



AECOM

M-51 from Indiana State Line to M-60BR
US-12 from 3rd Street to Cass County Line

Public Open House #2

City of Niles, Niles Township, Berrien County

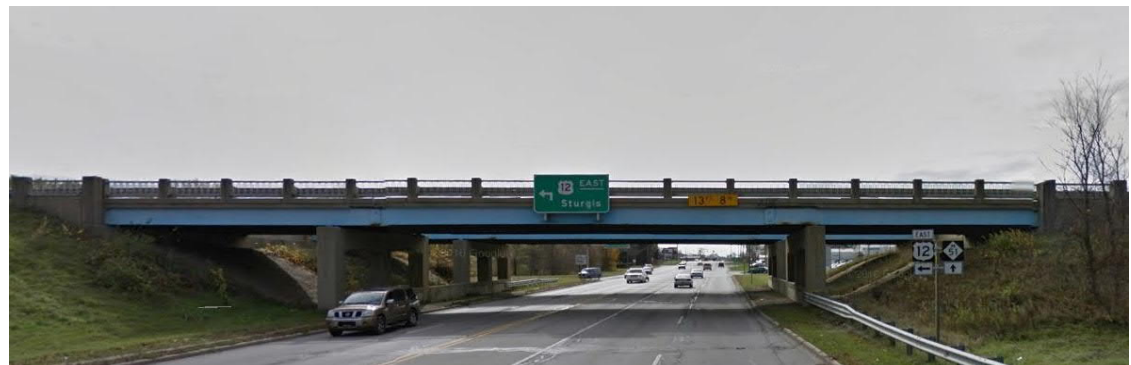
Wednesday, February 6, 2019

The AECOM Team:
AECOM, Bergmann Associates and SME



Why are we here?

- MDOT has initiated a feasibility study for US-12/M-51 interchange
 - Infrastructure is in poor condition
 - Interchange configuration
 - Review pavement fixes on M-51 (Indiana State Line to M-60BR)
 - Stakeholder and public involvement is key



Purpose & Need

Project Purpose

- Address deteriorated infrastructure (bridges and pavement).
- Consider long-term maintenance costs.
- Accommodate existing and future operational needs.
- Size the infrastructure appropriately (fiscally-responsible solutions).
- Provide a safe and connected facility for all users.
- Minimize environmental impacts.



Project Need

Address the:

- Deteriorated bridges.
- Outdated existing geometric features.
- The excess capacity of US-12.
- Lack of safe and accessible pedestrian facilities.
- Deteriorated pavement conditions.



What we've been up to.

Where we are going?





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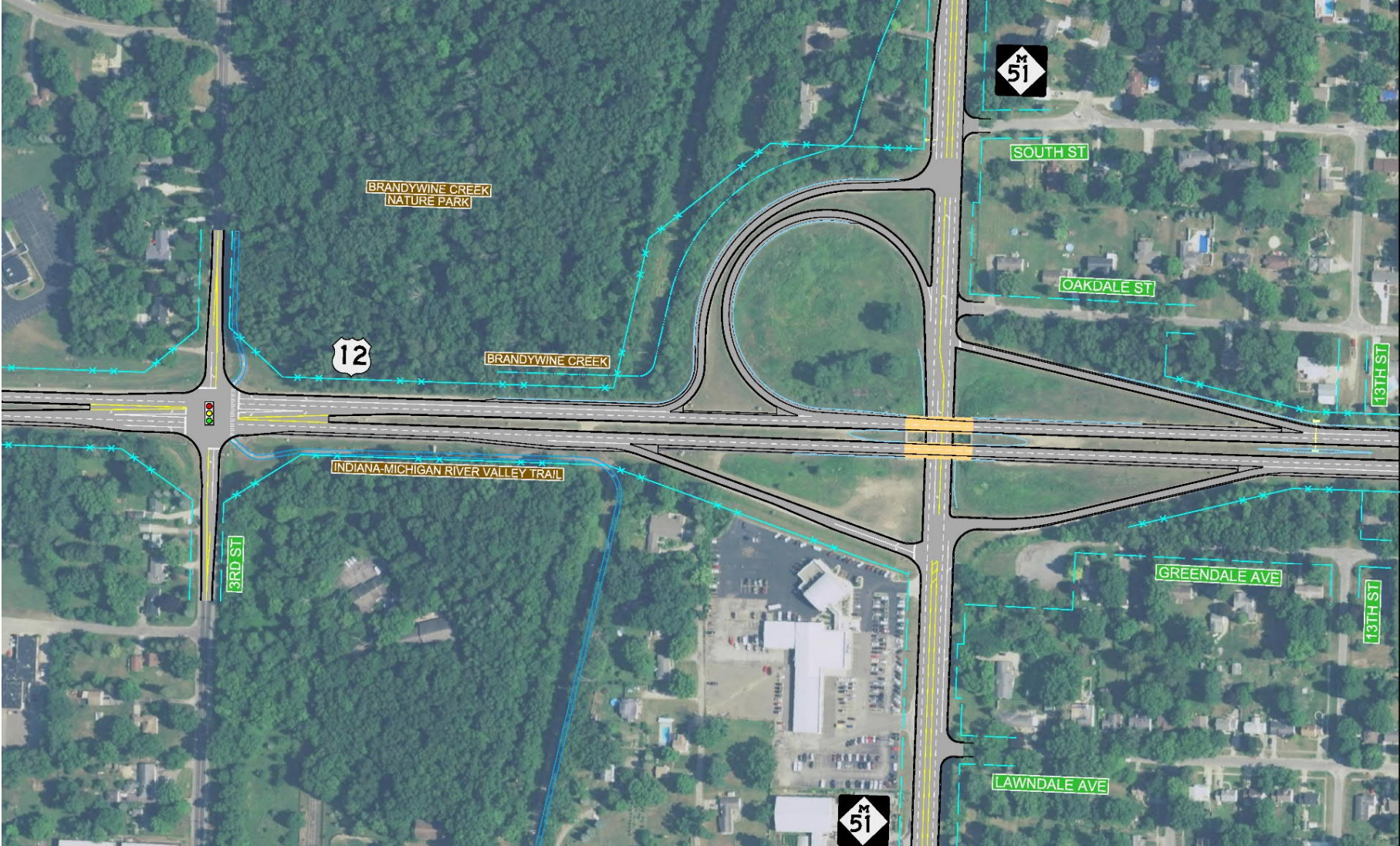


