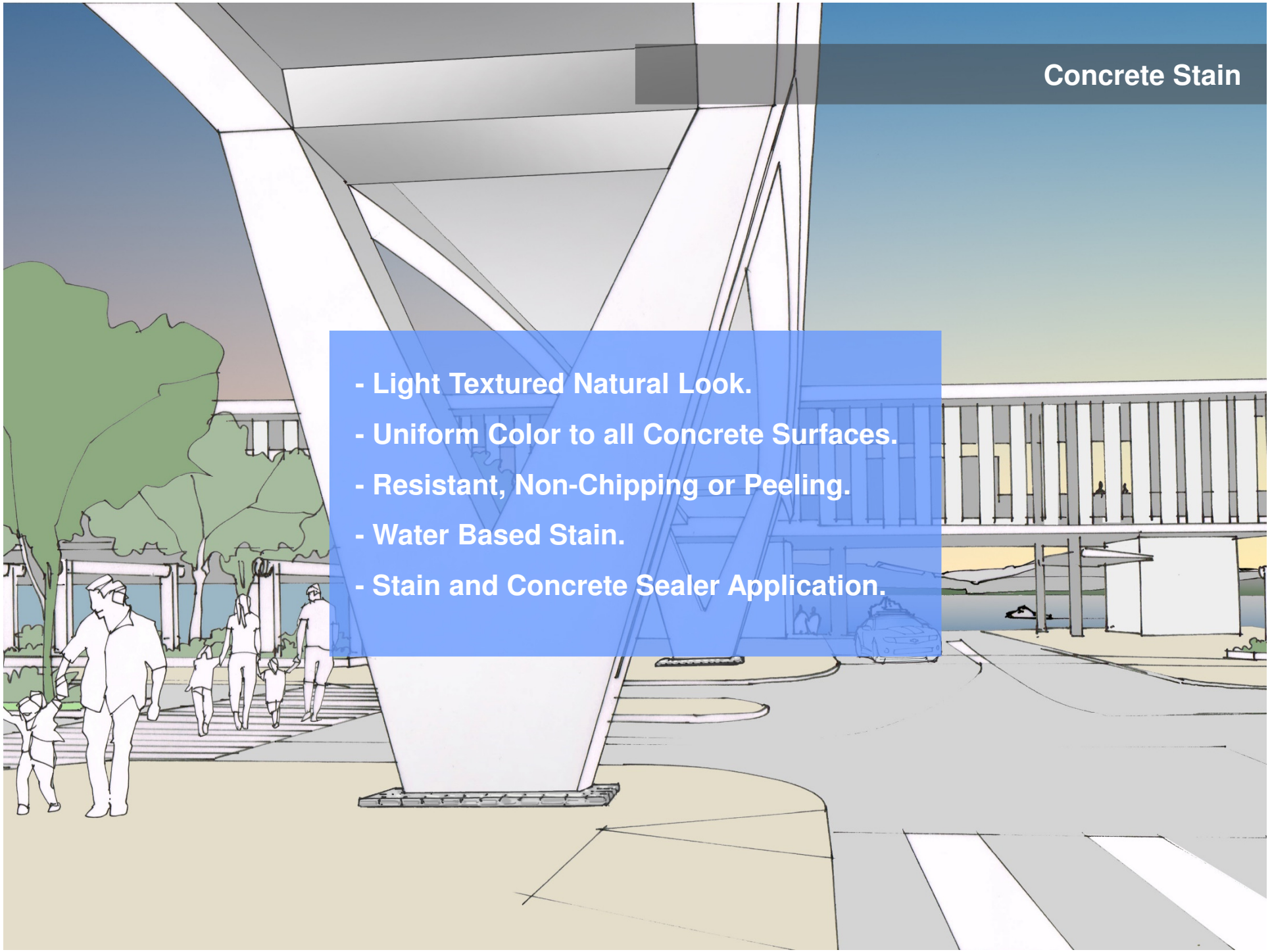
Liberty Bridge, Greenville, SC

Moody Pedestrian Bridge, Austin, TX

Sustainability Strategy

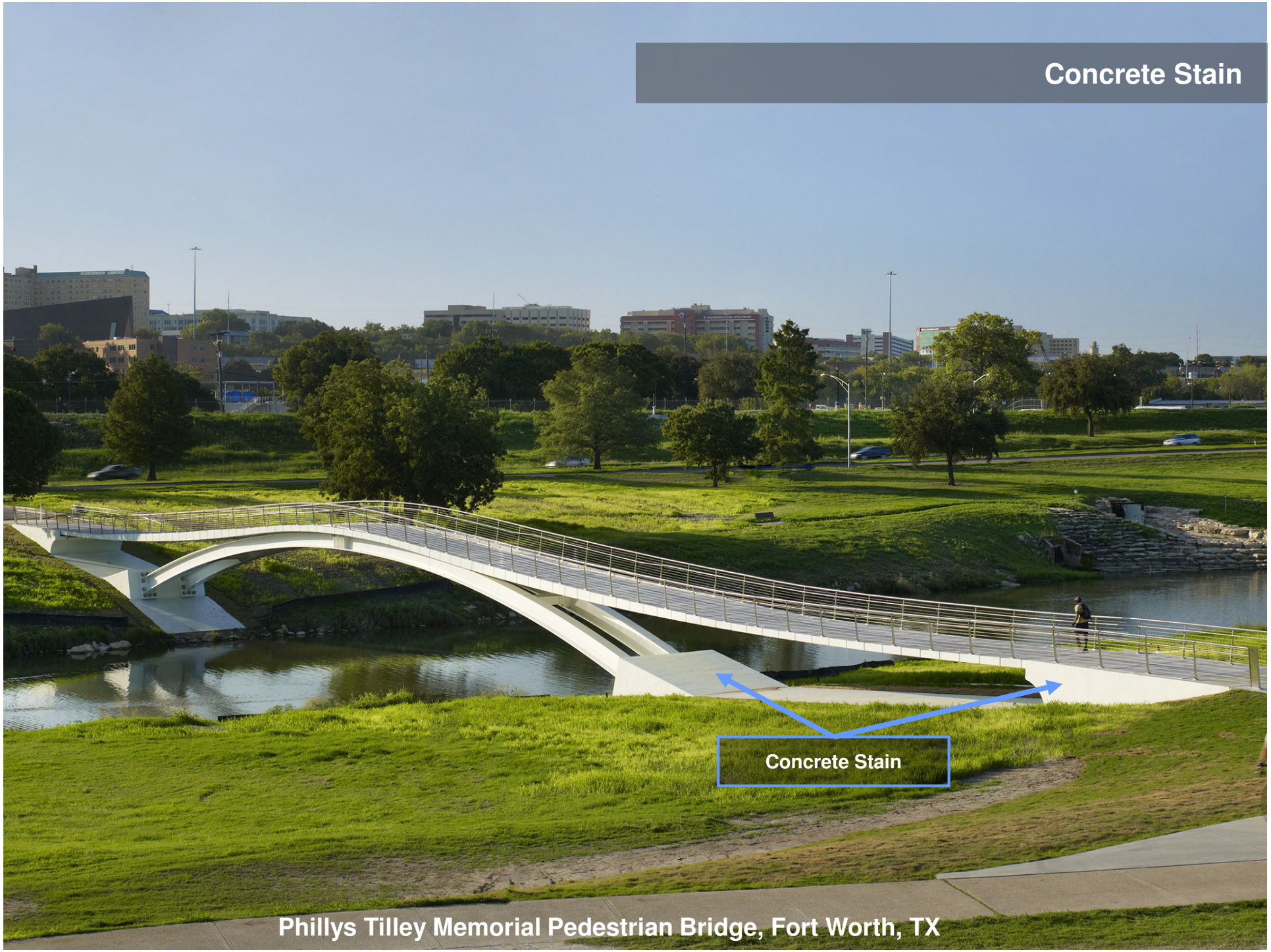
Appleton Bridge, Boston, MA

Concrete Stain



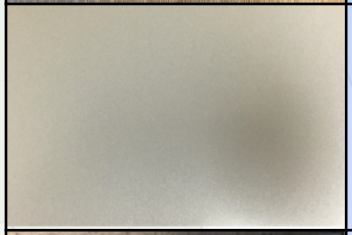
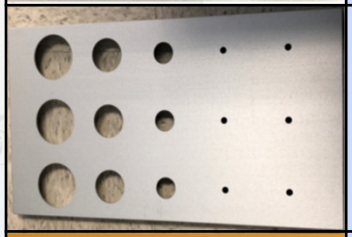
- Light Textured Natural Look.
- Uniform Color to all Concrete Surfaces.
- Resistant, Non-Chipping or Peeling.
- Water Based Stain.
- Stain and Concrete Sealer Application.

