

SECTION 4 AREA ADVISORY TEAM



The Louisville - Southern Indiana
Ohio River Bridges Project
(LSIORBP)

June 16, 2011

- 1. Welcome / Introductions**
- 2. Project History**
- 3. Why We Are Here**
- 4. Proposed Alternatives**
- 5. Next Steps**

The Bridges Project

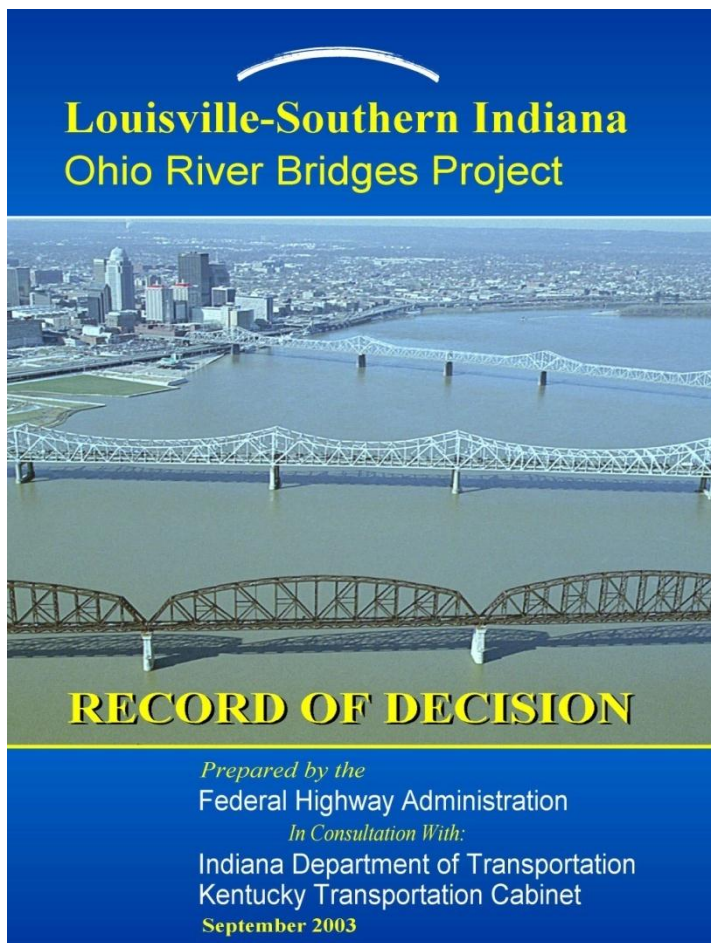


Federal EIS Phase

- 1998 - Federal process begins
- Considered 9 bridge locations in 1 or 2 bridge combinations
- Extensive public involvement process
- 5,000 comments received on Draft EIS



2003 Record of Decision



Selected Alternative:

Construct New Downtown Bridge

Construct New East End Bridge

Reconstruct Kennedy
Interchange

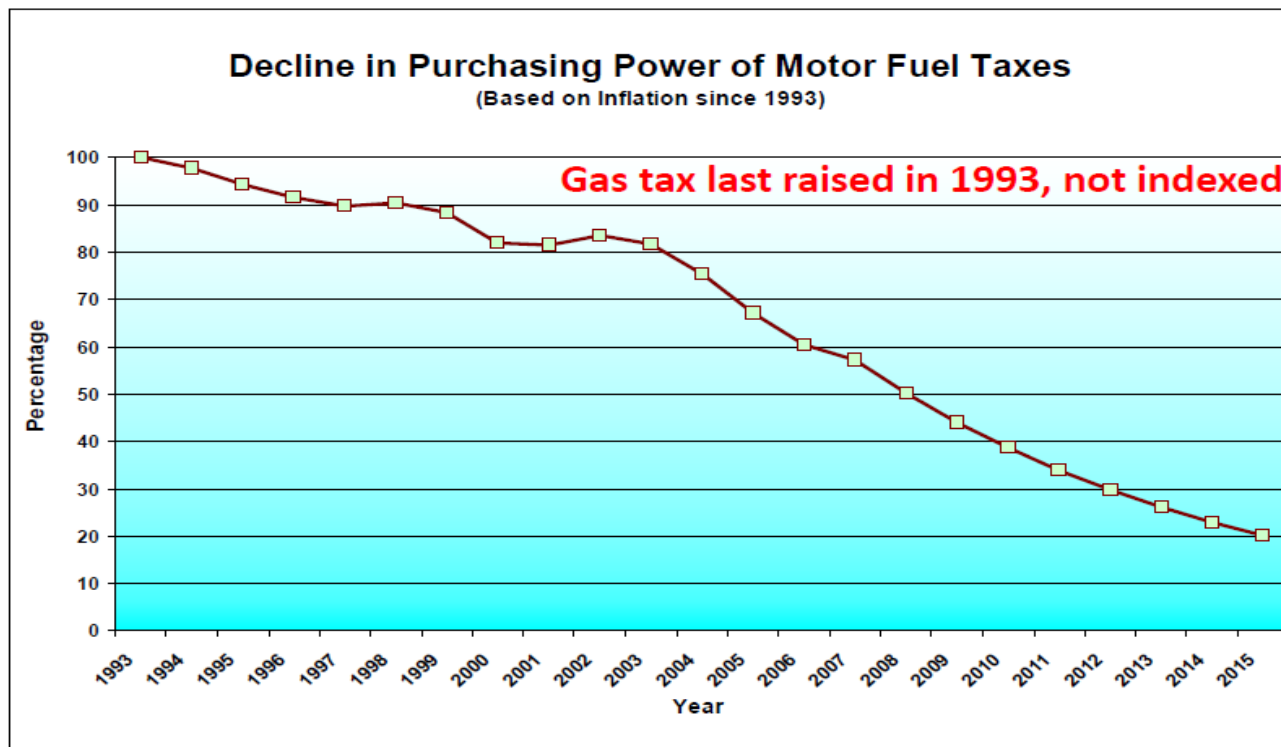
Progress Since 2003

- Design Engineering
- Right-of-Way Acquisition
- Major Project Financial Plan and Update
- Creation of Louisville and Southern Indiana Bridges Authority (LASIBA) - 2010

Why We Are Here

Lack of Conventional Funding

- Federal highway funds come from gasoline tax
- Purchasing power of federal gas tax dropping



Source: American Association of State Highway and Transportation Officials

Additional Funding to Fill Gap

- Metropolitan Transportation Plan amended to add tolling
- Bridges Authority developing financial plan



Leaders Seek Cost-Saving Measures

Governors, Mayor identified potential project savings

1. Rebuild Kennedy Interchange in place
2. Reduce East End bridge, roadway and tunnel from six lanes to four lanes
3. Complete the Big Four Bridge pedestrian / bike path under a separate project



Cost Comparisons

Project Segment	2003 Selected Alternative	2011 Modified Alternative
Section 1 - Kennedy Interchange	\$1,530.0	\$728.2
Section 2 - Downtown River Bridge	\$569.7	\$532.6
Section 3 - Downtown IN Approach	\$392.7	\$177.8
Section 4 - KY East End Approach	\$885.2	\$794.8
Section 5 - East End River Bridge	\$406.2	\$326.2
Section 6 - IN East End Approach	\$234.8	\$231.7
Other Costs ⁽²⁾	\$124.2	\$125.0
TOTAL⁽¹⁾	\$4,142.8	\$2,916.2

(Costs in \$, million)

(1) Totals may not sum due to rounding

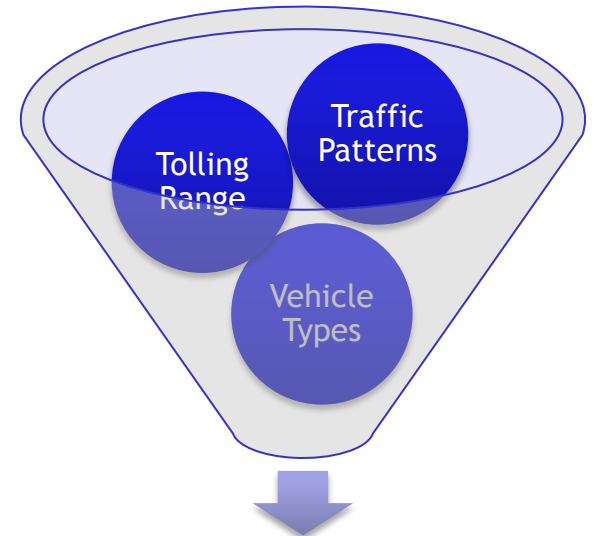
(2) Includes costs that are not section specific, including Project Oversight, Environmental Mitigation of Hazardous Materials, Wetland Remediation and Historic Preservation

- Federal requirement to review potential changes
- What are the impacts associated with:
 - Tolling
 - Implementation of cost saving ideas
- Focused effort

Traffic Diversion Analysis

- Computer program to model traffic
- Range for diversion study
 - Cars, trucks, SUVs - \$1 to \$2
 - Box / panel trucks - \$2 to \$4
 - Tractor trailers - \$4 to \$8
- Actual toll rates determined through separate analysis by Bridges Authority

Travel Model



Traffic Diversion Effects

Purpose and Need

- Safety problems
- Traffic congestion
- Inefficient mobility
- Inadequate system linkage
- Planning consistency



