

Type I or II Categorical Exclusion Action Classification Form

STIP No.:	B-5833
WBS Element:	45786.1.2
Federal Aid No.:	NHP-0021(023)

A. Project Description:

Replace Bridge No. 29 on US 21 Business over I-77, Yadkin County.

The replacement structure will use 2-span continuous plate girders approximately 249-feet long providing a clear roadway width of 40-feet. The new structure will be realigned to the northeast. The bridge will include two 12-foot lanes and 8-foot offsets. The bridge length is based on preliminary design information and is set by minimum vertical and horizontal requirements. The project is shown in Figure 1.

The intersection of Loop D (from southbound I-77 to US 21 Business) and Ramp D (from US 21 Business to southbound I-77) will be shifted westward and realigned and extended to intersect with US 21 Business. The intersection of Loop A (from US 21 Business to I-77 northbound) and Ramp A (from I-77 northbound to US 21 Business) will be realigned and extended to intersect with US 21 Business.

The 4'X6' culvert on US 21 Business over an unnamed tributary to Sandyberry Creek will be replaced with a single 7'X7' reinforced box culvert (RCBC). The proposed single 7'X7' RCBC will match the natural gradient of the stream and be buried a minimum of one-foot. Due to the steepness of the natural gradient of the stream, sills and baffles are proposed to ensure that native bed material will be retained in the new RCBC.

Project construction on US 21 Business will extend approximately 1600-feet from the western end of the new bridge and 1200-feet from the eastern end of the new bridge. The approaches will be widened to provide two 12-foot travel lanes with 8-foot shoulders (11-feet with guardrail) including 5-foot paved.

Traffic will be maintained on-site; however, an off-site detour is planned during some of the construction period. The off-site detour will utilize US 21 Business and NC 67. The detour is shown in Figure 2.

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a structurally deficient bridge. NCDOT records indicate Bridge 980029 has a sufficiency rating of 50.21 out of a possible 100 for a new structure in 2016. The bridge is considered structurally deficient due to a substructure appraisal of 4 out of 9 according to Federal Highway Administration standards.

C. Categorical Exclusion Action Classification:

Type I(B) - Ground Disturbing Action

D. Proposed Improvements:

23 CFR 771.117 (c)

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117 (e)(1-6).

E. Special Project Information:**Design:**

- Functional classification: Major Collector
- Statewide Tier Guidelines
- Project length: 0.578 mile
- Design Speed: 50 mph
- Posted Speed: 45 mph
- 2041 Design Year ADT = 4,550 vpd
- Design Exception: not required

Alternatives Considered:

The No-Build alternative would result in eventually closing the road which is unacceptable given the traffic service provided by US 21 Business.

Alternate 1 would construct Bridge No. 29 on an arch over I-77 on new alignment to the northeast.

Alternate 2 (Recommended) would construct Bridge No. 29 on constant grade over I-77 on new alignment to the northeast. Traffic will be maintained on-site; however, an off-site detour is planned during some of the construction period. The off-site detour will utilize US 21 Business and NC 67. The project detour shown in Figure 2 is for temporary construction closures.

Alignments to the southwest were determined not to be feasible due to anticipated impacts to existing ramps, and high number of residential and business relocations.

Rehabilitation of the old bridge is not practical due to its age and being structurally deficient. The extent of deterioration and the numerous locations of areas of disrepair on the bridge make rehabilitation inefficient, ineffective, and costly beyond reasonable limits.

Estimated Costs: The estimated construction costs are based on 2017 prices.

ITEM	Alternative 1	Alternative 2 (Recommended)
Construction Costs	\$4,400,000	\$4,600,000
Right-of-Way Costs*	\$300,000	\$300,000
Total Estimated Cost	\$4,700,000	\$4,900,000

*Cost from 2020-2029 Draft STIP

Relocations: One relocation is anticipated with the proposed project. The BP Gas Station and convenience store (Thruway Food Mart) will be impacted due to the realignment of US 21 Business.

Pedestrian and Bicycle Accommodations: The Yadkin County Comprehensive Transportation Plan identifies US 21 Business as an existing bicycle route. NCDOT Division of Bicycle and Pedestrian Transportation recommends that the replacement bridge include minimum 4-foot paved shoulders (5-foot preferred), with bicycle-safe railing. The railing should be at least 42 inches high, with heights of 48 and 54 inches recommended.

A Complete Streets Project Sheet was approved by NCDOT in May 2020.

Public Involvement: A landowner notification letter was sent to all property owners affected by this project in February 2016. Property owners were invited to comment. No comments have been received to date.

Start of Study letters were sent to local officials, and environmental permit and resource agencies with jurisdiction in the proposed project area in December 2015. All comments have been addressed within this document.

In accordance with the NCDOT Tribal Protocol, the following Tribal Partners were notified on June 15, 2020 of the proposed project: Cherokee Nation, Eastern Band of Cherokee Indians, and United Keetoowah Band of Cherokee Indians in Oklahoma. Comments received will be addressed during final design.

Bridge Demolition: Bridge No. 29 is constructed of concrete and steel and should be possible to remove with no resulting debris based on standard demolition practices.

GeoEnvironmental: Three properties with geoenvironmental concerns were identified within the study area. One site, The Thruway Food Mart, is an anticipated relocation. This site has five registered USTs, all were installed in 1985.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)				
<p>Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.</p> <ul style="list-style-type: none"> • <i>If any question 1-7 is checked “Yes” then NCDOT certification for FHWA approval is required.</i> • <i>If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.</i> 				
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked “Yes”.)			Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Other Considerations for Type I and II Ground Disturbing Actions (continued)</u>		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F:

Question 5: Relocations

The proposed project may result in the displacement of one business. The relocation program for the proposed project will be conducted in accordance with 49 CFR 24, The Uniform Relocation and Real Property Acquisition Act of 1970, as Amended. The program is designed to provide assistance to displaced persons in relocating to a replacement site in which to live or do business.

