



Complete 540 Industry Forum

April 12, 2018

Welcome

Joey Hopkins, PE
Division Engineer, Division 5

Rodger Rochelle, PE
Chief Engineer, NCTA

Complete 540 Industry Forum

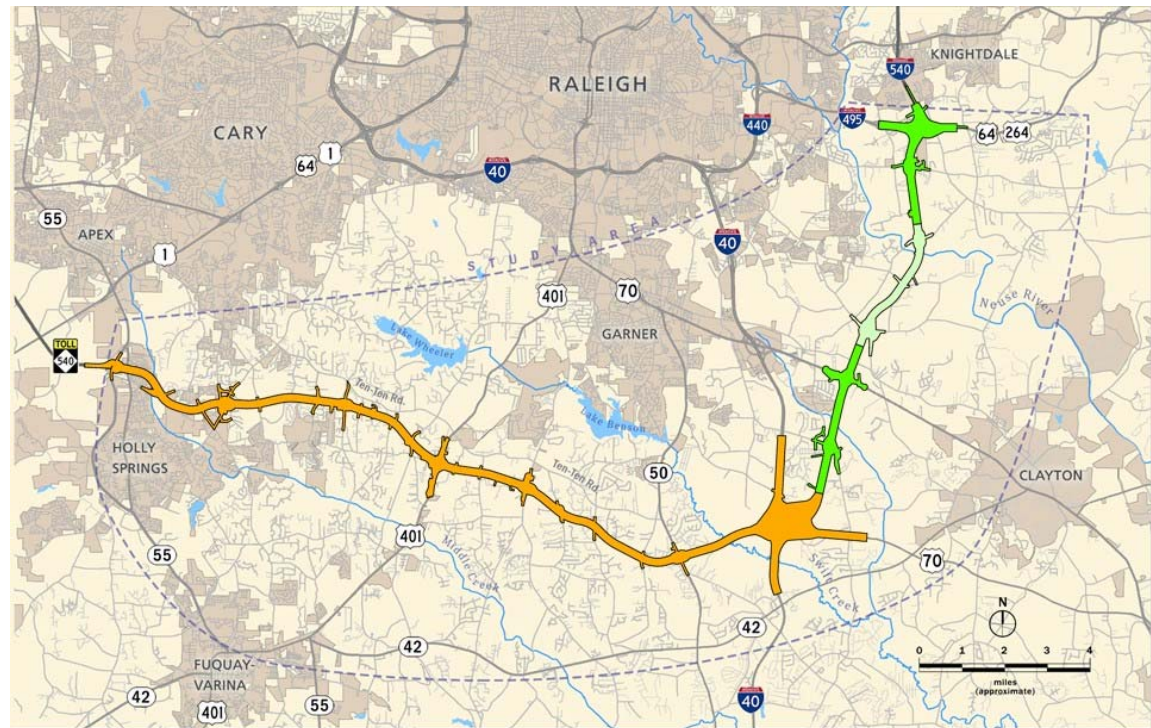
- Welcome
- Introductions and Register Attendance
- Schedule Overview
- Project Overview (R-2828 and R-2721)
- Procurement Information
- DBE Goals and Considerations
- Utilities and Railroad Coordination
- Right of Way and Permitting
- Open Discussion

Current Project Schedule

- Record of Decision: Summer 2018
- Corridor Permit Application: Summer 2018
- Right of Way Plans for R-2721A & R-2721B: Fall 2018
- Anticipate Permits: Late 2018/Early 2019
(phased for R-2828 & construction for R-2721A and R-2721B)
- Design-Build Contract Letting
 - R-2828: November 2018
 - R-2721B: February 2019
 - R-2721A: April 2019
 - R-2829: Future (2027)
- Complete Project Finance: Early 2019

Complete 540

- Approximately 29 miles
- 70 mph posted, with 13 interchanges
- All electronic toll collection
- Preferred Alternative
 - DSA 2
 - orange-green-mint-green
- Three STIP projects



Preferred Alternative
(Final EIS)

Complete 540



STIP Segments

R-2721, R-2828, R-2829

Complete 540

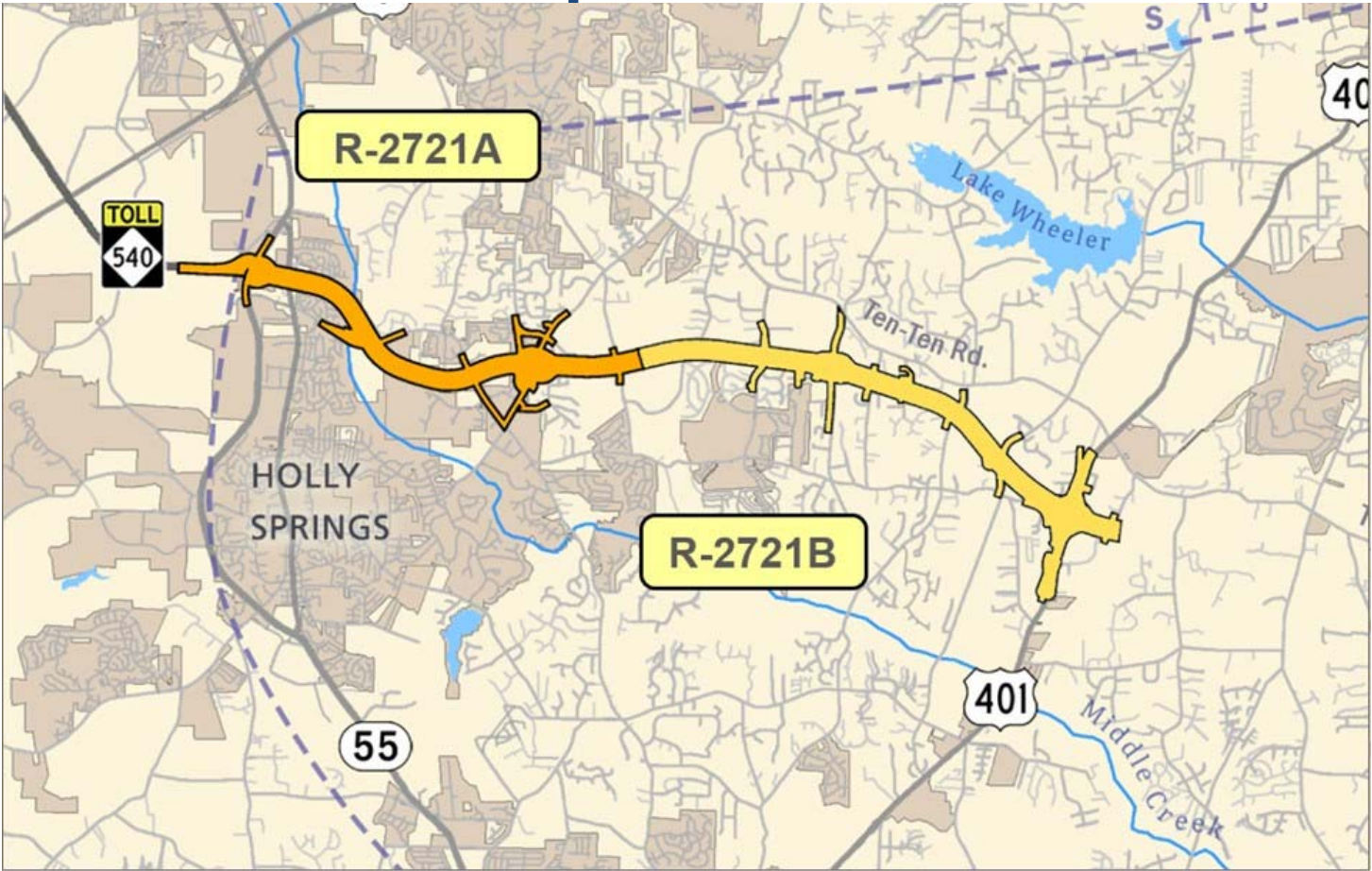
Current Procurements



STIP Segments

R-2721 and R-2828

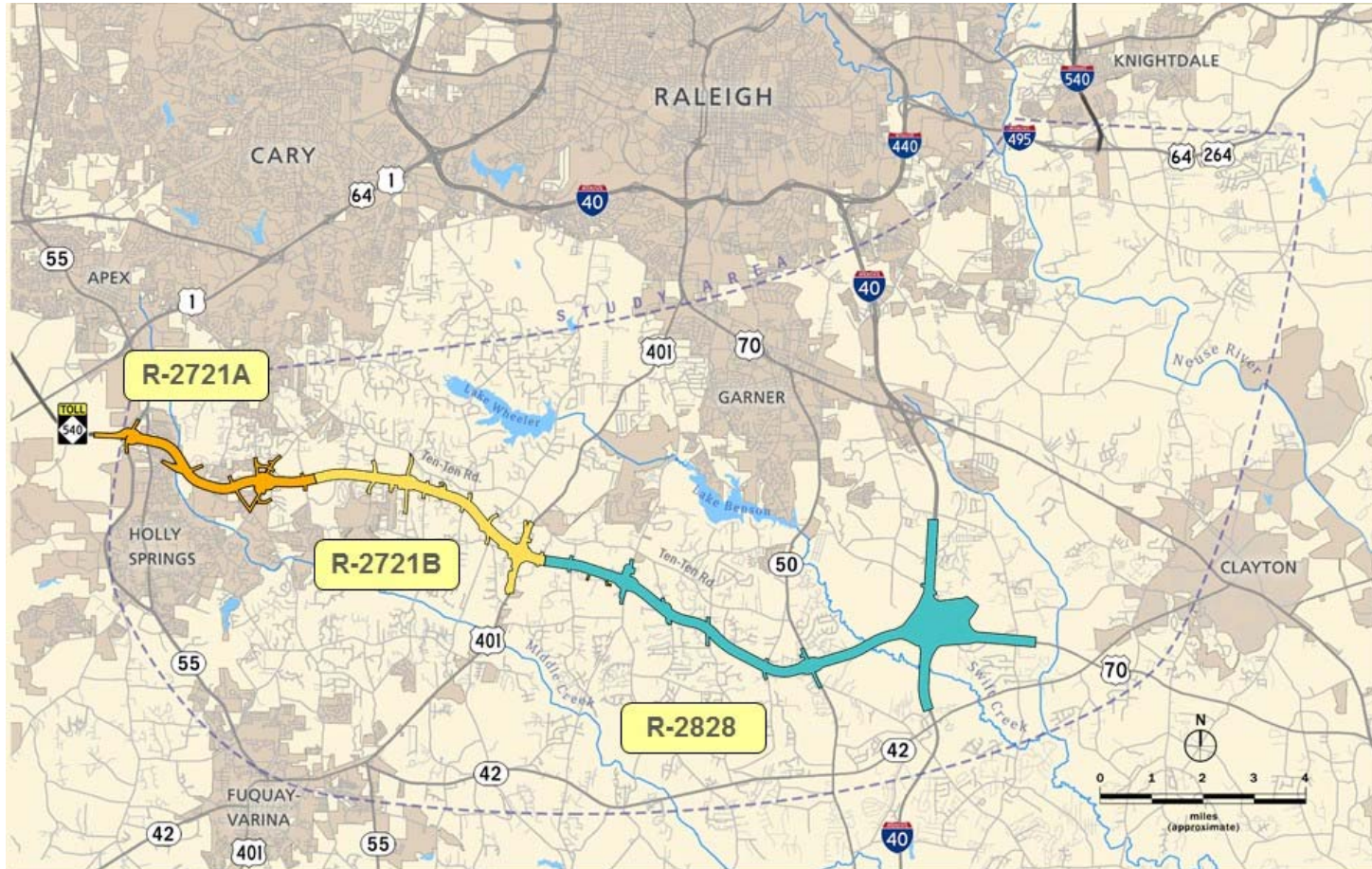
Complete 540



STIP Segment
R-2721 A & B

Complete 540

Three Contracts



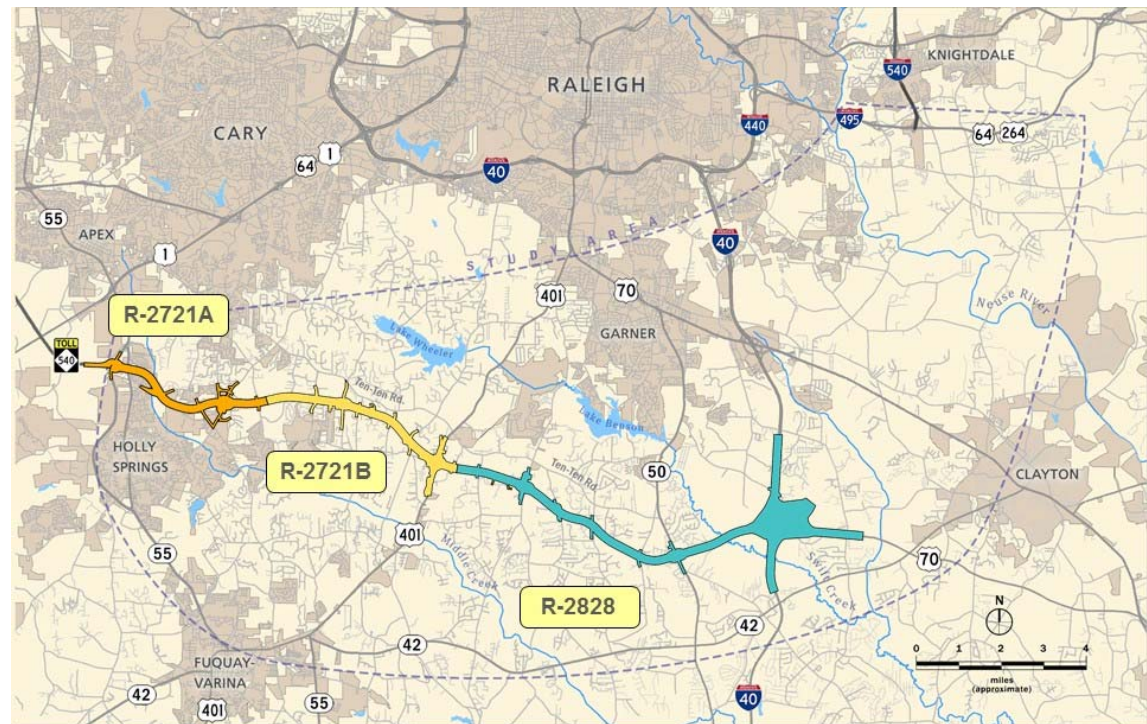
STIP Segments
R-2721 (A&B) and R-2828

Complete 540

- R-2721A
 - 4.6 mile new location
 - ~ 190 parcels

- R-2721B
 - 4.9 mile new location
 - ~ 210 parcels

- R-2828
 - 8.6 mile new location
 - ~ 250 parcels



STIP Segments
R-2721 (A&B) and R-2828

Key Features on Map 1

- Begin project west of NC 55 Bypass
- NC 55 Bypass bridge and interchange
- East Williams Street crossing
- Middle Creek crossing
- Colonial Pipeline crossing
- Sunset Lake Road crossing
- Middle Creek bridge on Sunset Lake Road
- Closure of River Falls Drive
- Woodcreek pedestrian/bicycle crossing