Bottom line: Improve cross-river mobility

Recommended SEIS Alternatives

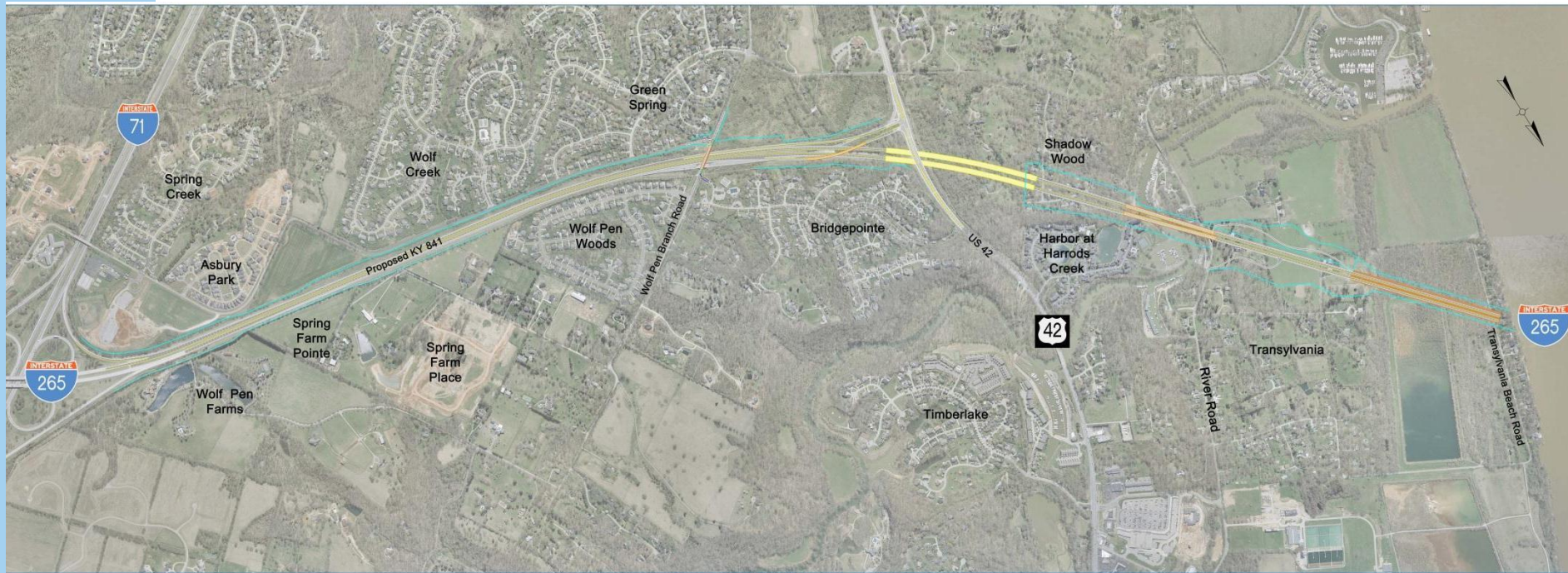


- No Action
- 2003 Selected Alternative with tolls
- 2011 Modified Alternative with tolls

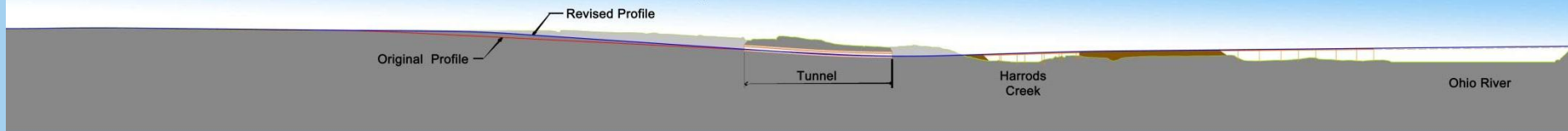
Section 4

Kentucky Approach to East End Bridge

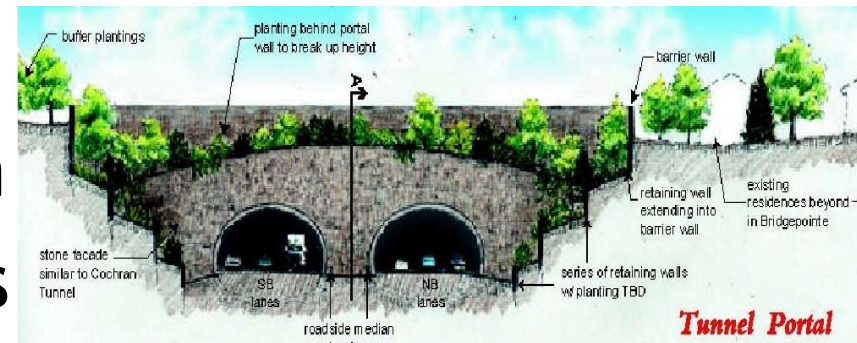
Section 4 Overview



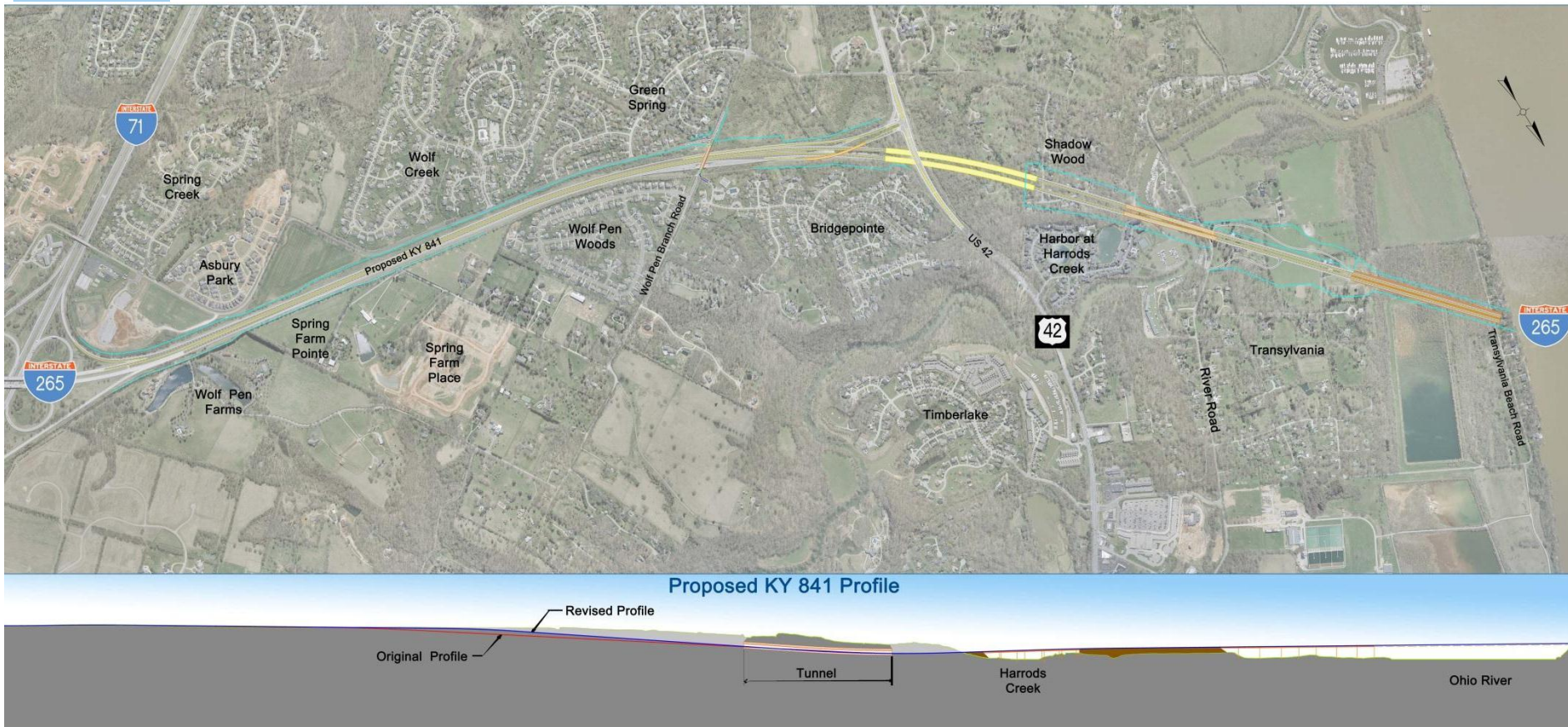
Proposed KY 841 Profile



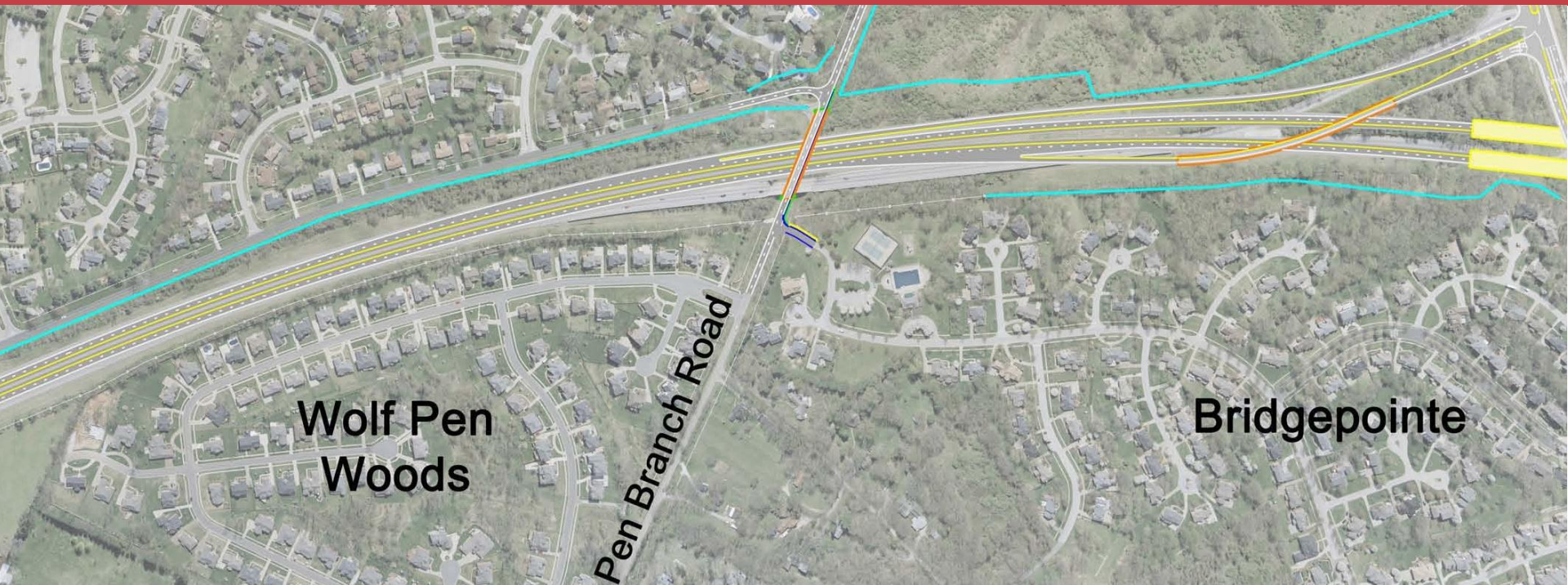
- Context Sensitive Solutions
- Historic Resources
- Tunnel Construction
- Blasting Restrictions
- Wellhead Protection Measures
- Shared-Use Path



