

November 27, 2023



PRESENTERS



KYANNA WHEELERProject Manager, INDOT



DAN THATCHERProject Manager, HNTB



STACEY OSBURNCommunications, HNTB



KYLE ZAKGeotech, Terracon



AGENDA

- Project Overview
- Project Information
- Alternative Delivery
- Geotech Information
- DBE
- Questions



PROJECT OVERVIEW

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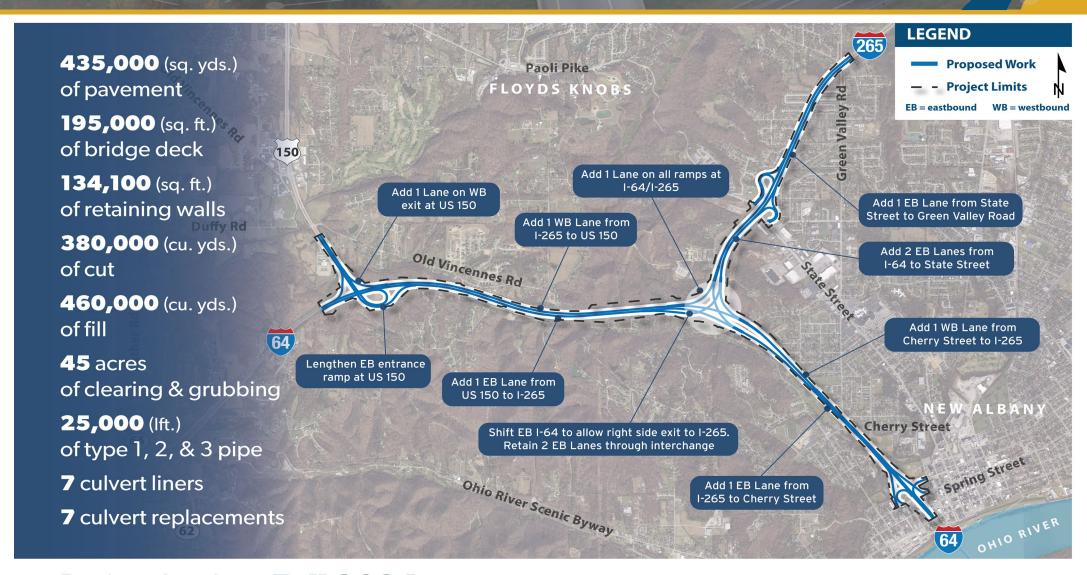


