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METROPOLITAN PLANNING ORGANIZATION

PLANNING TOMORROW'S TRANSPORTATION

US 70 East Corridor Study

Phase 1 Final Report

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March 12, 2024

DCHC MPO Technical Committee

https://tinyurl.com/US70East

Presentation Overview

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70 CORRIDOR STUDY

Background of the Study

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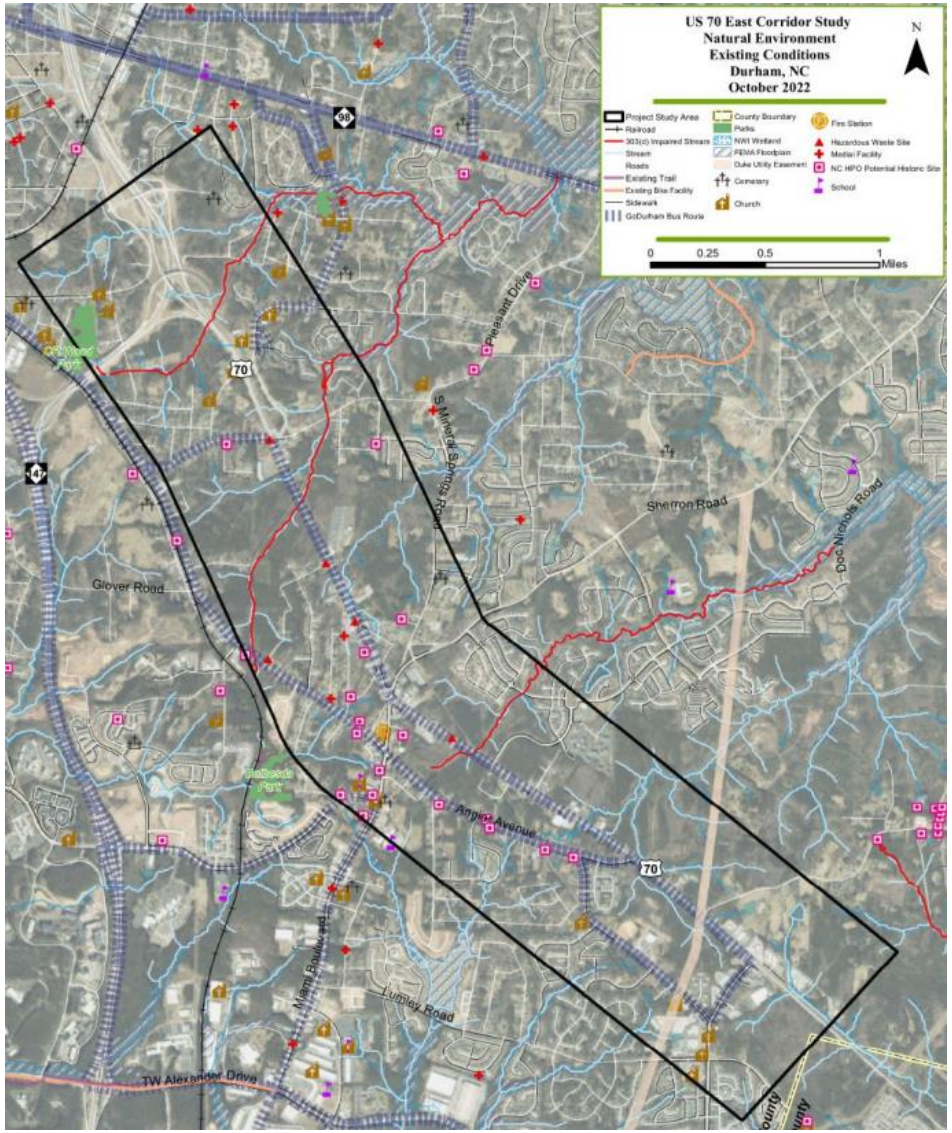
Project Background

- The study area spans 4 miles, from I-885 to the future North Durham Parkway (near the Wake County border).
- Originally an NCDOT road widening and freeway conversion project (U-5720).
- MPO staff was directed to explore alternatives to consider multi-modal transportation options – including a boulevard option – along the corridor.
- This planning study began in July 2022.