Begin Project



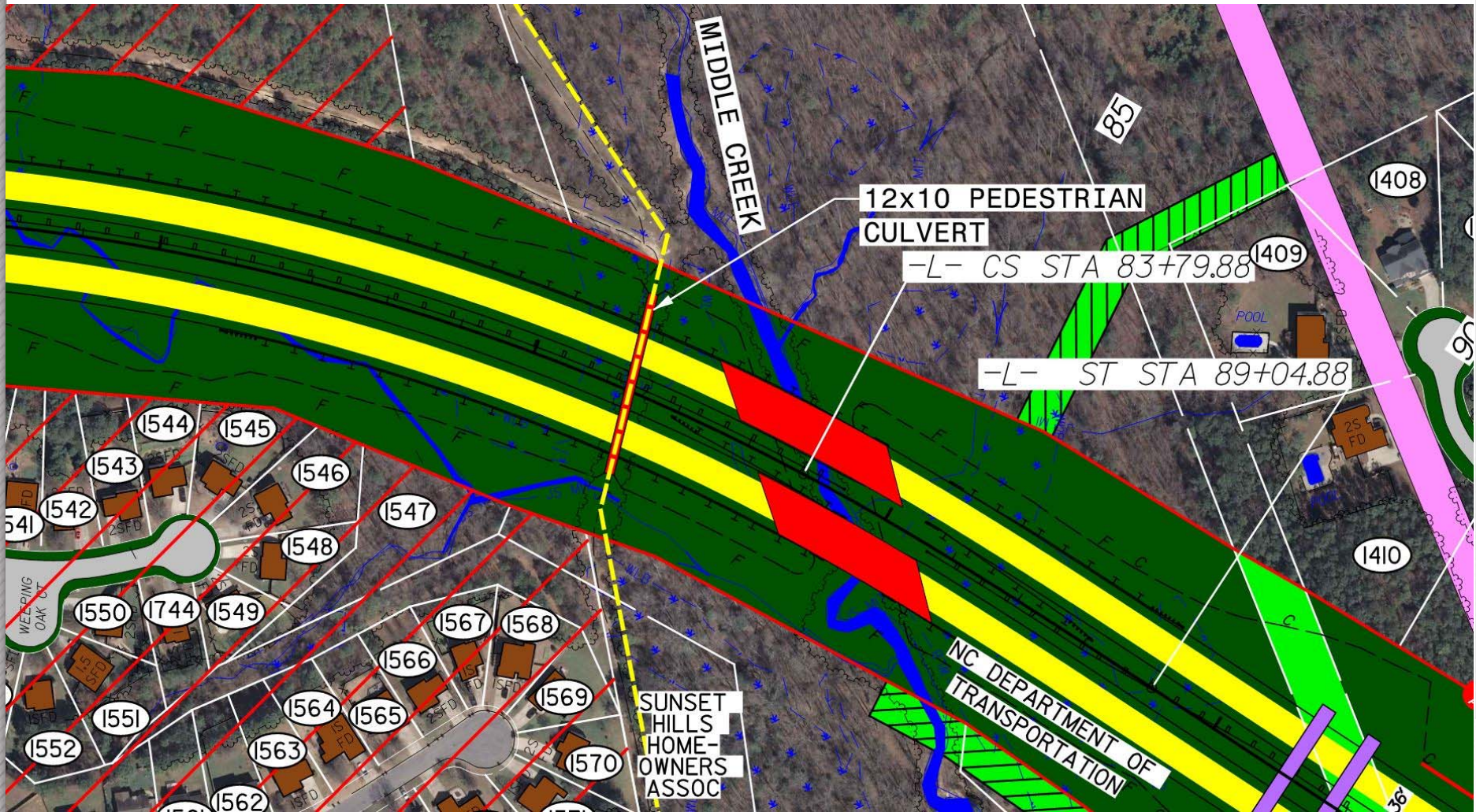
NC 55 Bypass Interchange



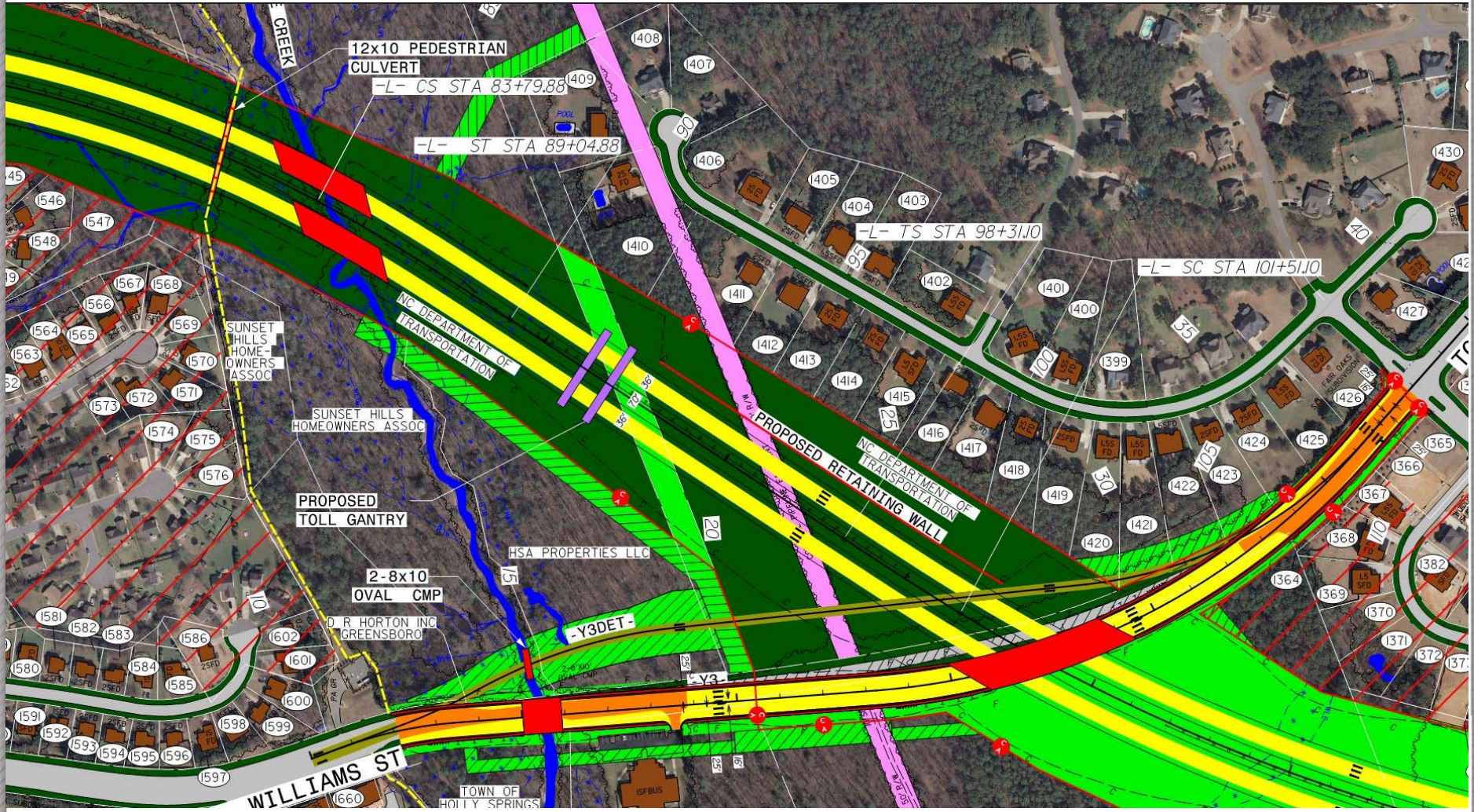
East Williams Street Bridges



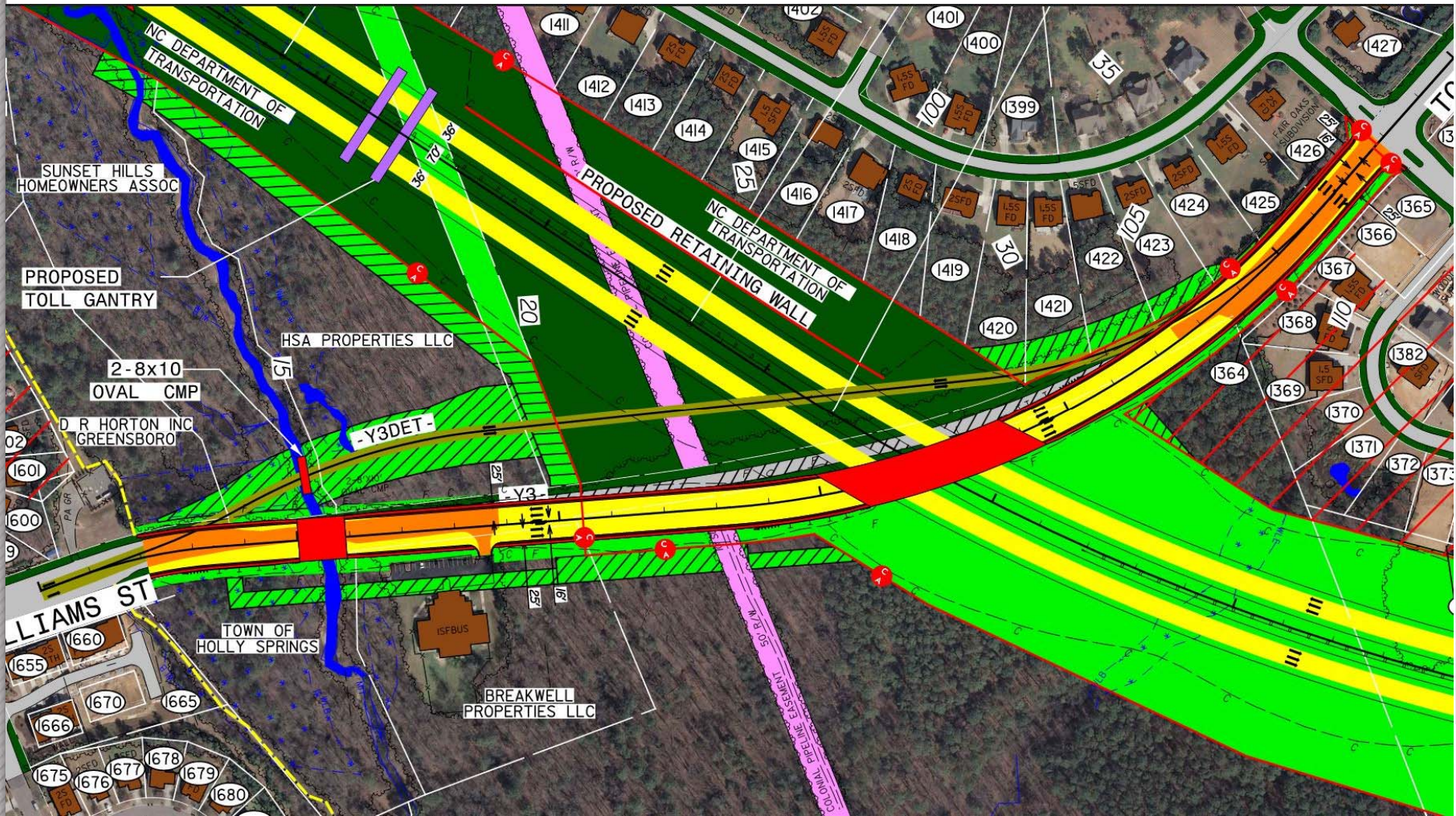
Middle Creek & Greenway



Colonial Pipeline



Sunset Lake Road



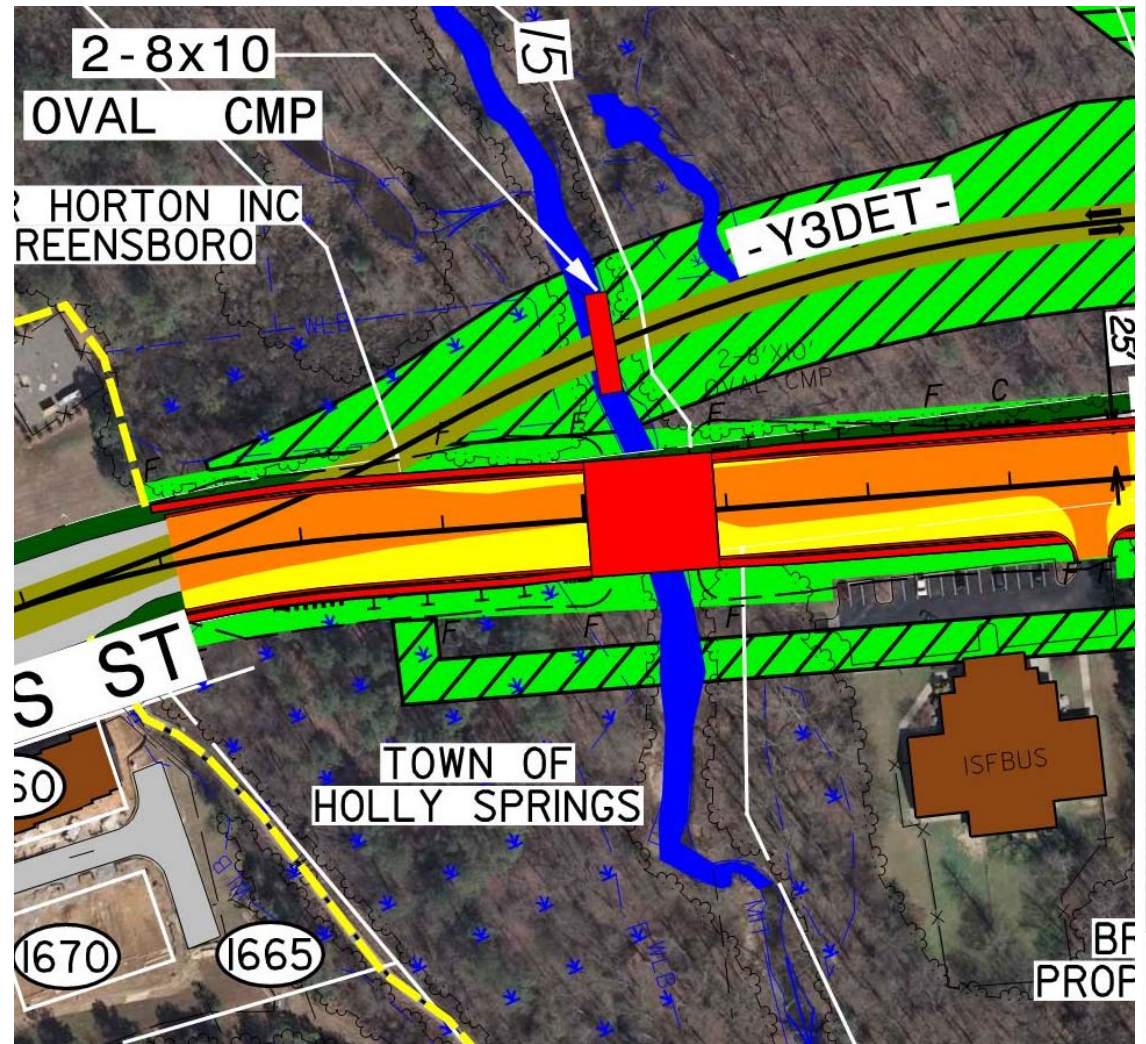
Sunset Lake Road at Middle Creek



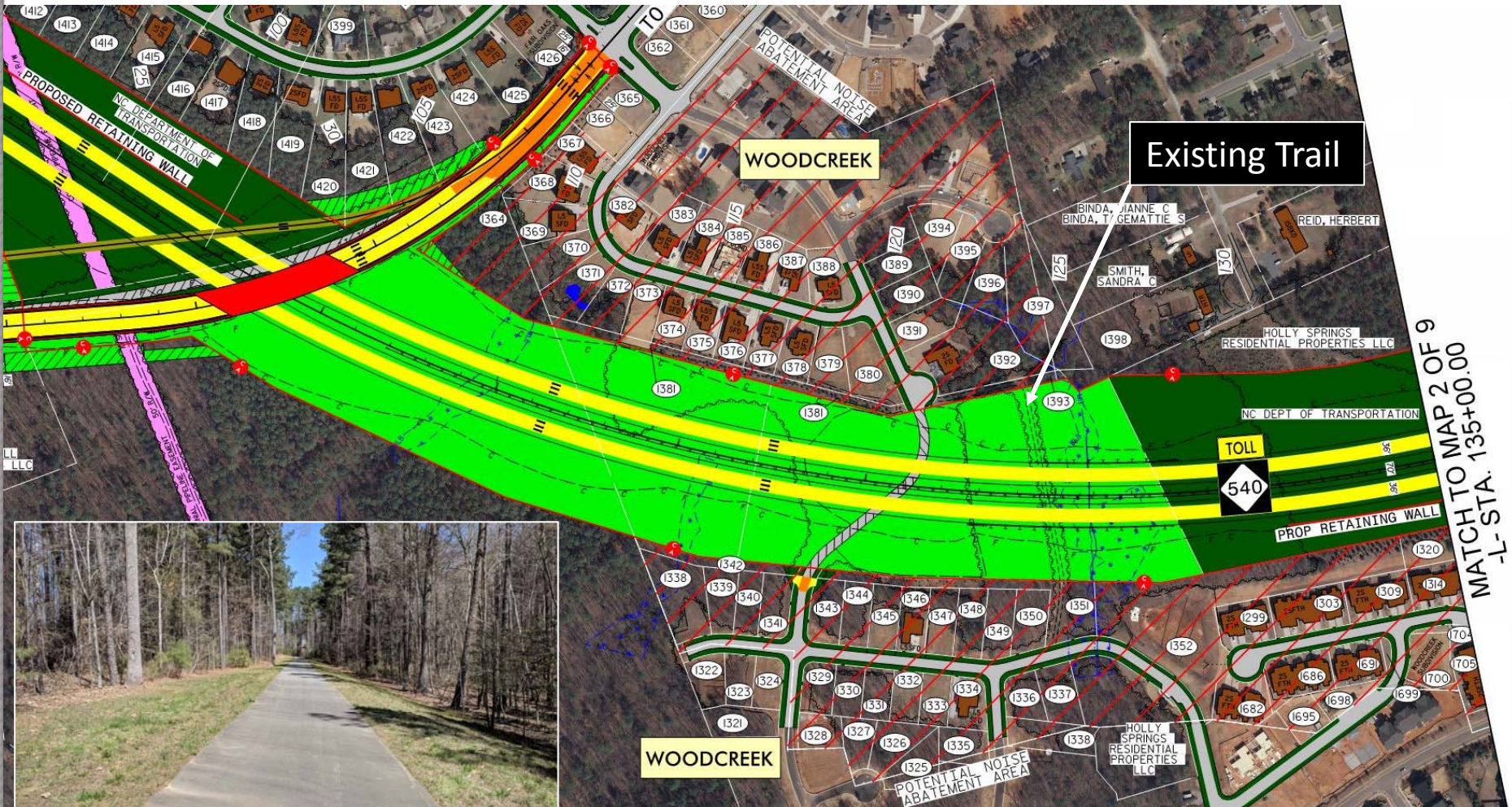
Looking downstream at existing 2@12'x7.5' CSPA w/ 2/3 asphalt paving



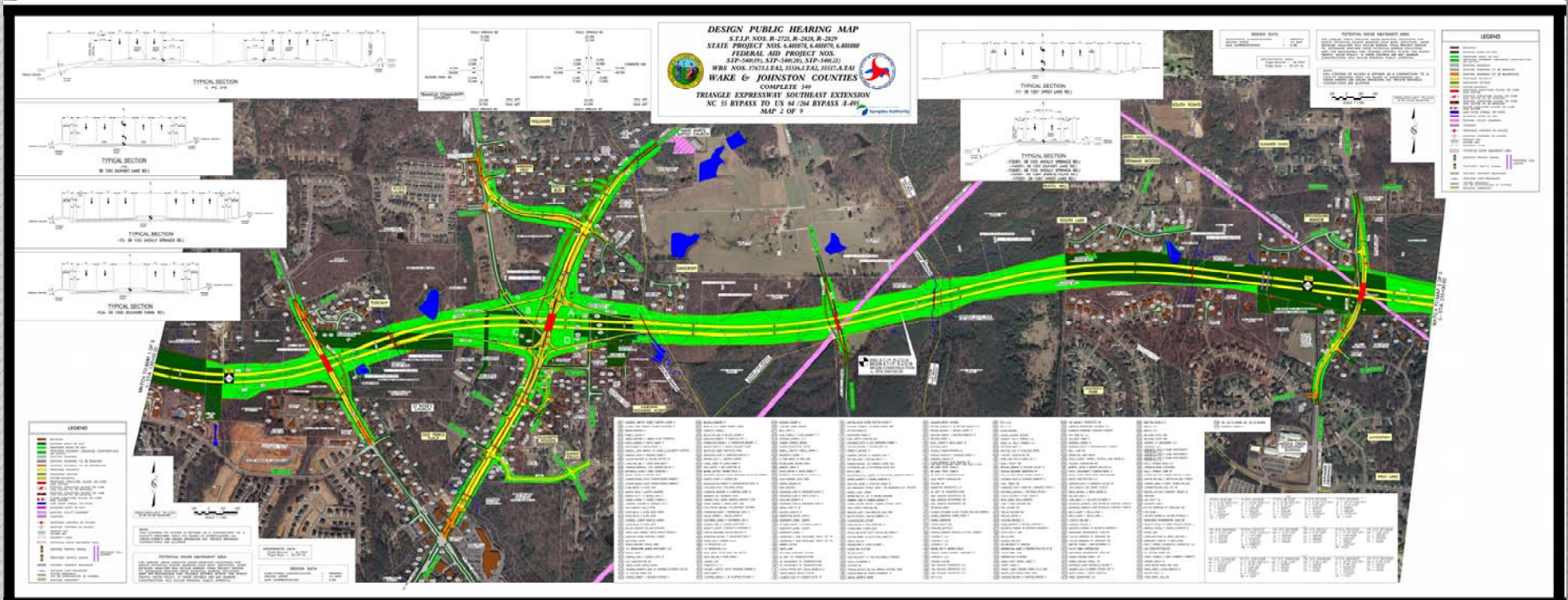
Looking upstream at existing 2@12'x7.5' CSPA



Woodcreek



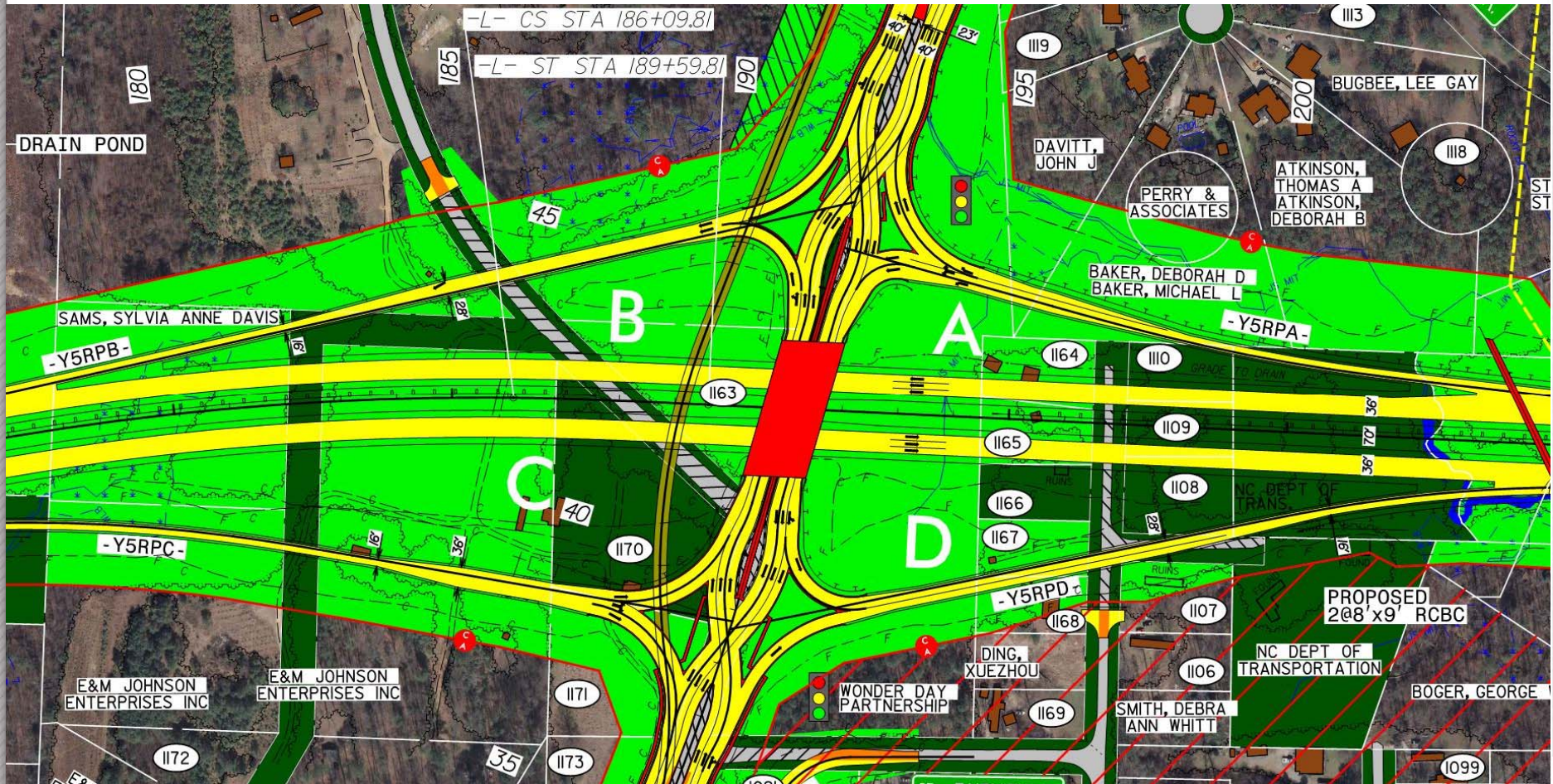
Design Public Hearing Map 2 R-2721A and R-2721B



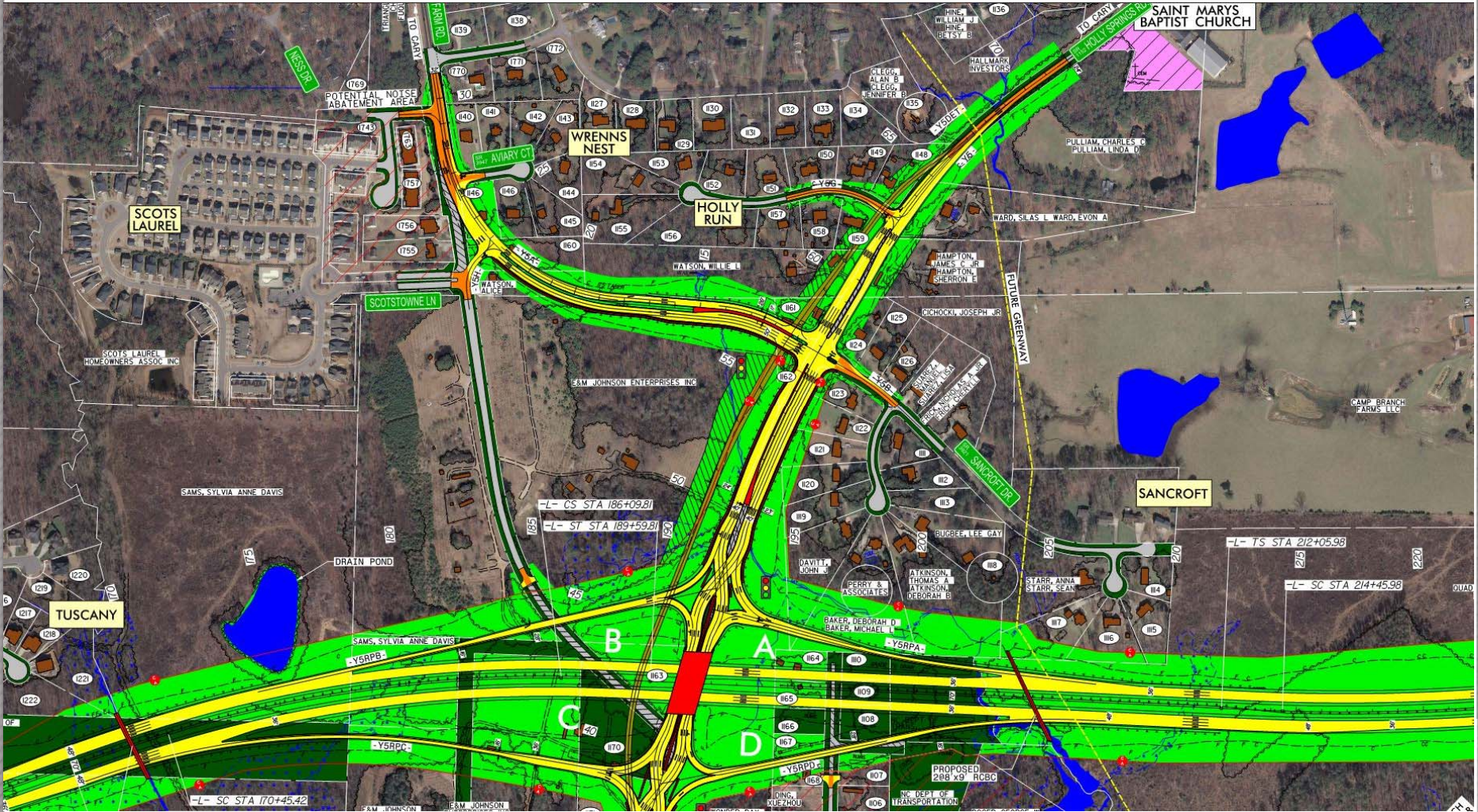
Key Features on Map 2

- Sunset Lake Road crossing
- Holly Springs Road interchange
- Relocated Kildaire Farm Road
- Neighborhood access off Holly Springs Rd
- Pierce Olive Road crossing
- End R-2721A and Begin R-2721B @ 240+00
- Camp Branch greenway crossing
- West Lake Road crossing
- Colonial Pipeline crossing