PROJECT STATS



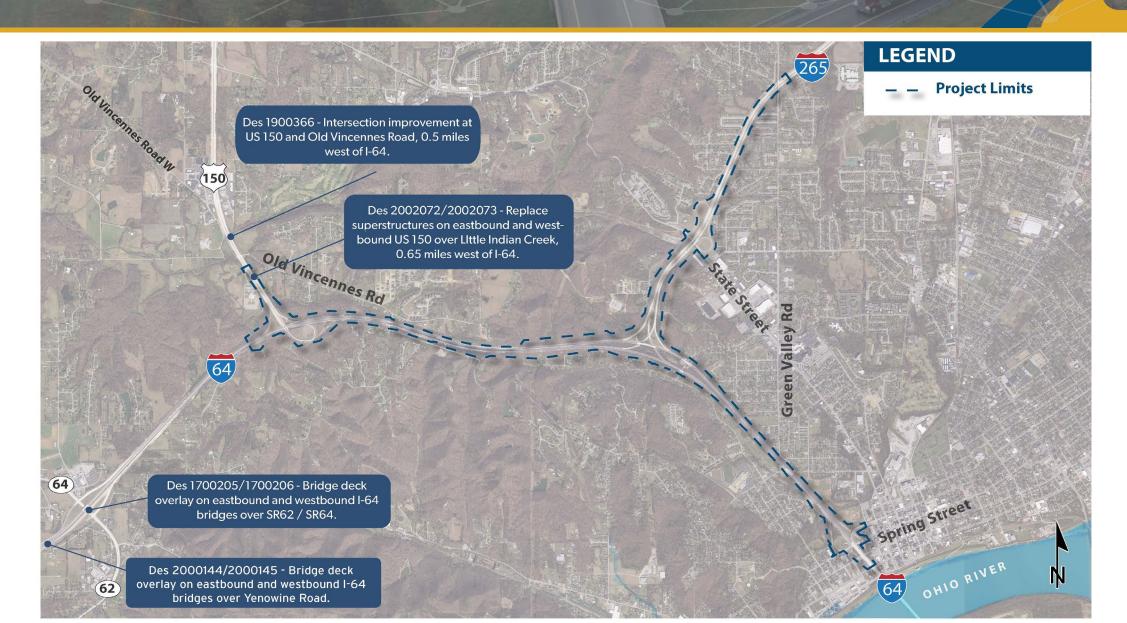
Project Letting: Fall 2024

PROJECT QUANTITIES



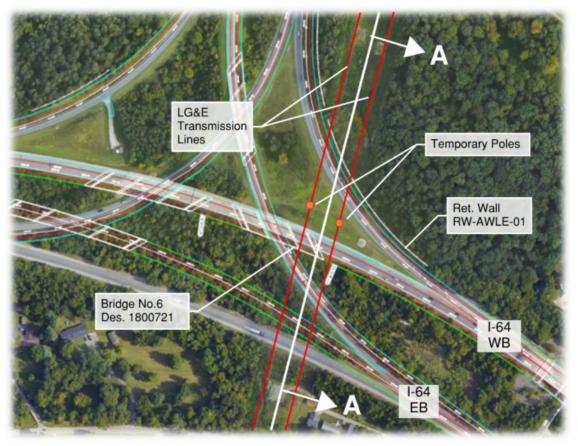
Project Letting: Fall 2024

BUNDLED PROJECTS

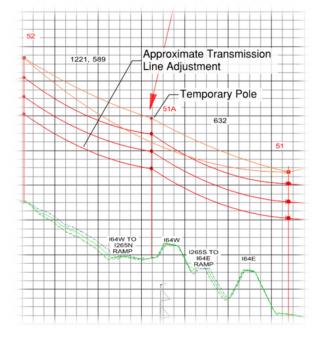


PROJECT INFORMATION

LG&E Transmission



- Temporary poles installed to raise the utility lines
- Additional working room to be provided
- Utility workplan progress ongoing



Section A-A

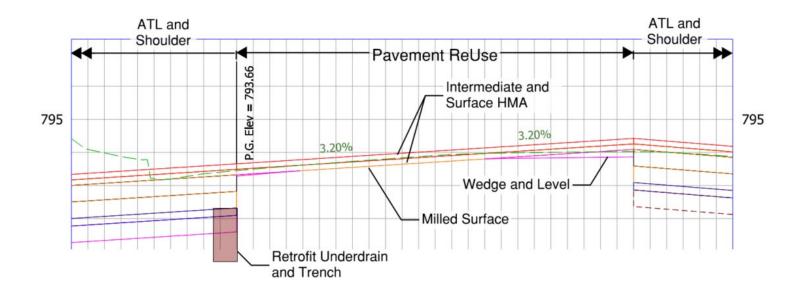






Pavement Design

- Typical section incorporates elements of full depth and rehabilitation
- Retrofit underdrains
- Variability with existing pavement cross slopes
- 2-inch milling depth and cross slope correction with wedge and level



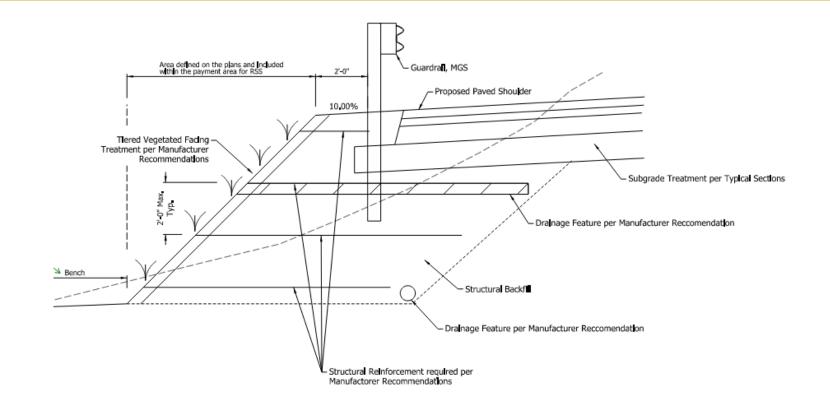
1234+50.00





Reinforced Soil Slopes

- Avoids tall sliver fill embankments
- USP allows for flexibility with construction options
- Shall be designed by the contractor using the procedure described in FHWA-NHI-10-025



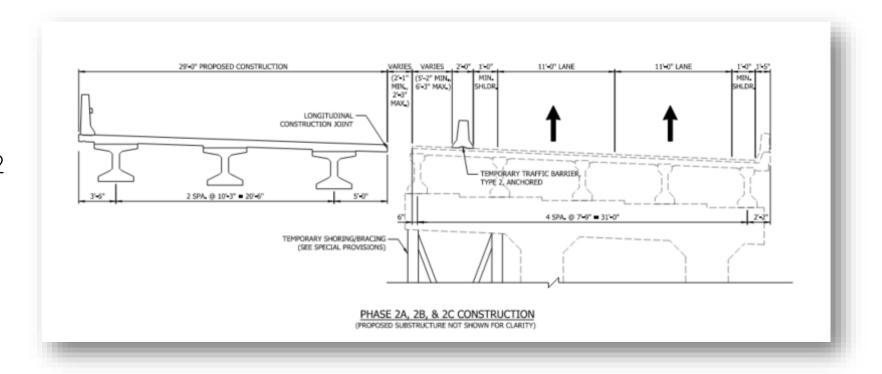






Bridge Construction – Phased Approach

- 16 bridges within the limits of the ATL
- Minimum of two construction phases
- Working width reduced to 1-2 feet at various locations
- Quarry Road bridges ~10' vertical offset between them



