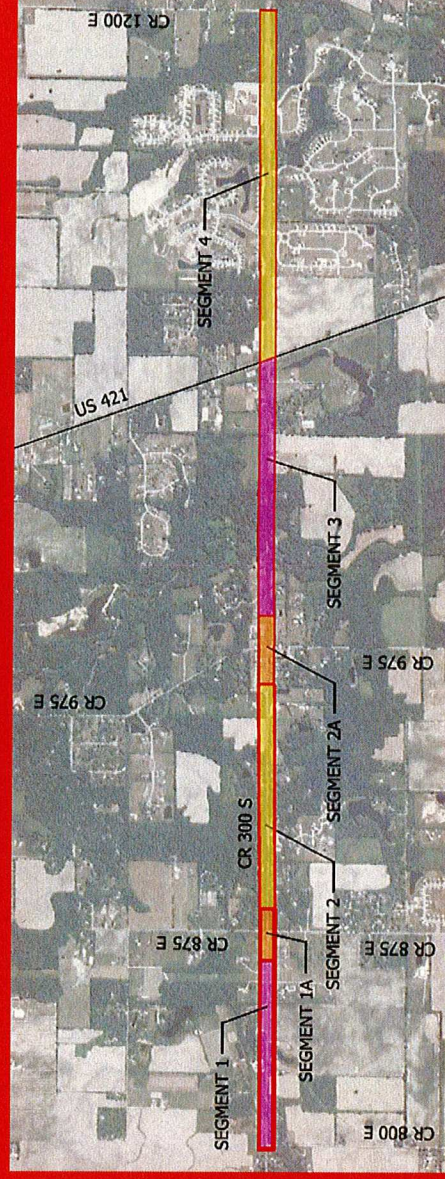
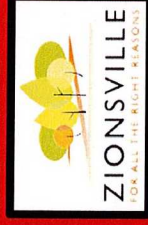
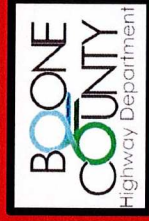
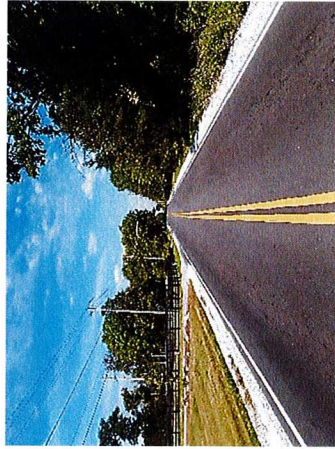


County Road 300 South Corridor

Boone County Update
February 18, 2020





Introductions



Project Overview and Purpose

1. Project Limits – CR 300 South from CR 800 East to 1200 East
2. Study Funded jointly through Boone County, The Town of Zionsville, and the Indianapolis Metropolitan Planning Organization
3. Purpose:
 - Evaluate Preliminary Scope, Feasibility, and Cost for Project
 - Create a **PRELIMINARY DESIGN AND LAYOUT** in order to evaluate layout, feasibly, impacts and costs.
4. Drawings and exhibits are concepts based on:
 - Adopted County, Town, and MPO Standards and Policies, such as typical details for the project based on previously adopted documents.
 - Constraints such as water features and the existing cemetery
 - Property impacts
 - Traffic information



Public Meeting

- Held October 10, 2019 in Zionsville Town Hall
- Notice was placed on social media and in 2 publications.
- Direct mailings sent to approximately 150 addresses
- Approximately 100 to 125 people attended
- Preliminary alignments and intersection alternative were presented
- Received 24 comment cards and approximately 20 emails after the meeting, which have been provided to Town and County staff

