

BURGESS & NIPLE

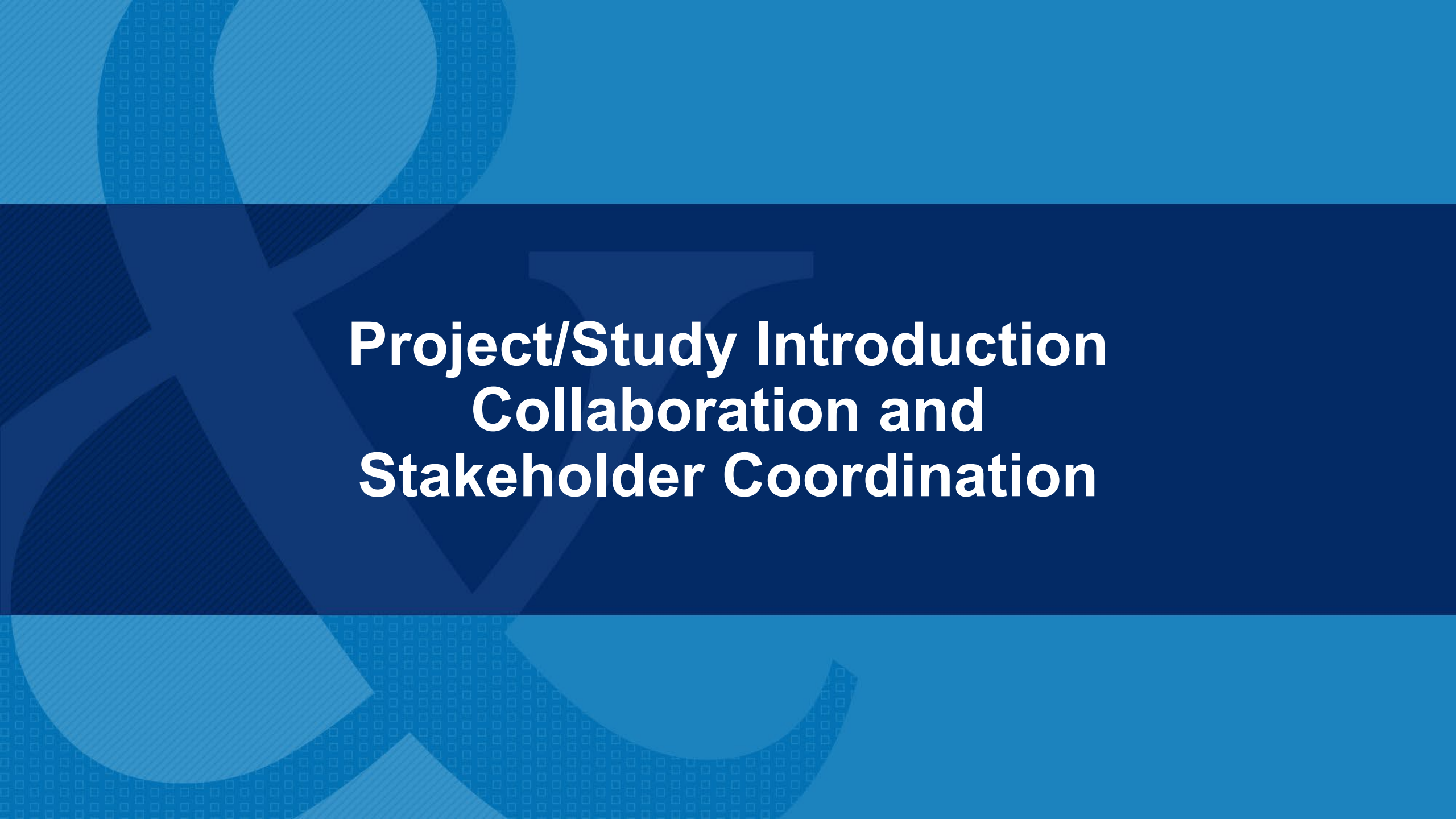
Multimodal Freight Connector Project

John Tuggle, Jason Roberts, Austin Young



**Big Foot shares the
dream of many
West Virginians.....
*Bring Back Industry
to West Virginia***



The background features a dark blue horizontal band across the center. Above and below this band are lighter blue areas containing abstract geometric shapes, including circles and squares, some with a fine grid pattern.

Project/Study Introduction Collaboration and Stakeholder Coordination

Why This Project Matters?

- Good **Industrial Park**
 - Recent 100-acre expansion
- No Access to **Rail Freight**
- Local Shipping
 - FedEx
 - Amazon
- Strong and Diversified Airport
 - With Air Freight
- Growth and attraction
- Complements **YESWV**



*YESWV funding helps transform raw land into marketable, **investment-ready** economic assets by completing critical planning, engineering, and infrastructure readiness work before opportunities arise.*

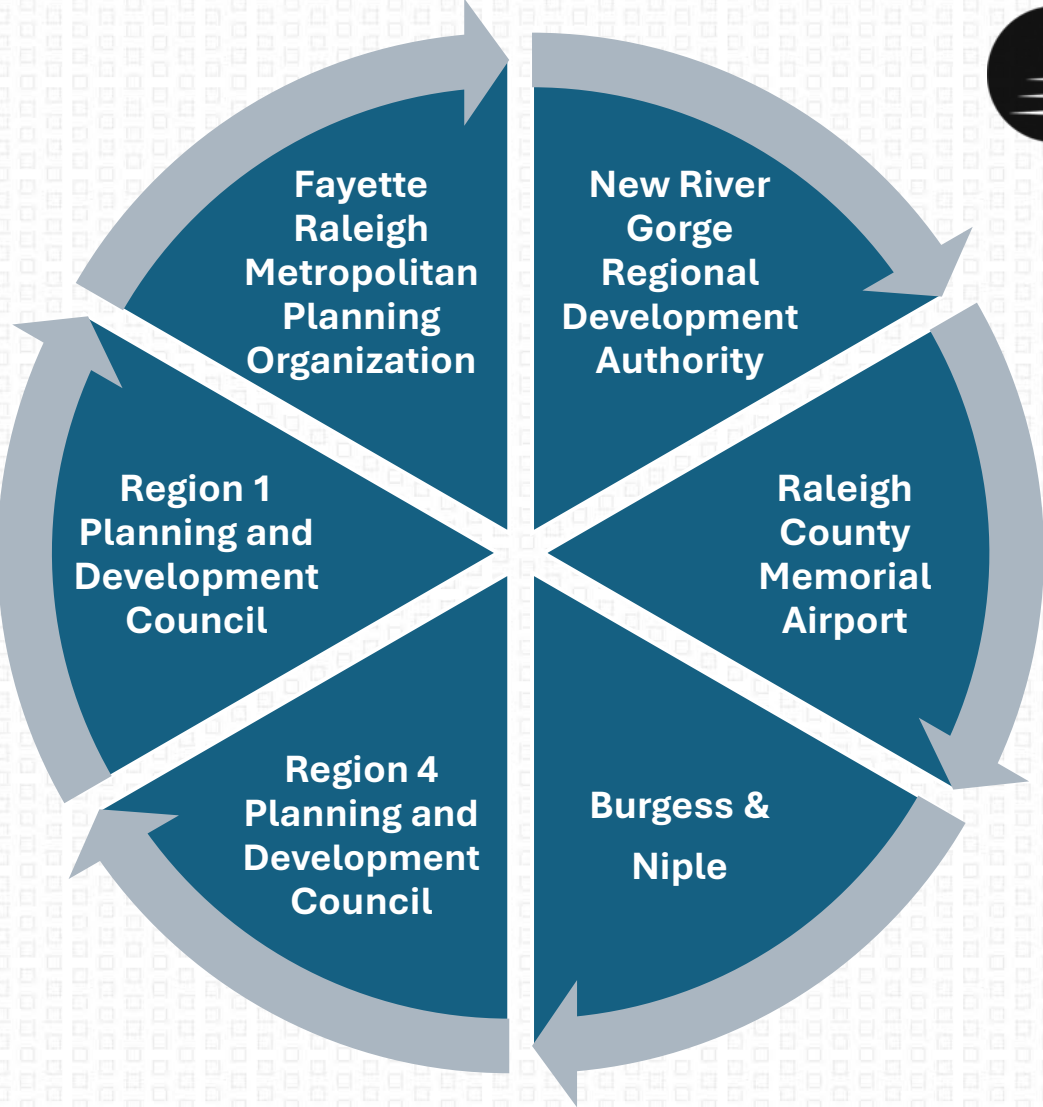


How Did We Get Here?

- Sourced **Partnerships**
- **10 Years** in the Making
- Unique **Rail Connectivity** to Airport
- FRMPO+B&N
- **Regional Collaboration** started to generate ideas



Importance of Multi-Agency Collaboration



BURGESS & NIPLE
Engineers ■ Architects ■ Planners



Shared Regional Priorities

NRGRDA Provided the Grant

Fayette Raleigh MPO Provided
the Matching Funds



Thank you!