Concrete Stain



Phillys Tilley Memorial Pedestrian Bridge, Fort Worth, TX

Colman Dock Materials and Colors

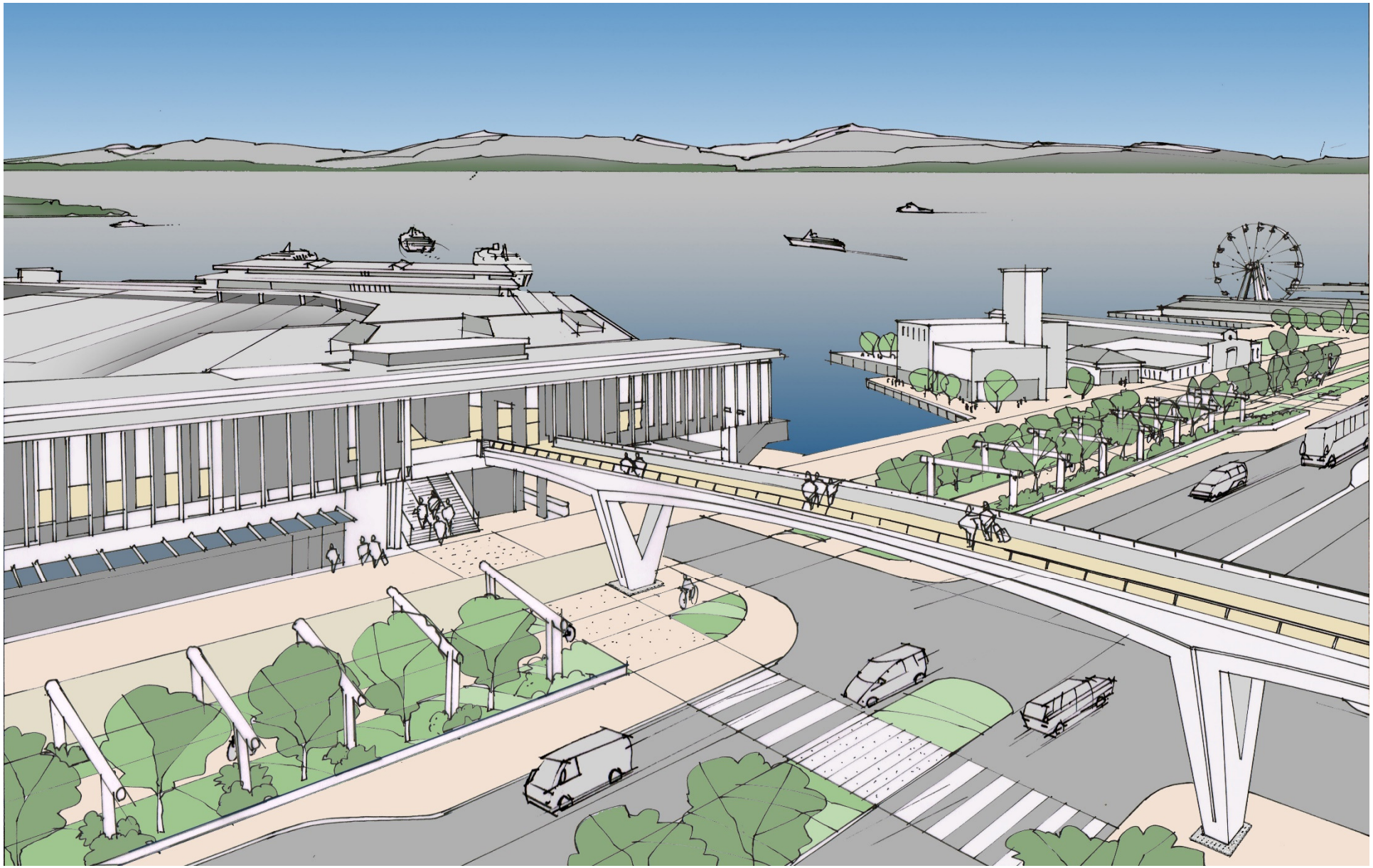
Sample	Use	Material	Finish / Color
	Terminal Ceiling	Stonewood Architectural Panels	New Age Oak
	Terminal Roof	Fluropon Classic	SR Silver Storm
	Guardrail Infill	Stainless steel	Silver / Sanded
	Terminal View Deck	Drylac Powder Coatings	PC-1 Mardi Gras Gold
	Plastic Glazing in Viewing Platform	3Form Koda XT	Ochre Stucco F06

