



# OHIO RIVER CROSSING

## I-69 ORX Section 3 Industry Forum

Danny Corbin, INDOT | Project Manager  
Steve Nicaise, Parsons | Project Manager



# PRESENTERS



**Danny Corbin**

INDOT| Project Manager



**Steve Nicaise**

Parsons| Project Manager

# AGENDA



## Project Overview

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## Section 3

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## Design Build

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## DBE Information

## Project Information

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## Bridge Work

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## Geotech Information

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## Project Contacts





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# PROJECT OVERVIEW

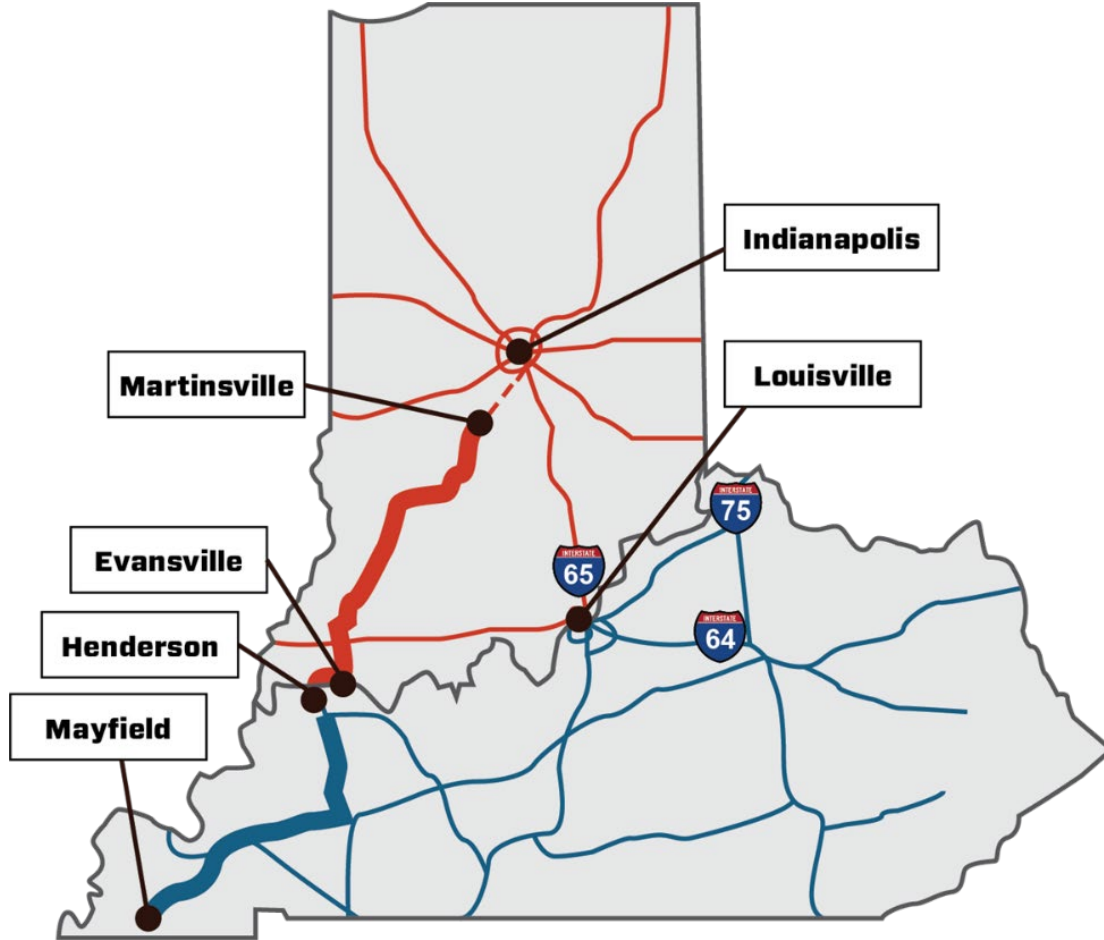
# I-69 OHIO RIVER CROSSING



- Will complete the I-69 connection between Evansville and Henderson
- Provides interstate cross-river connectivity; will reduce traffic and delays; will improve safety
- Includes 11+ miles of new interstate and 4-lane river crossing
- FEIS/ROD in fall of 2021 cleared the way for construction



# I-69: PROGRESS IN BOTH STATES



## INDIANA INVESTMENT

- 116 miles complete from Evansville to Martinsville
- Evansville to Indy complete in late 2024

## KENTUCKY INVESTMENT

- 128 miles of I-69 in place from Henderson to Mayfield
- 19 miles south to Fulton complete by end of 2024



# DELIVERING I-69 ORX



- Collaborative, bi-state approach
- Project broken into three sections for delivery

