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COLMAN DOCK PROJECT

Construction Start: April of 2017 Completion of Construction Activities: Spring 2023

Agenda

- Project Background
- Project Challenges
- Environmental Commitments
- Construction Phasing
- Construction Activities

Colman Dock Fun Facts



Fun Facts





One of the largest Ferry networks in the World, and is currently the busiest Provides Ferry Service to Bainbridge and Bremerton Islands



Commuter Averages (pre-COVID)

25,000 daily riders 7,000 cars per day 10,000,000 passengers annually

Fun Facts

6 Temporary Bridges

753 Pre-Cast Panels

448 Piles

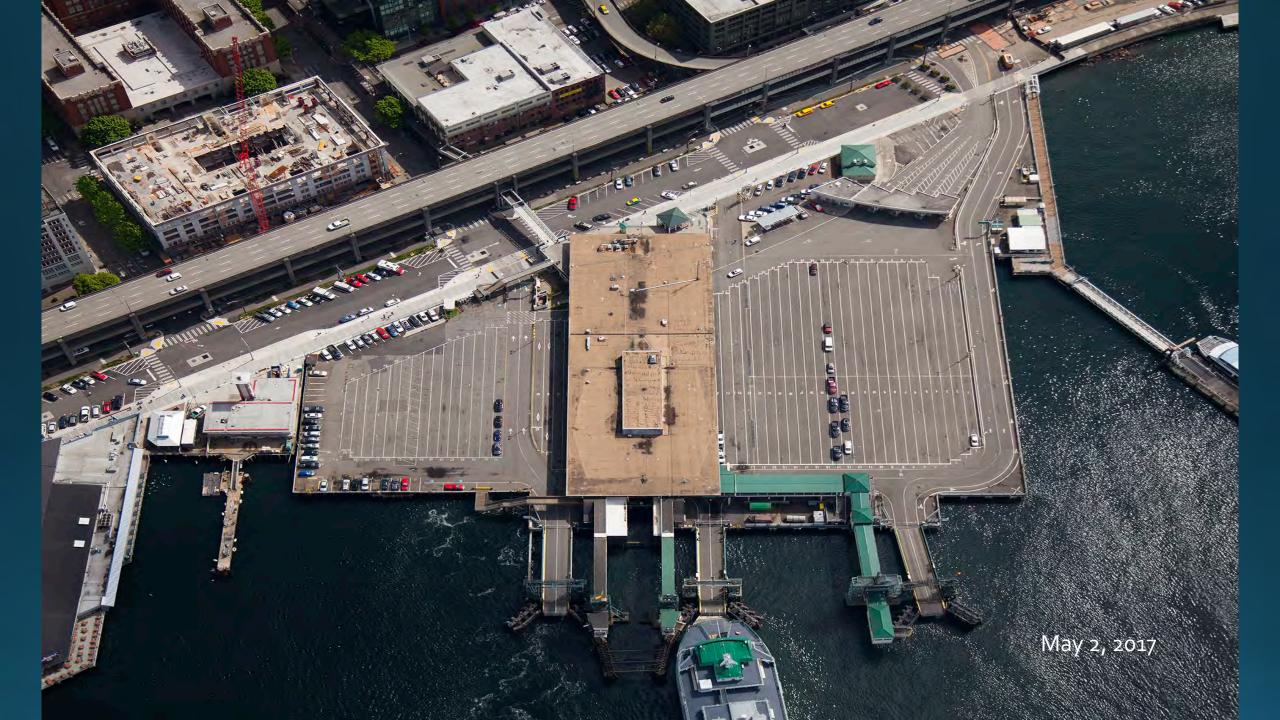
Current MACC contract amount \$367 million

Why Is This Project Needed?