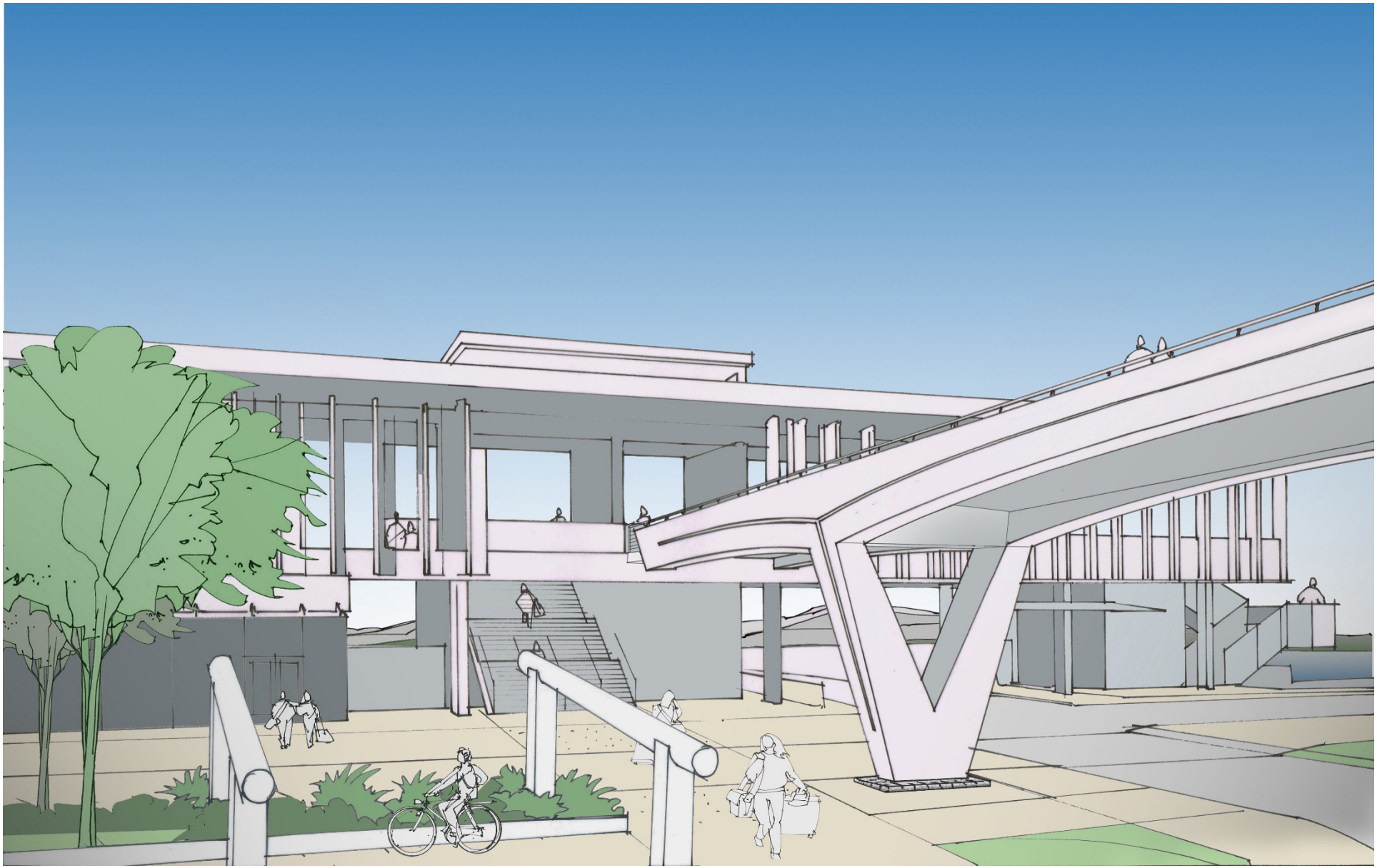
Colman Dock Materials and Colors

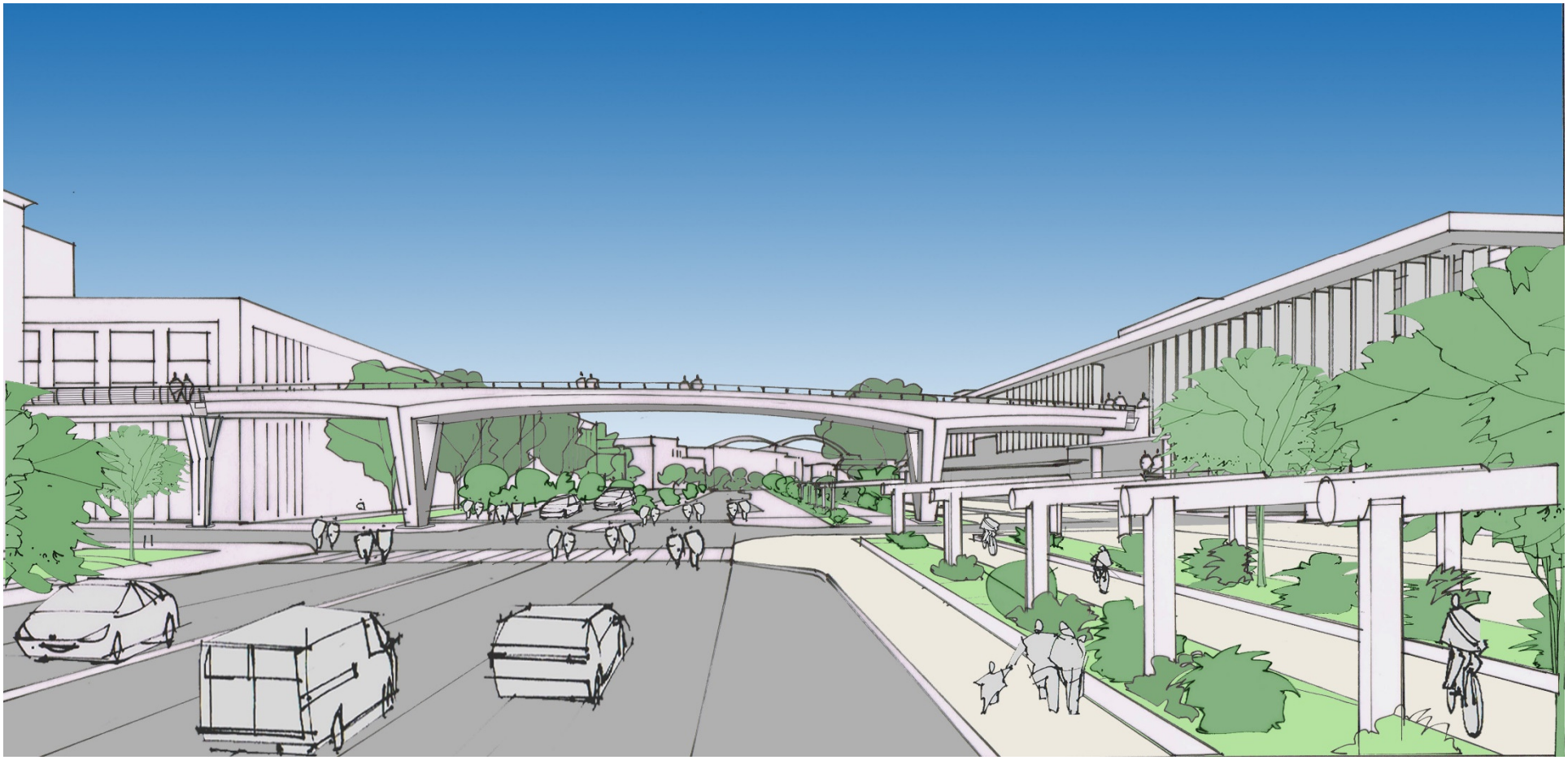
Marion Street Pedestrian Bridge Materials and Colors