Alternatives

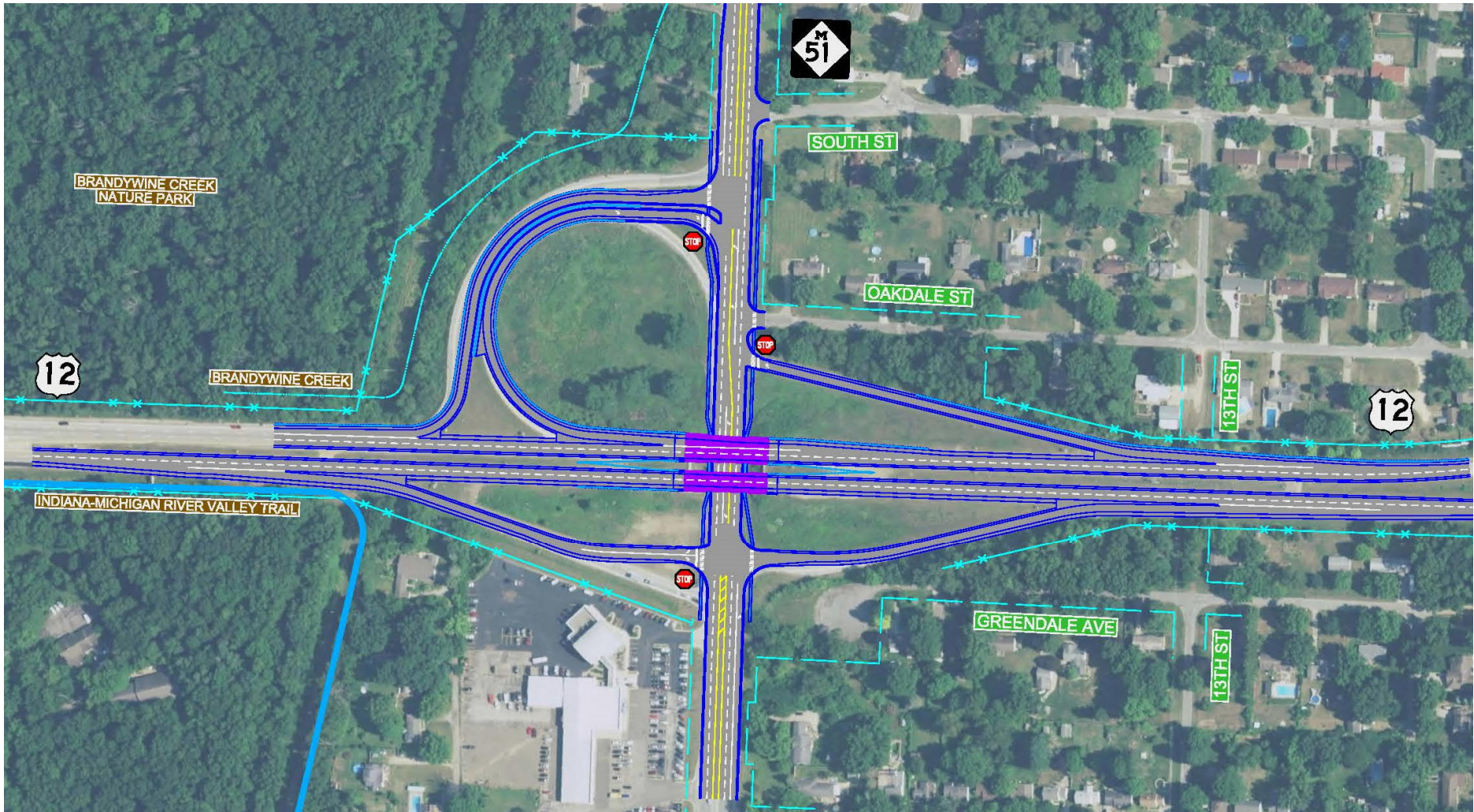
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