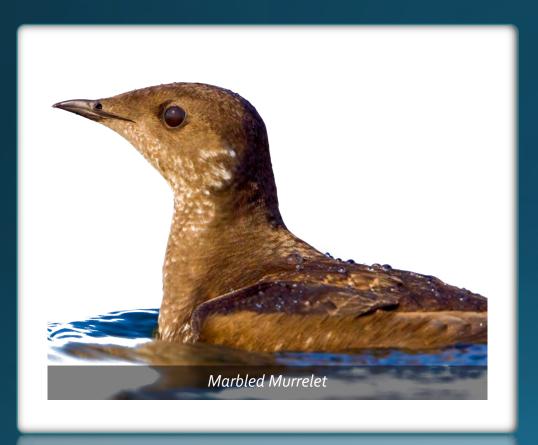
- Key components of Colman Dock were aging and seismically deficient.
 - Pile were starting to fail caused by gribbles
- The layout of the old facility created safety concerns and operational inefficiencies
- Preserve the role of Colman Dock as a regional multimodal transportation hub







Project Challenges



- Safety Traveling public 28,000/day through project area
- Safety Craft workers Unique work, tide driven, marine
- Fully maintain WSF Operations
- Schedule
 - In-water work windows
 - COVID and teamster delays
- Environmental Monitoring:
 - Marine Mammals
 - Water Quality
 - Barging Coordination with local Tribes



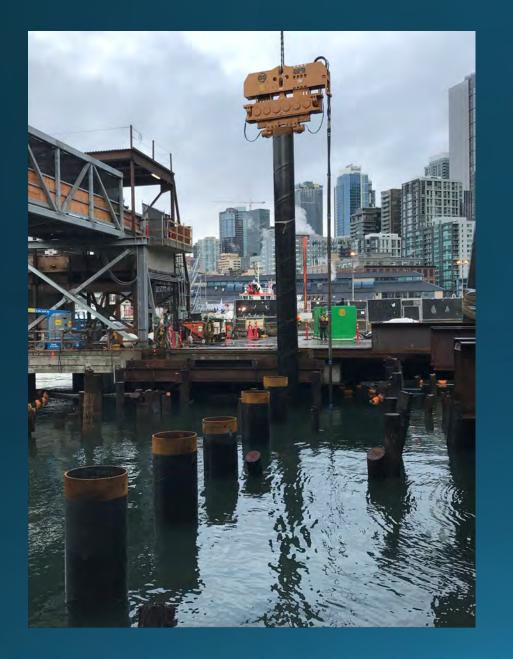
Environmental Commitments

- Coordination with multiple permitting agencies
 - DOE
 - Army Corps of Engineers
 - USCG
 - Department of Fish and Wildlife
- Over 750 commitments
- Protected Species observers
 - 6 full time employees during in water work (Aug-Feb)
 - Monitors spaced throughout Puget sound area during construction activities

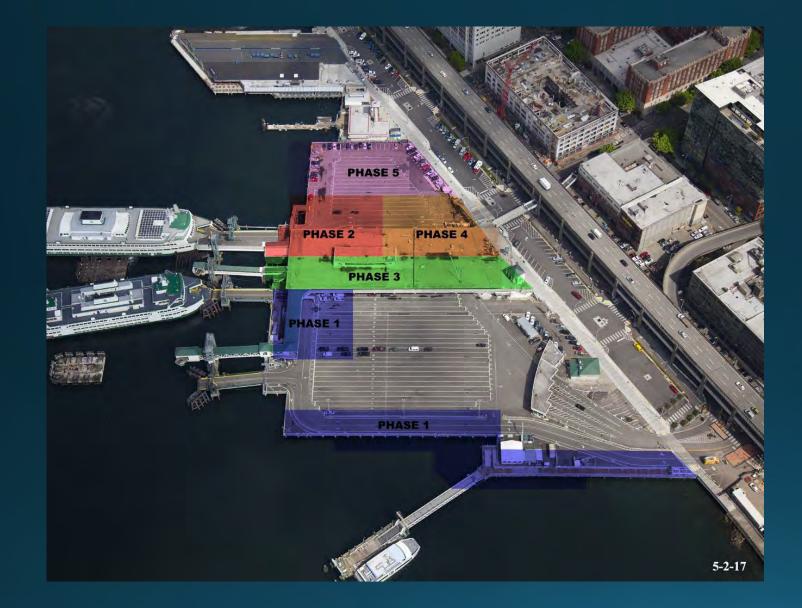
Water Quality Monitoring



- In water work activities during each phase from Aug – Feb
- Continuous visual monitoring
- Extensive sampling monitoring
- Activities
 - Pile install
 - Use of bubble curtains
 - Sediment Capping

