



PAT McCrory
Governor

NICHOLAS J. TENNYSON
Secretary

June 7, 2016

U. S. Army Corps of Engineers
Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

ATTN: Ms. Loretta Beckwith
NCDOT Coordinator

Subject: **Application for Section 404 Nationwide Permit 13, 23, 33, and 401 Water Quality Certification** for the proposed replacement of Bridge No. 22 over Little Tennessee River/ Lake Emory on US 441 Business in Macon County, Federal Aid Project No. BRNHS-0441(8), Division 14, TIP No. B-5125. Debit \$240 from WBS 42271.1.1.

Dear Madam:

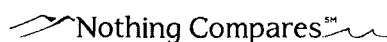
The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 22 over the Little Tennessee River/ Lake Emory on US 441 Business with a 250 foot 4-span bridge in the same location as the existing bridge. Traffic will be maintained on the existing southbound bridge during construction.

There will be 0.07 acre of temporary stream impacts due to temporary causeways needed for the removal and construction of the interior bents and removal of the existing wing wall. No more than 50% of the river/lake will be blocked at any time during the removal/ construction of the project.

There will also be 22 feet of bank stabilization due to the replacement of an existing pipe containing an unnamed tributary to Little Tennessee River/ Lake Emory.

Please see enclosed copies of the Pre-Construction Notification (PCN), stormwater management plan, permit drawings and design plans for the above-referenced project. The Categorical Exclusion (CE) was completed in May 2014 and distributed shortly thereafter. Additional copies are available upon request.

This project calls for a letting date of August 16, 2016 and a review date of June 28, 2016.



A copy of this permit application and its distribution list will be posted on the NCDOT Website at: <http://connect.ncdot.gov/resources/Environmental>. If you have any questions or need additional information, please contact Michael Turchy at maturchy@ncdot.gov or (919) 707-6157.

Sincerely,



for Philip S. Harris III, P.E., C.P.M.
Natural Environment Section Head

cc:
NCDOT Permit Application Standard Distribution List



Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	<input checked="" type="checkbox"/> Section 404 Permit	<input type="checkbox"/> Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: 13, 23, 33 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input checked="" type="checkbox"/> 401 Water Quality Certification – Regular	<input type="checkbox"/> Non-404 Jurisdictional General Permit	
<input type="checkbox"/> 401 Water Quality Certification – Express	<input type="checkbox"/> Riparian Buffer Authorization	
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Project Information

2a. Name of project:	B-5125 Replacement of Bridge 22 over Little Tennessee River/ Lake Emory on US 441 Business
2b. County:	Macon
2c. Nearest municipality / town:	Franklin
2d. Subdivision name:	n/a
2e. NCDOT only, T.I.P. or state project no:	B-5125

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	
3c. Responsible Party (for LLC if applicable):	
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	919-707-6157
3g. Fax no.:	919-212-5785
3h. Email address:	maturchy@ncdot.gov

4. Applicant Information (if different from owner)	
4a. Applicant is:	<input type="checkbox"/> Agent <input type="checkbox"/> Other, specify:
4b. Name:	
4c. Business name (if applicable):	
4d. Street address:	
4e. City, state, zip:	
4f. Telephone no.:	
4g. Fax no.:	
4h. Email address:	
5. Agent/Consultant Information (if applicable)	
5a. Name:	
5b. Business name (if applicable):	
5c. Street address:	
5d. City, state, zip:	
5e. Telephone no.:	
5f. Fax no.:	
5g. Email address:	

B. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	n/a
1b. Site coordinates (in decimal degrees):	Latitude: 35.186131 Longitude: - 83.372060 (DD.DDDDDD) (-DD.DDDDDD)
1c. Property size:	Approximately 2.5 acres
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Little Tennessee River/ Lake Emory
2b. Water Quality Classification of nearest receiving water:	C
2c. River basin:	Little Tennessee
3. Project Description	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: The land use is urbanized/ maintained disturbed as the project is located in downtown Franklin.	
3b. List the total estimated acreage of all existing wetlands on the property: There are no wetlands on the property.	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: Approximately 150 linear feet (Little Tennessee River) within construction easement boundaries.	
3d. Explain the purpose of the proposed project: The purpose of the project is to replace a structurally deficient and functionally obsolete bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 215-foot long 5 span structure with a 250-foot long 4 span structure at the same location. Traffic will be reduced to one lane in each direction and maintained on the existing southbound bridge. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
4. Jurisdictional Determinations	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known):	Agency/Consultant Company: Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

C. Proposed Impacts Inventory

1. Impacts Summary

1a. Which sections were completed below for your project (check all that apply):

- Wetlands **Streams - tributaries** Buffers
 Open Waters Pond Construction

2. Wetland Impacts If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.						
2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested <input type="checkbox"/> Yes <input type="checkbox"/> No	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)	
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T				<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
2g. Total wetland impacts						
2h. Comments:						
3. Stream Impacts If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.						
3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Work Pad for Barge Access & Bent Removal	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	74'* (0.05 acre)
Site 2 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Dewatering (Cofferdam for New Bent Installation)	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	0.01 acre
Site 3 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Work Pad for Bent Removal	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	< 0.01 acre
Site 4 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Work Pad for Bent Removal	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	< 0.01 acre
Site 5 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Dewatering (Cofferdam for New Bent Installation)	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	0.01 acre
Site 6 <input type="checkbox"/> P <input checked="" type="checkbox"/> T	Temporary Work Pad for Old Abutment Removal	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	66'* (<0.01 acre)
Site 7 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Bank Stabilization	Little Tennessee River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	150	22'
3h. Total stream and tributary impacts					Permanent = 22' bank stabilization Temporary = 0.07 ac temp work pads*	
3i. Comments: Site 2 & 5 = <0.01 ac (58 square feet) of permanent surface water impact due to 6 bridge piers. *Temporary impacts overlap, the actual total linear temporary stream impact is 96 feet.						

4. Open Water Impacts

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 <input type="checkbox"/> P <input type="checkbox"/> T				
O2 <input type="checkbox"/> P <input type="checkbox"/> T				
O3 <input type="checkbox"/> P <input type="checkbox"/> T				
O4 <input type="checkbox"/> P <input type="checkbox"/> T				

4f. Total open water impacts

4g. Comments:

5. Pond or Lake Construction

If pond or lake construction proposed, then complete the chart below.

5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)		5e. Upland (acres)	
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded
P1								
P2								
5f. Total								

5g. Comments:

5h. Is a dam high hazard permit required? Yes No If yes, permit ID no:

5i. Expected pond surface area (acres):

5j. Size of pond watershed (acres):

5k. Method of construction:

6. Buffer Impacts (for DWQ)

If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you **MUST** fill out Section D of this form.

6a. Project is in which protected basin?			<input type="checkbox"/> Neuse <input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Other: <input type="checkbox"/> Catawba <input type="checkbox"/> Randleman		
6b. Buffer impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name	6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)
B1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
6h. Total buffer impacts					

6i. Comments:

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. <p>The proposed replacement bridge will be on the same alignment as the existing bridge. The structure will be longer and will have only two bents in the water. Accommodations have been made for pedestrians to cross under the bridge which obviates the current at-grade pedestrian crosswalk.</p> <p>The bridge is designed so that storm water is collected in inlets immediately after the bridge, allowing for no direct discharge into the Little Tennessee River.</p>		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. <p>Design Standards for Sensitive Waters will be implemented for this project.</p> <p>Best Management Practices (BMPs) will be utilized during construction to attempt to reduce the stormwater impacts to the receiving streams due to erosion and runoff.</p>		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank:		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	linear feet	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	acres	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
5. Complete if Using a Permittee Responsible Mitigation Plan		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ

6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?

Yes **No**

6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.


Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
6f. Total buffer mitigation required:				

6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).