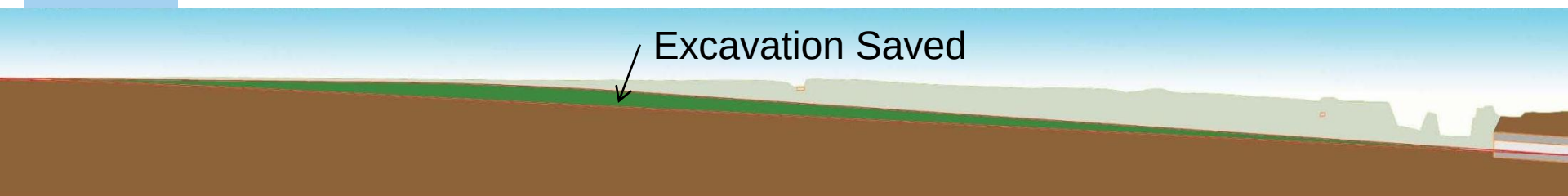
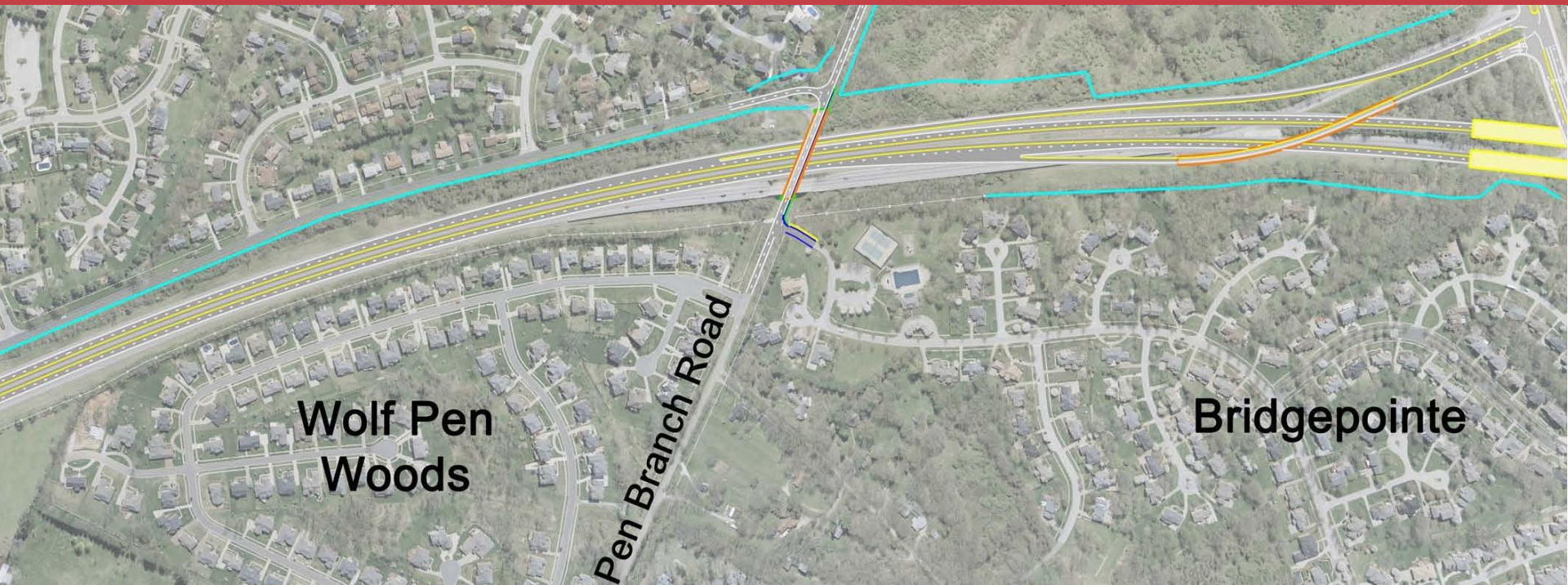
Section 4 Overview and Profile