Burgess & Niple's Involvement

2020

PHASE 1 – COMPLETED

Preliminary feasibility study

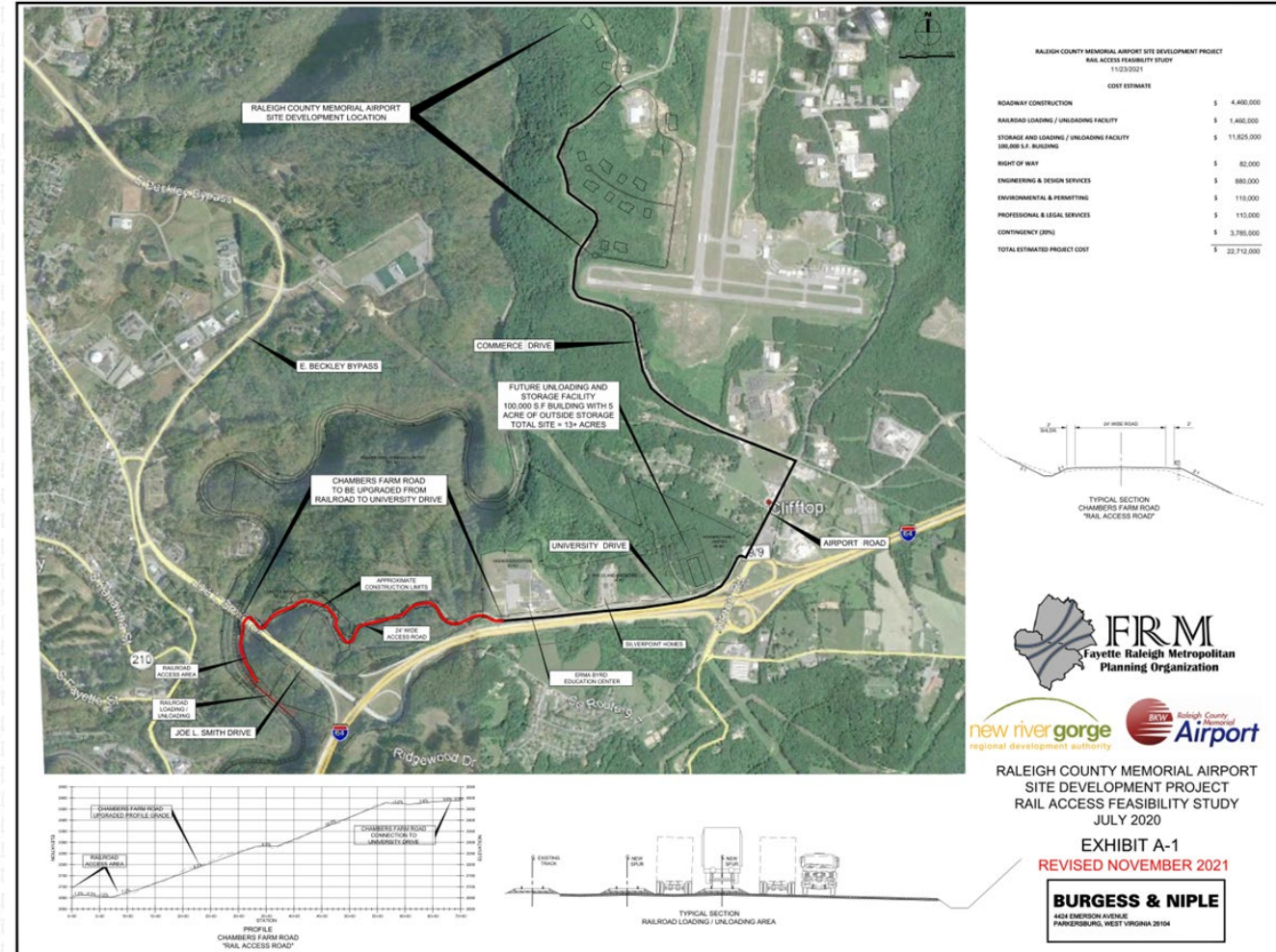
- High-level site investigations
- Evaluated project viability
- Identified key constraints and opportunities

Current

PHASE 2 – IN PROGRESS

Advancing Design & Coordination

- Site visit & Geotech
- Updated Mapping & Layouts
- Railroad Spur Layout
- Stakeholder Coordination
- Preliminary slope layouts