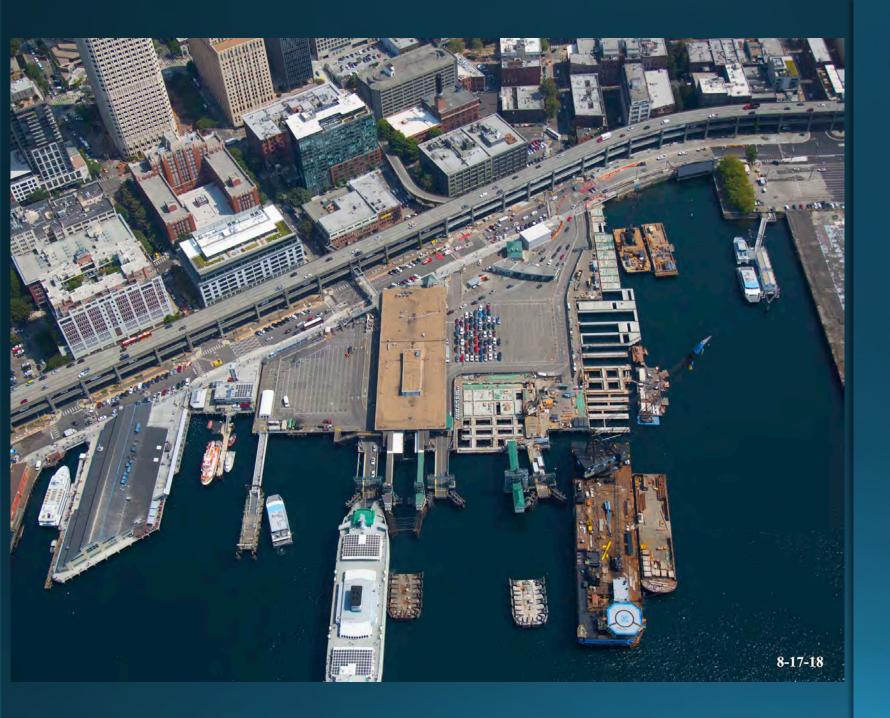




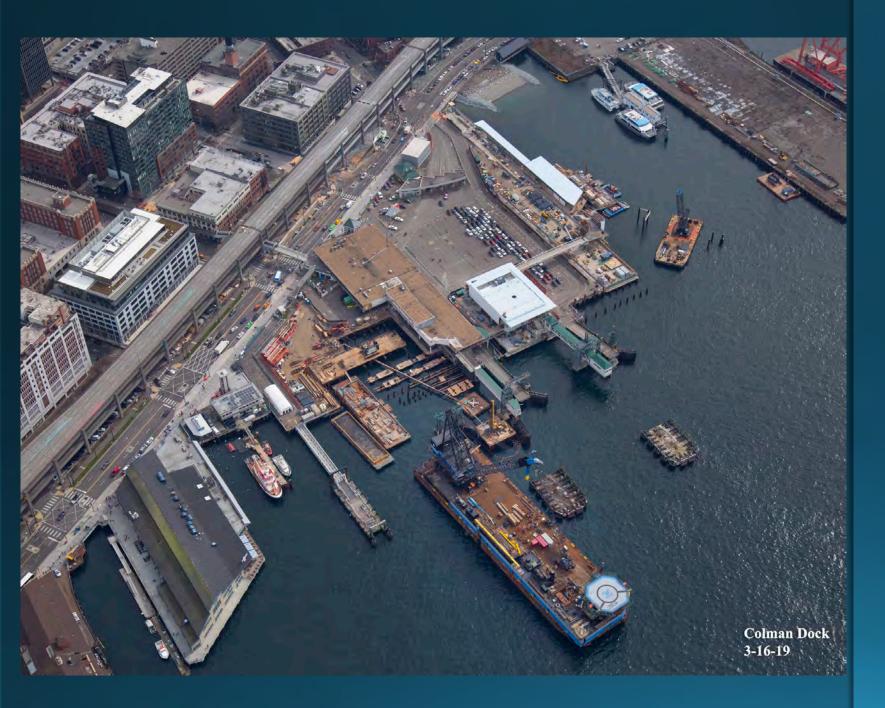


Phasing Overview

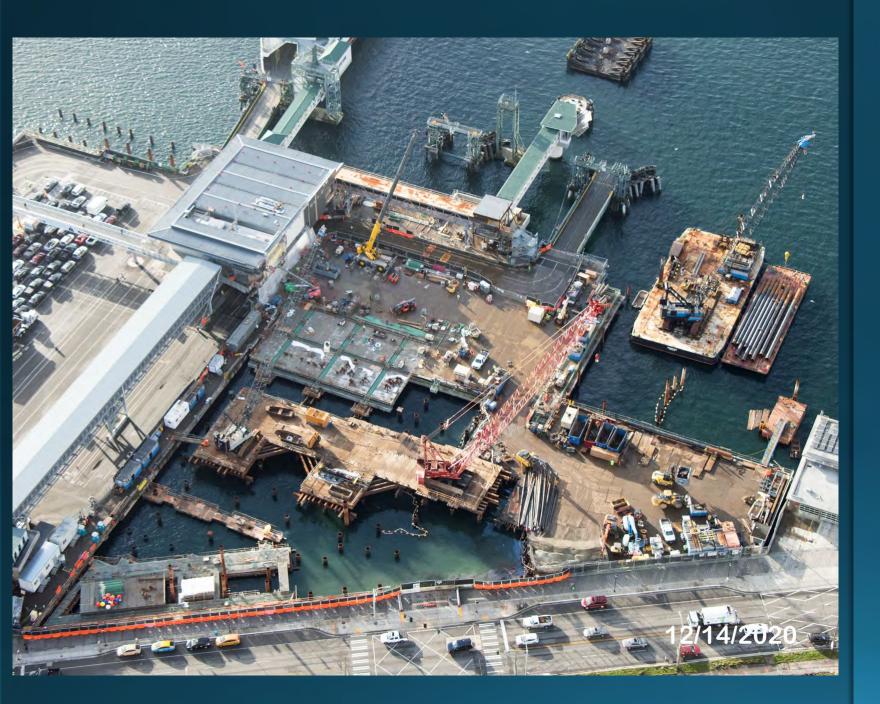
- Total of 5 Phases
- 5 Separate Buildings
 - POF (King County)
 - Terminal Building