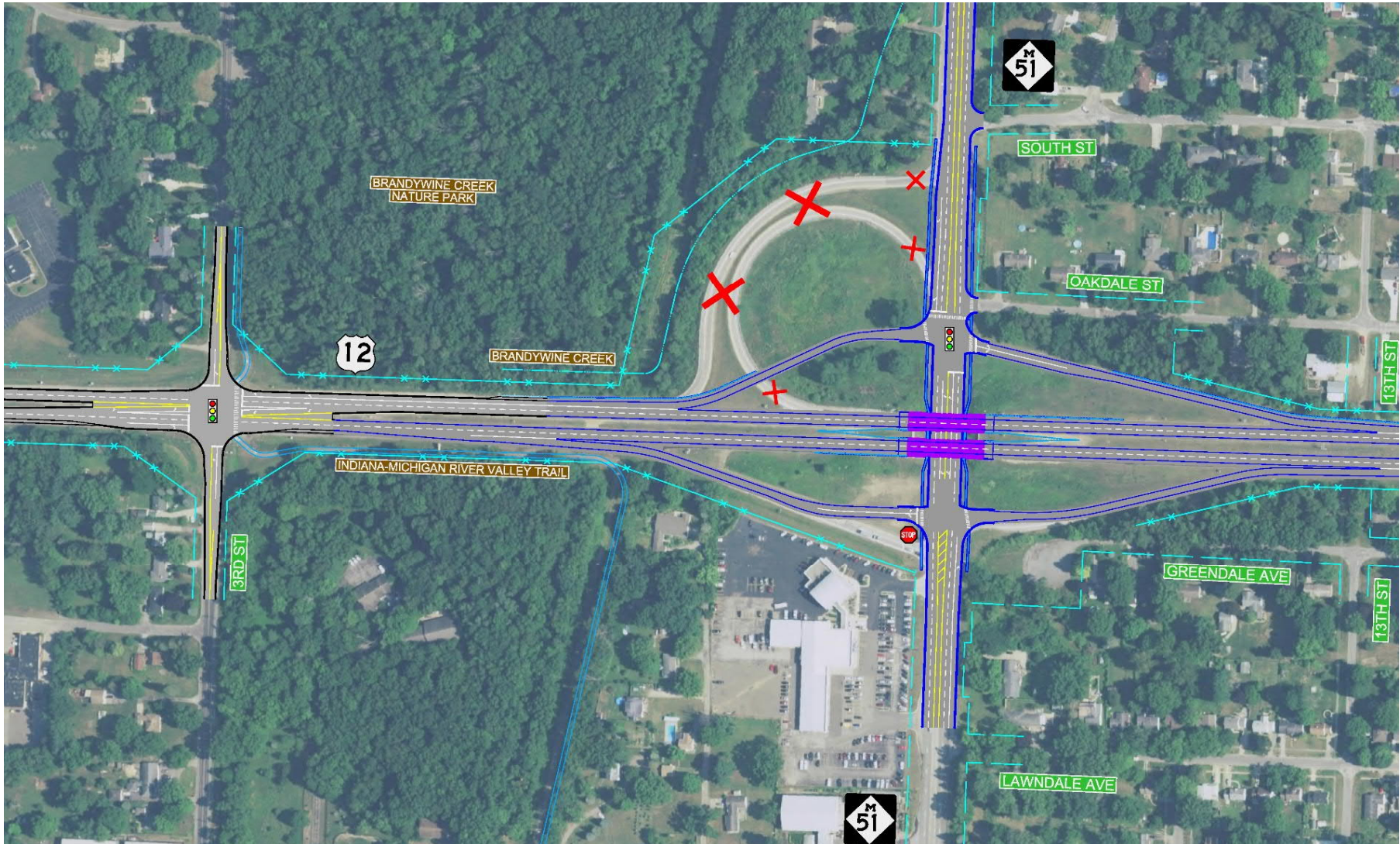
Existing Configuration



