Heartland Corridor

Walton, VA to Columbus, OH

Double Stack Clearance Project
Construction Inspection
Pre-Proposal Meeting

February 14, 2007

Safety Briefing

- Project Manager Structures
  Joe Fowler

Federal Project Manager

Eastern Federal Lands Highway Division

US Department of Transportation - Federal Highway Administration

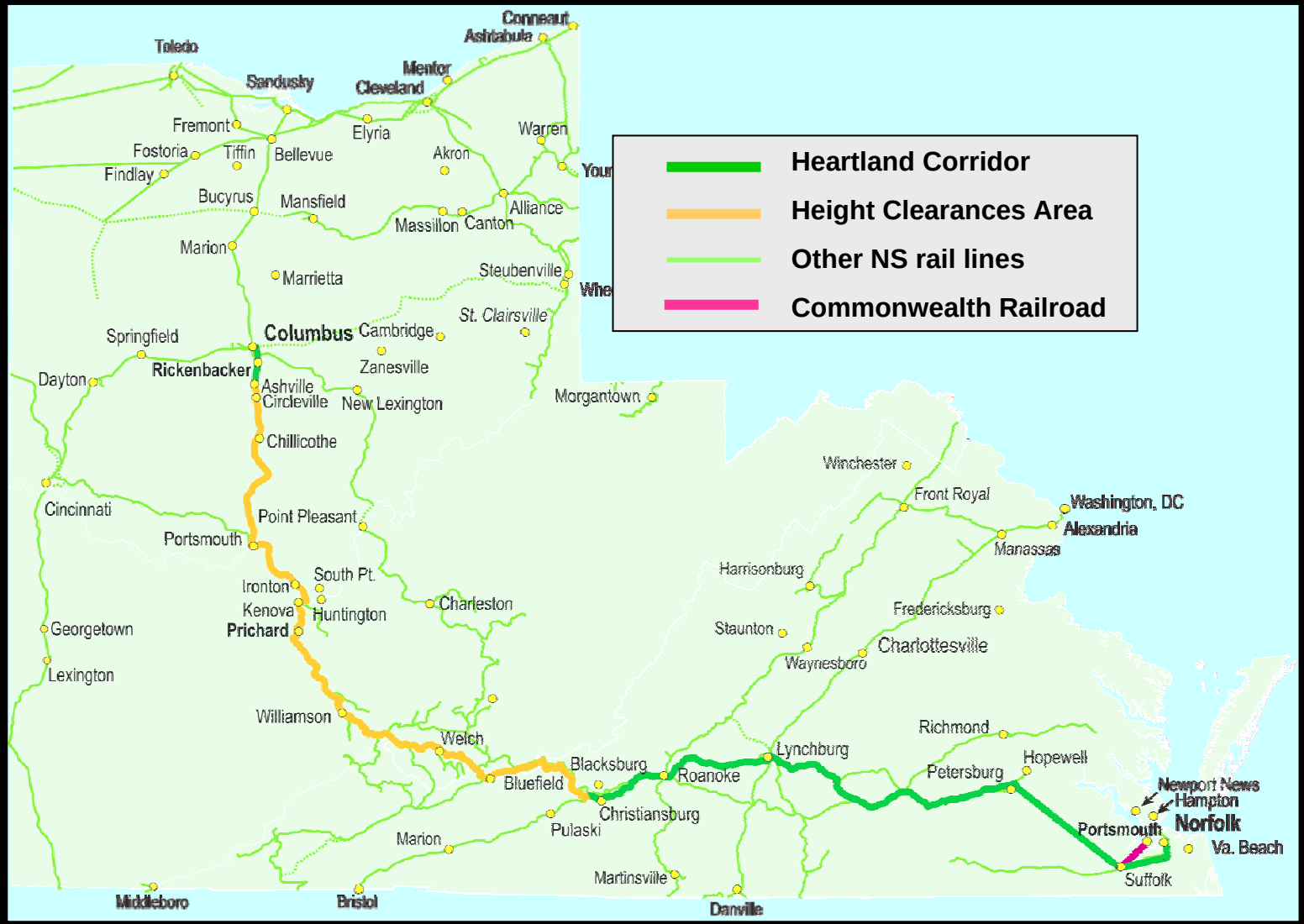
State Sponsoring Agencies

DRPT
Virginia Department of Rail and Public Transportation

OHIO RAIL DEVELOPMENT COMMISSION

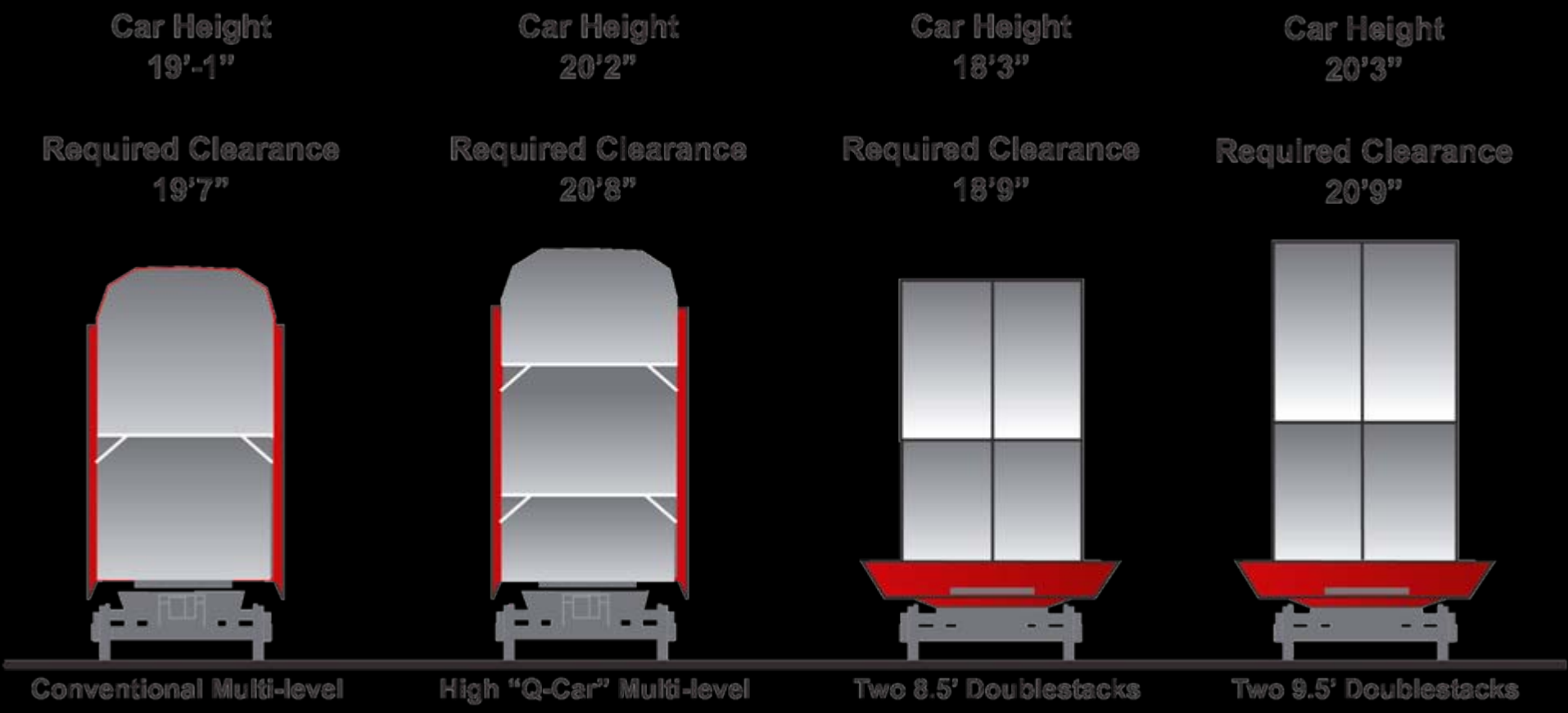
Heartland Corridor
Norfolk to Chicago

Heartland Clearance Project



Double-Stack Project:

Current Clearance: 19’1” for multi-levels only
Proposed: 20’9” for high-cube double-stacks



Project Overview

- Double Stack Clearance Project – Federal Funding Portion
  - 25 Tunnels included (1–VA, 24–WV) – all lined
  - 4 Through Truss Modifications
  - 2 Overhead Bridges require track lowering/bridge raising
  - Slide Fence Modifications

    8 locations

Project Overview

- Double Stack Clearance Project – non-Federal Funded Portion
  - 5 Tunnels included (3-VA, 2-KY) – 4 lined
  - 4 Through Truss Modifications – NS forces
  - 1 Overhead Bridge requires track shifting

