

INDOT Fort Wayne District

US 30 @ SR 101 J-Turn A Safety Driven Solution

March 5, 2019



Outline

Existing Conditions

- Location and Layout

Project Selection

- Initial concern to analysis

Project Development

- Scoping project alternatives

Project Design

- Concept to Plans

Project Construction

- Schedule and Phasing

Project Conclusion

- Analysis of Final Product

Takeaways

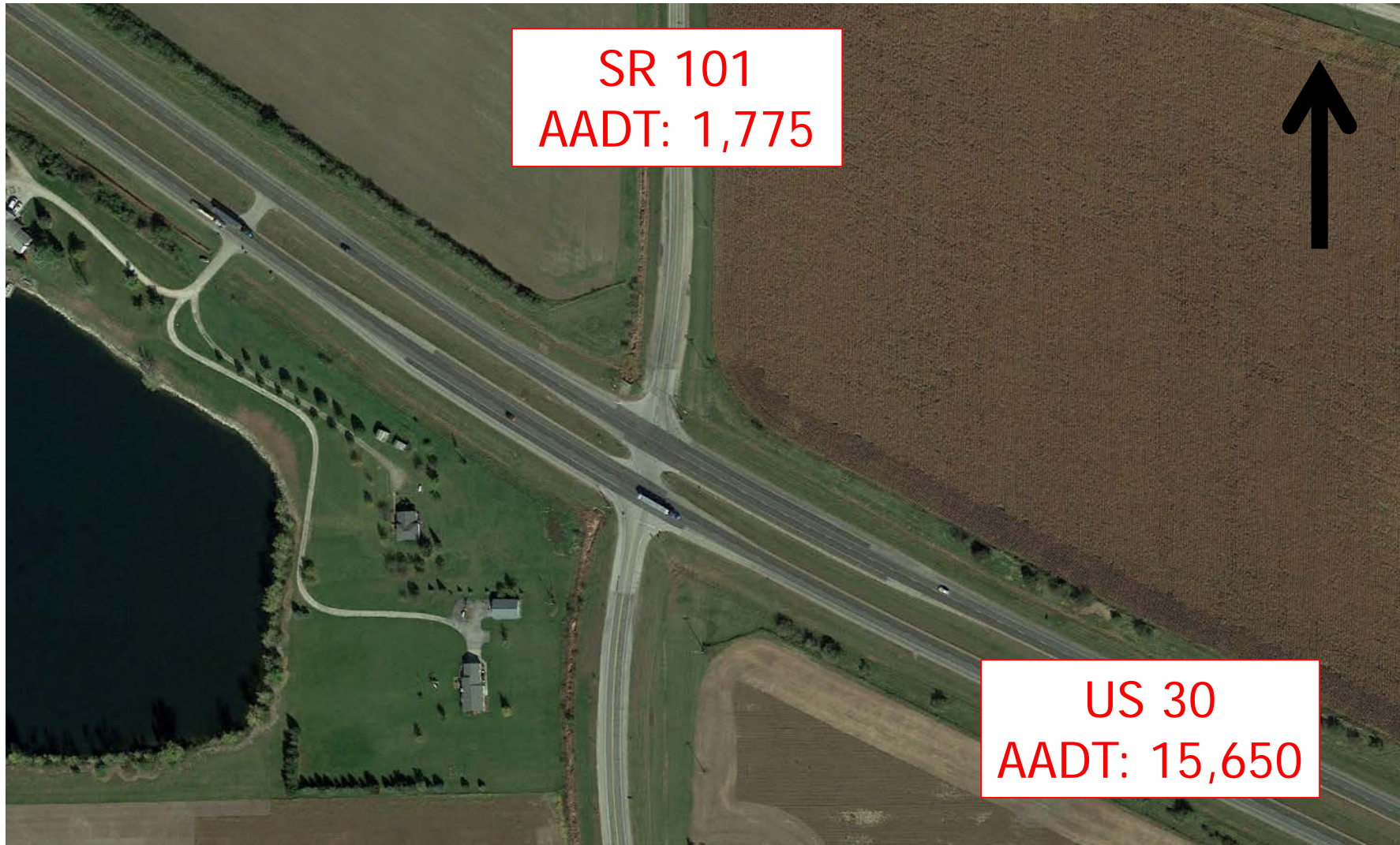
- What did we learn?