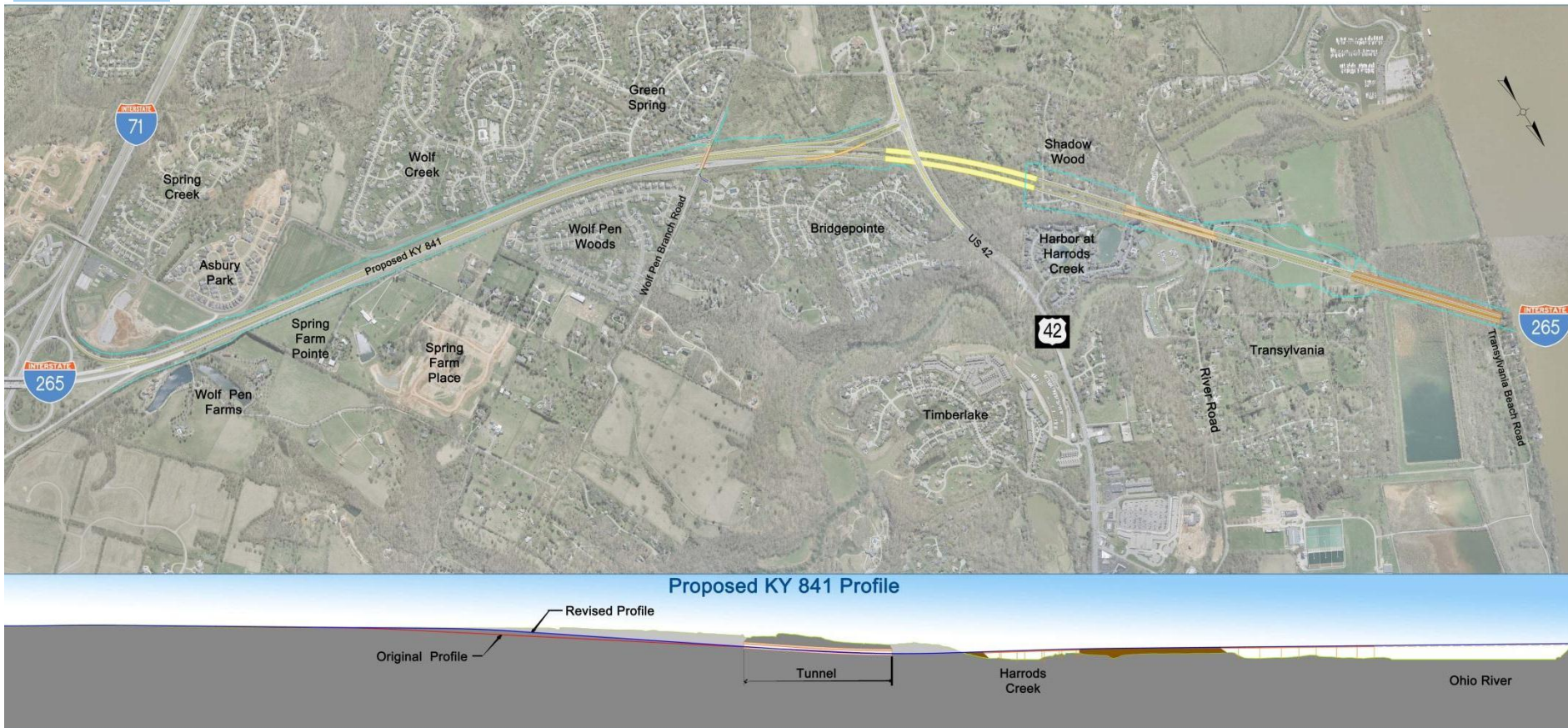
Section 4 Overview and Profile



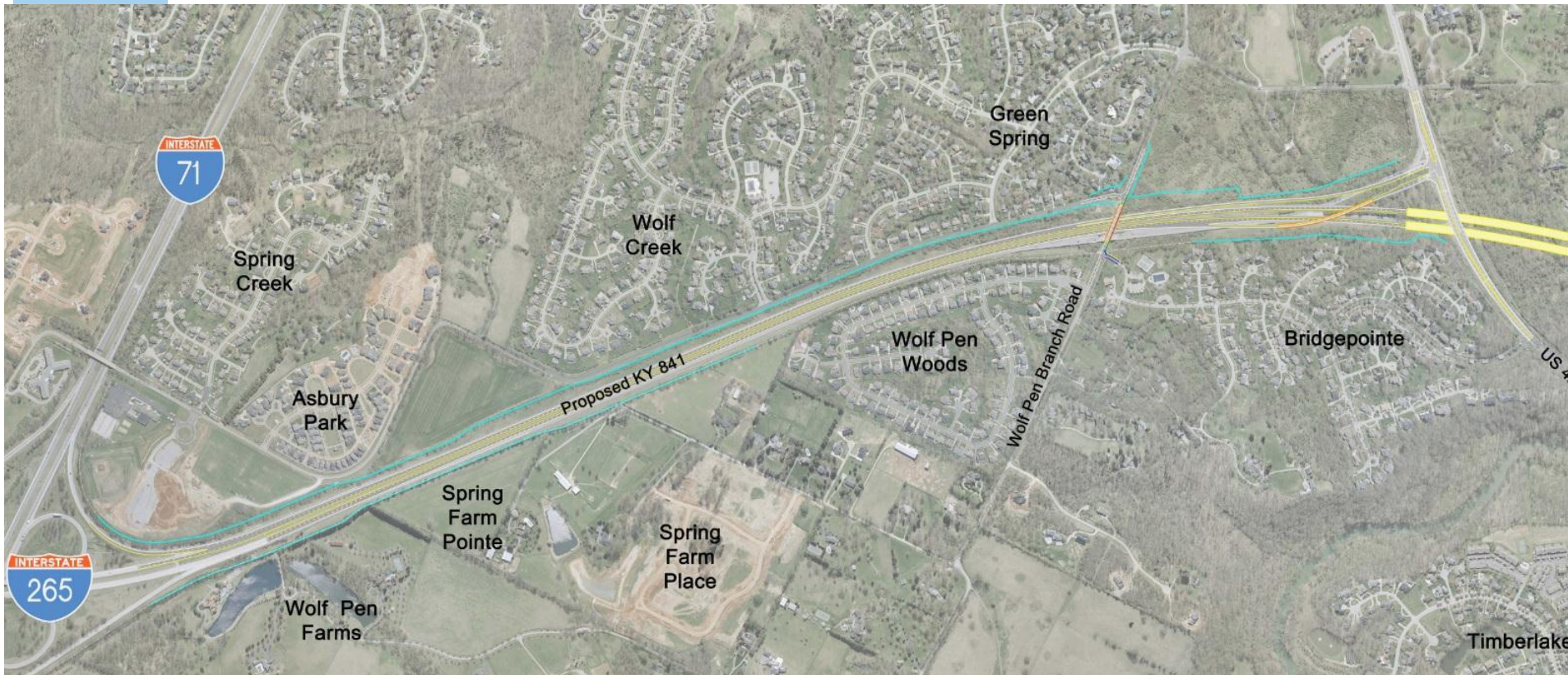
Section 4 Overview and Profile

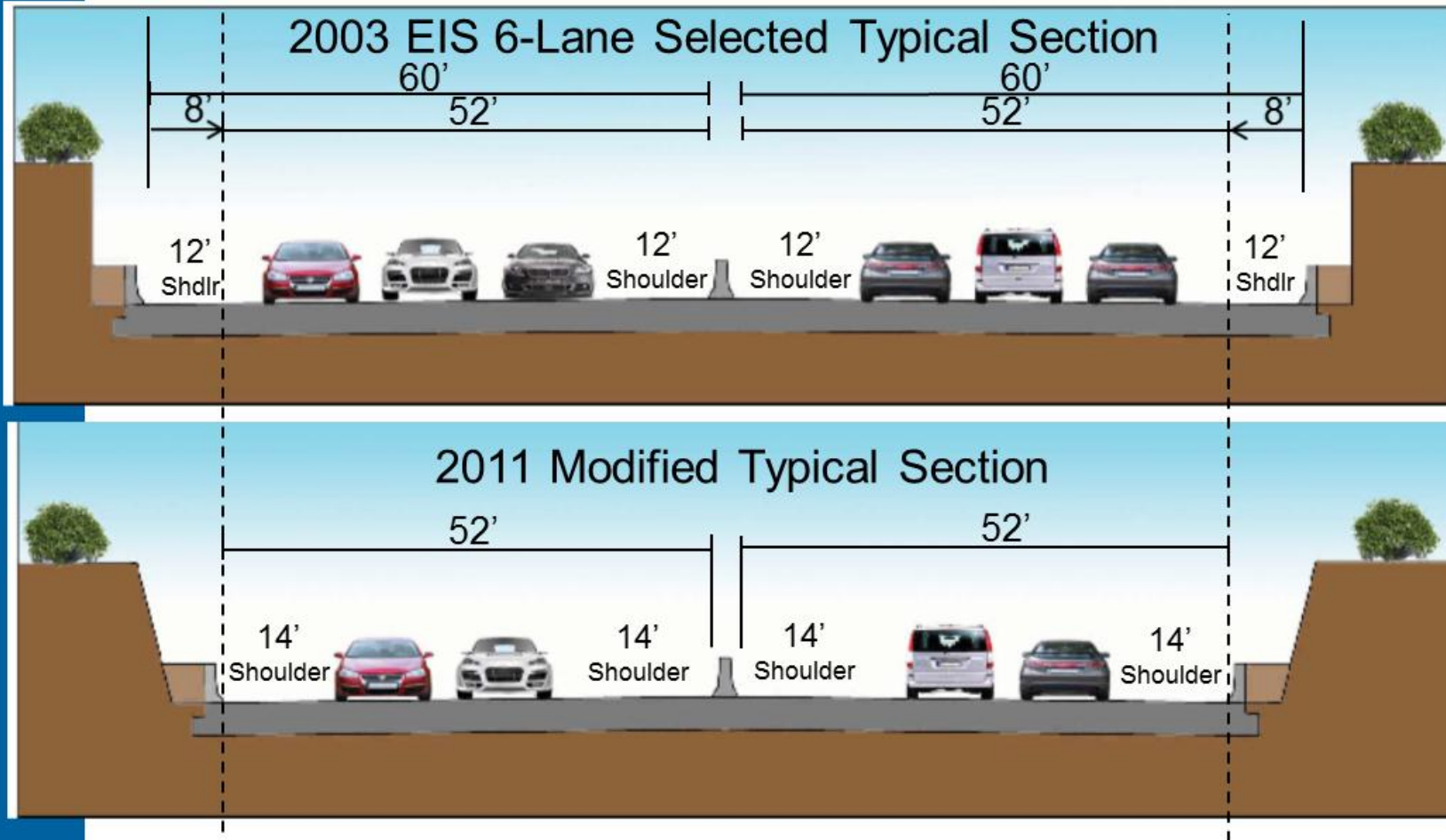


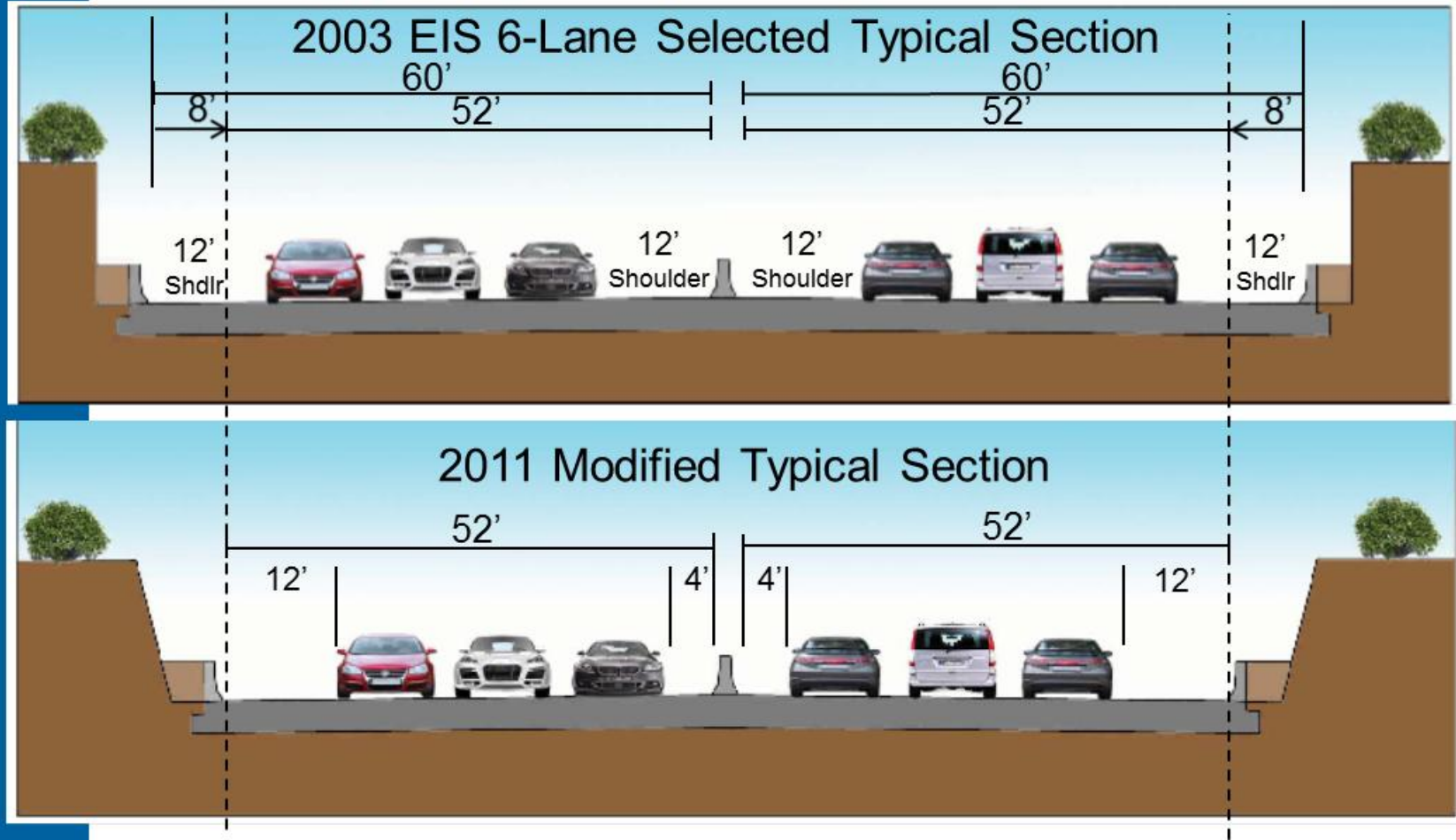
Typical Section Revision



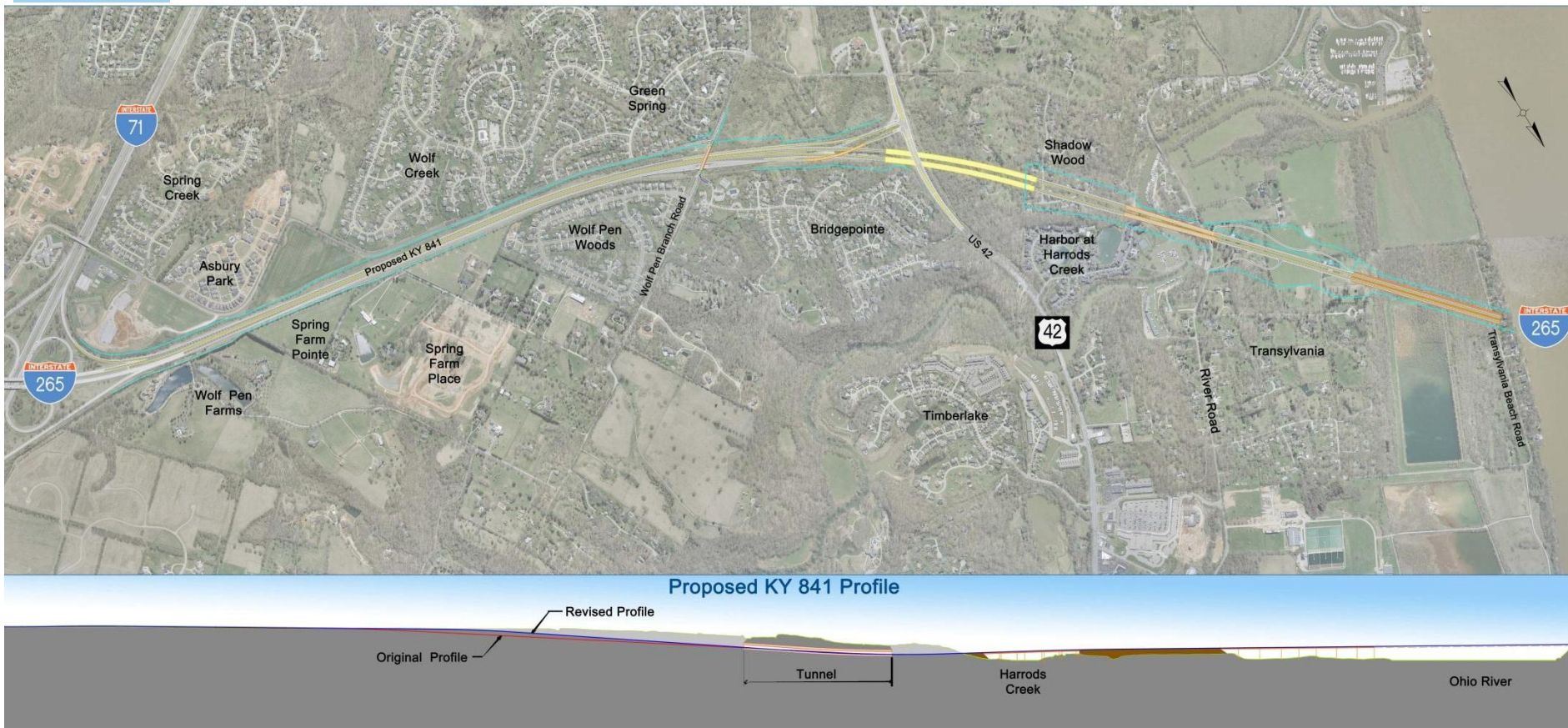
Typical Section Revision



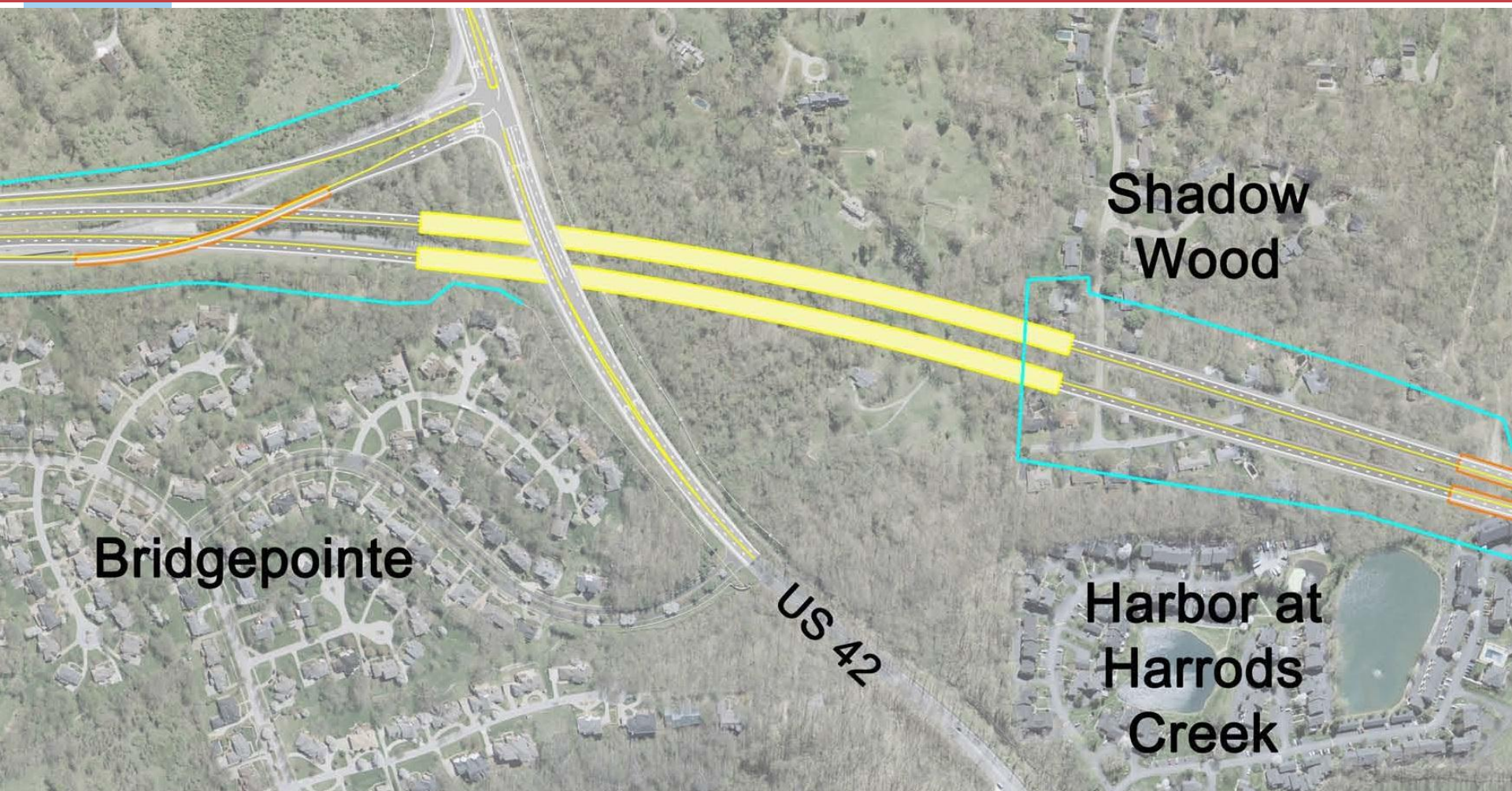




Typical Section Revision

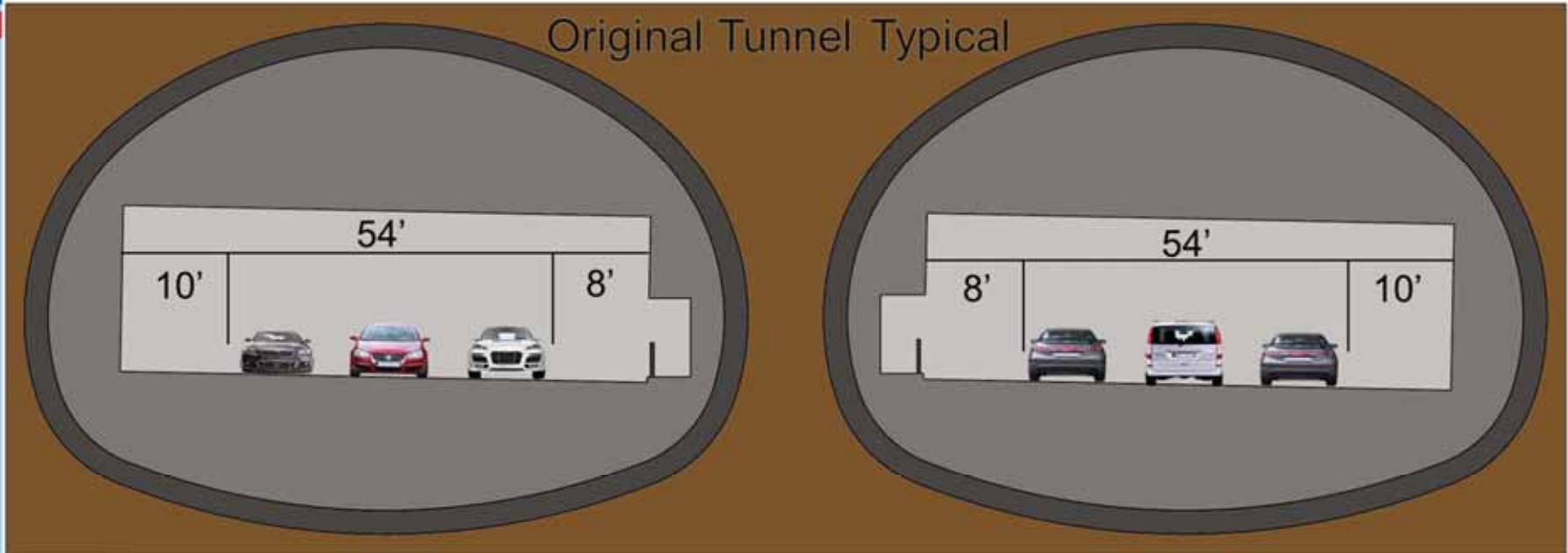


Typical Section Revision