Question 8: Federally Protected Species

Northern long-eared bat (NLEB): A review of NCNHP records, updated January 2020, indicates no known occurrences of federally protected species within 1.0-mile of the project study area. The nearest known Northern long-eared bat hibernaculum is approximately 56-miles southwest of the project and no known NLEB roost trees occur within 150-feet of the project area. NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) Rule, codified at 50 CFR § 17.40 (o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

Question 30: Farmland Protection Policy / Voluntary Agricultural District (VAD)

The Marian G. Welborn Family Limited Partnership (DB 574 page 156) located in the northeast quadrant of the project study area is a VAD property. The proposed project has anticipated impacts of 0.61 acre for Right-of-Way and 0.08 acre for an easement. The Yadkin County VAD allows NCDOT minor right of way takes. The North Carolina Cooperative Extension -Yadkin County Center on June 2, 2020 stated that “they have no issues with NCDOT requiring ROW and easements for the B-5833 bridge replacement.”

Should right-of-way need to be acquired from the VAD through eminent domain, the Yadkin County Voluntary Agricultural District Ordinance requires [that the Agricultural Board hold a public hearing on the proposed condemnation before condemnation may be initiated, or other specific provision of that county’s enabling ordinance.] Any VAD/EVAD lands converted to non-agricultural use as part of a temporary construction easement must be returned to farmable condition by the project’s completion.

H. Project Commitments (attach as Green Sheet to CE Form):

NCDOT PROJECT COMMITMENTS

Replace Bridge No. 29 on US 21 Business over I-77
Yadkin County
STIP No. B-5833

Division 11 - Offsite Detour

Yadkin County School Transportation will be contacted at least one month prior to road closure to make sure the necessary plans to adequately reroute school busses at (336) 679-2233.

Yadkin County Emergency Medical Services will be contacted at least one month prior to road closure to make the necessary plans to adequately reroute school busses at (336) 849-7722.

Division 11 – Voluntary Agricultural District

Should right-of-way need to be acquired from the VAD through eminent domain, the Yadkin County Voluntary Agricultural District Ordinance requires [that the Agricultural Board hold a public hearing on the proposed condemnation before condemnation may be initiated, or other specific provision of that county's enabling ordinance.] Any VAD/EVAD lands converted to non-agricultural use as part of a temporary construction easement must be returned to farmable condition by the project's completion.

Categorical Exclusion Approval:

STIP No:	<u>B-5833</u>
WBS No.:	<u>45786.1.1</u>
Federal Aid No.:	<u>NHP-0021(023)</u>

Prepared By:

7/24/2020 | 6:55 AM PDT DocuSigned by:
Stacy Oberhausen

 Date Stacy B. Oberhausen, PE, CPM
 TGS Engineers

Prepared For:

Structures Management Unit
 North Carolina Department of Transportation

Reviewed By:

7/30/2020 | 11:18 AM EDT DocuSigned by:
Philip S. Harris, III, PE

 Date Philip S. Harris, III, PE
 NCDOT, Environmental Analysis Unit Head

- Approved**
 - If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.
- Certified**
 - If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
 - If classified as Type III Categorical Exclusion.

7/30/2020 | 11:10 AM EDT DocuSigned by:
Kevin Fischer, PE

 Date Kevin Fischer, PE, Assistant State Structures Engineer
 NCDOT, Structures Management Unit

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

7/30/2020 | 10:02 AM PDT DocuSigned by:
Janet W Bauer

 Date for John F. Sullivan, III, PE, Division Administrator
 Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. Eric Boyette
SECRETARY

June 25, 2020

Dr. Wenonah Haire
Tribal Historic Preservation Officer
Catawba Indian Nation
1536 Tom Steven Road
Rock Hill SC, 29730

Dear Dr. Haire,

The North Carolina Department of Transportation has started the project development, environmental, and engineering work for the replacement of Bridge No. 29 over I-77 on U.S. 21 Business in Yadkin County, NC as project B-5833.

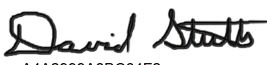
The US Army Corps of Engineers is the lead agency and a permit is anticipated under the Section 404 Process with the USACE.

The project vicinity map is attached. The coordinates of this project are approximately 36.197598, -80.811420.

This project was reviewed/surveyed for cultural resources by NCDOT under the terms of the 2015 Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation and the North Carolina State Historic Preservation Office for Minor Transportation Projects in North Carolina (PA). The results of that review/survey are attached. The environmental document for this undertaking is currently under development.

Please respond by July 27th so that your comments can be used to evaluate potential environmental impacts during the design phase of this project. If you have any questions concerning this project, or would like additional information, please contact me at (919) 707-6442 or email dstutts@ncdot.gov.

Thank You,

DocuSigned by:

A4A2999A8BC64F2...

David Stutts, PE

Structures Management Unit Project Engineer, NCDOT

cc: Matt Wilkerson, NCDOT Archaeology Team Lead

Lori Beckwith, USACE Division 11

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
STRUCTURES MANAGEMENT UNIT
1581 MAIL SERVICE CENTER
RALEIGH, NC 27699-1581

Telephone: (919) 707-6442
Fax: (919) 250-4082
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610



PAT McCrory
Governor

NICHOLAS J. TENNYSON
Secretary

February 16, 2016

Dear Landowner:

The North Carolina Department of Transportation (Department) is constantly working to provide better and safer transportation facilities for public uses in North Carolina. The effects that these proposed facilities have on the human and natural environment are of great concern to the Department and must be adequately described in environmental documents, such as Environmental Assessments or Environmental Impact Statements. As part of this process, the Department is obligated to identify and document environmental resources so that they can be avoided or impacts reduced. Streams and wetlands are two of the resources that must be identified during the review process. The Department has begun planning studies for the proposed replacement of bridge No. 29 on US 21 BUS, over I-77, Yadkin County, TIP Project B-5833.