 - Entry Building
 - EPC
 - VPAC Building



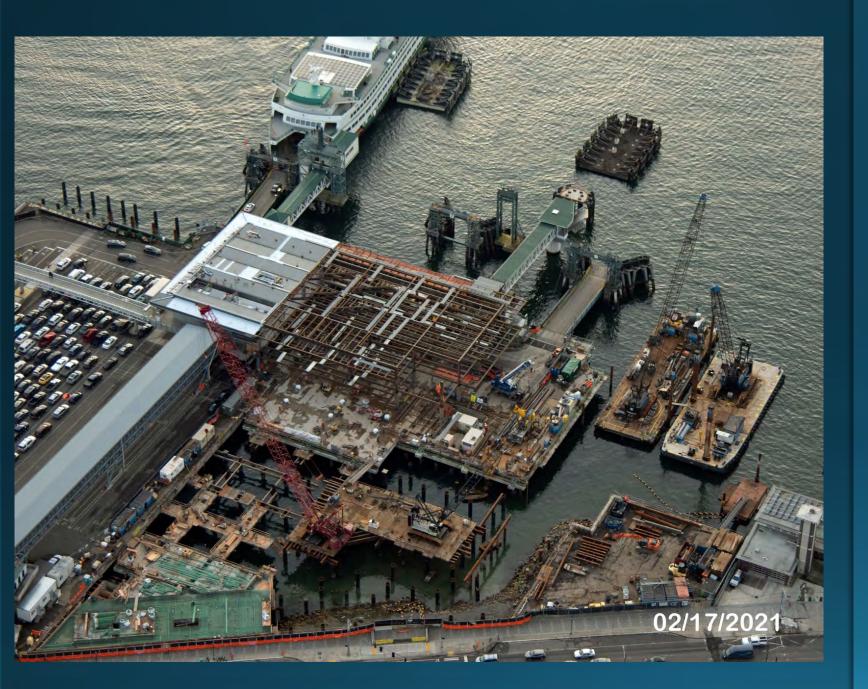
- Relocate POF facility to North
- Demo of southern portion of trestle
- POF Construction
- Interim Terminal Building Construction