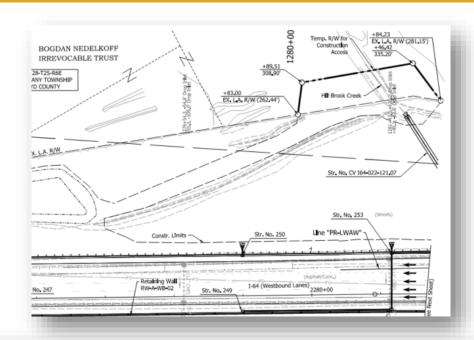


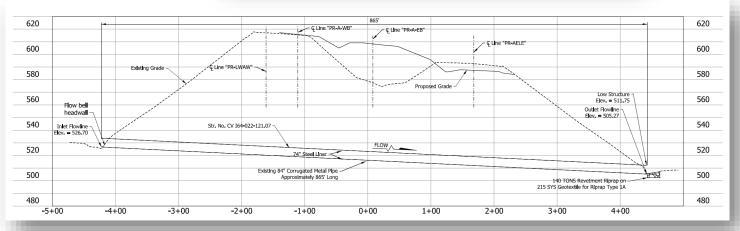




Culvert Pipes

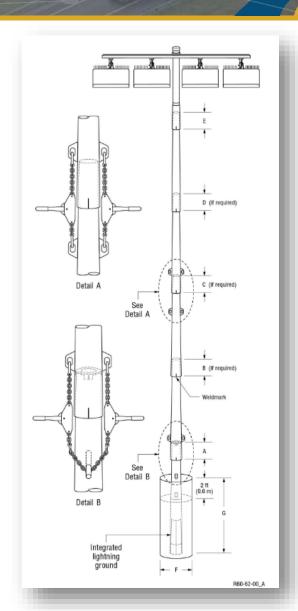
- 11 culverts under I-64 EB/WB
 - Range from 36" to 84" Dia.
- Bury depths range from 15-feet to 80-feet
- Access routes defined by clearing and grubbing limits
- Temporary R/W for materials staging





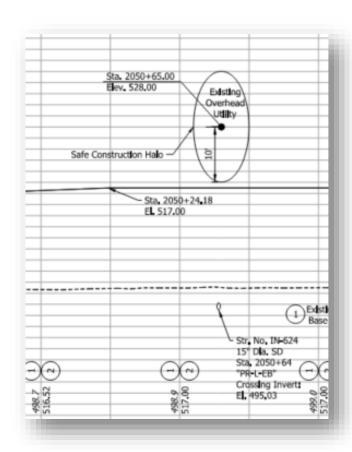
Traffic Elements

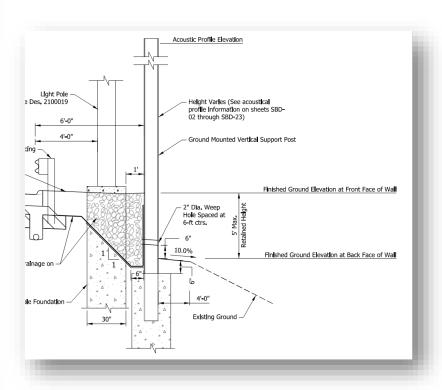
- 8 70-foot-tall light poles required along I-64 WB east of Captain Frank
 - Sole source vendor
 - Close proximity to Noise Barrier NB-5
- Temporary lighting
- ITS fiber optic replaced along I-64 and I-265
 - Package of 7 conduits



Noise Barriers

- One barrier along I-64 WB, two along I-265
- Proximity to transmission and distribution overhead lines
- Noise Barrier NB-5
 - Includes retained fill
 - Proximity to light, ITS and signing foundations

