



I-440 Reconstruction From I-40 to I-24



What is Design Build?



- A project delivery method that combines all or some portions of the design and construction phases of a project into a single contract.
- TDOT clearly defines the standards, scope, and specifications for a project, and the Design-Builder works to satisfy those requirements.



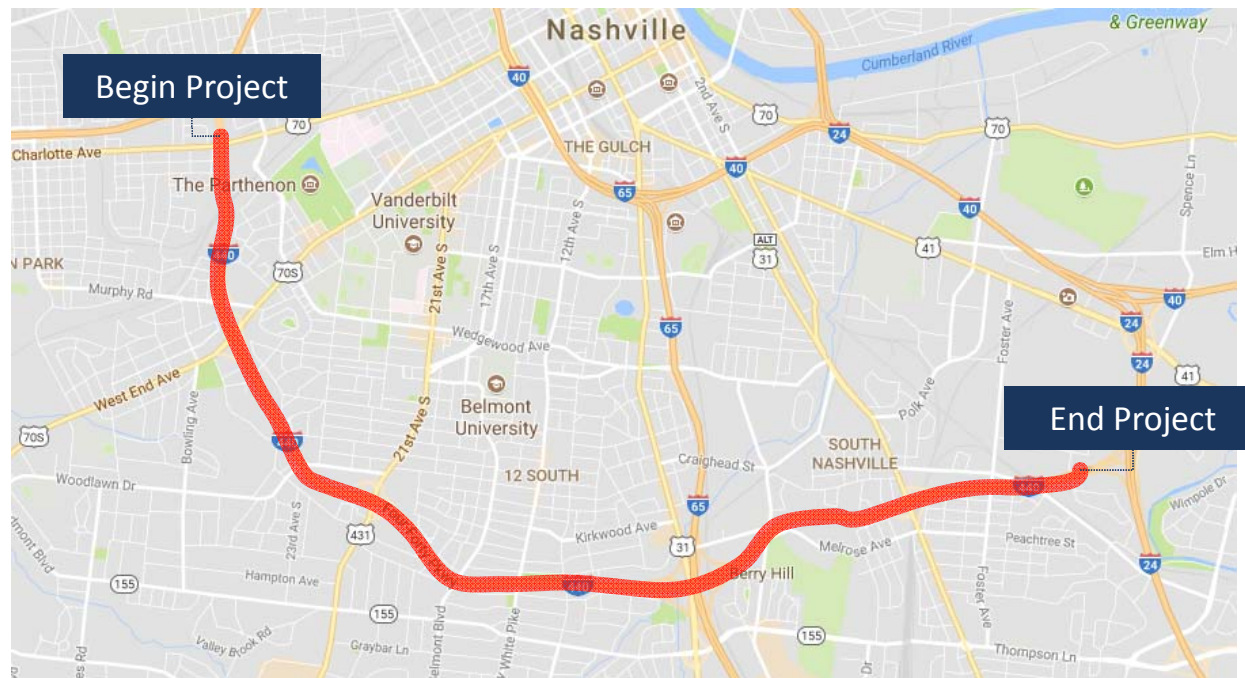
Why Design-Build?



- Shortened completion time by overlapping design and construction
- Construction can begin before all design details are final.
- Reduced claims due to design errors/ omissions because construction happens under same contract.
- Shortened project delivery time which can reduce user costs.
- Single contact point for quality, cost and schedule from design through construction.



I-440 Project Overview - Location Map





I-440 Project Overview



- Constructed in the early 80s
- 7.8 miles+/-
- I-440 serves as an urban interstate facility linking I-40 in the west to I-24/I-40 in the east. This facility also serves as a connection to I-65, which connects to Nashville to the north and to Brentwood/Franklin/Huntsville to the south.
- The existing concrete pavement on I-440 is in substandard condition.
- The crash rates on I-440 are approximately 1.8 times higher than the statewide average for urban interstate facilities.



I-440 ADT

AADT

- 2016 – 94,801
(Along the corridor)

- 2021 – 102,968
(Along the corridor)

- 2041 – 123,688
(Along the corridor)

- Lowest between Murphy Road and West End
 - 85,890 (2021)
 - 104,360 (2041)