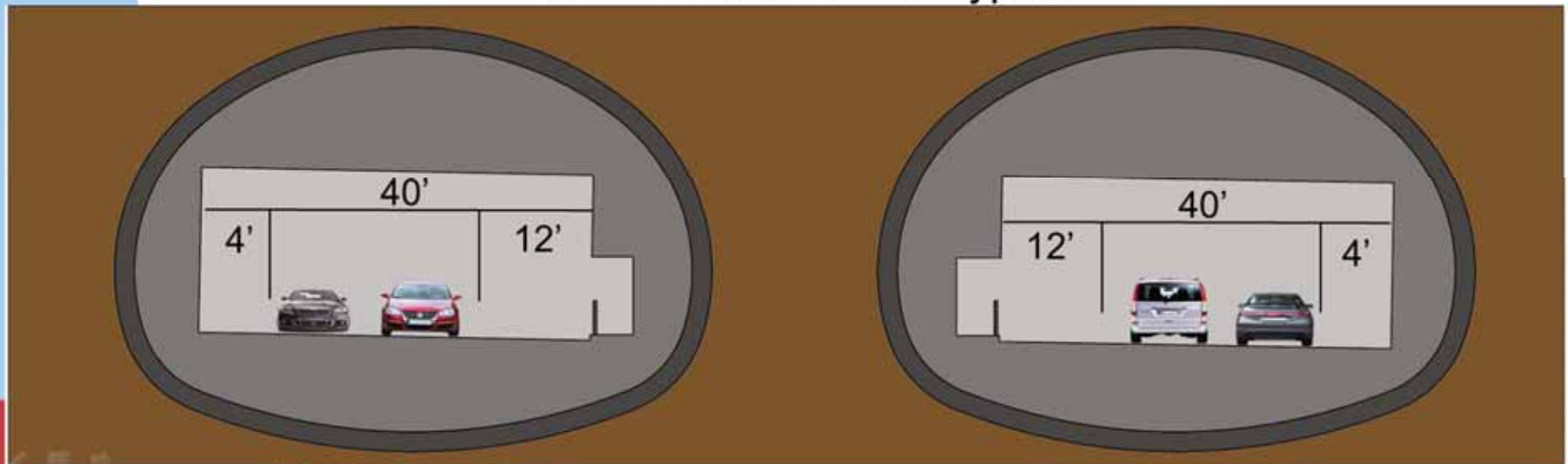


Tunnel Typical Section

Original Tunnel Typical

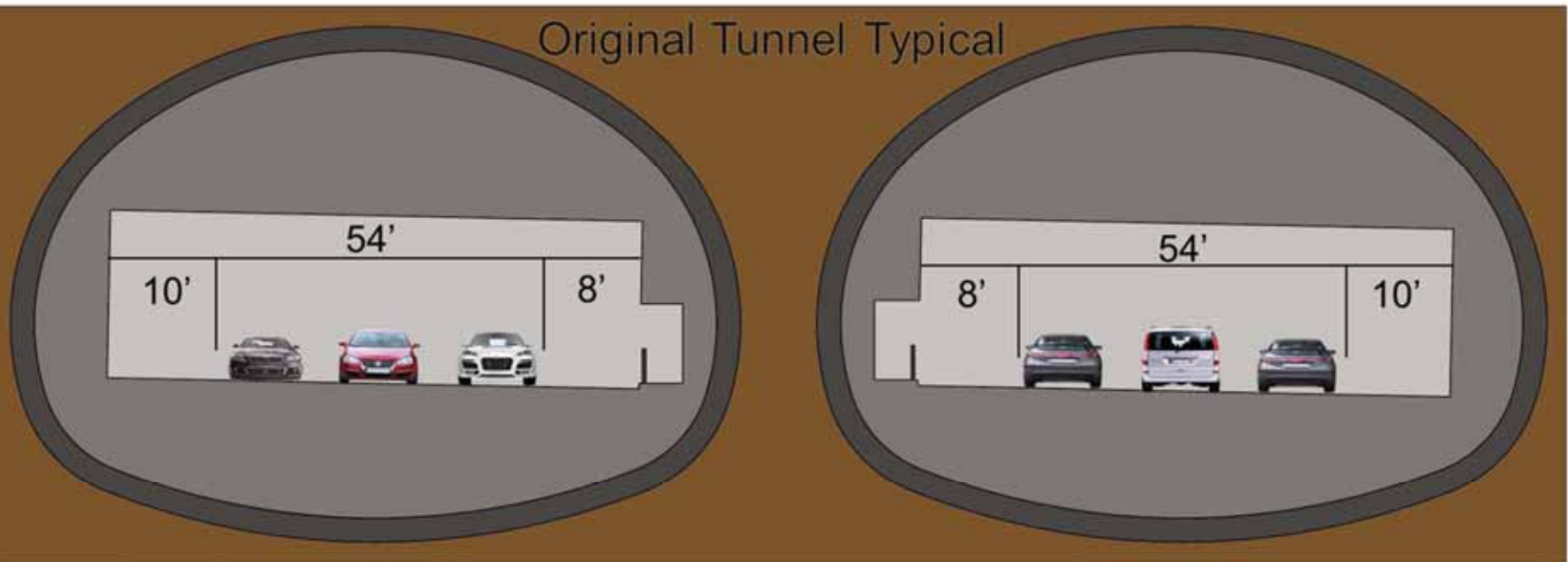


Reduced 4-Lane Tunnel Typical

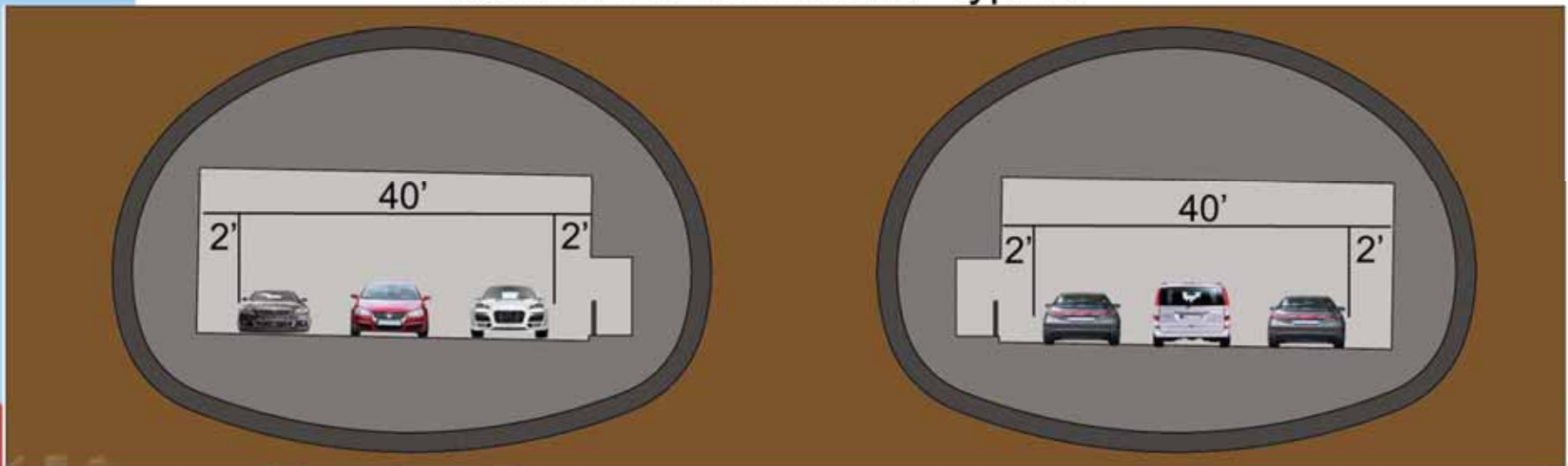


Tunnel Typical Section

Original Tunnel Typical



Reduced 6-Lane Tunnel Typical



Section 5

East End River Bridge

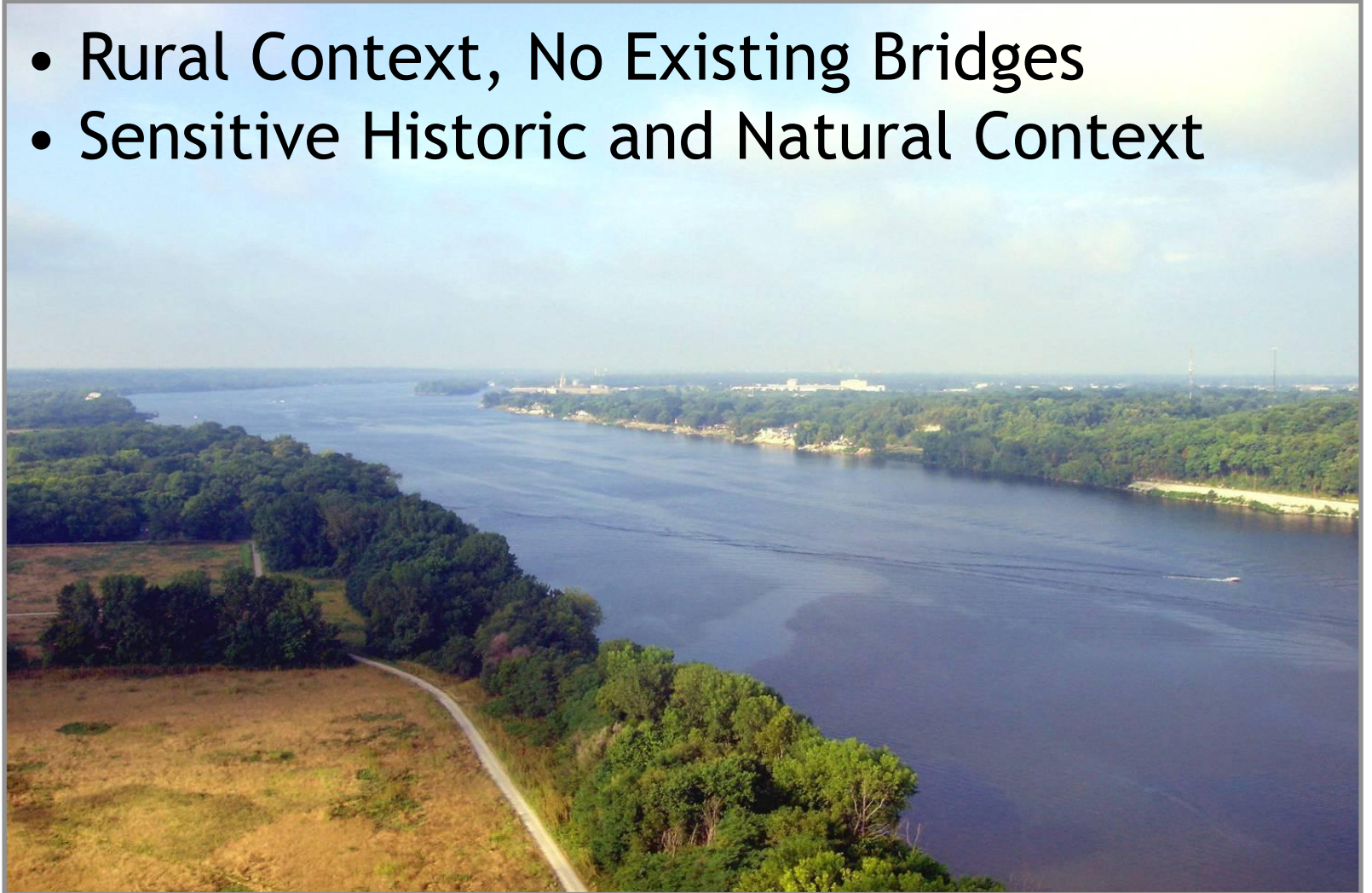
Section 5 - East End Bridge

Section 5



Section 5

- Rural Context, No Existing Bridges