6h. Comments:

E. Stormwater Management and Diffuse Flow Plan (required by DWQ)	
1. Diffuse Flow Plan	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments:	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Stormwater Management Plan	
2a. What is the overall percent imperviousness of this project?	n/a %
2b. Does this project require a Stormwater Management Plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2c. If this project DOES NOT require a Stormwater Management Plan, explain why:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: see attached permit drawings	
2e. Who will be responsible for the review of the Stormwater Management Plan?	<input type="checkbox"/> Certified Local Government <input type="checkbox"/> DWQ Stormwater Program <input checked="" type="checkbox"/> DWQ 401 Unit
3. Certified Local Government Stormwater Review	
3a. In which local government's jurisdiction is this project?	n/a
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Phase II <input type="checkbox"/> NSW <input type="checkbox"/> USMP <input type="checkbox"/> Water Supply Watershed <input type="checkbox"/> Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. DWQ Stormwater Program Review	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Coastal counties <input type="checkbox"/> HQW <input type="checkbox"/> ORW <input type="checkbox"/> Session Law 2006-246 <input type="checkbox"/> Other: N/A
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No n/a
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No n/a
5b. Have all of the 401 Unit submittal requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> No n/a

F. Supplementary Information	
1. Environmental Documentation (DWQ Requirement)	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments: - CE completed May 28, 2014.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Violations (DWQ Requirement)	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
3. Cumulative Impacts (DWQ Requirement)	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description.	
4. Sewage Disposal (DWQ Requirement)	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. Not applicable.	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input type="checkbox"/> Raleigh <input type="checkbox"/> Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? USFWS website: Turquoise shiner/ spotfin chub (no habitat present*) *The project is located in an area included in the designated critical habitat for the turquoise shiner (spotfin chub), <i>Erimonax monachus</i> . No such habitat is found in the vicinity of this bridge replacement project as the project is located in a section of the Little Tennessee River that is impounded by the Lake Emory Dam. In addition, there are currently no records of the species above the Lake Emory dam. Construction of the project will not affect habitat utilized by the species. Virginia spiraea – No Effect, last survey 7/9/2015 No habitat exists for all other remaining listed protected species		
6. Essential Fish Habitat (Corps Requirement)		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat?		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources?		
8. Flood Zone Designation (Corps Requirement)		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements:		
8c. What source(s) did you use to make the floodplain determination? approved NEPA documents		
for <u>Philip S. Harris C.P.M., P.E.</u> Applicant/Agent's Printed Name	 Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	06-07-2016 Date



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR LINEAR ROADWAY PROJECTS



(Version 1.2; Released July 2012)

Project/TIP No.: B-5125 County(ies): Macon Page 1 of 3

General Project Information

Project No.:	B-5125		Project Type:	Bridge Replacement		Date:	7/9/2015	
NCDOT Contact:	Marc. T. Shown, PE		Contractor / Designer:	Elizabeth (Liz) G. DiNatale				
	Address:	NCDOT Hydraulics Unit 1020 Birch Ridge Road Raleigh, NC 27610			Address:	Sepi Engineering and Construction, Inc 1025 Wade Avenue Raleigh, NC 27605		
	Phone:	(919)707-6751			Phone:	919-573-9949		
	Email:	mshown@ncdot.gov			Email:	ldinatale@sepiengineering.com		
City/Town:	Franklin		County(ies):	Macon				
River Basin(s):	Little Tennessee		CAMA County?	No				
Primary Receiving Water:	Little Tennessee		NCDWQ Stream Index No.:	2-(1)				
NCDWQ Surface Water Classification for Primary Receiving Water	Primary:			Class C				
	Supplemental:			None				
Other Stream Classification:	None							
303(d) Impairments:	None							
Buffer Rules in Effect	N/A							