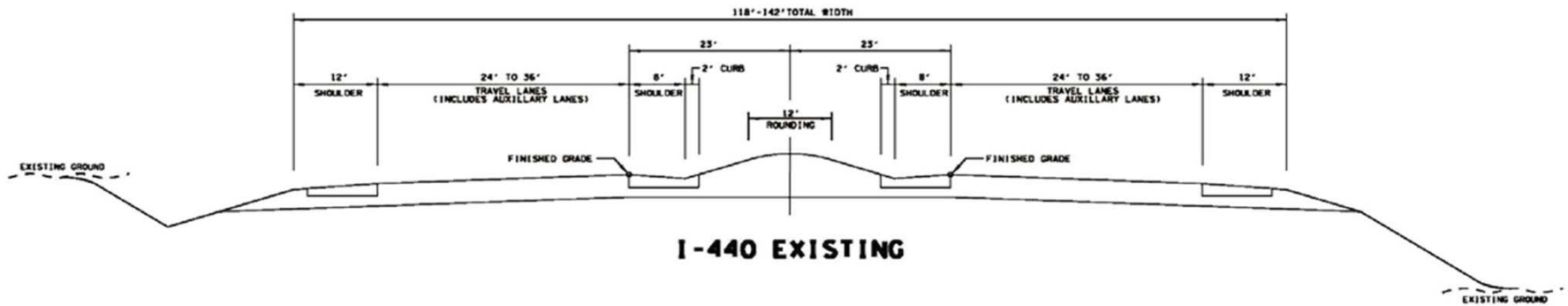
- Highest between Hillsboro Road & I-65
 - 115,740 (2021)
 - 138,400 (2041)

- 7% Trucks



Existing Typical Section

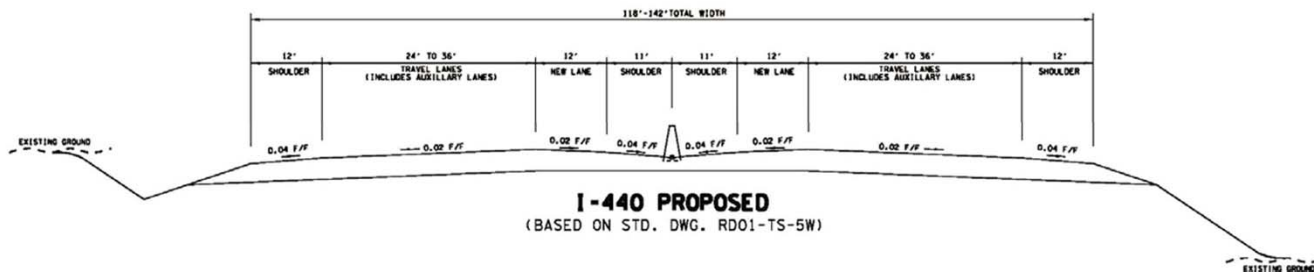
- Travel Lanes (TL)
 - 2 Lanes in each direction
- 8-foot inside shoulders with 2-foot curb
- 13-foot grass median
- Total Median Width – 46 feet (TL to TL)
- 12-foot outside shoulders





I-440 Proposed Improvements

- Widening to the inside to provide a minimum of six (6) travel lanes (3 in each direction) throughout the corridor
 - Widening ends west of Nolensville Road
 - 12-foot Travel Way
 - 11-foot +/- shoulder
- Removing and replacing the existing pavement
 - Eastbound Reconstruction ends west of Nolensville Road