Over the next several weeks, representatives of the Department, as well as the US Army Corps of Engineers, Wilmington District, Regulatory Division, may be present on your property for the purposes of conducting or verifying the limits of waters and wetlands pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. These representatives will be wearing orange safety vests, have picture ID badges, and will be hanging pink and black flagging, or ribbons, on trees and shrubs to identify the limits of streams and wetlands, if present, on the property. This flagging does not indicate the location of a proposed transportation project, but it is very important in our environmental review process. Please do not disturb this flagging.

Please note that if the U.S. Army Corps of Engineers has already issued a Jurisdictional Determination on your property confirming the presence of streams and/or wetlands, or if you have general questions or comments about the project, contact the NCDOT Planning Engineer Jonathan Carr, by phone (919) 707-6014, or via email at jecarr@ncdot.gov. If you call, please mention NCDOT project number **B-5833**.

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard W. Hancock". The signature is fluid and cursive.

Richard W. Hancock, PE, Unit Head
Project Development and Environmental Analysis Unit

Nothing ComparesSM



PAT McCrory
Governor

NICHOLAS J. TENNYSON
Secretary

Febrero 16, 2016

Estimado propietario

El Departamento de Transporte de Carolina del Norte (Departamento) trabaja constantemente para ofrecer mejores y más seguras instalaciones de transporte para el uso público en Carolina del Norte. Los efectos que estas instalaciones propuestas tienen sobre el medio ambiente representan una gran preocupación para el Departamento y deben ser descritas adecuadamente en documentos ambientales, tales como Exclusiones Categóricas, Evaluaciones Ambientales o Declaraciones de Impacto Ambiental. Como parte de este proceso, el Departamento está obligado a identificar y documentar recursos ambientales con el fin de evitar o reducir los impactos. Los arroyos y los humedales son dos de los recursos que deben ser identificados durante el proceso de revisión. El Departamento ha iniciado los estudios de planeación relacionados con la propuesta reemplazo de la puentes número 29 de US 21 BUS, encima de I-77, en el condado Yadkin, Proyecto TIP B-5833.

Durante los próximos meses, es posible que representantes del Departamento, así como del Cuerpo de Ingenieros del Ejército de los Estados Unidos del distrito de Wilmington, pertenecientes a la División Regulatoria, se presenten en su propiedad con el propósito de conducir o verificar los límites de aguas y humedales de conformidad con la Sección 404 del Acta de Agua Limpia y/o la Sección 10 del Acta de Ríos y Puertos de 1899. Estos representantes vestirán chalecos de seguridad de color naranja, llevarán credenciales de identificación con fotografía y estarán colgando banderines de color rosa y negro, o listones, en árboles y arbustos para identificar los límites de arroyos y humedales que existan en la propiedad. Este mapeo **no** significa que en la zona se contemple un proyecto de transportación propuesto, pero es muy importante en nuestro proceso de revisión ambiental. Por favor no retire tales banderines o listones.

Por favor tome en cuenta que si el Cuerpo de Ingenieros del Ejército de los EE.UU. ha emitido una Determinación Jurisdiccional en su propiedad confirmando la presencia de arroyos y/o humedales, o si tiene preguntas o comentarios relacionados con el proyecto, por favor contacte la Línea Directa en Español del NCDOT llamando al 1-800-481-6494 o envíe su correspondencia a Jonathan Carr jecarr@ncdot.gov. Cuando llame, por favor mencione el Proyecto TIP B-5833 del NCDOT.

Gracias por su cooperación.

Atentamente,

A handwritten signature in black ink, appearing to read 'Richard W. Hancock'.

Richard W. Hancock, PE, Unit Head
Unidad de Desarrollo de Proyectos y Análisis Ambientales



16-01-0079



HISTORIC ARCHITECTURE AND LANDSCAPES NO HISTORIC PROPERTIES PRESENT OR AFFECTED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

Project No:	B-5833	County:	Yadkin
WBS No.:	45786.1.1	Document Type:	CE
Fed. Aid No:	NHP-0021(023)	Funding:	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
Federal Permit(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Permit Type(s):	none
<u>Project Description:</u>			
Replace Bridge No. 29 on US 21 Business over I-77.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

- There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.
- There are no properties within the project's area of potential effects.
- There are properties over fifty years old within the area of potential effects, but they do not meet the criteria for listing on the National Register.
- There are no historic properties present or affected by this project. (Attach any notes or documents as needed.)

Date of field visit: n/a

Description of review activities, results, and conclusions:

Review of HPOGIS web service was undertaken on February 4, 2016. Based on this review, there are no existing NR, DE, LL, SL or SS properties in the project area. One house constructed in 1957 is within the Area of Potential Effects; however it is a common period cottage that lacks the architectural significance to meet the criteria for National Register listing either individually or as a historic district. The bridge itself, Yadkin County Bridge No. 29, was built in 1964. The structure does not exemplify any distinctive engineering or aesthetic type and is not eligible for the National Register of Historic Places. No historic properties will be affected by this project.