## Section 1



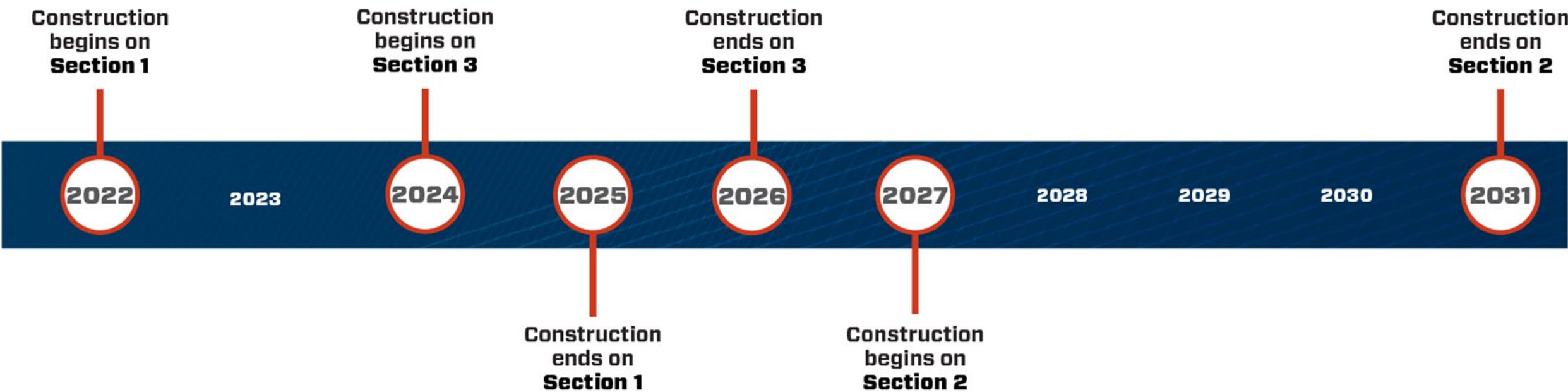
## Section 2



## Section 3



# ORX TIMELINE





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# SECTION 3

Indiana Approach

# SECTION 3

- INDOT is overseeing
- Approach work in Indiana
- Design-Build project
- New interchange at I-69 and Veterans Memorial Parkway
- Nearly all of Section 3 is Ohio River floodplain; includes two embankment sections and viaduct bridges



# SECTION 3

- Design development continues
- Geotechnical work, surveying and right-of-way are underway
- RFP in summer 2023
- Project letting in fall 2023
- Construction to begin in early 2024
- Construction ends in 2026



Design work  
begins

Contract  
awarded

Construction  
begins

Construction  
ends

2022

2023

2024

2025

2026

# VETERANS MEMORIAL PARKWAY



- New interchange at I-69 and Veterans Memorial Parkway
- Public feedback: reduce travel distance and improve speeds for EB Veterans to NB I-69
- Value Engineering
  - Reduced interchange costs; long fly-over bridges
  - Service level vs. system level
  - Floodplain mitigation vs. bridging entire floodway



# ORX SECTION 3: WHAT'S UNIQUE



- Will serve as access route for Section 2
- Earthwork and bridge construction
- Deferred elements will be included in Section 2 contract
- Major risks:
  - Flooding
  - No local borrow source
  - Geotechnical conditions
  - Embankment working platform
  - Deep bridge foundations





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**DESIGN BUILD**





Value engineering is a key component of work by Project Team members



Goal to reduce interchange costs while maximizing traffic flow and safety



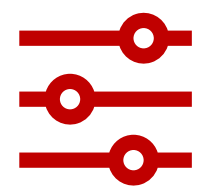
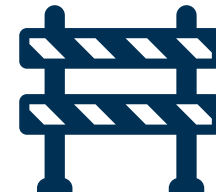
Floodplain mitigation alleviated the need to bridge entire floodway in Indiana



Public feedback shaped interchange design refinements

# WHY DESIGN-BUILD?

- Needed access for river bridge construction – begins 2027
- Floodplain construction: Contractors' preferred means/methods may affect
  - Foundation design
  - Span arrangements
  - Materials selection
  - Construction sequence
- Enhances risk sharing – flooding, geotechnical



# PROCUREMENT PROCESS

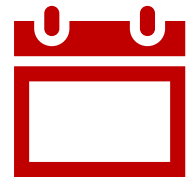


- INDOT Low-Bid Design-Build Process
- Focused on providing construction access for river bridge project
- Will include primarily work south of existing I-69
- Excludes work along existing I-69 and other deferred work
- Contract Information Book
  - Scope of Services and Technical Provisions
  - Reference Information Documents



# PROCUREMENT PROCESS

- ATC process
  - 4 confidential one-on-one meetings
  - Proposer questions/INDOT responses
  - Technical proposal submittal 18 days prior to bid
  - Pass/fail evaluation
  - Cost proposal/bid opening/DBC Selection



# ANTICIPATED PROCUREMENT SCHEDULE



- **April 2023**
  - April 13 - Industry forum
  - April 14 - General RIDs release
- **July 2023**
  - July 12 - Project advertisement, Full RIDs release
  - July 26 - Mandatory pre-bid meeting
- **October 2023**
  - October 13 - Technical proposals due
  - October 31 - Bid letting day - cost proposal submittal
  - October 31 - DBC selection
- **December 1 - DBC contract award**





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# DBE INFORMATION

# DBE RECIPROCITY



- INDOT and KYTC have a DBE Reciprocity Agreement.
- DBEs certified in one state may be used in partner state.
- DBEs to follow project State's prequalification laws.