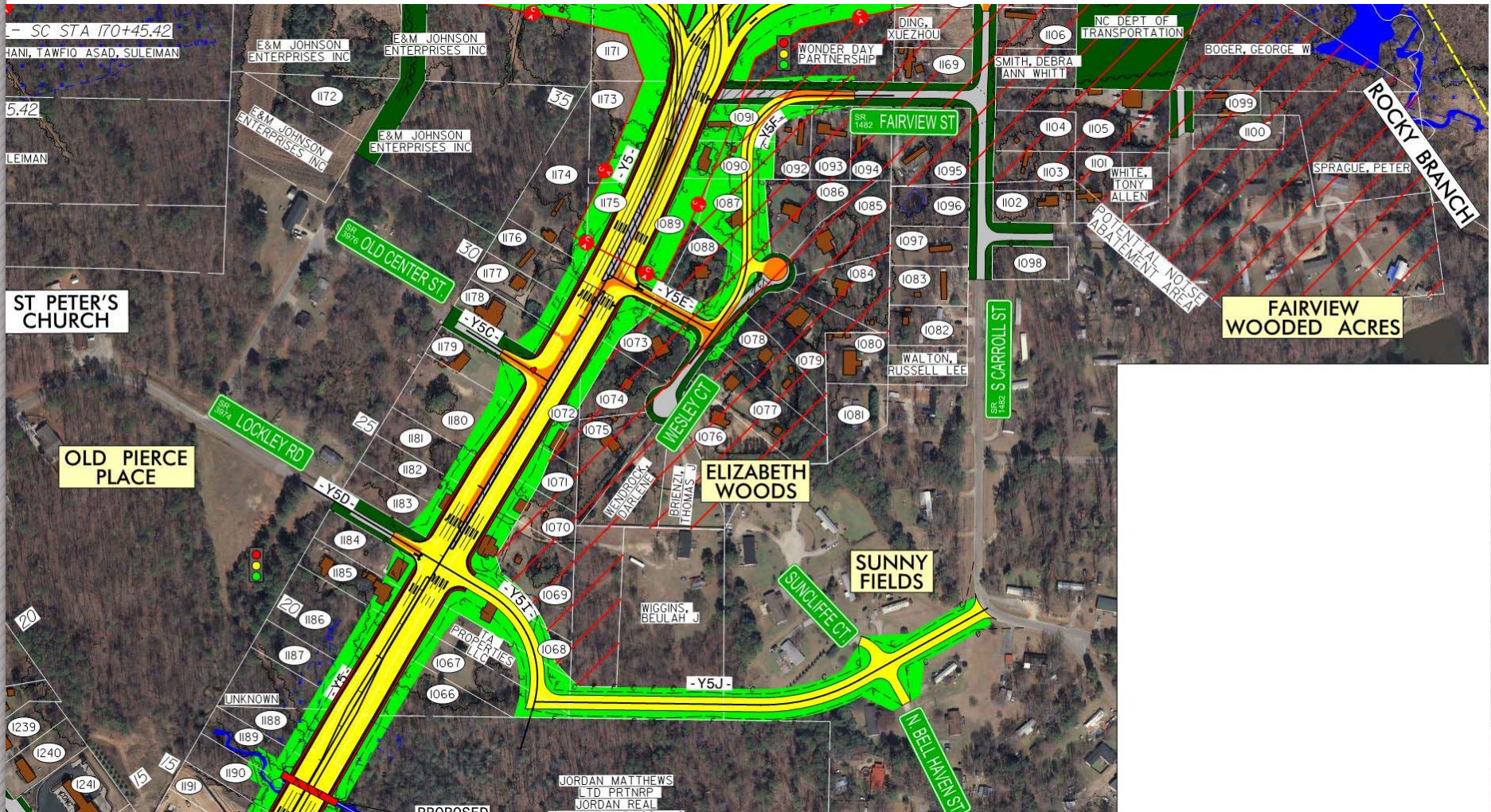
Holly Springs Road Interchange



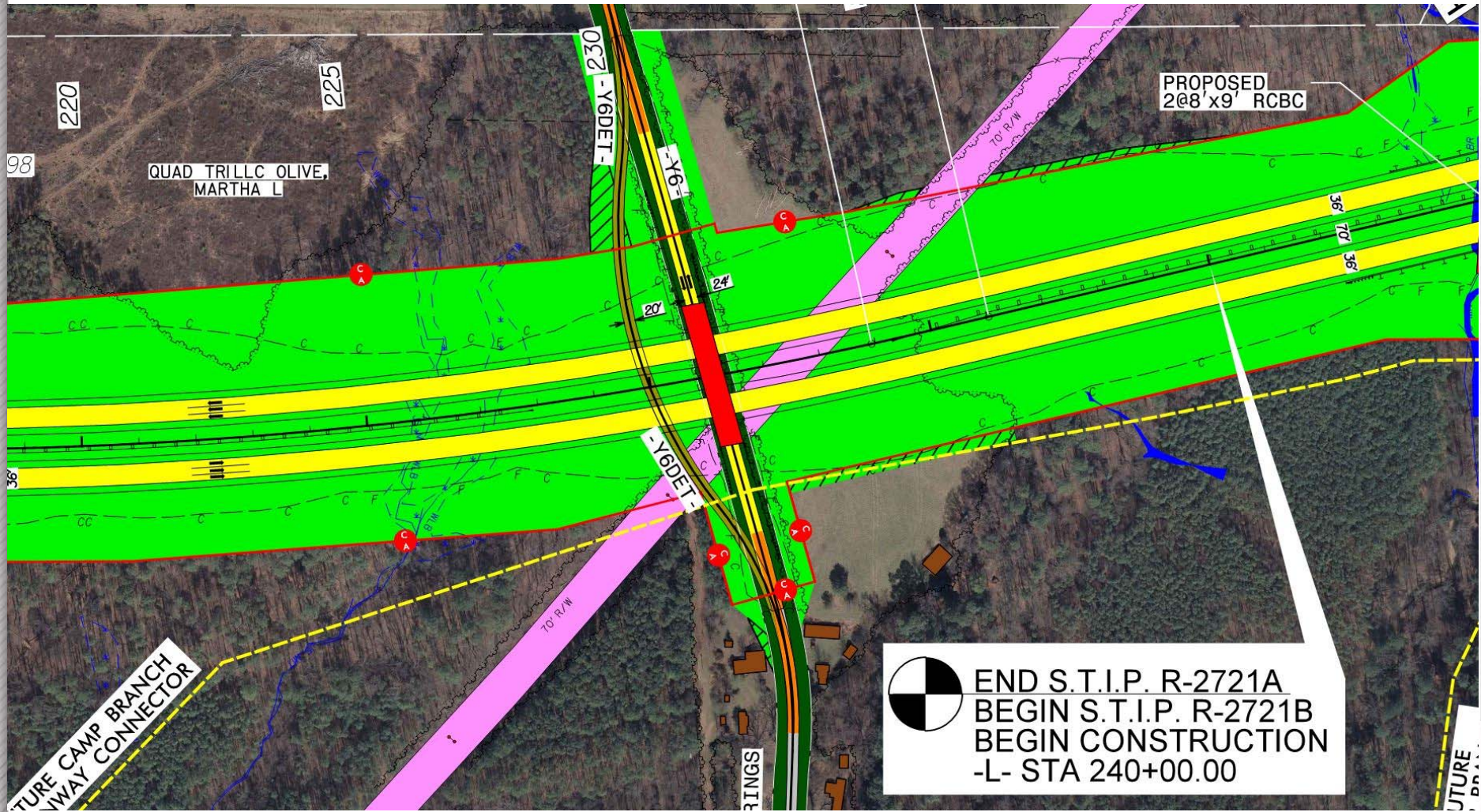
Relocated Kildaire Farm Road



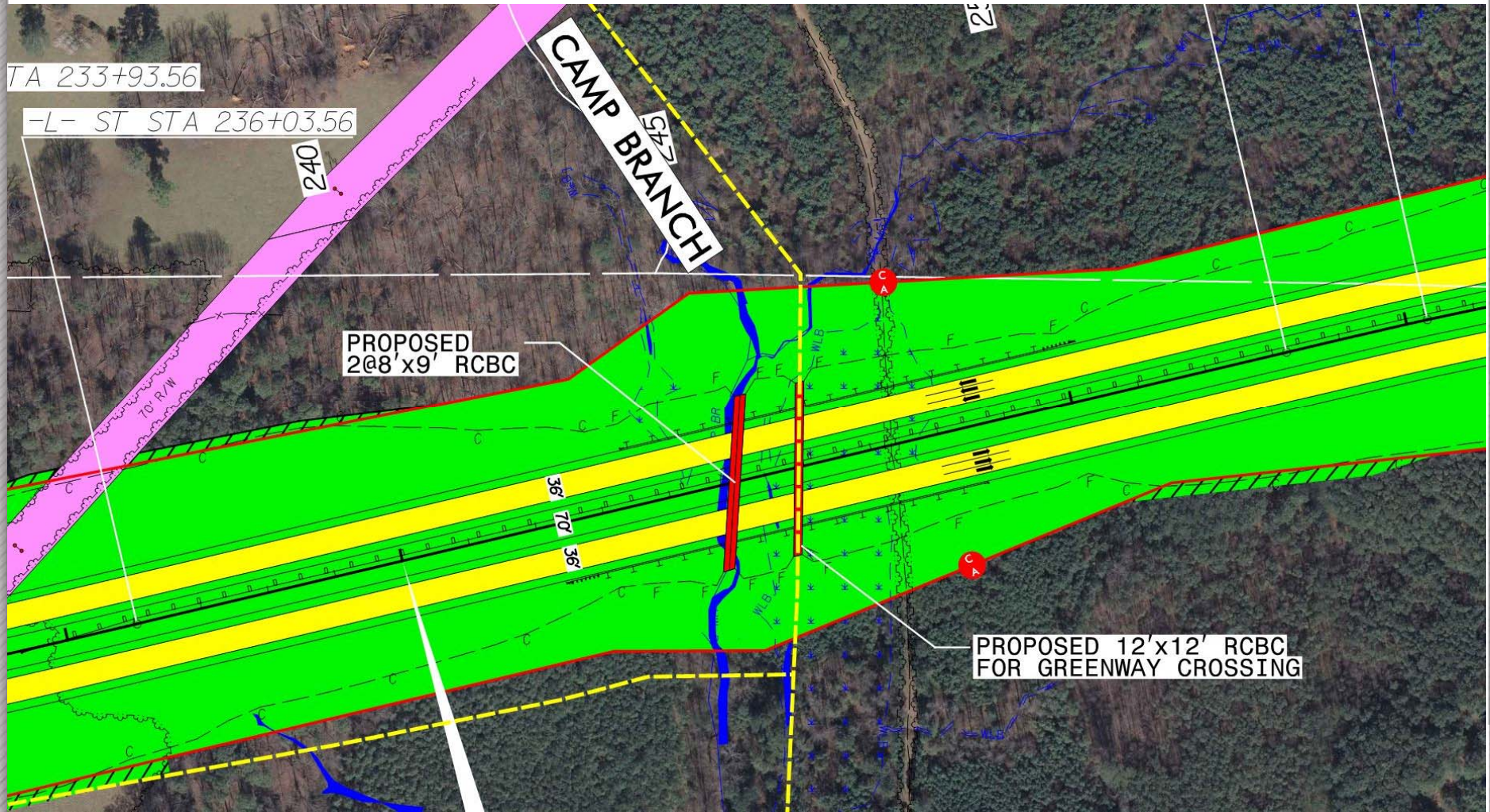
Neighborhood Access



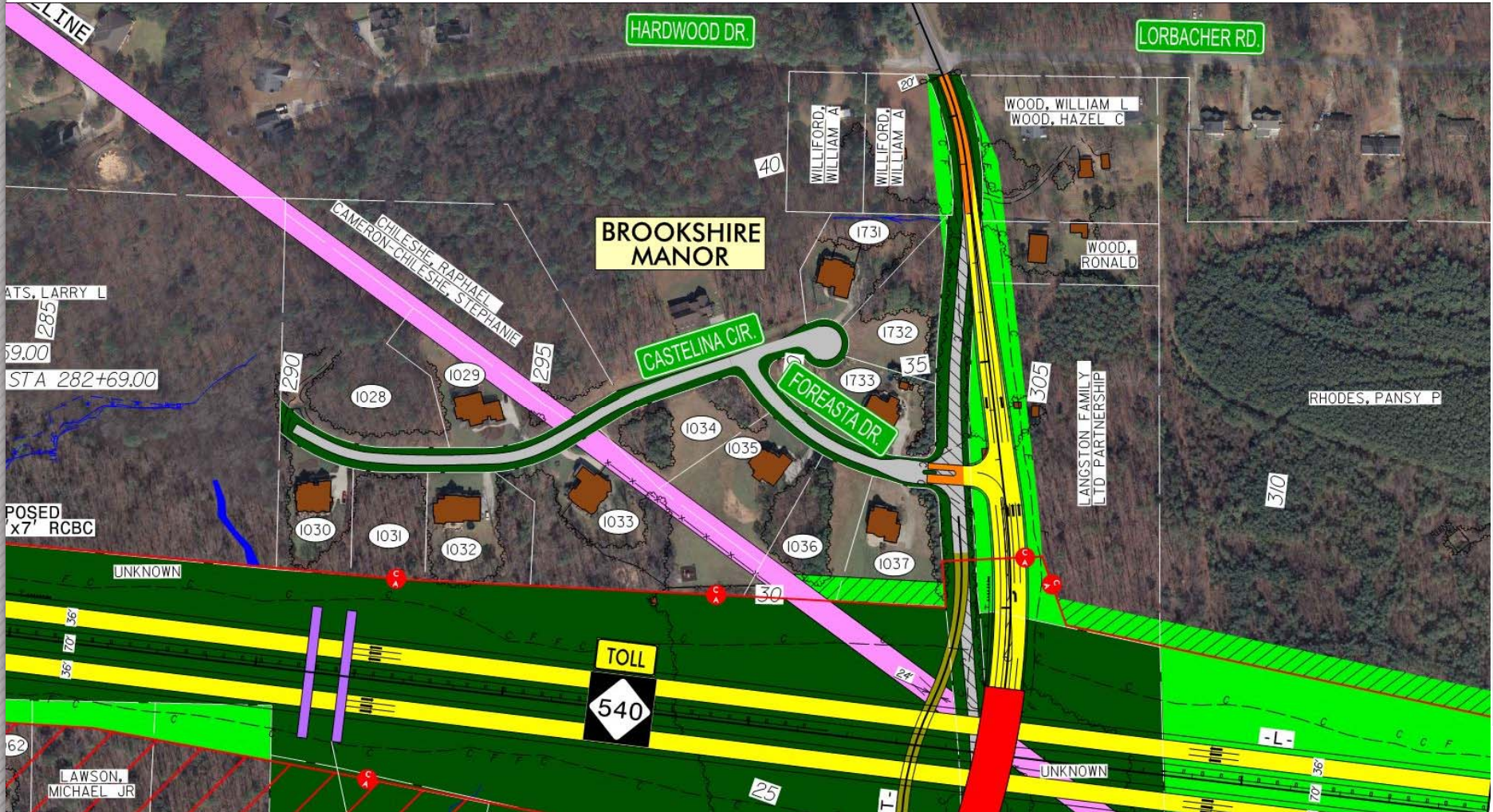
Pierce Olive Road



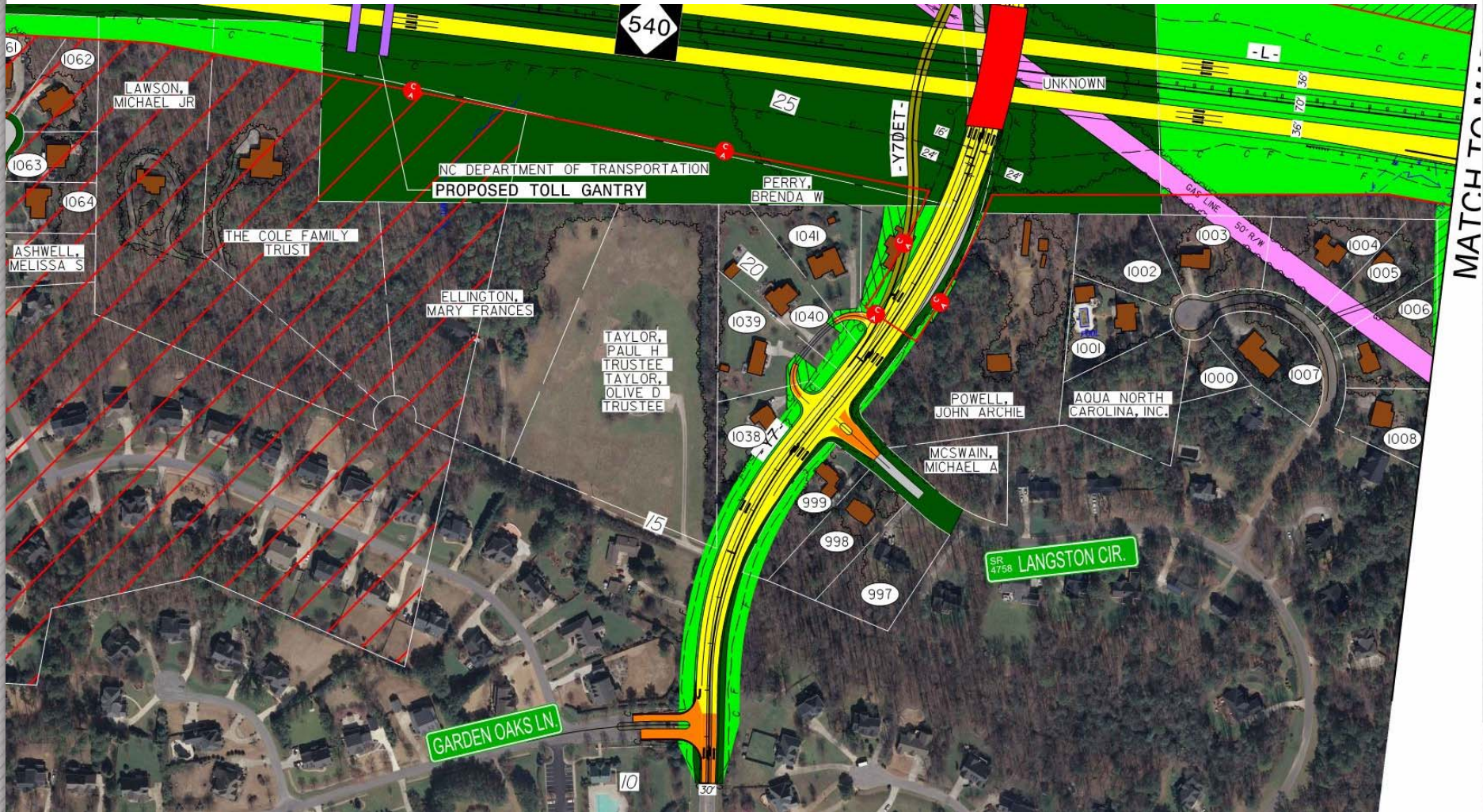
Camp Branch Greenway



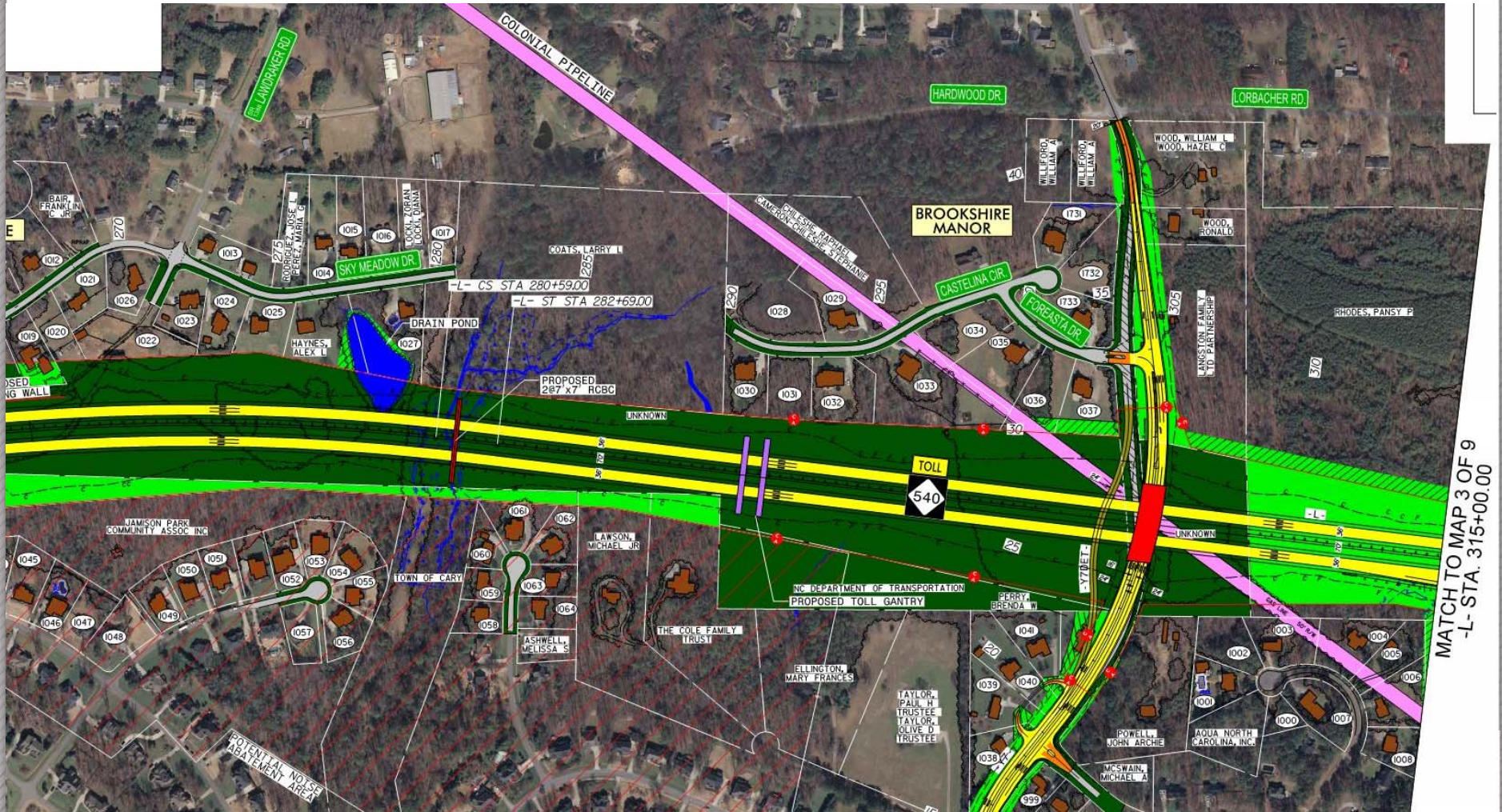
West Lake Road



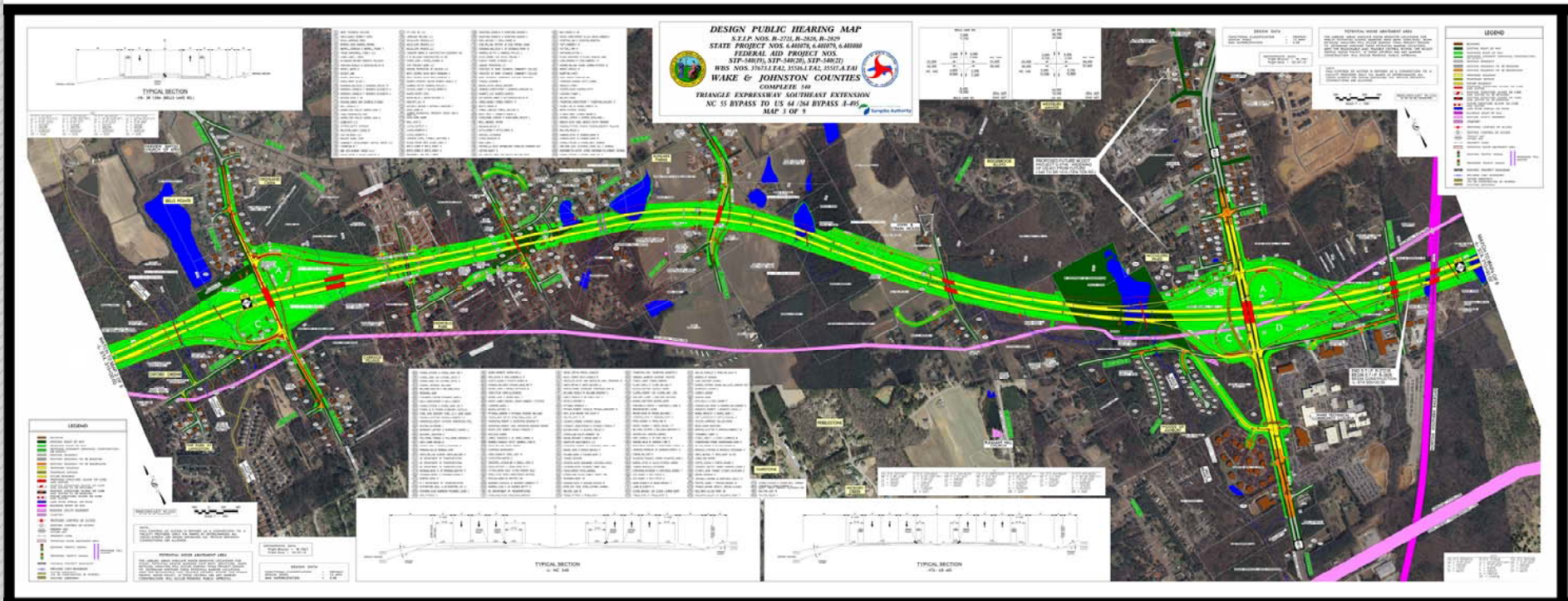
West Lake Road



Colonial Pipeline



Design Public Hearing Map 3 R-2721B and R-2828



Key Features on Map 3

- Optimist Farm greenway crossing
- Bells Lake Road interchange
- Mainline and ramp wetland bridges
- Rhodes Road closure