■ Project Location



■ October 2017

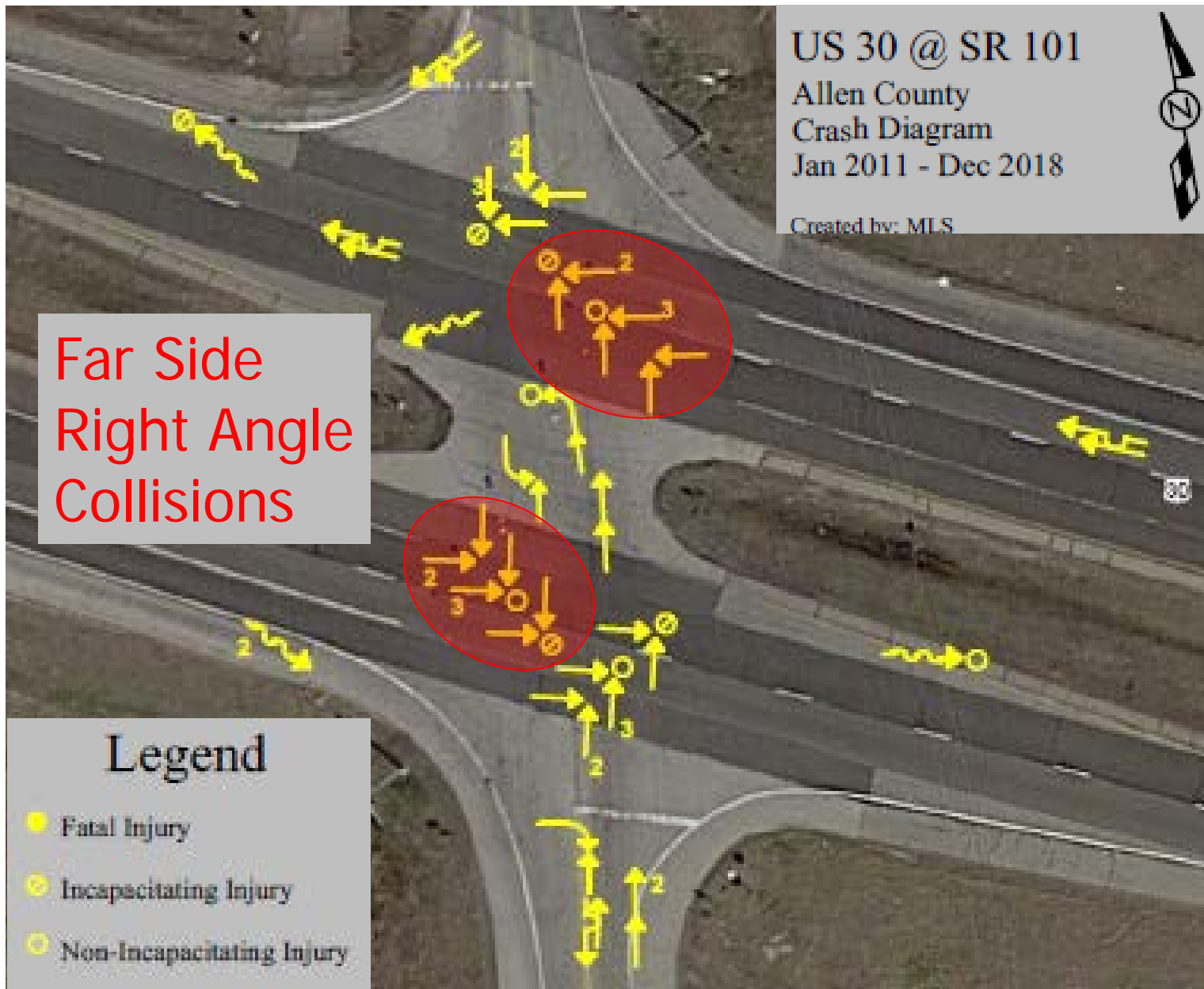


■ Public Concerns

- Long delays on SR 101 due to vehicles waiting to cross US 30, specifically semis
- Safety of vehicles crossing all 4 lanes of US 30 at once
- Address vehicles with trailers stopping in median and blocking traffic along US 30

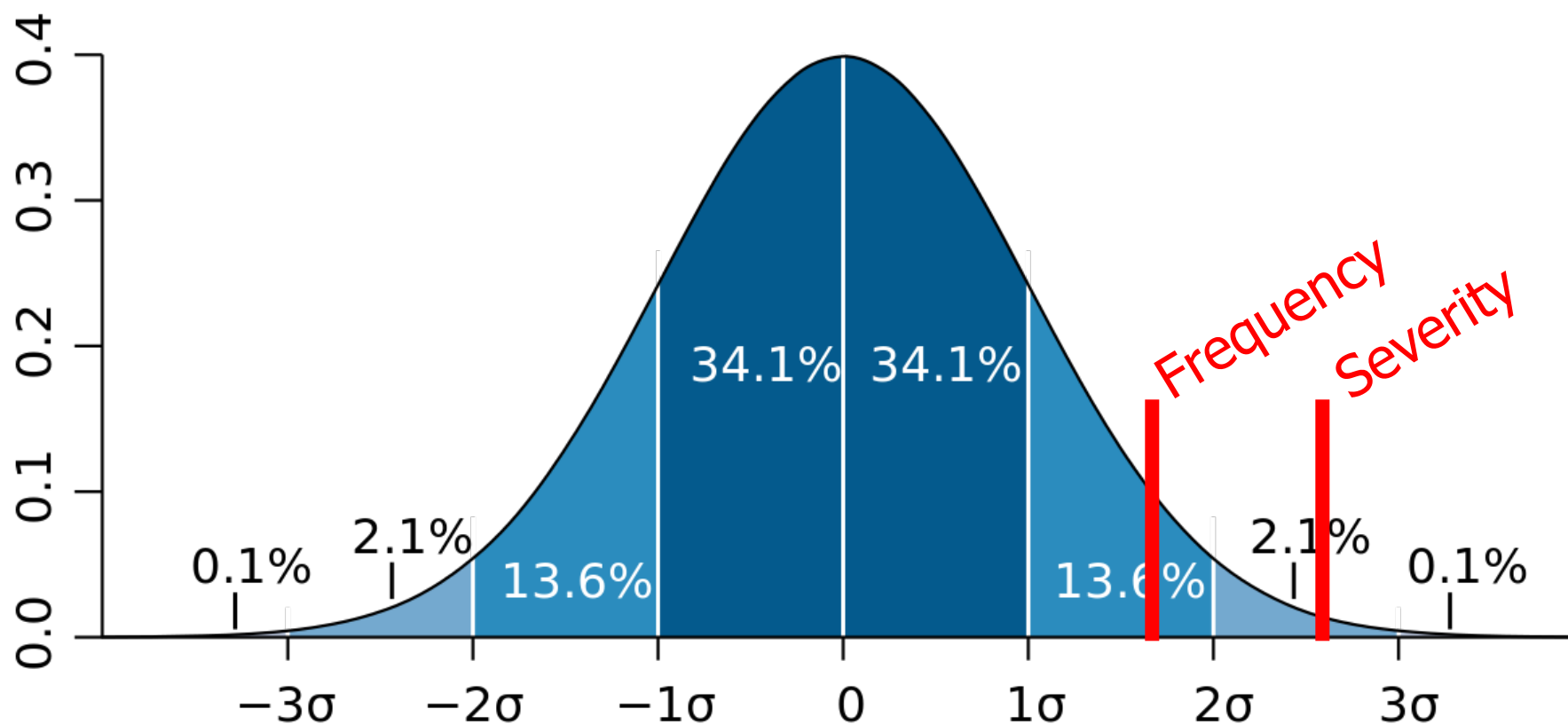
■ Crash History 2011-2017

- 32 Total Crashes
 - Average of 4+ Crashes/Year
- 16 Injury Crashes
- 19 Right-angle Crashes
 - 12 Far side right angles



■ How does this intersection compare?