Consultant Team and Core Technical Team

- **STV** was selected as the prime consultant, and **Aidilisms** was selected as the subconsultant to lead public engagement efforts.
- A **Core Technical Team** (CTT) was developed to review and provide feedback on the development of alternatives. The CTT consisted of:
    - City of Durham
    - Durham County
    - Durham City-County Planning
    - GoTriangle
    - NCDOT Division 5
    - DCHC MPO

MPO Goal Alignment and Performance Measures

DCHC MPO Goal	Focus	Performance Measure
Promote Safety, Health, and Well-Being	Walkability	Potential reduction factor for pedestrian involved crashes and exposure
	Bikeability	Potential bicycle-motorist involved crashes and exposure
Promote and Expand Multimodal & Affordable Choices	Walkability	Pedestrian experience & comfort
	Transit	Sidewalks/Shared Use Paths
Connect People & Places	Walkability	Pedestrian amenities along US 70 Y-lines
	Bikeability	Buffer protection from traffic, and bike network connectivity
Improve Infrastructure Condition & Resilience	Transit	Available ROW for Bus Stops/BRT Platforms
Protect the Human and Natural Environment and Minimize Climate Change	Greenspace	Impervious area
Manage Congestion & System Reliability	Vehicular Operations	Delay

Recap of the 2nd Round of Public Engagement

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Public Engagement – Round 2

In-person and Online Meetings:

- August 21 – Virtual Meeting
- August 26 and 31 – In-person at the P.O.O.F. Community Center
- September 7 – All-day drop in at the Bethesda Ruritan Club facility

Community Engagement Ambassadors were used to extend outreach to minority and low-income community stakeholders to ensure equitable community engagement.

Feedback was requested on the design features of each alternative. Participants were requested to submit their thoughts to the **online survey** at each meeting so that all comments could be properly attributed to the right intersection and alternative.

- **81 people attended the in-person meetings**
- **73 people attended the virtual meeting**
- **195 survey responses received**

Business Outreach

Public Engagement Round 1

49 businesses were contacted via phone along the corridor with e-mail follow up to those willing to share contact information for owners, managers, and key staff with very low response received

Public Engagement Round 2

During the second round of outreach, in-person visits were made to local businesses with paper surveys and an invitation to the upcoming public meetings.

11 partially completed paper surveys from businesses were included in the second survey, with some businesses attending the September 7 in-person session.

Alternative 1 – 4 Lane Boulevard Feedback

Top 5 Responses to Design Features of Alternative 1

Participants expressed support for:

1. The future grade separated paved greenway connection to Briar Creek / East Fork Creek.
2. The 5 new crosswalks with pedestrian refuge at the signalized U-Turn intersection at future Angier Road Extension.
3. 4 proposed crosswalks and multi-use path connections to US 70.
4. Crosswalks at Page Road and Future Page Road Extension.
5. 12% of the respondents indicated no need to do any of the proposed design enhancements.

Alternative 2 – 4 Lane Blvd Parallel Road Feedback

Top 5 Responses to Design Features of Alternative 2

Participants expressed support for:

1. The future bridged paved greenway connection to Lick Creek Trail and trail connection at Briar Creek / East Fork Creek.
2. 3,170 feet of additional sidewalk / multi-use path.
3. Diversion of local trips on parallel roads.
4. Closure of 50 driveways on US 70 to improve safety and flow of vehicles and provide businesses fronting US 70 alternative bidirectional access via parallel roads.
5. 9.5 ft grass strip buffer along parallel travel lanes for bicyclist and pedestrian comfort and can provide opportunities for future transit service along parallel roads.

Public Engagement – Round 2

Additional Comments Shared:

- More than 1/3 of comments were supportive of infrastructure that supports bicycle, pedestrian, and public transit along the corridor.
- 22% are still interested in seeing the corridor converted to a freeway; a portion of these respondents stated that the parallel roads were a positive addition to the Alternative 2 concept.
- Although participants were not asked for a preference of either conceptual design, 15% of respondents expressed a preference for Alternative 2 in comments.
- Comments reflected a tension between wanting to address traffic congestion and wanting to prioritize safety for other modes of travel.
- Future plans for this corridor should consider regional connectivity needs, and not just local needs.

Public Engagement – Round 2

Demographics of Respondents:

- **19%** of respondents are people of color; 1/3 of these respondents were contacted by the Engagement Ambassadors
- **15%** of respondents have someone in the household that lives with a disability
- **44%** of respondents live in zip code 27703 (the study area)
- **22%** of respondents do not use public transit
- **10%** of respondents reported household incomes at or below $50,000

Public Engagement – Round 2 Key Takeaways

- For each intersection there was a higher sense of approval for the design features of Alternative 2
- Minimizing contact between bicyclists, pedestrians and cars was a popular comment for reasons of safety and making the experience of all travelers more pleasant
- There was concern that U-turns throughout the design leads to longer drive times and will not sufficiently address congestion
- The ability of this design to create greenway connections was a highlight of comments throughout the survey