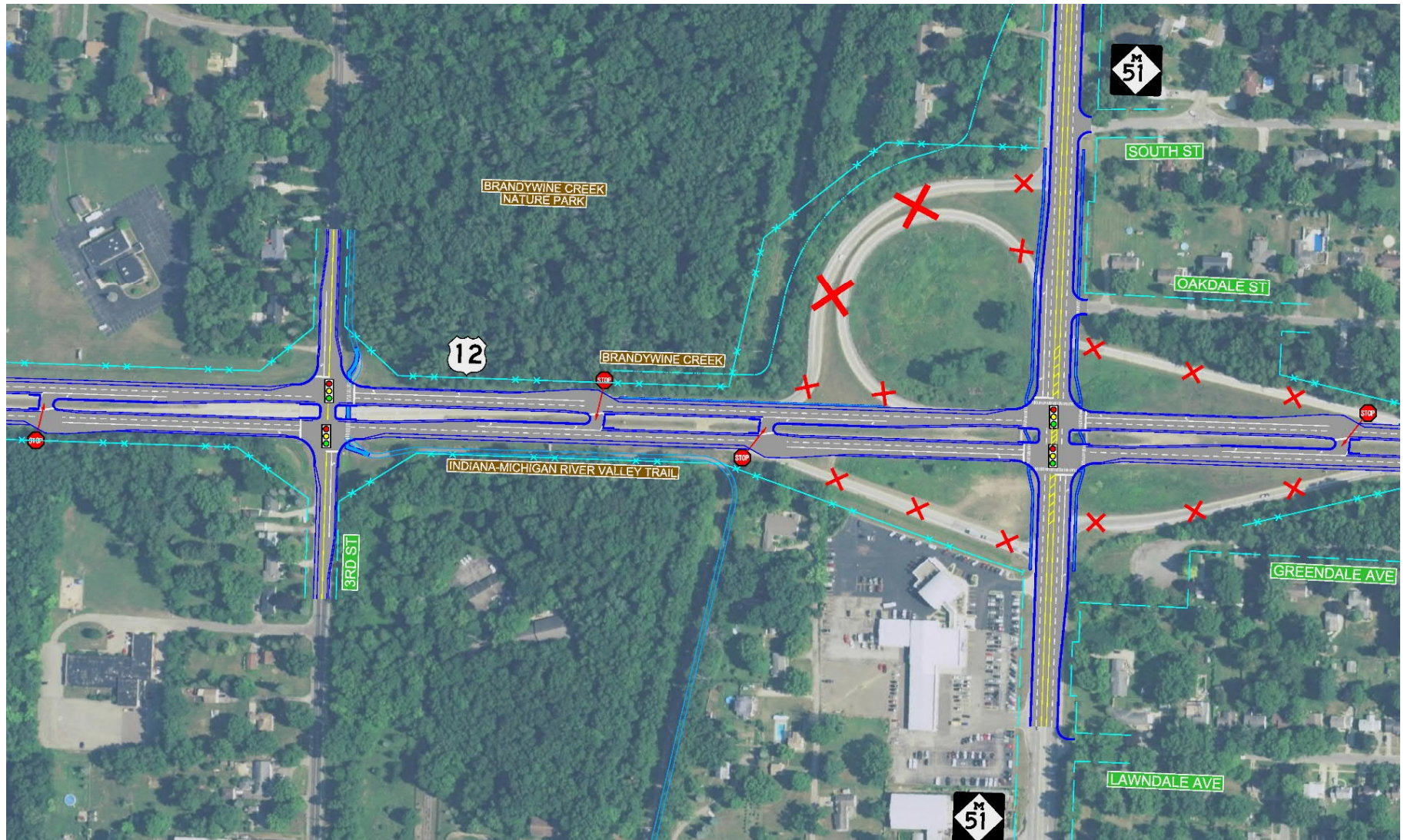
Alternative #0. Rebuild Existing Interchange



Alternative #1 – Diamond Interchange



Alternative #2 – At-Grade Signal with Michigan Left-Turns



Alternative #3 – At-Grade Roundabout



Alternative #4 – At-Grade Signal with Direct Left-Turns



The background image shows a public engagement meeting in a conference room. A group of people is seated on high-top chairs, facing a presentation screen. The screen displays a map with various colored zones and lines. A semi-transparent blue and green overlay covers the middle of the image, with the text "Review of Public Engagement" written in white. The room has a drop ceiling with recessed lights and a patterned carpet.