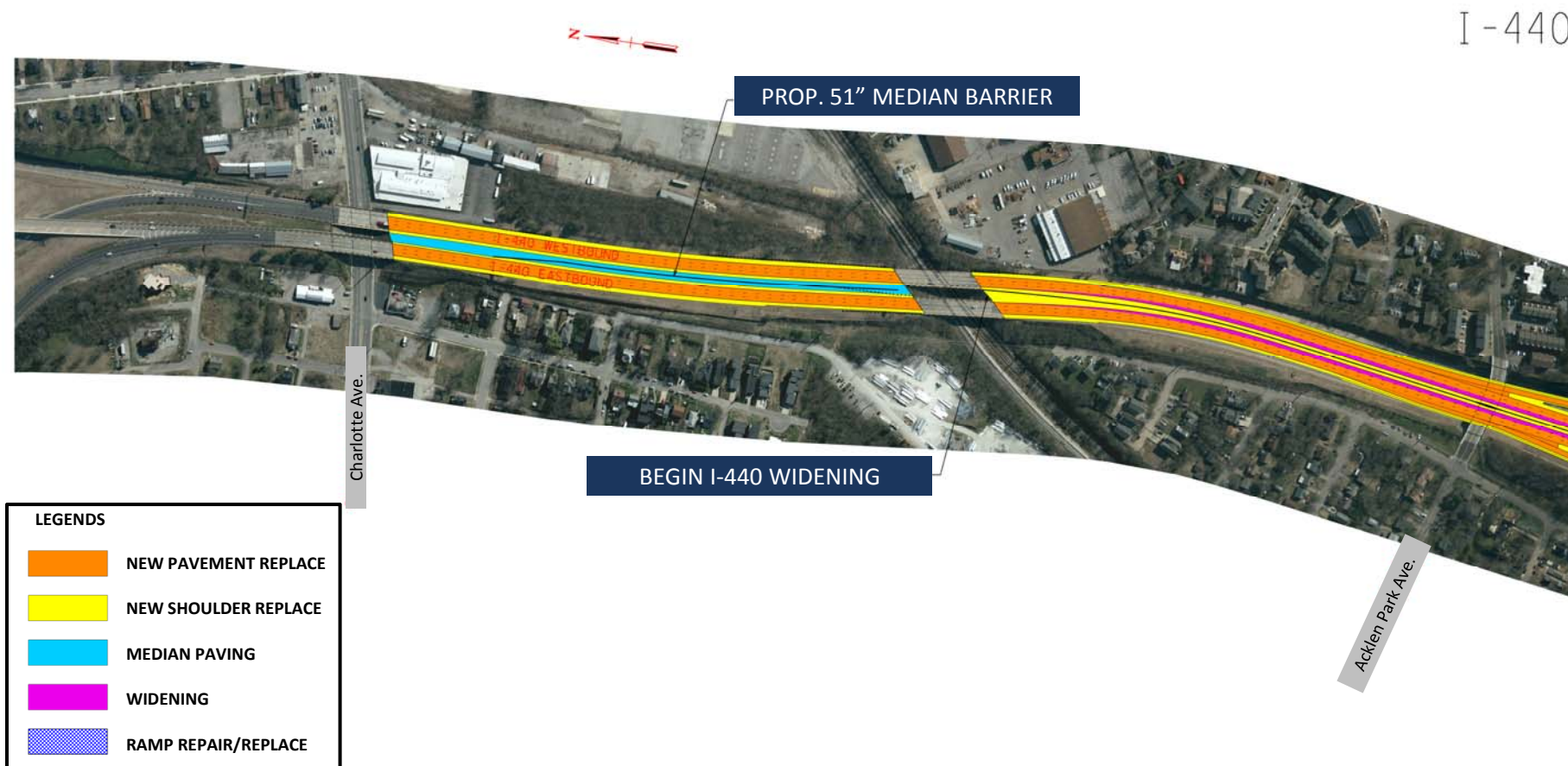


Other Improvements

- Other Improvements
 - New Noise walls
 - Repair/Replace Noise walls
 - Signing
 - ITS
 - Rockfall Mitigation