CR 300 South – Roadway Designations and Classifications

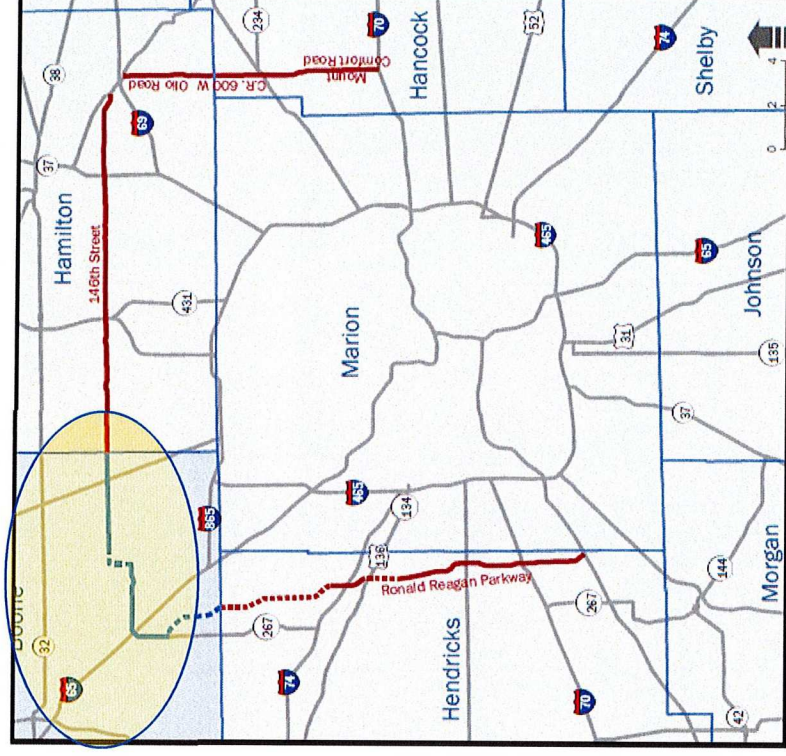
Boone County

- CR 300 South is identified for pedestrian and cyclist improvements and as a Corridor Mini-Plan on pages 77 and 87 of the Boone County Thoroughfare Plan. The 300 South Corridor is intended to link the Ronald Reagan Pkwy on the west side of Boone County to 146th Street in Hamilton County. A link is available at:

<https://boonecounty.in.gov/Offices/Highway/Documents>

Town of Zionsville

- Designated as a Primary Arterial on Figure 5-1 and referenced in other sections of Zionsville's Transportation Plan for future improvements.



Regional Context Map

Boone County Thoroughfare Plan

Goals Preliminary Design Parameters

Goals for Corridor

- 146th Extension Mini-Plan
- MPO's "Complete Street Policy"
- Context Sensitive
- Balance Needs of Traffic Flow with Land Use Planning Needs

Primary Goals for the 146th Street Extension Corridor

- Balance needs for regional traffic flow and mobility with access to businesses and destinations along the corridor.
- Maximize opportunity for desired development through land use planning.
- Manage future growth and development along the corridor.
- Enhance the aesthetics and visual appeal of the corridor through corridor design standards and site design standards for development adjacent to the corridor.
- Provide for multi-modal transportation opportunities along the corridor.

**Primary Goals for
Corridor**

Page 87 of

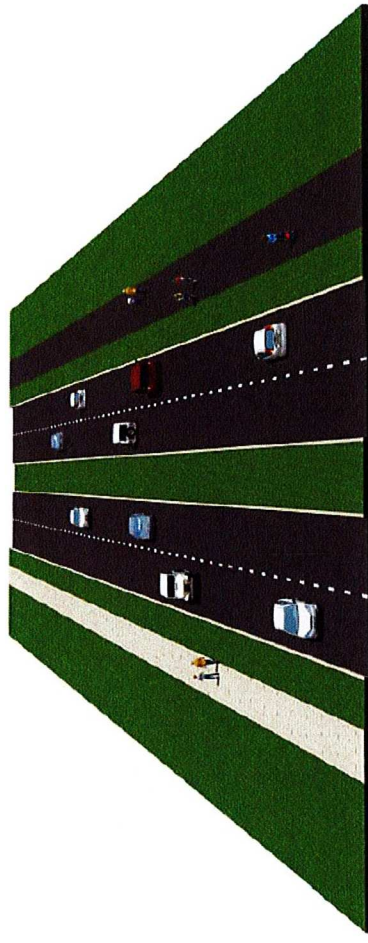
County Thoroughfare Plan

Goals Preliminary Design Parameters

Background Design Data

- Boone County
Thoroughfare Plan
- Zionsville Town
Standards
- INDOT and
AASHTO Standards