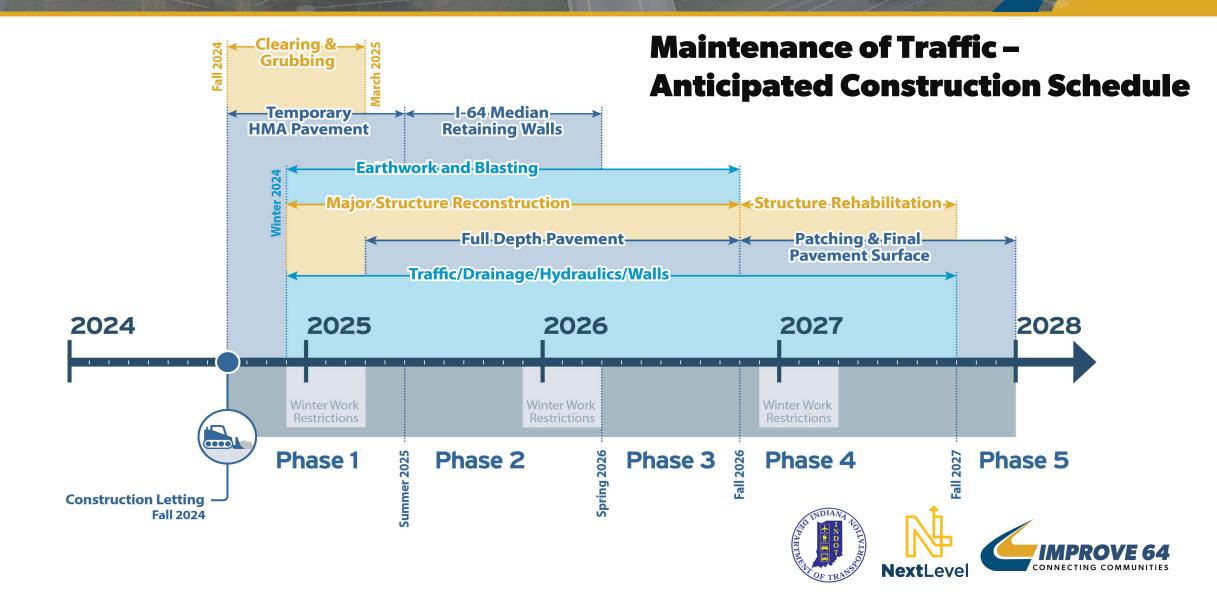












Maintenance of Traffic

- IHCP Waivers
 - Shoulder closures 24/7
 - Nighttime lane closures
 - Short-term full stoppages
 - 20-minute maximum
 - Closures to Quarry Rd. and Captain Frank Rd.
 - Overnight ramp closures:
 - I-64 EB to I-265 EB
 - I-265 WB to I-64 EB
 - Full closures to I-64 / Spring Street ramps

Short-Term (20-minutes Maximum) Full Stoppage Analysis Summary

Snort-Term (20-minutes Maximum) Full Stoppage Analysis Summary							
Segment	Direction	Full Stoppage Allowed within INDOT Policy Limits					
Segment	Direction	Weekday	Friday	Saturday	Sunday		
I-64, between US 150 and I-265	WB	Midnight to 2 pm, 7 pm to Midnight	Midnight to Noon, 8 pm to Midnight	Midnight to 2 pm, 6 pm to Midnight	Midnight to 3 pm, 6 pm to Midnight		
	EB	Midnight to 5 am, 7 pm to Midnight	Midnight to 5 am, 8 pm to Midnight	Midnight to 8 am, 4 pm to Midnight	Midnight to 9 am, 3 pm to Midnight		
I-64, between I-265 and Spring Street	WB	Midnight to 2 pm, 7 pm to Midnight	Midnight to 1 pm, 7 pm to Midnight	Midnight to 3 pm, 6 pm to Midnight	Midnight to 3 pm, 6 pm to Midnight		
	EB	Midnight to 6 am, 9 am to Midnight	Midnight to 6 am, 9 am to 2 pm, 5 pm to Midnight,	Anytime	Anytime		
I-265, between I-64 and State Street	WB	Midnight to 7 am, 8 pm to Midnight	Midnight to 7 am, 8 pm to Midnight	Midnight to 9 am, 8 pm to Midnight	Midnight to 11 am, 8 pm to Midnight		
	EB	Midnight to 6 am, 7 pm to Midnight	Midnight to 6 am, 7 pm to Midnight	Midnight to 9 am, 6 pm to Midnight	Midnight to 10 am, 6 pm to Midnight		
I-265, east of State Street	WB	Midnight to 7 am, 8 pm to Midnight	Midnight to 7 am, 8 pm to Midnight	Midnight to 10 am, 8 pm to Midnight	Midnight to Noon, 7 pm to Midnight		
	EB	Midnight to 6 am, 7 pm to Midnight	Midnight to 6 am, 7 pm to Midnight	Midnight to 9 am, 7 pm to Midnight	Midnight to 10 am, 8 pm to Midnight		