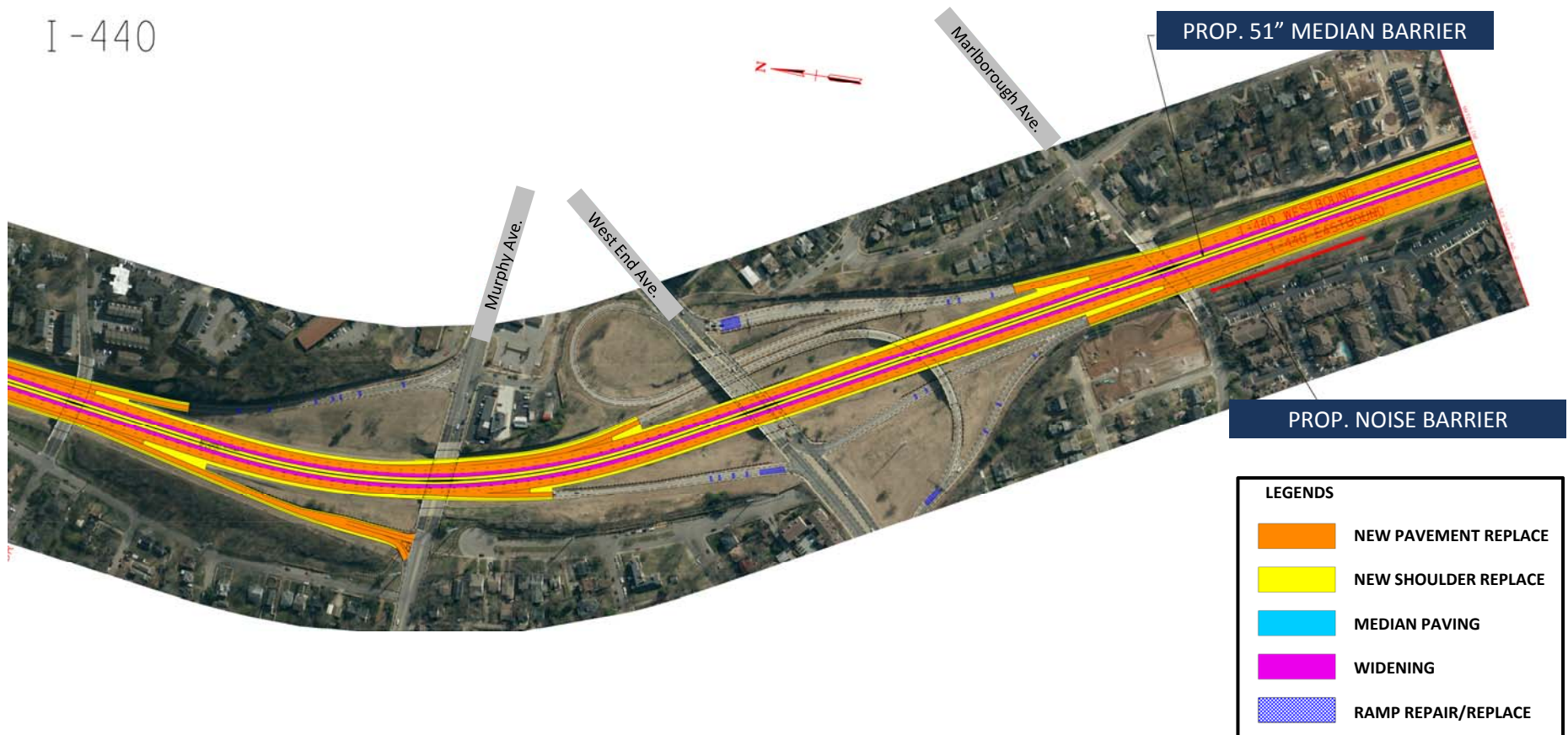
I-440 Slide 1





I-440 Slide 2

I-440



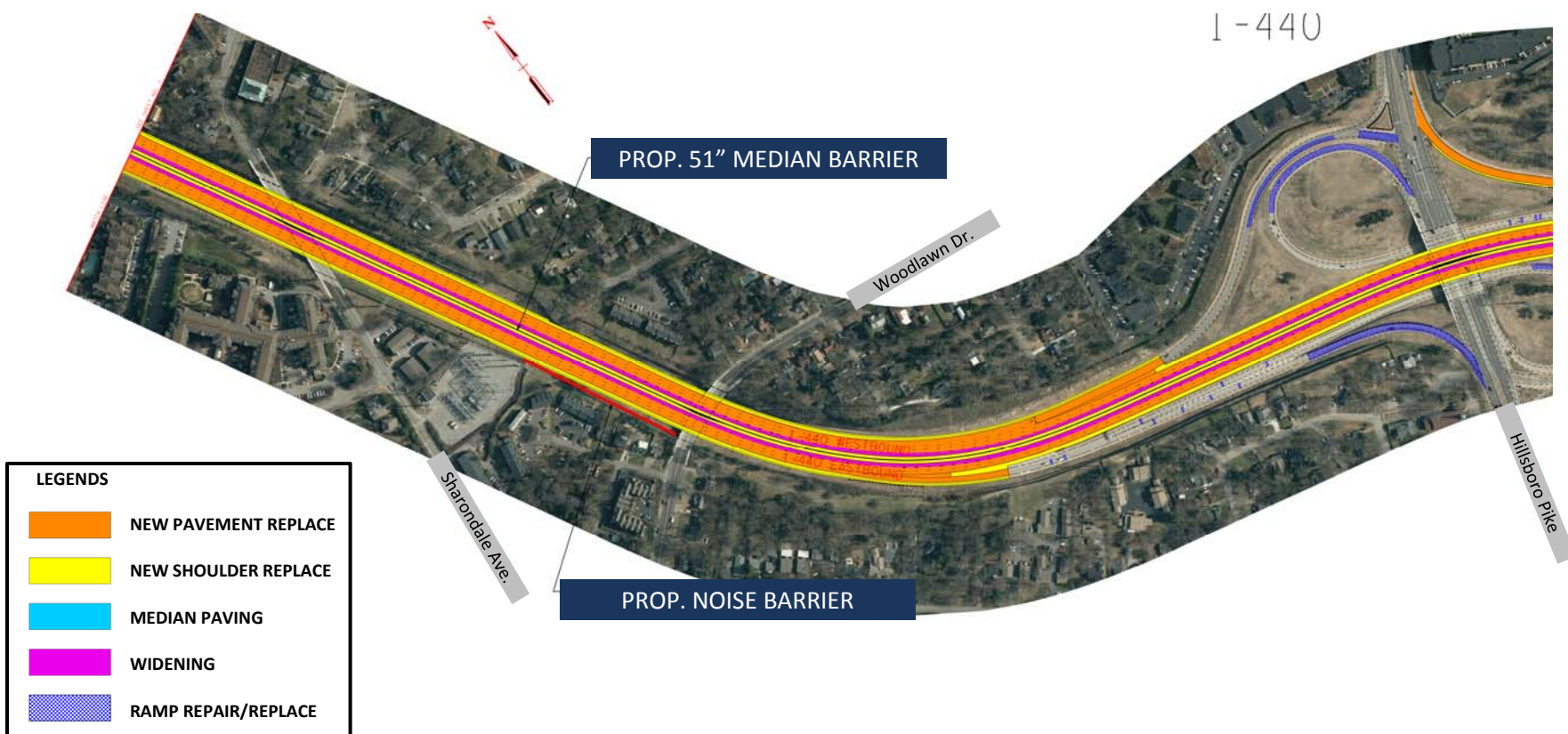


I-440 Slide 2



