BRENT SPENCE
BRIDGE CORRIDOR

The Brent Spence Bridge - A Progress Update

November 13, 2025

Department of Transportation

INVESTING IN LOCAL COMMUNITIES. GROWING AMERICA'S ECONOMY.

brentspencebridgecorridor.com

TEAM KENTUCKY
TRANSPORTATION CABINET

AGENDA

- Project Overview
- OH Design
- Longworth Hall
- KY Design
- Companion Bridge and Construction

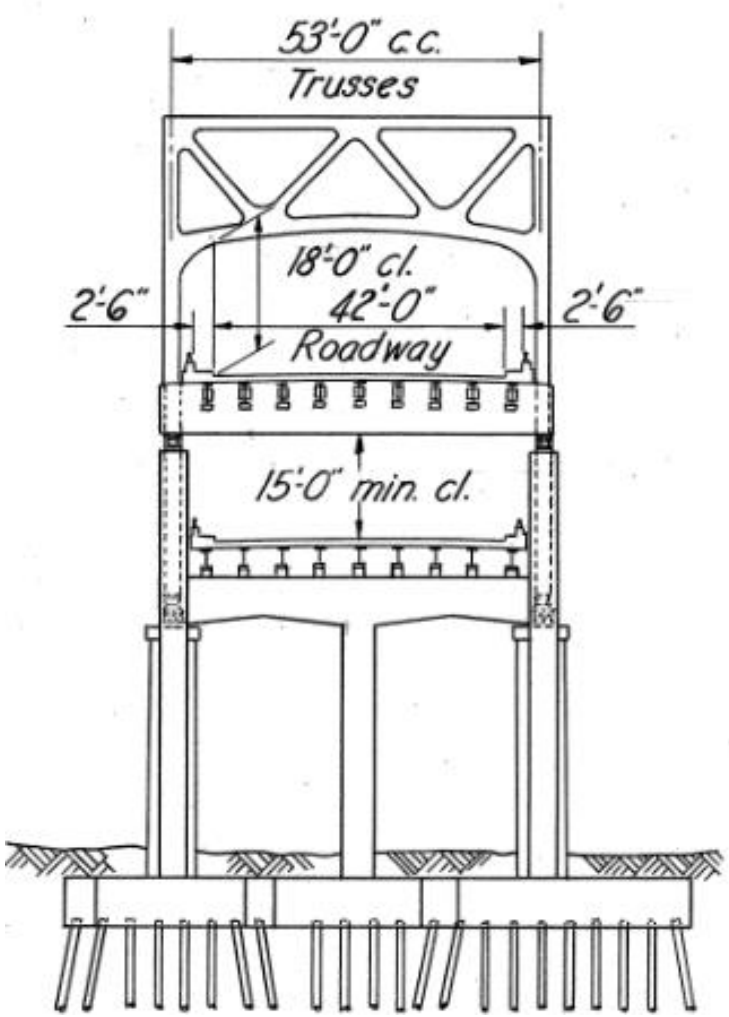
BRENT SPENCE
BRIDGE CORRIDOR

PROJECT HISTORY AND OVERVIEW


INTERSTATE HIGHWAY SYSTEM
INTERSTATE
75
0.4 MILES
STATE FUNDS 10%
KENTUCKY STATE HIGHWAY DEPT.
COST $2,740,000
FEDERAL AID FUNDS 90%
U.S.DEPT. OF COMMERCE
BUREAU OF PUBLIC ROADS
FOGARTY ELECTRIC
Hadorn Photographers

IMPROVE ROADWAY GEOMETRICS

Before: Three 12-feet lanes & 5-feet shoulders



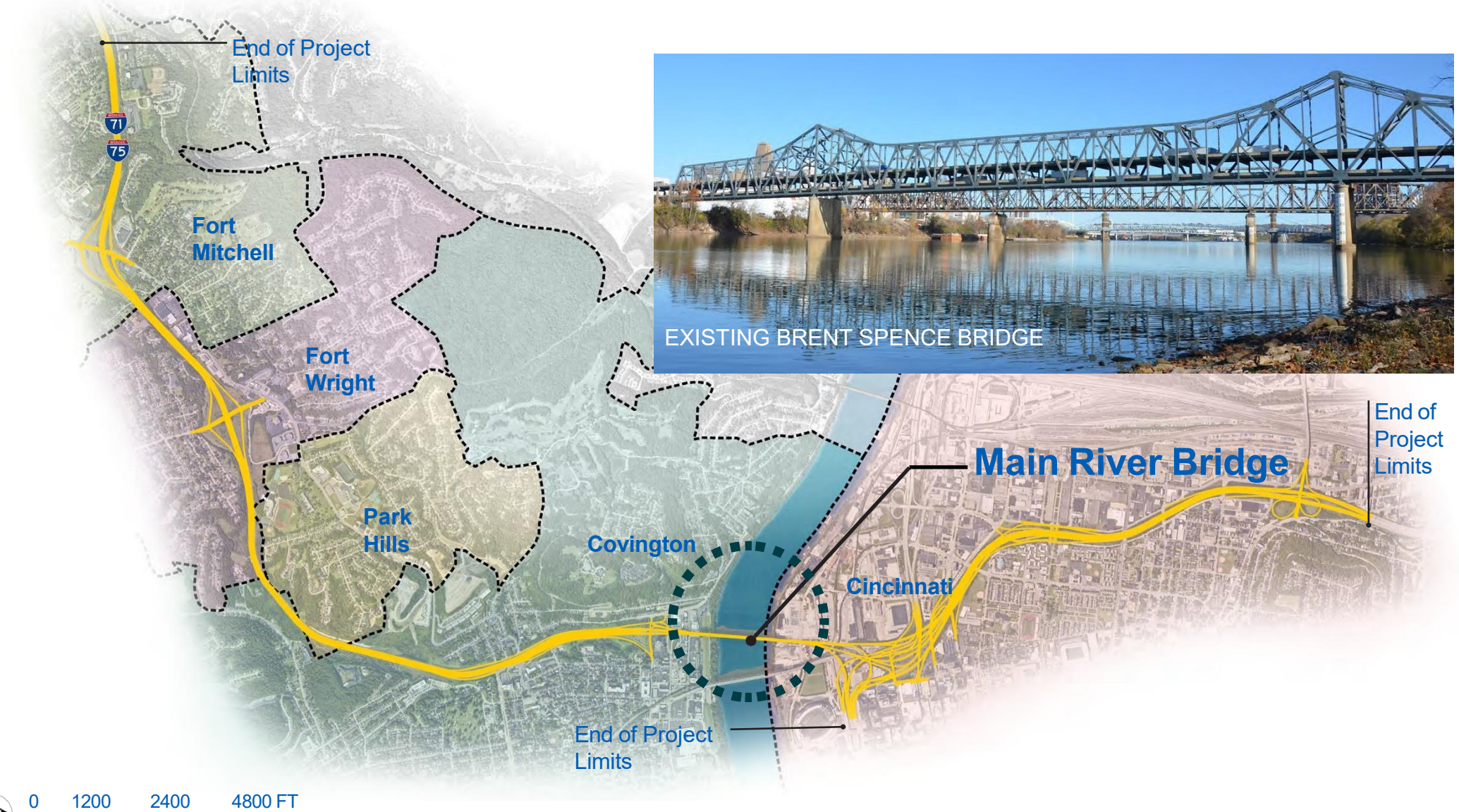
Now: Four 11-feet lanes & 1-feet shoulders

MAINTAIN KEY CONNECTIONS

- Improves safety and design
  - The Brent Spence bridge was restriped in 1985
- Addresses one of the worst truck bottlenecks in the nation
- Improves a critical highway network connecting Florida to Michigan
  - I-75 carries more than $1B worth of freight every day
  - CVG is the 7th largest cargo airport in North America and the 20th in the world

PROJECT HISTORY

BACKGROUND


End of Project Limits
71
75
Fort Mitchell
Fort Wright
Park Hills
Covington
Cincinnati
Main River Bridge
End of Project Limits
End of Project Limits
EXISTING BRENT SPENCE BRIDGE
0
1200
2400
4800 FT


BRENT SPENCE
BRIDGE CORRIDOR

PROGRESSIVE DESIGN-BUILD TEAM

- Bi-State Management Team
  - Six ODOT/KYTC Staff
- Support Contracts (lead firm)
  - CCOM (HNTB)
  - QAM (Michael Baker)
  - CEI (WSP)
  - ICE (Stanton)
  - SCE (KCI)

- Contractors – Joint Venture
  - Walsh Construction Company II, LLC.
  - Kokosing Construction Company, Inc.
- Design Consultants
  - AECOM Technical Services, Inc.
  - Jacobs Technical Services, Inc.
  - Parsons Corporation, Inc.

RECENT ACTIVITIES (OCTOBER 2023-JUNE 2025)

- By the numbers
  - One million combined hours (WKJV + BSMT)
  - 300 Full Time Equivalent designers on the project
  - 52 subcontractors, including 31 design firms
  - 309,000 cubic yards of structural concrete
  - 95M pounds of structural steel (5 x Paycor Stadium)

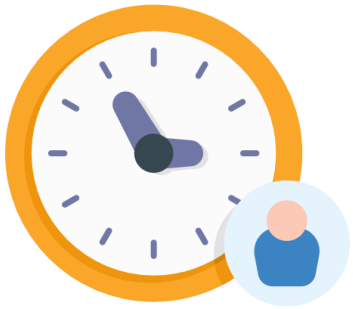
- Both OH and KY have continuously collaborated with local representatives regarding design elements of the project

BRENT SPENCE BRIDGE CORRIDOR

WHAT TO EXPECT

- Schedule of work is being developed now
- Design has reached 60% complete
- Early work in 2025; in-water work expected to begin in 2026

BY THE NUMBERS



6 Million
Workhours

700
Estimated
Trades

60+
Subcontractor
Packages

220+
Events
Completed

BEHIND THE NUMBERS

- 70 graduates in first four cohorts
- 93% graduation rate
- $36/hr avg pay for last two cohorts