I 46TH STREET EXTENSION PROPOSED CROSS SECTION



140' Right-of-Way

Minimum Standards

- 12' travel lanes
- 4 lanes
- 12' median
- Multi-use trail on one side

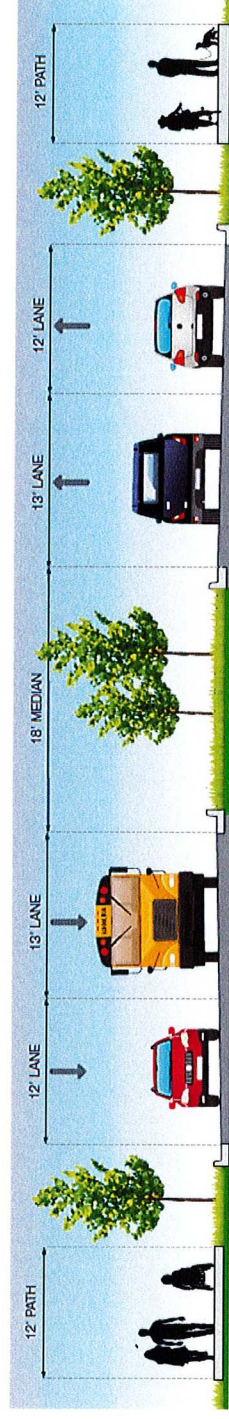
Standards to Consider

- Street trees and landscaping
- Decorative street lighting
- Decorative banners and signage
- Additional pedestrian facilities

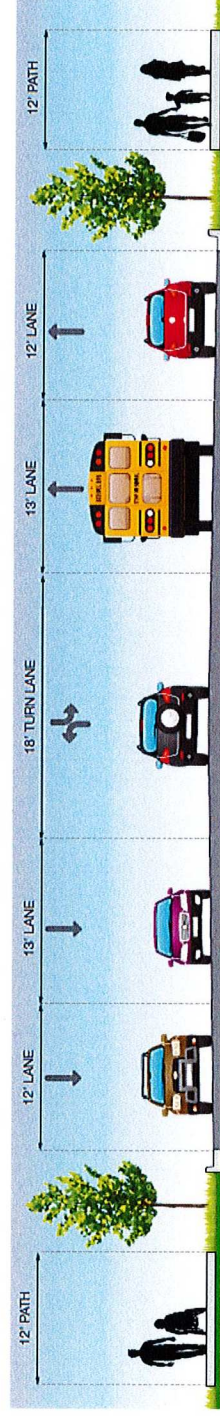
Typical Cross Section
Corridor Mini-Plan
Page 91 of
County Thoroughfare Plan