- Sensitive Historic and Natural Context



Alignment Crossing River

Section 5



Section 5

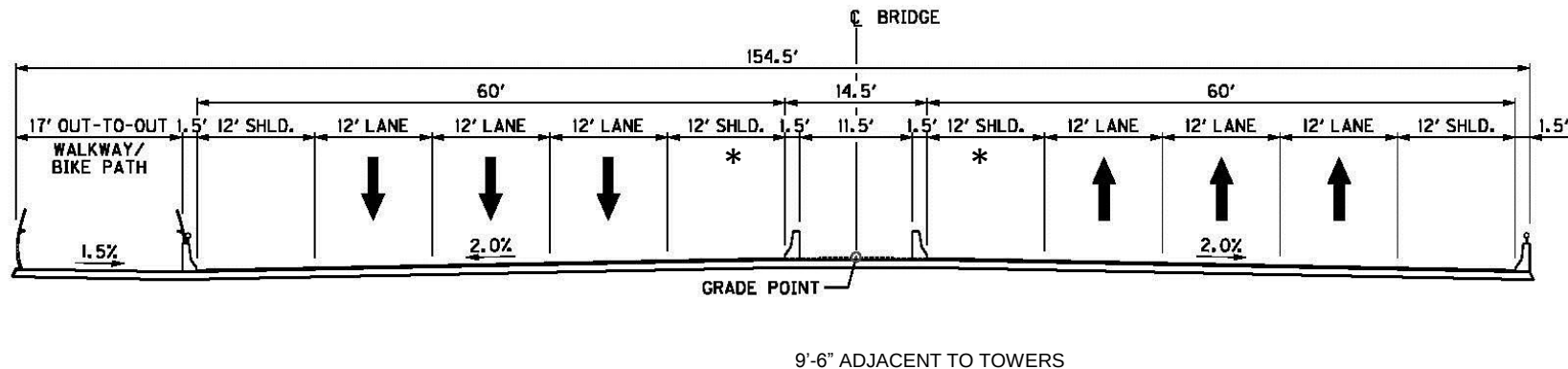
- Bridge design with sensitivity to aesthetic values, historic cultural landscapes, and the historic context.
- Aesthetic treatments to surfaces, structures, and other secondary elements.
- Minimize roadway and aesthetic lighting dispersion.
- Bridge deck storm water should be collected in a closed drainage system.
- Minimize adverse noise effect.