Preliminary Engineering

- Hatch Mott MacDonald
- Link to reports: http://www.nscorp.com/nscorphtml/engineering/heartland.html
- Password: Railroad06

Hatch Mott MacDonald

delivering solutions

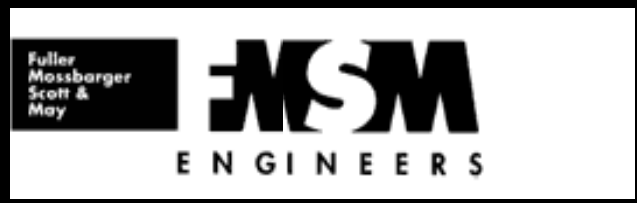
Field Investigations

- 2005 Study to Identify Clearance Issues
- Tunnels
- Thru Truss Bridges
- Highway Overpasses
- Slide fences, utilities and other facilities
- Total of 67 sites

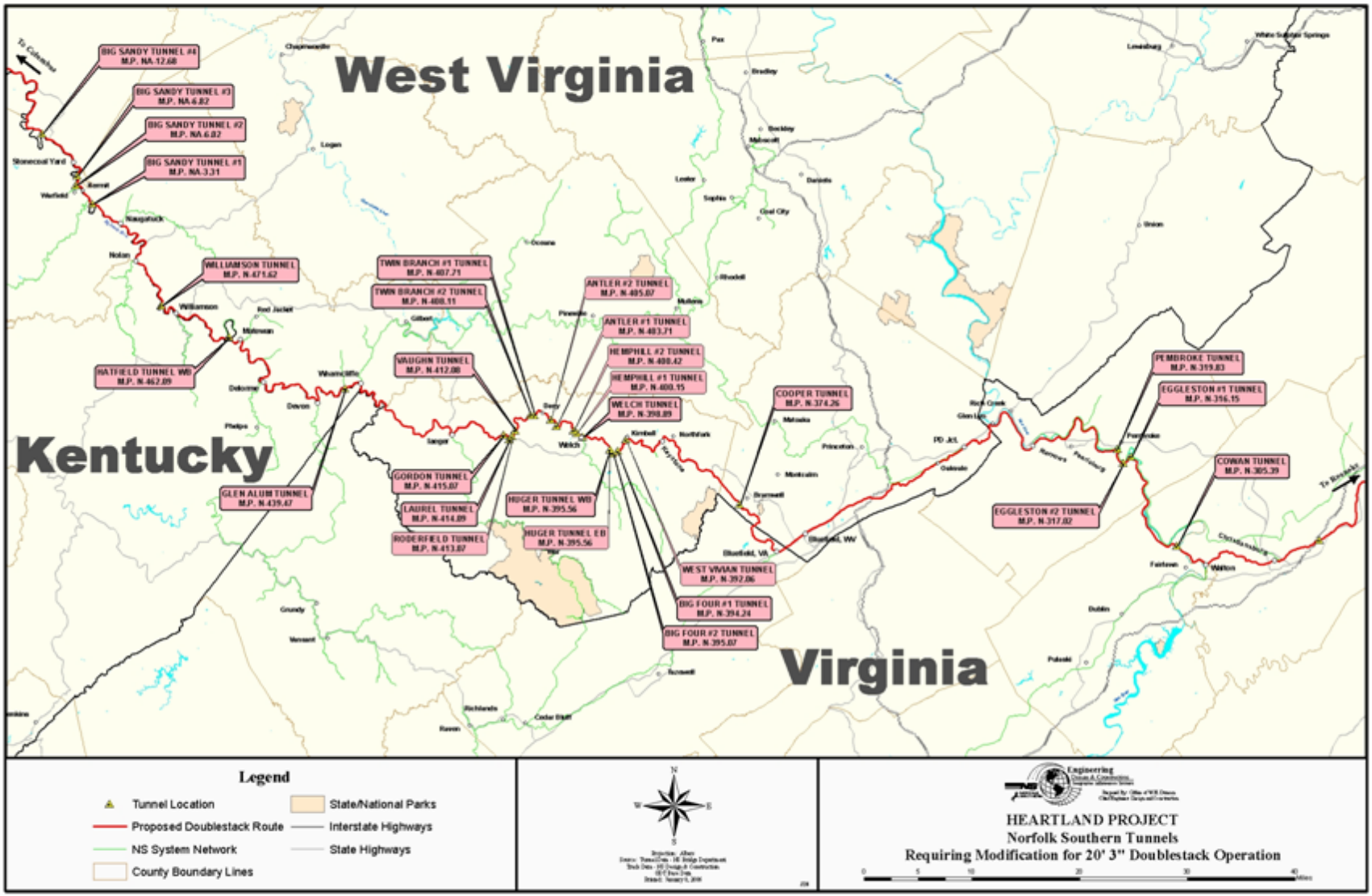
Field Investigations

- 30 Tunnels Along Corridor
- Lengths from 170’ to 3,300’ (4.5 Mi)
- Field Investigation to identify:
  - Clearance Deficiencies (laser car)
  - Verify Structural Conditions
  - Geology & Geotechnical Parameters