DESIGN UPDATE
OHIO

OHIO SEGMENT

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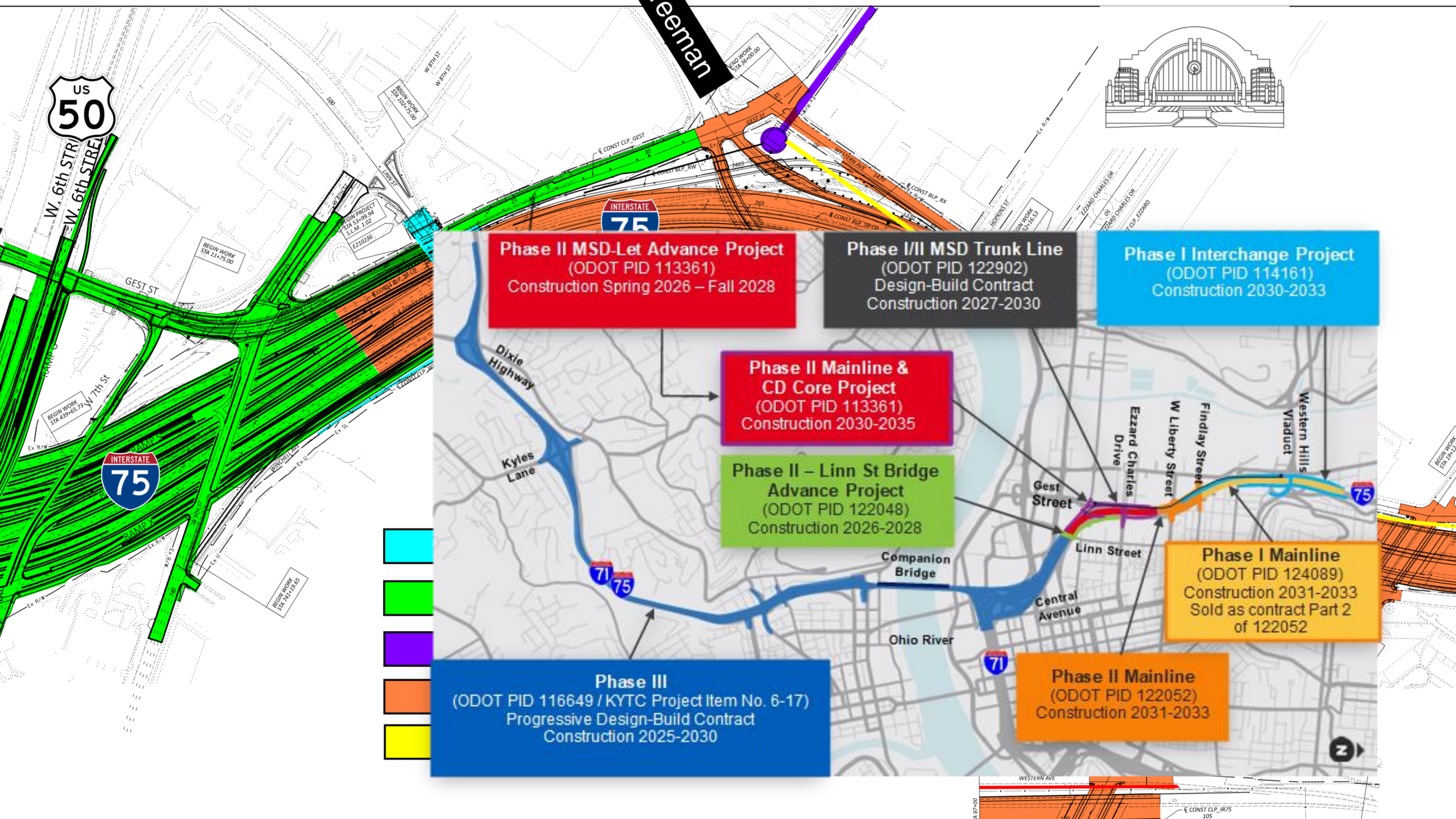


Phase II MSD-Let Advance Project
(ODOT PID 113361)
Construction Spring 2026 – Fall 2028
Phase I/II MSD Trunk Line
(ODOT PID 122902)
Design-Build Contract
Construction 2027-2030
Phase I Interchange Project
(ODOT PID 114161)
Construction 2030-2033
Phase II Mainline & CD Core Project
(ODOT PID 113361)
Construction 2030-2035
Phase II – Linn St Bridge Advance Project
(ODOT PID 122048)
Construction 2026-2028
Phase I Mainline
(ODOT PID 124089)
Construction 2031-2033
Sold as contract Part 2 of 122052
Phase II Mainline
(ODOT PID 122052)
Construction 2031-2033
Phase III
(ODOT PID 116649 / KYTC Project Item No. 6-17)
Progressive Design-Build Contract
Construction 2025-2030
Dixie Highway
Kyles Lane
Companion Bridge
Ohio River
Central Avenue
Linn Street
Gest Street
Ezzard Charles Drive
W Liberty Street
Findlay Street
Western Hills Viaduct
US 50
W. 6th STREET
INTERSTATE 75
GEST ST
eeman

Ohio Segment Update

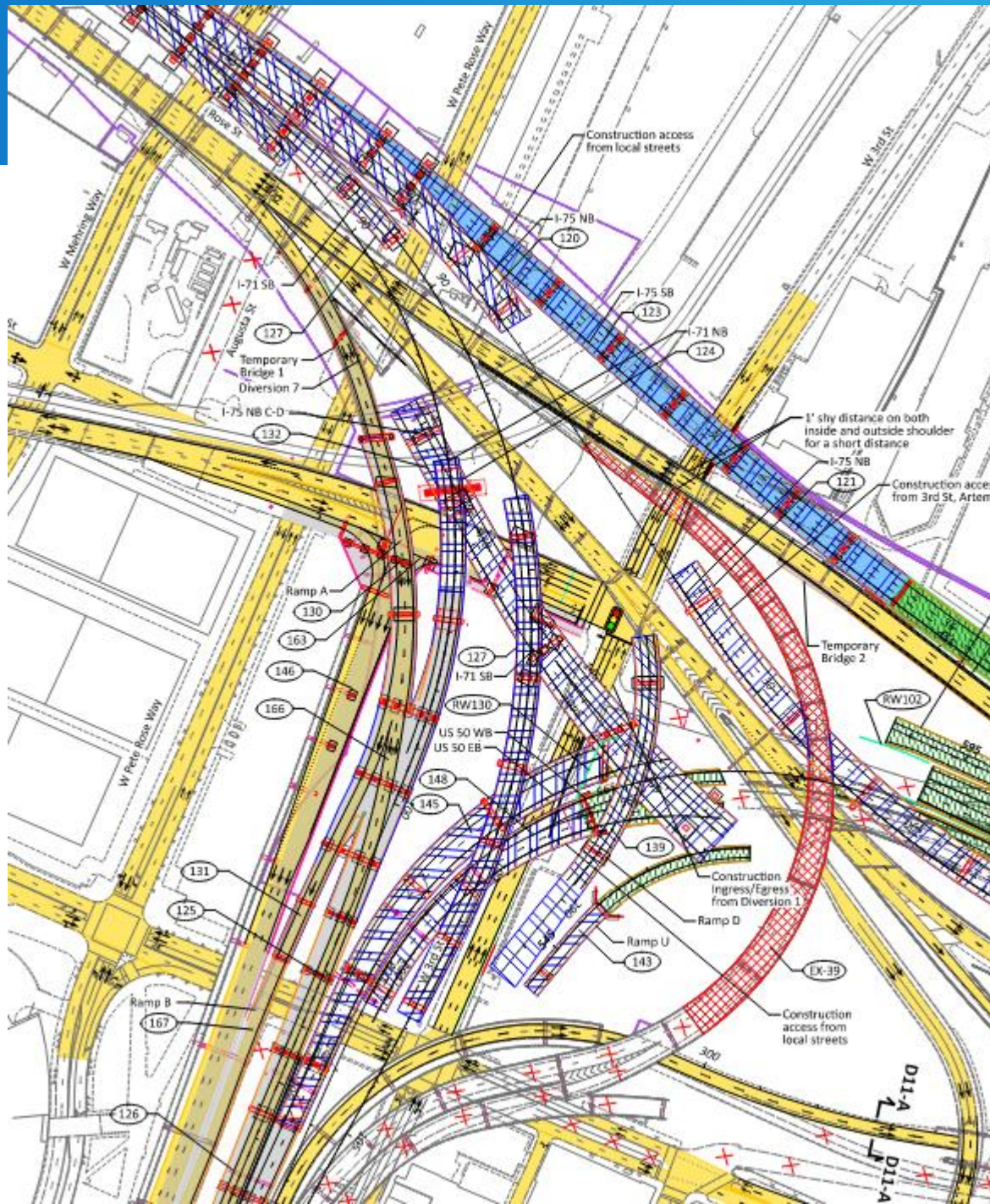
MOT

Coordination:

- City of Cincinnati
- First Responders
- Stakeholders such as the Bengals (Parking ingress/egress)

Just in time MOT (14 Major Phases)