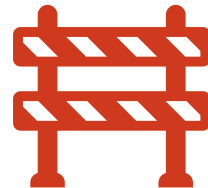
**INDOT Economic Opportunity  
Division**  
**Derrick Casson, DBE  
Program Administrator**  
**[EISinquiry@indot.in.gov](mailto:EISinquiry@indot.in.gov)**



**KYTC Office for Civil Rights and  
Small Business Development**  
**Melvin Bynes, Executive Director**  
**[melvin.bynes2@ky.gov](mailto:melvin.bynes2@ky.gov)**  
**502-782-4816**

# POSSIBLE DBE ACTIVITIES

- Clearing and grubbing
- Concrete supply
- Drilled shaft foundations
- Environmental monitoring
- Erosion control
- Excavation
- Formwork
- Geotechnical explorations
- Hauling
- Pile driving
- Public involvement
- Rebar
- Site security
- Surveying
- Traffic control
- Other roadway and bridge activities



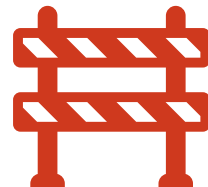


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# PROJECT INFORMATION

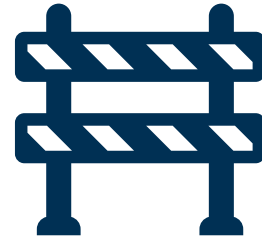
# ESTIMATED QUANTITIES

- New bridges: 5 bridges
- Bridge deck: 570,300 square feet
- Retaining wall: 820 linear feet
- Fill: 850,000 cubic yards



# ROAD/SITEWORK

- Construct access road from S. Weinbach Road to I-69 alignment
- Construct two new embankment sections
- Construct embankment widening along south side of existing I-69



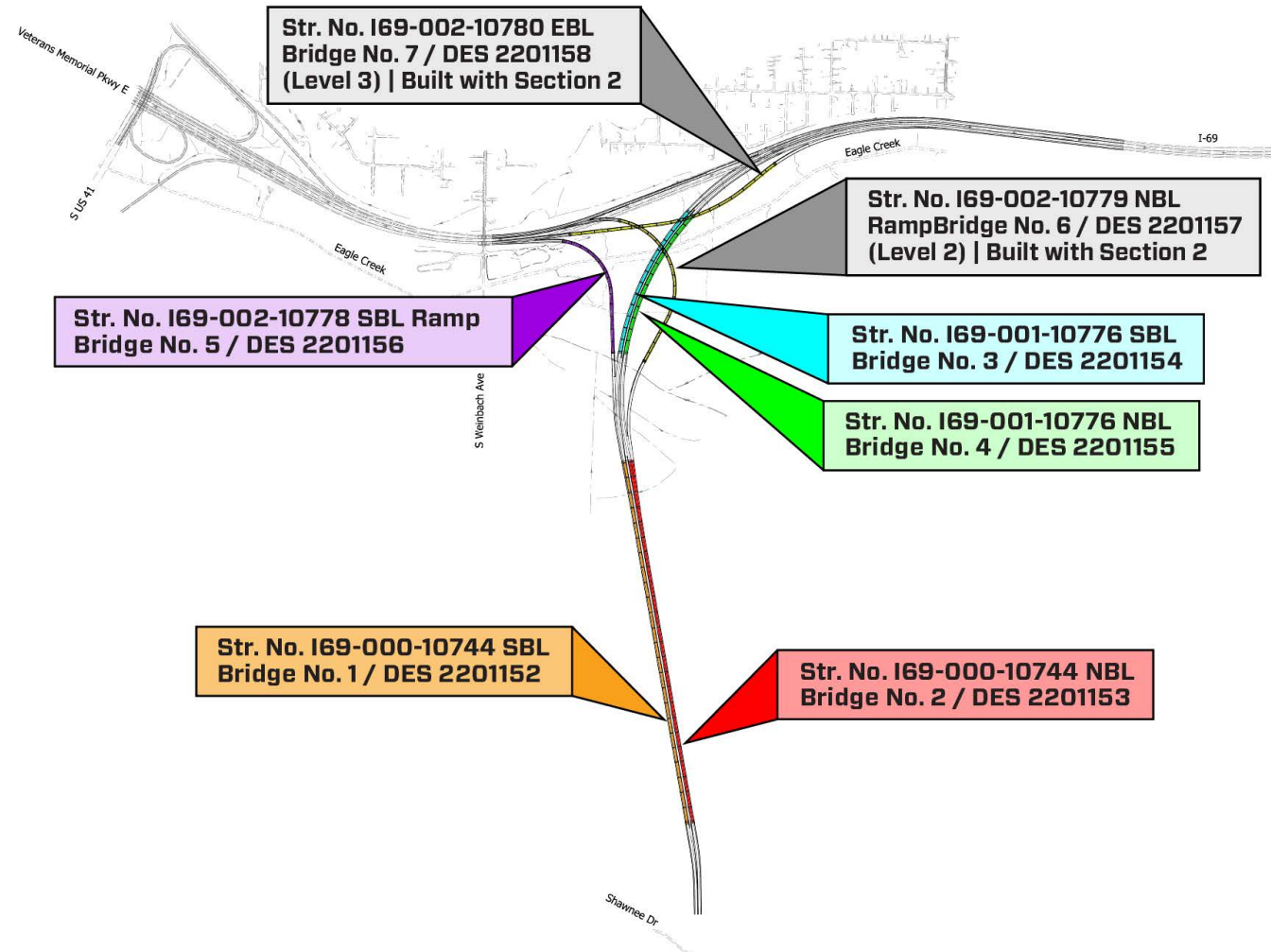
- New embankments to be placed minimum 6” above final subgrade elevation and
  - Account for anticipated long-term settlement
  - Graded to drain
  - Temporary erosion control measures
  - Include permanent armoring to prevent flood scour
- No final paving in this contract
- MOT, signage, temporary barriers and temporary paving required for any construction access points to/from existing I-69