Section 5

- 4 Step Public Process (18 months)
- 15 Bridge Type Concepts Considered - trusses, arches, and cable-stayed
- 3 Bridge Type Concepts Carried Forward to a Public Vote
- Final Selection By 14-Person Executive Committee Including Governors of Indiana and Kentucky
- Selection: Median Tower Cable-Stayed with Center Cables

Section 5

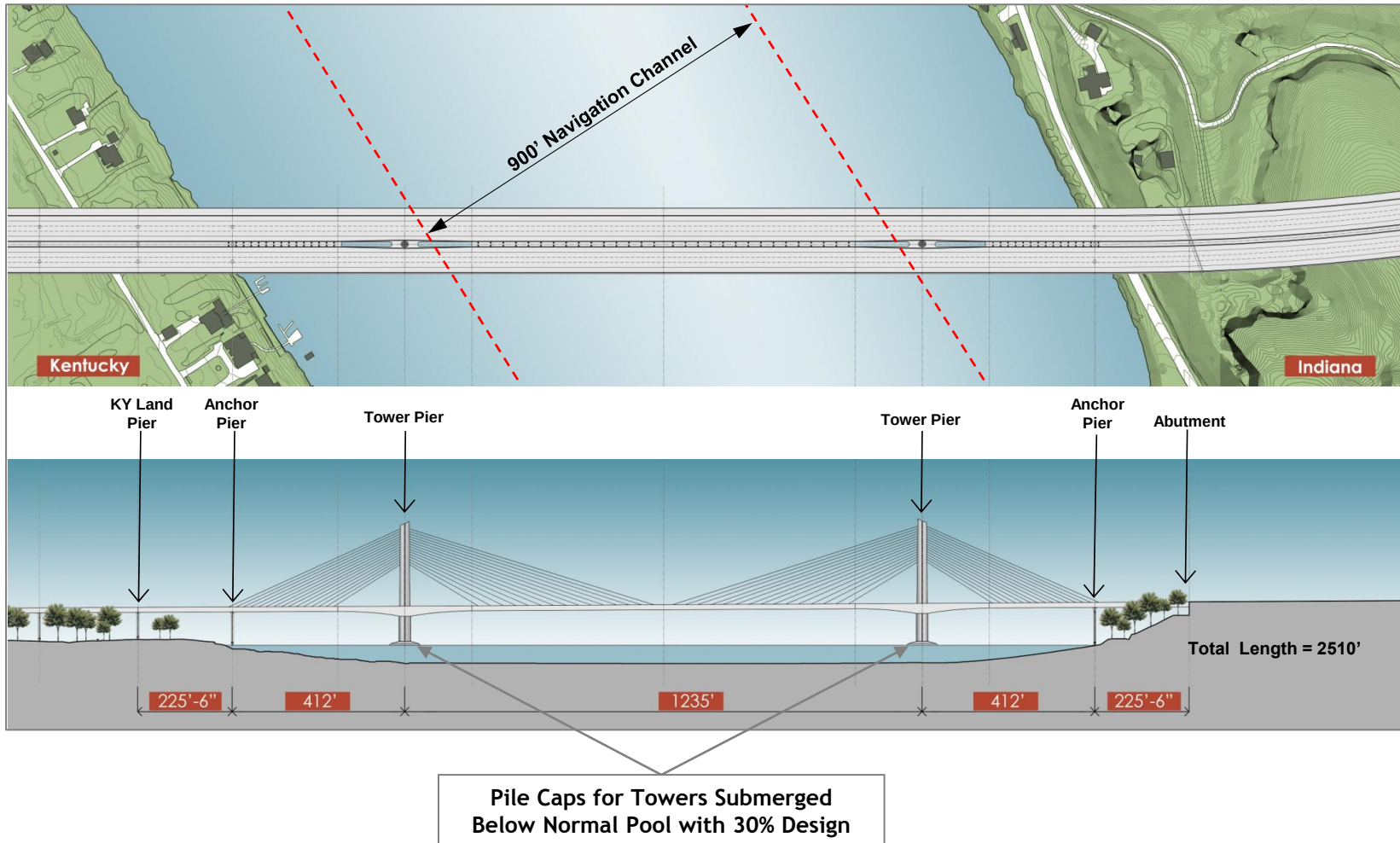
- 154.5 feet wide
 - 6 lanes with full 12' shoulders
 - 17 foot wide walkway / bikepath