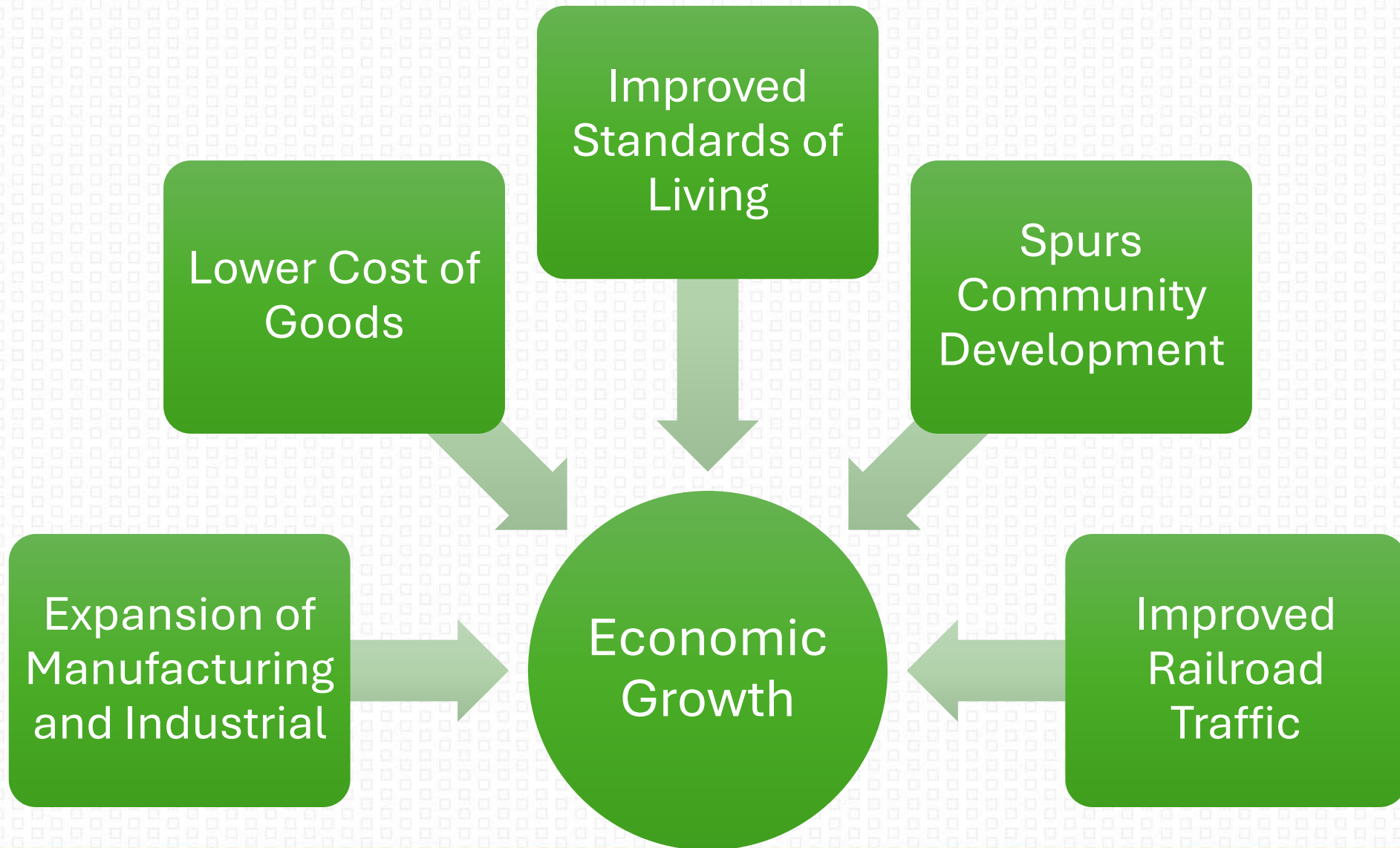
Project Location



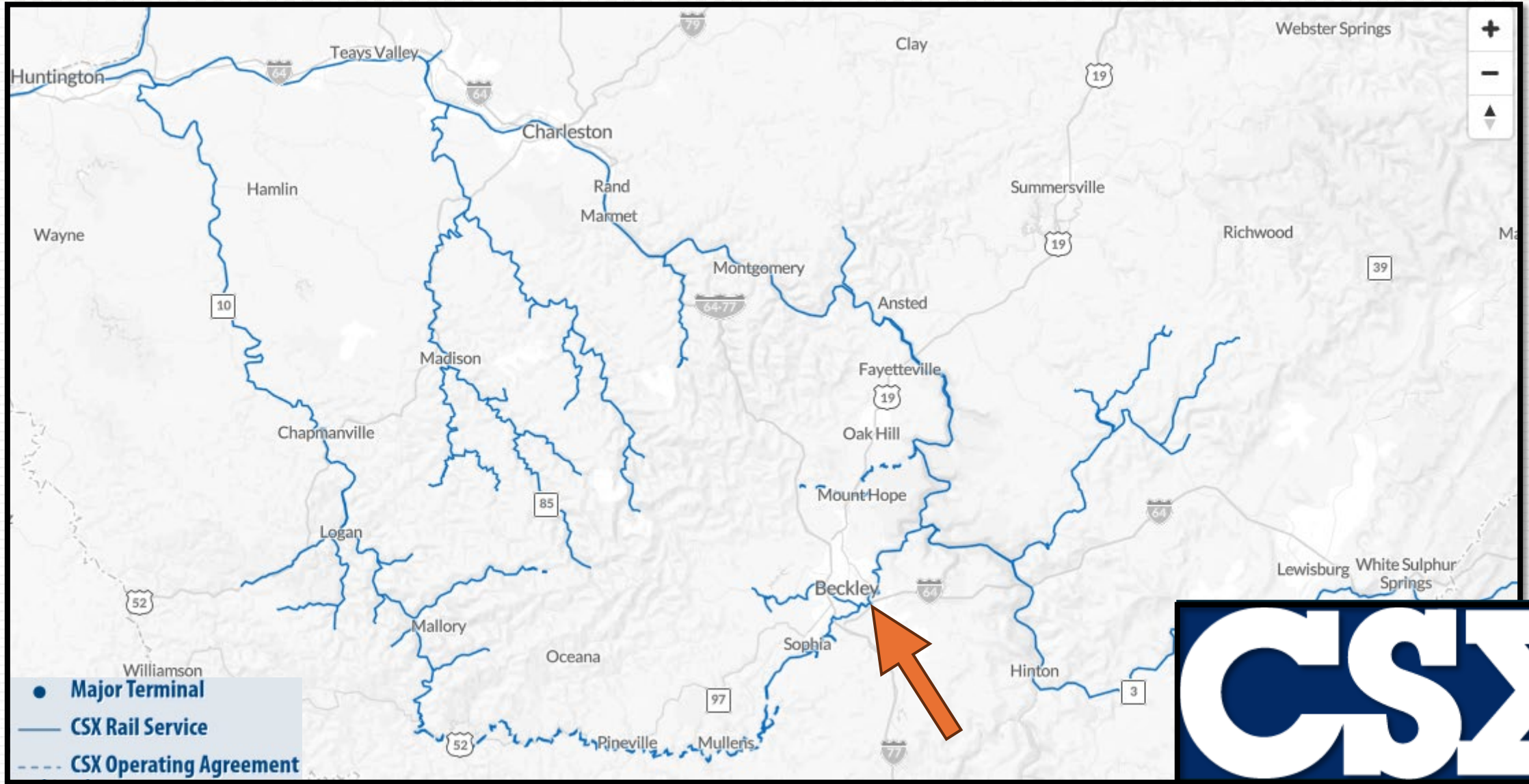
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Economic Development Vision

Why are we are doing this?



CSX System Map



Raleigh County Memorial Airport Industrial Park



- Phase 1: 174 acres
- Phase 2: 278 acres
- 105 acres in Progress
- Located in the automotive corridor:
 - Tennessee, Kentucky, and West Virginia
- Excellent proximity to major interstates
- One Mile from I-64/I-77

Industrial Park Growth & Expansion

INDUSTRIAL GROWTH

- Home to 30+ businesses
- 16 active development sites

ABUNDANT UTILITY CAPACITY

- Broadband expansion
- Water
- Sewer
- Electricity
- Gas

REGIONAL INVESTMENT

- New Amazon facility nearby
- Enhanced DOH investment in infrastructure

A Growing Industry = More High Paying Jobs



amazon

- 95,000 SF Fulfillment Center
- Offers Same-Day/Next-Day Delivery to the Area
- Employs 200 People



Electricity



Gas



Water



Sewer

Other Important Landmarks

HIGHER EDUCATION

- New River Community and Technical College
- Erma Byrd Higher Education
- Bluefield State College – Beckley Campus

MANUFACTURED HOMES

- Silverpoint Homes
- Freedom Homes

OTHER INDUSTRY INVESTMENT

- Tri County Trailers
- US Mine Safety and Health Administration
- Southern WV Asphalt, Inc.



The background is a solid dark blue. Overlaid on this are several large, semi-transparent light blue shapes. These include a large circle in the upper left, a large square in the center, and a large circle in the lower left. Additionally, there are smaller, semi-transparent light blue shapes with a fine grid pattern, including a circle in the upper left and a large circle in the lower left.

Importance of Rail Connectivity

Multimodal Freight Connectivity

Transportation

- Truck
- Rail
- Sea
- Air

Multimodal Transportation

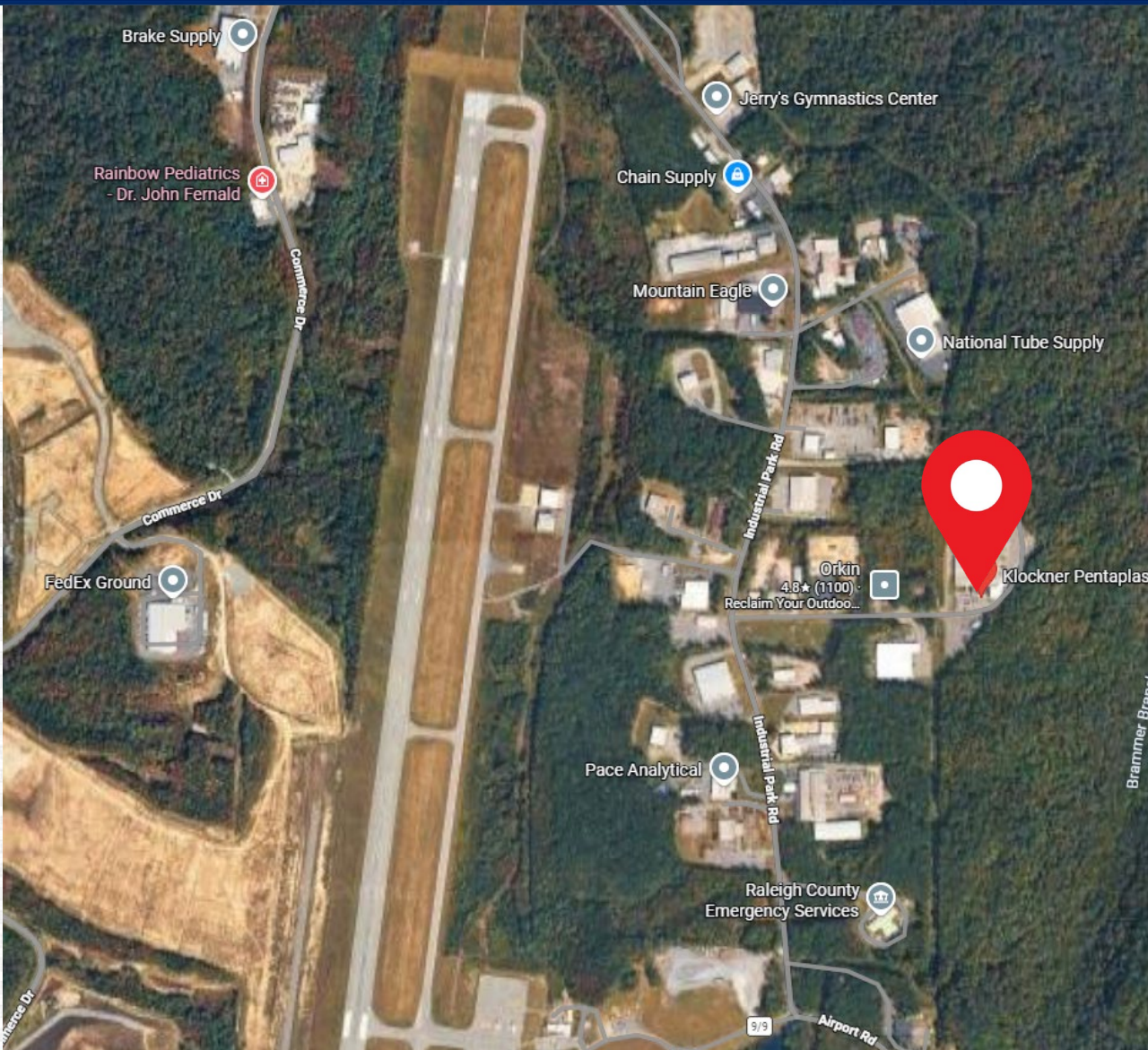
- 2 or More Modes of Transportation Used Together

Supply Chain Advantages

- Improves Efficiency
- Promotes Large Volume Shipments
- Cost Reduction
- Lightens Environmental Impact



A Draw to the Industrial Park



A Good Partnership with the Industrial Park

- Klockner Pentaplast
- Medical, Consumer, and Food Packaging
- 7 Locations in US
- 27 Total Plants in 16 Countries
- 5,000 Employees
- Rail Benefits Industrial Companies

This is a Desirable Industrial Area!

Why Rail Connectivity Matters in Beckley?