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# BRIDGE WORK

# ORX SECTION 3 - BRIDGES

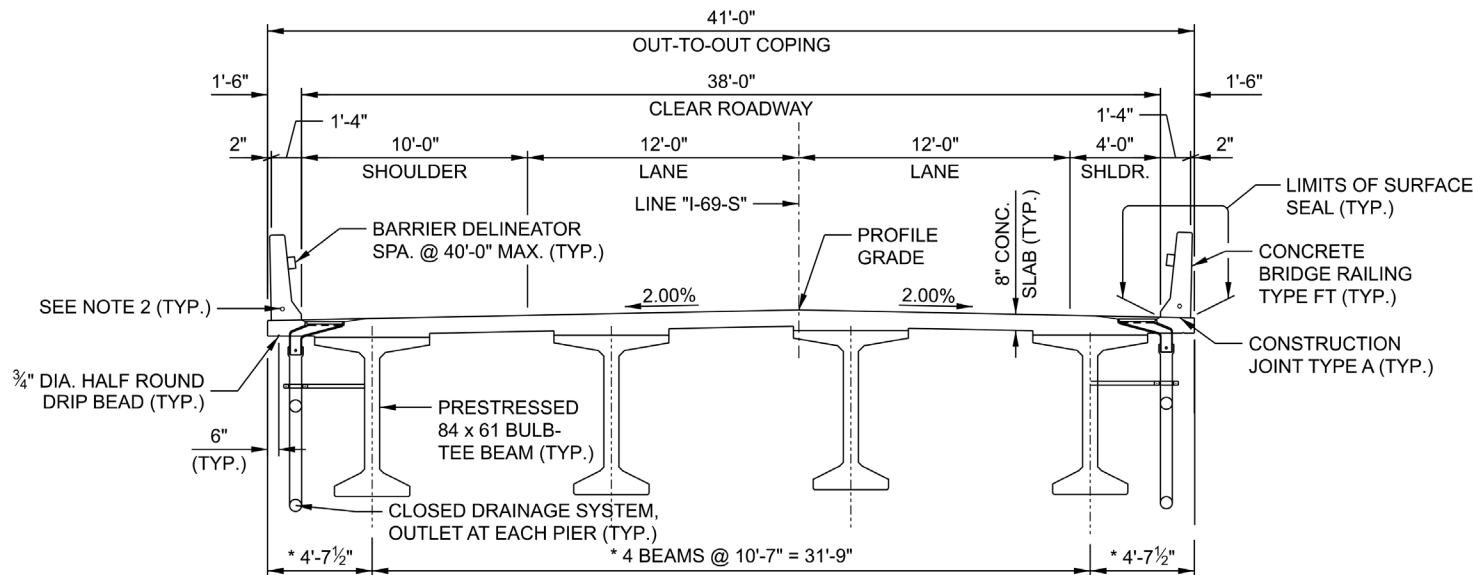


- **Number of Bridges:**
  - 5 New (Constructed in Section 3)
  - 2 New (Constructed in Section 2)
- **Total Bridge Deck area (S3): 570,300 SFT**
- **Retaining Walls (S3) 820 LF (22,000 SFT)**