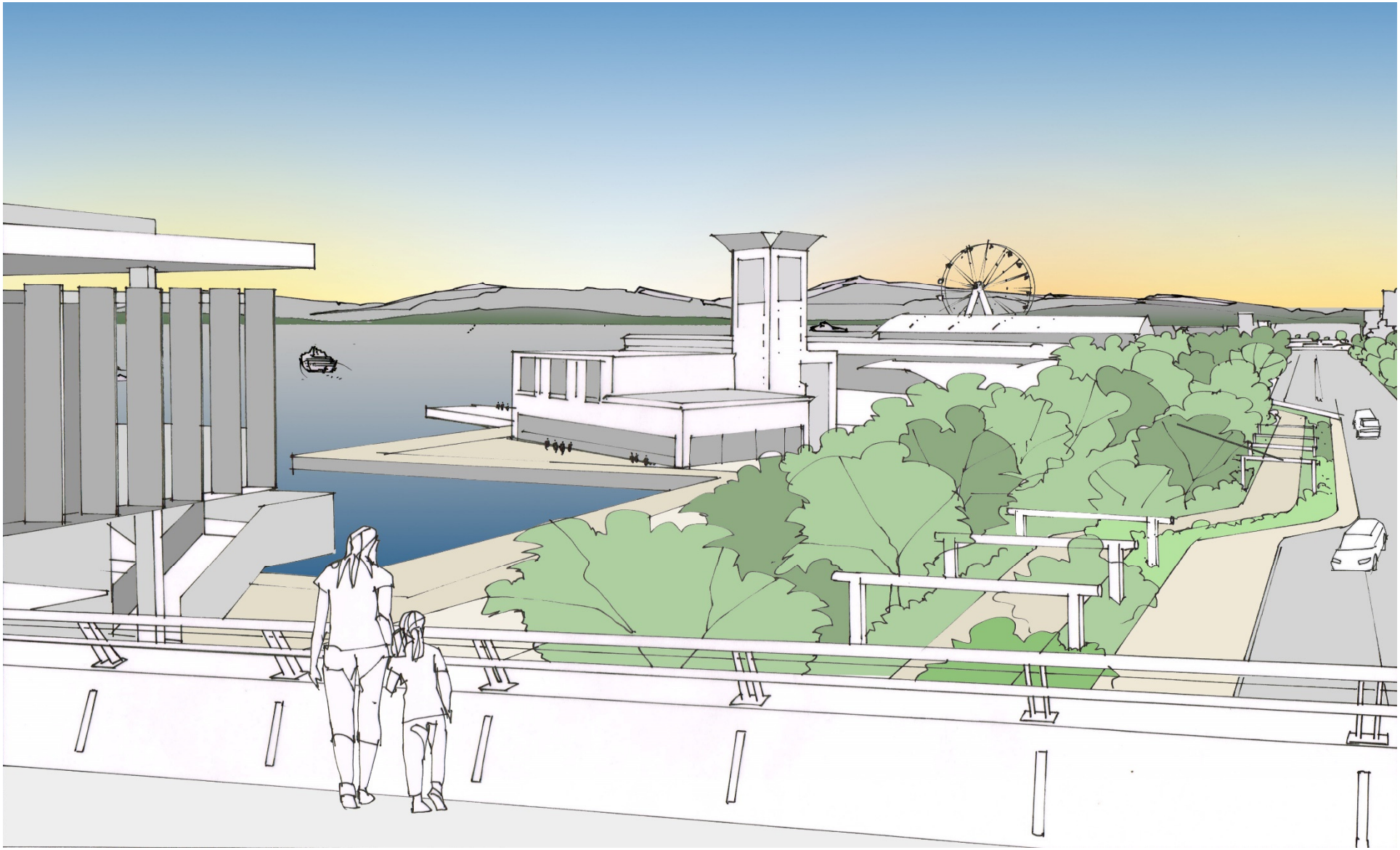
Sample	Use	Material	Finish / Color
	Concrete surfaces	Concrete stain	Federal Standard Color 37925 Light cool grey
	Base of Piers ADA warning	4”x4” Granite Cobblestone	Natural grey
	Bridge Luminaires	Aluminium and Stainless Steel	White
	Drainage pipes / Handrail	Stainless steel	Satin