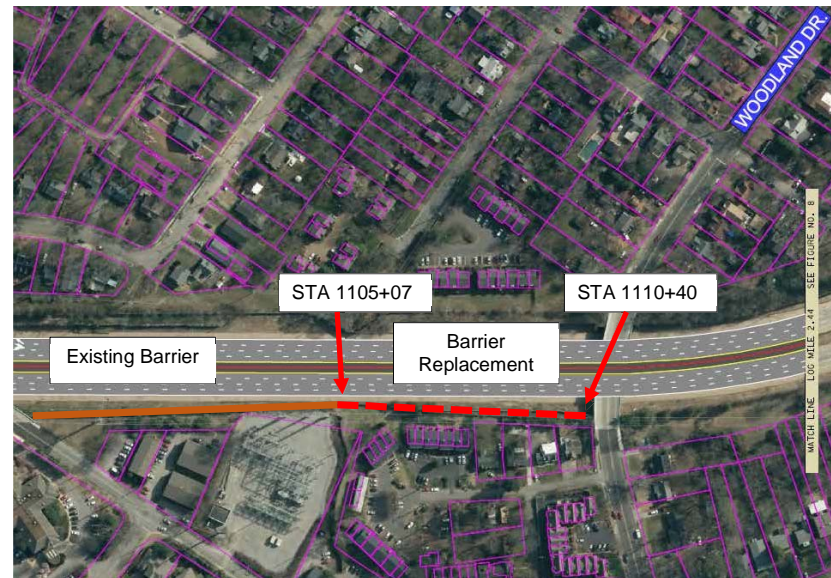


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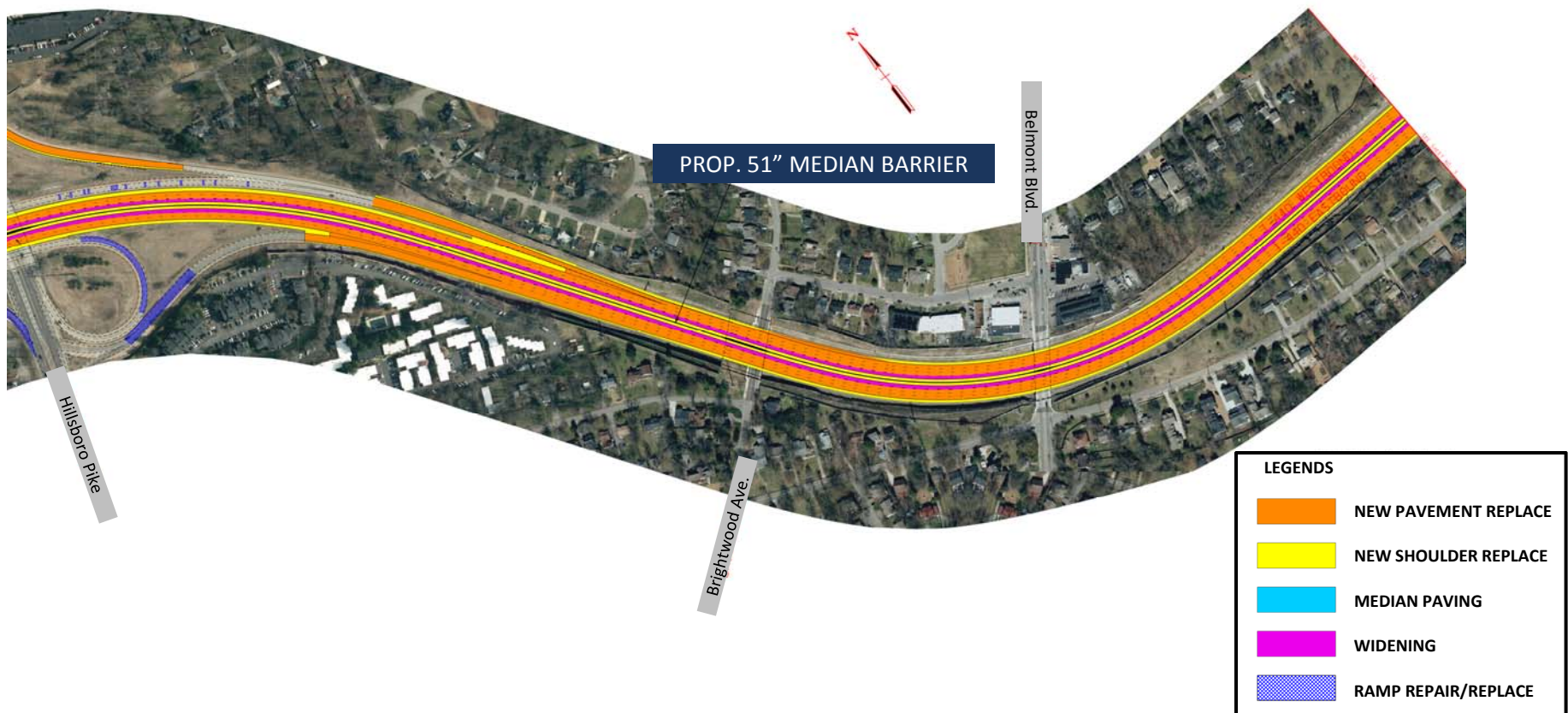