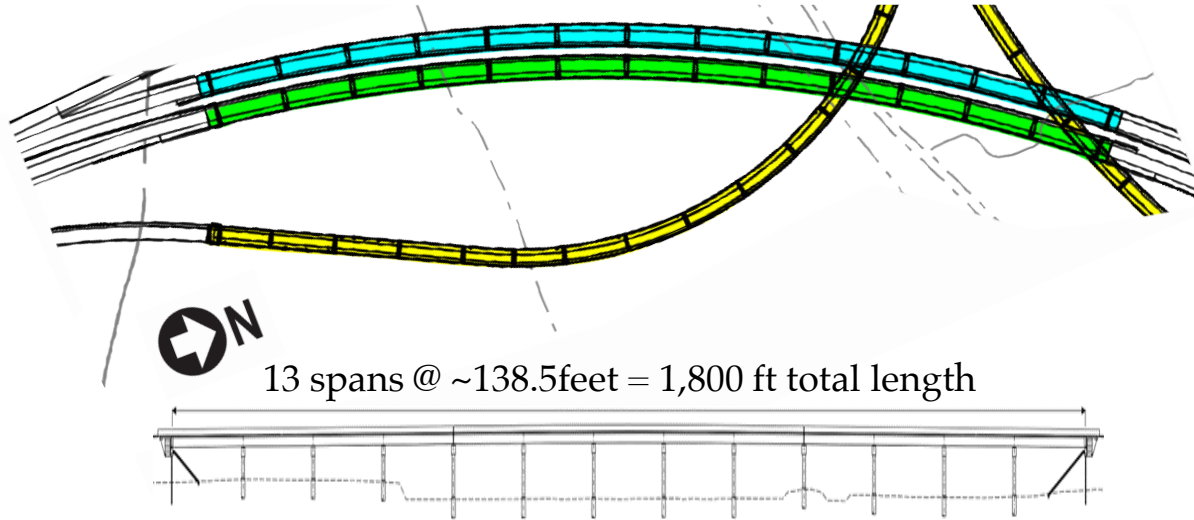


- **Each Bridge Statistics:**
  - 4,321-Feet Long x 41-Feet Wide
  - 24 Spans
  - Last 3-Spans NB - flare to accommodate ramps

- 35,200 LF of Concrete Beams
- 28,000 CY Concrete  
(Substructure & Superstructure)
- 8M LB Reinforcing Steel