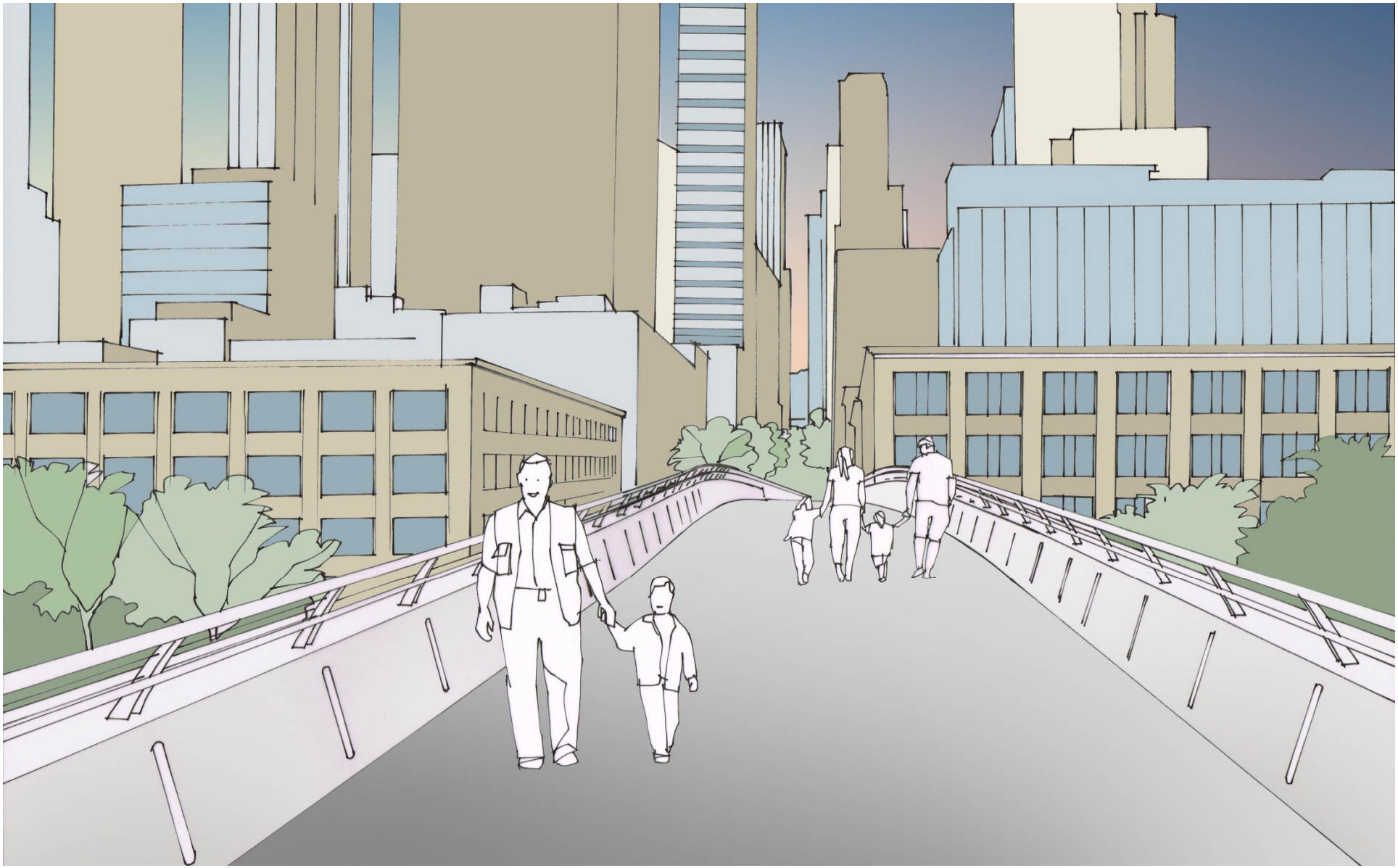
Marion Street Pedestrian Bridge

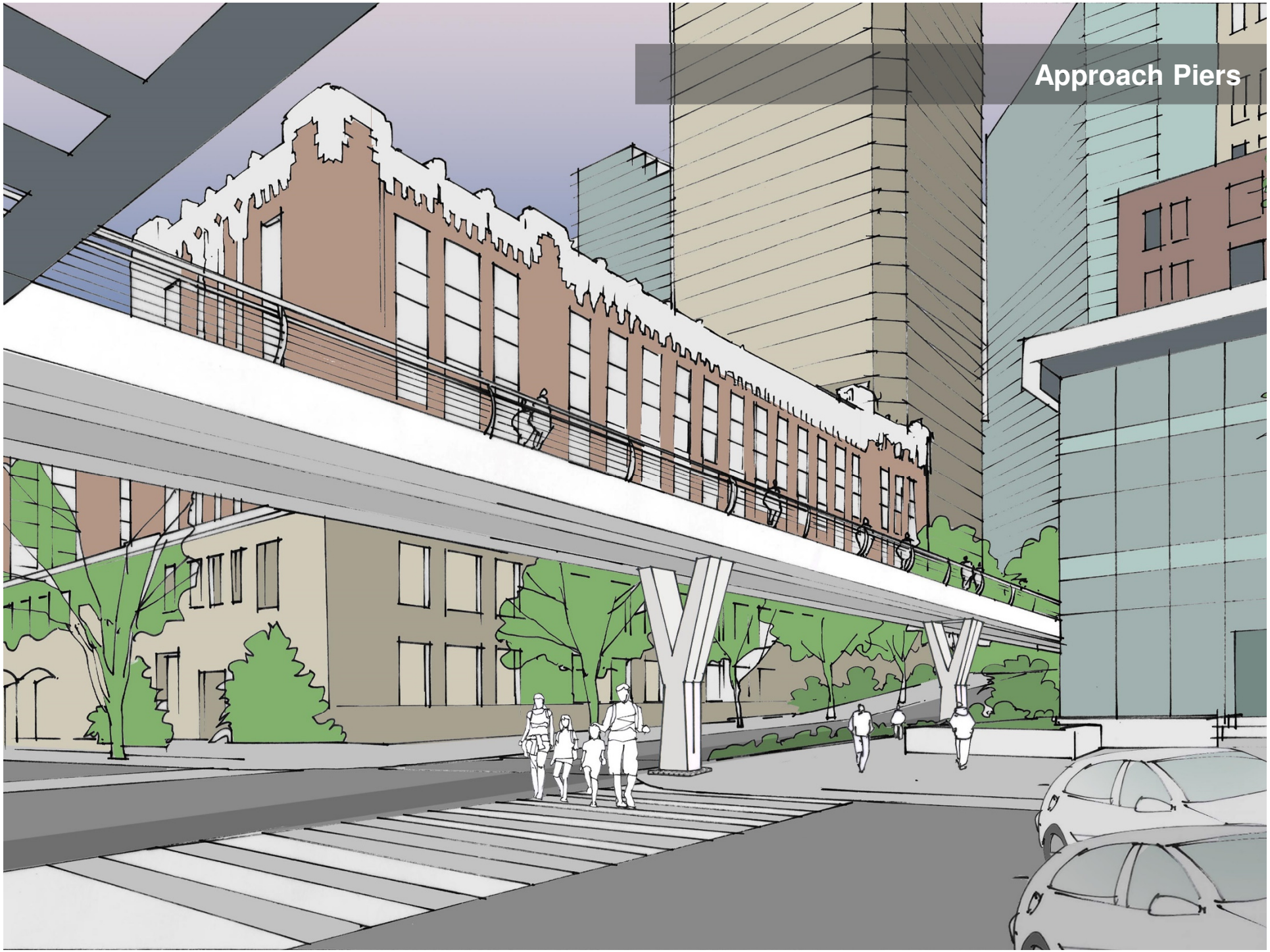


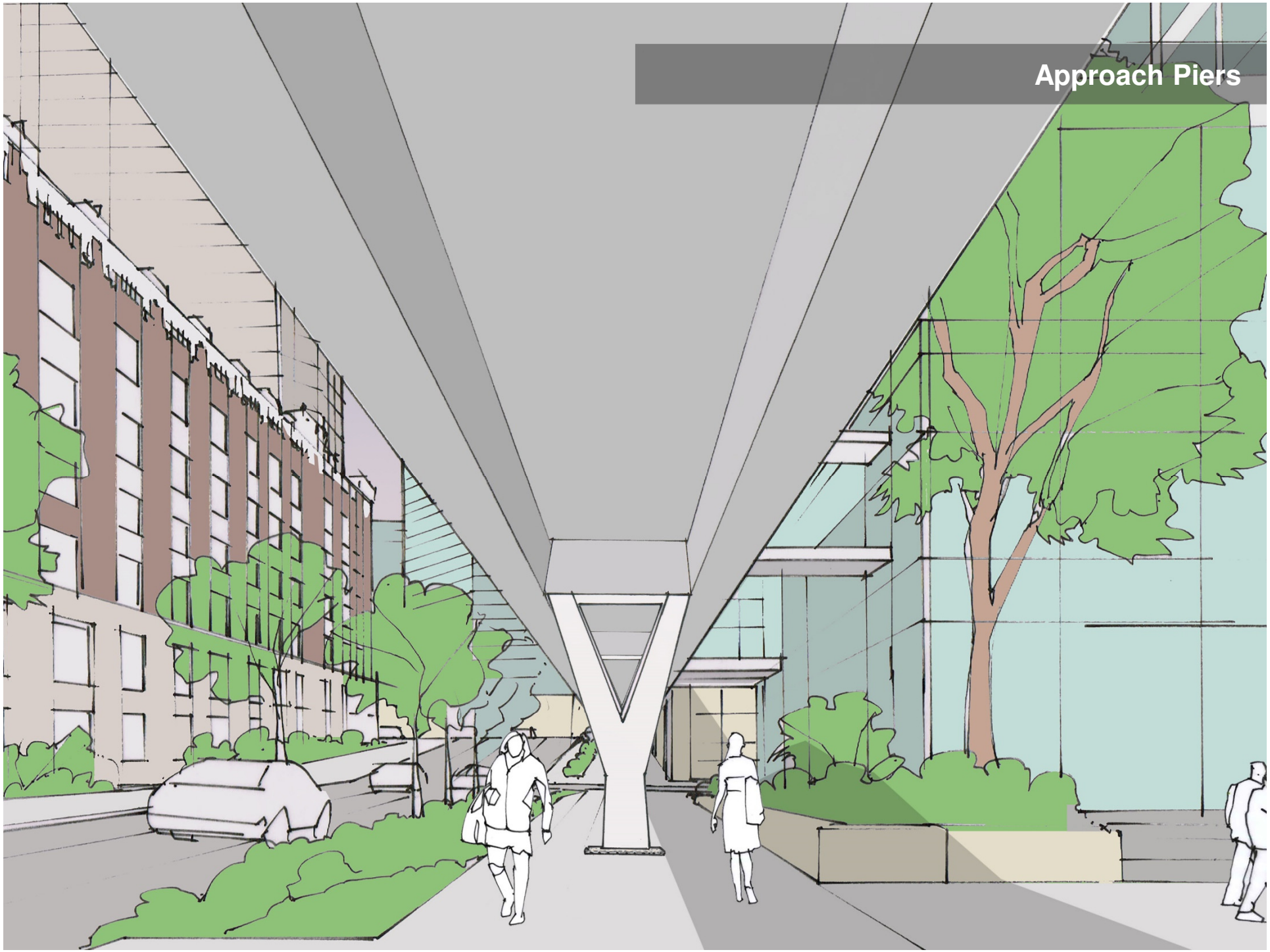