Crash Severity and Frequency



■ **No-Build**

- Does not address safety and mobility concerns

■ **Traffic Signal**

- Improves delay on SR 101
- Creates stop condition for US 30

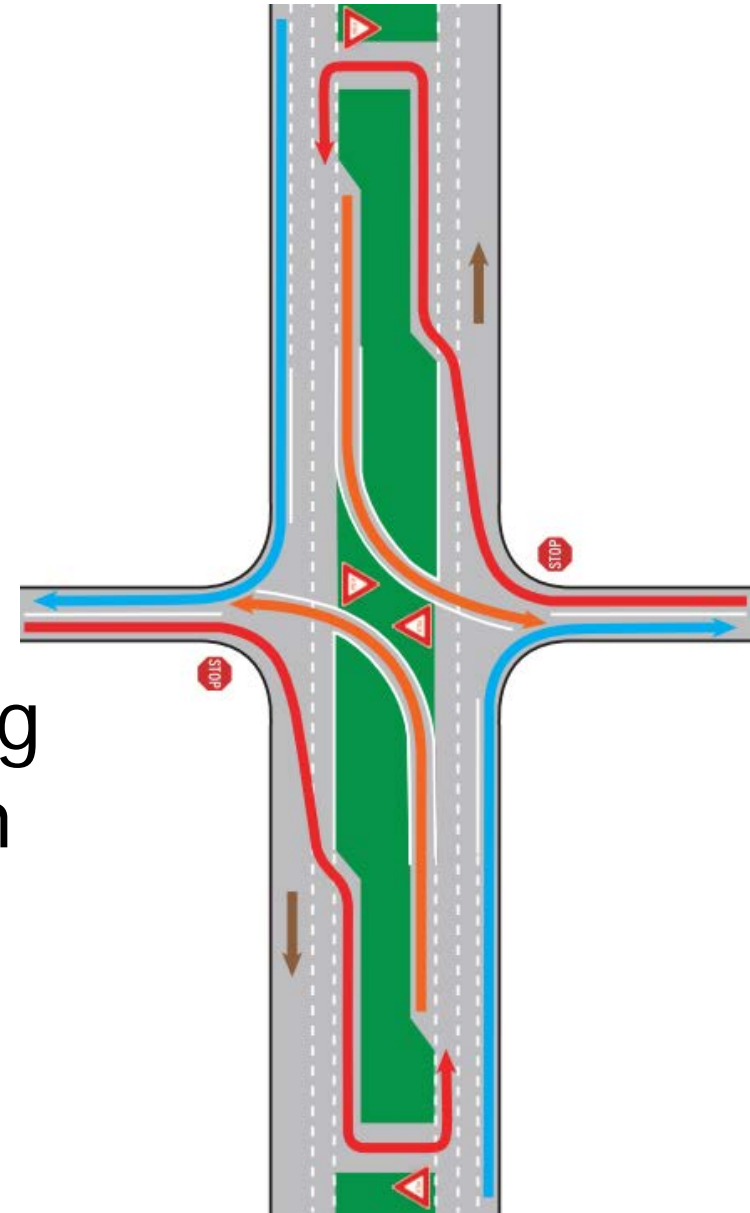
■ **Grade Separation or Interchange**

- Reduces crashes but at higher cost

■ **Alternative Intersection J-Turn**

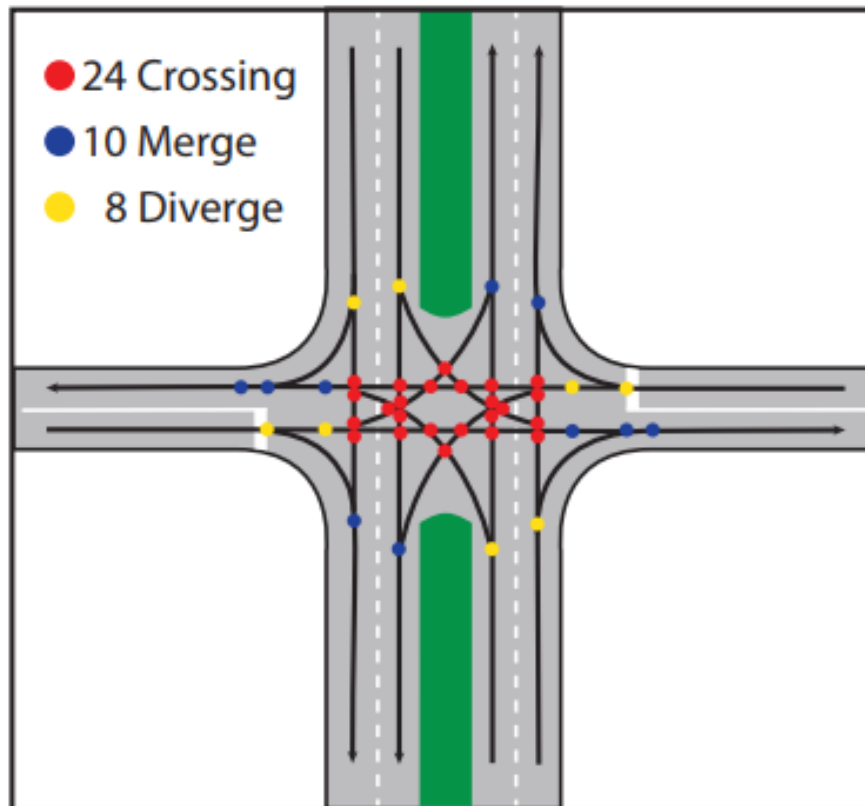
- Keeps US 30 free flow while eliminating crossing crashes

- **What is a J-Turn?**
 - Restricts crossing by diverting through movements to U-Turns
 - Maintains free flow on mainline
 - Creates a simpler crossing of mainline, one direction at a time