I-440 Slide 3





I-440 Slide 4





I-440 Slide 5



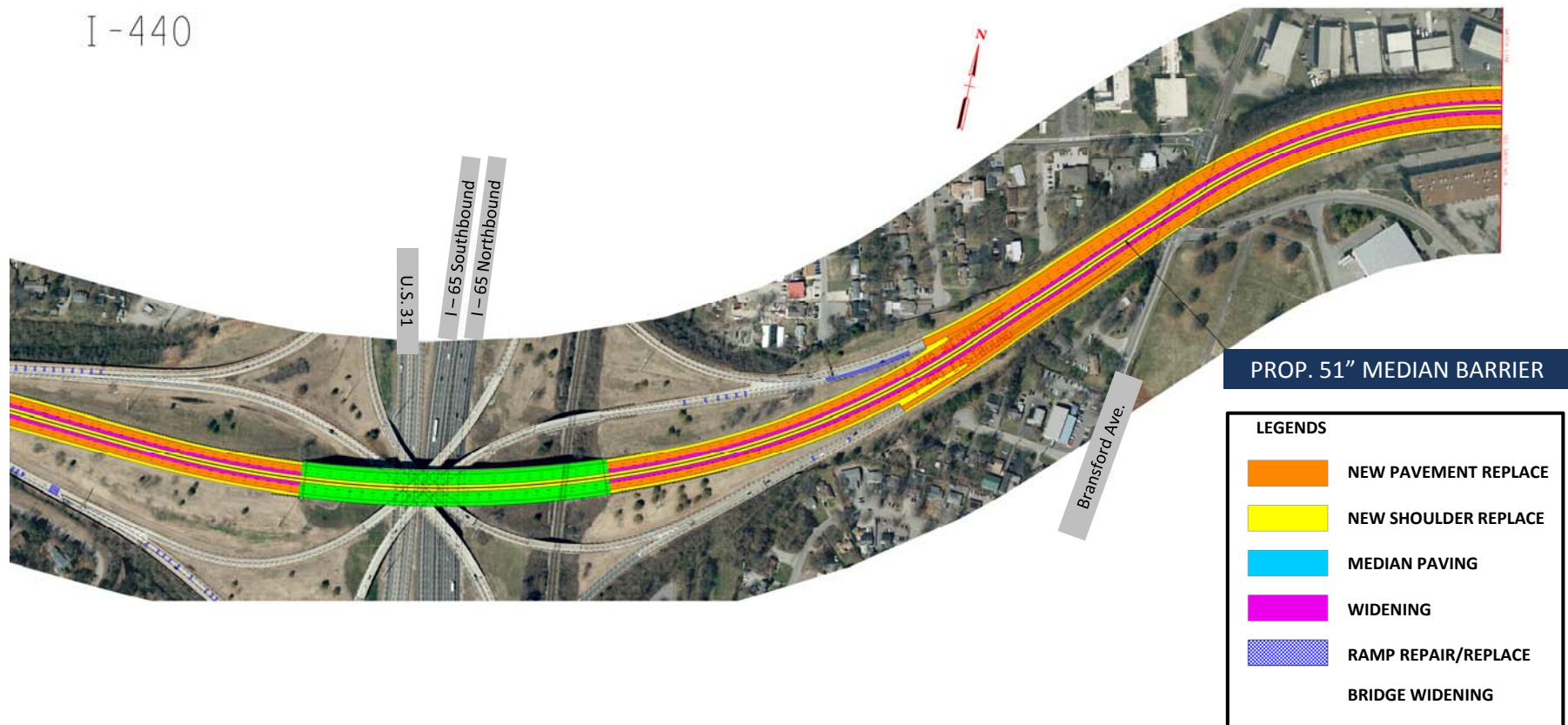


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