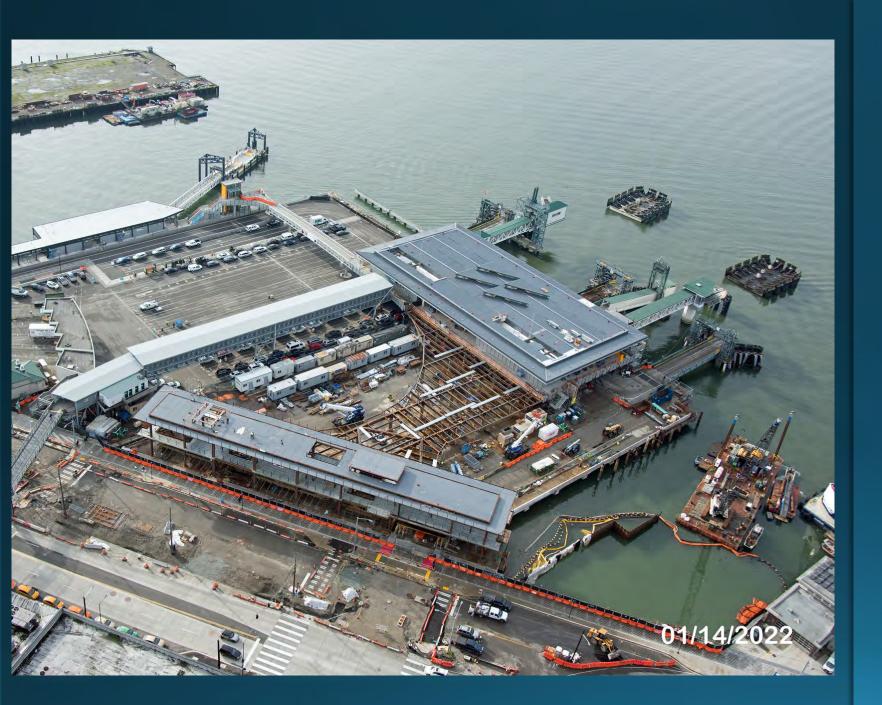
- Remove Slip 3
- Demo North Side of Old Terminal Building and Dock
- Begin construction on first third of new Terminal Building