The Recommended Alternative Concept

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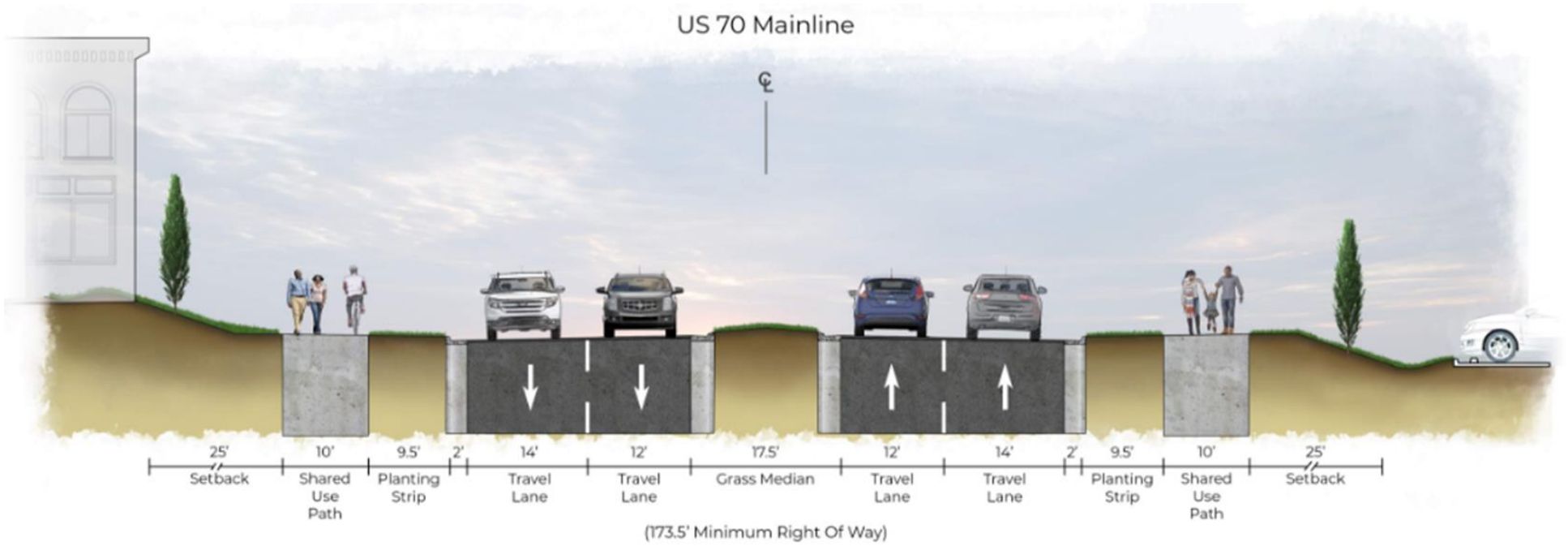
Recommended Alternative

4 Lane Blvd with Parallel Road Concept



(173.5' Minimum Right Of Way)

Existing Right-of-Way Varies:

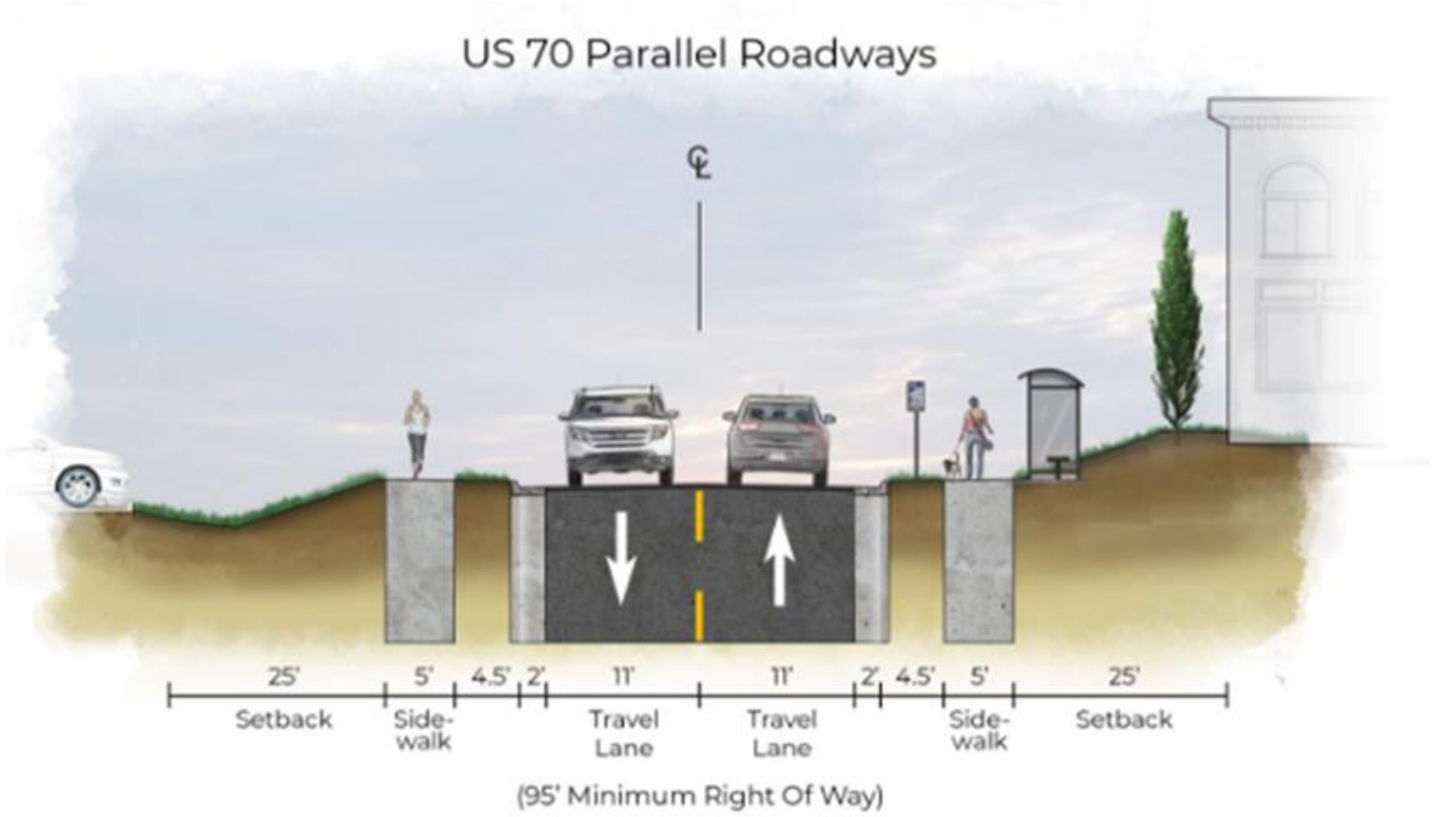
180' From TW Alexander to Sherron Rd.