- Enhances Connectivity for Industry
- Many Industrial Partners **WON'T** Establish at Locations Without Rail Access

Freight Access = Regional Economic Growth



- Better Standard of Living for Residents
 - Higher Pay
- Population Increase
- Additional Public Dollars
 - Improved Schools
 - Better Roads

Diversify and Growing Businesses

WV is always looking to expand business opportunity

Current Economic Overview

- Gross State Product: \$83.7b
- Population: 1.8 million
 - Growth Rate from 2019-2024: -0.3%
 - Ranks 50th / 50 states by Growth Rate
- Total Businesses: 112,027
- Top Industries (2024 Revenue):
 - Hospitals (\$10.4b)
 - Mining (\$8.3b)
 - Oil and Gas (\$7.3)
 - Manufacturing does NOT make Top 10

WV is Preparing for Growth

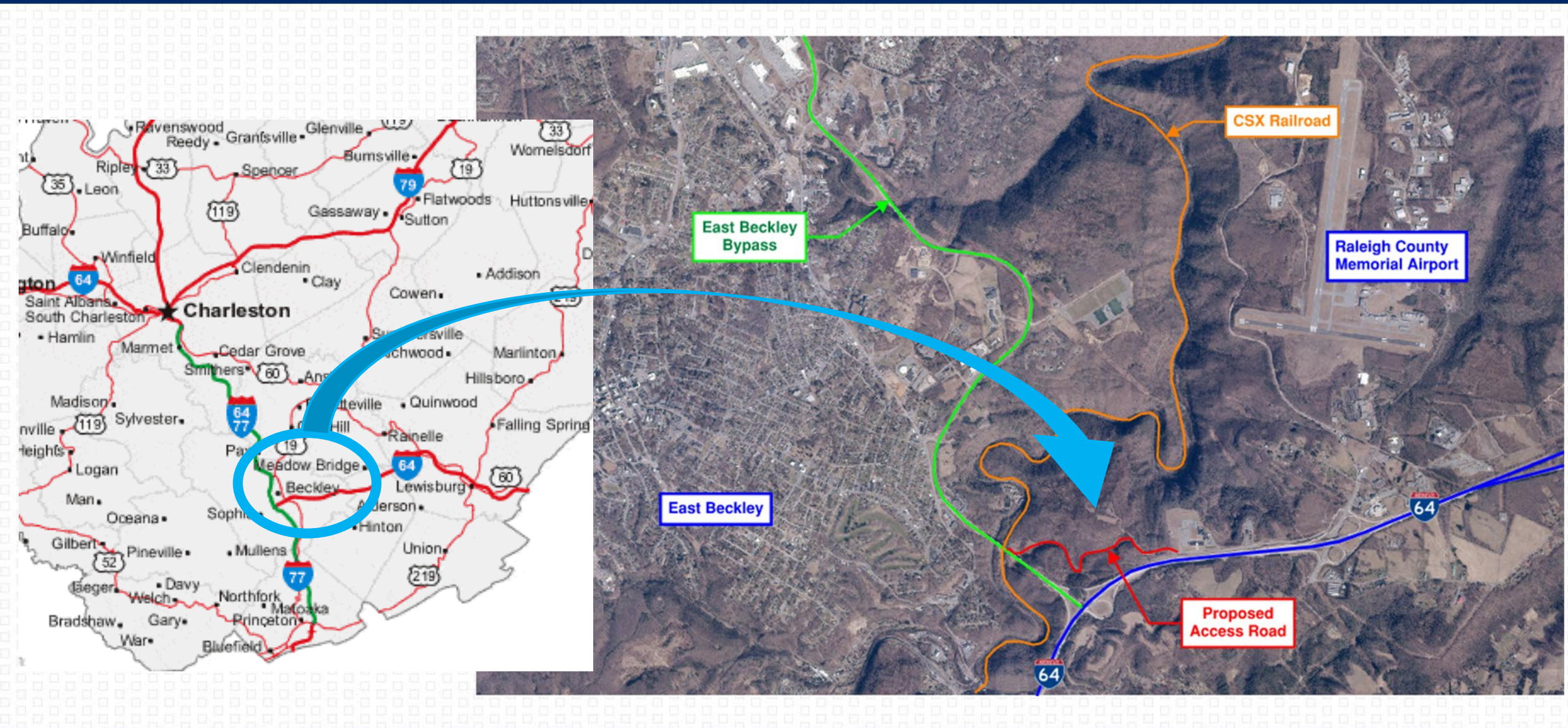
- 100,000 SF Manufacturing Facility Announced in May 2026
- WV is Investing \$2.1m in 2026 in Shovel-Ready Sites for Industry
- 50 by 50: Energy Initiative to Triple WV's Generating Capacity
 - 50 Gigawatts by 2050



The background is a solid dark blue. On the left side, there are several overlapping circular and semi-circular shapes in lighter shades of blue. Some of these shapes contain a fine, repeating pattern of small squares or dots. The overall design is modern and minimalist.

Project Introduction

Site Location



Overview Map & Corridors

Connectivity to Major Routes

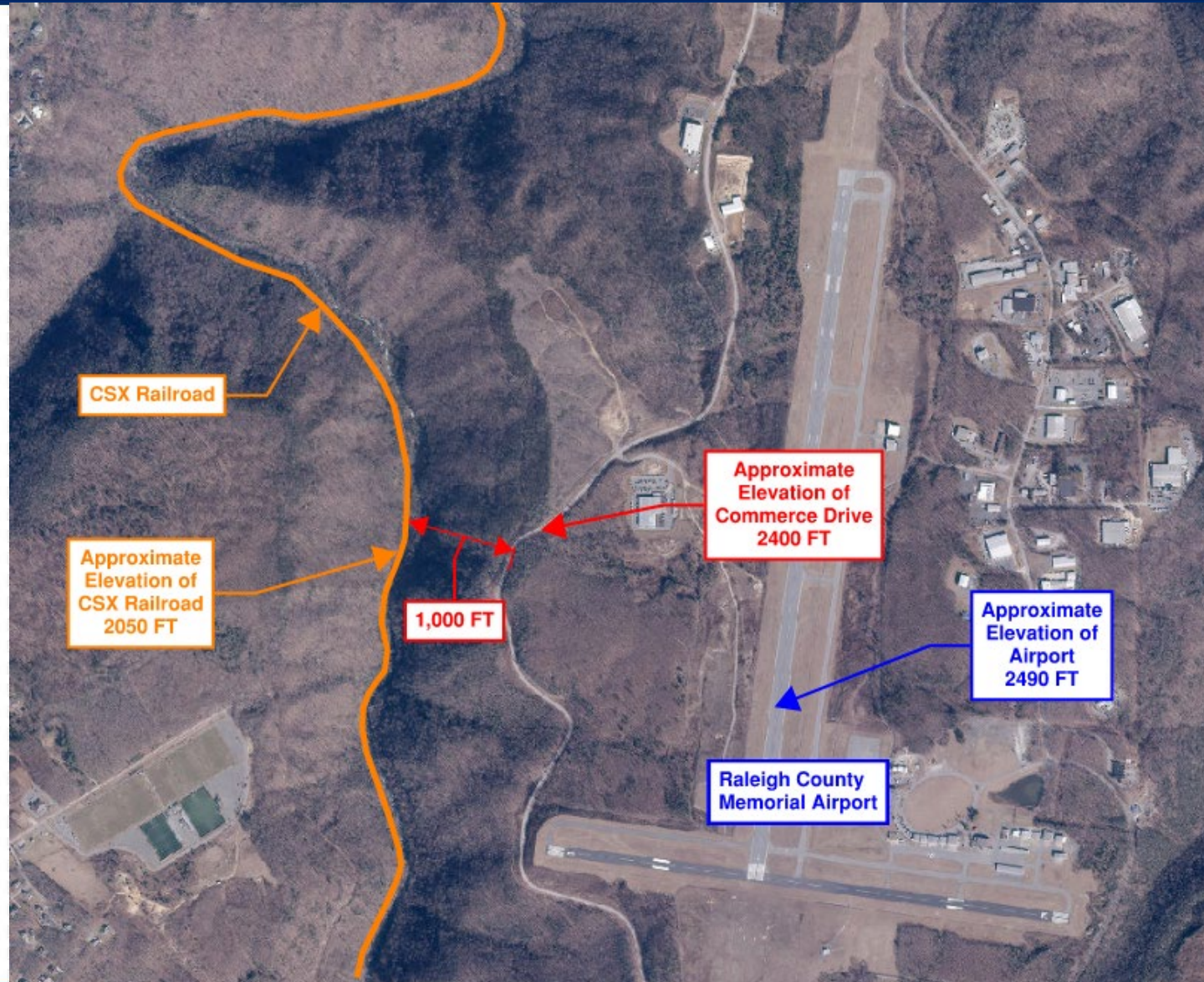
- I-64
- I-77
- US 19

Distance to Major Cities

- Charleston: 68 miles (1hr, 9 mins)
- Lewisburg: 47 miles (46 mins)
- Bluefield: 52 miles (54 mins)