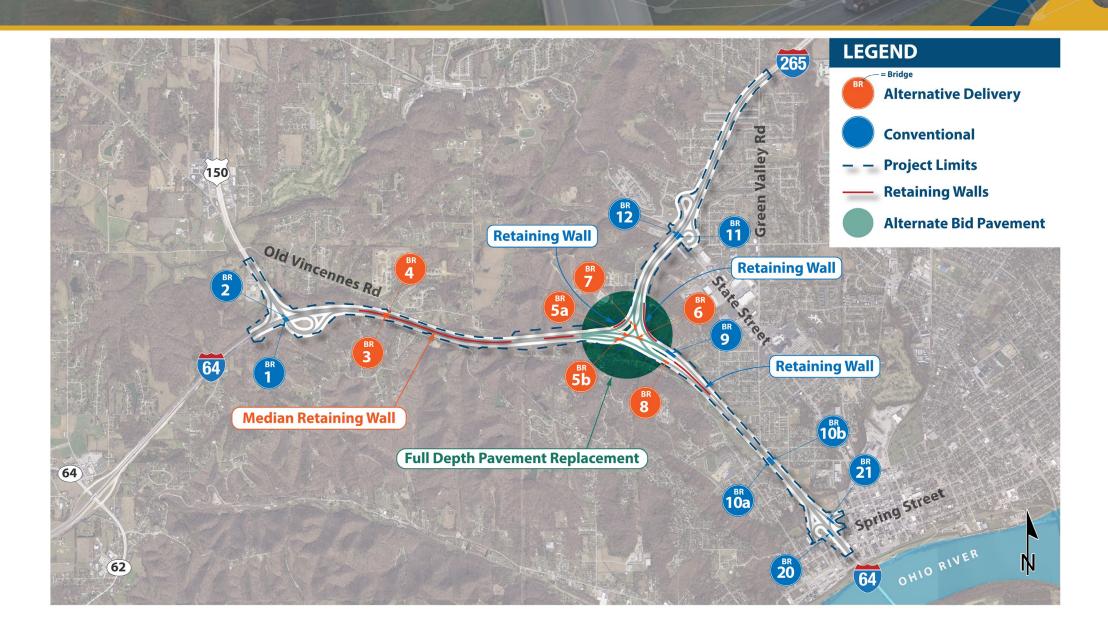






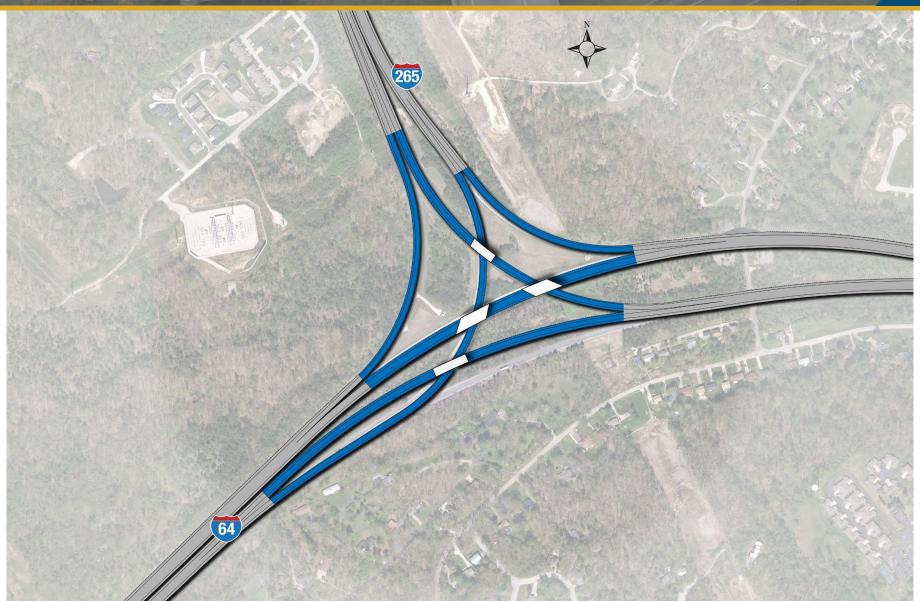
ALTERNATIVE DELIVERY

ALTERNATIVE DELIVERY ELEMENTS



ALT DELIVERY - PAVEMENT

System Interchange – HMA vs. PCCP



ALT DELIVERY - BRIDGES

Unique Special Provisions

- Optional DB Delivery for Bridges
 - Technical Requirements
 - Design With No Impacts or Revisions to:
 - Roadway Horizontal and Vertical Alignments
 - Cross Slopes
 - Number and Width of Lanes and Shoulders
 - Approved Level One and Level Two DE's
 - Barrier or Guardrail Type and Location
 - Drainage
- Alternate and Optional Pay Items
 - Split of Common, Alternate Pavement, and Design-Build Pay Items

OPTIONAL DESIGN-BUILD DELIVERY FOR BRIDGE STRUCTURES

Description

This work shall consist of design, furnishing, fabrication, installation, and construction of all necessary incidentals to complete the work for optional design-build bridge structures, and associated retaining walls, in accordance with 105.03.