100' From Sherron Rd. to Pleasant Dr.

215' From Pleasant Dr. to I-885

Recommended Alternative

4 Lane Blvd with Parallel Road Concept



Reduced Conflict Intersection (RCI) Corridor

KEY BENEFITS

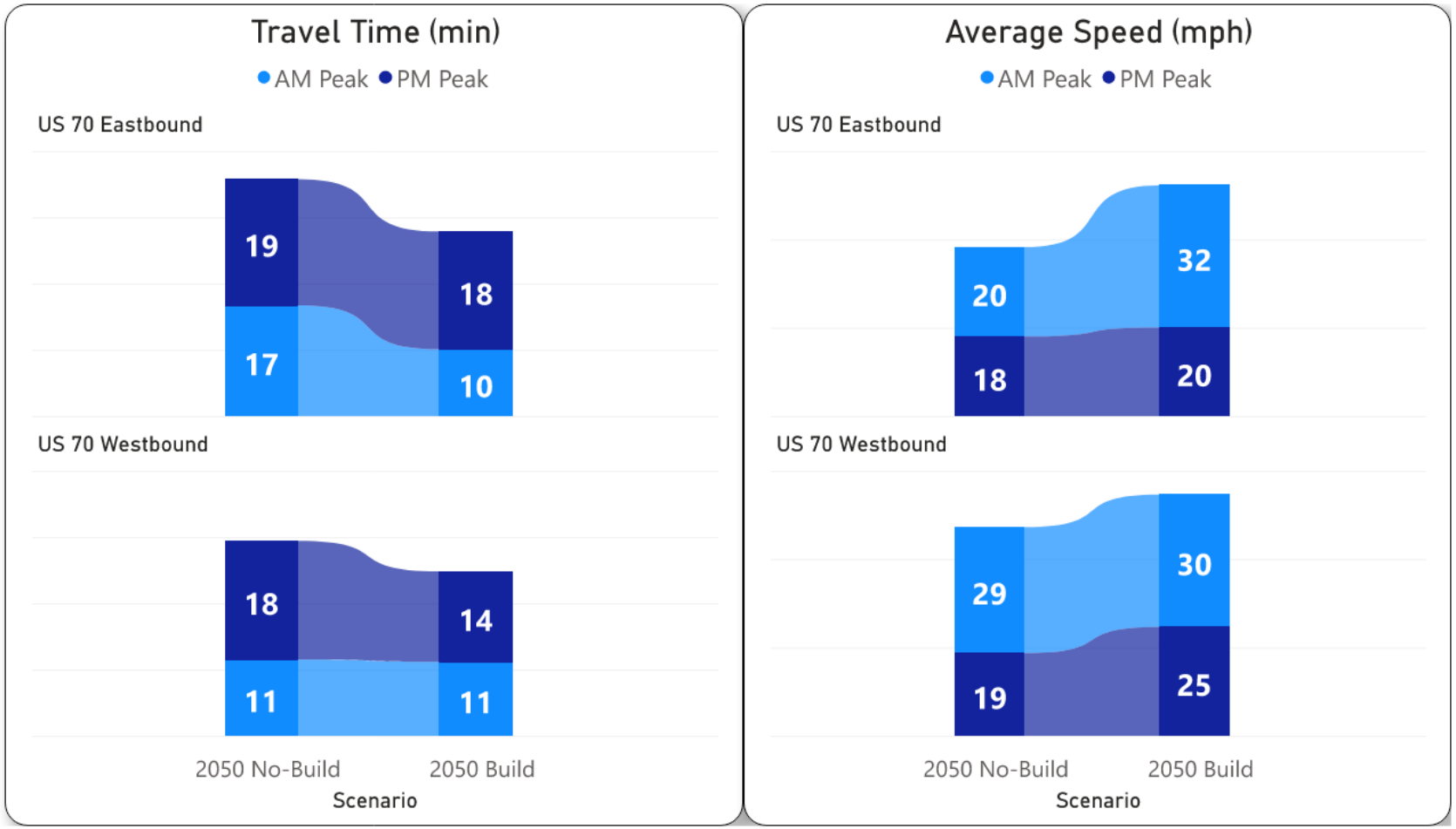
- ***Improved Safety:*** Reduces the number of conflict points were motorists, pedestrians and bicyclists may cross paths.