Review of Public Engagement

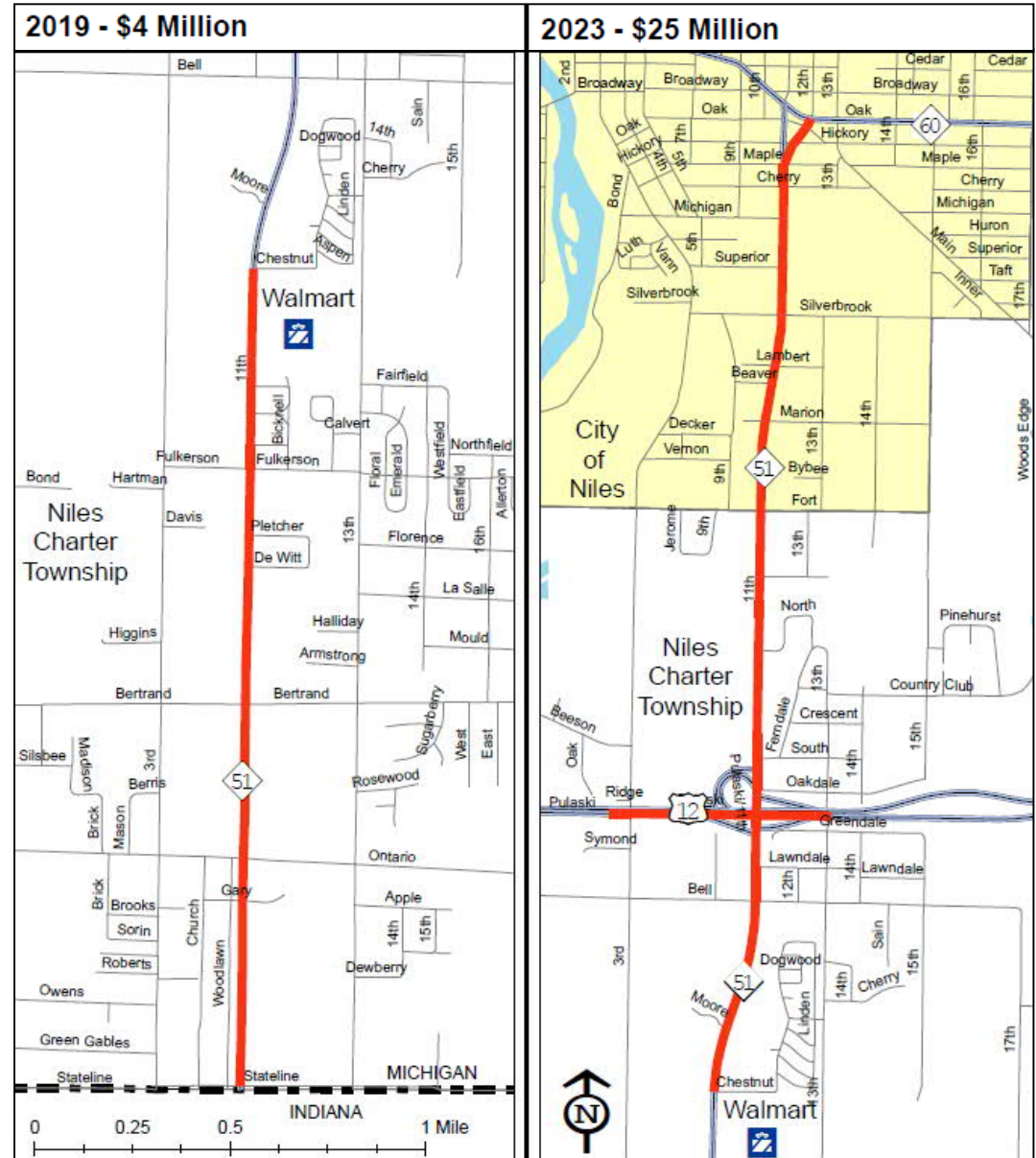
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What We Heard...

- “M-51 pavement needs to be repaired before 2025.”

What We Did...