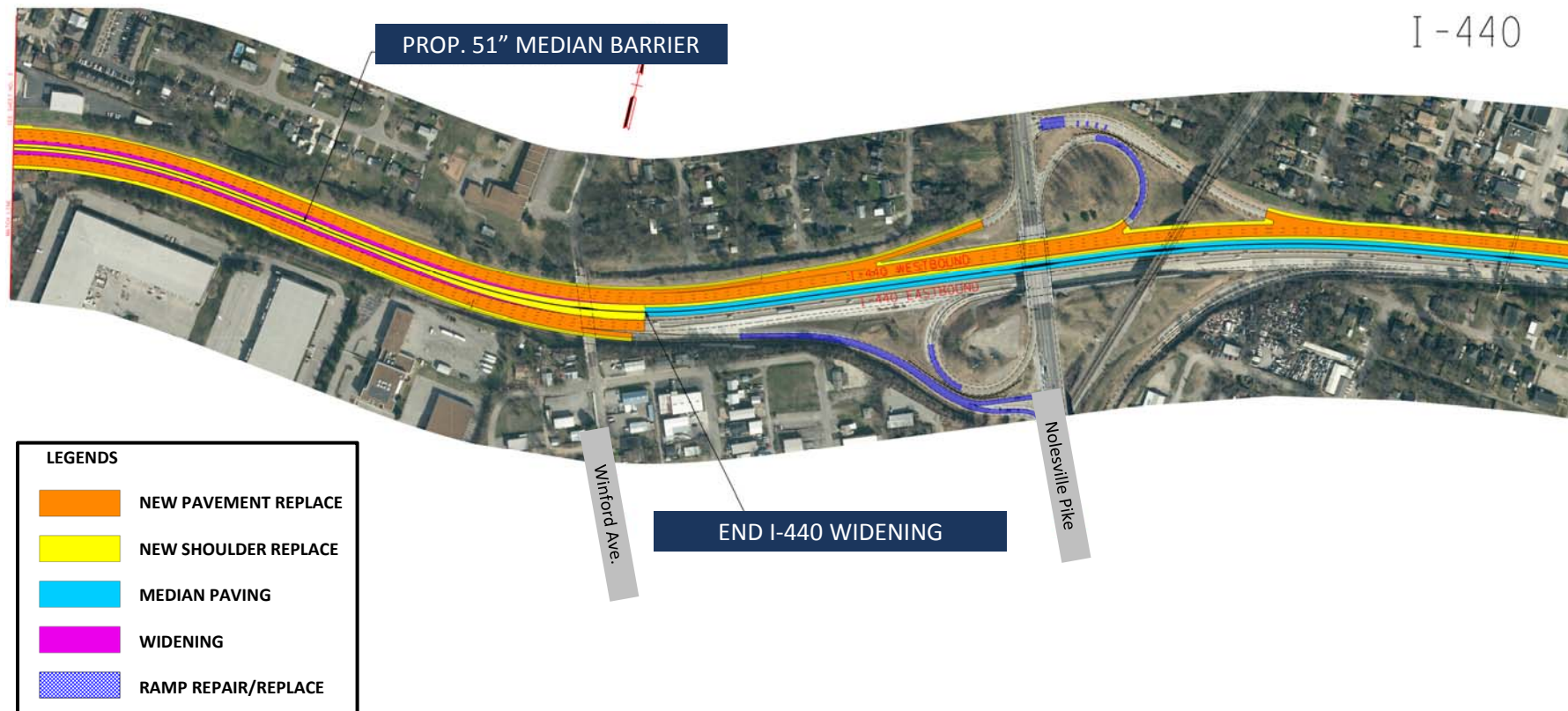


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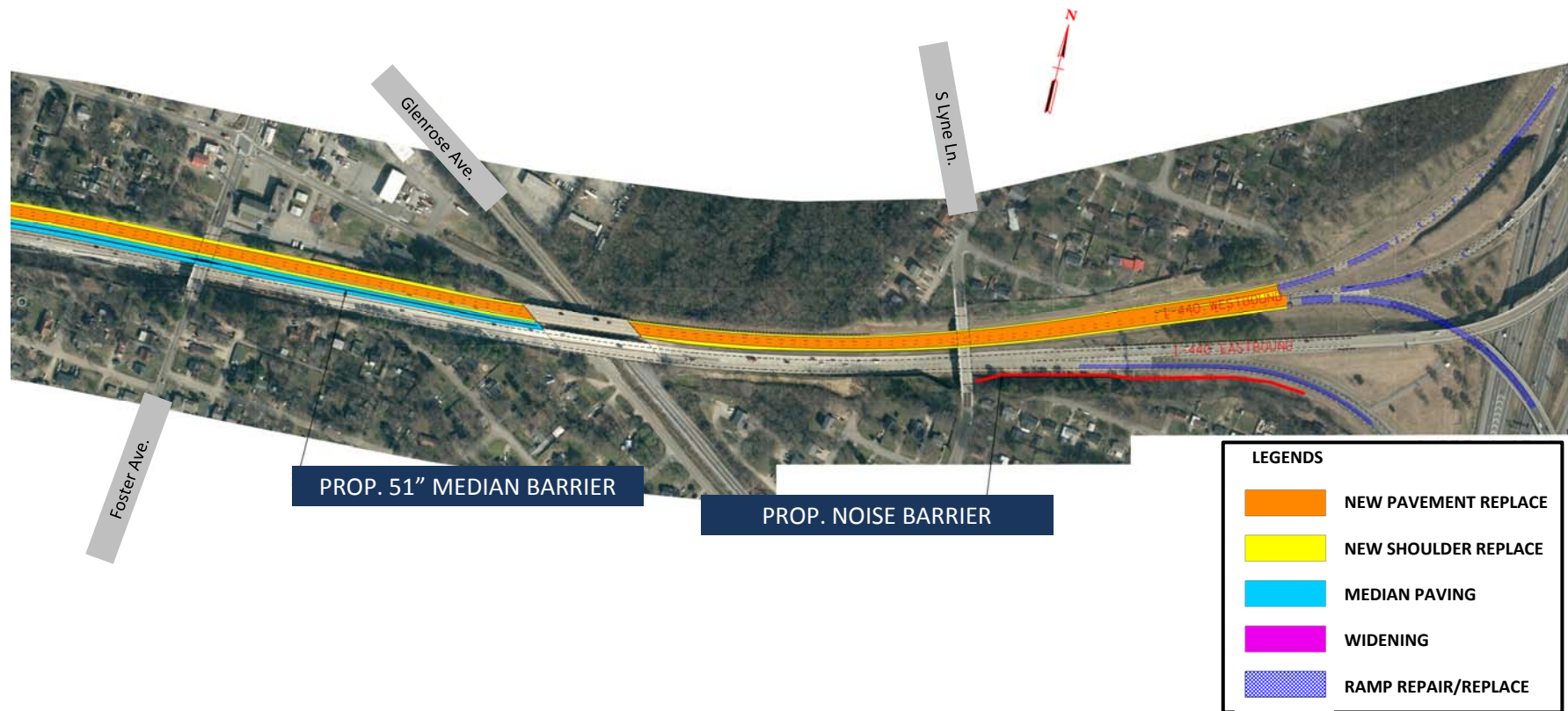