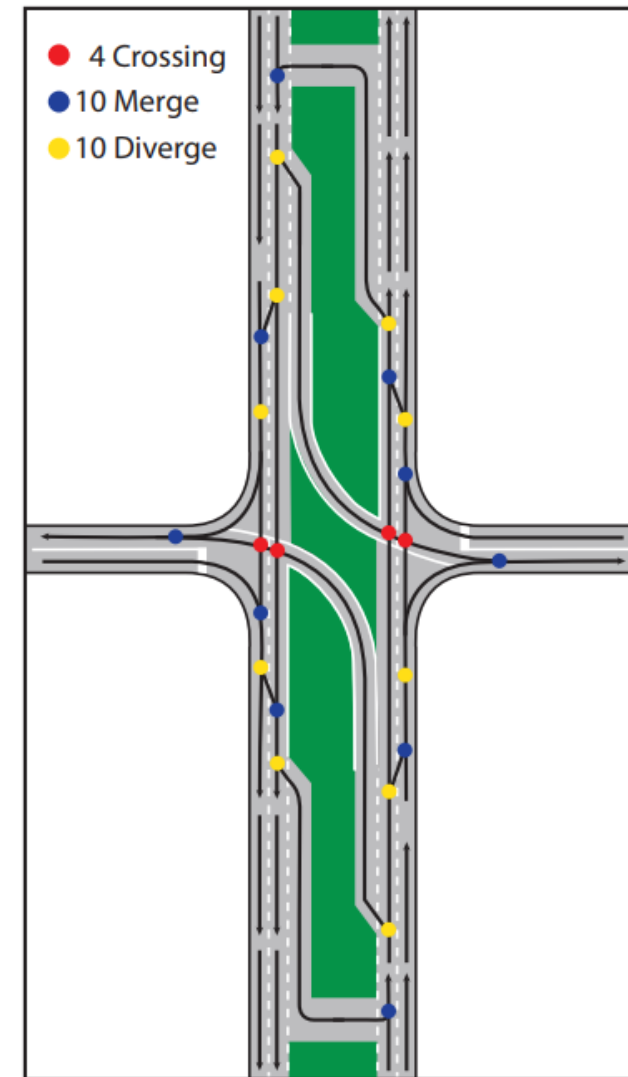


Conflict Points – Conventional vs. J-Turn

Conventional Intersection Conflict Points



J-Turn Conflict Points



Existing
Conditions

Project
Selection