EIS Selected Alternative

Section 5

Plan and Profile from Preliminary Design



Section 5

30% Design - Looking Downstream



Section 5

Preliminary Design - View from Indiana Shoreline - Pile Caps for Towers
Above Normal Pool



Section 5

30% Design - View from Indiana Shoreline - Pile Caps for Towers
Below Normal Pool



Section 5



Section 5

View of Walkway / Bike Path



Section 5

- MOA Commitments to Remain Same as EIS
- No Change in Height Restriction for Towers
- No Change in Selected Bridge Type and Architecture
- No Change in Roadway and Walkway Lighting
- No Change in Aesthetic Lighting
- No Change in 900' Navigation Channel

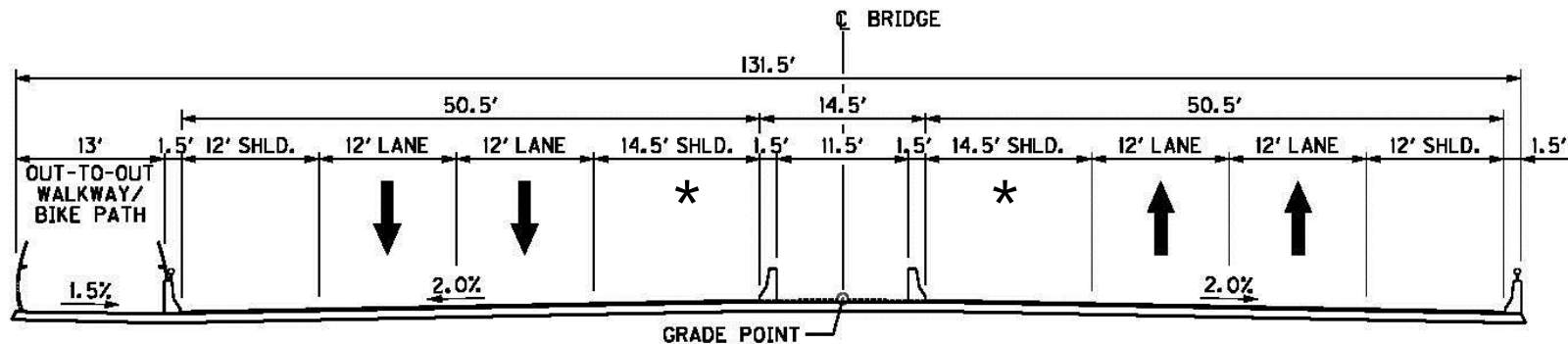
Section 5

- 131.5 feet wide (reduction of 23')
 - 4 lanes with full 12' shoulders
 - 6 lanes (*if ever needed*) with reduced shoulders (bridge would be re-striped)
 - 13 foot wide walkway / bikepath
- Span Arrangement: 225'-430'-1200'-430'-225'
- All Concrete Superstructure (i.e. steel box portion of main span not needed)
- Variable Depth Superstructure Adjacent to Towers Not Needed
- Deck Openings Adjacent to Towers Eliminated

Modified Alternative

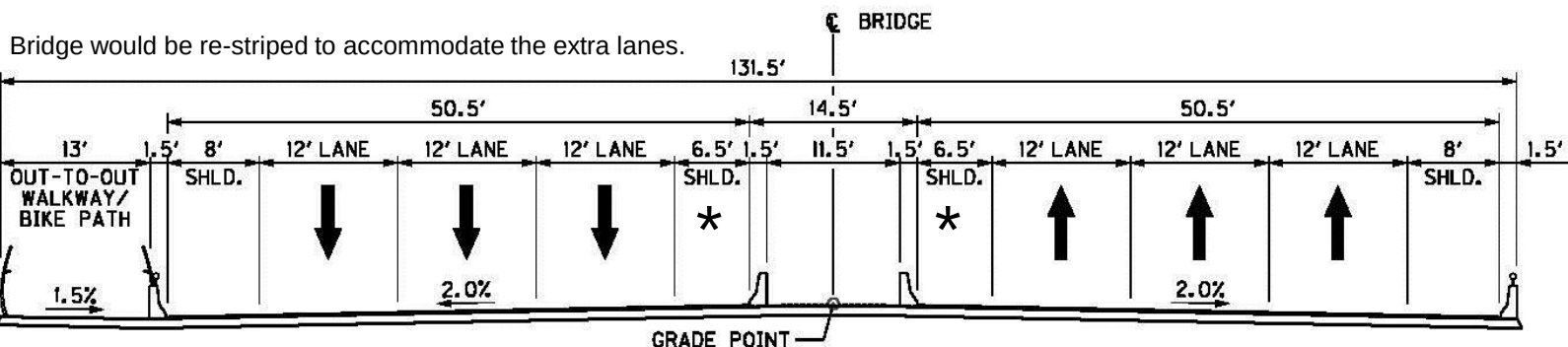
Section 5

- 4 lanes with full 12' shoulders



* 12' ADJACENT TO TOWERS

- 6 lanes (if ever needed) with reduced shoulders



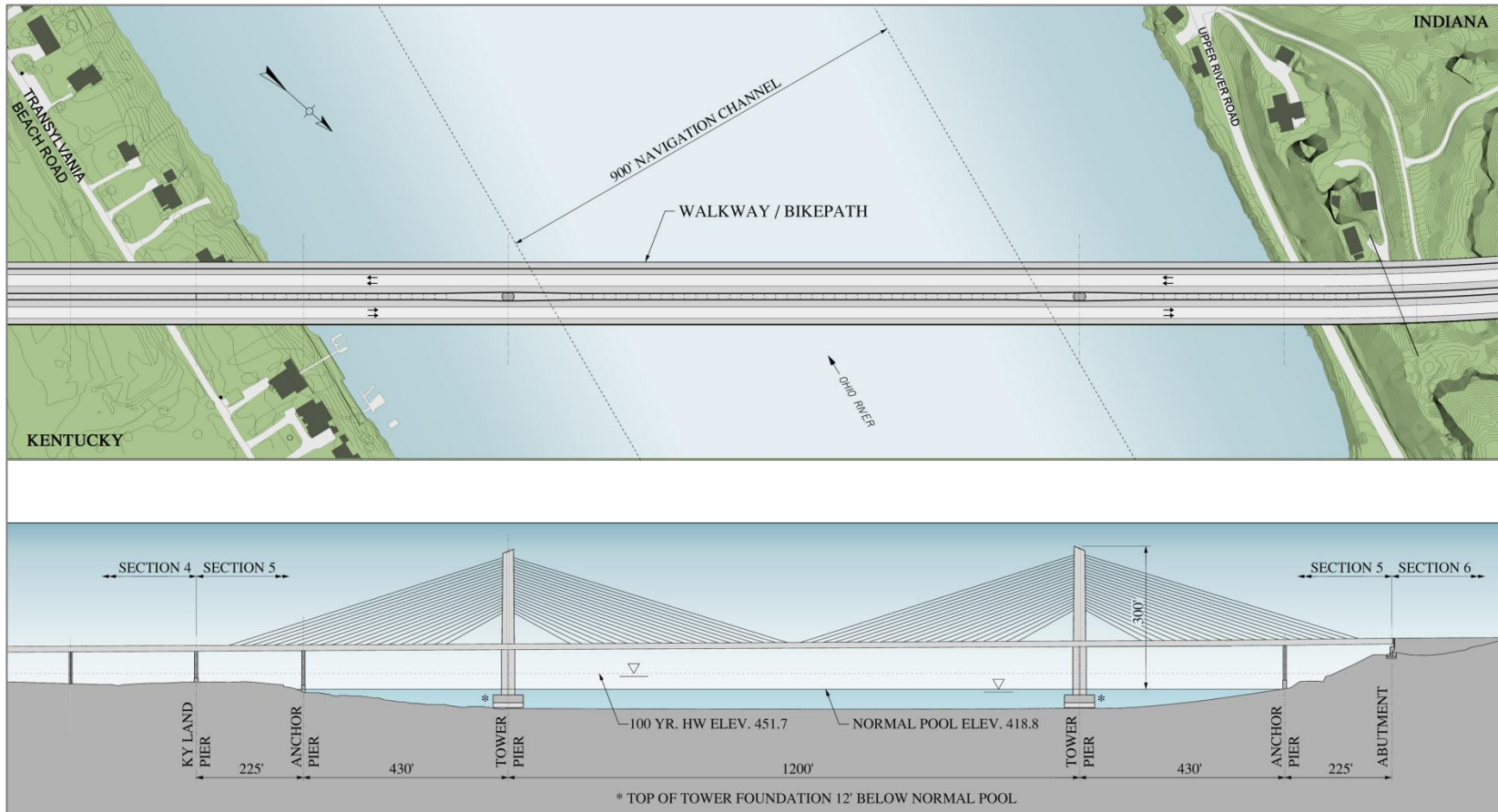
Bridge would be re-stripped to accommodate the extra lanes.

* 4' ADJACENT TO TOWERS

Modified Alternative

Section 5

Plan and Profile



Section 5

Looking Downstream



Modified Alternative

Section 5



Section 5



Modified Alternative

Section 5

View of Walkway / Bike Path



Next Steps

- **Public Involvement Meetings**
- **Analysis of Alternatives**
- **Draft SEIS published**
- **Public Comment period**
- **Final SEIS published**
- **FHWA review**
- **Record of Decision**

www.kyinbridges.com

The Louisville - Southern Indiana
Ohio River Bridges Project
(LSIORBP)

June 16, 2011

Questions or Comments

Thank you!!!