- ***Increased Efficiency:*** Eliminates left-turn movements from the main intersection, allowing for fewer traffic signal phases and reduces delay.

- ***Shorter Wait Times:*** Fewer traffic signal phases result in less time stopped at the main intersection.

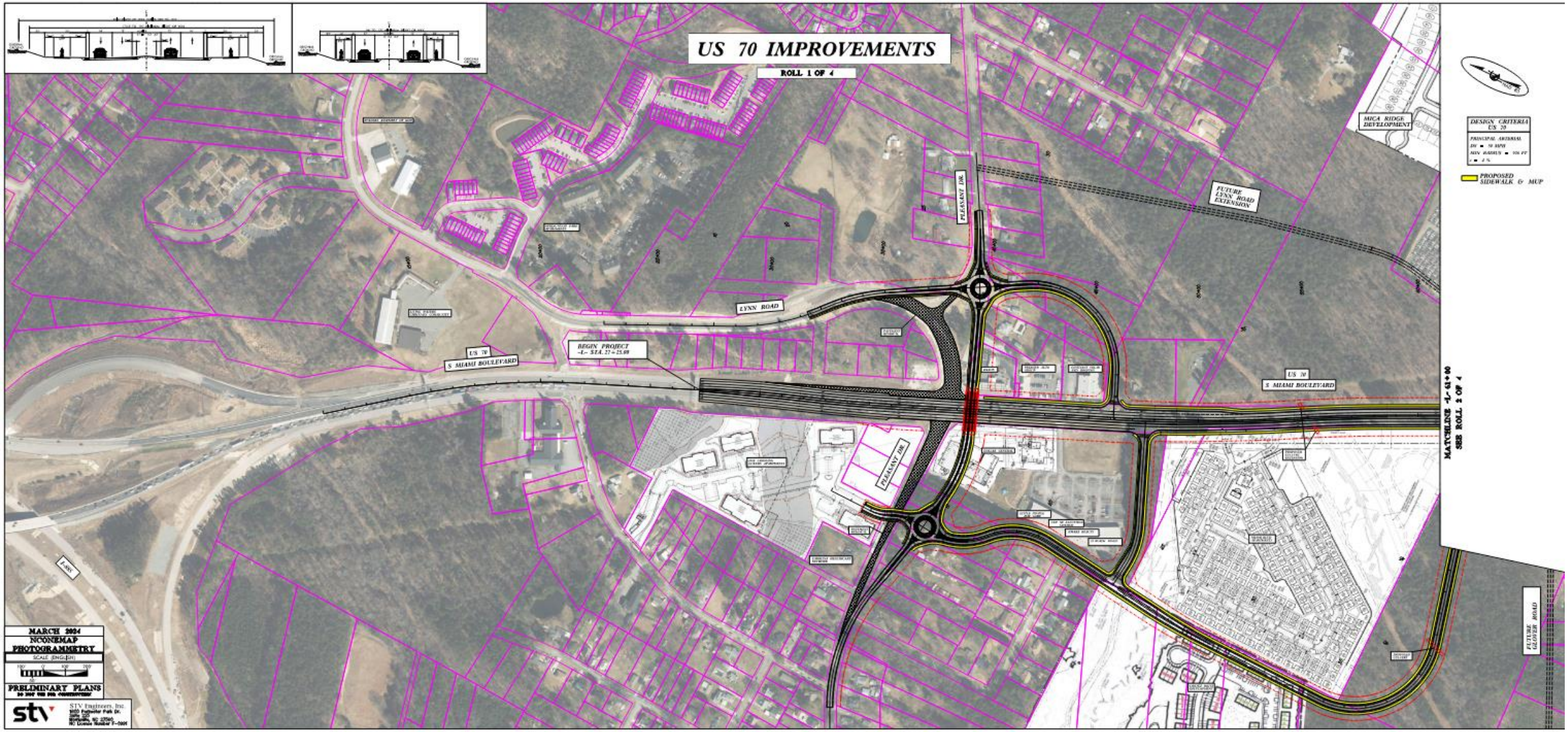
- ***Cost Effective:*** More cost effective than adding additional through vehicular lanes.