SUPPORT DOCUMENTATION

Map(s) Previous Survey Info. Photos Correspondence Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes – **NO HISTORIC PROPERTIES PRESENT OR AFFECTED**

Shelby Reap

NCDOT Architectural Historian

Feb 5, 2014

Date



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: B-5833 County: Yadkin
 WBS No: 45786.1.1 Document: Categorical Exclusion
 Federal Aid No: NHP- Funding: State Federal
 0021(023)

Federal Permit Required? Yes No Permit Type: N/A

Project Description: Replace Bridge 29 on US 21 Business over Interstate 77 in Yadkin County. Area of Potential Effects (A.P.E.) is approximately 595 meters (1,950 ft.) long and 92 meters (300 ft.) wide. No design plans were provided.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The review included an examination of a topographic map, an aerial photograph, and listings of previously recorded sites, previous archaeological surveys, and previous environmental reviews at the Office of State Archaeology (O.S.A.). The bridge is oriented northwest to southeast, but is considered north-south for this review.

The topographic map (Elkin South, N.C.) shows the A.P.E. is located on a level ridge toe. The bridge does not cross any streams. There is a seasonal drainage located near the north end of the A.P.E. Level ridge toes have a low to moderate potential for archaeological sites. Much of the A.P.E. on the west side of US 21 is occupied by the interchange at I-77.

The aerial photograph shows that most of the A.P.E. is developed. The west side of US 21 is disturbed by structures, parking lots, and two entrance/exit ramps for I-77. The southeast quadrant has some undeveloped land between SR 1350 and I-77. The northeast quadrant is occupied by a structure and parking lot (gas station?).

A review of information at the O.S.A. shows there are no previously recorded sites within or adjacent to the A.P.E. The A.P.E. has not been previously surveyed for archaeological sites. A project along US 21 (ER 98-8509) has been reviewed by the State Historic Preservation Office (HPO). No survey was recommended. A project along I-77 (ER 03-1643) has also been reviewed.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

The landform within the A.P.E. has a low to moderate potential for archaeological sites. Most of the A.P.E. is disturbed by development and by the entrance/exit ramps for I-77. There are no previously recorded sites within the A.P.E.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Photocopy of County Survey Notes Other:

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED

Caleb Smith

3/9/2016

NCDOT ARCHAEOLOGIST II

Date

PRELIMINARY SCREENING OF FARMLAND CONVERSION IMPACTS – CORRIDOR PROJECT

1. **Area in non-urban use. Points awarded = 10 out of 15**

2. **Perimeter in non-urban use. Points awarded = 10 out of 10**

3. **Percent of site being farmed. Points awarded = 0 out of 20**

4. **Protection provided by state and local government. Points awarded = 20 out of 20**

5. **Size of present farm unit compared to average. Points awarded = 0 out of 10**

6. **Creation of non-farmable farmland. Points awarded = 5 out of 25**

7. **Availability of farm support services. Points awarded = 3 out of 5**

8. **On-farm investments. Points awarded = 0 out of 20**

9. **Effects of conversion on farm support services. Points awarded = 0 out of 25**

10. **Compatibility with existing agricultural use. Points awarded = 2 out of 10**

Conclusion: Total Points = 50 out of 160

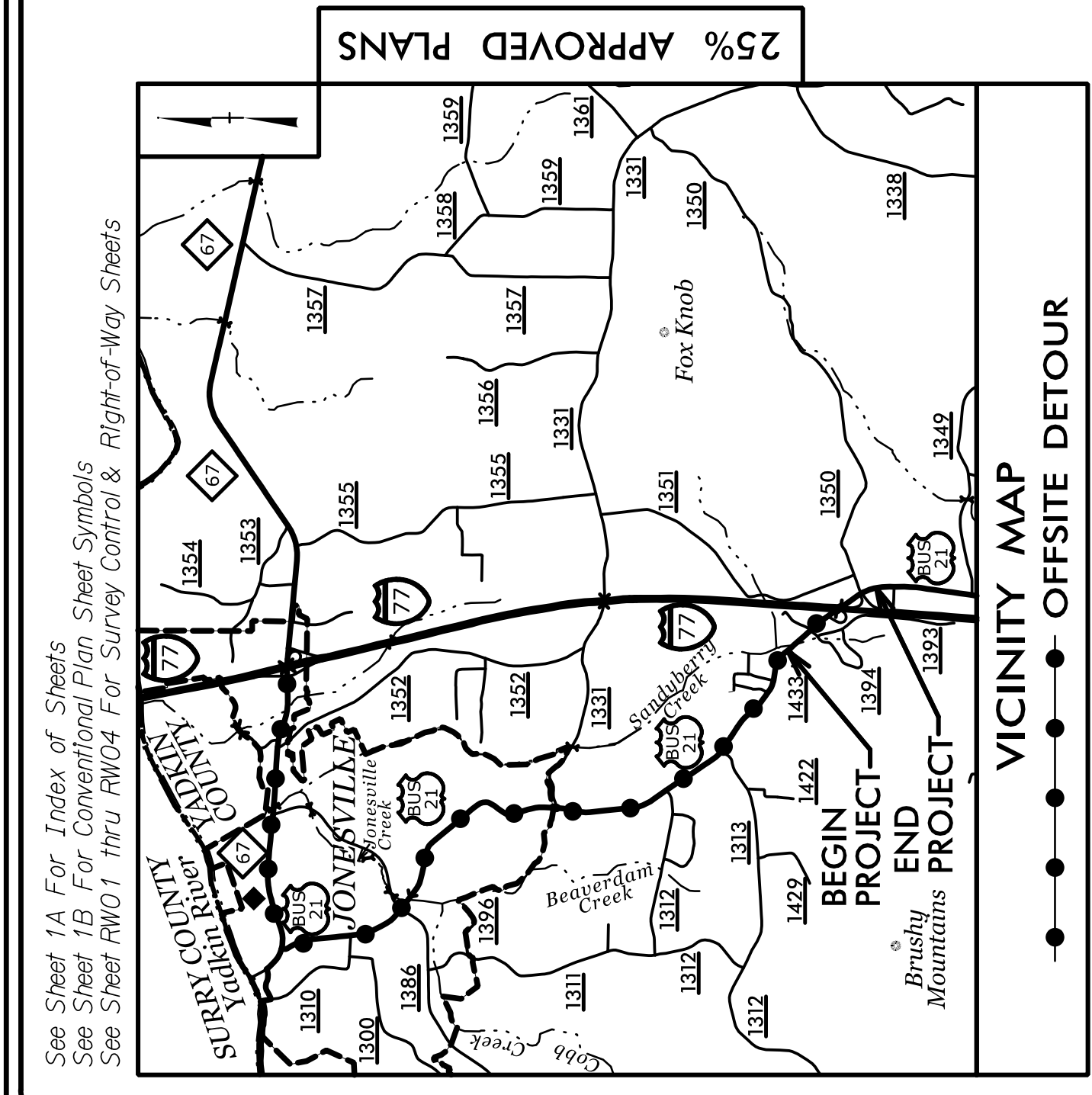
NCDOT has completed a screening of farmland in the project area and calculated the total number of points for the site per Part VI of the NRCS CPA-106 Farmland Conversion Impact Rating Form.