- Phase 1A (Stage, 1, 2, 3)
- Phase 1B, 2A, 2B, 3A, 3B (Stage 1, 2)
- Phase 4A




Paycor Stadium


5th Street
CD
NB
US
50
INTERSTATE
75
INTERSTATE
75
CD
SB


INTERSTATE
75
INTERSTATE
75

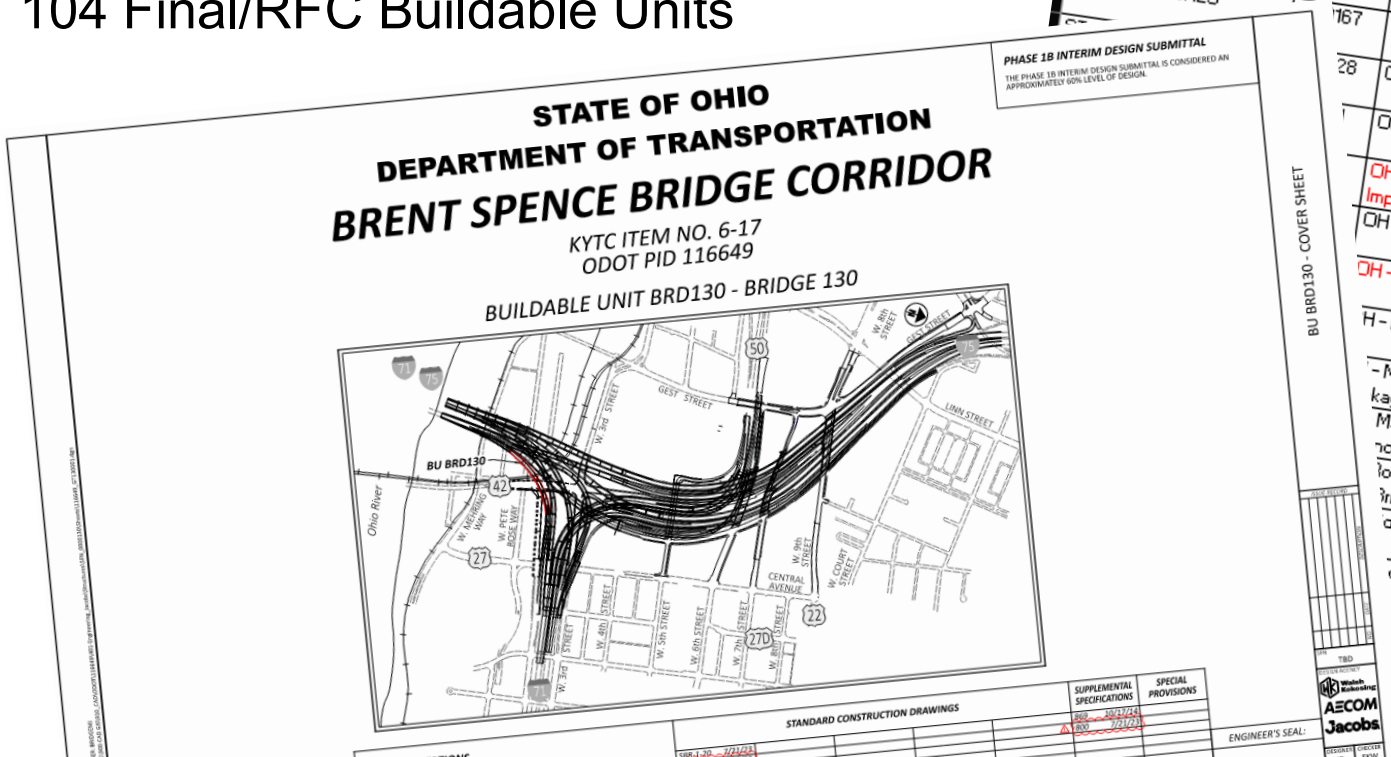

INTERSTATE
71
INTERSTATE
71
INTERSTATE
75

Ohio Segment by the Numbers

<u>Design Packages:</u>

81 Interim Buildable Units – 3985 Sheets

104 Final/RFC Buildable Units

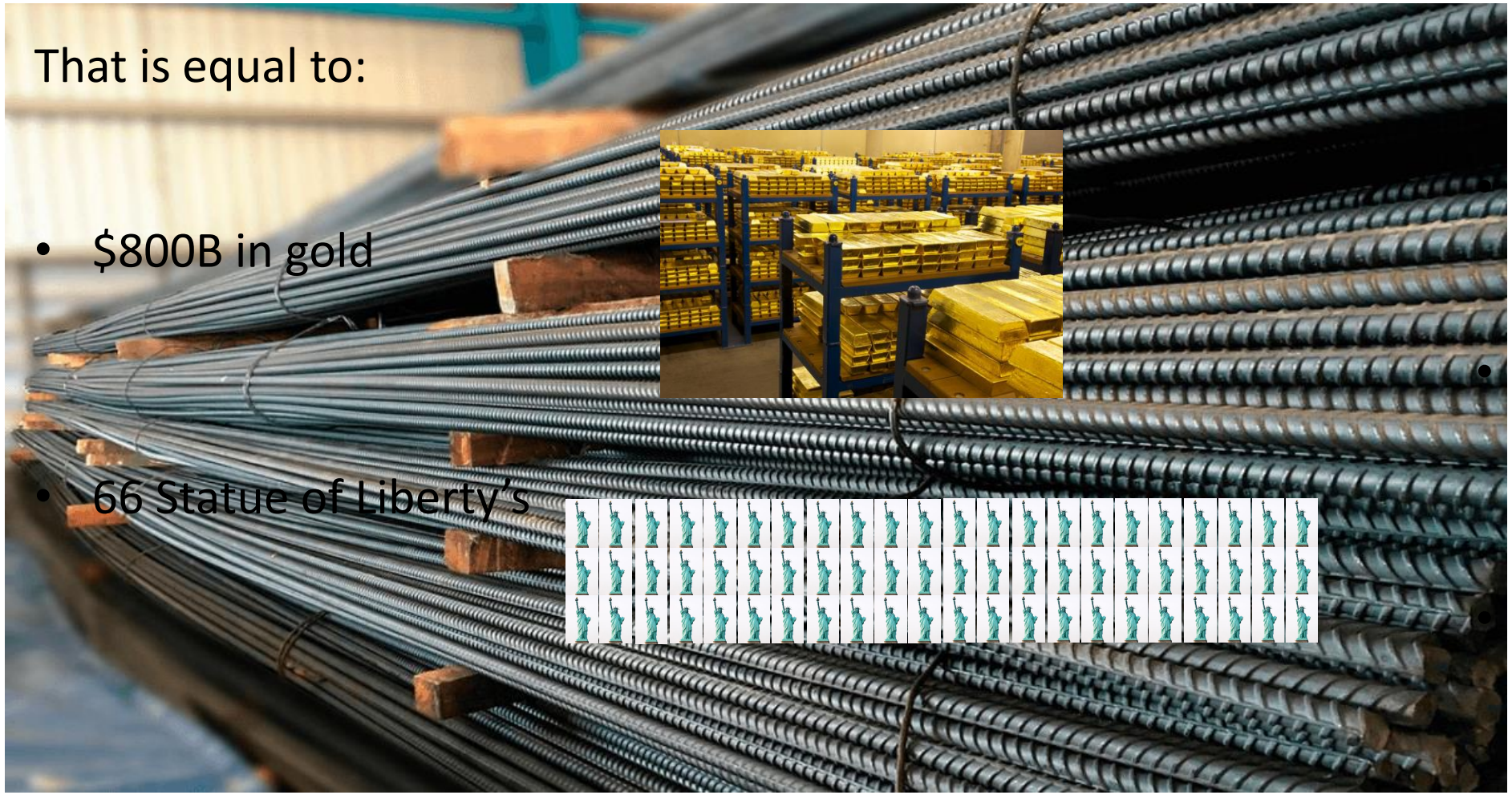


Design Work - Ohio (OH) Section

Disciplines	BU #	Design Package Description	Design Firm	Design Lead	Submittal Stage	Step 1 Internal Design Review & Reconcile Comments	Step 2 IDR/CR Reviews (5 Days)
TC-TRAFFIC CONT	LIG007A	OH - Lighting Early Package	Jacobs	Katie Aiken	5- Final/RFC 2	8/12/25	8/26/25
TC-TRAFFIC CONT	LIG008A	OH - Temporary Lighting Early Package	2LMN	Emilie Worley	5- Final/RFC 2	8/19/25	9/3/25
ST-STRUCTURES	WAL114	OH - Retaining Wall 114	2LMN	Hart	5- Final/RFC 2	8/29/25	9/15/25
ST-STRUCTURES	BRD131	OH - Bridge 131	Jacobs	Carroll_1	5- Final/RFC 2	9/2/25	9/16/25
ST-STRUCTURES	WAL129	OH - Retaining Wall 129	Jacobs	Centers	5- Final/RFC 2	9/4/25	9/18/25
TC-TRAFFIC CONT	ITS003A	OH - ITS Early Package	Jacobs	Rich Foote	5- Final/RFC 2	9/5/25	9/22/25
ST-STRUCTURES	BRD127A	OH - Bridge 127 - Foundation/Substructure	Jacobs	Malone-Jordan	5- Final/RFC 2	9/10/25	9/24/25
	167	OH - Bridge 167	Jacobs	Carroll_2	5- Final/RFC 2	9/12/25	9/26/25
	28	OH - Retaining Wall 128	ELR	Narsavage	5- Final/RFC 2	9/17/25	10/1/25
		OH - Bridge 171	Jacobs	Hoffmann	5- Final/RFC 2	9/22/25	10/6/25
		OH - Maintenance of Traffic - 471 Improvements	Jacobs	Pat Allen	5- Final/RFC 2	10/1/25	10/15/25
		OH - Sanitary Relocations	Jacobs	Dempsey Ballou	5- Final/RFC 2	10/2/25	10/16/25
		OH - Bridge 123	AECOM	Haynes/Mutch	5- Final/RFC 2	10/3/25	10/17/25
		H - Bridge 143	Compass	Kronk	5- Final/RFC 2	10/7/25	10/21/25
		- Maintenance of Traffic - Early kage	Jacobs	Pat Allen	5- Final/RFC 2	10/10/25	10/24/25
		Maintenance of Traffic - nced Signing	Jacobs	Pat Allen	5- Final/RFC 2	10/10/25	10/24/25
		Roadway - Interstates/ICDs Bridges to W. 5th St)	Jacobs	Lynch	5- Final/RFC 2	10/13/25	10/27/25
		dge 166	Jacobs	Carroll_1	5- Final/RFC 2	10/13/25	10/27/25
		dway Schematic	Jacobs	Lynch	5- Final/RFC 2	10/13/25	10/27/25

Ohio Segment by the Numbers

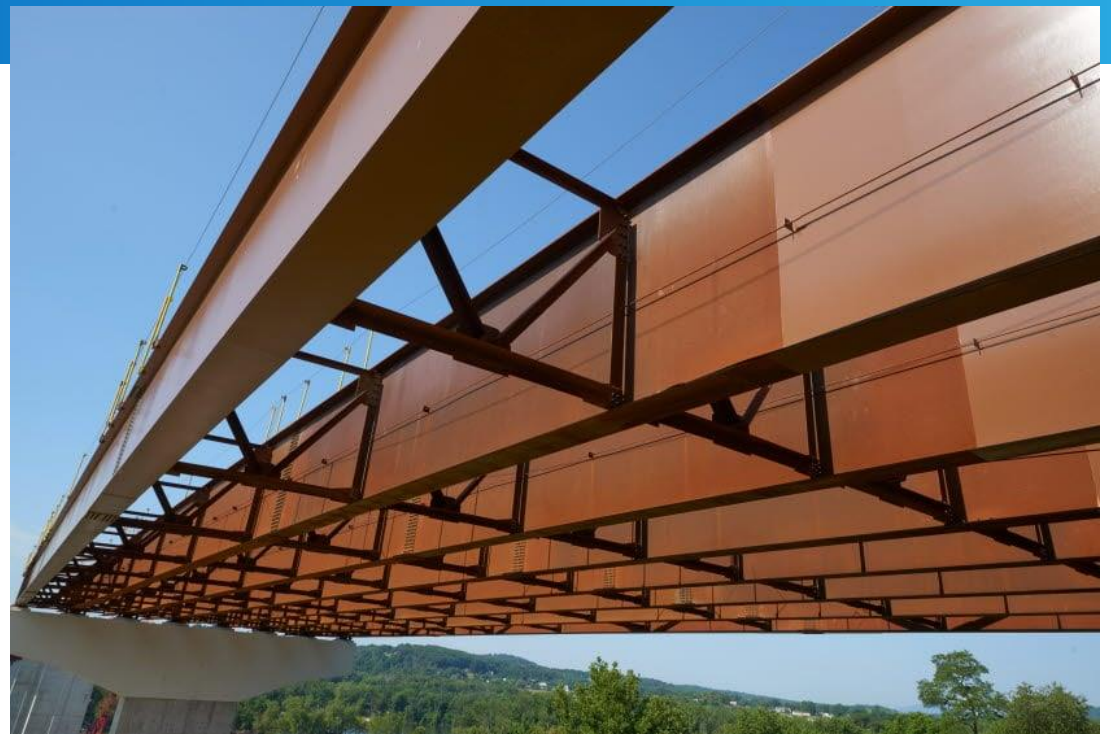
30,000,000 lbs of reinforcing bar!