- MDOT accelerated rehabilitation of M-51
 - 2019 project
 - 2023 project

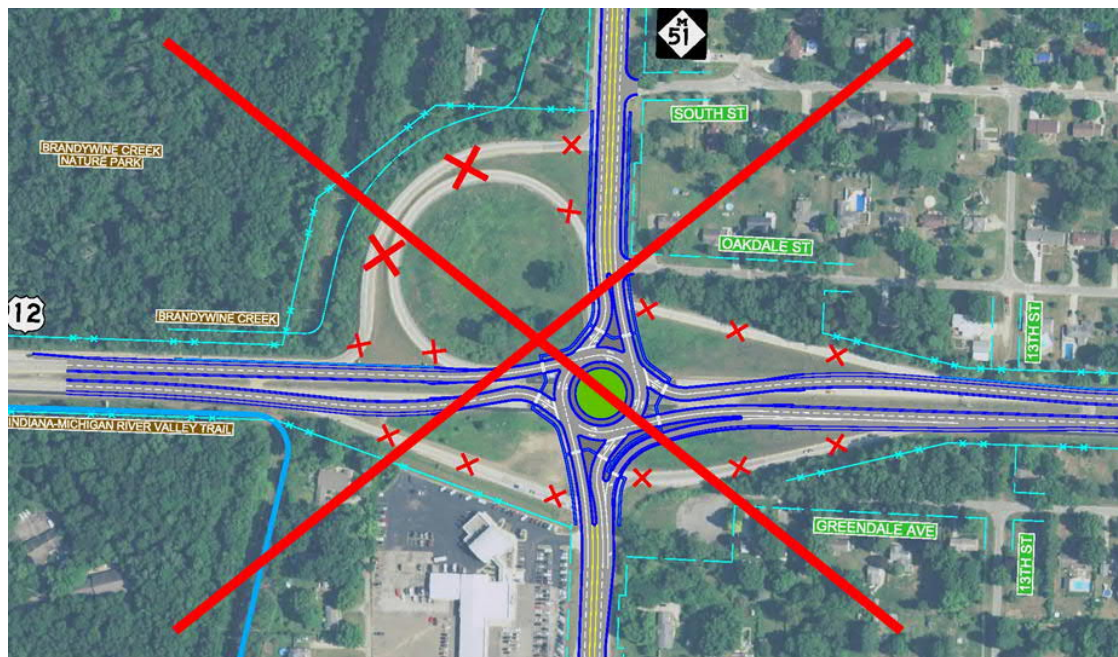


What We Heard...

- “We don’t want a roundabout at US-12/M-51.”

What We Did...

- MDOT eliminated the roundabout alternative.



What We Heard...

- "Safety at US-12/3rd Street intersection is a concern."

What We Did...

- MDOT included ways to improve traffic operations and safety at 3rd Street.



What We Heard...

- “Non-motorized facilities are insufficient (pedestrians and Indiana-Michigan River Valley Trail)”



What We Did...

- MDOT will include sidewalk along M-51 from Bell Road to Brandywine Creek.
- MDOT will provide marked crosswalks with ADA-compliant pedestrian ramps at M-51 signals where required (e.g. Bertrand and Fulkerson)



What We Heard...

- “Non-motorized facilities are insufficient (pedestrians and Indiana-Michigan River Valley Trail)”

What We Did...

- Improved crossing safety at 3rd Street by providing median storage for pedestrians and reducing potential conflict points with the Michigan Left-Turns Alternative



What We Heard...

- “US-12 carries a high percentage of trucks.”



What We Did...

- Confirmed that 9% of the traffic stream along US-12 is trucks.
- Verified the capacity of US-12 will serve trucks for each of the remaining three alternatives.

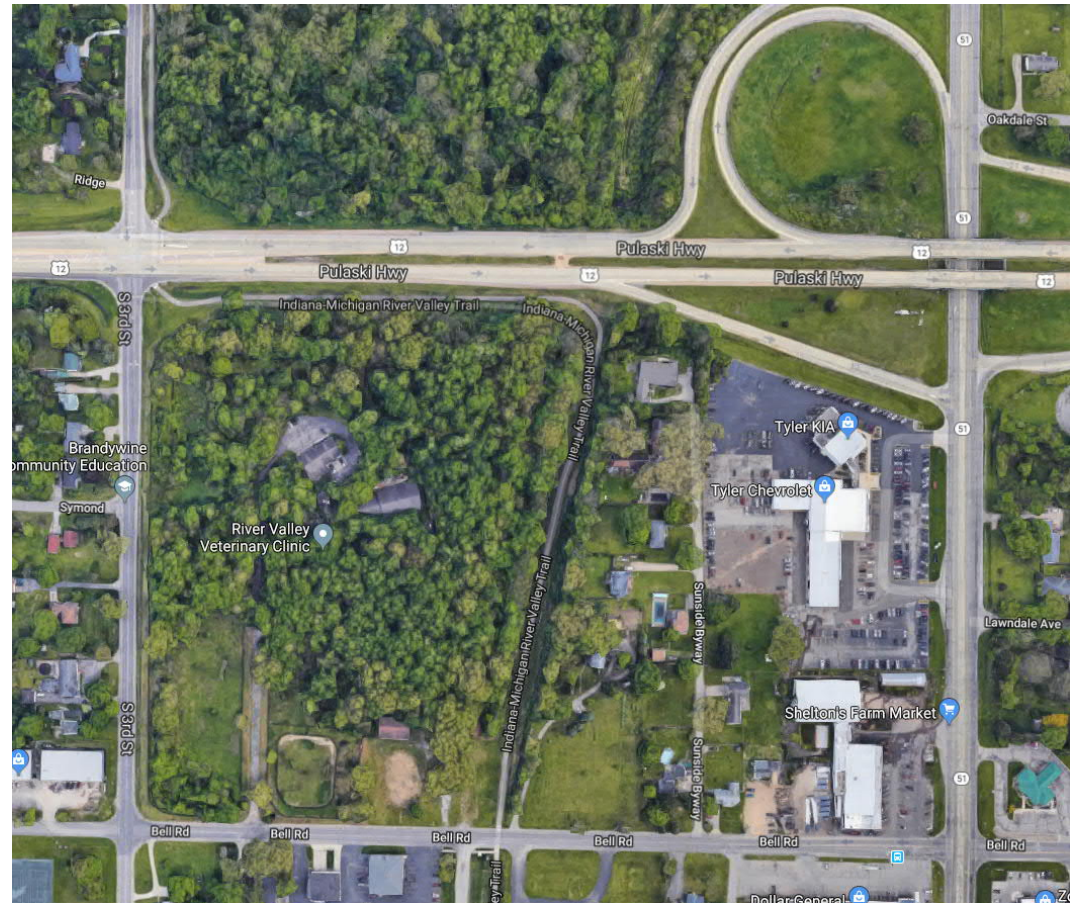


What We Heard...