Alternative 1 (4 Lane Boulevard) Travel Time Savings



The travel times savings data shown was developed for Alternative 1. Travel time savings for Alternative 2 will be an output of the Study's Phase 2 Transmodeler scope of work, which is expected to produce increased travel time savings due to the addition of parallel roads.

4 Lane Boulevard with Parallel Road Concept



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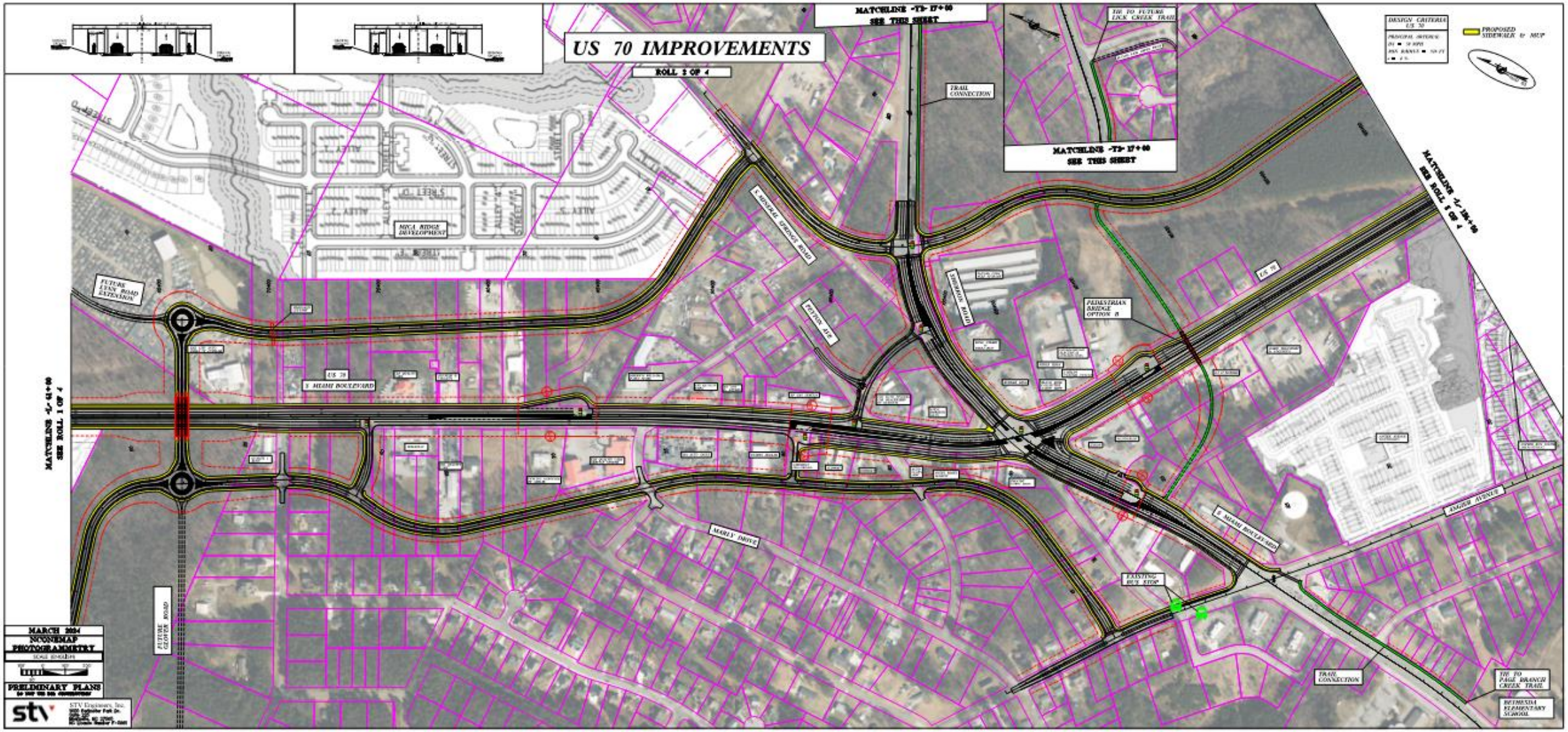
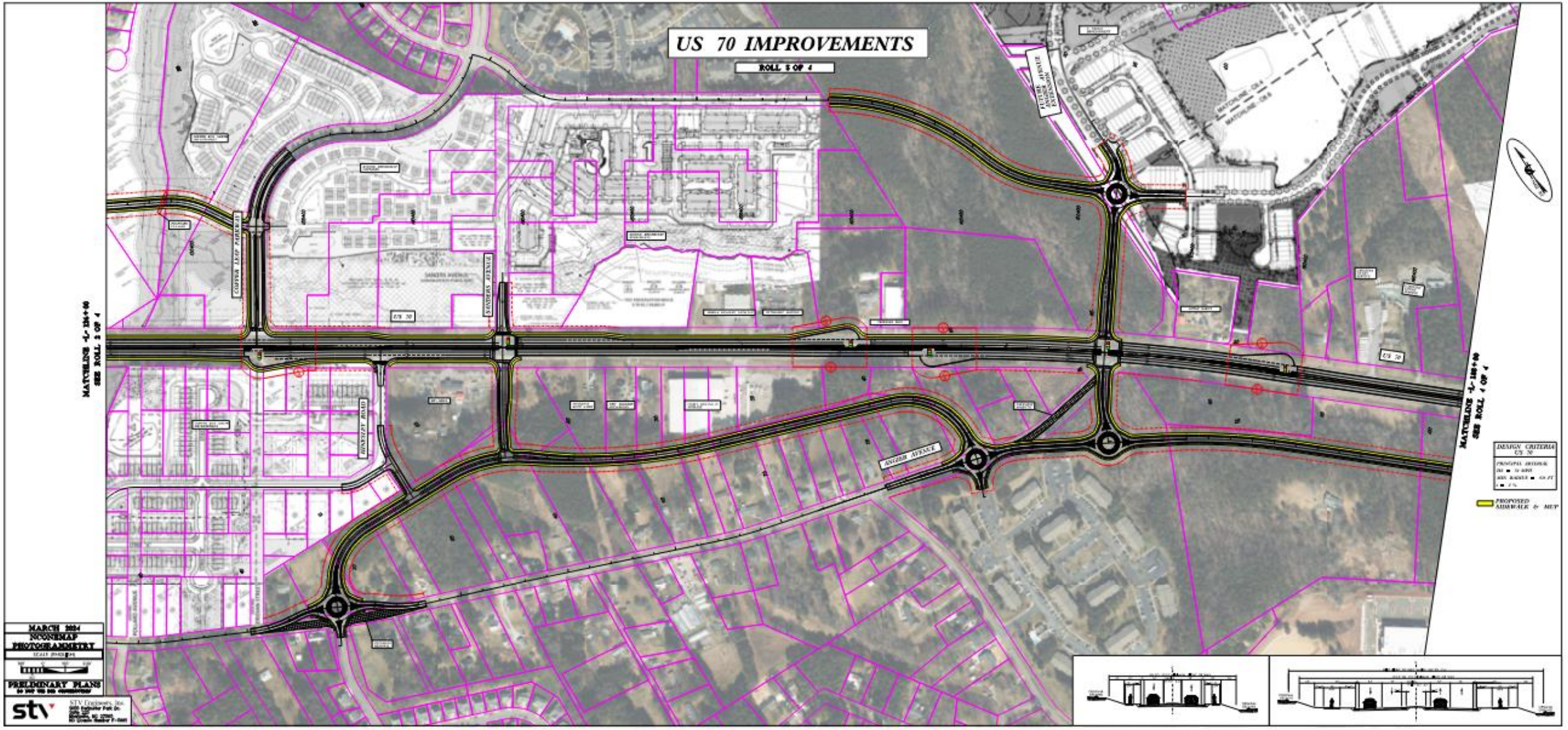
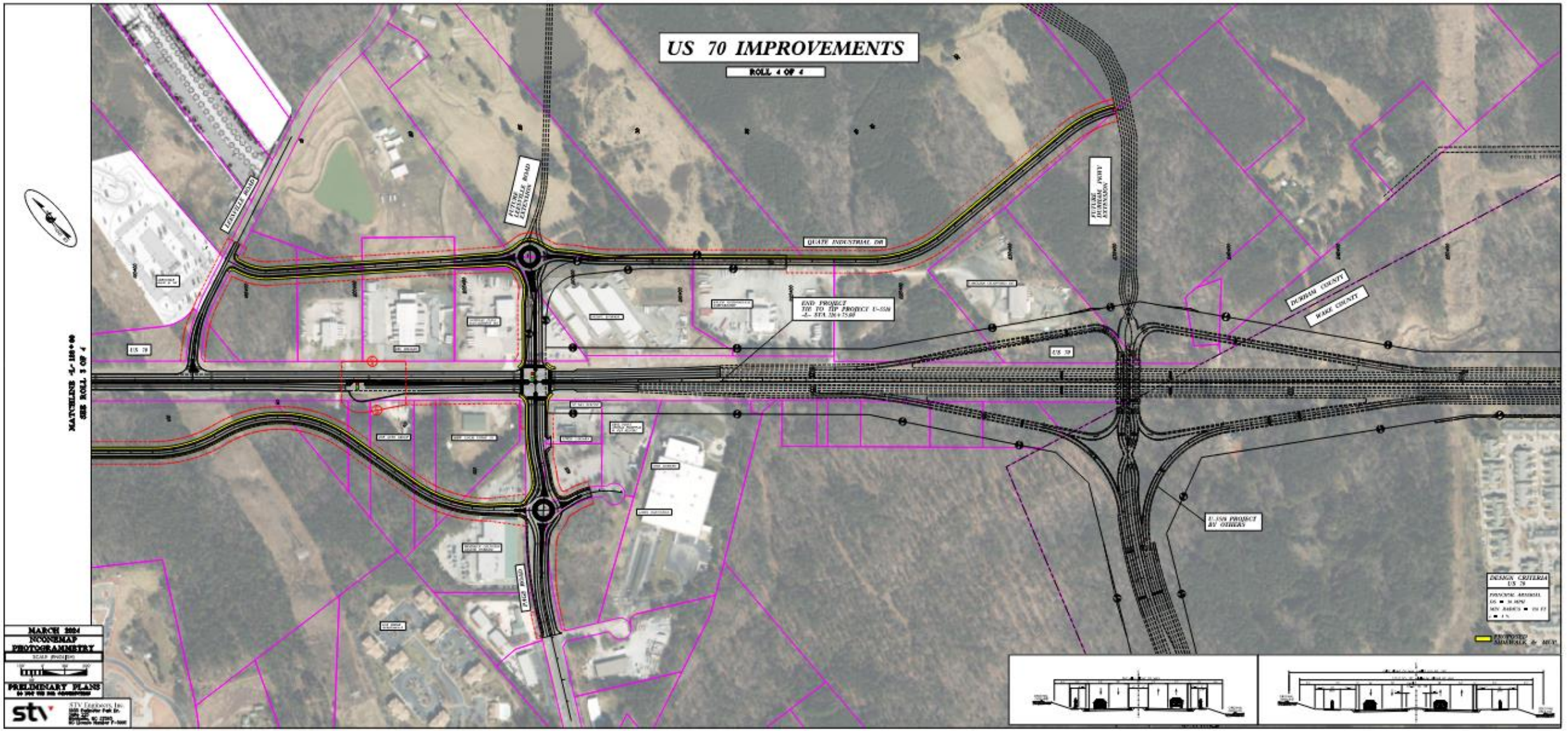