**Project
Development**

Project
Design

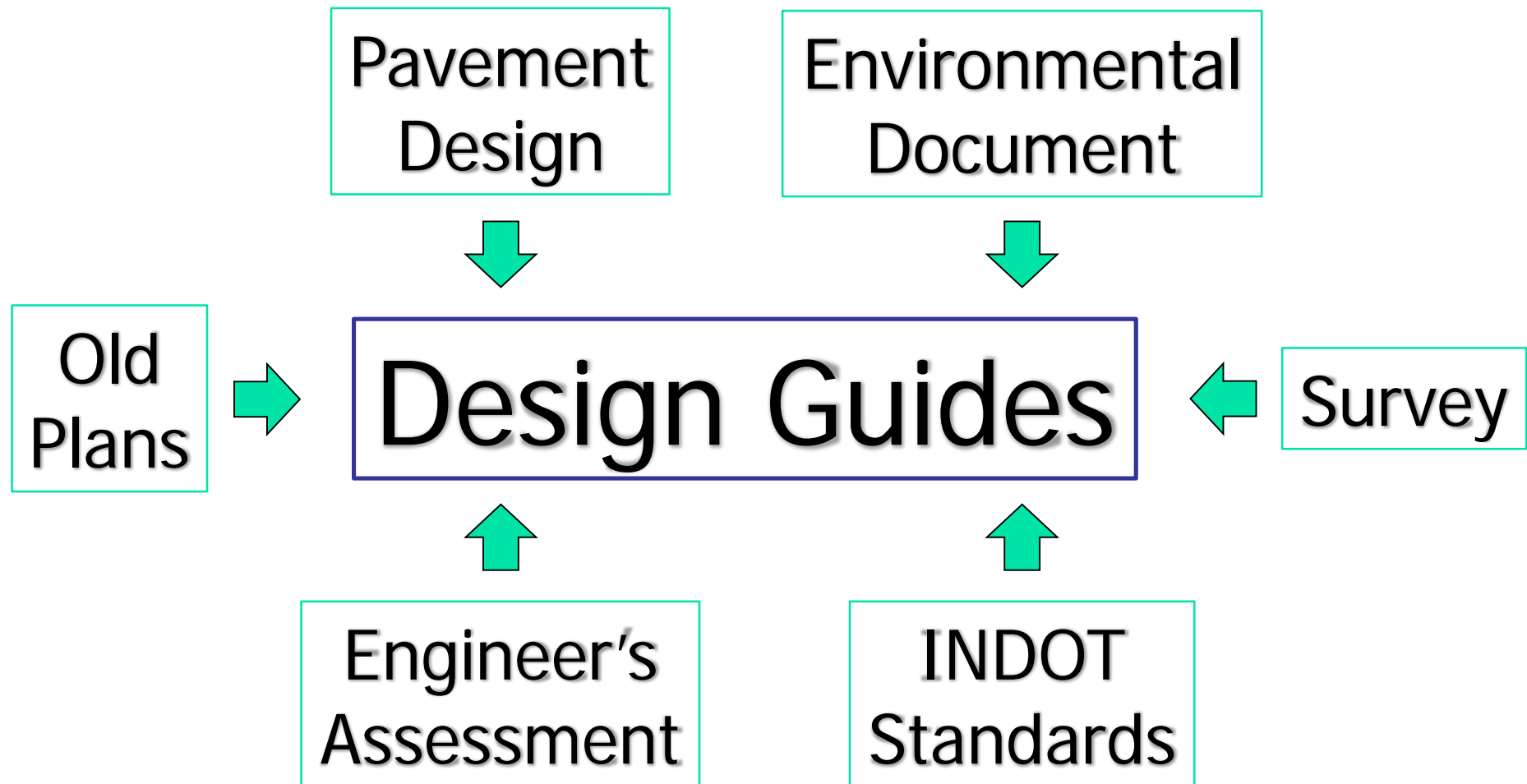
Project
Construc-
-tion

Project
Conclusion

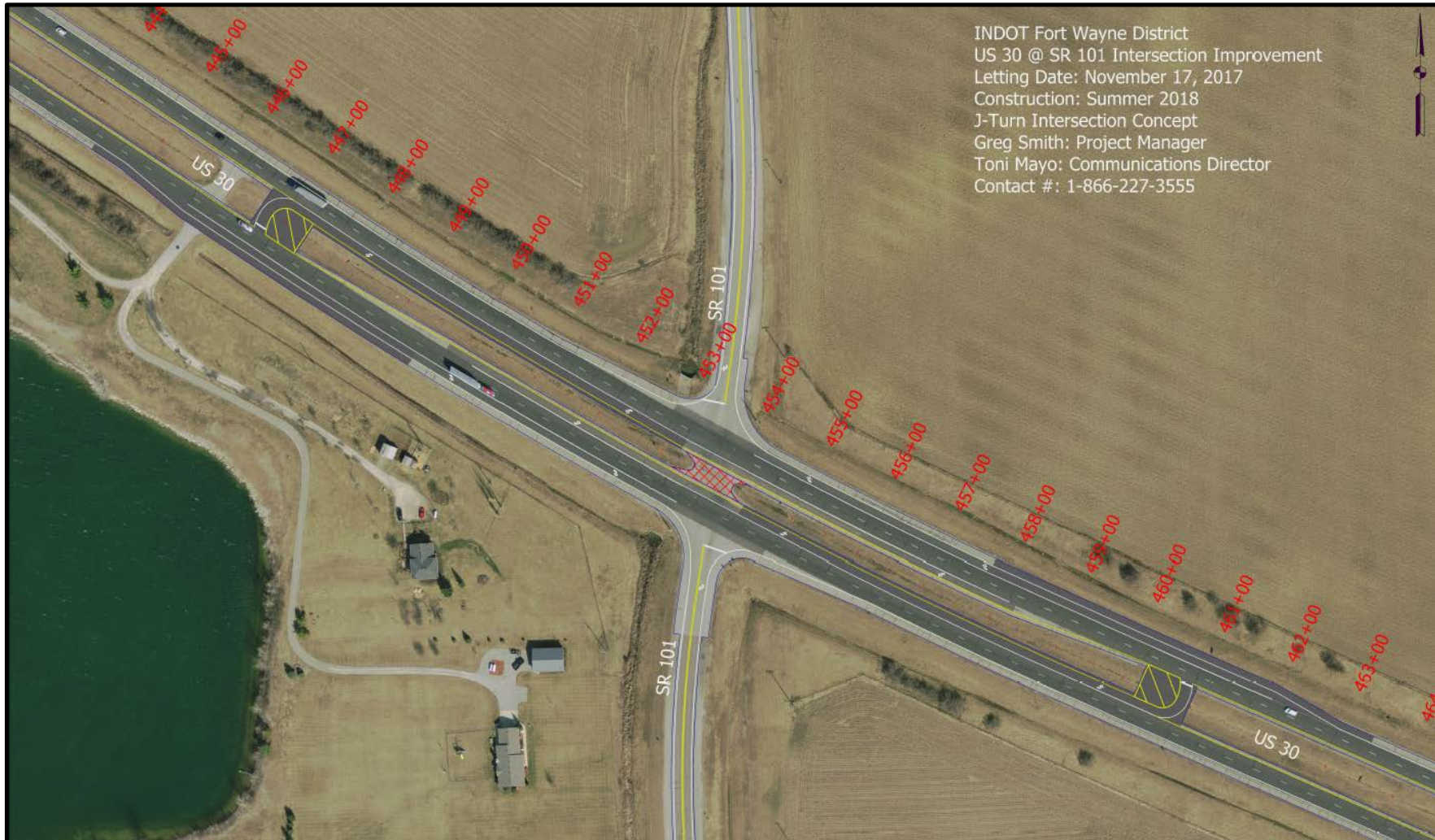
Takeaways



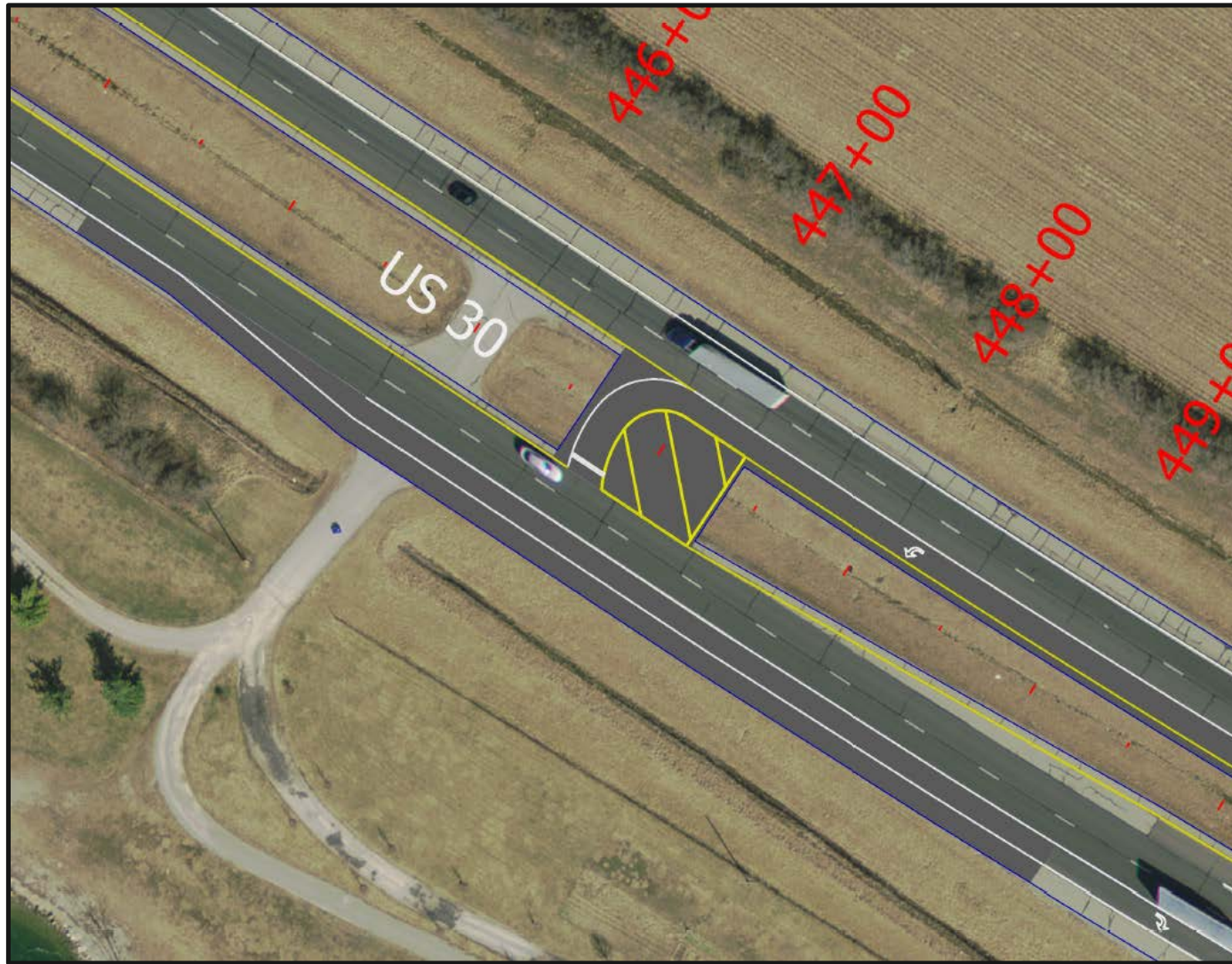