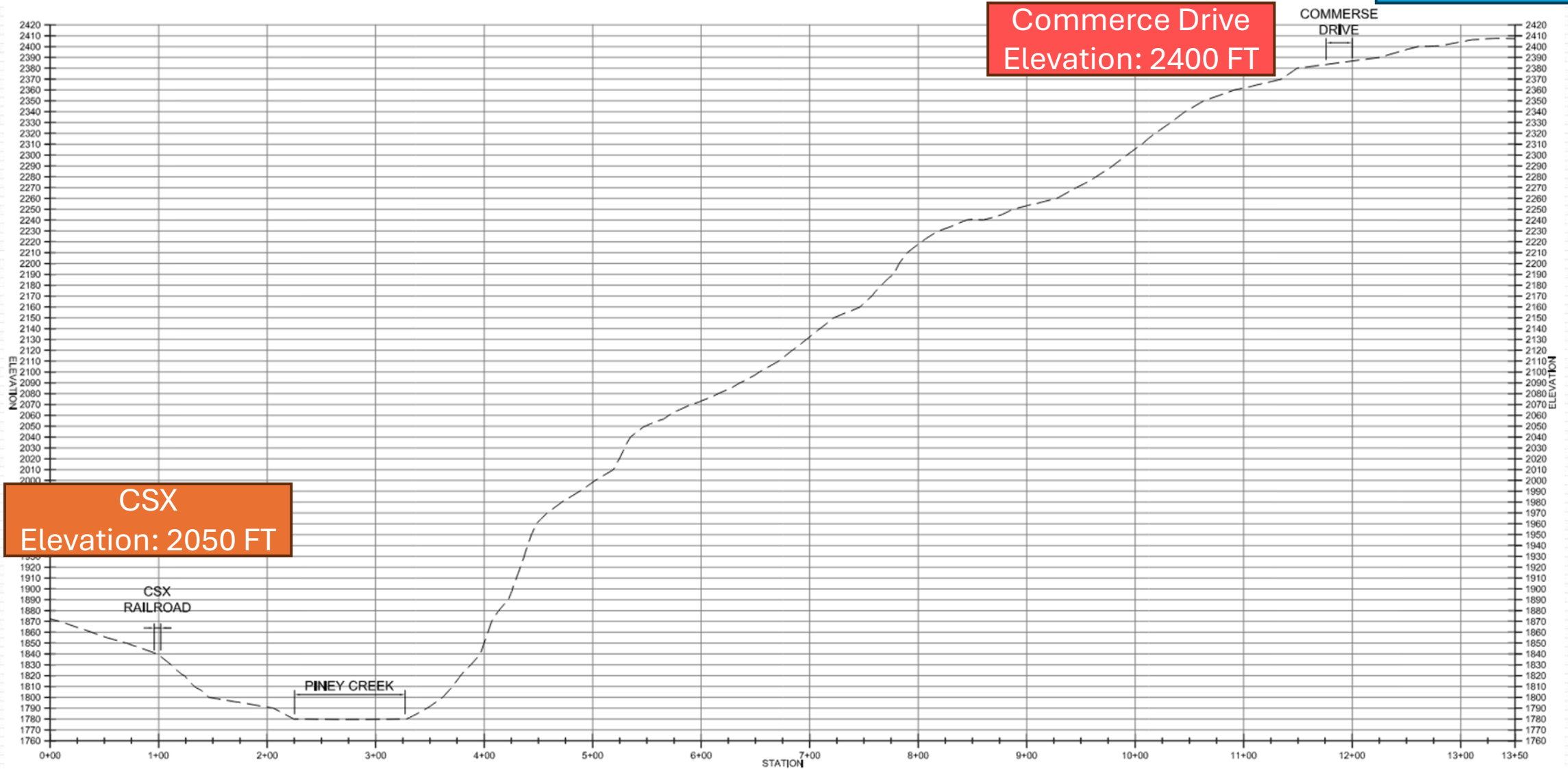


Why is this Study Needed?



Why is this Study Needed?

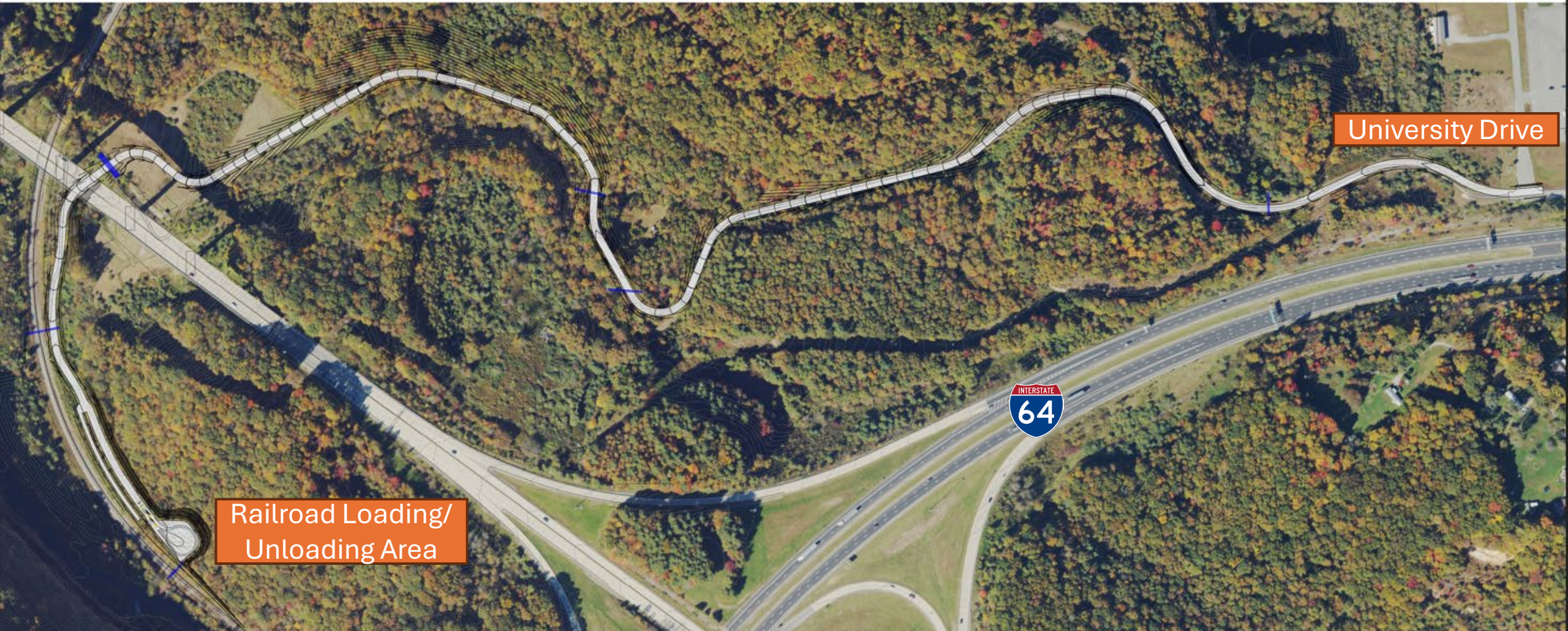
Airport
Elevation: 2490 FT



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Project Details

Project Overview



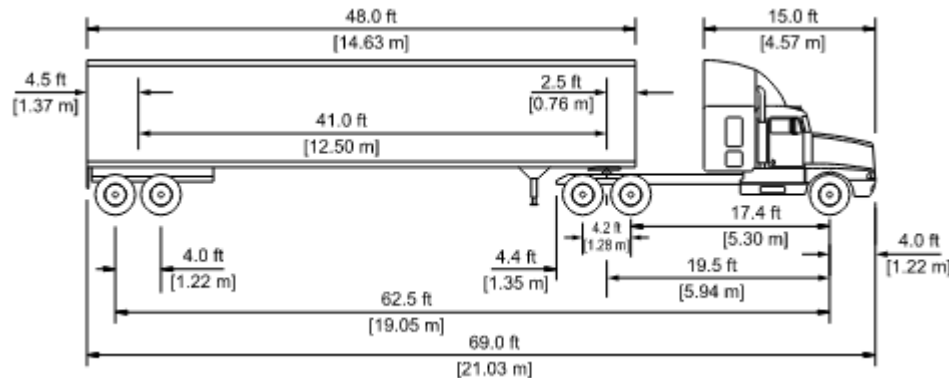
Existing Site Conditions



Geometric Design Parameters

Roadway Design Items

- Grade: Generally Follows Existing
- Roadway Width: 24'
2' Shoulders
- Design Vehicle: WB-62