APPENDIX D: PRELIMINARY SCREENING OF FARMLAND CONVERSION IMPACTS



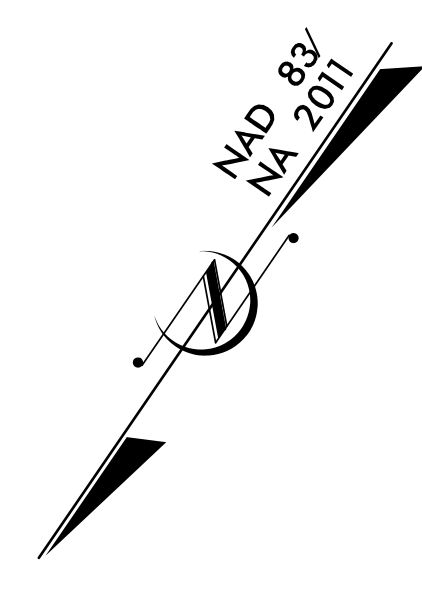
CONTRACT: TIP PROJECT: B-5833



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS YADKIN COUNTY

**LOCATION: REPLACE BRIDGE NO. 29 OVER I-77 ON US 21 BUS
TYPE OF WORK: GRADING, DRAINAGE, PAVING, RETAINING WALLS,
AND STRUCTURE**

STATE	N.C.	STATE PROJECT REFERENCE NO.	B-5833	SHEET NO.	1	TOTAL SHEETS	1
STATE PROJ. NO.	45786.1.1	F.A. PROJ. NO.	NHP-0021(023)	DESCRIPTION	PE		