- Deer Meadow Drive crossing
- Pond drainage and restoration
- Johnson Pond Road crossing
- Lake Wheeler Road crossing
- McCullers Pond

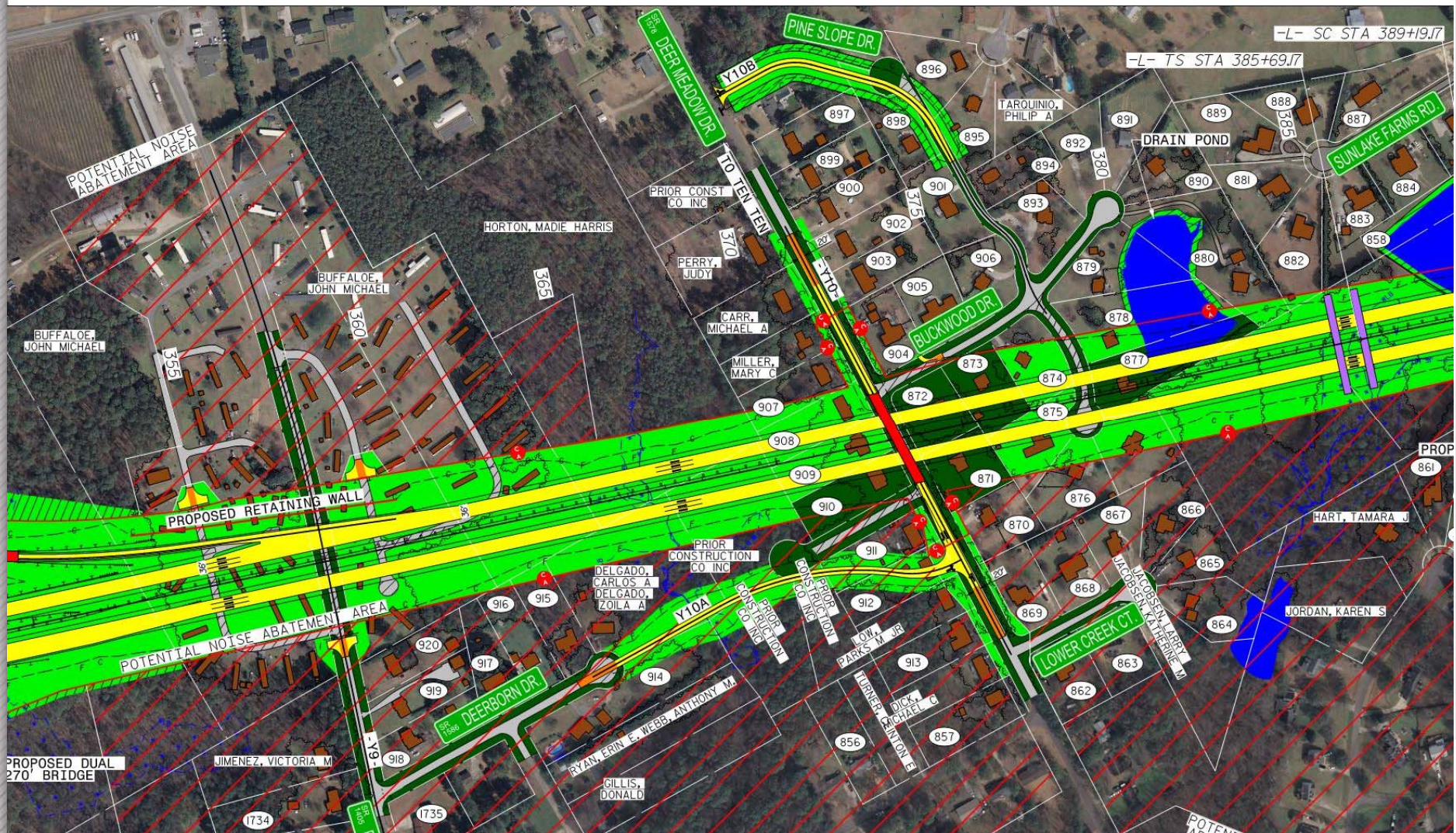
Key Features on Map 3

- US 401 Interchange
- Colonial Pipeline crossing
- Old McCullers Road crossing
- End R-2721B and Begin R-2828 @ 500+00
- Norfolk Southern crossing

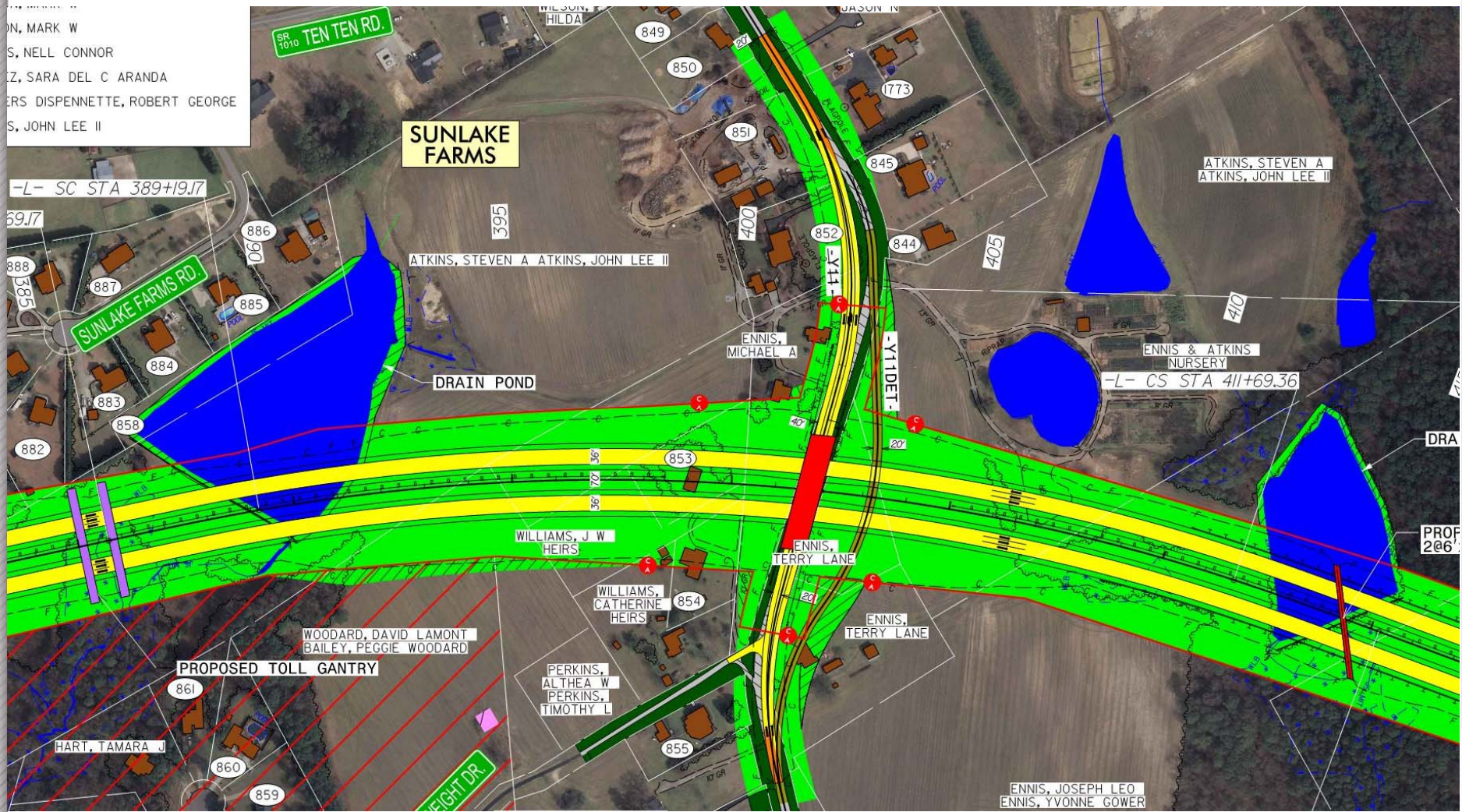
Bells Lake Road Interchange



Deer Meadow Drive

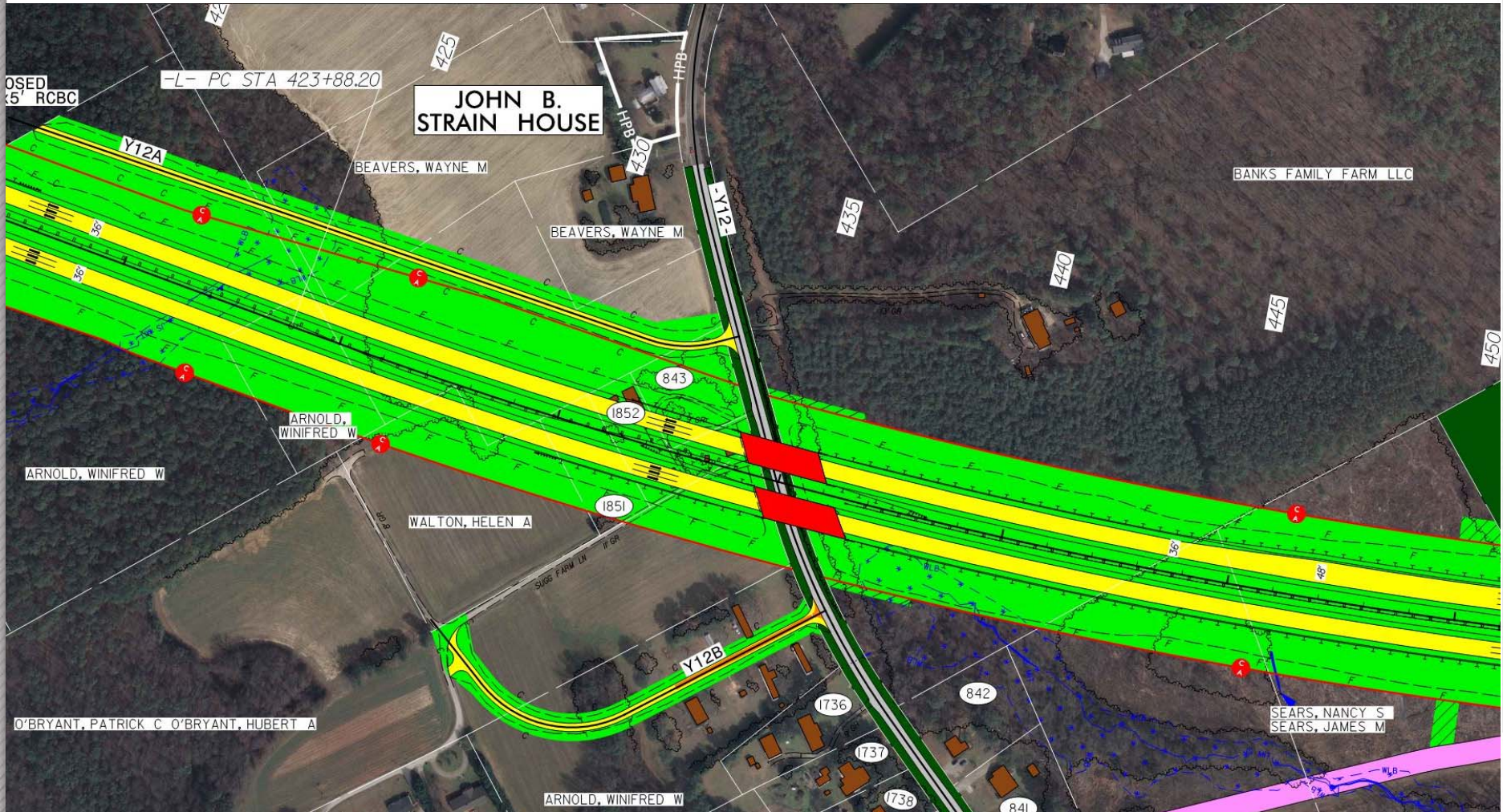


Johnson Pond Road

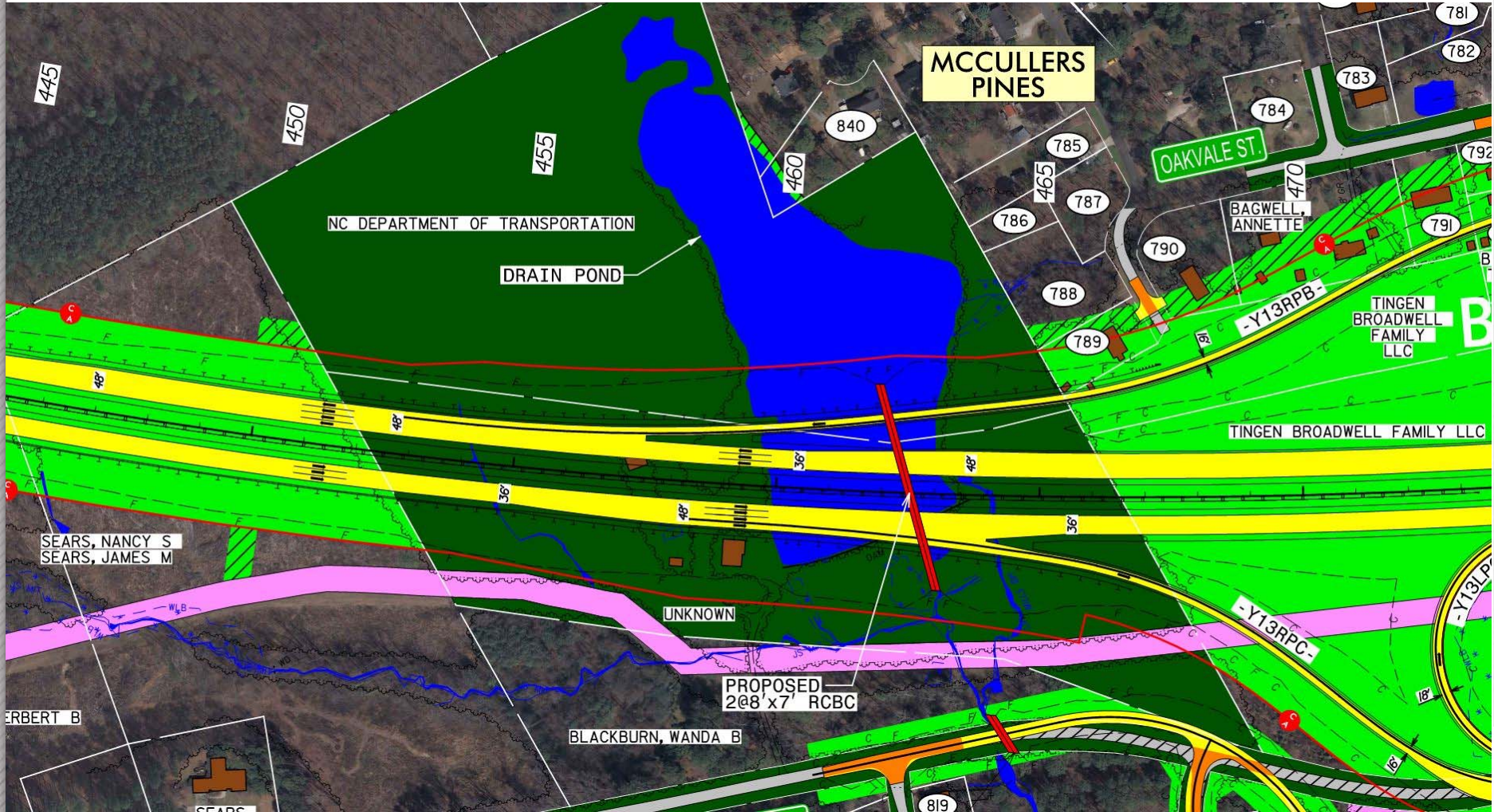


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S, NELL CONNOR
Z, SARA DEL C ARANDA
ERS DISPENNETTE, ROBERT GEORGE
S, JOHN LEE II