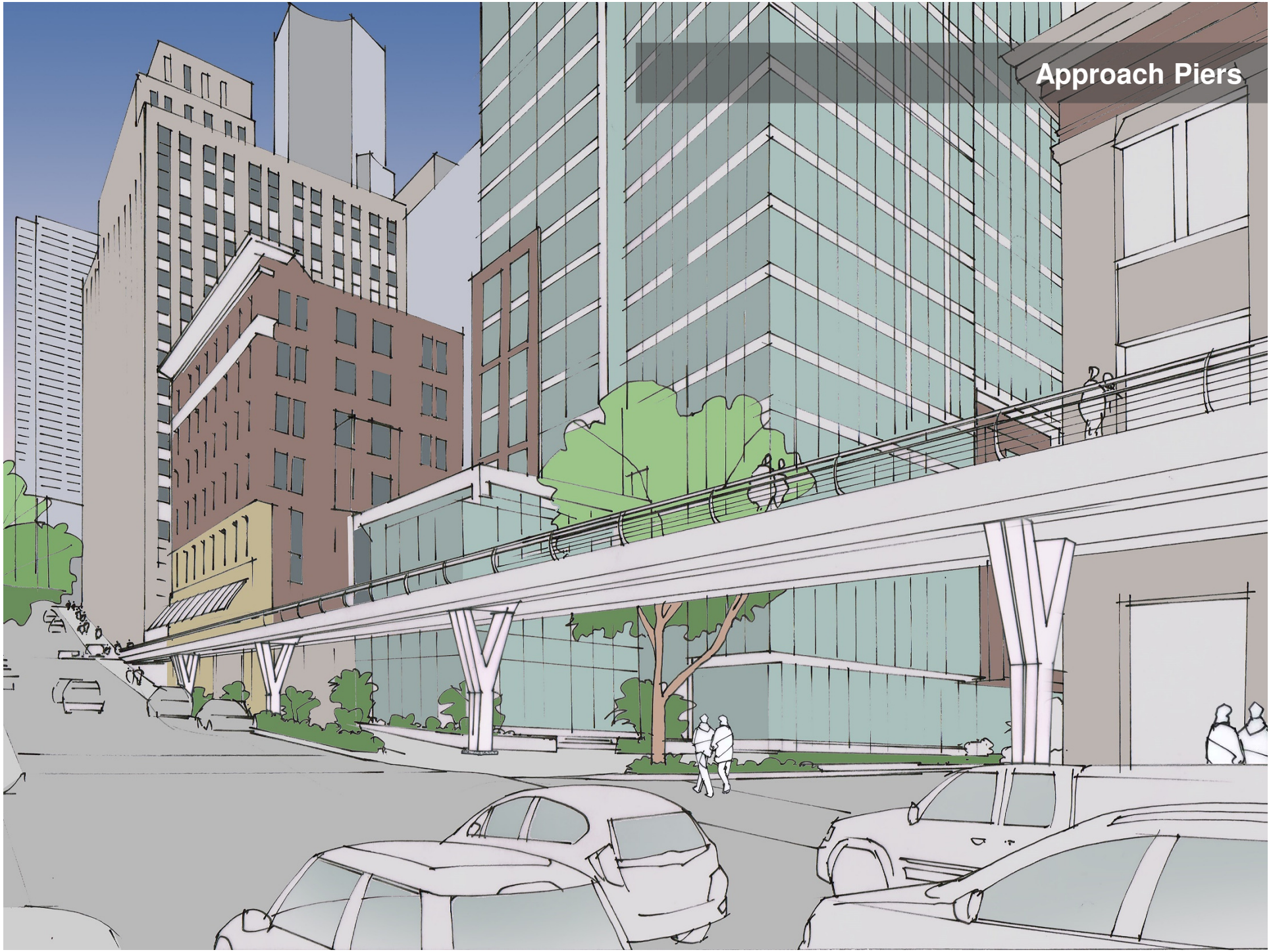


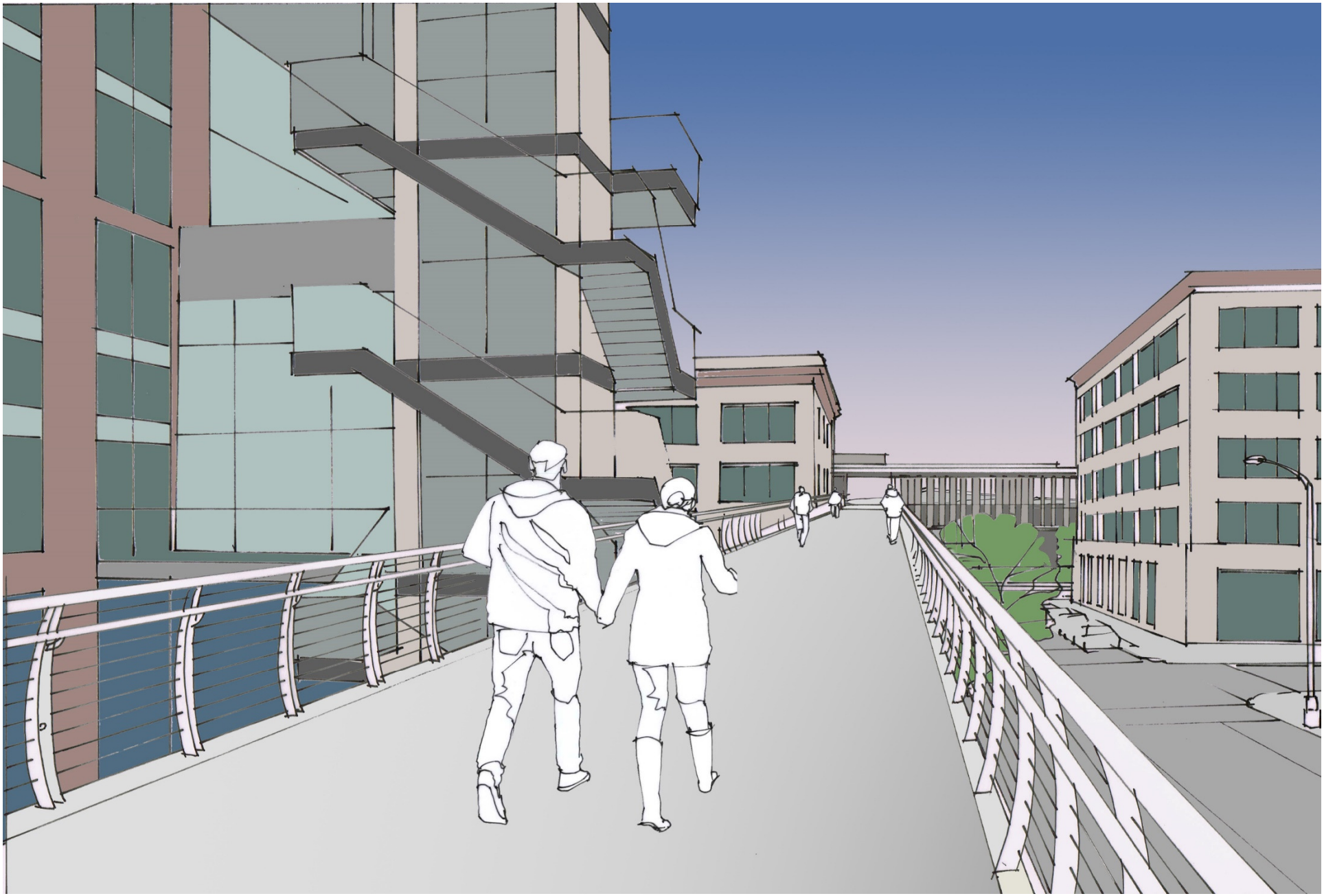




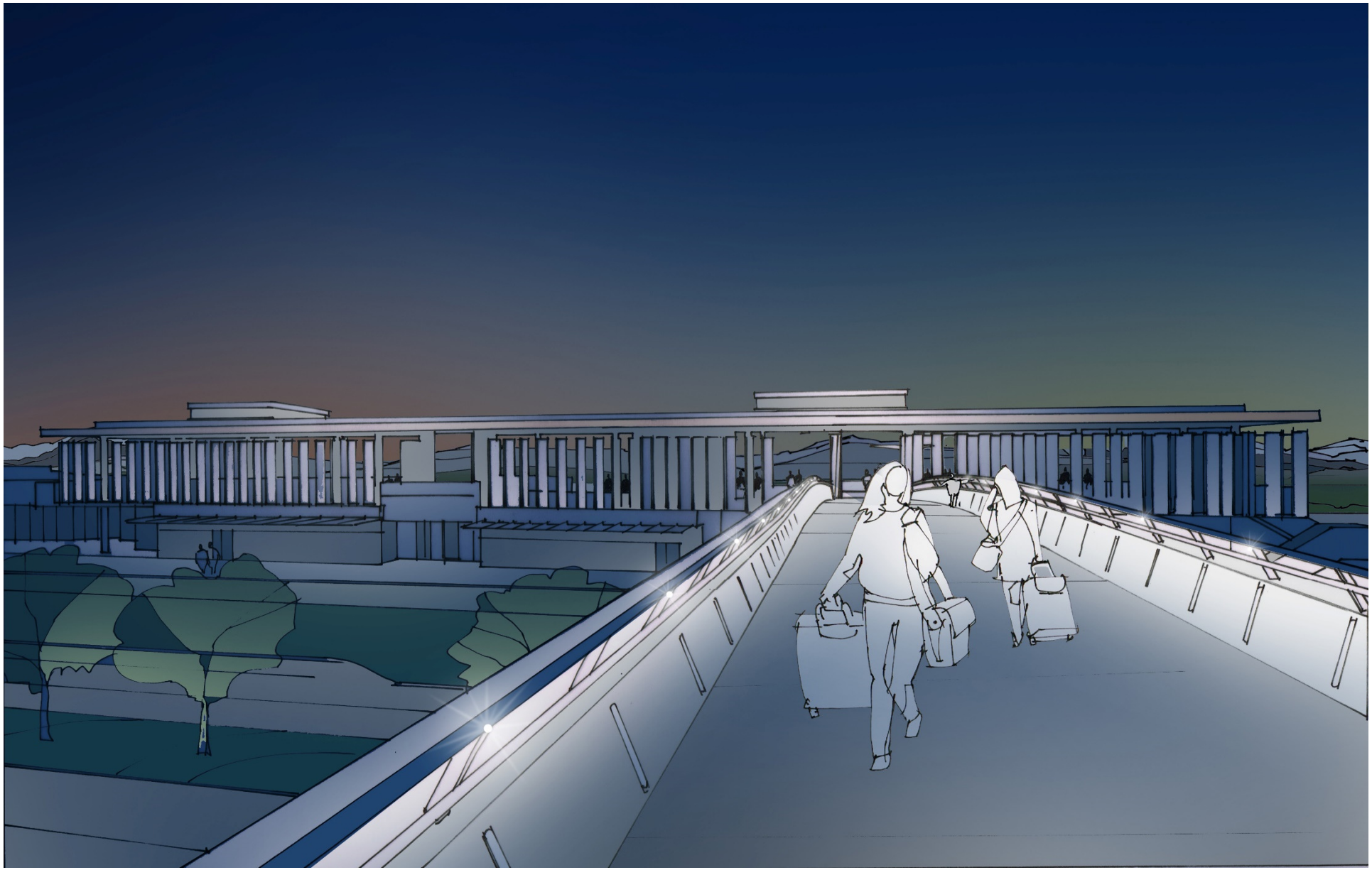

Approach Piers