- Epoxy Coated in Footings
- Galvanized in decks, railings and piers
- GFRP in railings (at joints for rigidity)

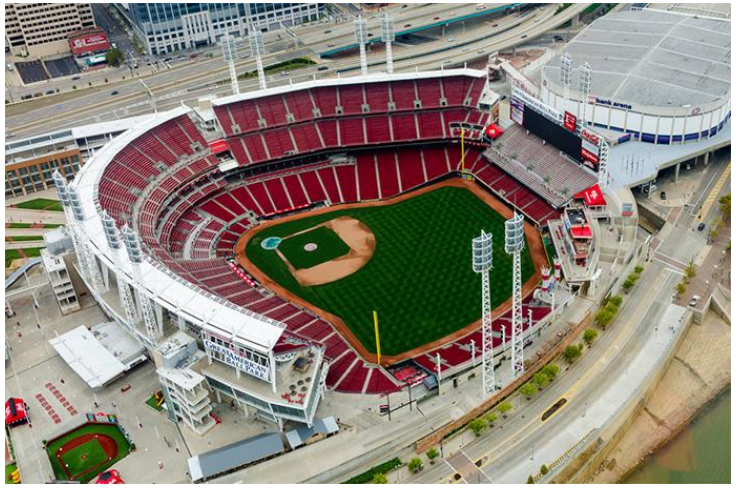
Ohio Segment by the Numbers

<u>52,000,000</u> lbs of structural steel!



That is equal to:

- 2.5 Reds Stadiums



- *104,000 barrels of whiskey*

Ohio Segment by the Numbers

46 Miles (245,000 ft) of pile

That is equal to:

- Length of the Panama Canal (51 miles)

- 800 stacked Statue of Liberty's

Ohio Segment by the Numbers

- Total Number of Bridges = ~~33~~ 32
  - Tallest Pier, Bridge 120 near Longworth Hall, 126 ft.
  - Total pile length = 244,382 ft. (46 miles)
  - Total drilled shaft length = 4,477 ft.
  - Structural Concrete = 122,877 CY
  - Reinforcing Steel = 29,124,780 lbs
  - Structural Steel = 52,000,000 lbs
  - Bearings = 1592
  - Straddle Bents = 22

- Total Number of Walls = 26
  - MSE Walls = 209,828 SF
  - SPL = 66,411 SF
  - Modular Block = 5,251 sf

Roadway

- Design Exceptions = 73

LONGWORTH HALL

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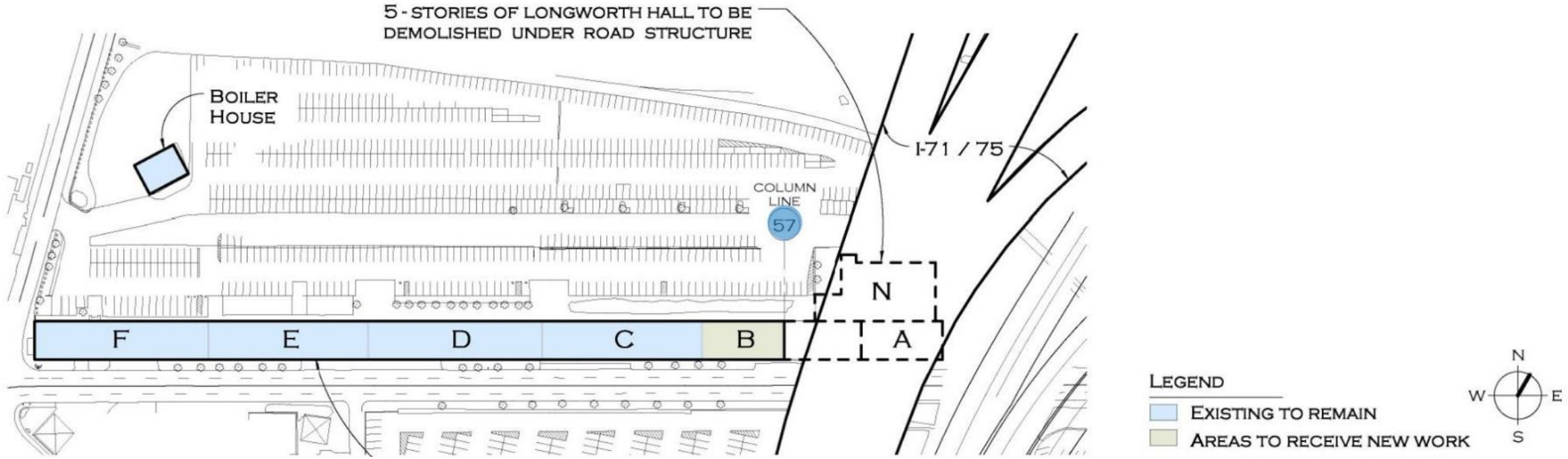
LONGWORTH HALL

- Built in 1904, Longworth Hall was originally a Baltimore & Ohio Freight Terminal and one of the longest buildings in the world.
  - Original construction: 1,277 feet long
  - It could hold up to 125 train cars, helping to move goods across the region and country.
- Listed in the National Register of Historic Places in 1986.
- In 1961, 150 feet was removed to make way for the original Brent Spence Bridge and a 5-story, 30,000 SF addition was built.

LONGWORTH HALL: PARTIAL DEMOLITION & RECONSTRUCTION

- The 1961 building addition (Sections N, A) and approximately 204 feet of the original structure (Part of Section B) will be demolished to accommodate the new bridge construction.



LONGWORTH HALL: PARTIAL DEMOLITION & RECONSTRUCTION

- Demolition and end wall construction
  - New façade wall
  - New elevator and stair
  - Asbestos remediation
  - Remaining spaces remodeled to maintain code compliance only
- Expected to begin in November 2025

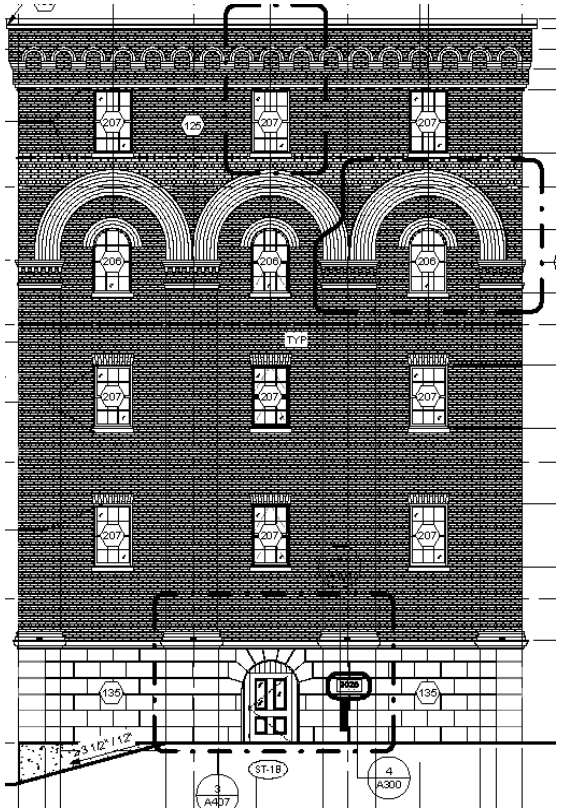
Photo 1: Longworth Hall - "Before" (The image above shows the east end of Longworth Hall "before" the introduction of the proposed Brent Spence Bridge Replacement/Rehabilitation.)

Photo 2: Longworth Hall - "After" (The image above shows how the east façade will be reconstructed as well as the bridge approach diagram.)

LONGWORTH HALL: USE OF HISTORIC MATERIALS

- Over 55,000 bricks will be salvaged during the demolition and reused in the reconstructed eastern end of the building.
- Original windows and limestone will also be salvaged and reused.
- Non-profits will have access to salvaged materials (Building Value, Habitat for Humanity, ReStore, and ReUse)

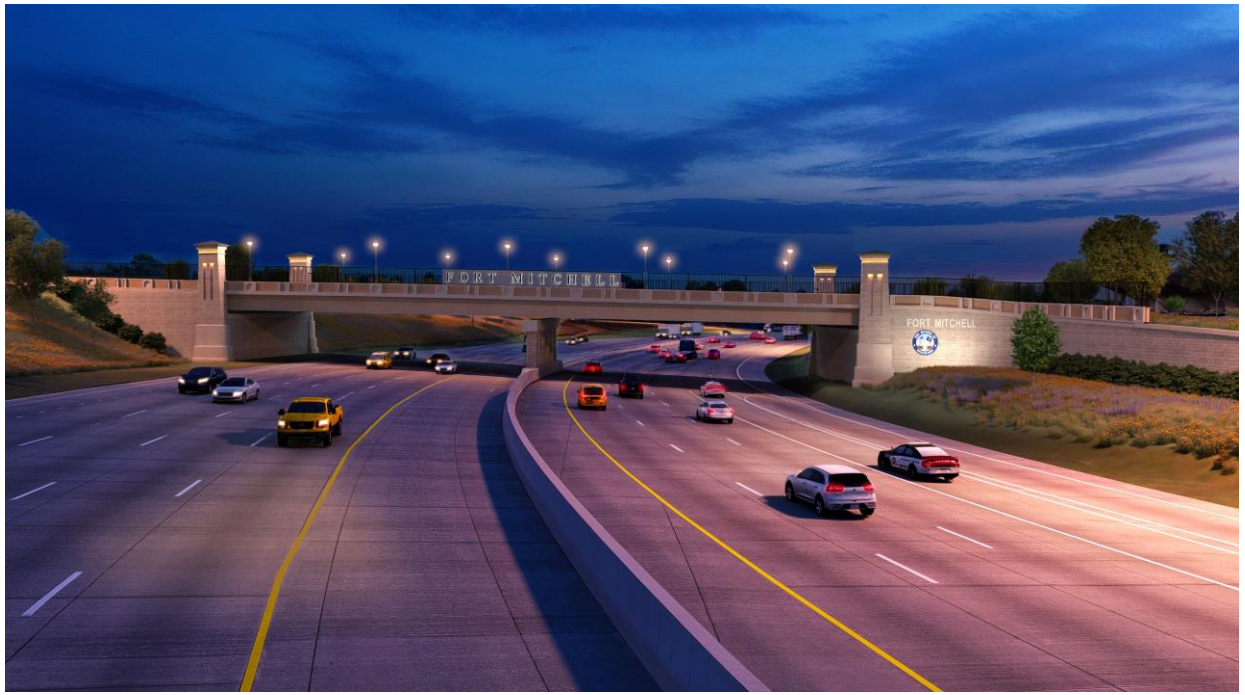
Original East Façade



Reconstruction Plan

DESIGN UPDATE KENTUCKY

KENTUCKY SEGMENT - INTERCHANGES



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KENTUCKY SEGMENT - BRIDGES

CONVENTIONAL BRIDGE

"PERGOLA" BRIDGE

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KENTUCKY SEGMENT – NOISE WALLS