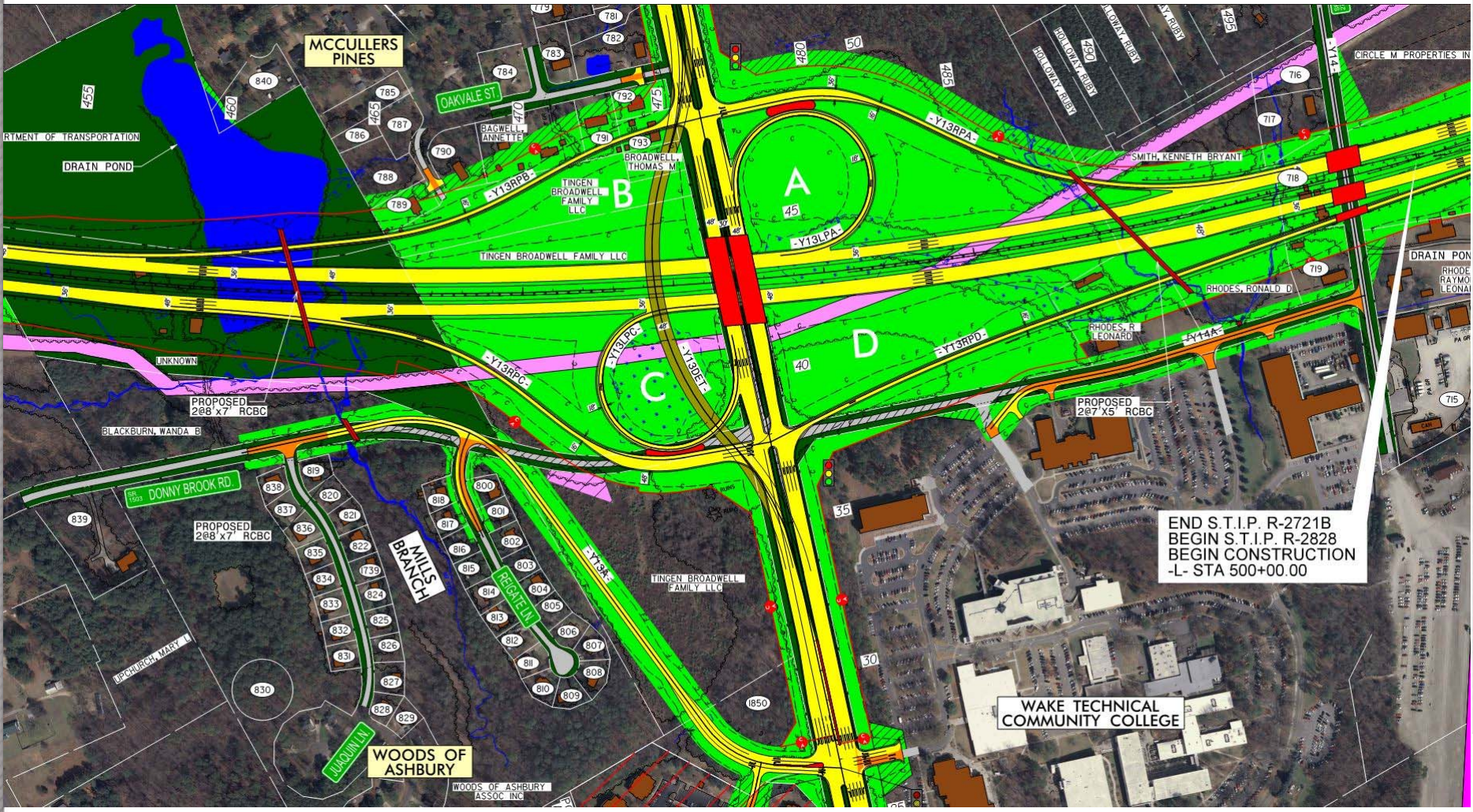
Lake Wheeler Road



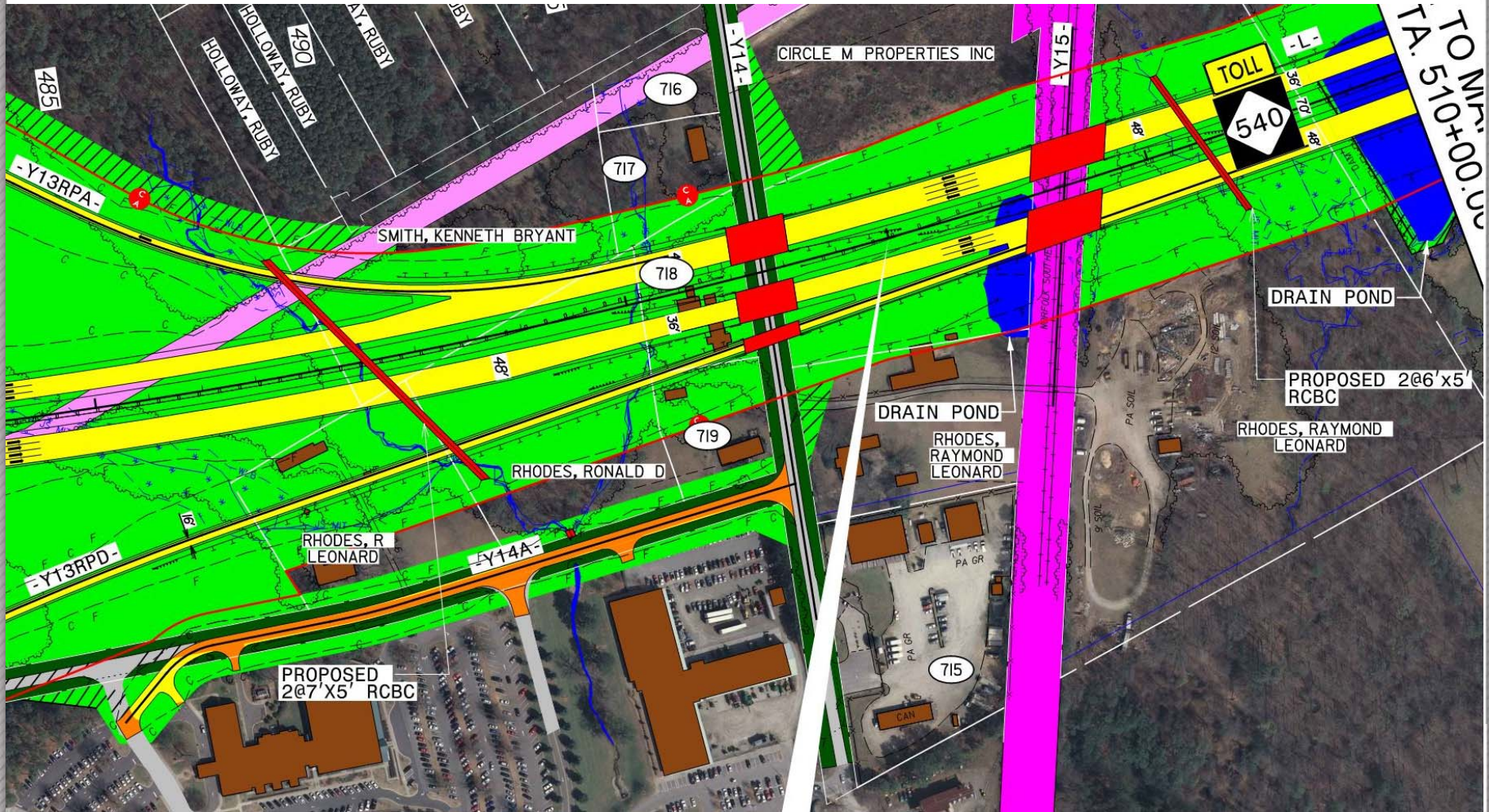
McCullers Pond



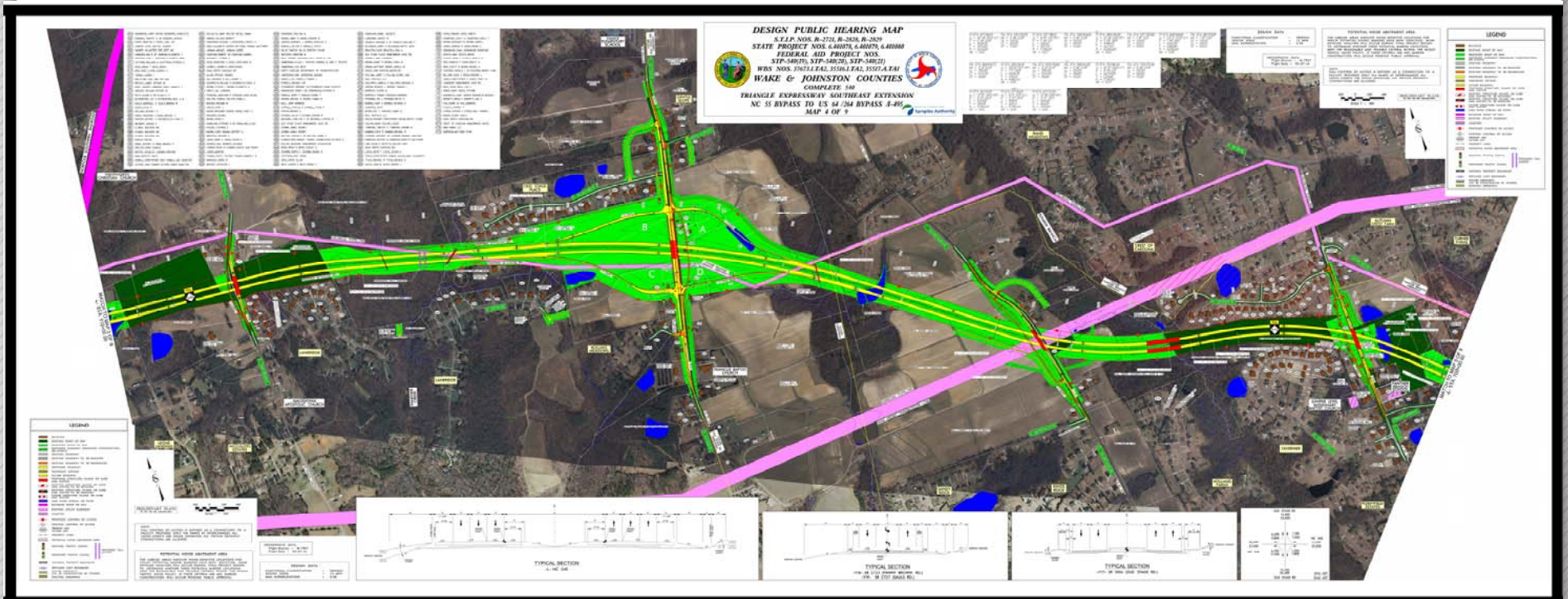
US 401 Interchange



Norfolk Southern Railroad



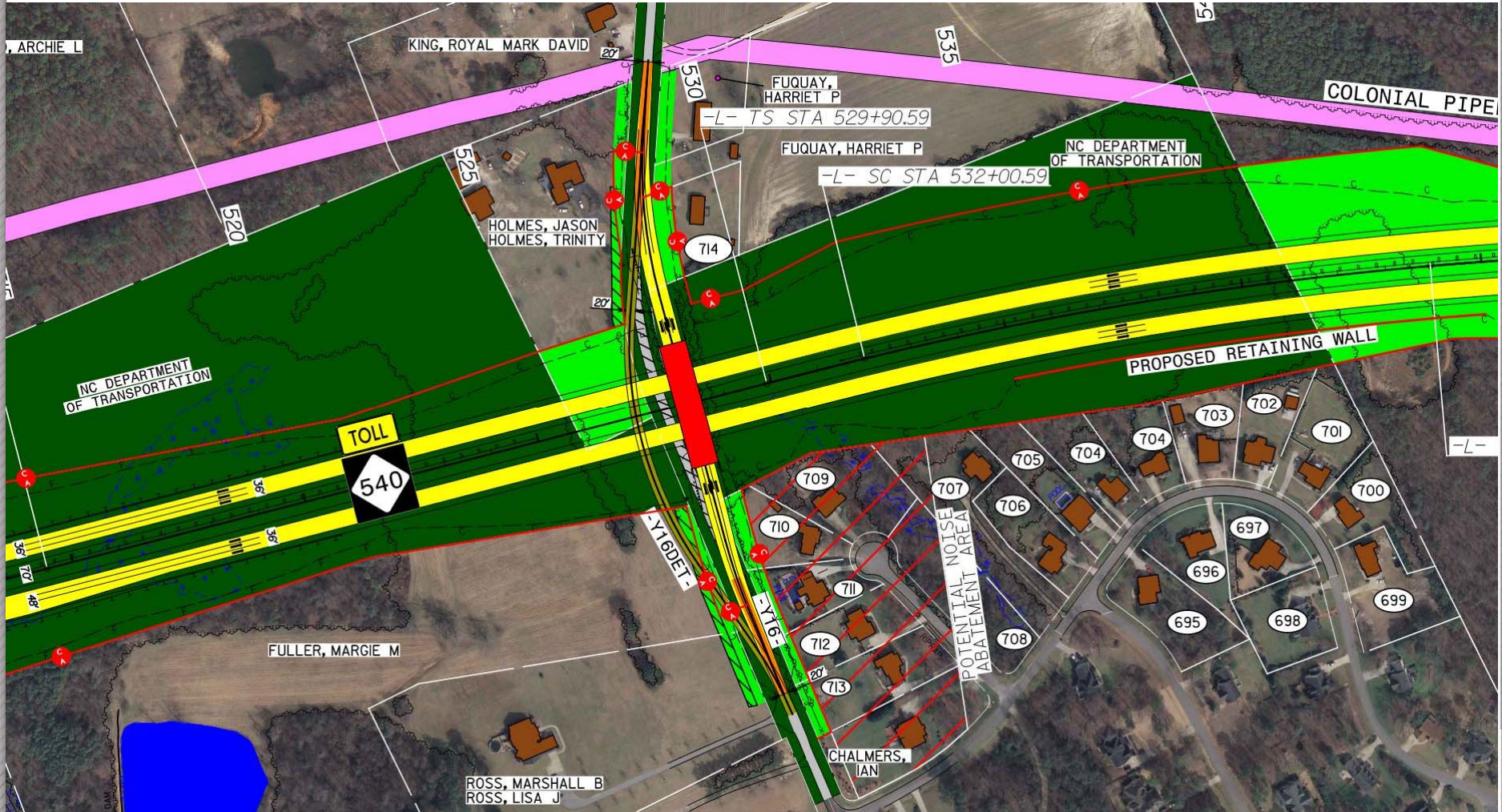
Design Public Hearing Map 4 R-2828



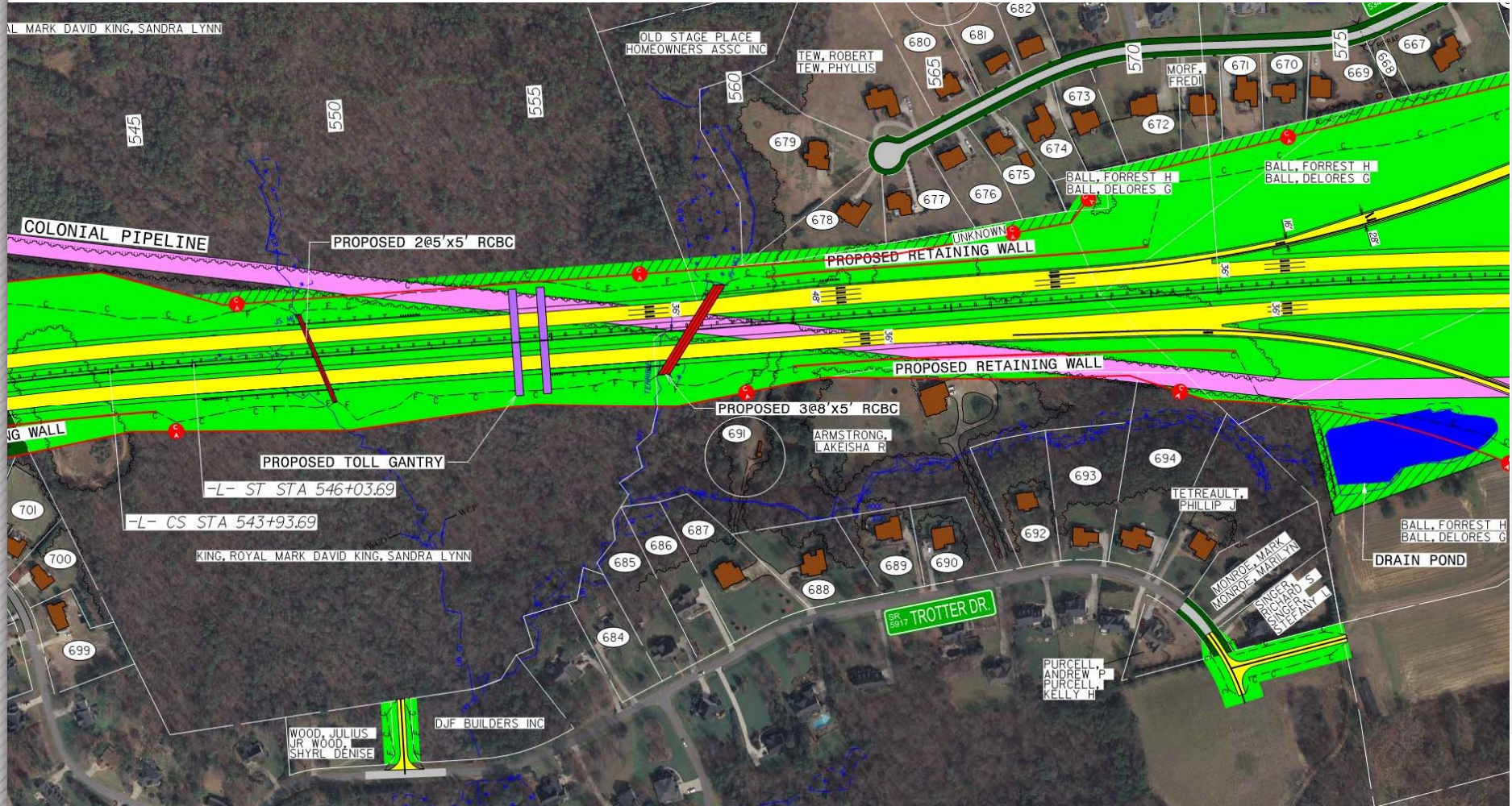
Key Features on Map 4

- Fanny Brown Road crossing
- Colonial Pipeline crossing
- Old Stage Road interchange
- Holland Church Road crossing
- Cardinal Pipeline and Duke Energy crossing
- Sauls Road crossing
- Panther Branch School Historic Site