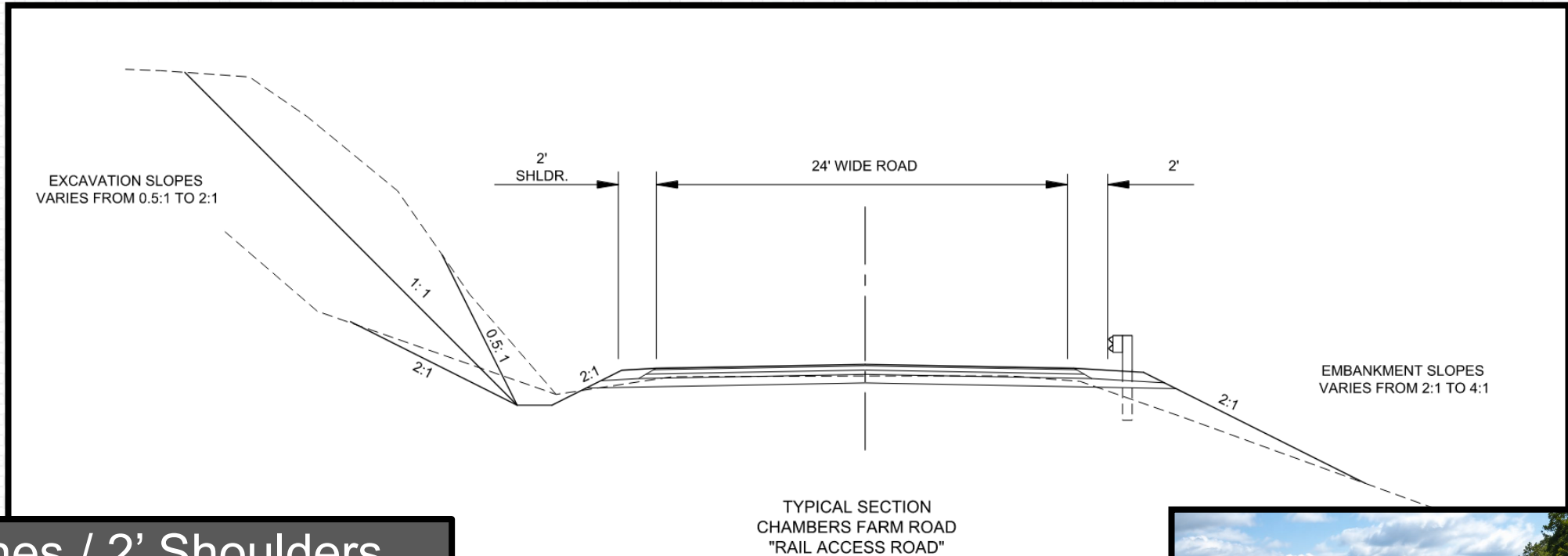
RR Spur Design Items

- 200' from Curve
 - Placed in Tangent
- 25' CL Spacing for Spur Lines



STANDARD SPECIFICATIONS FOR THE DESIGN
AND CONSTRUCTION OF PRIVATE SIDETRACKS

Typical Section



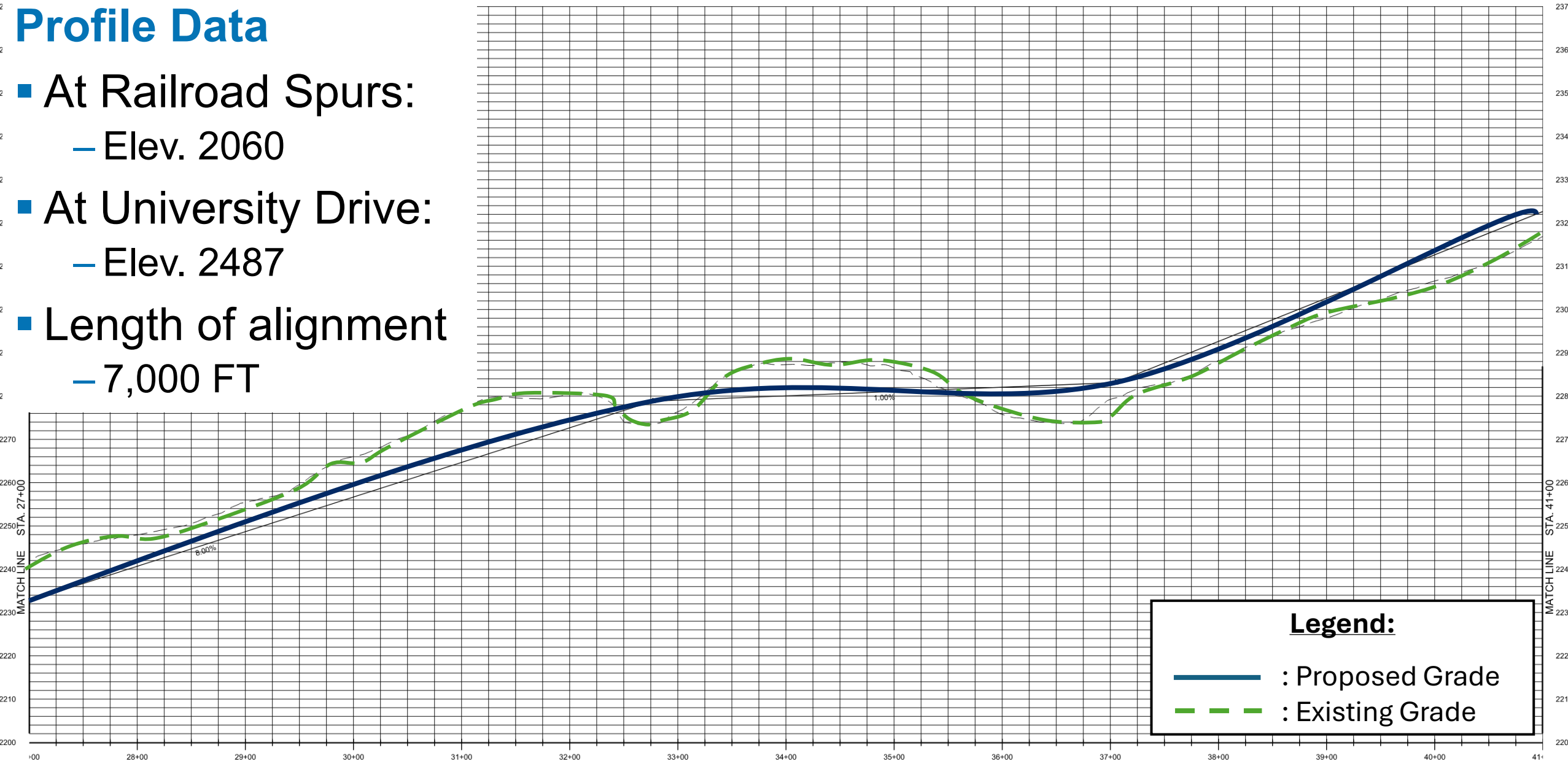
- 12' Lanes / 2' Shoulders
- Paving Design
 - Wearing Course
 - 6" Base Course
 - 6" Aggregate Base Course
- ~1,875' of Guardrail



Proposed Profile & Grades

Profile Data

- At Railroad Spurs:
 - Elev. 2060
- At University Drive:
 - Elev. 2487
- Length of alignment
 - 7,000 FT



Preliminary Geotechnical Evaluation

Site Observations

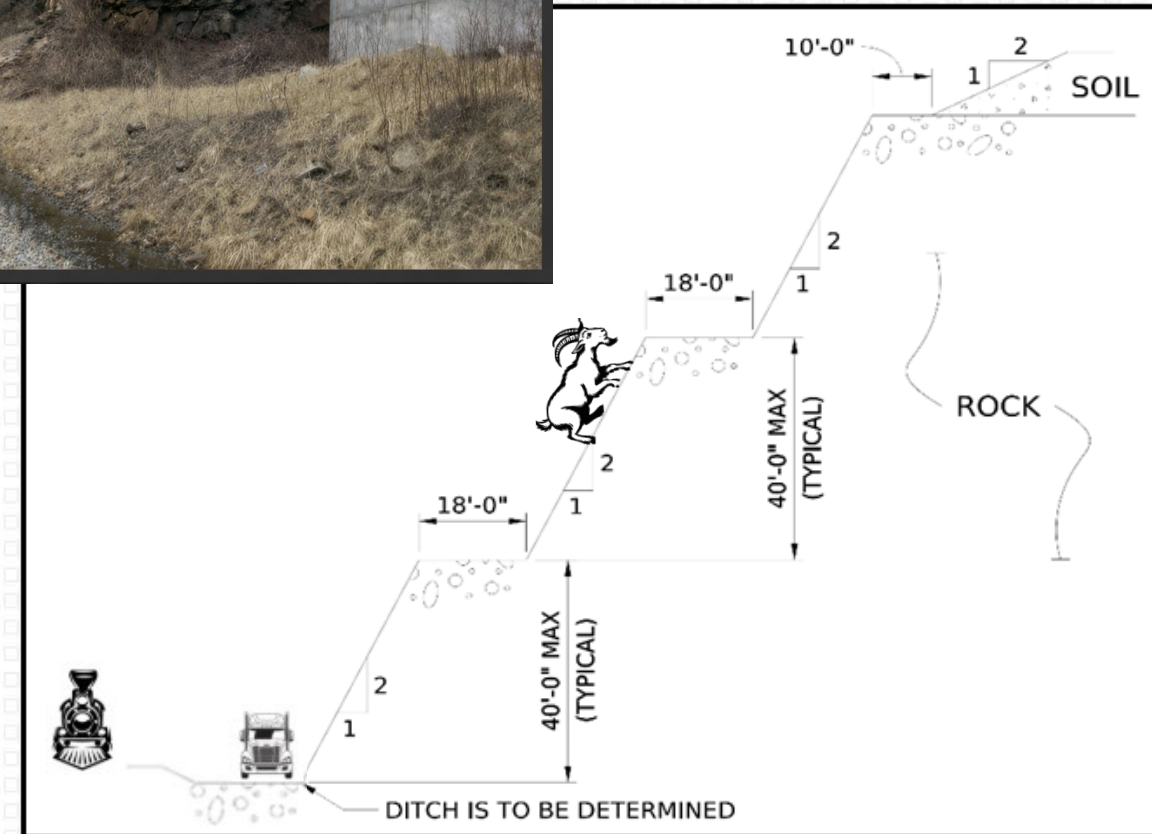
- Exposed Sandstone Noted
- Bridge Pier Excavation