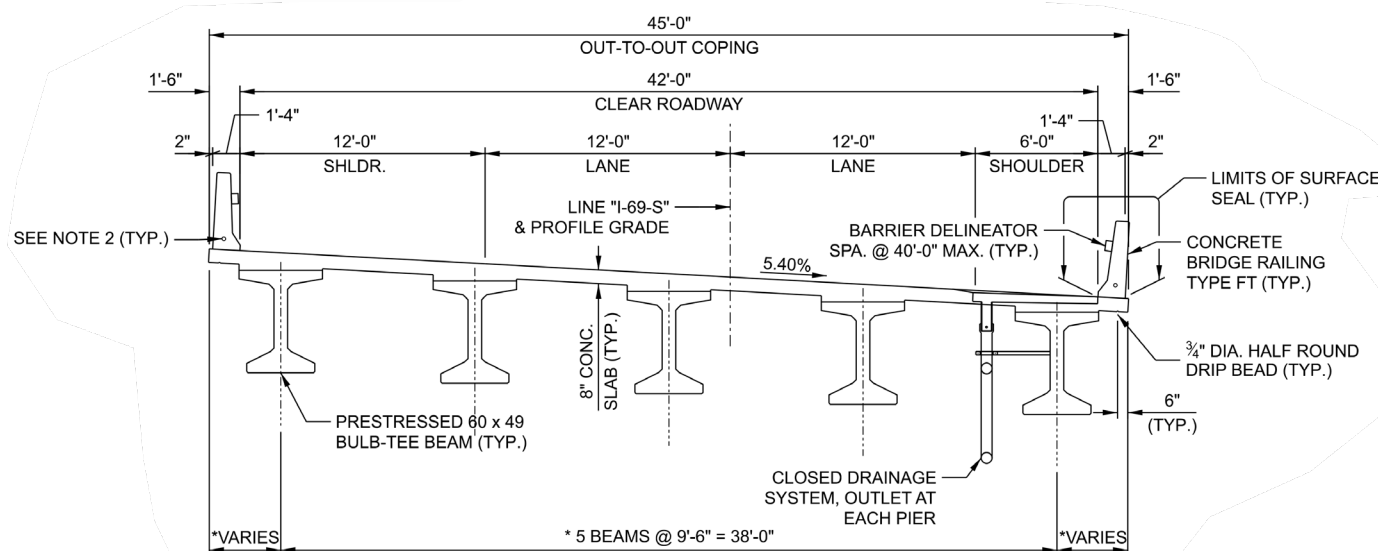


# ORX SECTION 3 - BRIDGES #3 AND #4

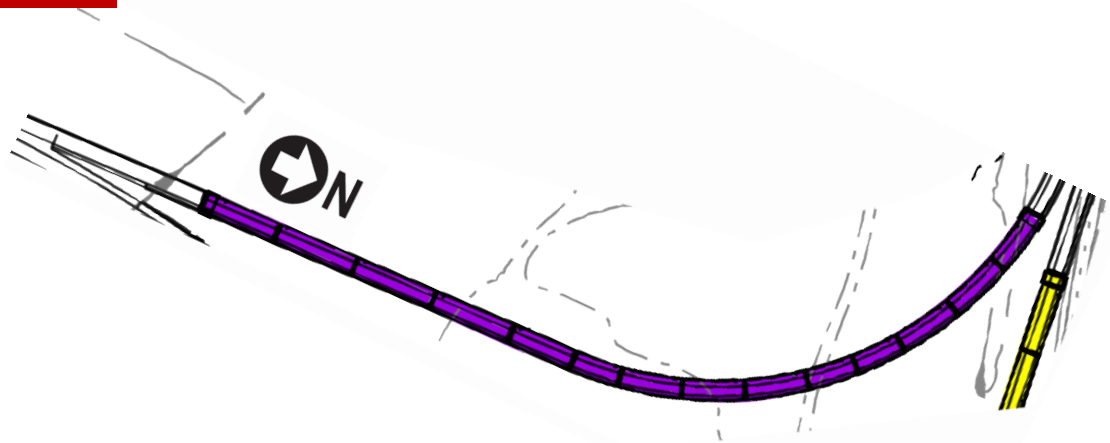


## Mainline I-69 (NB & SB) over Ohio River Floodplain and Eagle Creek

- Each Bridge Statistics:
  - 1,800-Feet Long x 45-Feet Wide
  - 13 Spans
- Estimate of Quantities:
  - 17,700 LF of Concrete Beams
  - 14,000 CY Concrete (Substructure & Superstructure)
  - 3M LB Reinforcing Steel



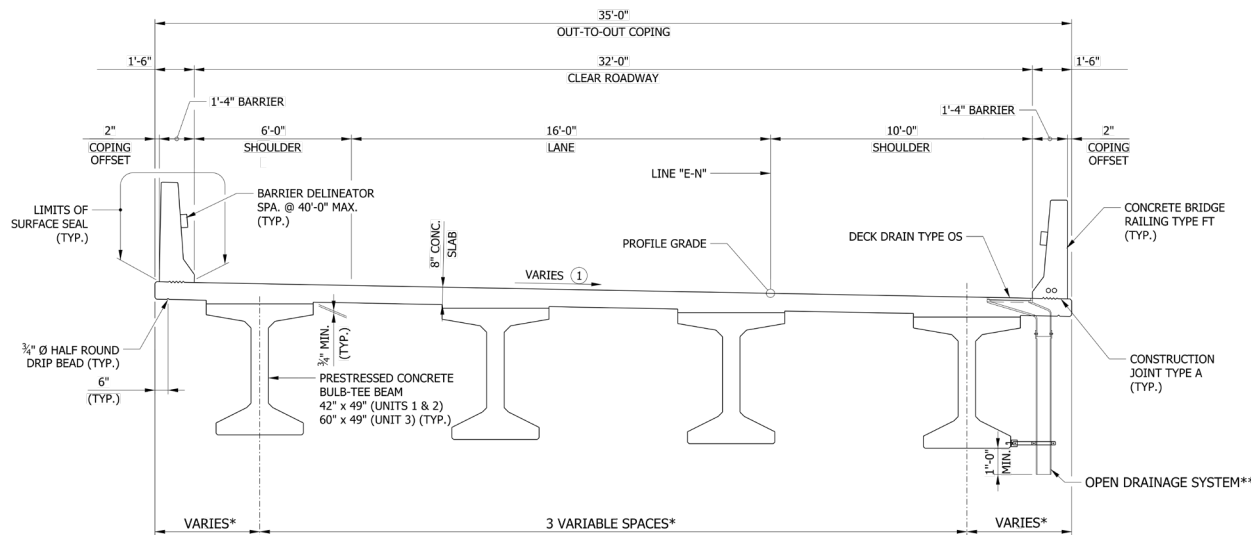
# ORX SECTION 3 - BRIDGE #5



14 spans @ ~110 feet = 1,542 ft total length

## EB to SB Ramp Bridge over the Ohio River Floodplain and Eagle Creek

- Bridge Statistics:
  - 1,542-Feet Long x 35-Feet Wide
  - 14 Spans
- Estimate of Quantities:
  - 6,100 LF of Concrete Beams
  - 3,200 CY Concrete (Substructure & Superstructure)
  - 876,000 LB Reinforcing Steel