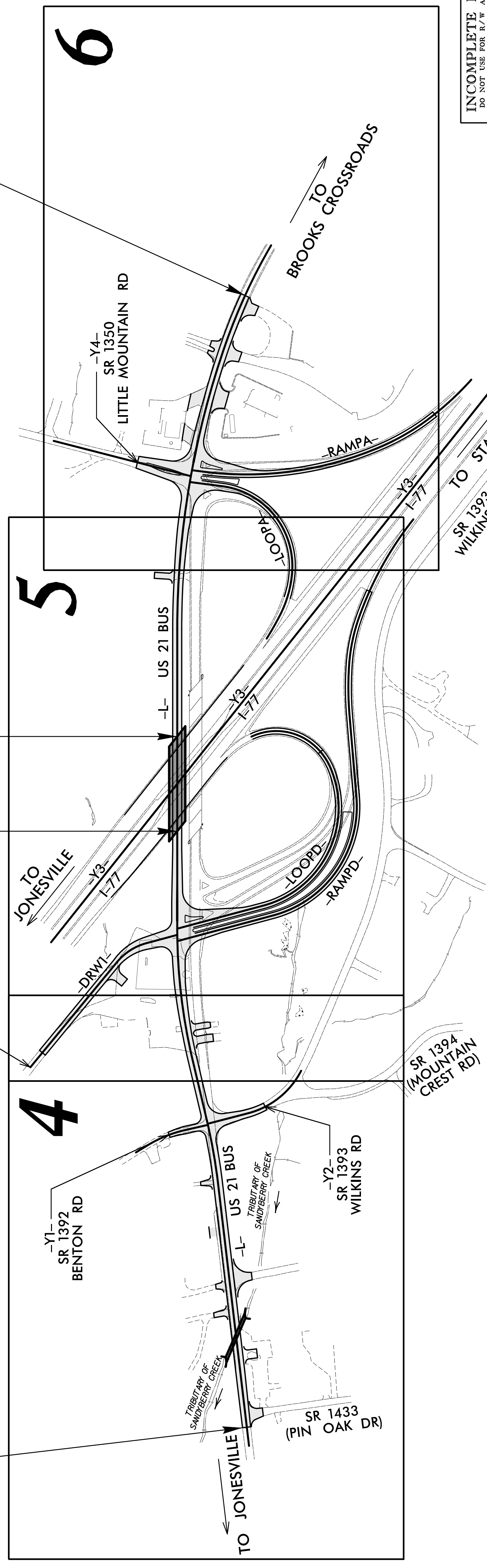


BEGIN TIP PROJECT B-5833
-L- STA. 10 + 50.00

BEGIN BRIDGE
-L- STA. 26 + 50 +/-

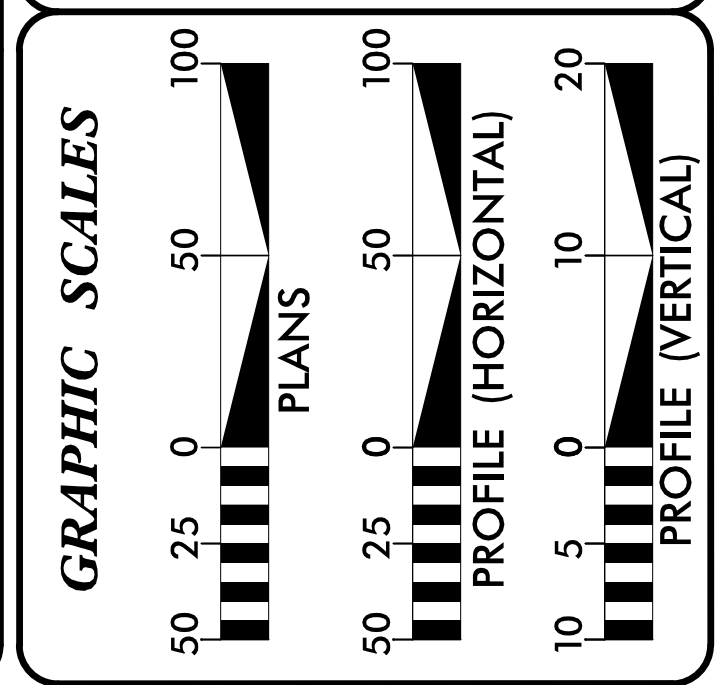
END BRIDGE
-L- STA. 29 + 03 +/-

END TIP PROJECT B-5833
-L- STA. 41 + 00.00



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA	
ADT 2021 =	4100
ADT 2041 =	4550
K =	11 %
D =	65 %
T =	5 % *
V =	50 MPH
* (TTST 1% + DUAL 4%)	
FUNC CLASS = MAJOR COLLECTOR	
STATEWIDE TIER DESIGN	

PROJECT LENGTH	
LENGTH ROADWAY TIP PROJECT B-5833	= 0.530 mile
LENGTH STRUCTURES TIP PROJECT B-5833	= 0.048 mile