Fanny Brown Road



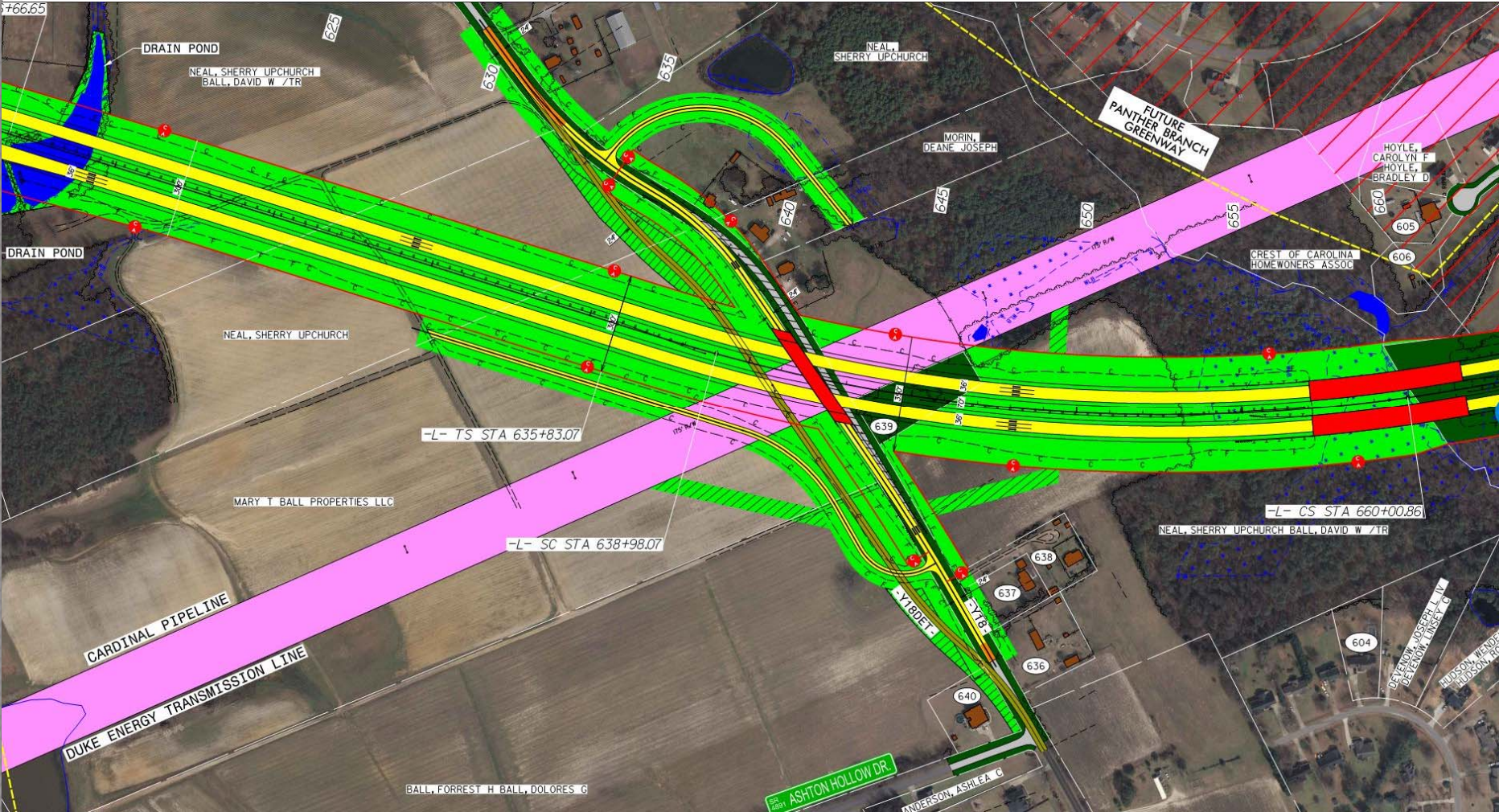
Colonial Pipeline



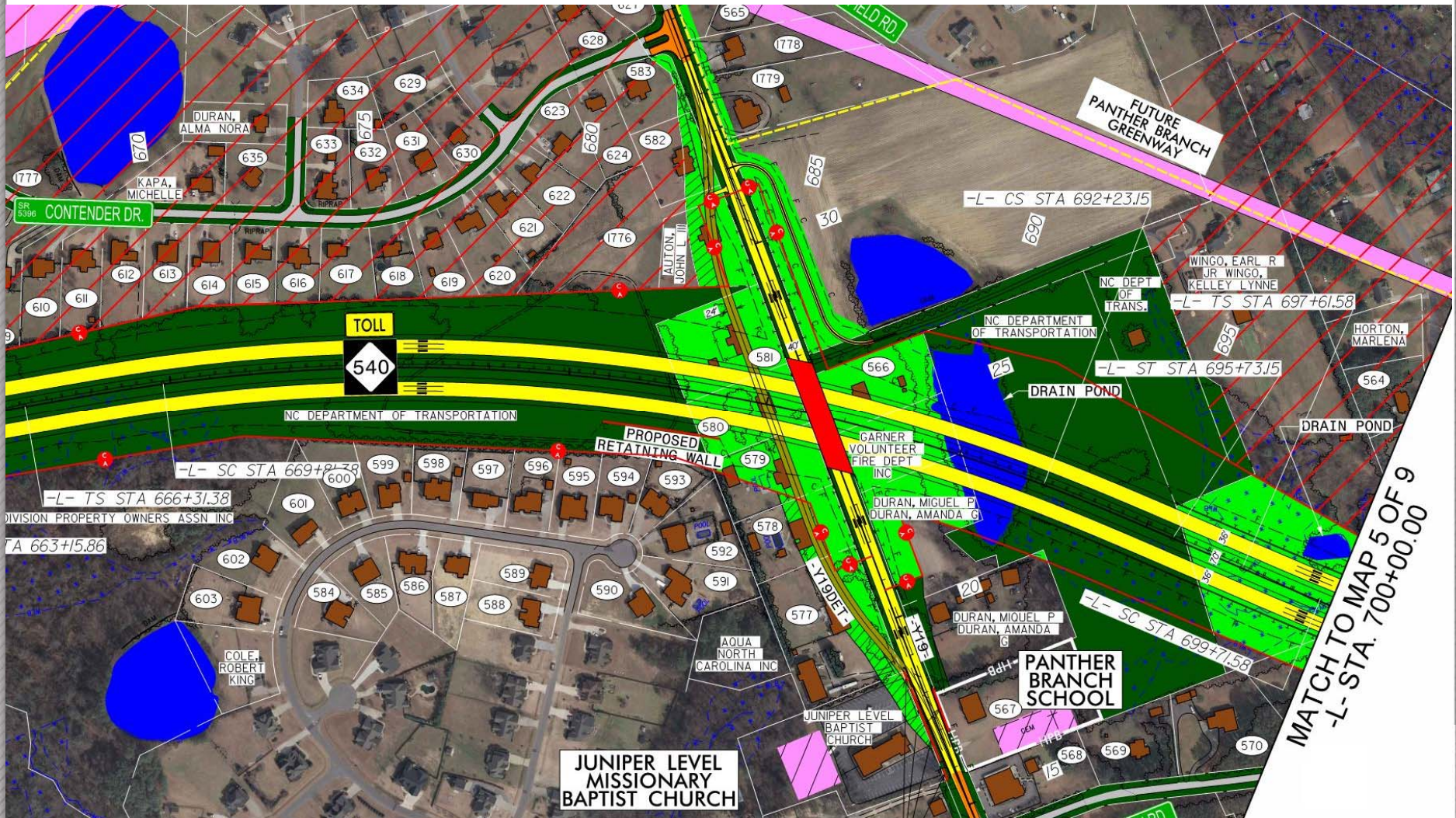
Old Stage Road Interchange



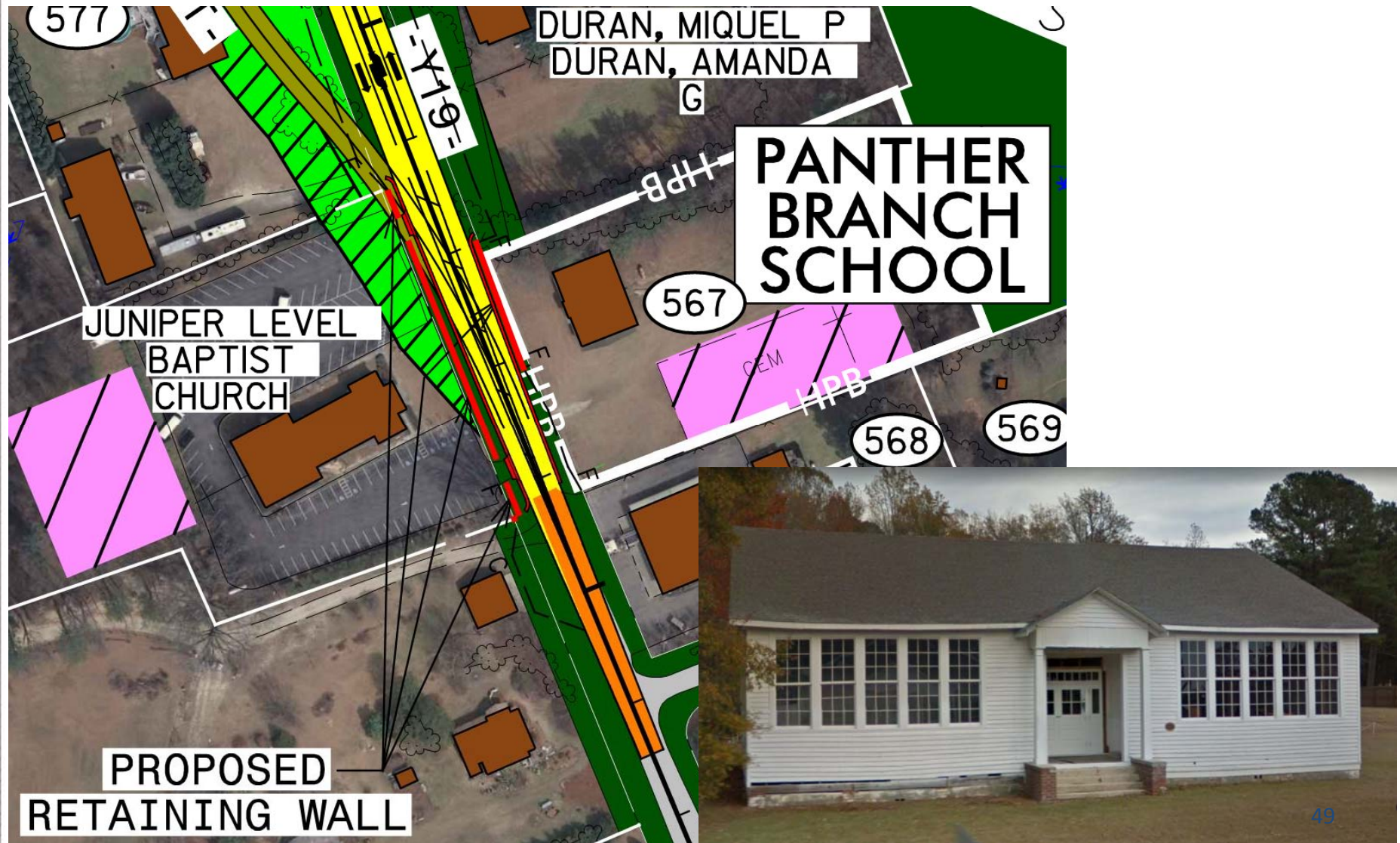
Holland Church Road



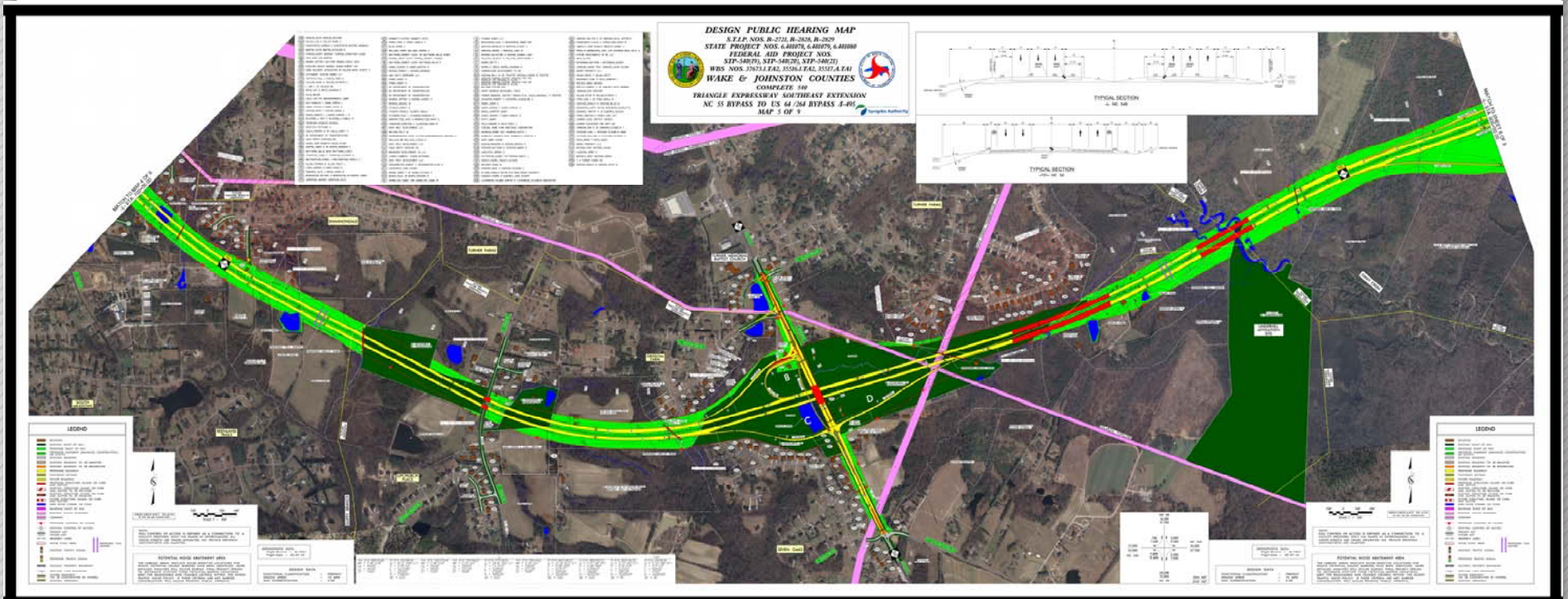
Sauls Road



Panther Branch School



Design Public Hearing Map 5 R-2828



Key Features on Map 5

- Jordan Road crossing
- NC 50 interchange
- Colonial Pipeline and Duke Energy crossing
- Swift Creek basin and crossing

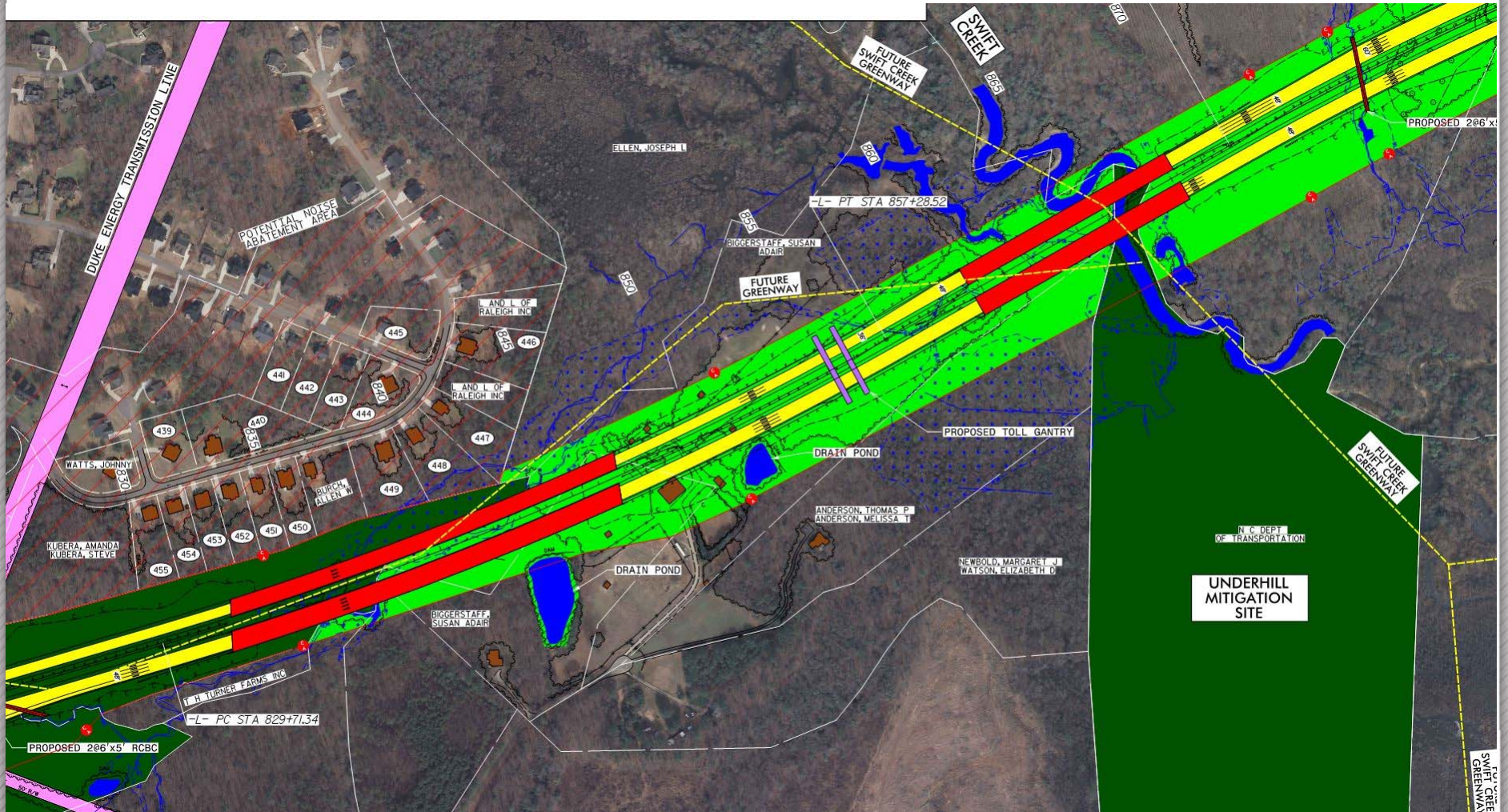
Jordan Road



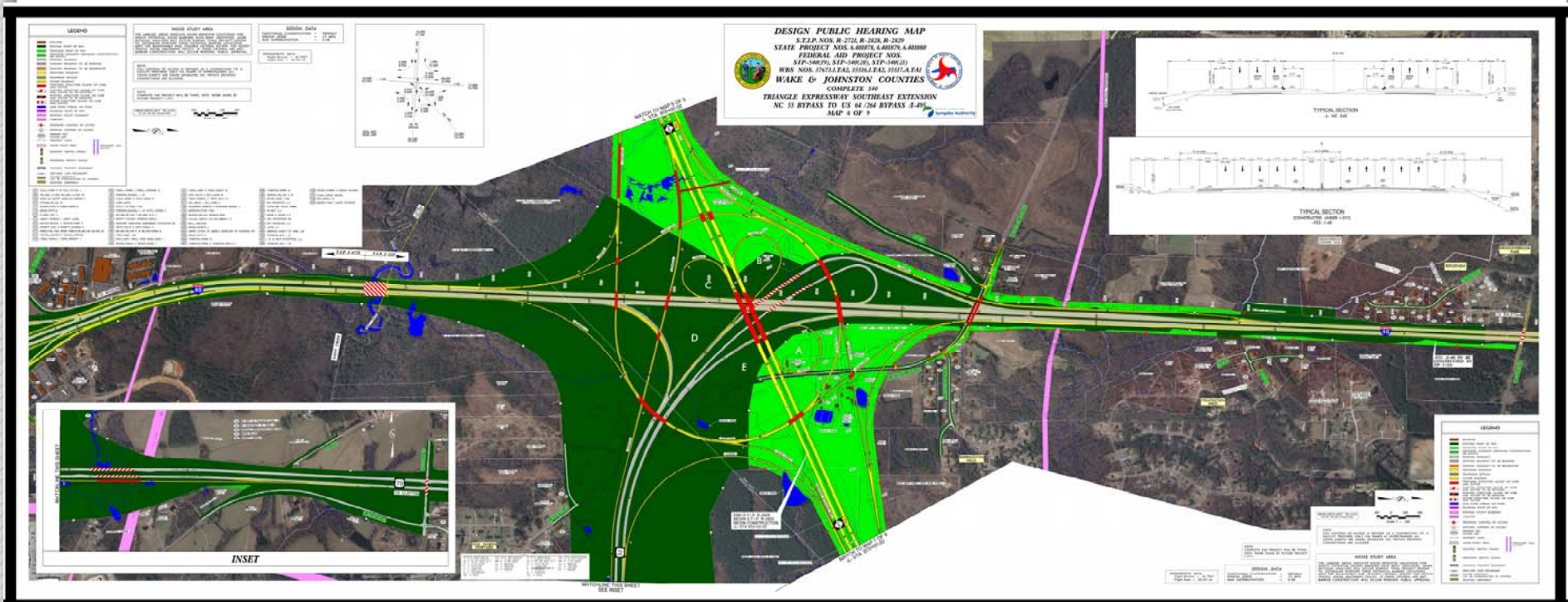
NC 50 Interchange



Swift Creek Crossing



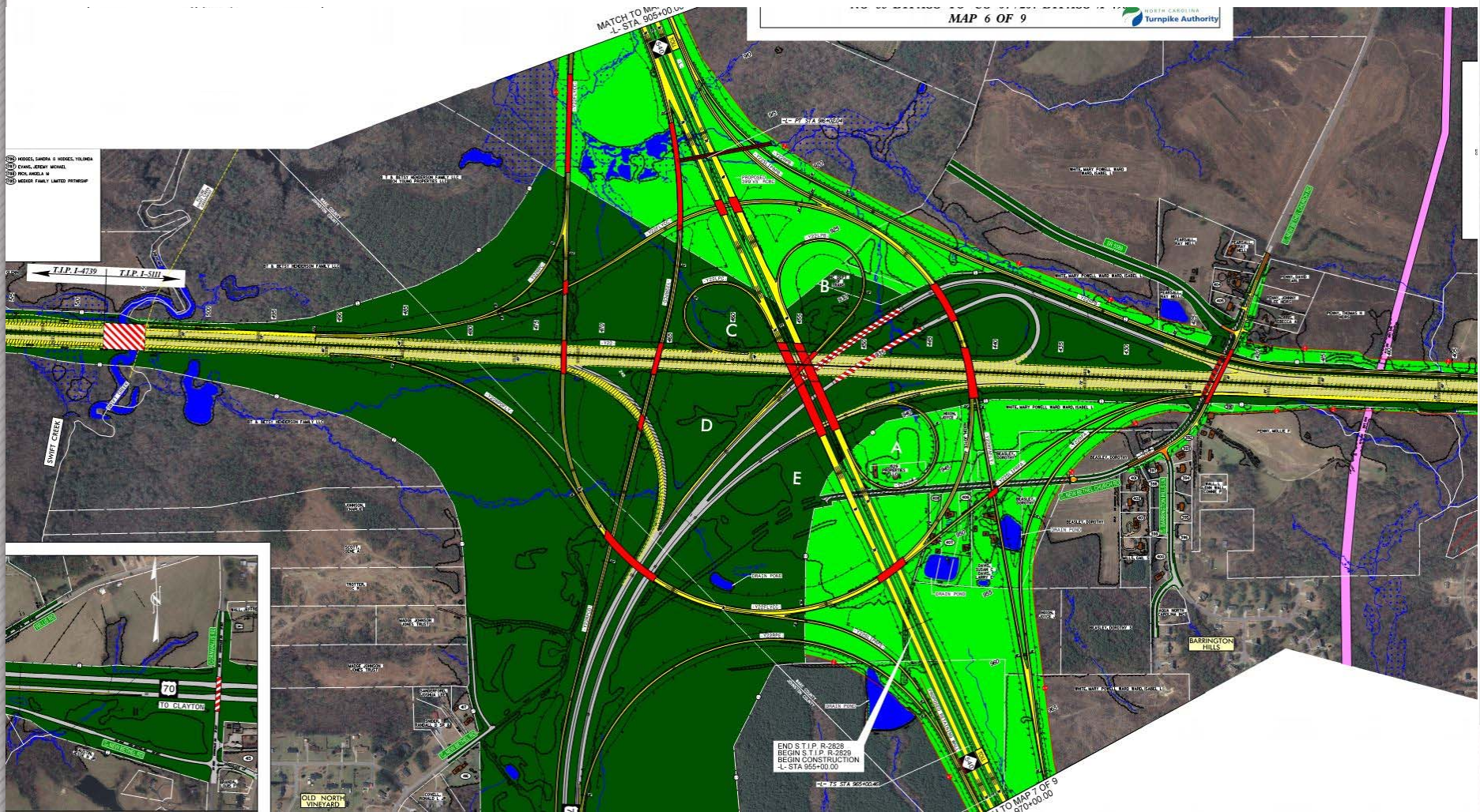
Design Public Hearing Map 6 R-2828



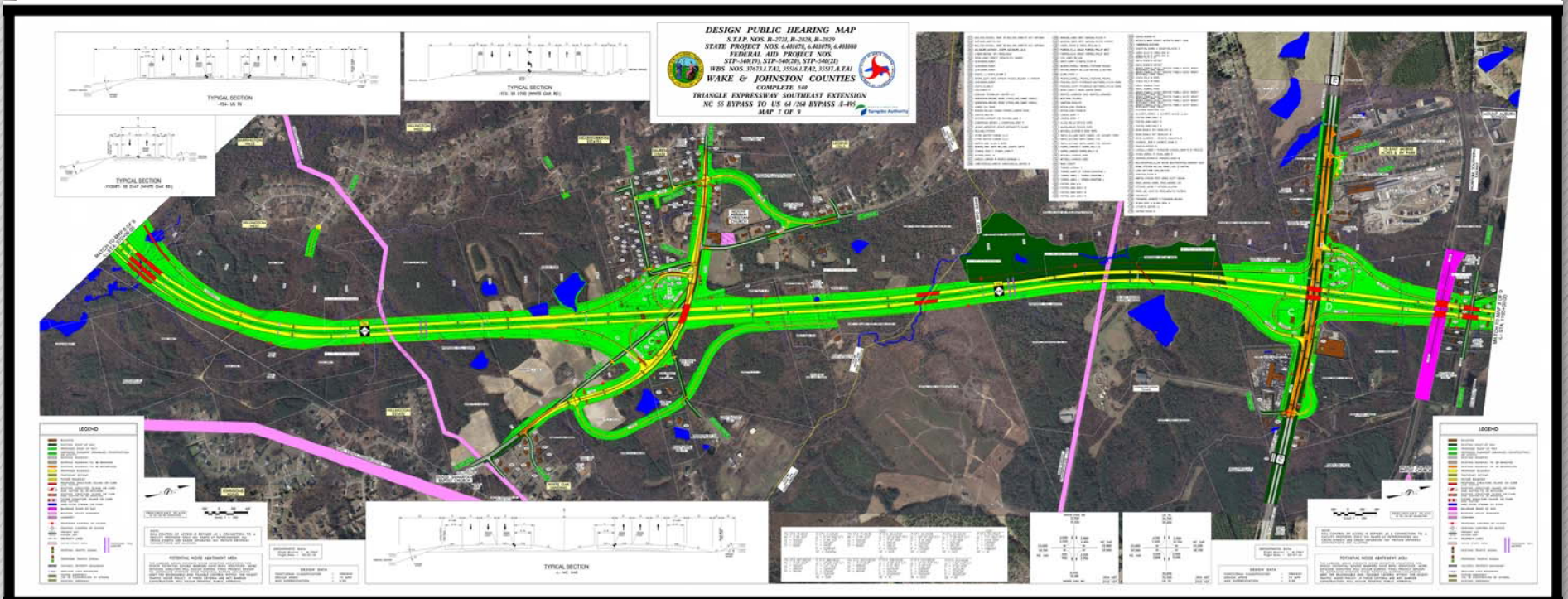
Key Features on Map 6

- Coordination with I-5111 & I-4739
- I-40 and US 70 interchange
 - Five-legged expressway to expressway interchange
 - 19 interchange related bridges (Not all are constructed with R-2828)
 - Ramps @ 60 mph design speed
 - Separation of toll and non-toll exits from I-40
- Cardinal Pipeline crossing
- End R-2828 @ 955+00