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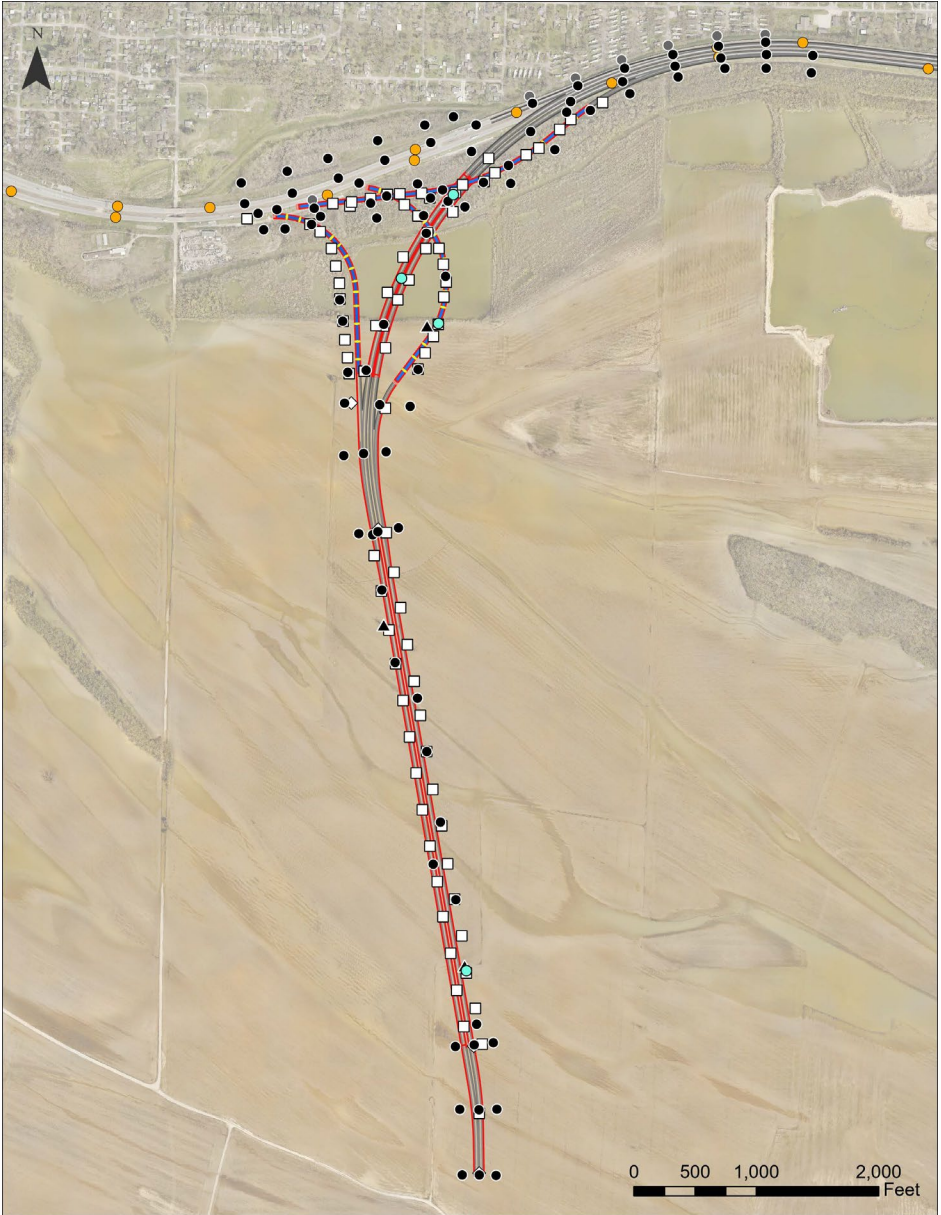
# GEOTECH INFORMATION

# EXPLORATORY FIELD WORK



- 107 SPT Borings
  - Nested piezometers at 4 locations
- 67 CPT locations
  - 82 pore pressure tests
- 21 SCPT locations

# EXPLORATORY FIELD WORK



- SPT Boring
- CPT Boring
- 2016 Boring
- SPT Boring with Suspension Logging
- ▲ Piezometer
- ◇ DMT

# EXPLORATORY FIELD WORK



- Borehole geophysical logging
- MASW
- Seismic refraction

# GENERALIZED SUBSURFACE PROFILE



- Cohesive soil - medium stiff trending soft to very soft and less plastic with depth; over
- Granular soil – loose trending medium dense to dense below El. 320; over
- Bedrock – El. 260 south to El. 250 north (110 ft deep) consisting of soft shale to coal to siltstone





- Data Report
- Baseline Report - A contract document

Mr. Steve Nicaise, P.E.  
Parsons Transportation Group, Inc.  
Indianapolis, Indiana  
[Steven.Nicaise@parsons.com](mailto:Steven.Nicaise@parsons.com)