Typical Cross Sections

ALTERNATIVE 1.
SECTION WITH
MEDIAN



ALTERNATIVE 2.
SECTION WITH
TURN LANE





Physical Constraints

- Cemetery
- Waterways
- Utilities
- Private Property Issues

Environmental Matters and Other Considerations

- Cemetery
- 975 E Crash Rate
- Private Property Concerns



Cemetery
Proximity of Existing Graves
To Existing Roadway

- Ponds
- Septic Tanks
- Other Issues
- Utilities

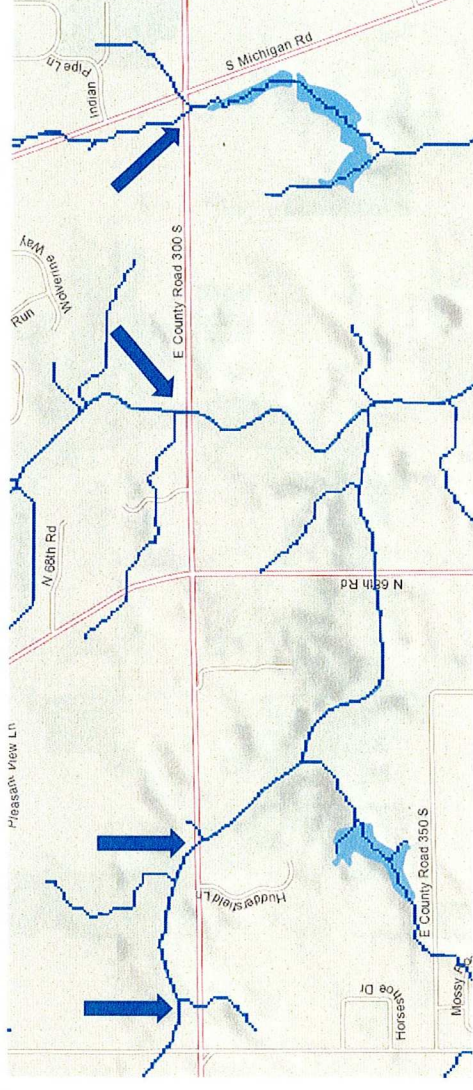


Environmental Matters and Other Considerations

Creeks, Streams, and Waterways

- Eagle Creek
- Jackson Run
- Defined Bed
and Bank

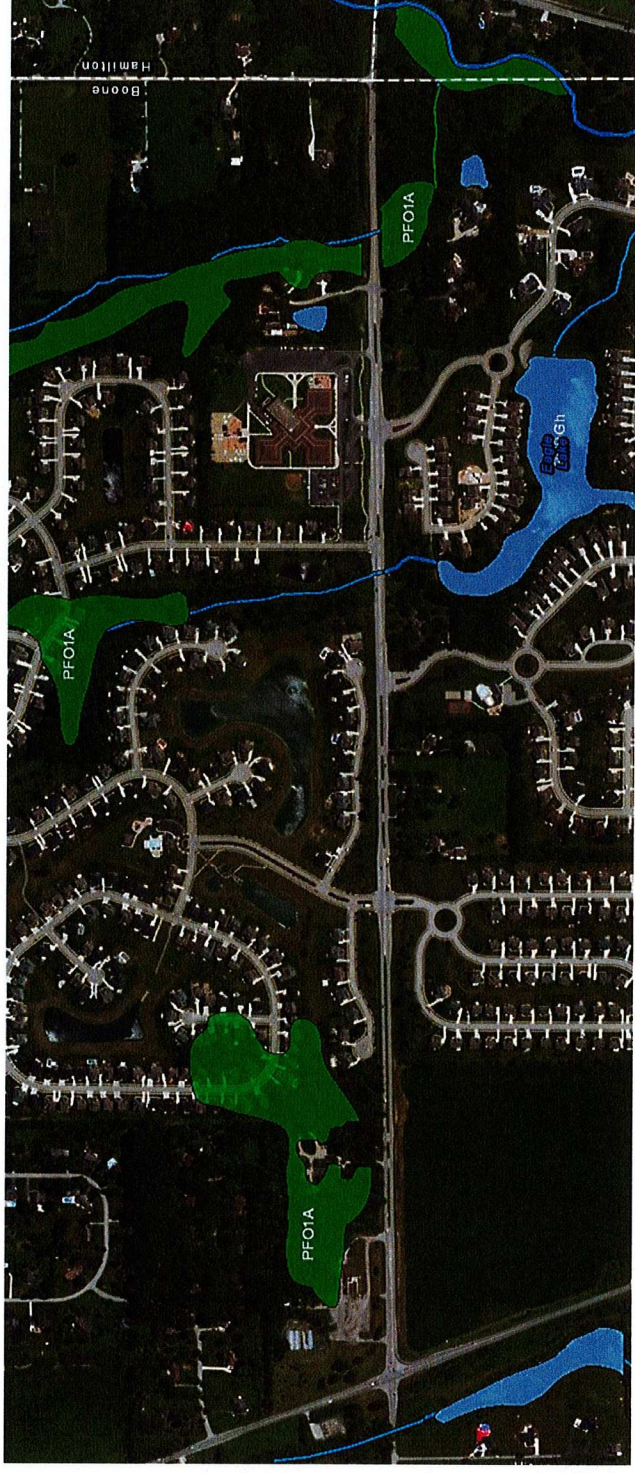
Streams and Waterways from
USGS StreamStats



Environmental Matters and Other Considerations

- Wetlands and Environmentally Sensitive Areas

Wetlands Mapper
US Fish and Wildlife Service



Bridge and Culvert Crossings

Bridges

Bridge Number	Project Station	Stream
06-00192	125+50	Jackson Run
06-00401	174+50	Jackson Run
06-00189	222+75	Jackson Run