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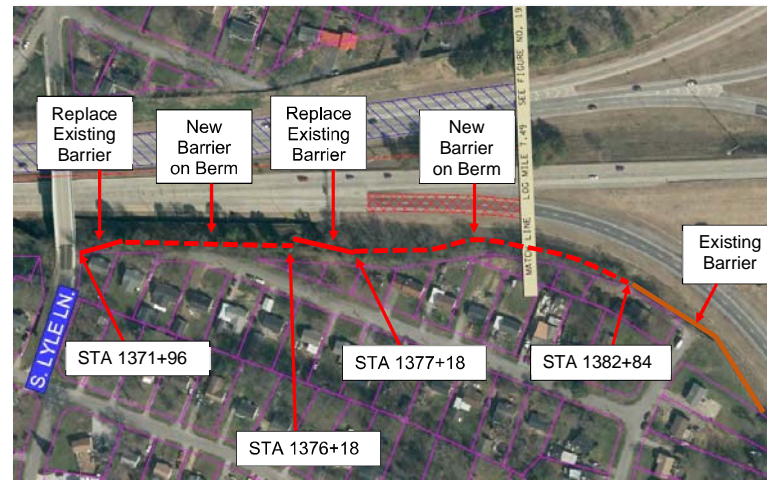


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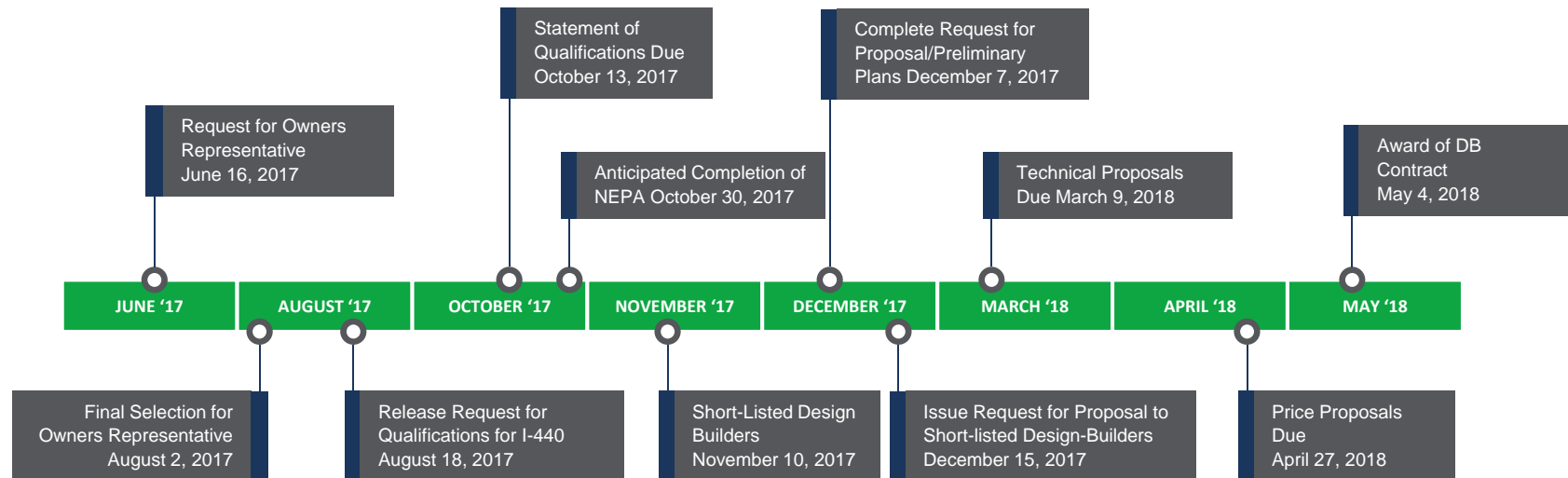
I-440 Slide 8







Aggressive Schedule



Community Outreach

- Noise Wall Meeting
- As -Needed Community Outreach
- Maintenance Agreement for Landscaping



Q & A