BRENT SPENCE BRIDGE CORRIDOR

Kentucky Segment by the Numbers

- Total Number of Bridges = 22
  - Tallest Pier = 83 ft.
  - Total pile length = 134,000 ft. (26 miles)
  - Structural Concrete = 40,000 CY
  - Reinforcing Steel = 9,000,000 lbs
  - Structural Steel = 17,000,000 lbs
  - Bearings = 696
  - Straddle Bents = 17

- Total Number of Walls = 22
  - MSE Walls = 190,000 SF
  - Solider Pile Wall = 30,000 SF
  - Tilt-Up Wall = 116,000 SF
  - Noise Wall= 532,000 sf

Roadway

- Lane Miles = 68

DESIGN UPDATE
COMPANION BRIDGE

2024 FONSI: PREVIOUSLY RECOMMENDED BRIDGE TYPES

MAY 2024 SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT, FONSI OPTIONS INCLUDE ARCH AND CABLE-STAY BRIDGE TYPES

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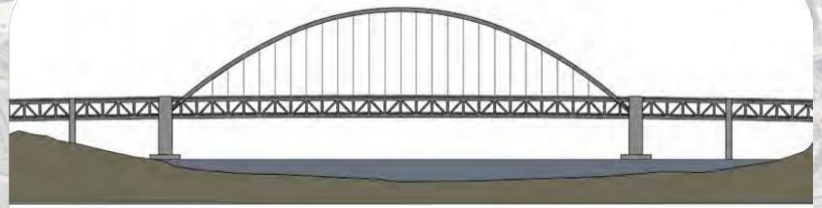
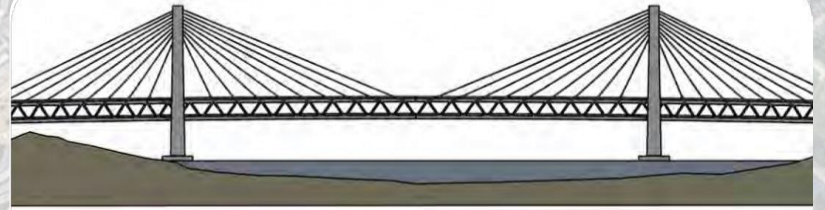
BRIDGE TYPES STUDIED BY BSMT/WKDBT

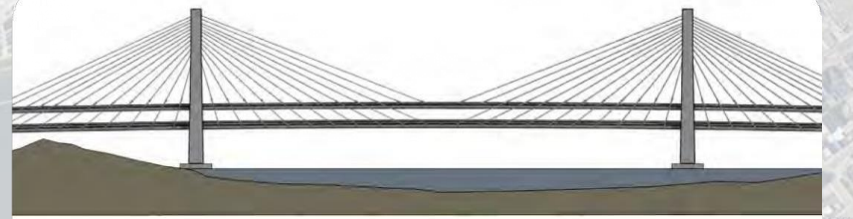
Brent Spence Bridge



- Base Concept – Arch w/ Deck Truss



- Base Concept – Cable Stayed w/Deck Truss & Vertical Pylons



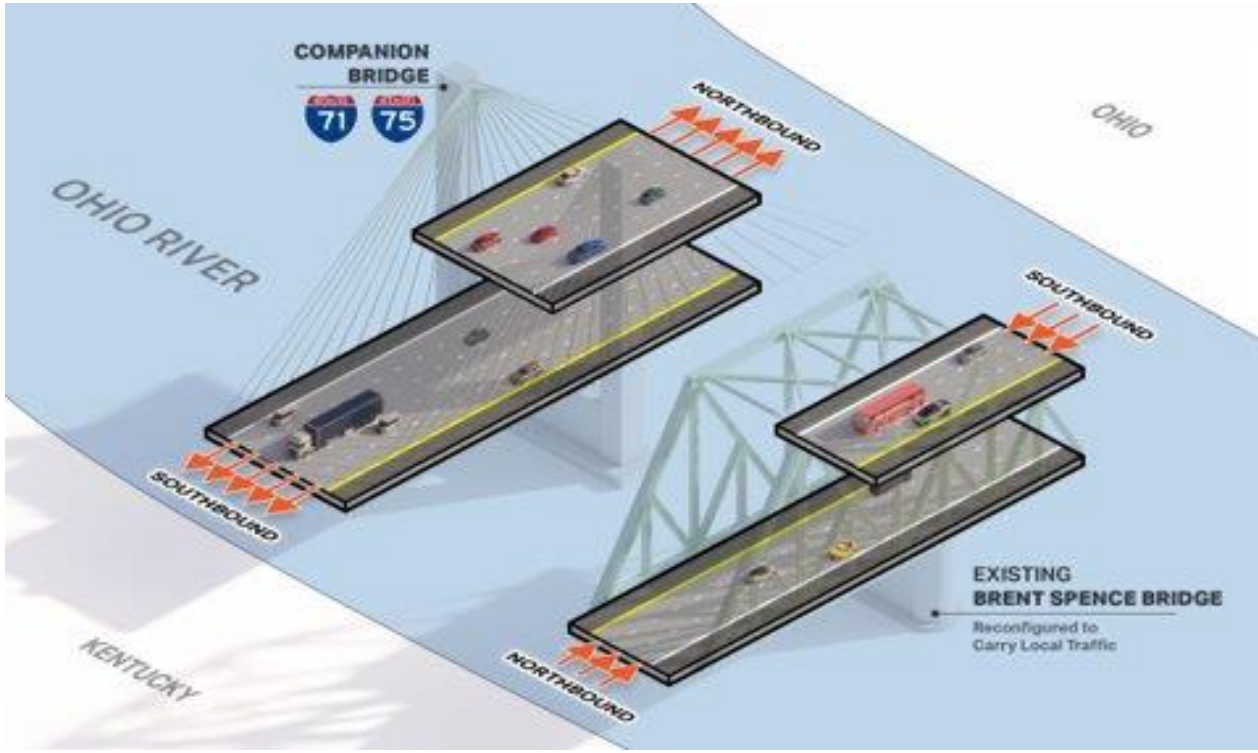
- Cable Stayed Independent Deck & Vertical Pylons

ALTERNATIVE COMPARISON

	Conceptual Construction Cost Differential ($ millions)	Schedule Impact	Constructability Risk	Increased Fabrication and Erection Costs/Risks	Increased Maintenance	Overall Construction Risk	Visually Distinctive Landmark
ALTERNATIVE 1 Tied Arch – Truss Deck	+1	+6 months	Yes	Yes	Yes	High	No
ALTERNATIVE 2 Cable Stayed – Truss Decks	+55	+3 months	No	Yes	Yes	Moderate	No
ALTERNATIVE 3 Cable Stayed – Independent Decks	0	-	No	No	No	Low	Yes