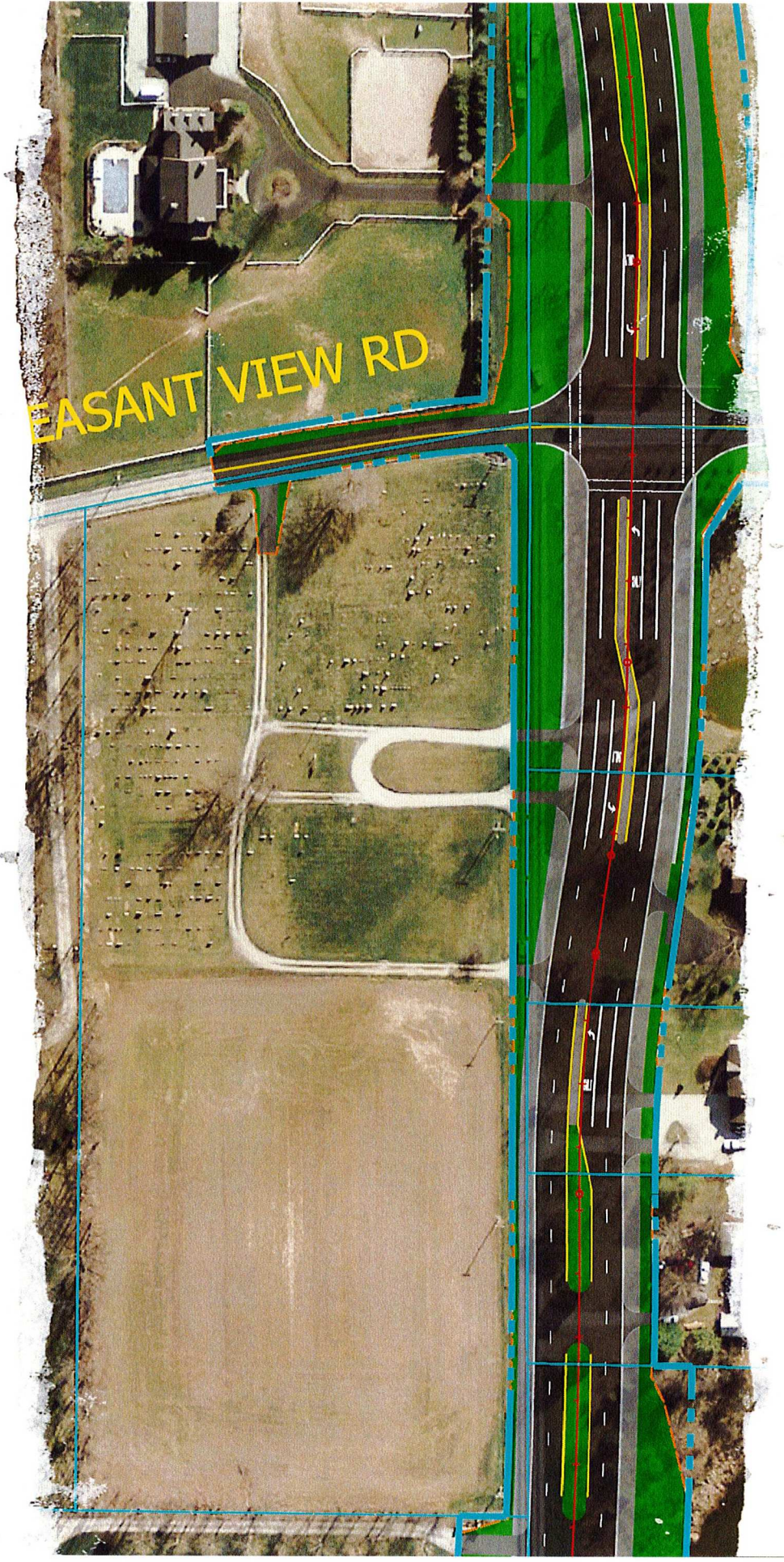
Small Structures/Culverts

Structure Number	Project Station	Existing	Proposed Size
UN015	127+75	13.4' x 4.5' Box	14' x 5'
UN007	225+50	2 = 3' x 6' Elliptical CMP	14' x 5'
UN027	299+50	12' x 5' Box	12' x 5'
UN028	316+00	13' x 6' Box	13' x 6'



Right of Way Assumptions Considerations

- Preliminary profiles and alignments were established with topography to establish preliminary right-of-way lines to the nearest 5-foot interval.
- Right-of-Way limits vary in the drawings based on:
 - Construction limits and topography
 - Accommodation for the relocation of utilities
 - Proximity to existing structures to minimize full takes
- Right-of-Way was determined conservatively. It is expected that the final width would be based on a survey and design.