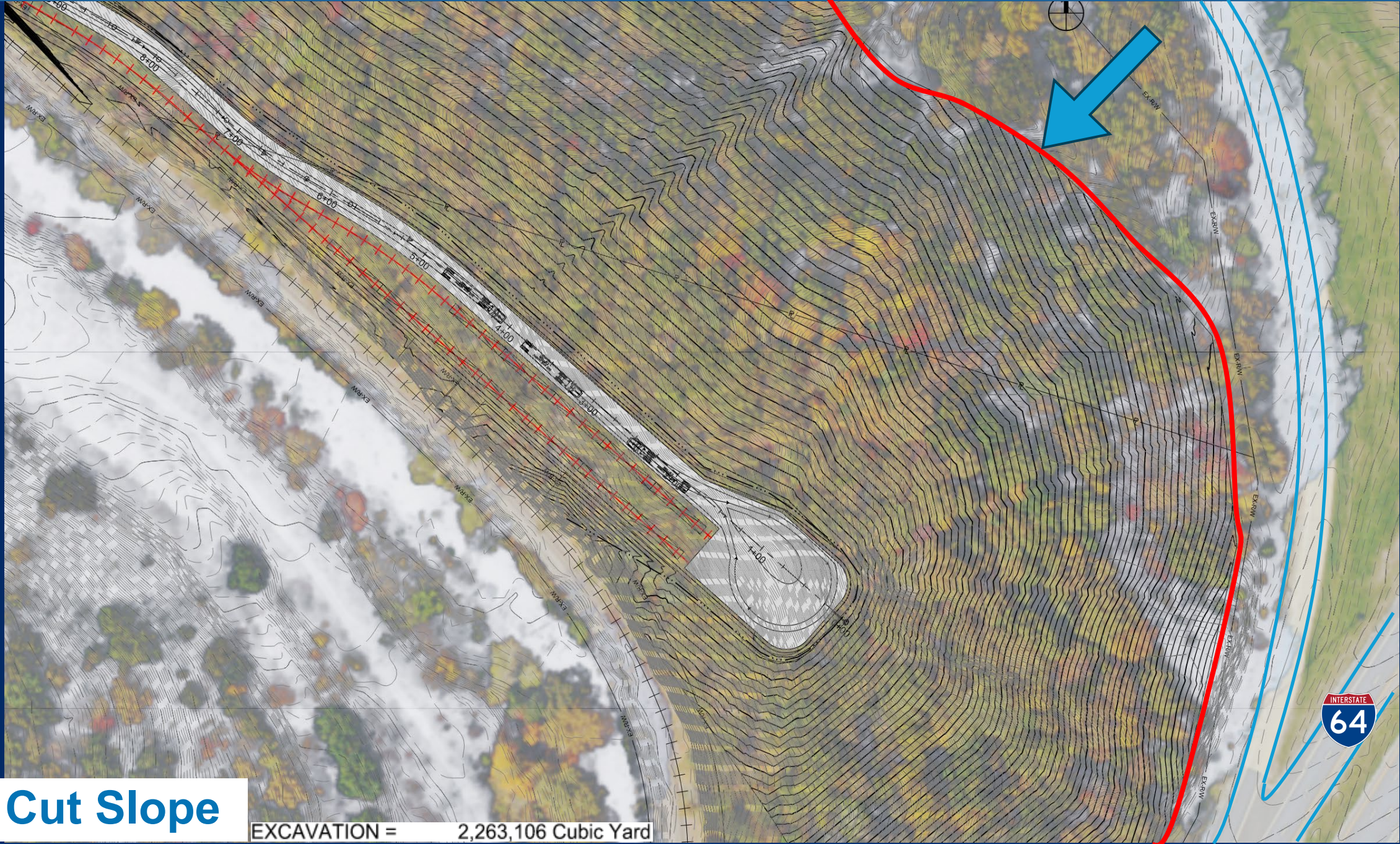
Geotech Recommendations

- Core Borings Needed For Final
- Design Cuts vs Fills
- Retaining Walls Likely Not Needed

Geotech Assumptions

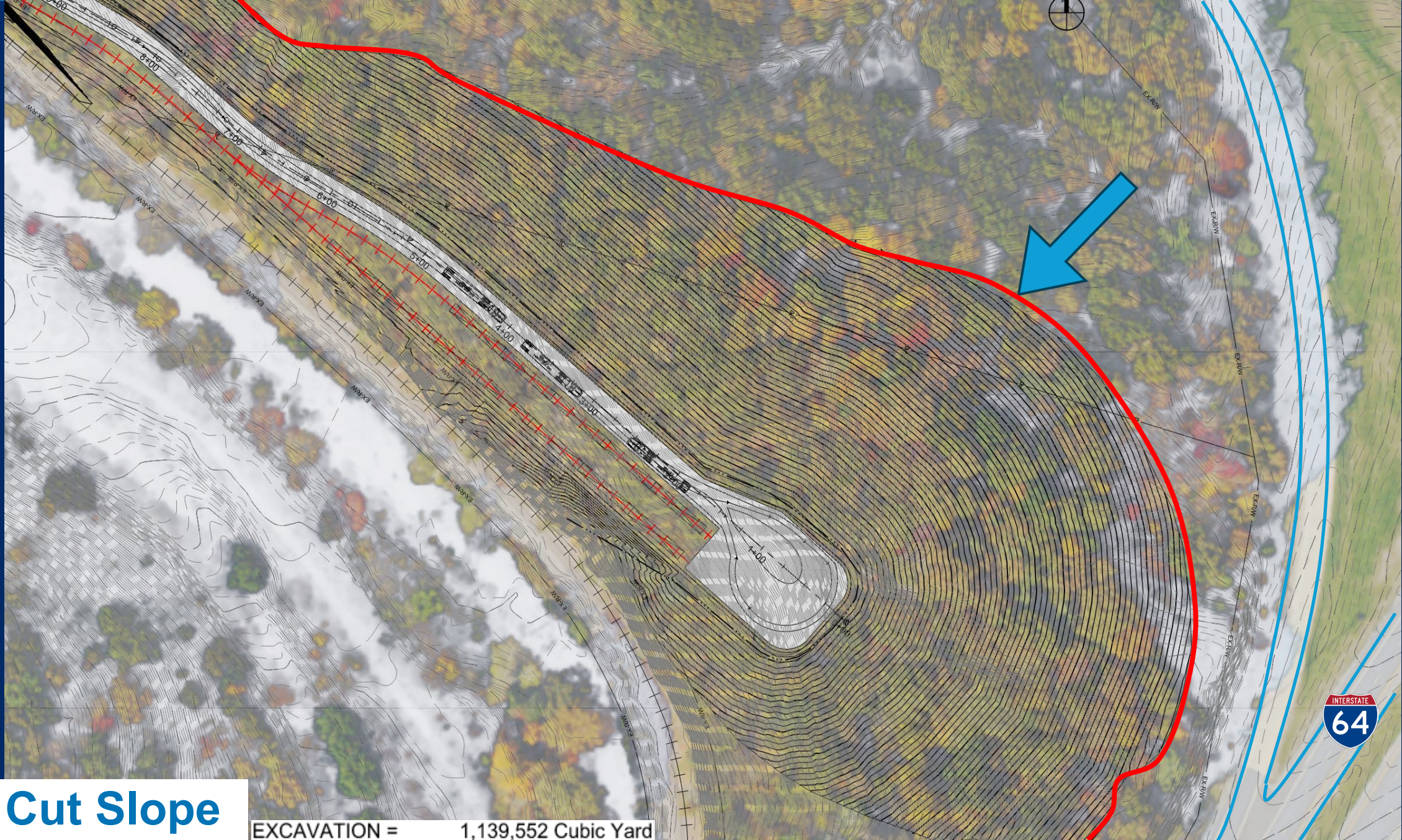
- 0.5:1 Slope Maximum
- Maintain 2:1 as Practical