The following bridges, as part of the I-64 Added Travel Lanes project, Contract R-42570, may be bid by the Contractor using an optional design-build model:

Bridge	DES NO.	Bridge File or		Minimum Required Scope	
No.		Structure	Description	of Work	
		No.			
3	1700207	164-120-	I-64 EB over Quarry	Superstructure	
		10786	Road	Replacement	
4	2200015	164-120-	I-64 WB over Quarry	Superstructure	
		10742	Road	Replacement	
5A	1702617	164-121-	I-64 WB over I-64 EB	Full Replacement	
		10787	to I-265 EB Ramp		
5B	2200016	164-121-	I-64 EB over I-64 EB	New Construction	
		10743 EBL	to I-265 EB Ramp		
6	1800721	164-121-	I-64 WB over I-265 WB	Full Replacement	
		10788	to I-64 EB Ramp		
7	2200019	(I <u>64)I</u> 265- 00-10746	I-265 WB to I-64 EB		
			Ramp over I-64 EB to	Full Replacement	
			I-265 EB Ramp		
8	2200017	164-121- 10744	I-64 EB & I-265 WB to		
			I-64 EB Ramp over	Full Replacement	
			Captain Frank Road		

The Contractor may bid none, one, some, or all the design-build bridges or bid and construct the bridges as shown in the Contract plans. Cost reduction incentives (CRIs) for these structures are prohibited post-letting.



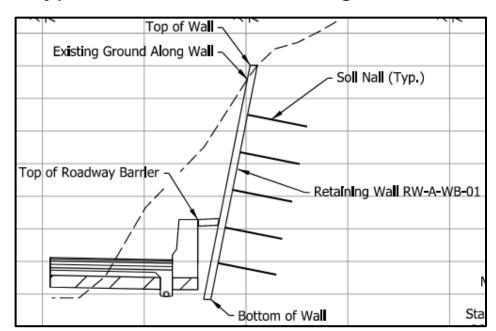


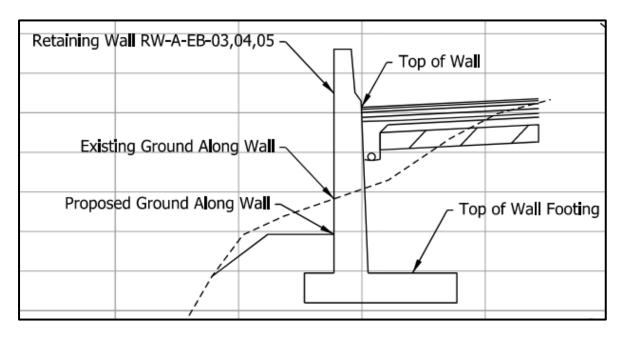


ALT DELIVERY - WALLS

Unique Special Provision

- Technical requirements
- Design overhead sign, dynamic message sign, and lighting foundations located within the median for specific range
- No impacts or revisions to barrier or guardrail type and location or drainage











ANTICIPATED PROCUREMENT

- November 27, 2023: Industry Forum & One-on-One Meetings
- January 23, 2024: Stage 3 Submittal
- April 22, 2024: Final Tracings
- May 22, 2024: RFC
- July 17, 2024: Advertisement
- September X, 2024: Special Letting