Design Engineering

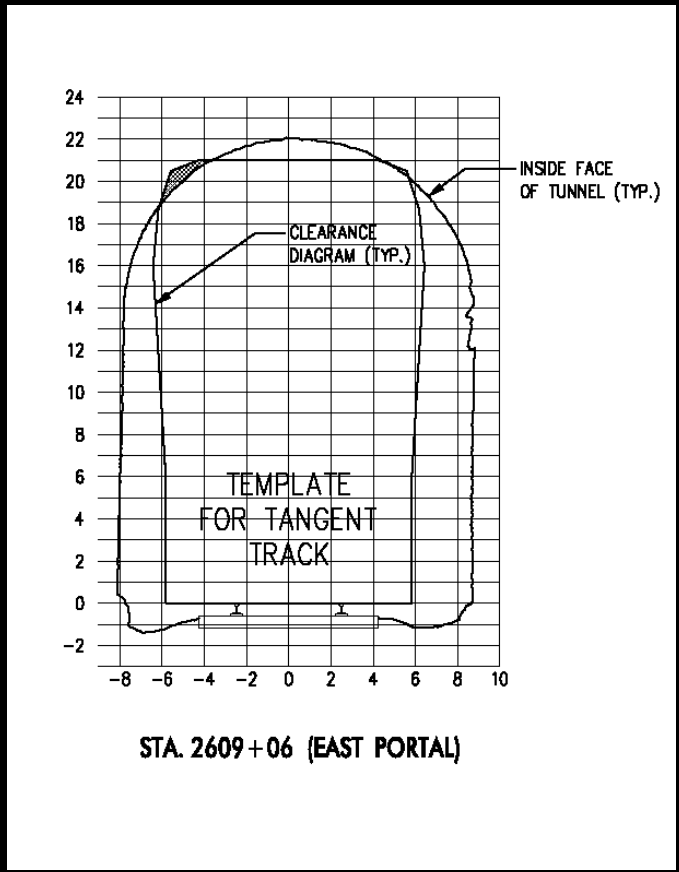


Heartland Tunnel Work

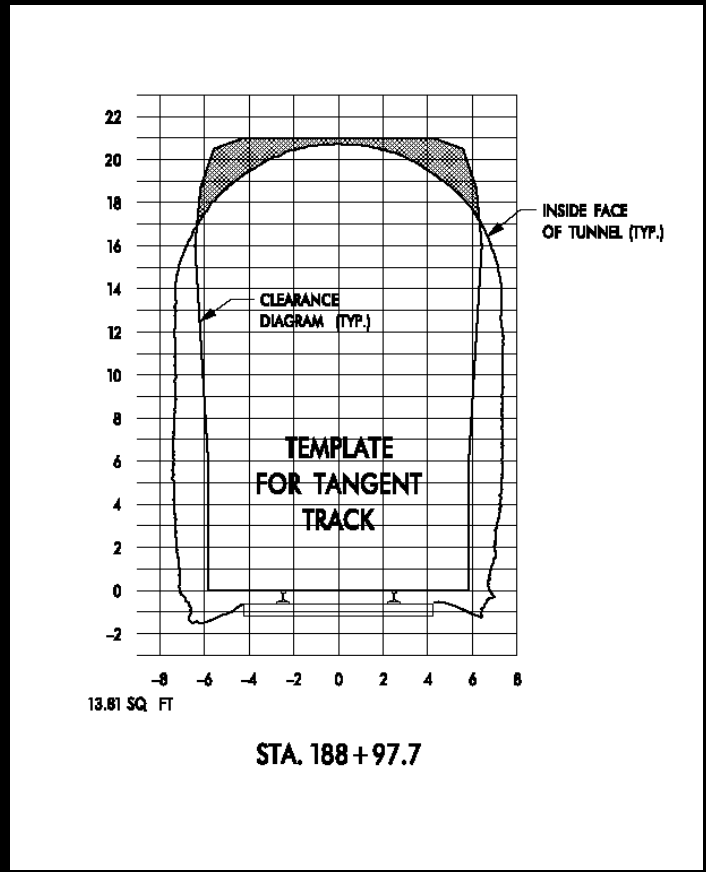