BRENT SPENCE BRIDGE CORRIDOR

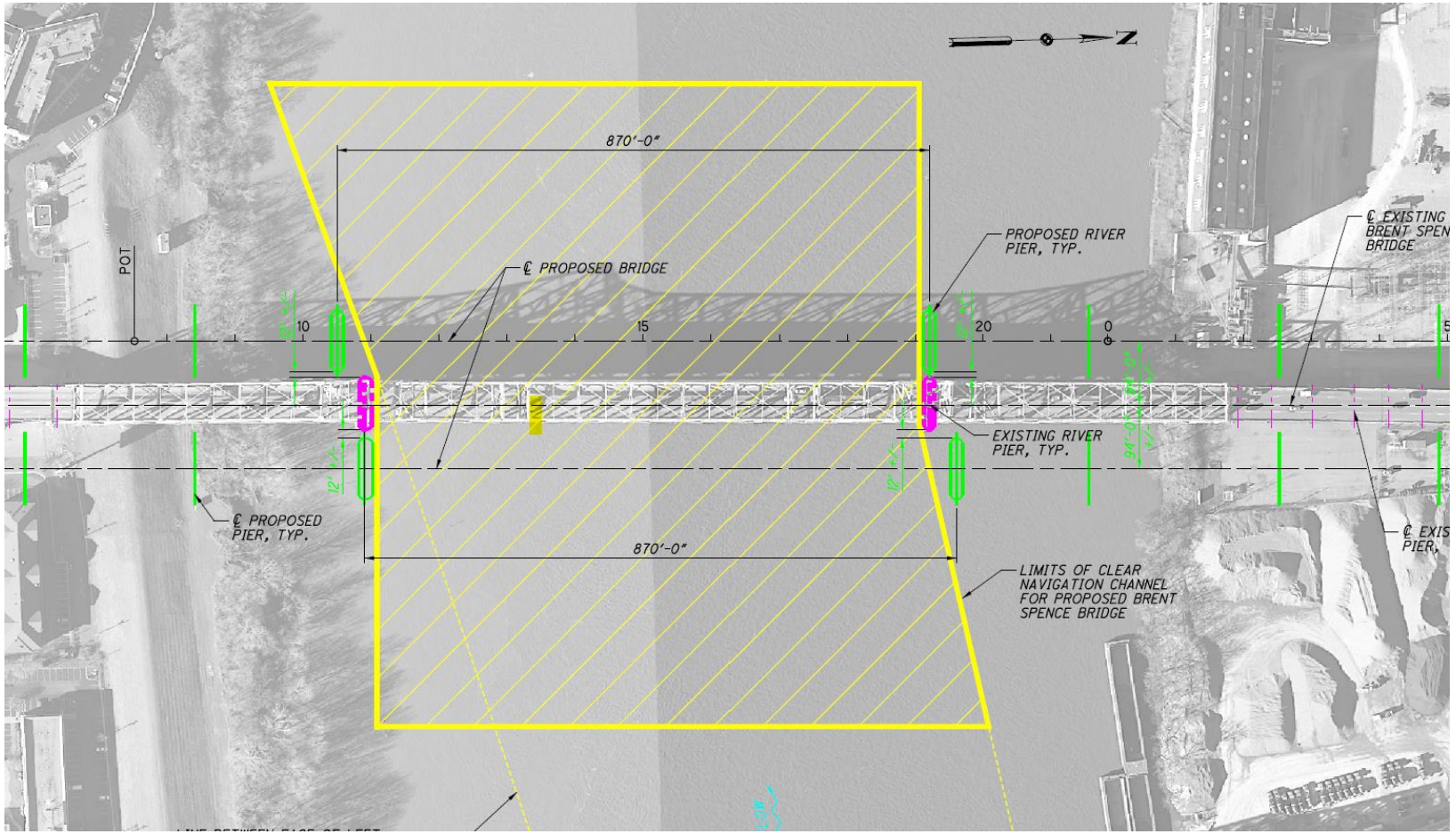
COMPANION BRIDGE DESIGN



COMPANION BRIDGE DESIGN

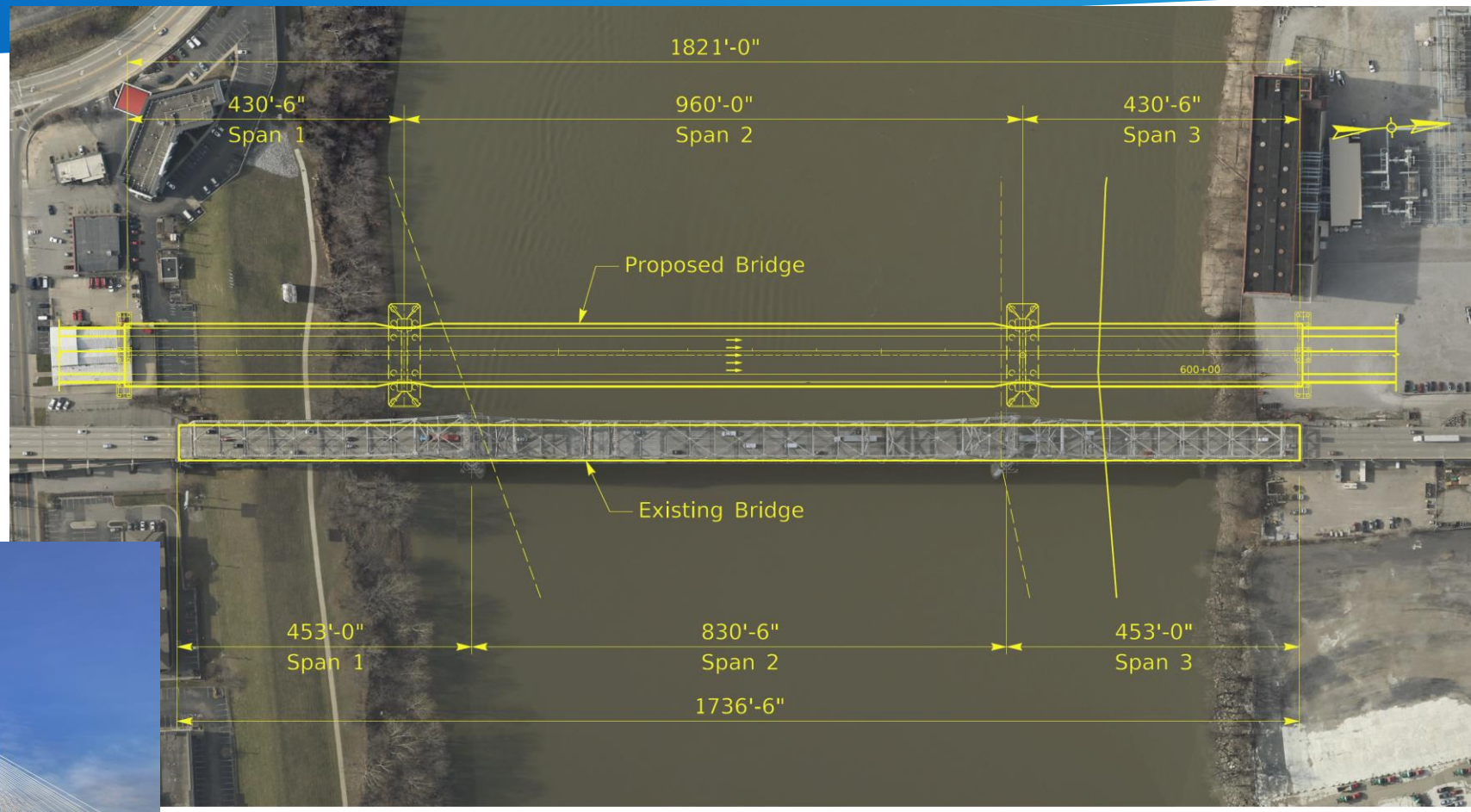
USCG Navigation Requirements

- Substructures outside of existing bridge
- Skewed limits of channel
- Low steel at El. 532



ADVANCING THE DESIGN

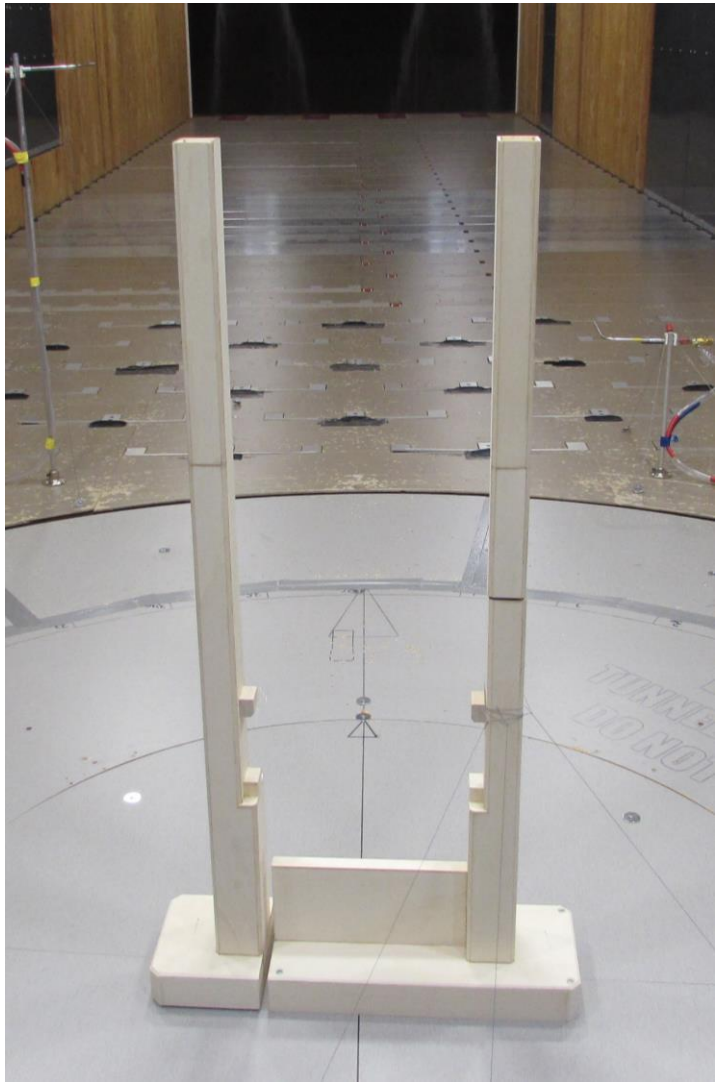
Span Arrangement



ADVANCING THE DESIGN

Efficient Pylons

- Vertical freestanding towers with no cross struts – provides visually open structure
- Towers support both decks by transferring loads from the decks to the towers through cable stays
- Drilled shaft foundations support all loads being transferred from the towers
- Designed for vessel impact (e.g. barge tows)
- Provides an economical pylon design
- Facilitates fast, safe, and simplified pylon construction techniques



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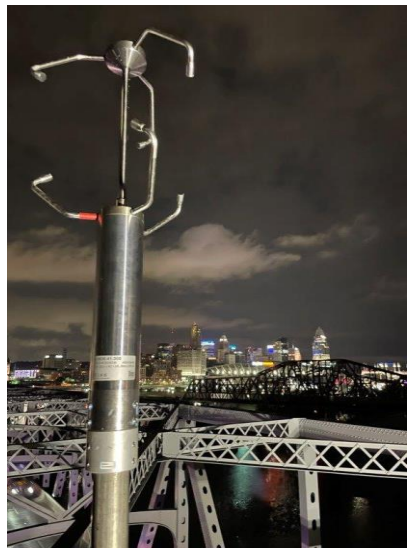
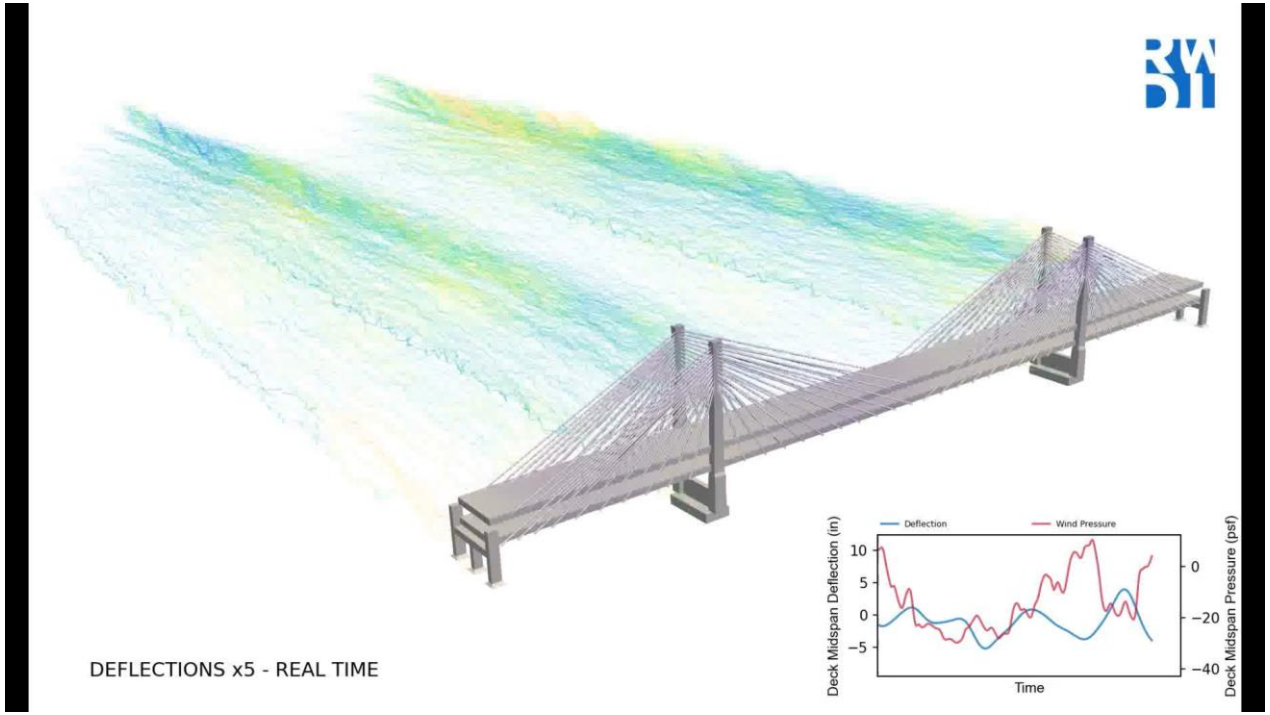
DEVELOPING WIND LOADS

- Site Specific Wind Climate Study completed to determine wind speeds and turbulent behavior at the river crossing
- Wind anemometers placed on existing Brent Spence Bridge to gather wind data