TOTAL LENGTH TIP PROJECT B-5833	= 0.578 mile

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

By:
TGS ENGINEERS
706 HILLSBOROUGH ST.
SUITE 300
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: OCTOBER 16, 2020	LETTING DATE: OCTOBER 19, 2021
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V. MARCUS LOWERY, P.E.
PROJECT ENGINEER

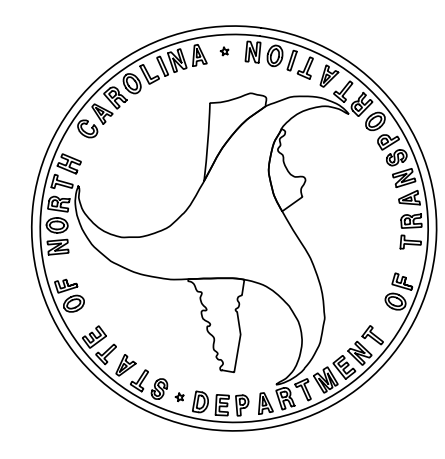
DAVID STUTTS, P.E.
NCDOT CONTACT

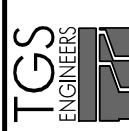
HYDRAULICS ENGINEER

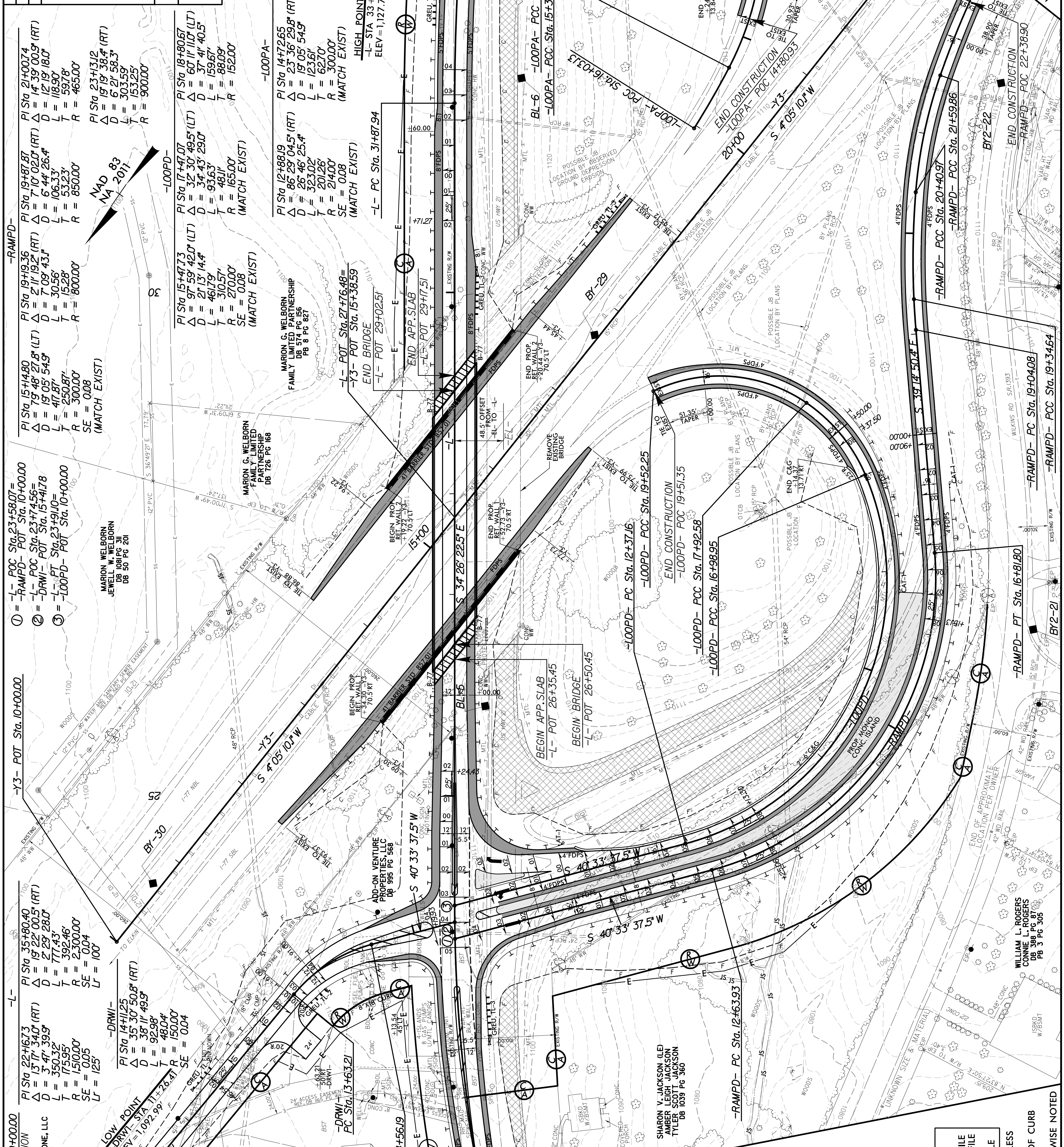
SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