2:1 Cut Slope

EXCAVATION = 2,263,106 Cubic Yard

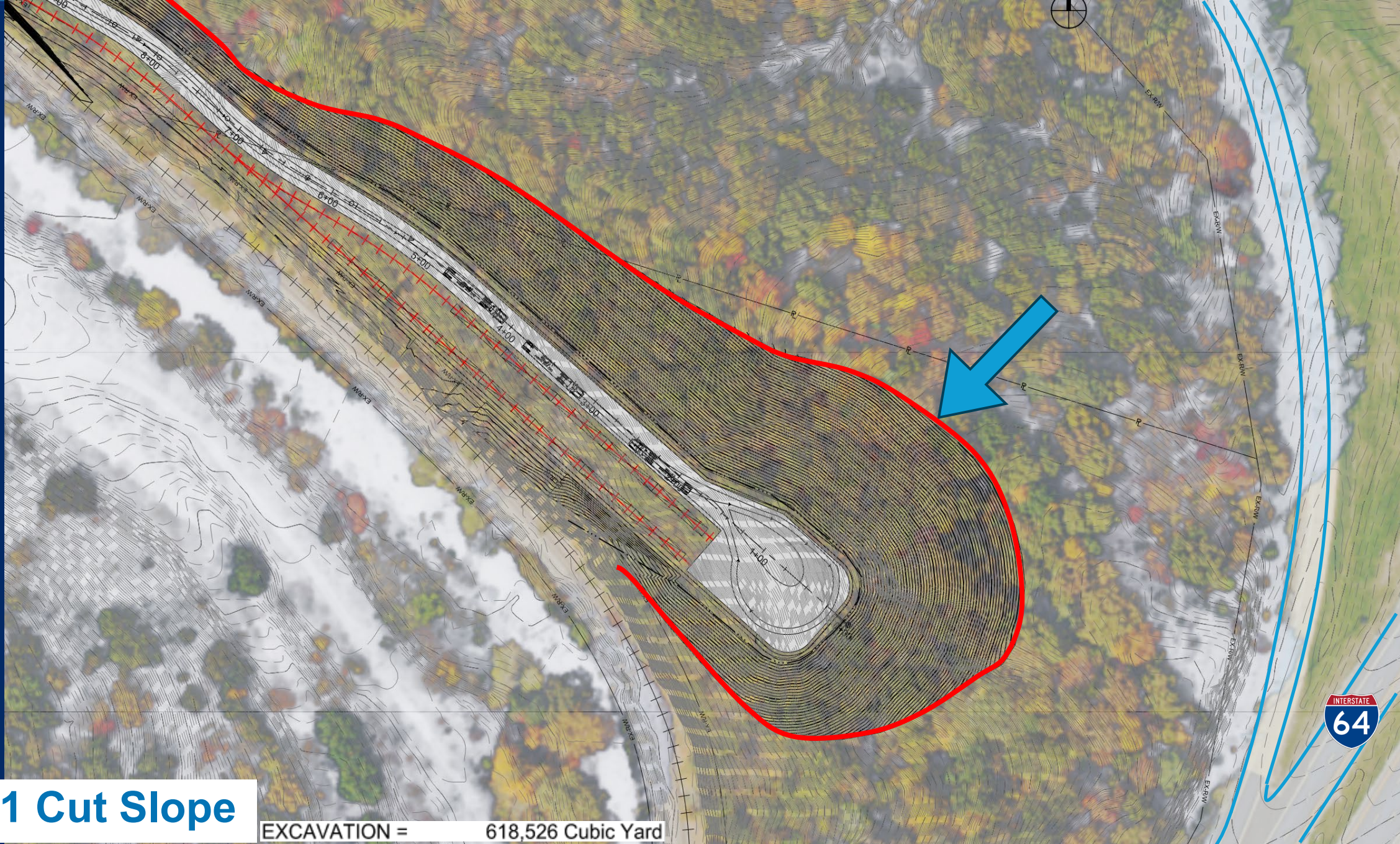


1:1 Cut Slope

EXCAVATION = 1,139,552 Cubic Yard

0.5:1 Cut Slope

EXCAVATION = 618,526 Cubic Yard

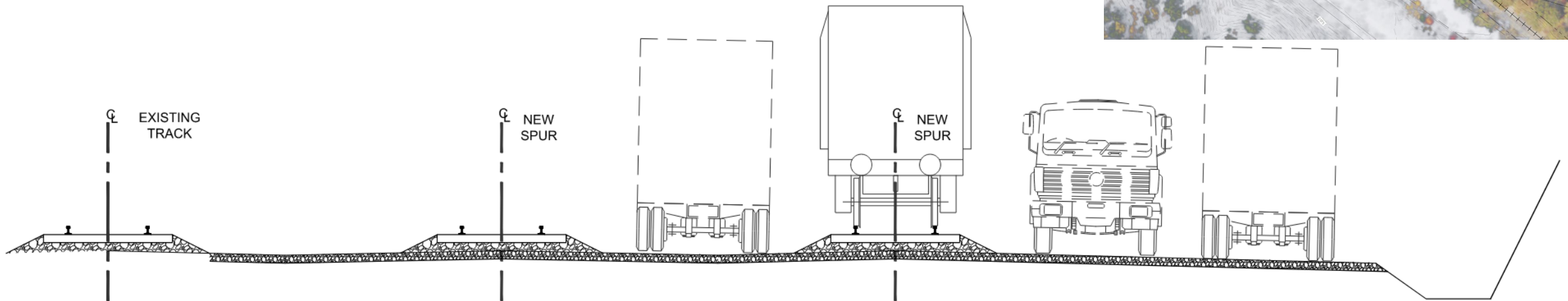
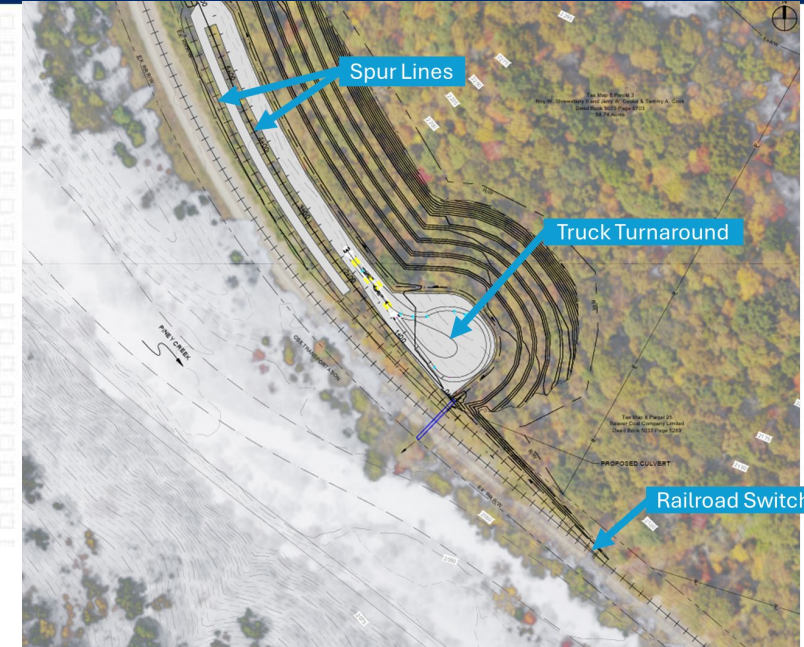


Typical Section – Railroad Unloading Zone



25'

25'

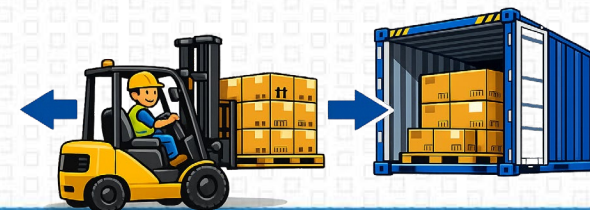


TYPICAL SECTION
RAILROAD LOADING / UNLOADING AREA

Railroad Unloading Zone

Rail Car Loading/Unloading Options

- Forklifts (Anticipated)
- Overhead Cranes
- Pneumatic Systems
- Other Specialized Equipment



Other Design Considerations

Utilities

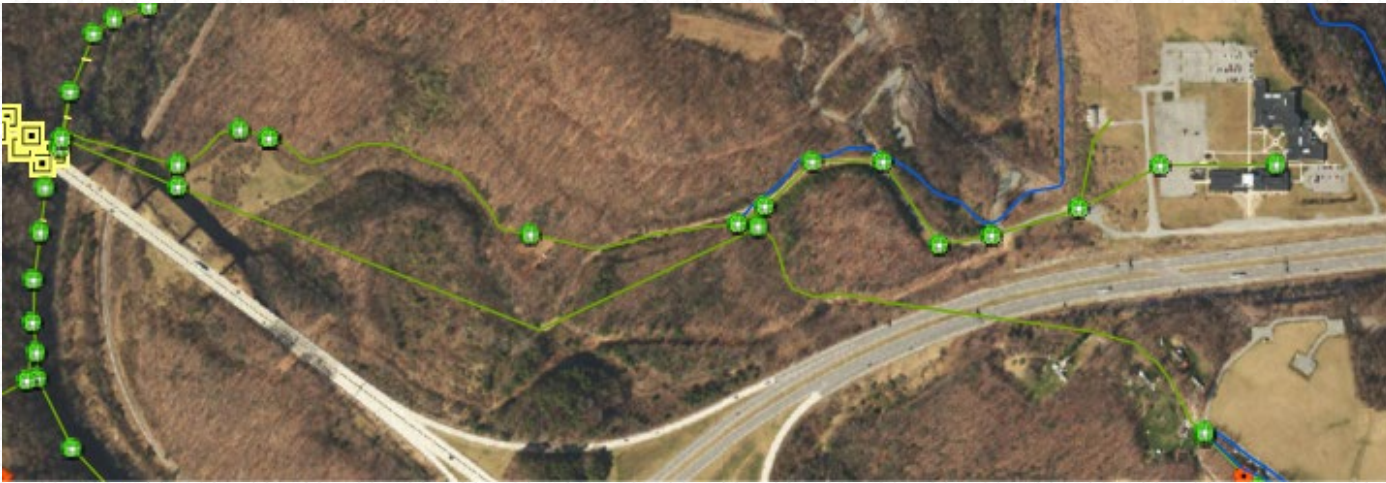
- Manhole was Observed Near Project Site
- Early Coordination with Sanitary Board

Environmental Analysis

- Environmental Screening Recommended

Survey Mapping

- Study was Completed with Available GIS Data



Estimated Cost of Construction

Current Day Costs

- Construction: > \$11 Million
- 20% Contingency Added

Total Estimated Cost

- ~ \$15 million



RALEIGH COUNTY MEMORIAL AIRPORT SITE DEVELOPMENT PROJECT RAIL ACCESS FEASIBILITY STUDY

ROADWAY COSTS	\$6,698,000
RAILROAD COSTS	\$1,940,000
RIGHT OF WAY COSTS	\$75,000
UTILITY RELOCATIONS	\$1,100,000
C&E (13%)	\$1,276,000
COMBINED CONSTRUCTION COSTS	\$11,089,000
ENGINEERING AND DESIGN SERVICES	\$900,000
BORING AND GEOTECHNICAL	\$150,000
ENVIRONMENTAL & PERMITTING	\$100,000
PROFESSIONAL & LEGAL SERVICES	\$100,000
ADMINISTRATION	\$150,000
COMBINED PROJECT COSTS	\$12,489,000
PROJECT CONTINGENCY (20%)	\$2,498,000
TOTAL CONSTRUCTION COSTS	\$14,987,000

Next Steps and Conclusion



- Secure Grant for Final Design
- Coordinate with CSX
- Complete Final Design



- Secure Construction Grant
- Complete Construction



- WV Economy to Experience Growth

**As this project
continues, we will
help make Big Foot's
*Dream Come True!***



Questions?

Thank you!