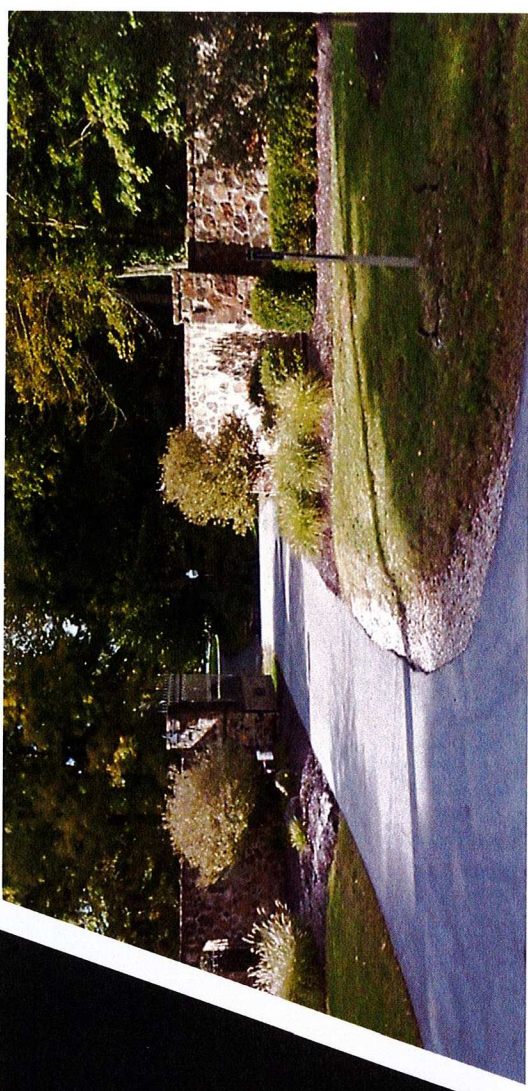
Right-of-Way Constraints and Cemetery

Estimates for Right-of-Way Impacts

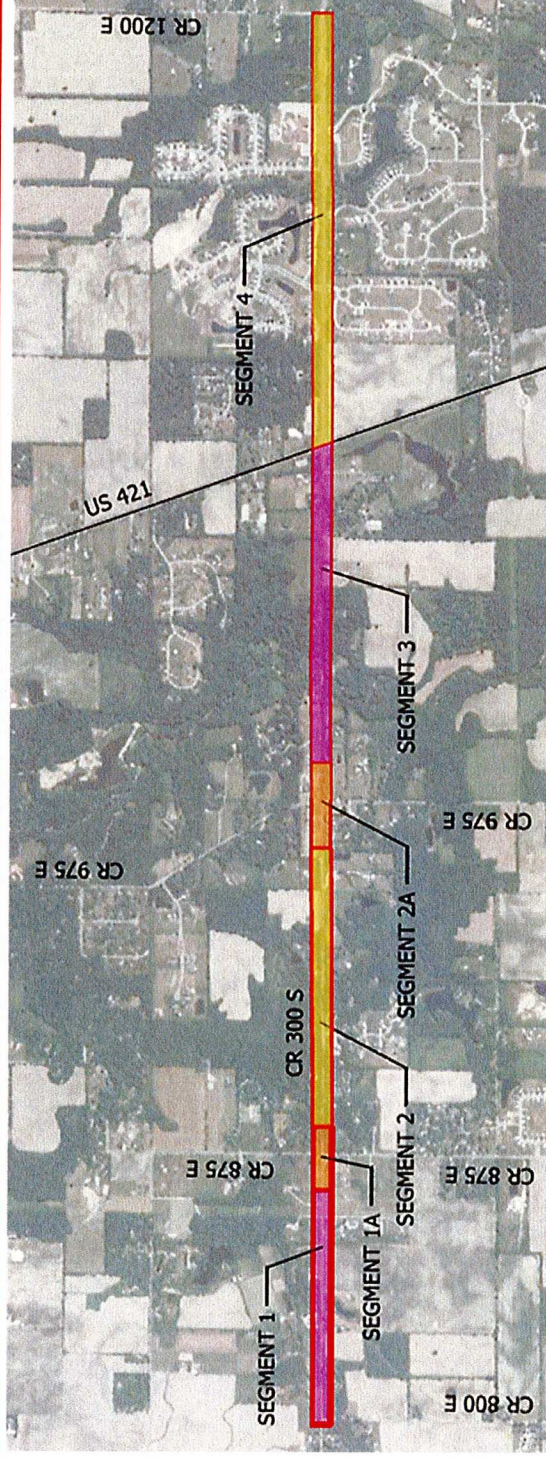
Segment	Estimated Number of Affected Parcels	
	Permanent	Temporary
800 E to 875 E (Seg. #1)	22	0
875 E to 975 E (Seg. #2)	29	5
975 E to US 421 (Seg. #3)	28	8
US 421 to 1200 E	21	4