Design Considerations

- Extent of Encroachment

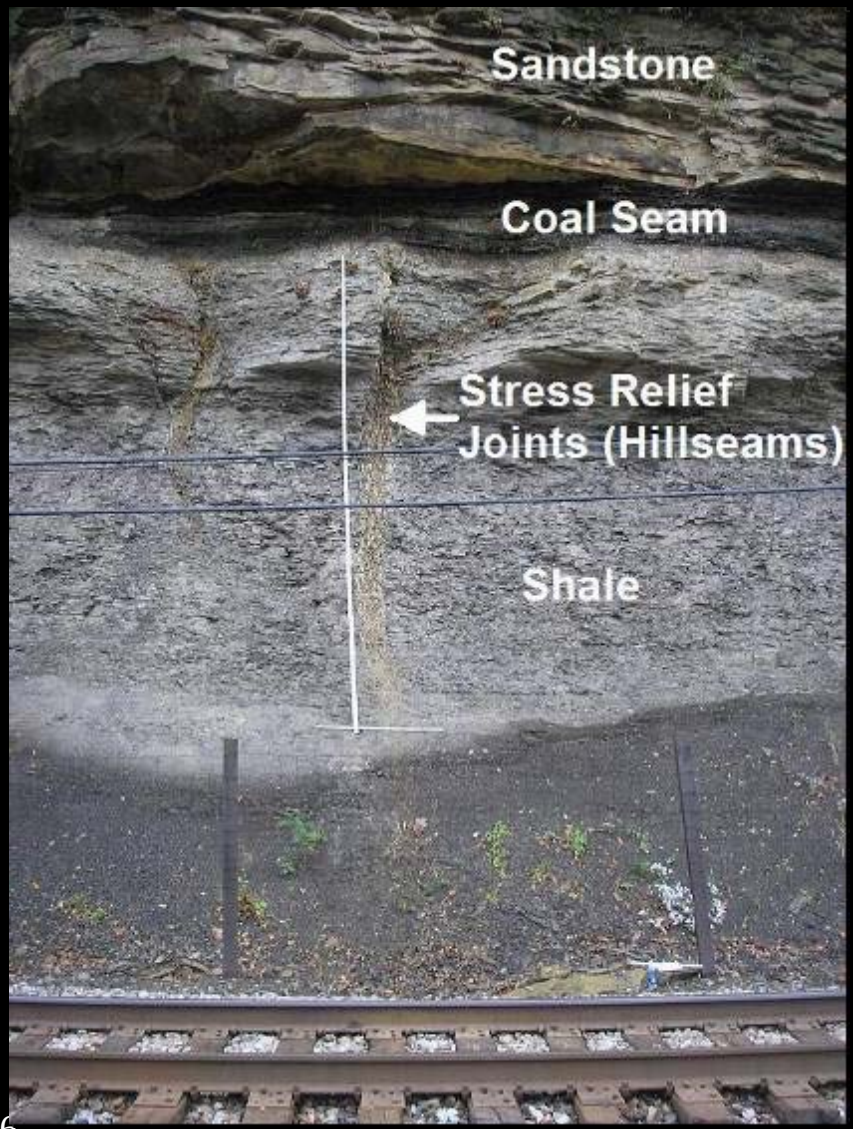


STA. 2609+06 (EAST PORTAL)