- “Traffic is avoiding the eastbound US-12 off-ramp at M-51 and instead using 3rd Street and Bell Road.”

What We Did...

- All solutions consider ways to improve eastbound US-12 to northbound M-51 left-turn movement



What We Heard...

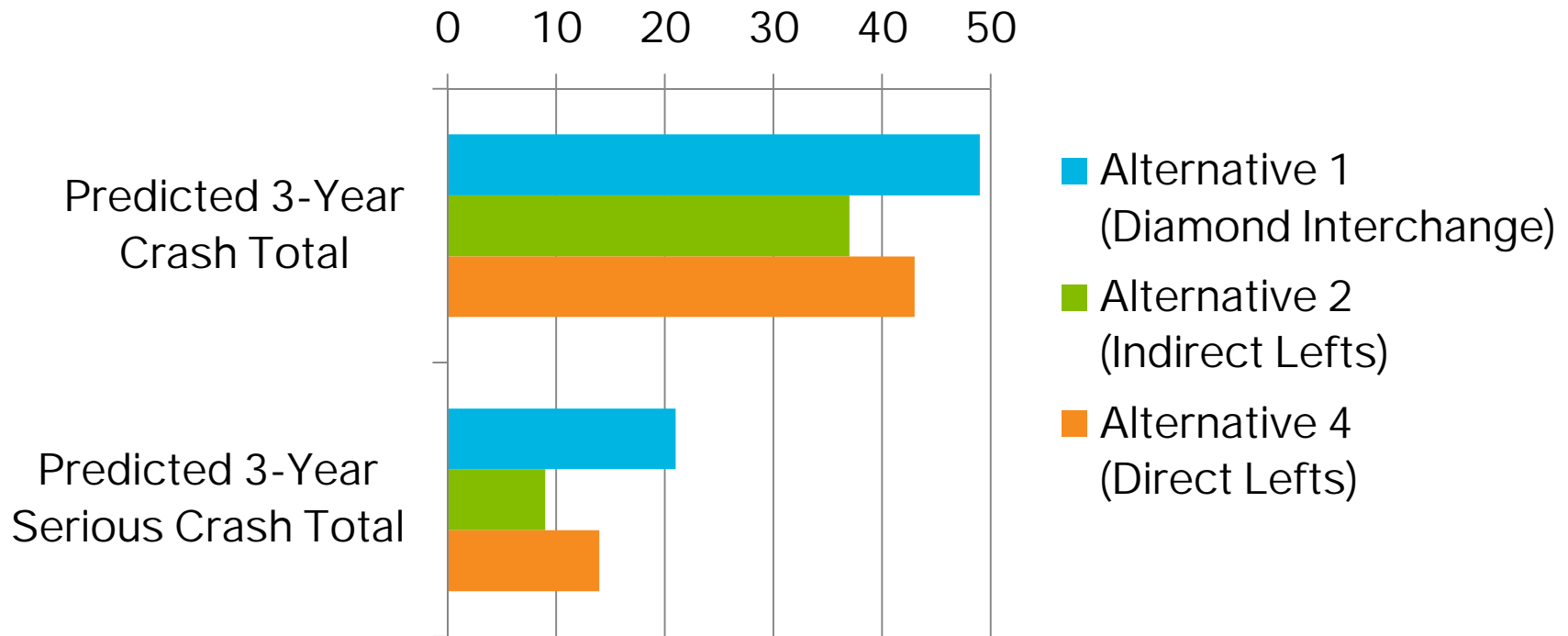
- “Many felt the Diamond Interchange Alternative was safer.”



What We Did...

- MDOT completed a quantitative safety comparison of the remaining alternatives, which included US-12 at 3rd Street and US-12 at M-51.