■ Stage 1 Design



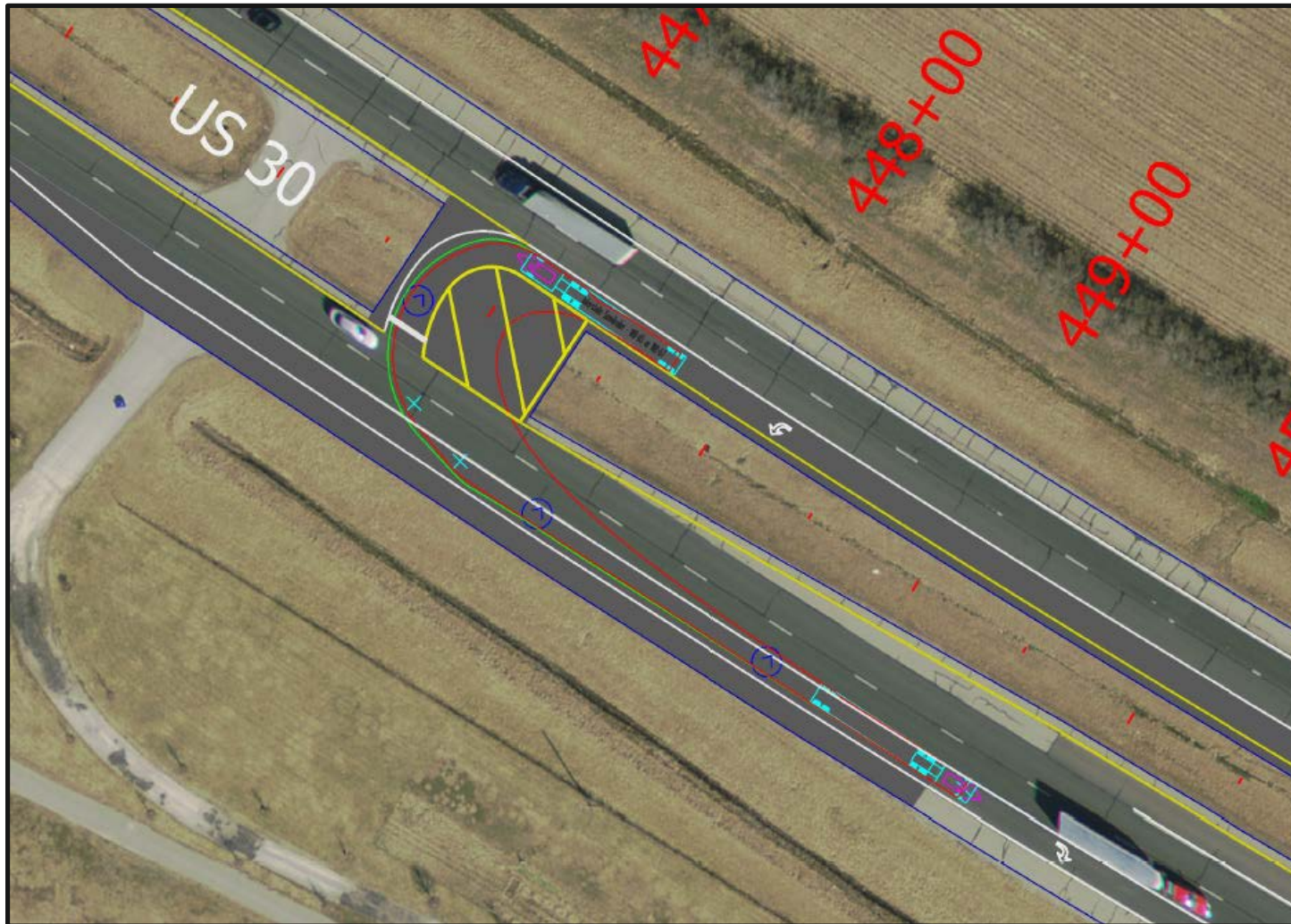
■ ~~Design~~ Conceptual Design



■ Crossovers: Location West

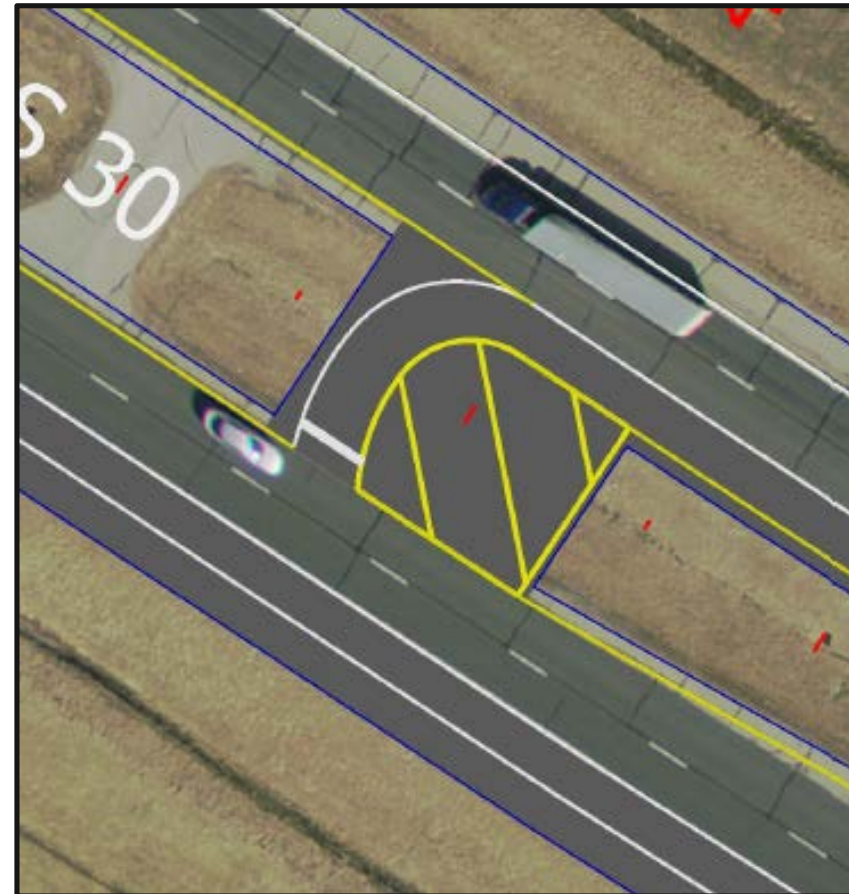
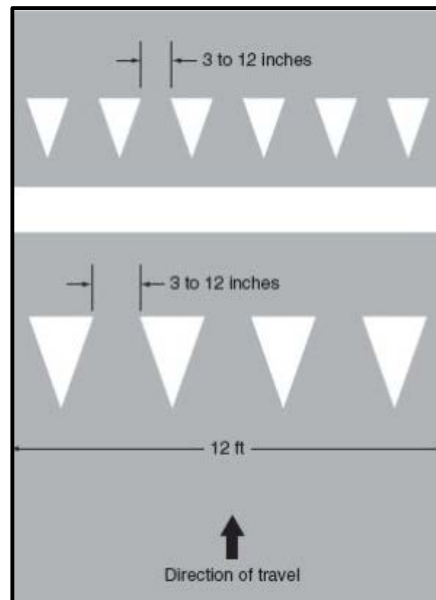