- Demo old dock
- Construct new dock



- Erect remaining Terminal
- Construct dock



- Erect Entry Building and EPC
- Removal of Phase 5 Fill Cell



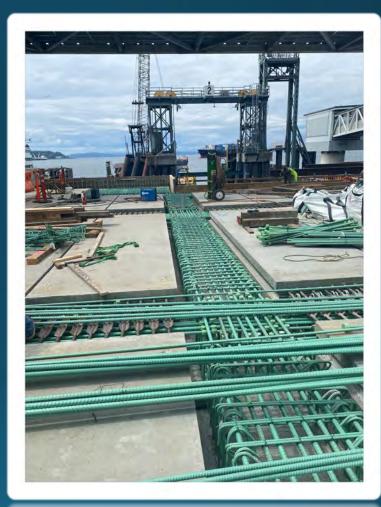


Trestle Construction

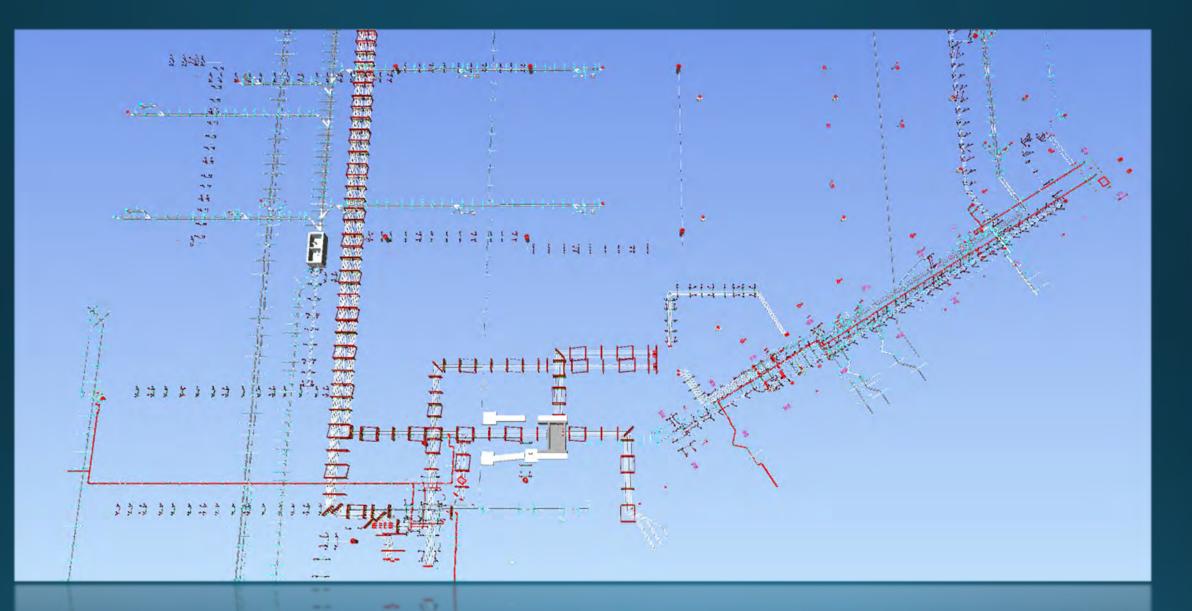
- Drive Pile
- Pour pile plug
- Install falsework
- Pour Stage 1 Pile Caps
- Set Precast Deck Panels
- Pour Stage 2 Pile Caps
- Infill Shear Keys
- HMA Paving