PROJECT REFERENCE NO.	B-5833
SHEET NO.	05
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 775-8887 CORP. LICENSE NO. C-0275	



REVISIONS

NO.	DATE	DESCRIPTION

SEE SHEET 2B-1 FOR INTERSECTION DETAILS

SEE SHEET 07 FOR -L- PROFILE
 SEE SHEET 08 FOR -DRWI- PROFILE
 SEE SHEET 09 FOR -RAMPD- PROFILE
 SEE SHEET 10 FOR -LOOPD- PROFILE
 SEE SHEET 11 FOR -LOOPA- PROFILE

CHANNELIZATION RADIUS ARE 3' UNLESS OTHERWISE NOTED
 RADIUS DIMENSIONS ARE TO FACE OF CURB (FC) UNLESS OTHERWISE NOTED
 DRIVE RADIUS ARE 10' UNLESS OTHERWISE NOTED

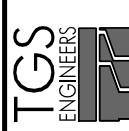
MATCHLINE -L- STA. 21+00.00
SEE SHEET 04

MATCHLINE -L- STA. 34+00.00
SEE SHEET 06

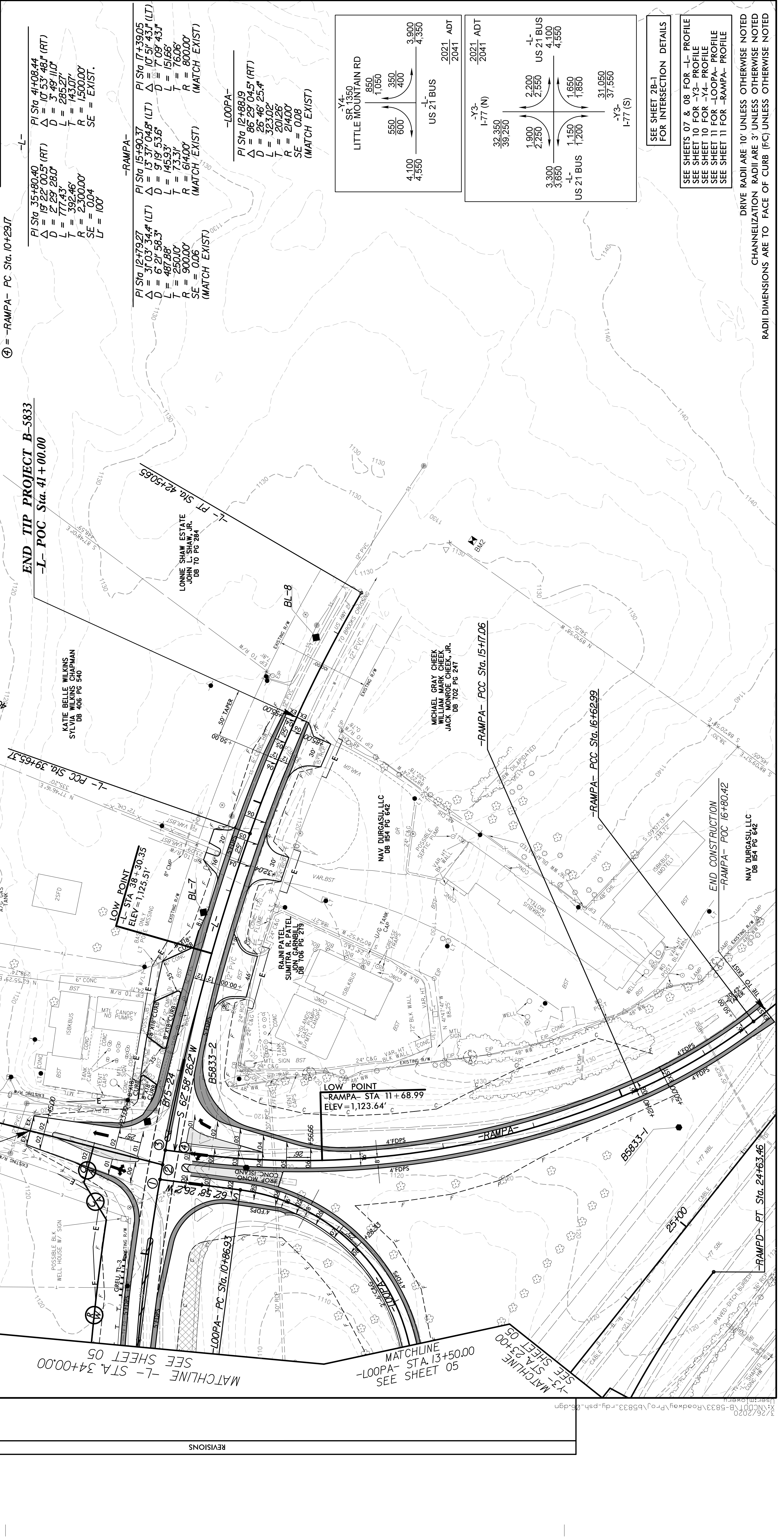
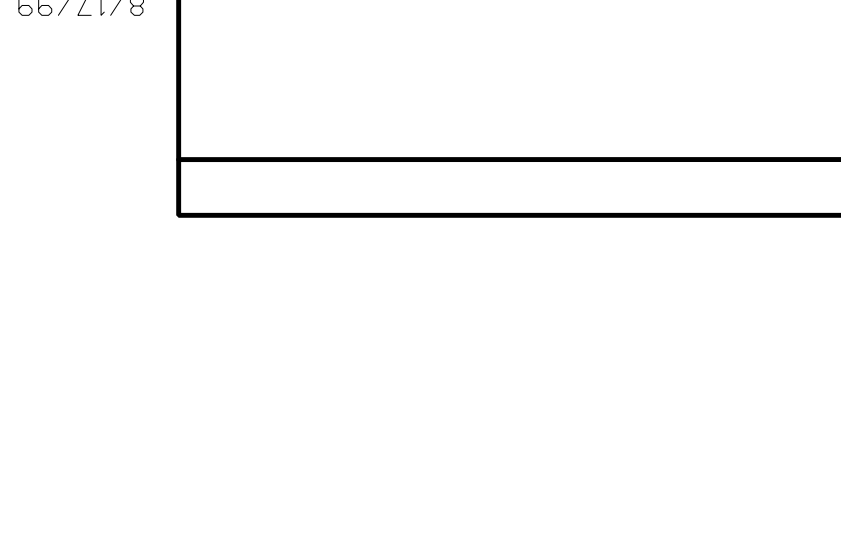
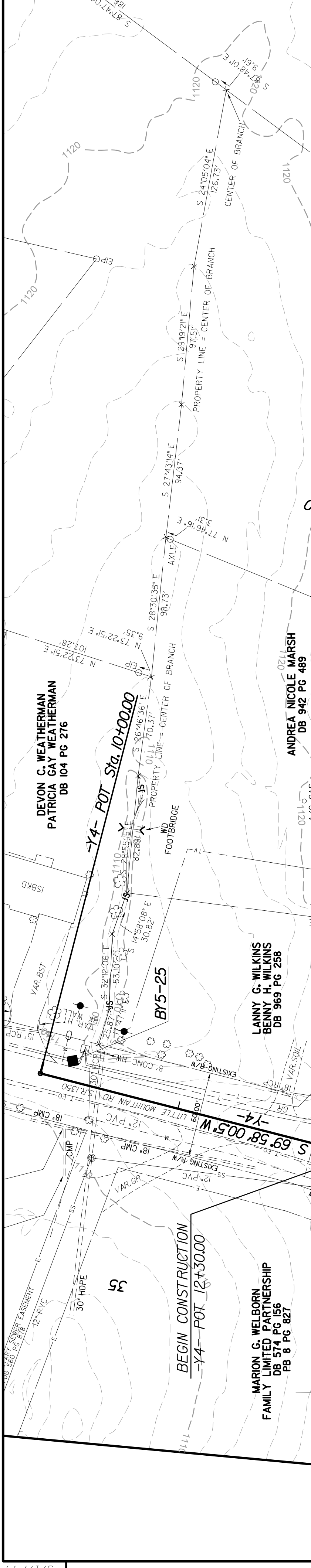
MATCHLINE -LOOPA- STA. 13+50.00
SEE SHEET 06

MATCHLINE -Y3- STA. 23+00.00
SEE SHEET 06

NO.	DESCRIPTION

PROJECT REFERENCE NO.	B-5833
SHEET NO.	06
ROW SHEET NO.	
HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR PAVING ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 TGS ENGINEERS 706 HILLSBOROUGH ST. SUITE 200 RALEIGH, NC 27603 PH (919) 775-8887 CORP. LICENSE NO. C-0275	

- ① = -L- POC Sta. 35+81.31 =
 -L- POC Sta. 10+00.00
 ② = -L- POC Sta. 35+97.31 =
 -L- POC Sta. 13+76.70
 ③ = -L- POC Sta. 36+13.35 =
 -L- POC Sta. 10+00.00
 ④ = -RAMPA- PC Sta. 10+29.17



MATCHLINE -L- STA. 34+00.00 SEE SHEET 05
 MATCHLINE -L- STA. 13+50.00 SEE SHEET 07
 MATCHLINE -L- STA. 21+00.00 SEE SHEET 08
 MATCHLINE -L- STA. 62+58.26 SEE SHEET 05

DRIVE RADII ARE 10' UNLESS OTHERWISE NOTED
 CHANNELIZATION RADII ARE 3' UNLESS OTHERWISE NOTED
 RADII DIMENSIONS ARE TO FACE OF CURB (FC) UNLESS OTHERWISE NOTED