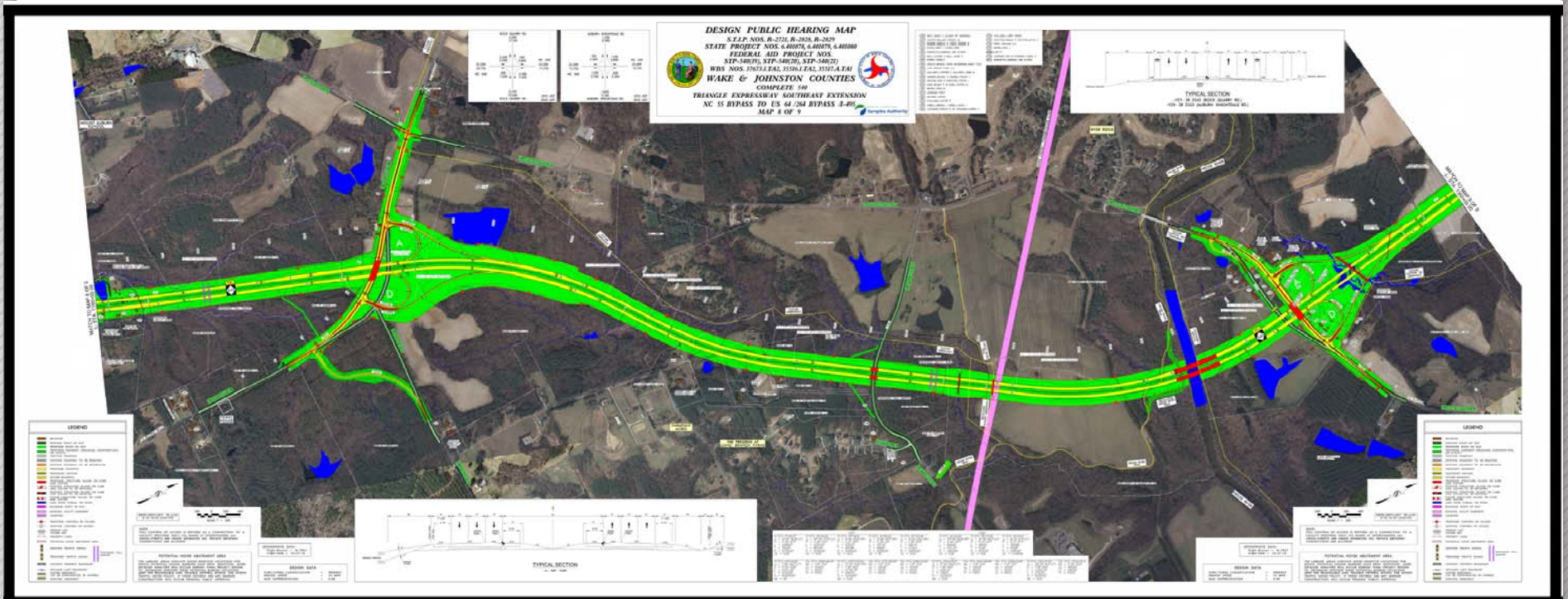
I-40 and US 70 Interchange



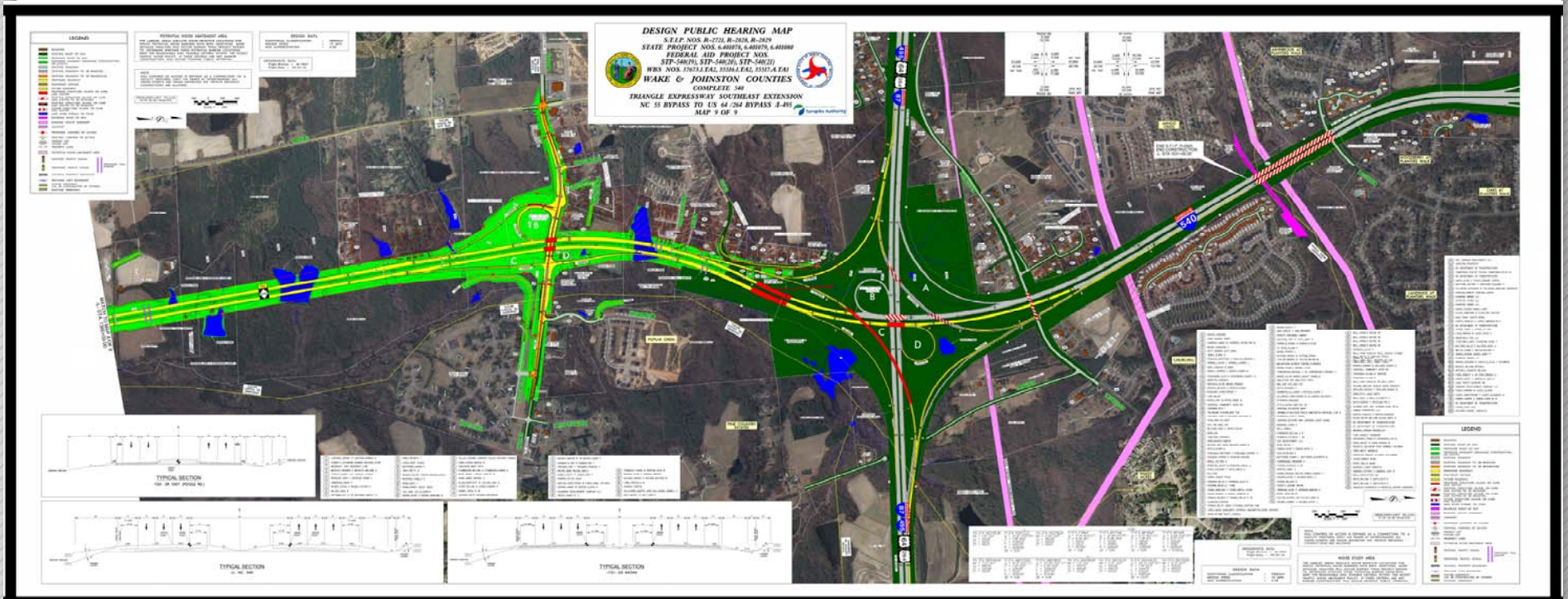
Design Public Hearing Map 7 R-2829 (Future Procurement)



Design Public Hearing Map 8 R-2829 (Future Procurement)



Design Public Hearing Map 9 R-2829 (Future Procurement)



Procurement Information

- Roles & Responsibilities
- Procurement Timelines
- RFQ and Shortlisting
- Provided Materials
- RFP and DB Proposal
- Contract Award and Finance

Roles & Responsibilities

- NCTA
 - Procurement Lead
 - Evaluation Facilitator (ex officio)
 - One Representative on TRC
 - ATC Review
 - Project Management During Preconstruction Phase
 - Design Reviews
 - Project Involvement During Construction

Roles & Responsibilities

- NCDOT
 - Procurement Support
 - Remainder of TRC
 - ATC Review Support
 - Design Review Support As Needed
 - Resident Engineer Contract Administrator
- Private Engineering Firms
 - Procurement Support
 - ATC and Design Review Support

Procurement Timelines

- Target comparable completion dates for all projects
- Enable shortlisting on one project to be complete before next advertisement
- Avoid holidays and standard bid days
- All three timelines set in advance
- Aim to manage workload for NCTA, NCDOT, and bidders
- Subject to change, monitor website

R-2828

Industry Forum	April 12, 2018
RFQ Advertisement	April 16, 2018
Statement of Qualifications due from Design-Build Teams	May 11, 2018
Department Announces Short-listed Teams	May 24, 2018
Department Issues Industry Draft RFP to Short-listed Teams	May 24, 2018
Department Holds Statement of Qualifications Debriefs	Week of June 4, 2018
First Meeting with Short-listed Teams	June 7, 2018
Department Issues Second Industry Draft RFP to Short-listed Teams	June 26, 2018
Second Meeting with Short-listed Teams	July 10, 2018
Department Issues Third Industry Draft RFP to Short-listed Teams	July 24, 2018
Third Meeting with Short-listed Teams	August 7, 2018
Department Issues Final RFP to Short-listed Teams	August 21, 2018
Deadline for Submitting New Alternative Technical Concepts	October 2, 2018
Technical Proposals and Sealed Price Proposals Due	October 30, 2018
Technical Presentations by Short-listed Teams	November 15, 2018
Open Price Proposals	November 20, 2018
Department Holds Technical Proposal Debriefs Pending Contract Execution	January, 2019

R-2721B

Industry Forum	April 12, 2018
RFQ Advertisement	July 2, 2018
Statement of Qualifications due from Design-Build Teams	July 31, 2018
Department Announces Short-listed Teams	August 14, 2018
Department Issues Industry Draft RFP to Short-listed Teams	August 14, 2018
Department Holds Statement of Qualifications Debriefs	Week of August 27, 2018
First Meeting with Short-listed Teams	August 28, 2018
Department Issues Second Industry Draft RFP to Short-listed Teams	September 11, 2018
Second Meeting with Short-listed Teams	September 25, 2018
Department Issues Third Industry Draft RFP to Short-listed Teams	October 9, 2018
Third Meeting with Short-listed Teams	October 23, 2018
Department Issues Final RFP to Short-listed Teams	November 6, 2018
Deadline for Submitting New Alternative Technical Concepts	December 18, 2018
Technical Proposals and Sealed Price Proposals Due	January 29, 2019
Technical Presentations by Short-listed Teams	February 13, 2019
Open Price Proposals	February 19, 2019
Department Holds Technical Proposal Debriefs Pending Contract Execution	April, 2019

R-2721A

Industry Forum	April 12, 2018
RFQ Advertisement	September 4, 2018
Statement of Qualifications due from Design-Build Teams	October 2, 2018
Department Announces Short-listed Teams	October 18, 2018
Department Issues Industry Draft RFP to Short-listed Teams	October 18, 2018
Department Holds Statement of Qualifications Debriefs	Week of October 29, 2018
First Meeting with Short-listed Teams	November 1, 2018
Department Issues Second Industry Draft RFP to Short-listed Teams	November 20, 2018
Second Meeting with Short-listed Teams	December 6, 2018
Department Issues Third Industry Draft RFP to Short-listed Teams	December 20, 2018
Third Meeting with Short-listed Teams	January 8, 2019
Department Issues Final RFP to Short-listed Teams	January 22, 2019
Deadline for Submitting New Alternative Technical Concepts	March 19, 2019
Technical Proposals and Sealed Price Proposals Due	March 27, 2019
Technical Presentations by Short-listed Teams	April 11, 2019
Open Price Proposals	April 16, 2018
Department Holds Technical Proposal Debriefs Pending Contract Execution	June, 2019

RFQ and Shortlisting

	R-2828	R-2721B	R-2721A
Advertisement	April 16	July 2	September 4
SOQ Due Date	May 11	July 31	October 2
Shortlist Date	May 24	August 14	October 18
Quality Credit	25%	20%	20%
Stipend	\$350,000	\$175,000	\$125,000

- Technical Review Committee with facilitator will shortlist 2-5 teams with Alternate Option
- Adjectival Scoring System
- Debriefs

RFQ

- Nearly identical to NCDOT pursuits
 - Request RFQ package
 - RFQ Holder List will be maintained
 - Preconstruction Firm Restrictions and Exceptions
 - Prequalification Requirements
 - Evaluation Criteria
 - Submit Statement of Qualifications on time **with close attention to page limits**
- **Financial Qualifications and Surety Letter**

RFQ

- Anticipated scopes of work noted in RFQ and the Project Synopsis to be on website
- AET and ITS components for tolling operations are not part of these contracts
- CEI performed by NCDOT or its agent(s)
- Right of Way acquisition scope will vary by project

Provided Materials

- All environmental documents are online at website noted at end of presentation
- Other materials will be provided to shortlisted teams through a dedicated shared site
- Materials to include preliminary design files, geotechnical inventory, preliminary utility information, right of way plans for R-2721A and R-2721B, surveys, etc.

RFP and DB Proposal

- Nearly identical to NCDOT pursuits
 - ATCs (but unlimited)
 - Industry Draft RFPs (3) followed by one-on-one meetings
 - Two additional one-on-one meetings
 - Evaluation criteria and adjusted price
 - Pavement designs will be specified, including alternate types
- Same TRC for both phases but will differ by project

Contract Award and Finance

- Anticipated combination of TIFIA, GARVEE, STIP and Toll Revenue Bonds to fund project
- Advanced funding for preconstruction portions of contracts
- Limited Notice to Proceed
- Unlimited Notice to Proceed upon financial close
- Extended bid validity periods likely with potential escalation provisions for unanticipated delays in Unlimited Notice to Proceed

DBE Goals and Considerations

- DBE Goals:
 - R-2828: 10%
 - R-2721A: 12%
 - R-2721B: 12%
 - Applies to construction and right of way portion of contract commensurate with past DB procurements
- DBE participation in preconstruction efforts considered as part of evaluation (both phases)
- DBE Outreach (current and ongoing)

Third Party Considerations

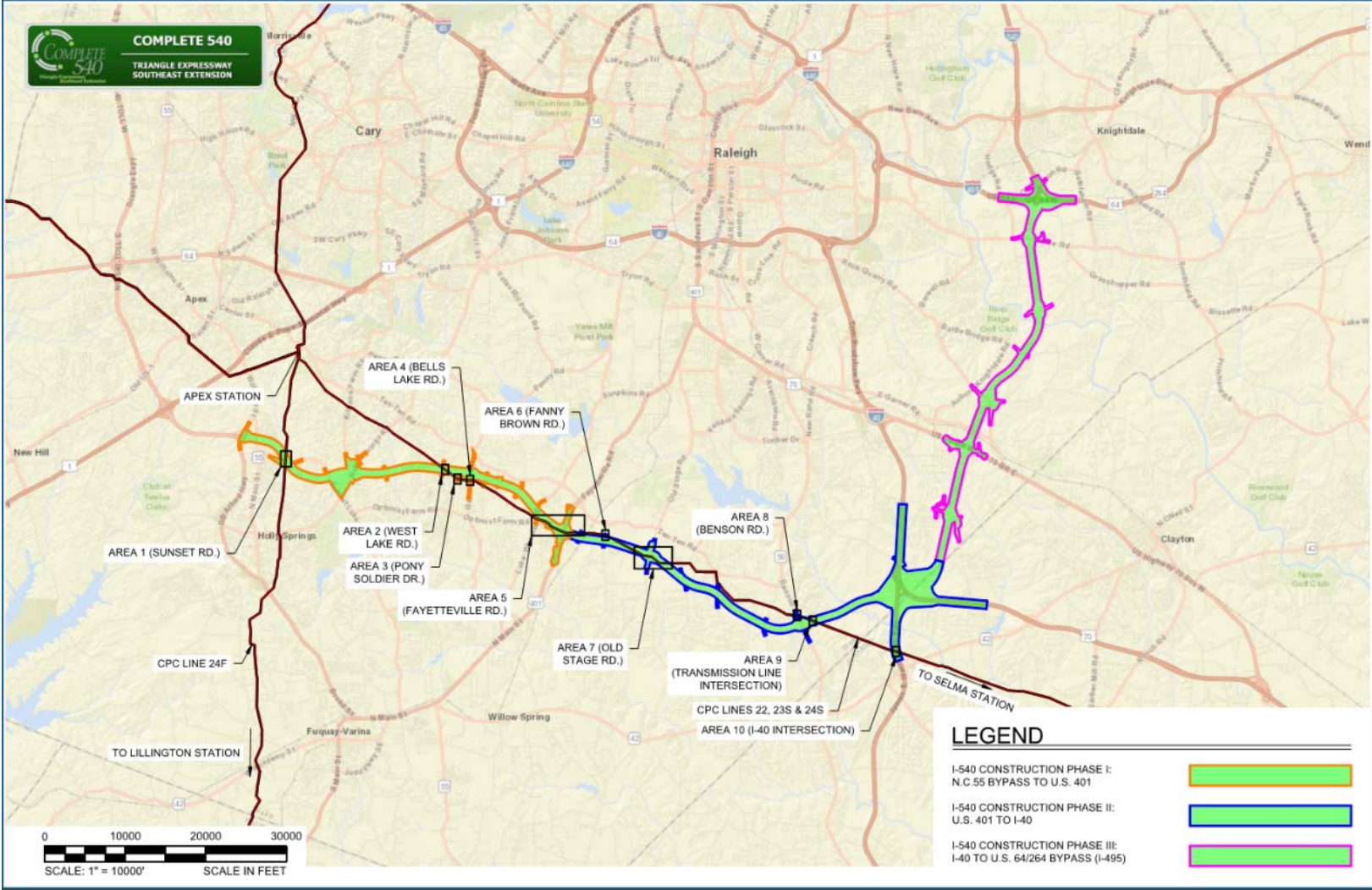
- Utilities
 - Colonial Pipeline
 - Other Utilities
- Railroad
- Right of Way
- Permitting

Colonial Pipeline Impacted Areas





Complete 540 Area Map





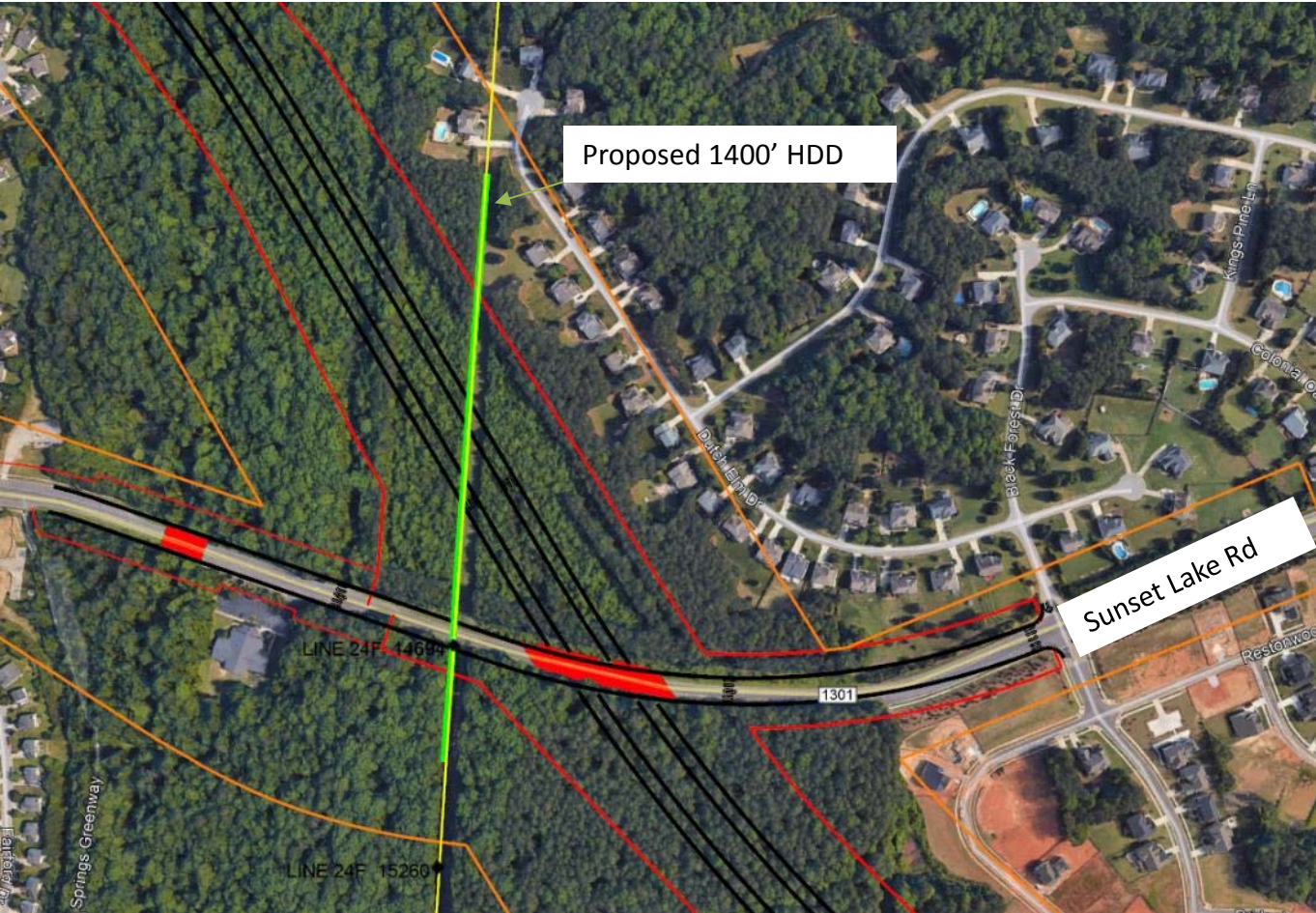
Area 1 (Sunset Lake Rd)

Project Scope

- Install approximately 1400 LF of 6" x 0.500" w.t. pipe via HDD method
- Tie-in new 6" HDD pipe to existing line
- Clean, abandon, and remove existing line crossing
- Estimated construction start: Sep 2018
- Estimated construction end: Mar 2019



Area 1 – Sunset Lake Road



Line 24F

Proposed 540 ROW



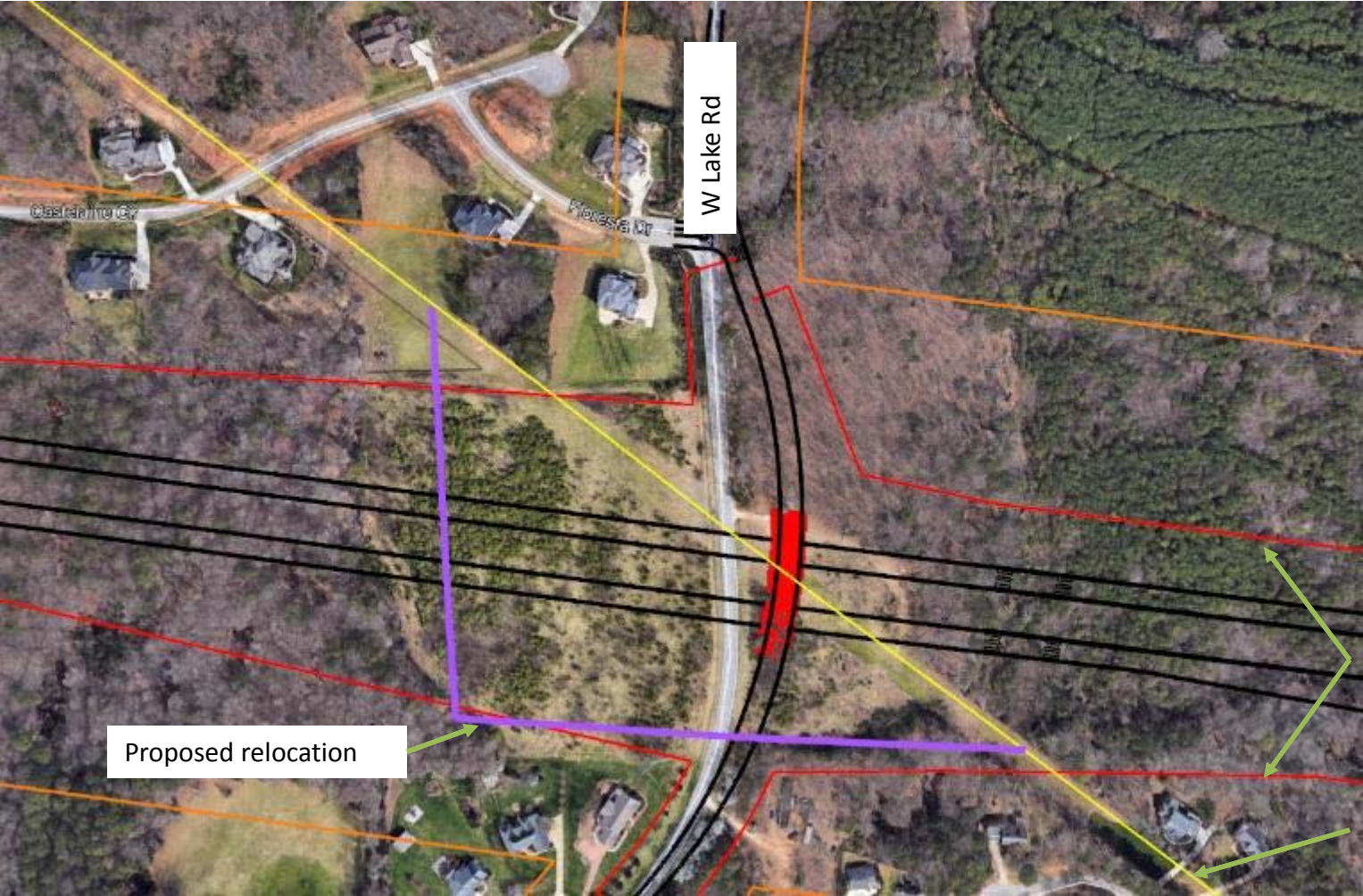
Area 2 (West Lake Road)