STA. 188+97.7

Design Conditions

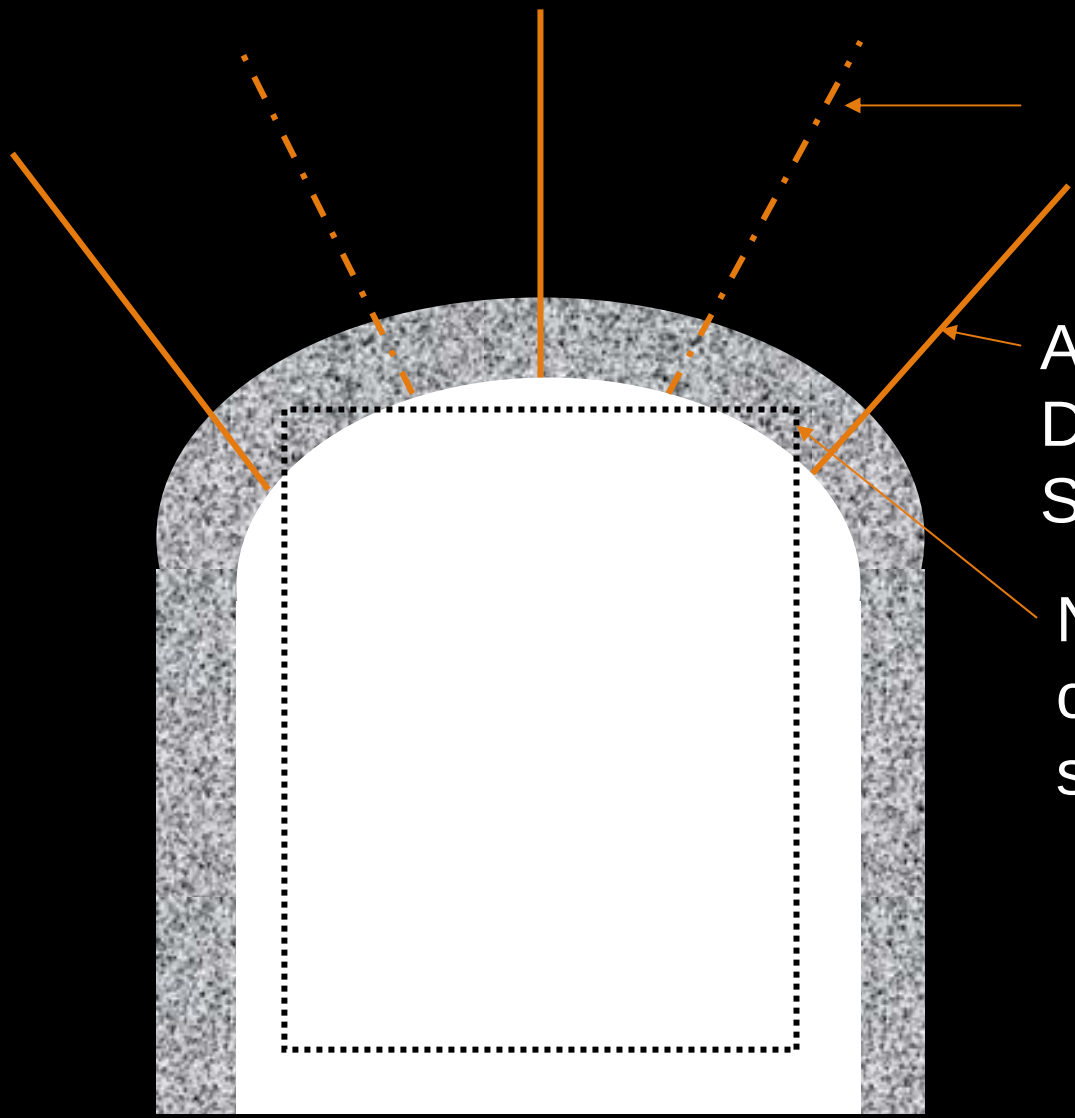


- Geotechnical Parameters

Clearance Improvement Methods

- Notching
  - Minor Notching
  - Deep Notching
- Lining Replacement
- Daylighting

Deep Notching (7 Tunnels)