Approach Piers

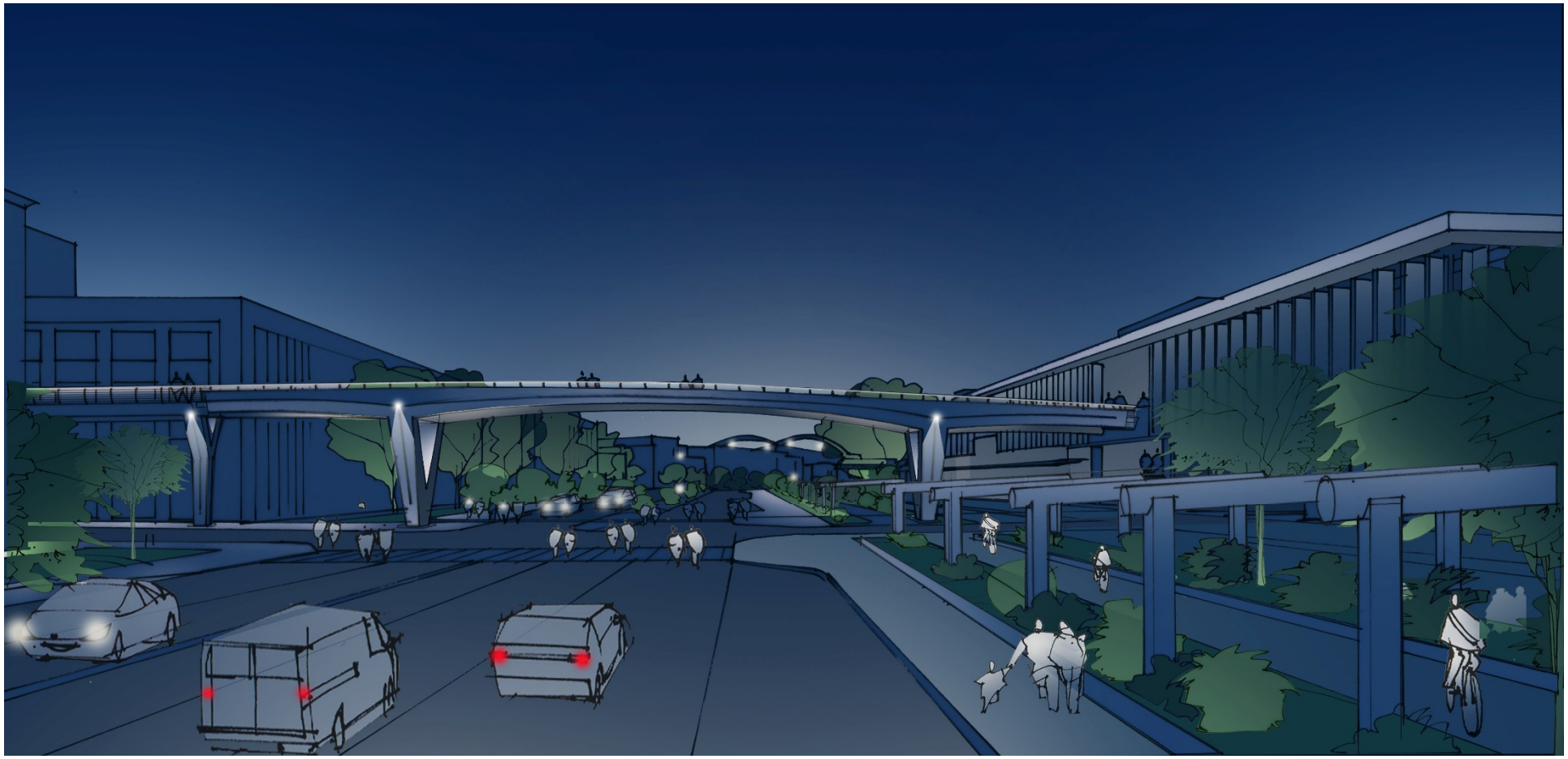

Approach Piers



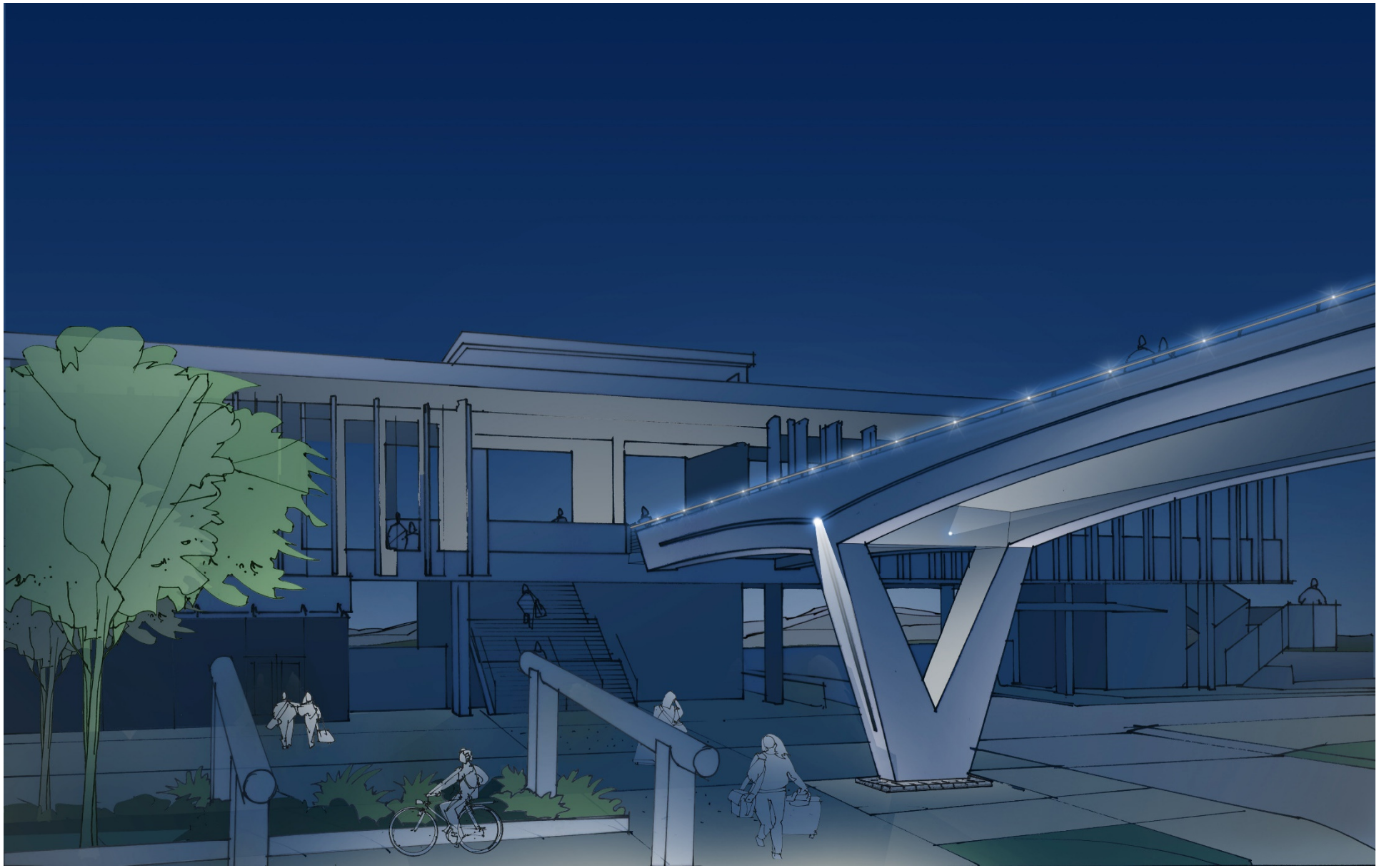
Lighting Design



Lighting Design



Lighting Design



Marion Street Pedestrian Bridge

Seattle Design Commission

January 3rd, 2019

city of seattle

waterfront SEATTLE

WSDOT