■ Crossovers: Swept Path

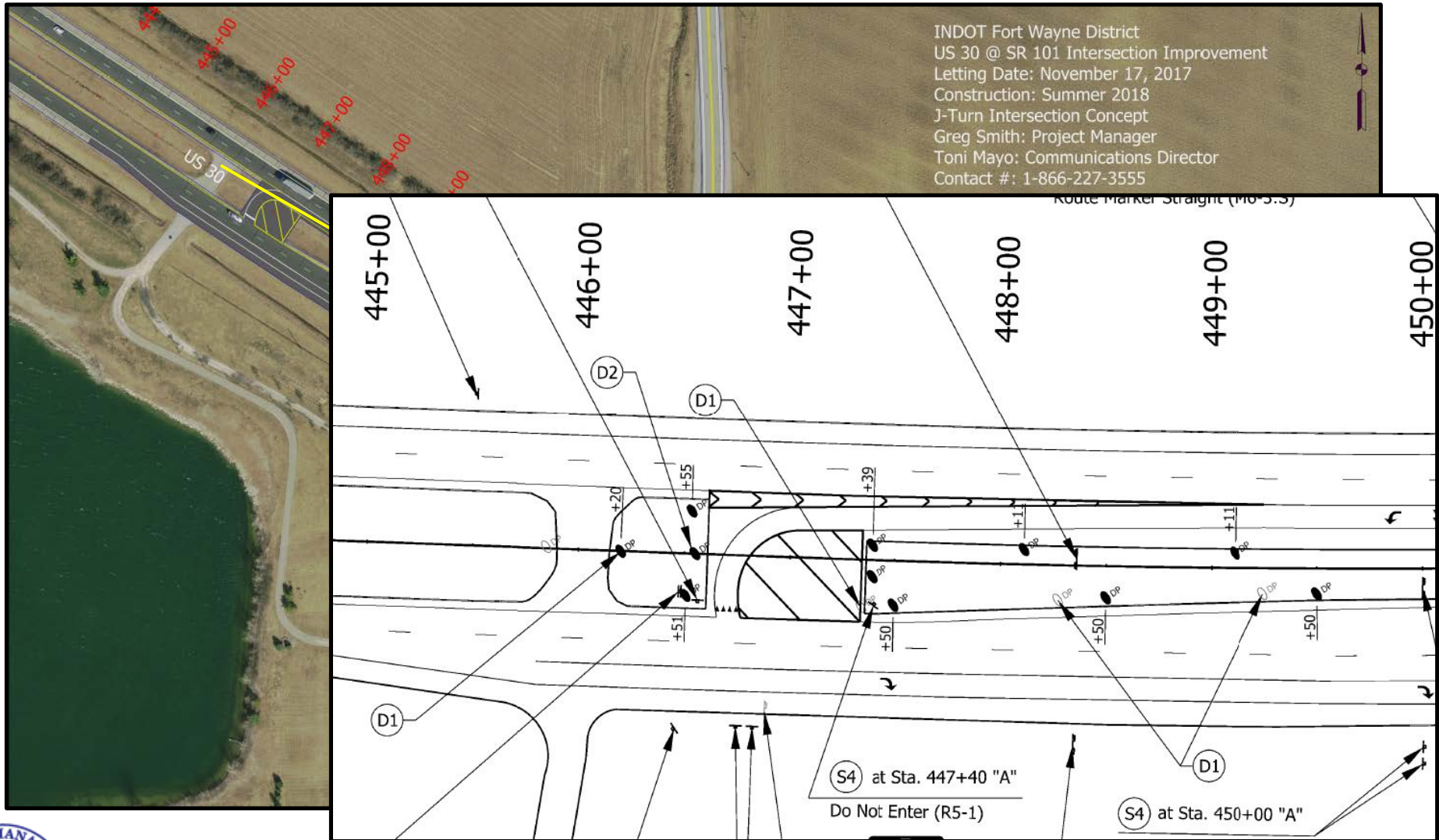


■ Crossover Pavement Markings

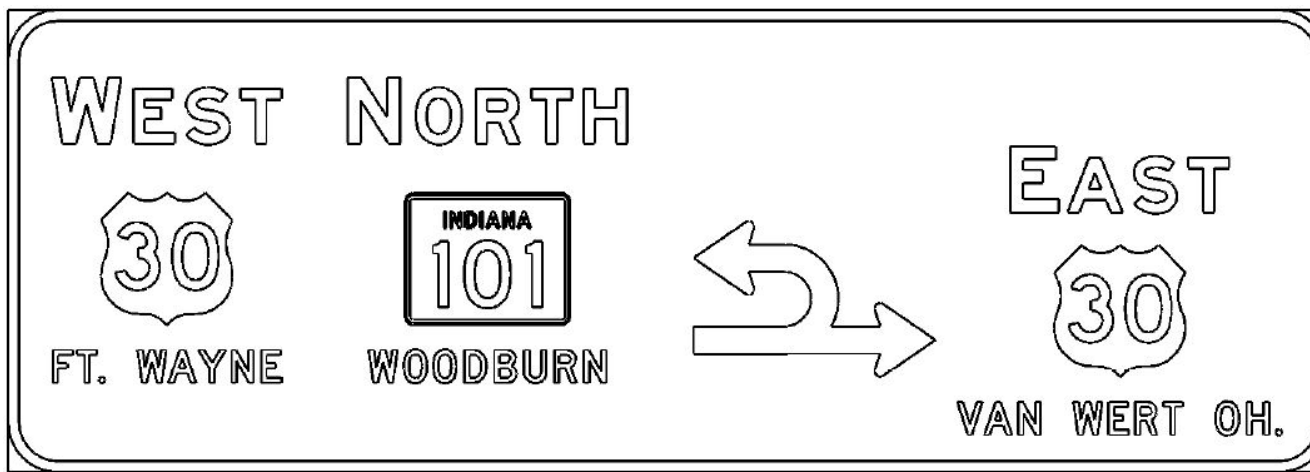
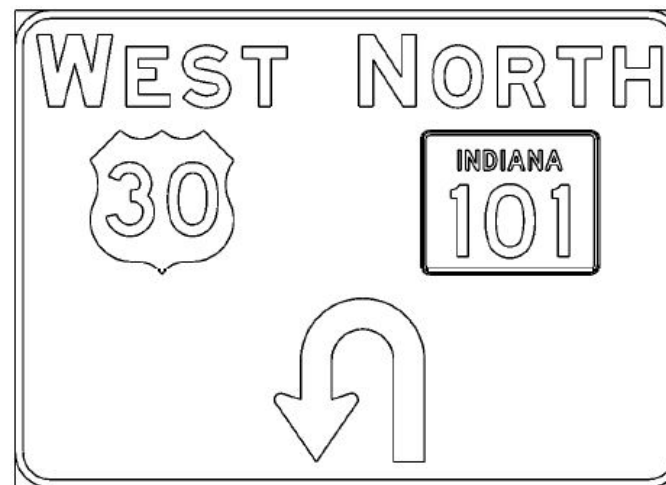
- Swept Path
- Yield Markings