Safety Comparison



Conclusion: Alternative 2 has the least number of predicted crashes at US-12/3rd and US-12/M-51

Alternative Screening

Alternative	Travel Delay	Pedestrian Safety	Motorist Safety	Geometry	Social/ Environmental	Cost and Future Maintenance	Constructability	Right Sized
Alternative #1 – Grade-Separated Diamond Interchange	●	●	●	●	●	●	●	●
Alternative #2 – At-Grade Signal with Indirect Lefts	●	●	●	●	●	●	●	●
Alternative #4 – At-Grade Signal with Direct Lefts	●	●	●	●	●	●	●	●

● Very Good

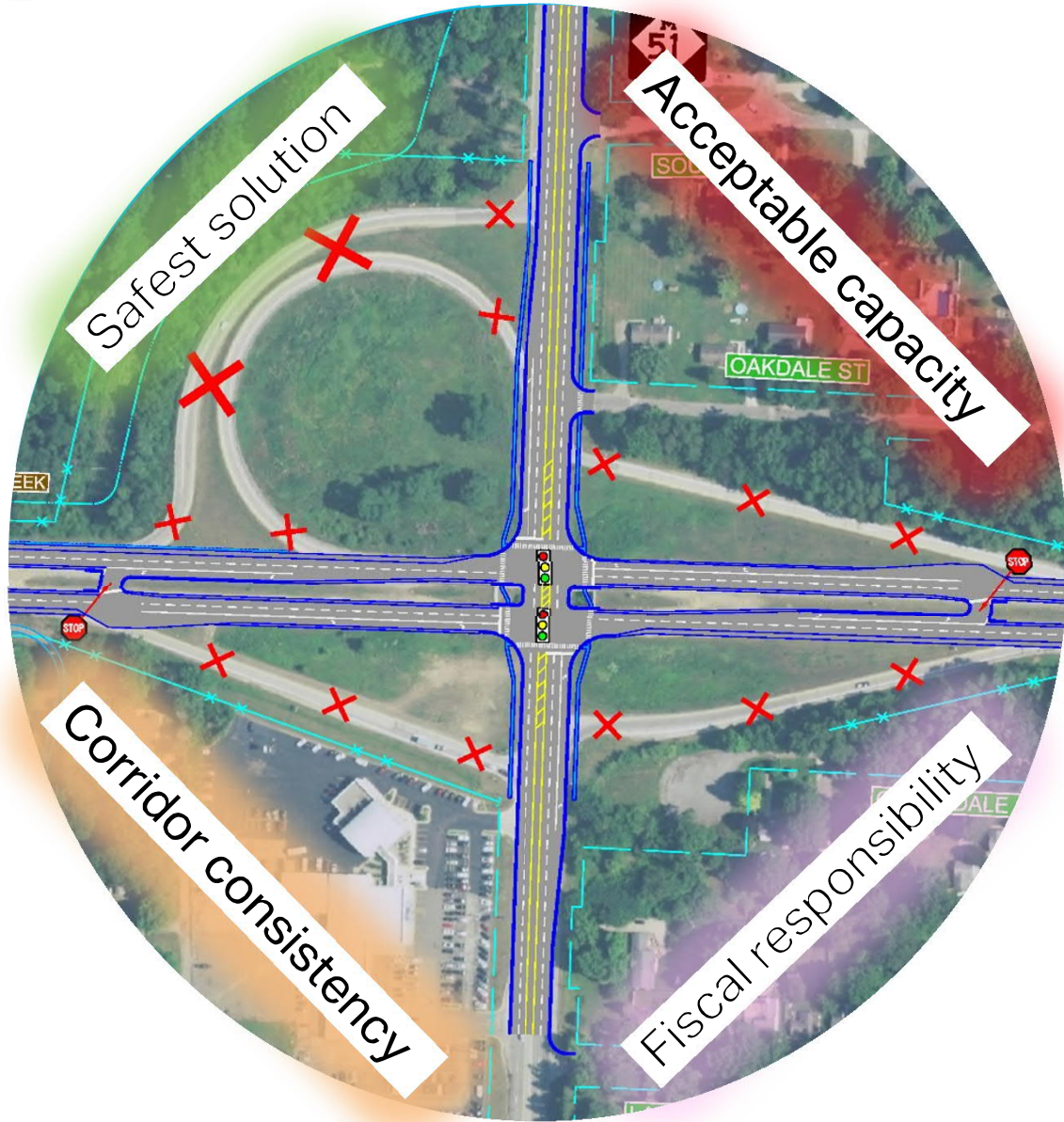
● Acceptable

● Not Preferable

Preliminary Construction Cost Estimate (M-51/US-12 Interchange Area ONLY)

Alternative	Construction Cost Estimate
Alternative #1 – Grade-Separated Diamond Interchange	\$15.0 million
Alternative #2 – At-Grade Signal with Indirect (Michigan) Lefts	\$8.7 million
Alternative #4 – At-Grade Signal with Direct Lefts	\$8.5 million

Leading Alternative: Michigan Left-Turns





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QUESTIONS?



The AECOM Team:
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Contact Person

Kyle Rudlaff, PE
Michigan Department of Transportation
Southwest Region Office
1501 Kilgore Road
Kalamazoo, MI 49001
PH: 269-337-3928
rudlaffk@michigan.gov

Thank you!