Other Estimates for Right-of-Way Impacts

- Costs to Cure
 - Horse Fence
 - Decorative Fence
 - Driveway Entry Features
- Septic Tanks
- Setback Damages



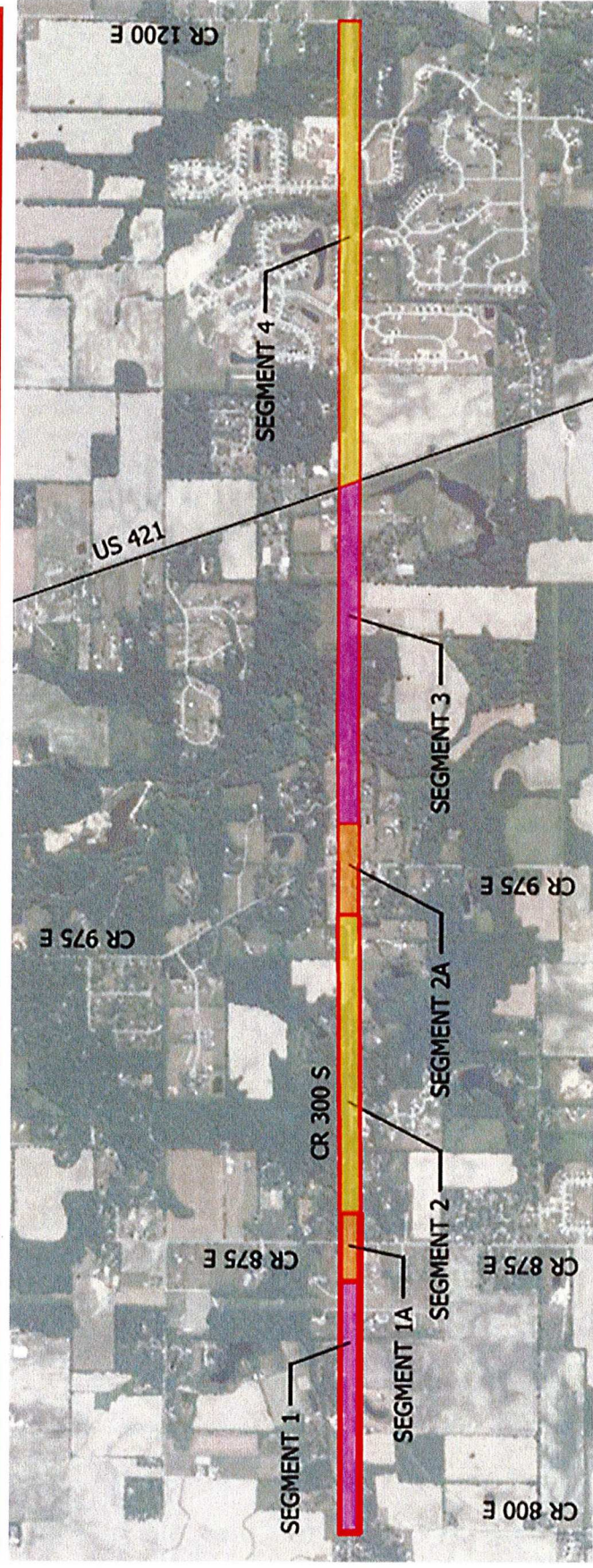
Construction Cost Estimate Summary



Option	Preliminary Construction Cost Estimates*		
A	Segment 1	CR 800 to CR 875 E	\$ 7,066,819.78
B	Segment 1A	Intersection of 875 E (Roundabout Option)	\$ 3,255,399.89
C	Segment 1A	Intersection of 875 E (Signal Option)	\$ 3,158,773.07
D	Segment 2	CR 875 E to West of 975 E	\$ 8,659,006.90
E	Segment 2A	Intersection of 975 E (Signal Option)	\$ 5,007,202.73
F	Segment 2B	Intersection of 975 E (Roundabout Option)	\$ 5,324,772.08
G	Segment 3	CR 975 to US 421	\$ 7,754,875.38
H	Segment 4	US 421 to CR 1200 E	\$ 10,191,416.32
I	Bridge 06-00192	Segment 2	\$ 2,040,000.00
J	Bridge 06-00401	Segment 2	\$ 2,280,000.00
K	Bridge 06-00189	Segment 3	\$ 3,480,000.00
Total Highlighted Options A, B, D, F, G, H, I, J, K			\$ 50,052,290.34

*Includes Base Estimate and 20% Contingency for Future Inflation

Estimated Construction Cost Summary



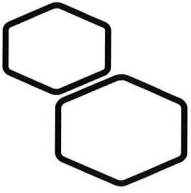
Present Day Estimate	Present	Per Lane Mile ¹	Per Lane Mile ²
Zionsville N-S Connector *	\$ 35,210,241.95	\$ 2,020,761.71	\$ 2,872,566.23
³ 146th Street - Hamilton County East of 1200 E	\$ 5,700,000.00	\$ 1,770,352.94	
	\$ 11,231,800.00		\$ 3,328,687.92

*Project has open drainage system and no curb and gutter on mainline roadway.

¹Roadway Costs Only

²Roadway Costs and Bridge Costs Included