Project Scope

- Install approximately 1,630 LF of 16" x 0.500" w.t. pipe via open cut & Jack-and-Bore methods
- Tie-in new 16" pipe to existing line
- Clean, abandon, and remove existing lines between tie-in points
- Estimated construction start: Sep 2018
- Estimated construction end: May 2019



Area 2 – West Lake Road



Proposed relocation

Proposed 540 ROW

Line 22 / 23S / 24S



Area 3 (Pony Solder Drive)

Project Scope

- Install approximately 100 LF of 2" concrete jacketing onto existing line under proposed Pony Soldier Drive extension.
- Estimated construction start: Sep 2018
- Estimated construction end: Feb 2019



Area 3 – Pony Soldier Drive





Area 4 (Bells Lake Road)

Project Scope

- Install approximately 100 LF of 2" concrete jacketing onto existing line on east and west side of Bells Lake Road.
- Estimated construction start: Feb 2019
- Estimated construction end: May 2019



Area 4 – Bells Lake Road





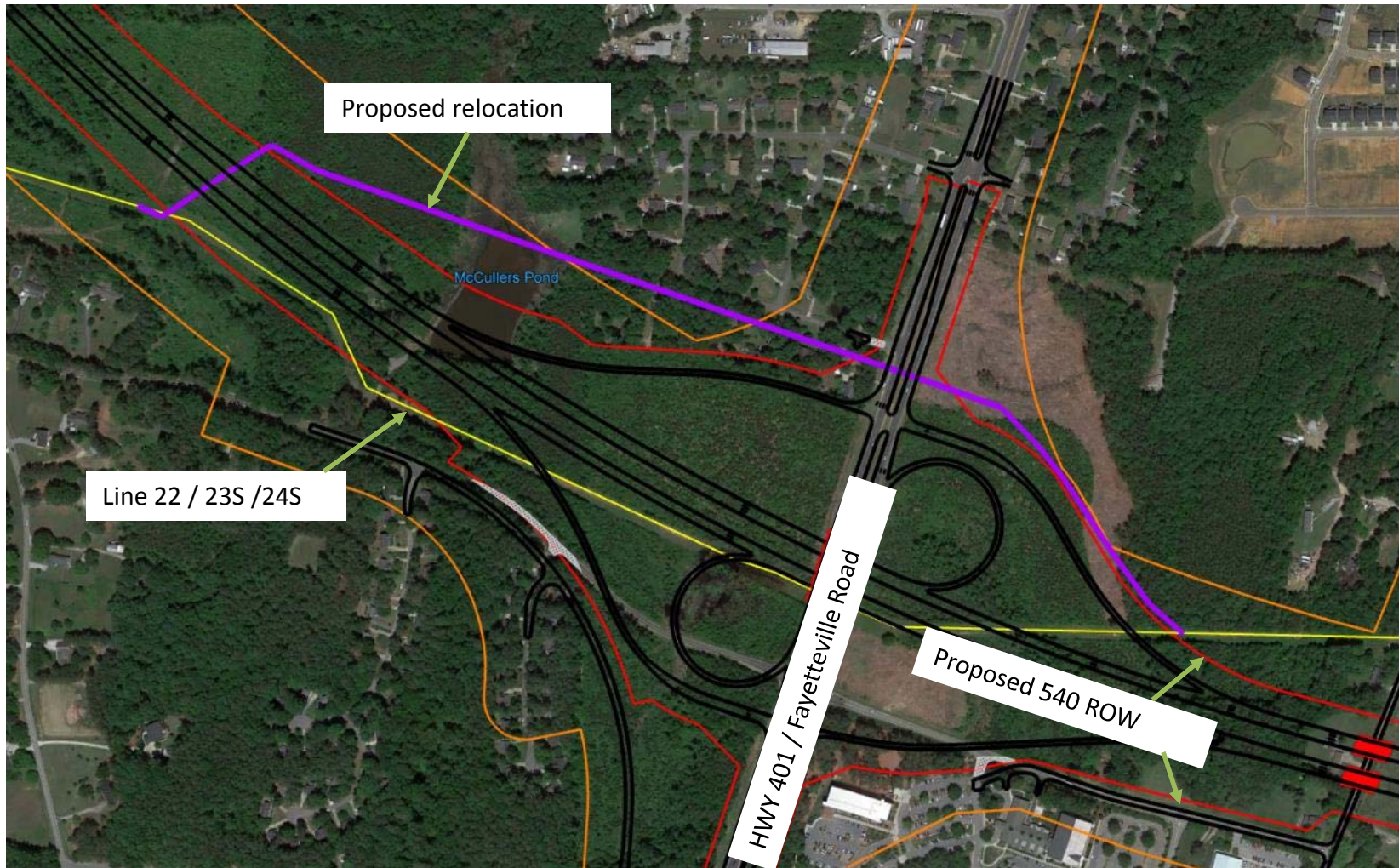
Area 5 (Fayetteville Road)

Project Scope

- Install approximately 4,450 LF of 16" x 0.500" w.t. pipe via open cut & HDD methods
- Tie-in new 16" pipe to existing line
- Clean, abandon, and remove existing lines between tie-in points
- Estimated construction start: Apr 2019
- Estimated construction end: Jan 2020



Area 5 – Fayetteville Road





Area 6 (Fanny Brown Road) Project Scope

- Initial Road Design showed expansion of ROW which would require extension of concrete jacketing.
- Road was redesigned to remove conflict
- No work required



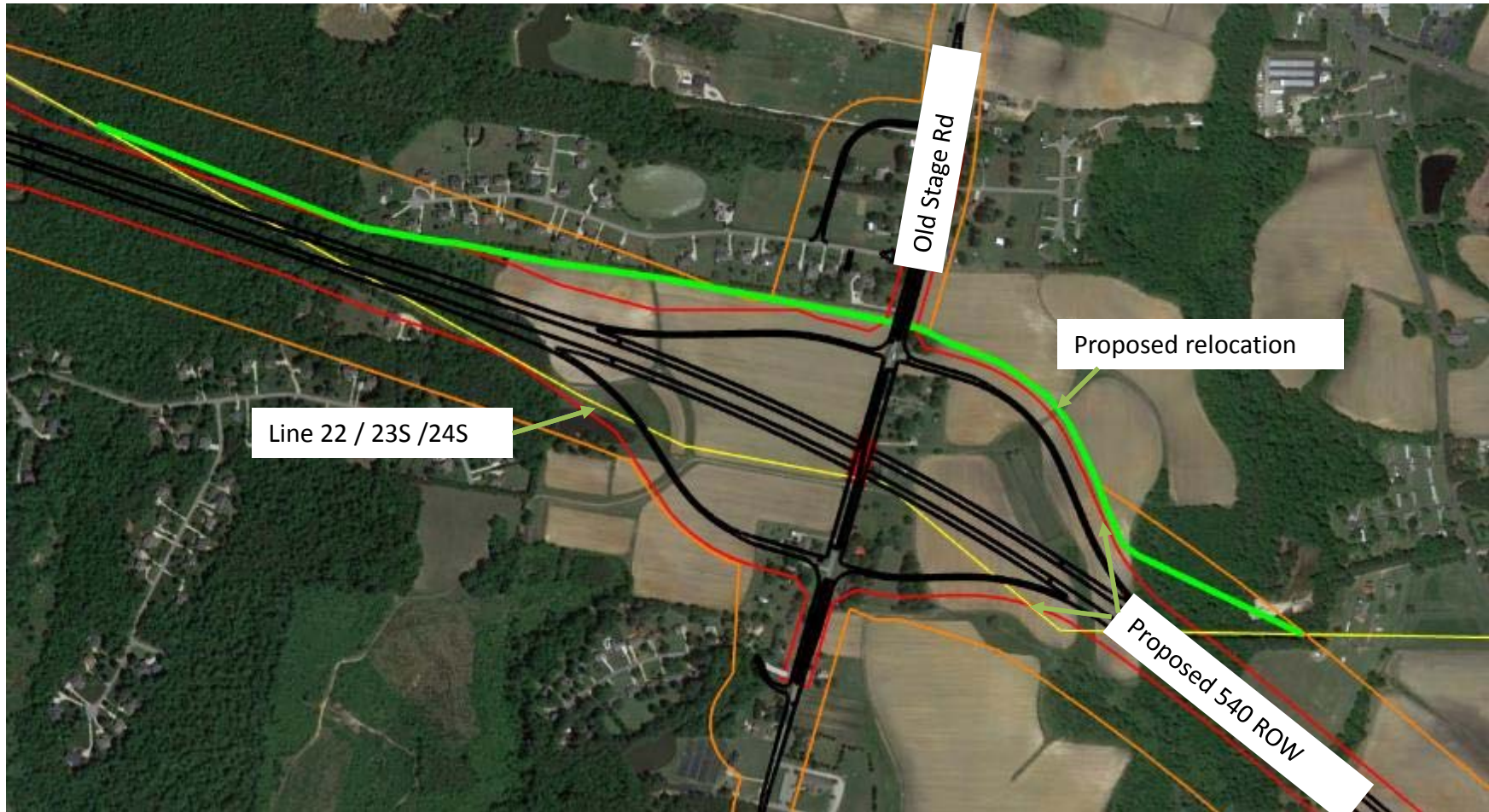
Area 7 (Old Stage Road)

Project Scope

- Install approximately 7,100 LF of 16" x 0.500" w.t. pipe via open cut & Jack-and-Bore methods
- Tie-in new 16" pipe to existing line
- Clean, abandon, and remove existing lines between tie-in points
- Estimated construction start: Jun 2019
- Estimated construction end: Feb 2020



Area 7 – Old Stage Road





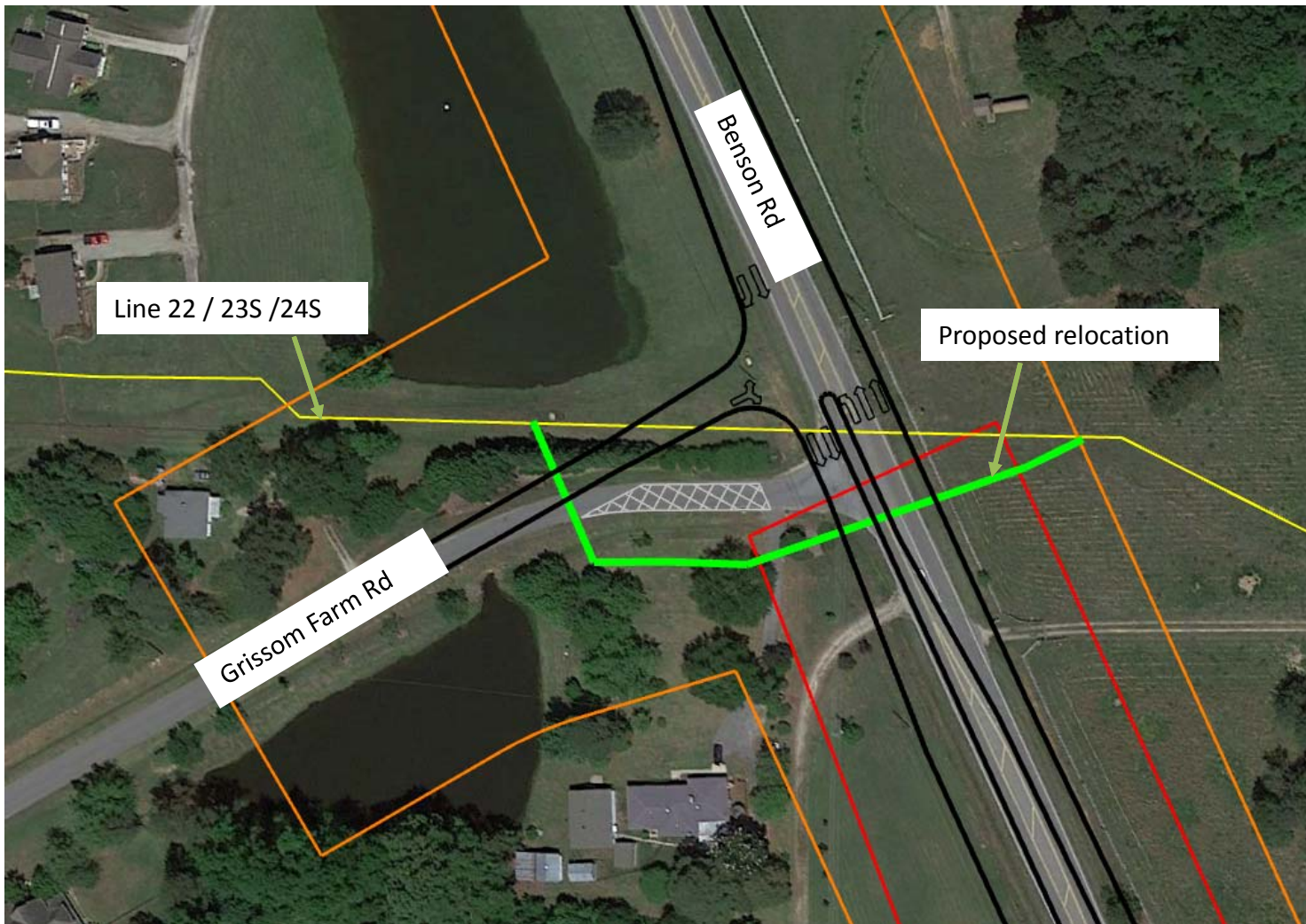
Area 8 (Benson Road)

Project Scope

- Install approximately 500 LF of 16" x 0.500" w.t. pipe via open cut & Jack-and-Bore methods
- Tie-in new 16" pipe to existing line
- Clean, abandon, and remove existing line between tie-in points
- Estimated construction start: May 2019
- Estimated construction end: Oct 2019



Area 8 – Benson Road





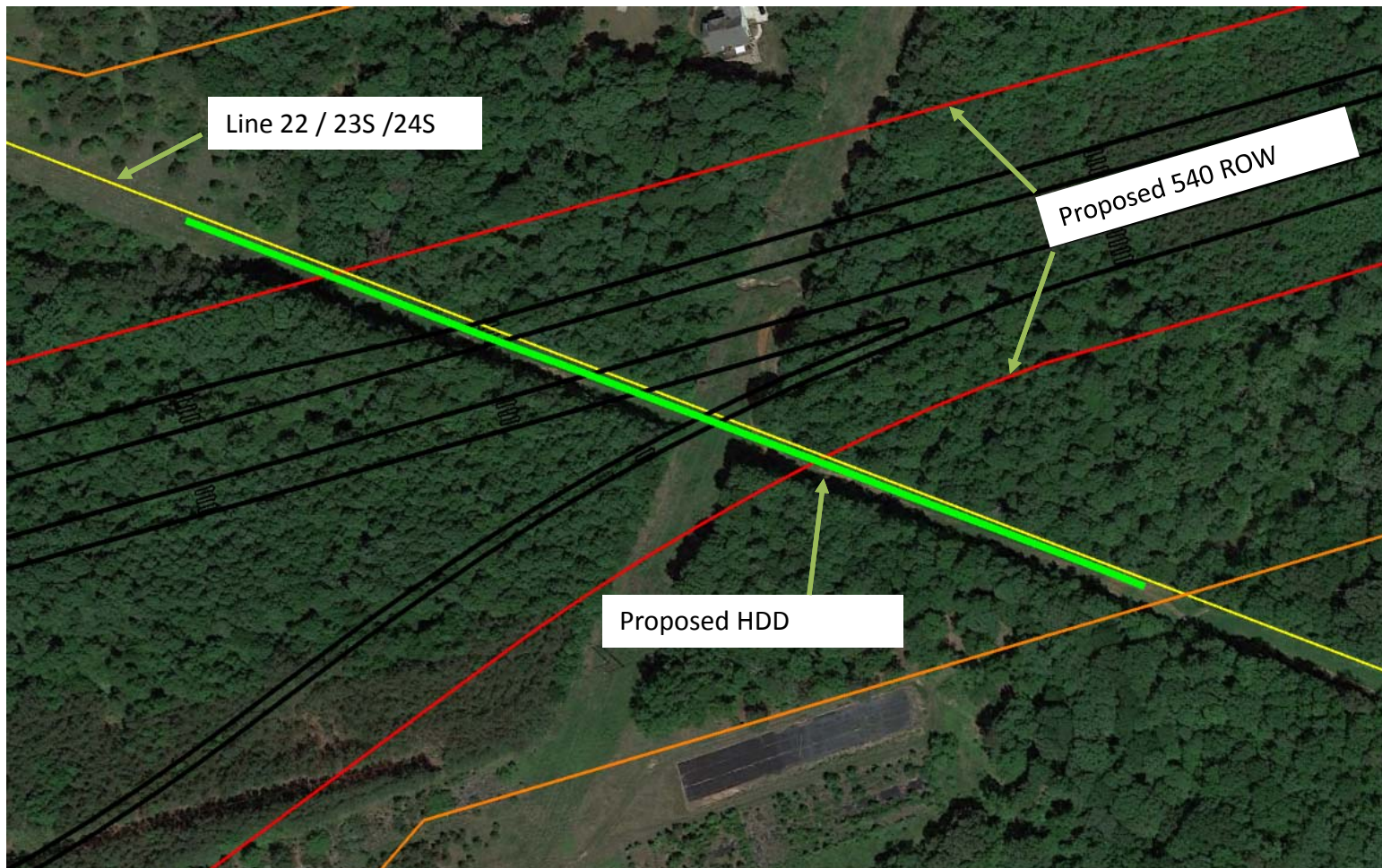
Area 9 (Transmission Line)

Project Scope

- Install approximately 1,300 LF of 16" x 0.500" w.t. pipe via HDD method
- Tie-in new 16" pipe to existing line
- Clean, abandon, and remove existing line between tie-in points
- Estimated construction start: Feb 2020
- Estimated construction end: Aug 2020



Area 9 – Transmission Line



Other Major Utilities

- Water/Sewer
 - City of Raleigh
 - Town of Holly Springs
 - Town of Cary
 - Town of Fuquay-Varina
 - Town of Garner
- Gas
 - Colonial Pipeline
 - Cardinal Pipeline
 - PSNC

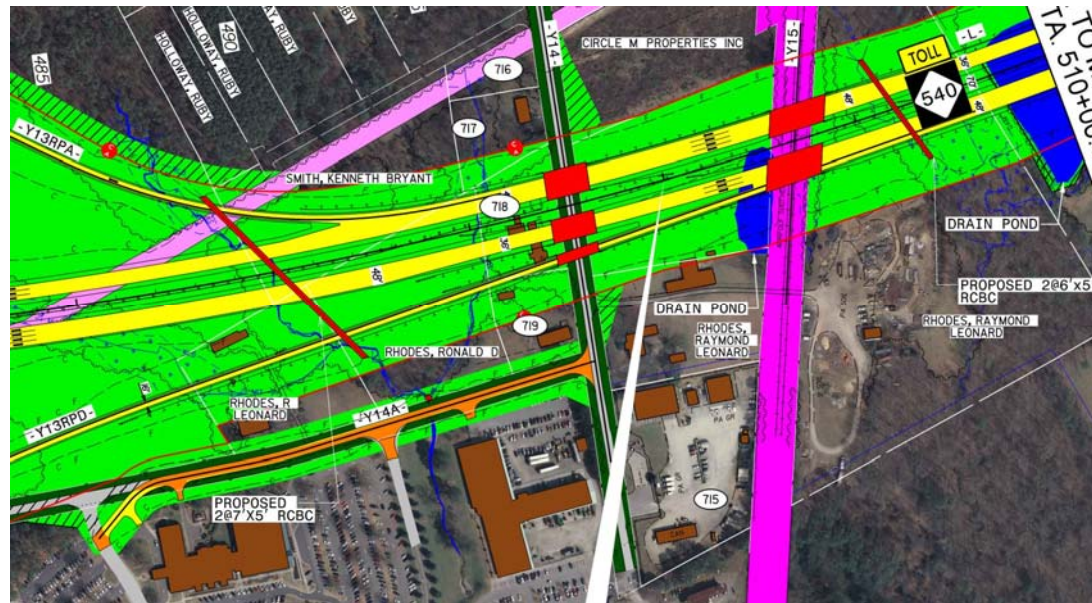
Other Major Utilities

- Power
 - Duke Energy – Distribution
 - Duke Energy – Transmission
- Communications
 - AT&T (Local)
 - AT&T (Legacy)
 - Century Link
 - Charter Communications/Spectrum

Other Major Utilities

- Communications (continued)
 - Earthlink
 - Google Fiber
 - Level 3
 - MCNC
 - Verizon Business (MCI)

NS Railroad Coordination



- Engineering Agreement executed
- Will be working to define clearance, flagging and insurance requirements
- DB Team responsible for coordination

Right of Way

- Right of Way Plans – R-2721A & R-2721B
 - Anticipated completion August 2018
 - NCTA anticipates hiring firm(s) to begin ROW work
 - Depending on progress, these projects may allow for DB Team to supplement these efforts with their own firm or further direct NCTA firms in priorities
- DB Team will include ROW firm(s) for R-2828
- 40 parcels underway
- Map Act – Some work will be considered Extra Work (reference Forsyth R-2247 DB ROW Scope)

Permitting

- NCTA pursuing corridor permit, to include final permits for R-2721A and R-2721B
- R-2721A & R-2721B – DB Team responsible for minor permit modification application as needed
- R-2828 – DB Team responsible for 4B and 4C type agency meetings and major permit modification permit application
- Schedule:
 - 4B meeting: February 2018
 - 4C meeting: May 2018
 - Permit Application: June 2018
 - Permit Received: Late 2018

Procurement Website

<https://connect.ncdot.gov/letting/Pages/Design-Build.aspx>

General Project Website

www.ncdot.gov/complete540

Request the RFQ on or after Ad Date

rfq_package_request@ncdot.gov

Procurement Questions

designbuild@ncdot.gov

Open Discussion