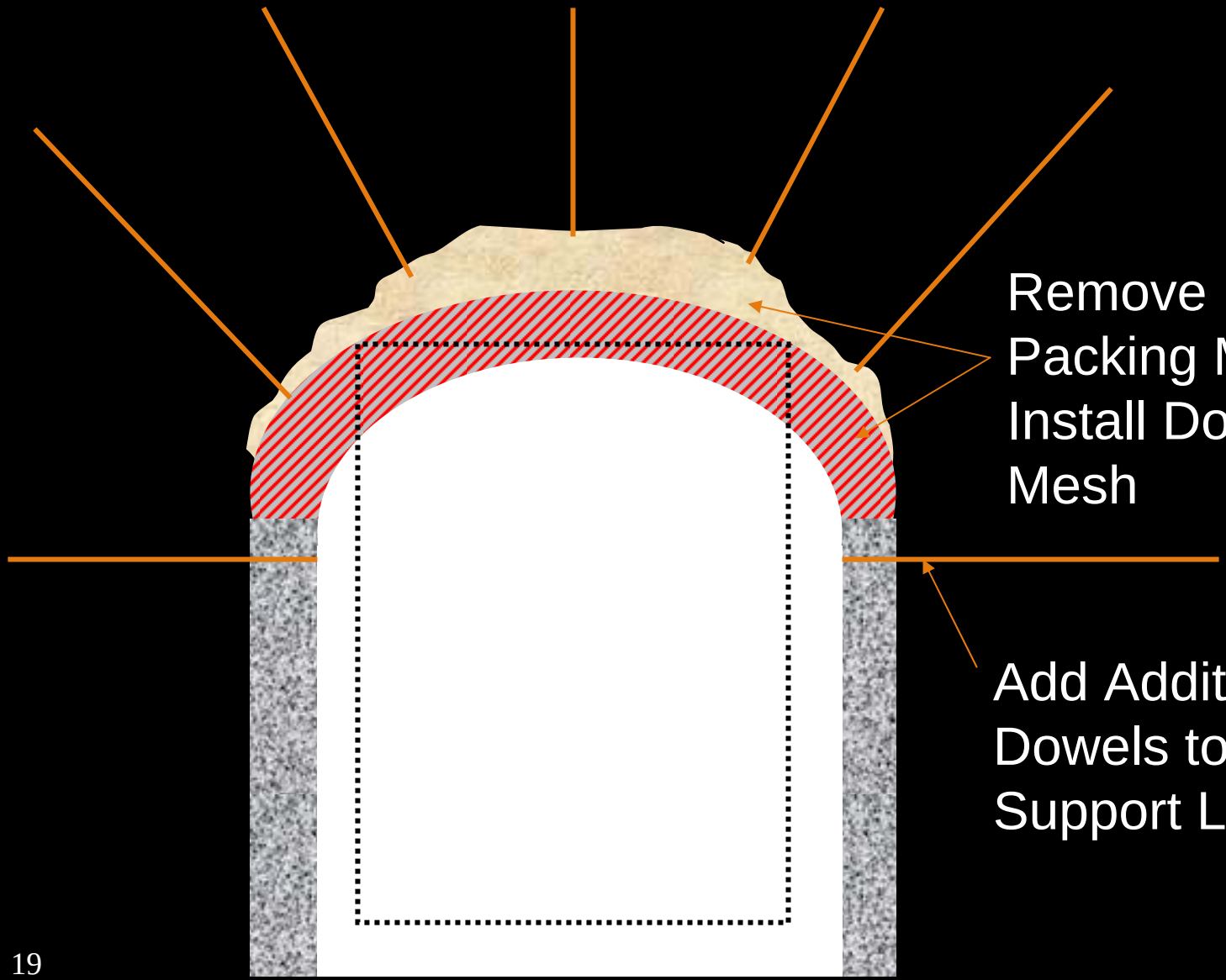


Insert Dowel in Probe Holes

Add Additional Dowels to Fully Support Liner

Notch depth compromises structural capacity

Liner Replacement (17 Tunnels)



Daylighting (1 Tunnel)

- Limited applications

Special Requirements

- FRA Roadway Worker and Bridge Worker Safety
- e-Railsafe at e-Verifile.com background checks and identification badges
- Norfolk Southern Safety Rules

Proposals

- Due 5:00 PM, March 1, 2007
- Qualifications/Technical Proposal and cost proposal must be submitted in separate folders – cost sealed
- Will be reviewed by a joint FHWA/NS selection committee
- Only the best qualified price proposal will be opened first. This may be accepted or be negotiated. If negotiations fail, then we will go to the next best qualified and follow the same process.