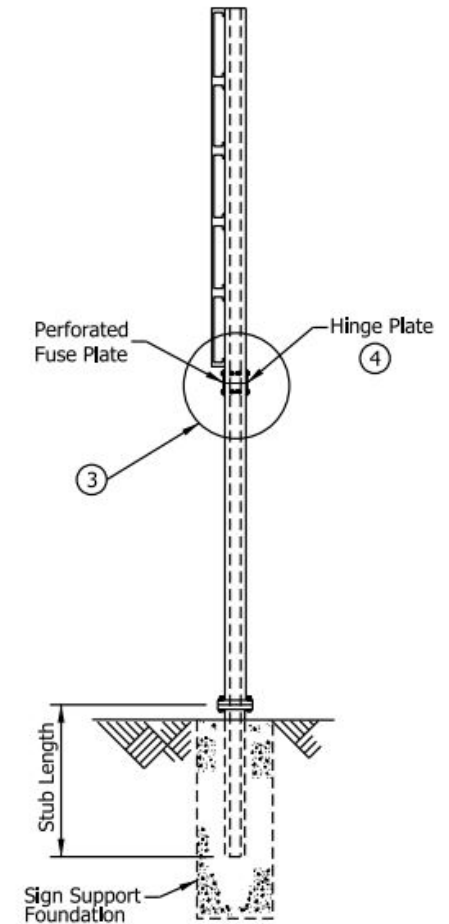
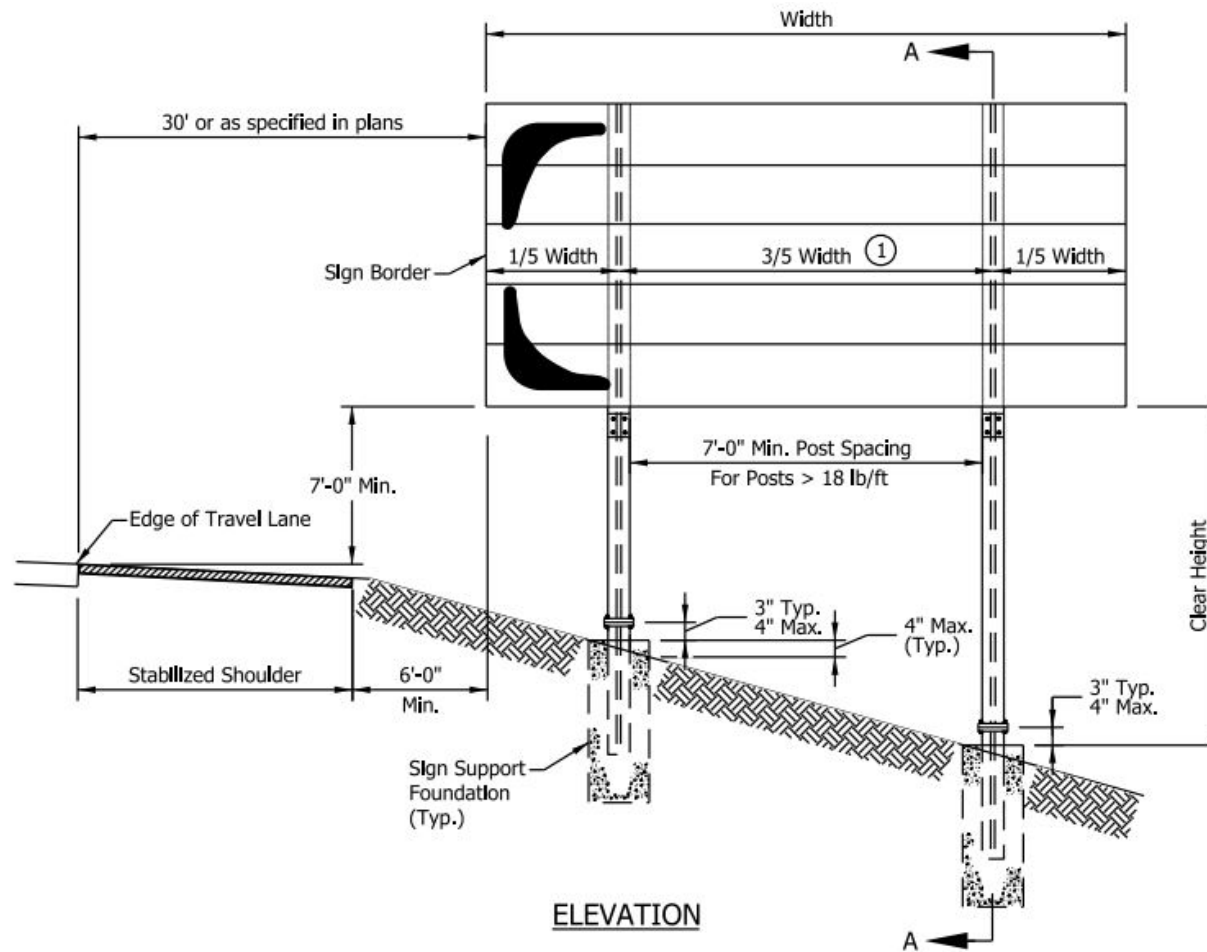
Sight Distance at Exist. Crossover



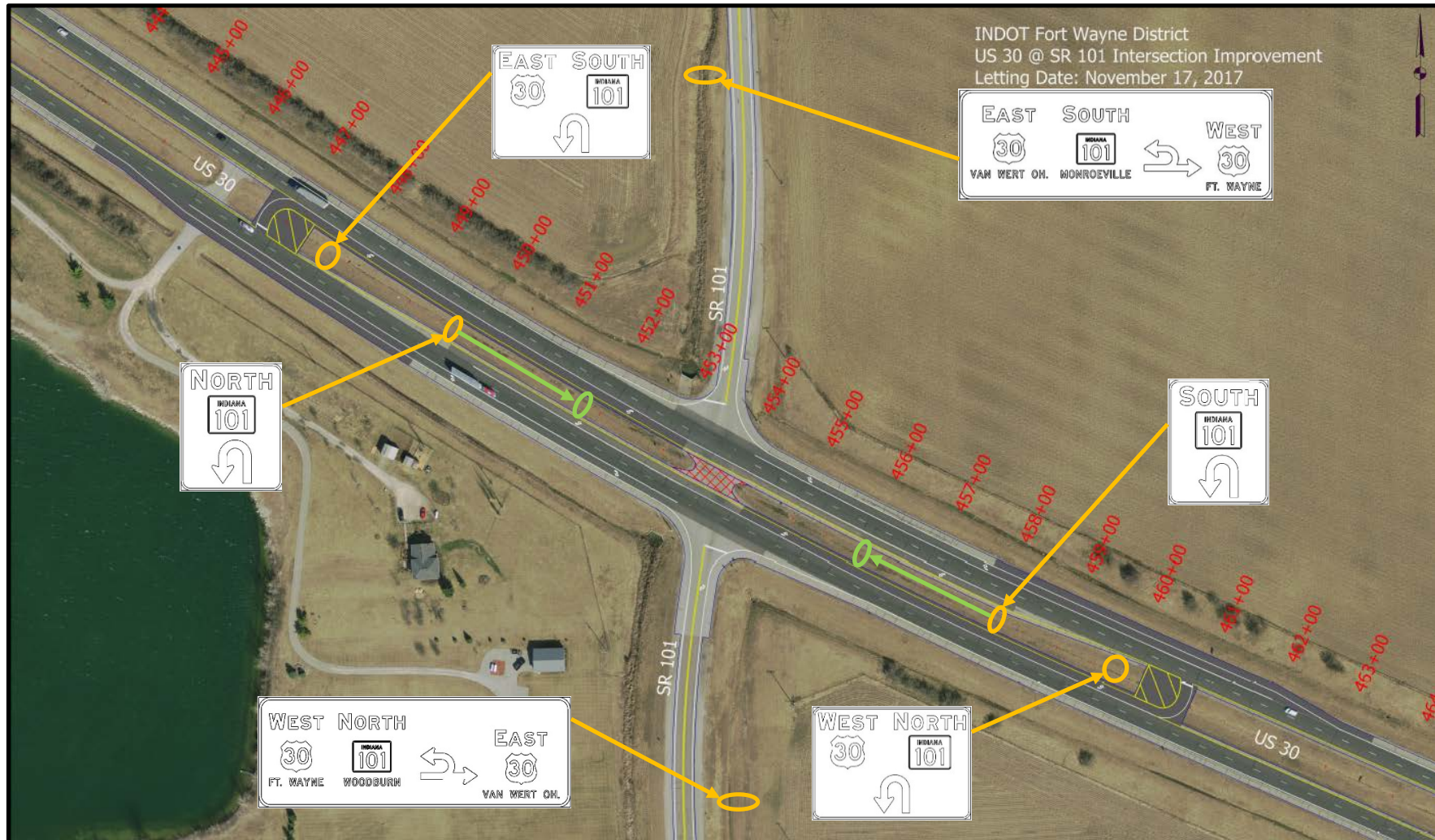
■ Panel Signs



■ Breakaway Posts



Panel Sign Locations



■ Stakeholder Meetings

- Emergency services
- School officials
- Local officials

■ Public Meeting

- Awareness and Education
- Interactivity



MOT Phases



Existing Conditions

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Existing
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■ Takeaways

- Public Involvement
 - Design Considerations
 - Interactivity
- Multi-modal Design
 - Semi Trucks
 - Farm equipment
- Keep Safety as Focus
 - Sight distance
 - Signage
 - Other vehicles

Questions ???

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