4 Lane Boulevard with Parallel Road Concept



4 Lane Boulevard with Parallel Road Concept



Recommended Alternative - Benefits

4 Lane Blvd with Parallel Road Concept

KEY BENEFITS AND OPPORTUNITIES

- Move high traffic volumes; separating through traffic from local traffic.
- Creating a generous bicycle and pedestrian space, and traffic calming on parallel roads.
- Increased greenspace.
- Opportunities to add community space.
- Offers sidewalks and bidirectional vehicular access to businesses.
- Improves safety on US 70 by reducing conflict points through access management.
- Better accommodates future transit opportunities on parallel roads.
- Offers commercial development opportunities to serve adjacent neighborhoods.
- Trail crossings of US 70 at Lick Creek Fork and Briar Creek/E. Fork Creek.

Next Steps and Phase 2

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Next Steps: Phase 2

- To advance a thorough study of the US 70 East Corridor, DCHC MPO will partner with NCDOT and a consultant to commence a second phase of this study that will focus on:

  - **Additional traffic evaluation and analysis (Express Design Traffic Evaluation, or EDTE).** This process will analyze the recommendations from NCDOT and the MPO.
  - **High level evaluations** of the impacts and multimodal effectiveness of the recommendations.
  - **Public engagement** efforts that will entail a community education and concept refinement charette.

- Phase 2 is programmed in the MPO's FY2024 UPWP, and procurement is underway.

Recommended Action

Technical Committee (March 12, 2024)

- Recommend that the MPO Policy Board endorse the recommended alternative concept for use in Phase 2 analysis.

Policy Board (March 26, 2024)

- Endorse the recommended alternative concept for use in Phase 2 analysis.

Additional Information

Project updates, public engagement opportunities, past presentations, and the results from public engagement activities can be accessed at:

https://www.dchcmpo.org/what-we-do/programs-plans/special-studies/us-70-corridor-study

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