Selection Criteria

- Firm Qualifications, with focus on experience gained in successful completion of similar clearance improvements performed under traffic on a Class 1 railroad (30 points)

Selection Criteria

- Qualifications of Key Personnel, specialized experience and technical competence in the type of work required, including where appropriate, experience in energy conservation, pollution prevention, waste reduction, and the use of recovered materials – 25 points

Selection Criteria

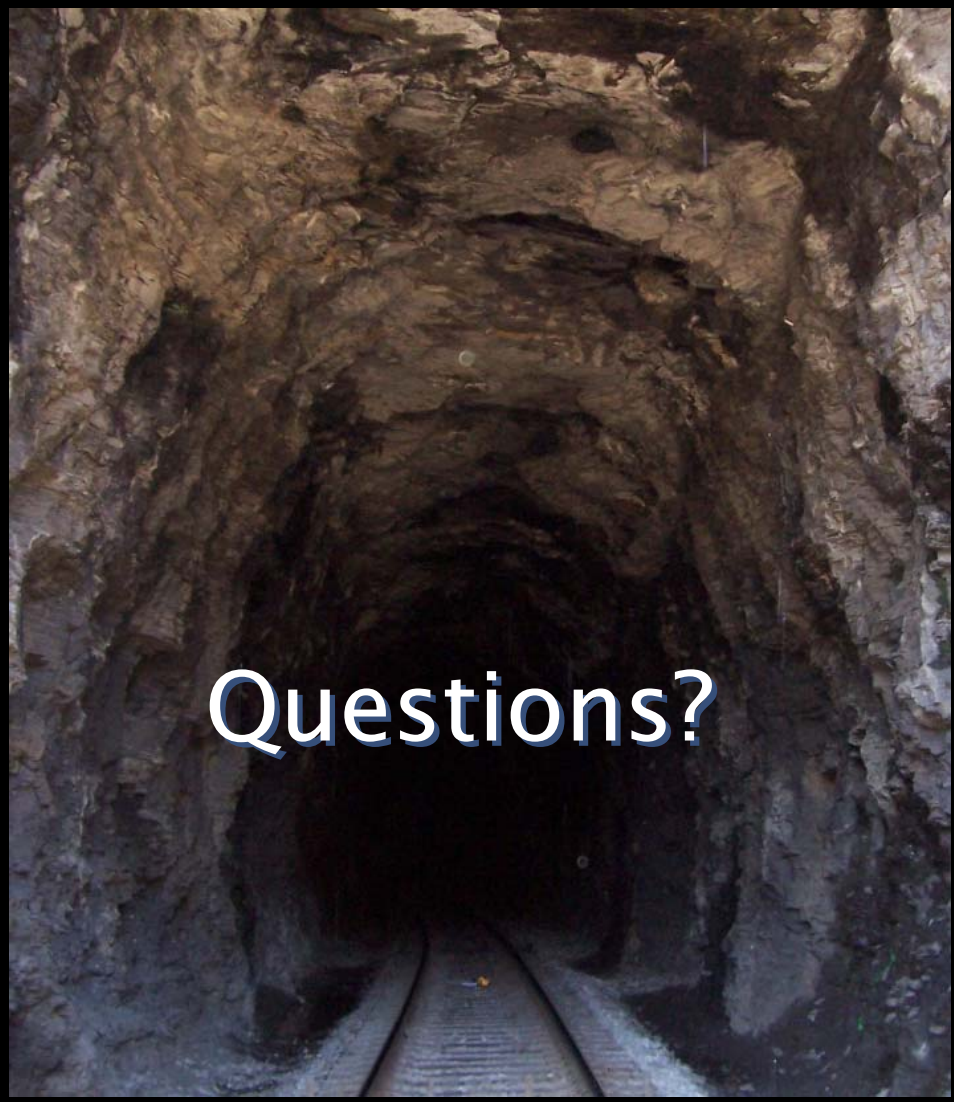
- Adequacy of Resources to perform the work – 20 points
- Past performance on contracts with government agencies and private industry in terms of cost control, quality of work, and compliance with performance schedules. – 15 points
- Location in the general geographic area of the project and knowledge of the locality of the project. – 10 points

Project Schedule

- Completion Mid 2010
  - Environmental Studies
    - FHWA Handling
  - 70 % Final Design
    - Concurrent with Environmental Studies
    - Due March 2007 for first packages
  - Start Construction June 2007
    - Multi-Tunnel Packages
    - Scheduled to Minimize Track Time Requirements

Heartland Corridor

Thank you for coming!



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