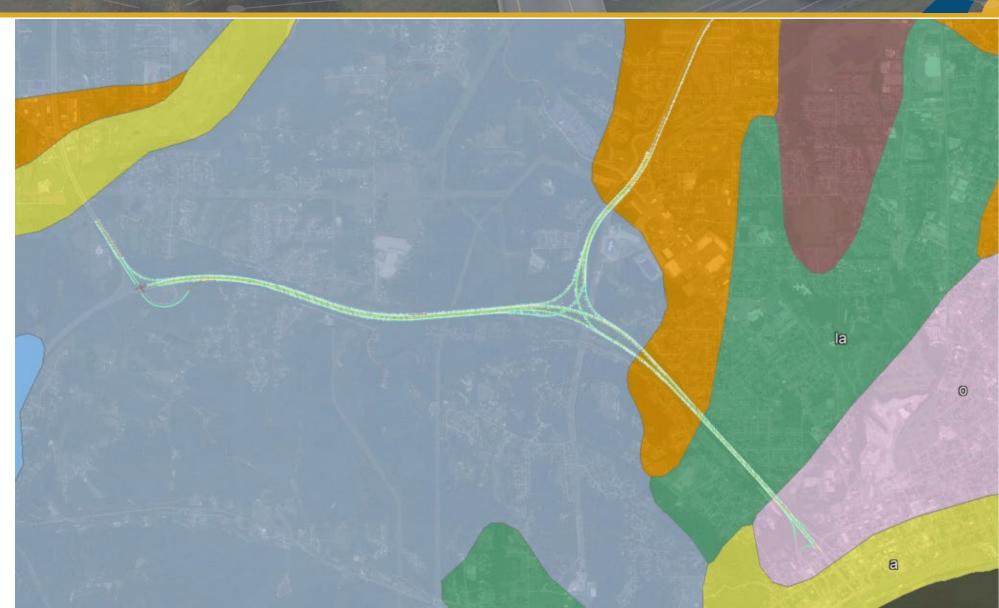




GEOTECH INFORMATION

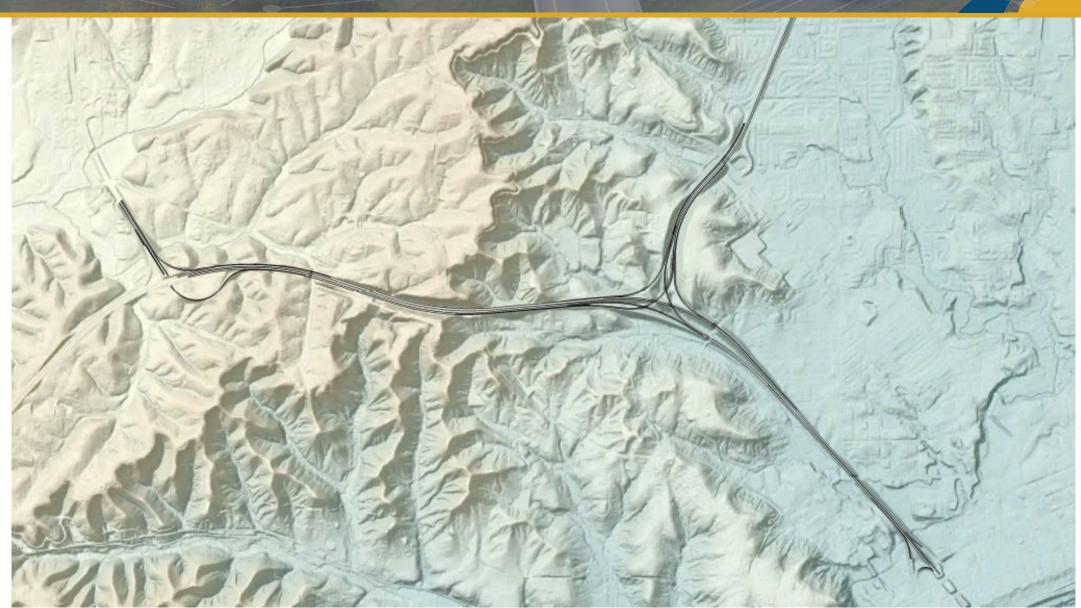
SITE TOPOGRAPHY AND GEOLOGY

SURFICIAL GEOLOGY



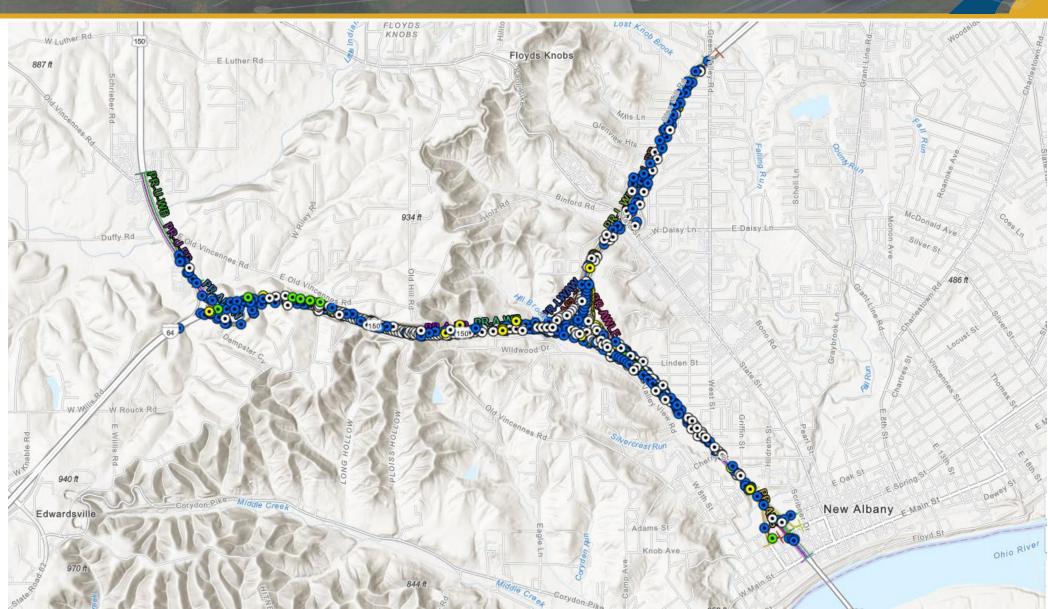
SITE TOPOGRAPHY AND GEOLOGY

SURFACE TOPOGRAPHY

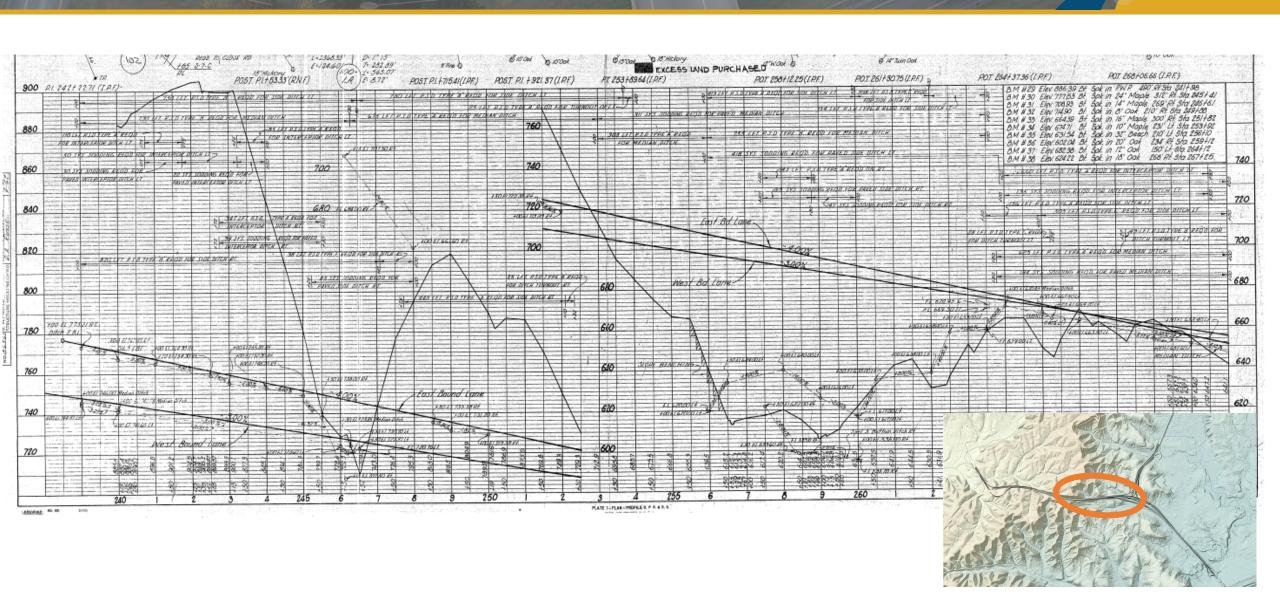


GEOTECHNICAL EFFORTS

EXPLORATORY PROGRAM



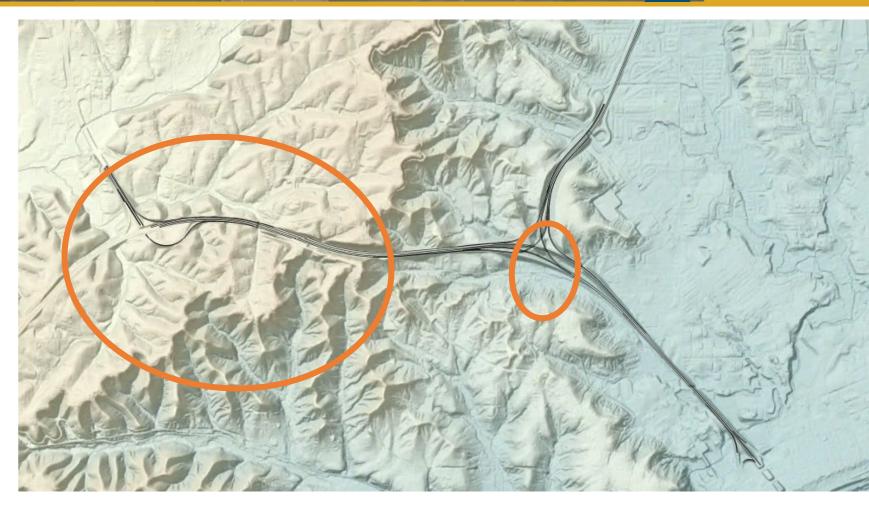
GRADING FROM ORIGINAL CONSTRUCTION



GEOTECHNICAL IMPACTS

Shallow Rock:

- Grading/Excavation
- Deep Rock Cut









GEOTECHNICAL IMPACTS

Shot Rock Fills:

- Bridge Foundations
- Workability
 - Benching
 - Excavations
 - Trenchless methods for drainage improvements









DBE INFORMATION

DBE RECIPROCITY

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

Derrick Casson, DBE Program Administrator INDOT Economic Opportunity Division ElSinquiry@indot.in.gov







POSSIBLE ACTIVITIES

- Clearing and grubbing
- Concrete supply
- Drilled shaft foundations
- Environmental monitoring
- Erosion control
- Excavation
- Formwork

- Geotechnical explorations
- Hauling
- Pile driving
- Rebar
- Site security
- Surveying
- Traffic control







PROJECT CONTACTS

KYANNA WHEELER

Project Manager, INDOT Central Office kwheeler@indot.in.gov

GREG PRINCE

Project Manager, INDOT Seymour District gprince@indot.in.gov

DAN THATCHER

Project Manager, HNTB dthatcher@hntb.com

KYLE ZAK

Geotechnical Lead, Terracon Kyle.Zak@terracon.com

www.improve64.com

THANK YOU!