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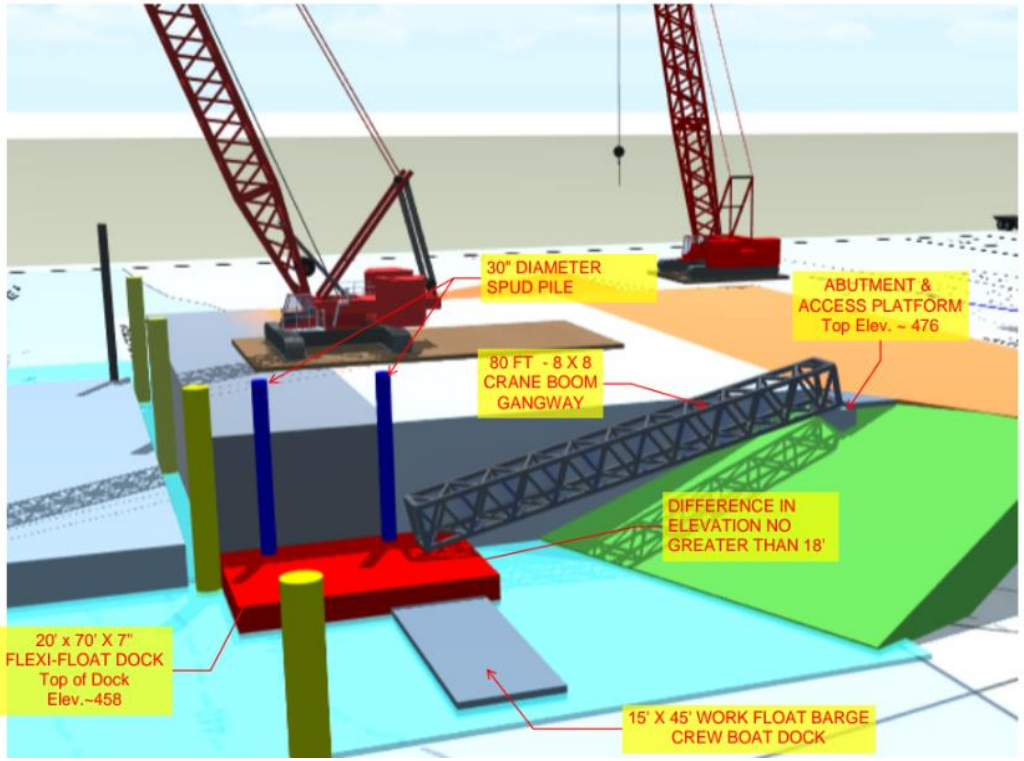
WIND TESTING

- Wind Tunnel Testing of Scaled Prototype Models to confirm aerodynamic stability and determine design loading

BRENT SPENCE BRIDGE CORRIDOR

ONE PROJECT – THREE SEGMENTS

- An integrated joint-venture.
- WKJV is divided into 3 distinct teams. This allows for a more focused approach to operational planning and continuity of leadership.
- Thousands of hours spent by the project segments developing operational plans that will guide the estimating process and provide direction to field staff once phase 2 construction begins.



LIST OF EQUIPMENT

* 3 - 10' X 40' FLEXIS FLOAT BARGES
- 15 TON FLEXI DBL TIMBERHEAD
* 1 - 15 X 45 WORK FLOAT
* 2 - 40 FT CRANE BOOM SECTION GANGWAY
* 2 - 30" 5/8" WALL SPUD PILE (TOP = Elev 486'

- CONSTRUCT UPPER HEADWALL AND ACCESS PLATFORM
- ADD DECK AND BOTTOM SKIDS ON GANGWAY
- CONSTRUCT RETAINER AND DECKING AROUND SPUD PILES .
- aDD 15 TON

BRENT SPENCE BRIDGE CORRIDOR

COMPANION BRIDGE BY THE NUMBERS

Twenty-Four – 9' Drilled shafts as deep as 80' + Rock Socket

Twenty-Four – 5' Drilled shafts as deep as 105' + Rock Socket

- 2.7M Pounds of Shaft Reinforcing Steel
- 3.7M Pounds of Drilled Shaft Casing

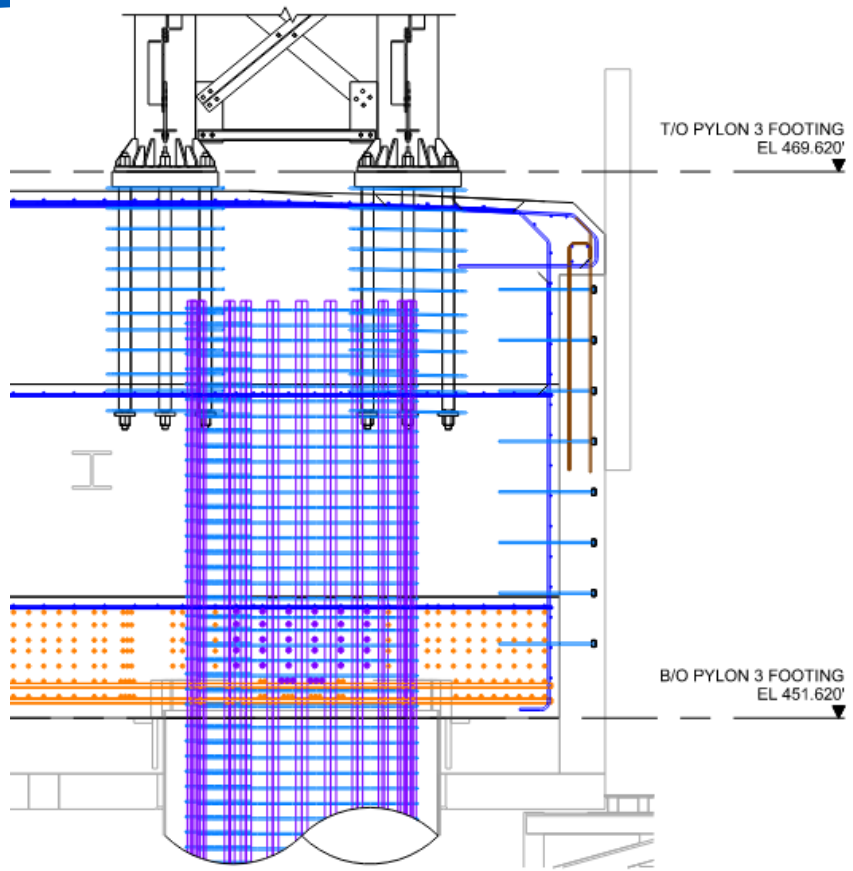
– Pylon Footers

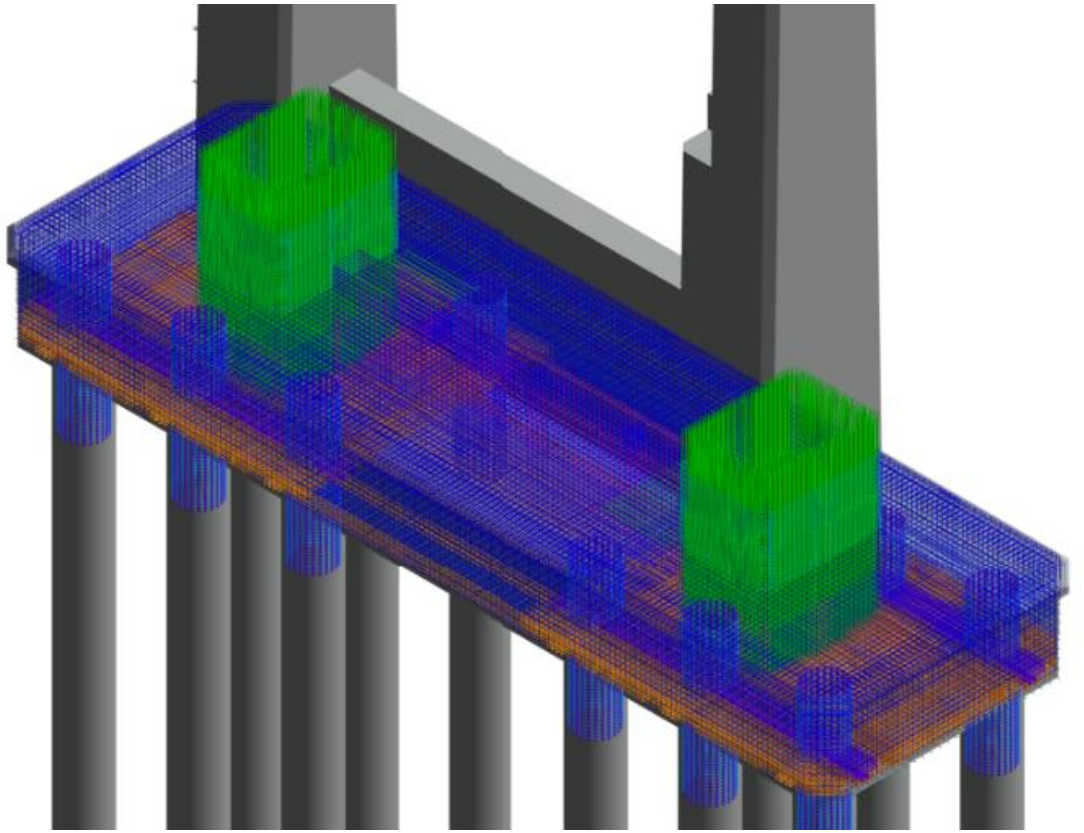
- Almost 12,000 CY of concrete and 3 Million Pounds of Reinforcing Steel