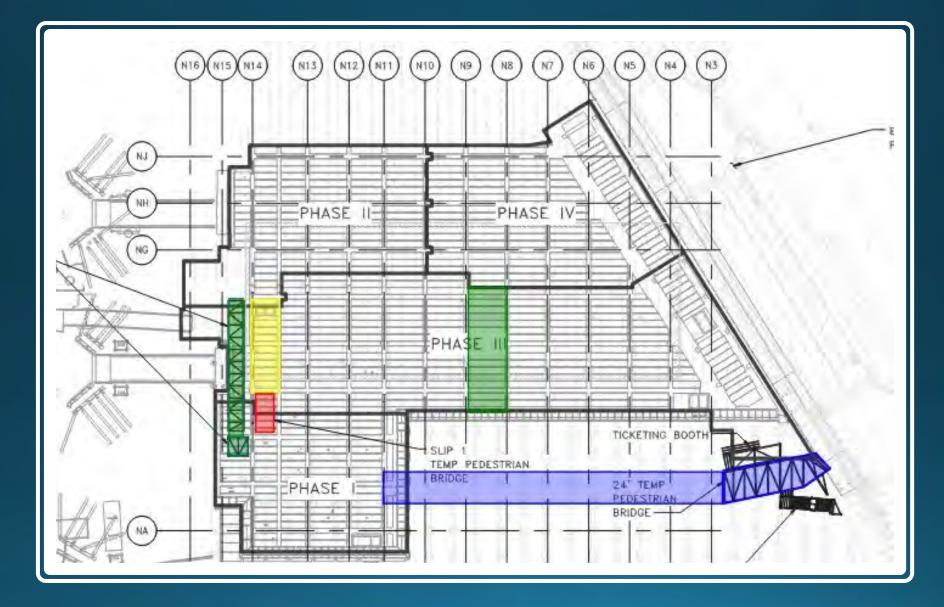


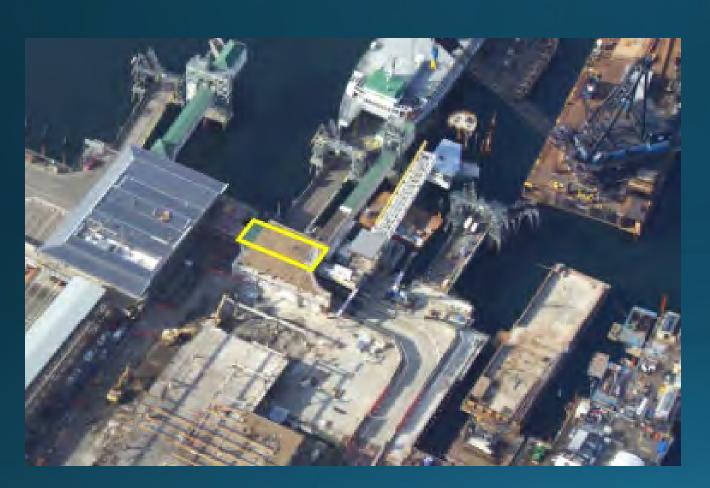
Under Dock Coordination

Under Dock Coordination

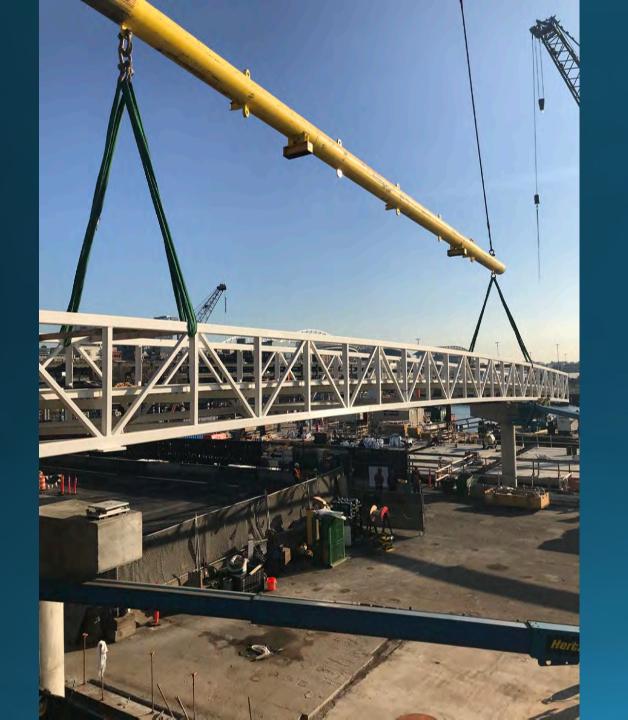


Temporary Bridges











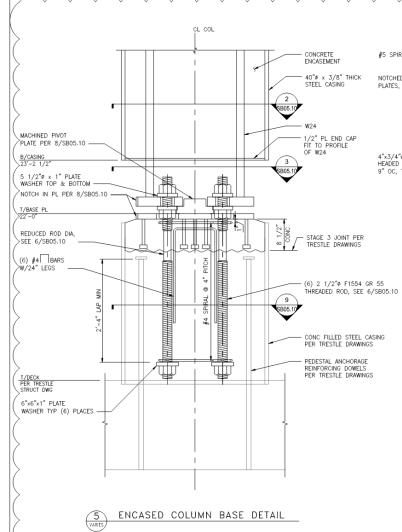
Building Construction

- Terminal Building, Entry Building, Elevated Pedestrian Connector
 - Design includes several future retail spaces
- Terminal Building orientation was flipped to run North – South.
- Unobstructed views of Elliott Bay
- Terminal building 22,000 SF with new seating capacity -362