³Based on Contract Awarded by INDOT



Key Elements and Concerns with Project

- Traffic and Safety
- Cemetery
- Right-of-Way
Impacts
 - Septic Tanks
 - Lot Frontage
- Drainage, Wetlands,
and Floodplain



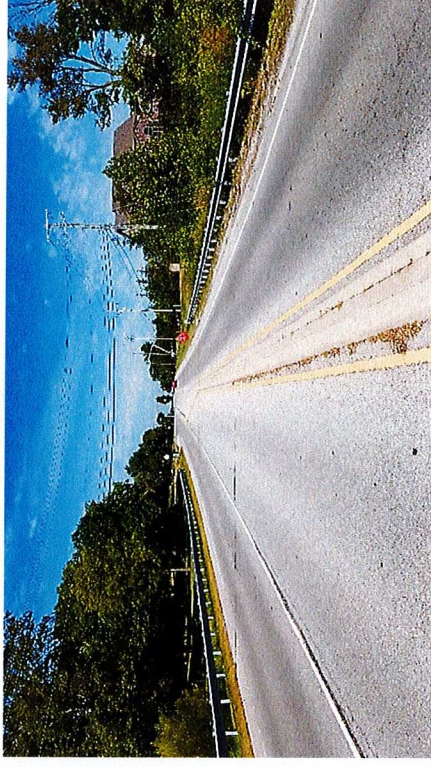


- 146th Street in Hamilton County
 - Ready for bid this winter
 - 4 lane cross section with median
- Boone Co. Bridge #06-00192
 - Received Partial Federal Funding
 - Design has not started
 - Schedule for construction in second half of 2023
- Other Phases
 - Funding and Cost Dependent
 - Permitting Dependent
 - Depends on Feasibility and Impact
 - Projects may most likely be phased by Section and Intersection
 - This project was developed to evaluate preliminary options.

Future Considerations

Considerations and Recommendations

- Level of Accuracy and Cost Savings Can be Developed and Finalized as Design Progressed
- Estimates are provided by segment, intersection and bridge so the project can be staged over a period of years in manageable portions.
- While roundabouts may require more right-of-way, the cost difference between the signal and roundabout estimates is manageable when considering the long term operational and maintenance costs for signals. Roundabouts typically out-perform signals over their life cycle.
- Intersections and bridge projects are lower initial investments that can be initiated to improve the corridor.



Questions

- John Beery – Beam, Longest, and Neff

jbeery@b-l-n.com