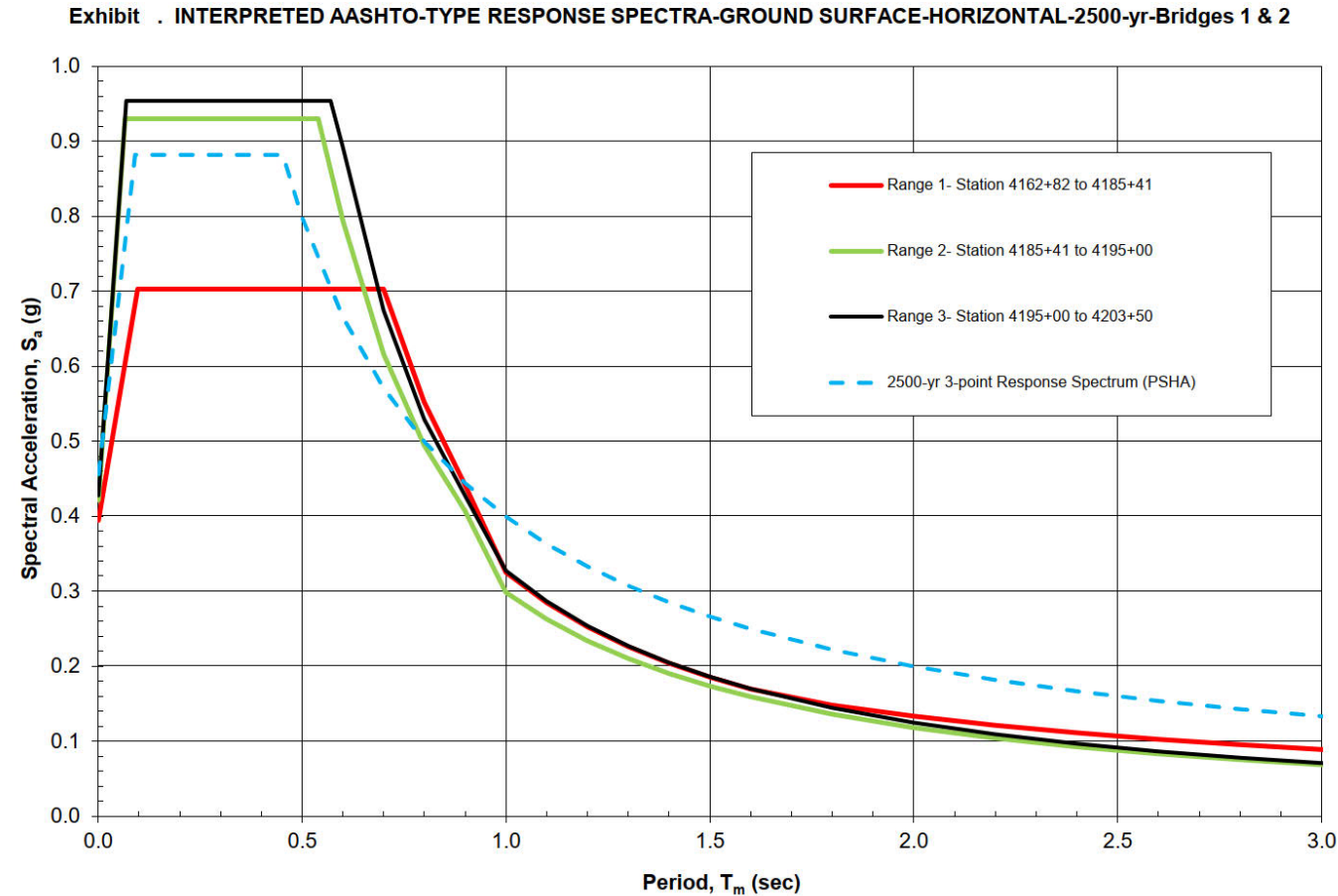
Re: Geotechnical Baseline Report  
I-69 ORX Section 3  
Vanderburgh Co., Indiana  
Terracon Project No. CJ215597

Dear Steve:

We have completed the Geotechnical Baseline Report (GBR) for I-69 ORX Section 3. We understand INDOT plans to award the final design and construction of the project using a design-build (DB) procurement method with the selection being made based on the lowest responsible bid. As part of the procurement method, this GBR is intended to establish the baseline geotechnical conditions (including seismic conditions and design requirements) on which DB teams are able to rely on certain geotechnical information. We understand the Contract Book will contain language to provide adjustments in the event geotechnical conditions differ from those summarized herein.

# RISK SHARING APPROACH

- Site specific hazard analysis
  - Response spectra and liquefaction strata are a contract document





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# PROJECT CONTACTS

# PROJECT CONTACT INFORMATION



**I69OhioRiverCrossing.com**



**I69ORX**



**Sign up on website**



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**Text “ORX” to 33222**





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**QUESTIONS?**

THANK YOU