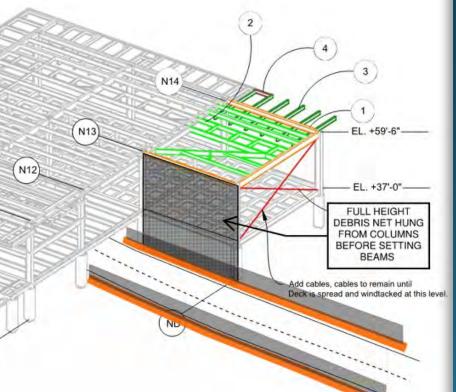
Building Construction





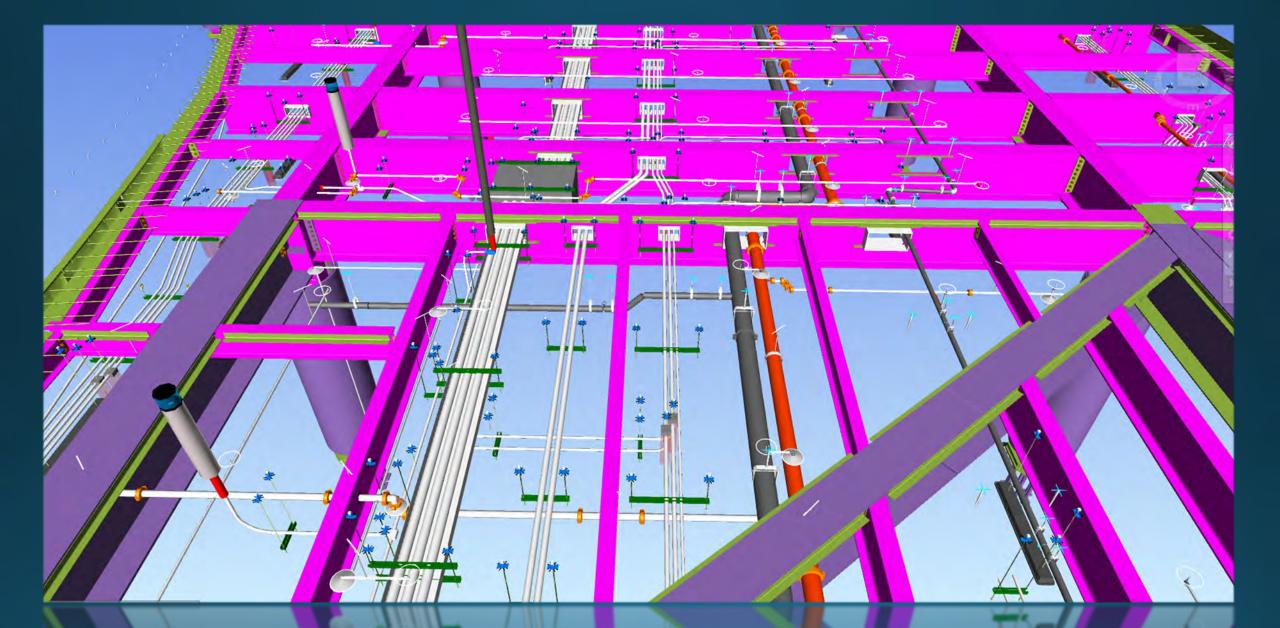
- A-Typical Column Baseplate Connection at Trestle Tie-in.
- Bolt design was coordinated through testing at UW.
- Reduced ROD section gives controlled breaking point of bolts during seismic event.





Building Construction

- Building erection occurred while maintaining WSF access
- Steel members set in between boats loading and unloading
- WSF queuing was continually switched and coordinated with WSF operations.



Above Trestle Coordination

Building Construction

- Elevated structures (EPC/TB) were designed to have 16' clearance
 - Clearance requirements pertained to both structural steel and MEP install.
- Utilities had to be coordinated and routed through structural steel
 - Coordination completed through BIM meetings with steel fabricator, MEP trades, and structural designer
- Information was coordinated before shop drawings and fabricated with added penetrations and stiffeners