– Over 26,000,000 Pounds of Structural Steel

BRENT SPENCE BRIDGE CORRIDOR

EOR and Construction Engineer Collaboration





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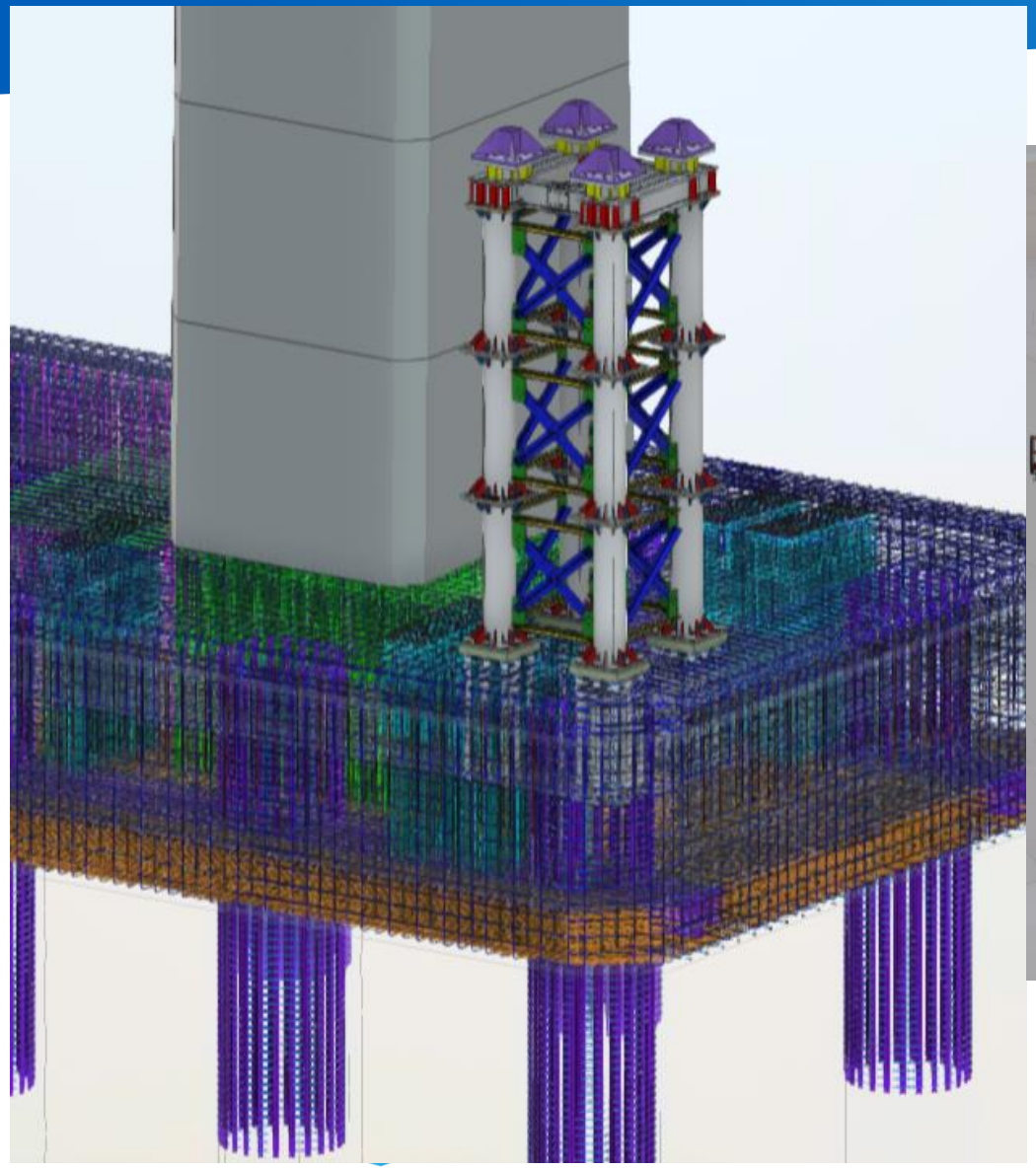
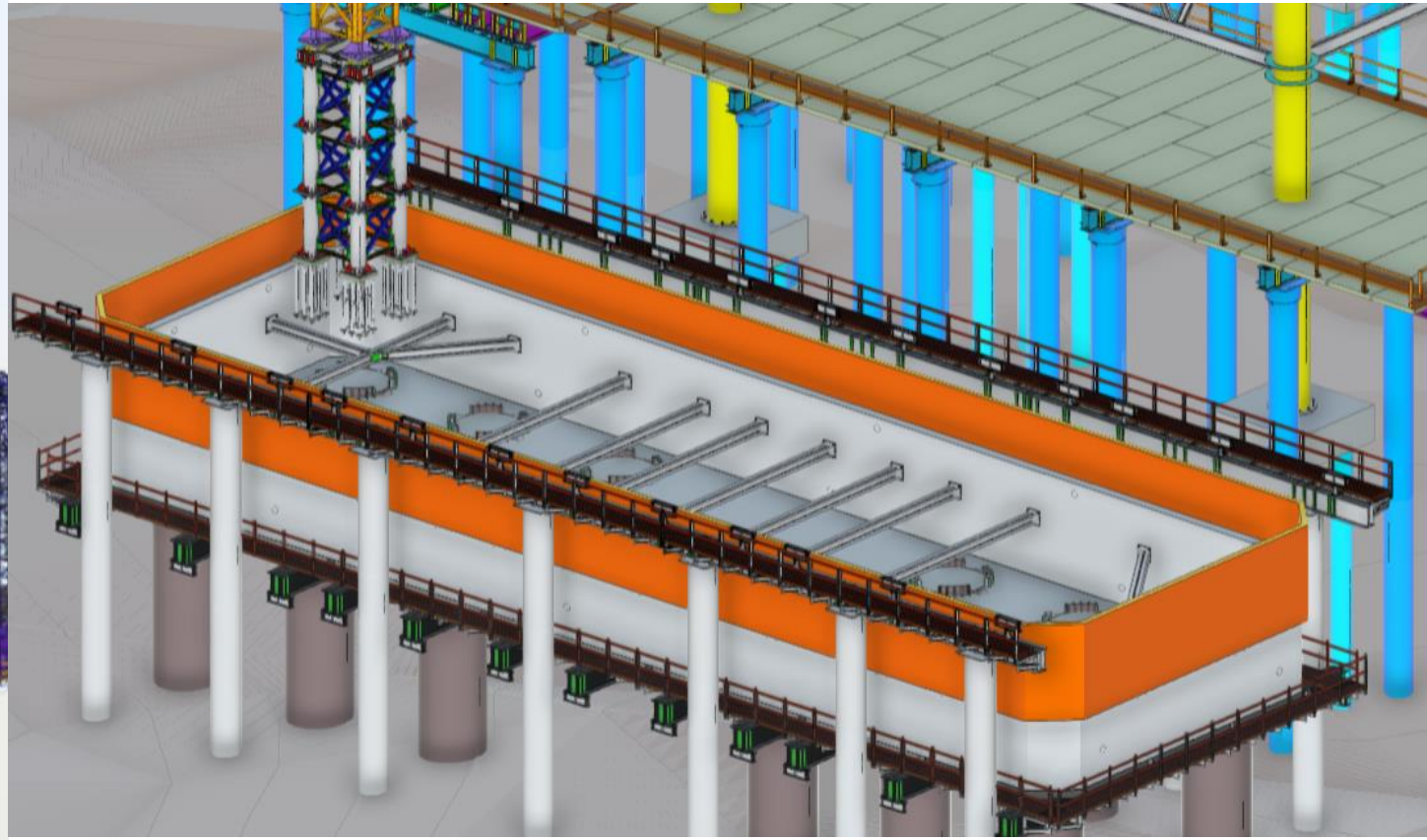
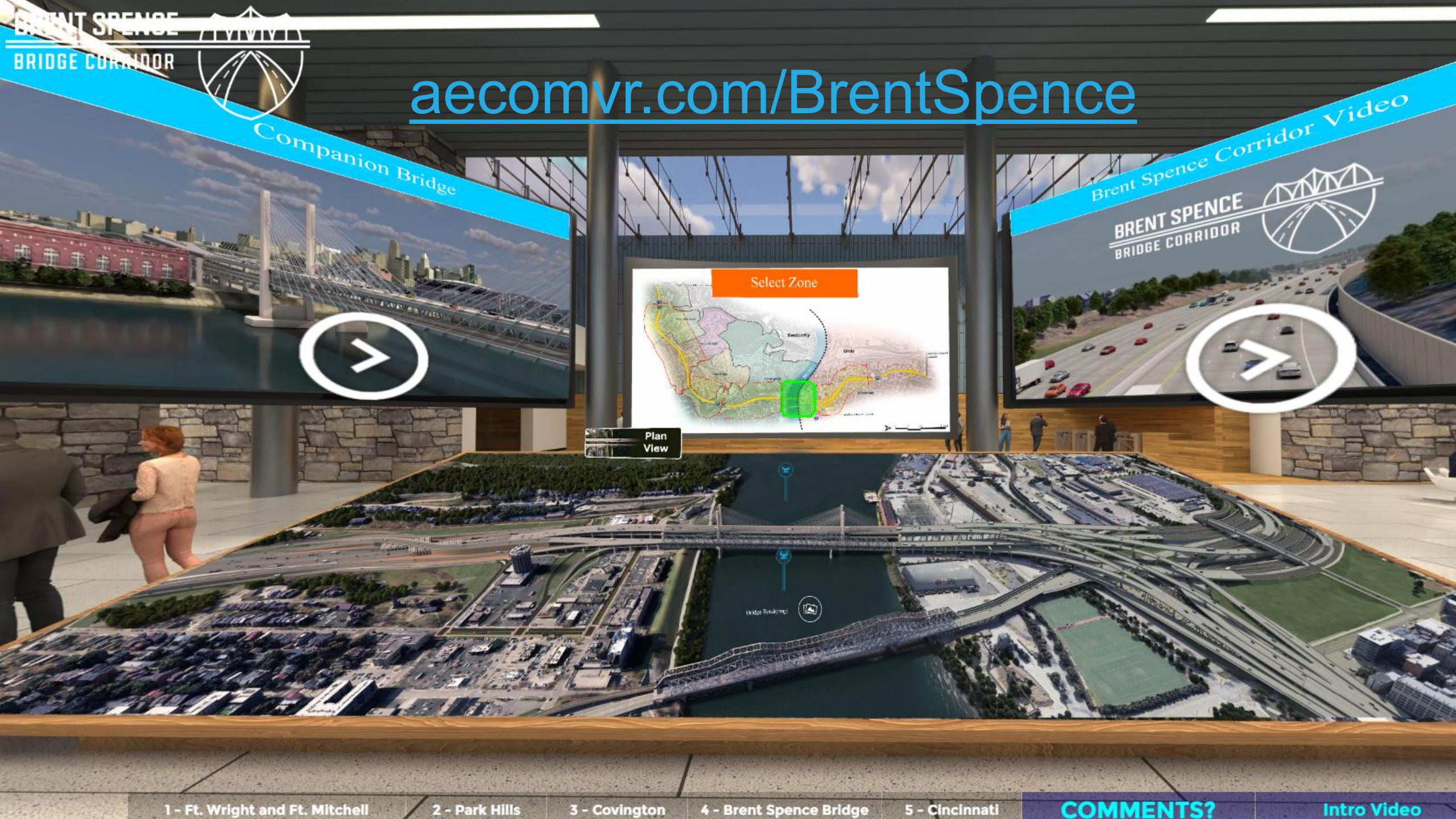
BRIDGE CORRIDOR

EOR and Construction Engineer Collaboration





Data Date: August 01, 2025	KTC and ODOT		Walsh Kokosing DESIGN-BUILD TEAM	KINKLE CONSULTING		PROGRESS AS OF:	Walsh Kokosing 1260 East Summit Street Crown Point, Indiana 46307 (219) 661-2450	Kinkle Consulting, LLC 311 E Chatham St. Cary, NC 27511 (813) 528-0071
Publish Date: September 09, 2025	Road No.	County/City	Contract #				Schedule Title: BSB Phase 1 Baseline Monthly Update #17_August 2025	Project / Job No.
	71/I75							


BRENT SPENCE
BRIDGE CORRIDOR
aecomvr.com/BrentSpence
Companion Bridge
Select Zone
Plan View
Brent Spence Corridor Video
BRENT SPENCE
BRIDGE CORRIDOR
1 - Ft. Wright and Ft. Mitchell
2 - Park Hills
3 - Covington
4 - Brent Spence Bridge
5 - Cincinnati
COMMENTS?
Intro Video

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