Project Description

Project Length (lin. Miles or feet):	0.137 miles		Surrounding Land Use:	urban				
	Proposed Project			Existing Site				
Project Built-Upon Area (ac.)	0.23 ac.		0.02 ac.					
Typical Cross Section Description:	The typical cross section consists of 11 ft travel lanes, a 2 foot shoulder on the downstream side and a 7 ft 7 in. shoulder on the upstream side, separated from a 12 ft 5 in multi-use path by a 42 in. vertical concrete barrier rail. The structure is supered toward the upstream side at 0.03 slope. 1.5" of type S9.5B asphalt is proposed to cover the bridge deck.			The existing downstream travel lane is approximately 11 feet wide and the upstream lane is approximately 11 ft wide.				
Average Daily Traffic (veh/hr/day):	Design/Future:	17,000		Existing:	13,200			

General Project Narrative: The NCDOT proposes to replace bridge #550022 on U.S. 441 Business over the Little Tennessee River in Macon County. The project will consist of grading, paving, drainage, signals and structures. The existing structure is 215 ft, while the proposed structure is 250 feet long. The new structure includes a multi-use path. The proposed bridge has a cored slab deck and concrete barrier between travel lanes and multi-use path with 2-bar metal rails on the outside of the structure. Proposed drainage will be similar to the existing with the addition of curb and gutter along the road passed the bridge. Catch basins will be used within the curb and gutter sections and various yard inlets will be utilized where needed. The bridge is super elevated to allow for deck drainage within the allowed spread section. The drainage from the bridge will be collected in inlets immediately after the bridge allowing for no discharge directly into the Little Tennessee River. A 42" pipe is proposed to contain the live running stream that currently drains through the roadway drainage into the Little Tennessee River.

References



Project Environmental Summary

Surface Water Impacts

Sheet No.	Station (From / To)	Feature Impacted	Water / Wetland / Buffer Type	Receiving Surface Water Name	NRTR Map ID	NCDWQ Stream Index	NCDWQ Surface Water Classification	303(d) Impairments	Type of Impact	Existing SCM	Proposed SCM
4	13+11 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Fill	N/A	N/A
	13+21 -L-										
4	13+32 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Excavation	N/A	N/A
	13+42 -L-										
4	13+75 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Excavation	N/A	N/A
	13+80 -L-										
4	13+80 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Fill	N/A	N/A
	13+91 -L-										
4	14+11 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Stabilization	N/A	N/A
	14+18 -L-										
4	13+98 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Stabilization	N/A	N/A
	14+15 -L-										
4	12+70 -L-	Stream	Perennial	Little Tennessee River	N/A	2-(1)	C	None	Fill	N/A	N/A
	13+05 -L-										

* List all stream and surface water impact locations regardless of jurisdiction or size.
 Equalizer Pipes to be noted as a minimization of impacts.
 All proposed SCMs listed must also be listed under Swales, Preformed Sour Holes and other Energy Dissipators, or Other Stormwater Control Measures.

Description of Minimization of Impacts or Mitigation

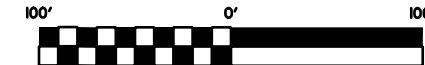
References

8/17/99

PROJECT REFERENCE NO. B-5125	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

SEPI ENGINEERING & CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197



DENOTES TEMPORARY IMPACTS IN SURFACE WATER

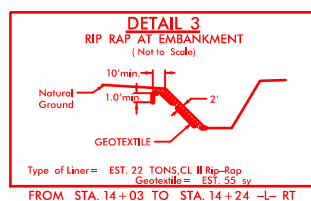
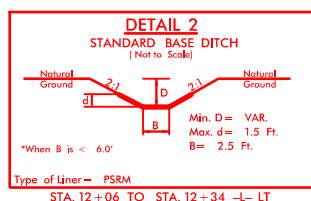
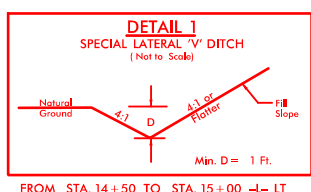
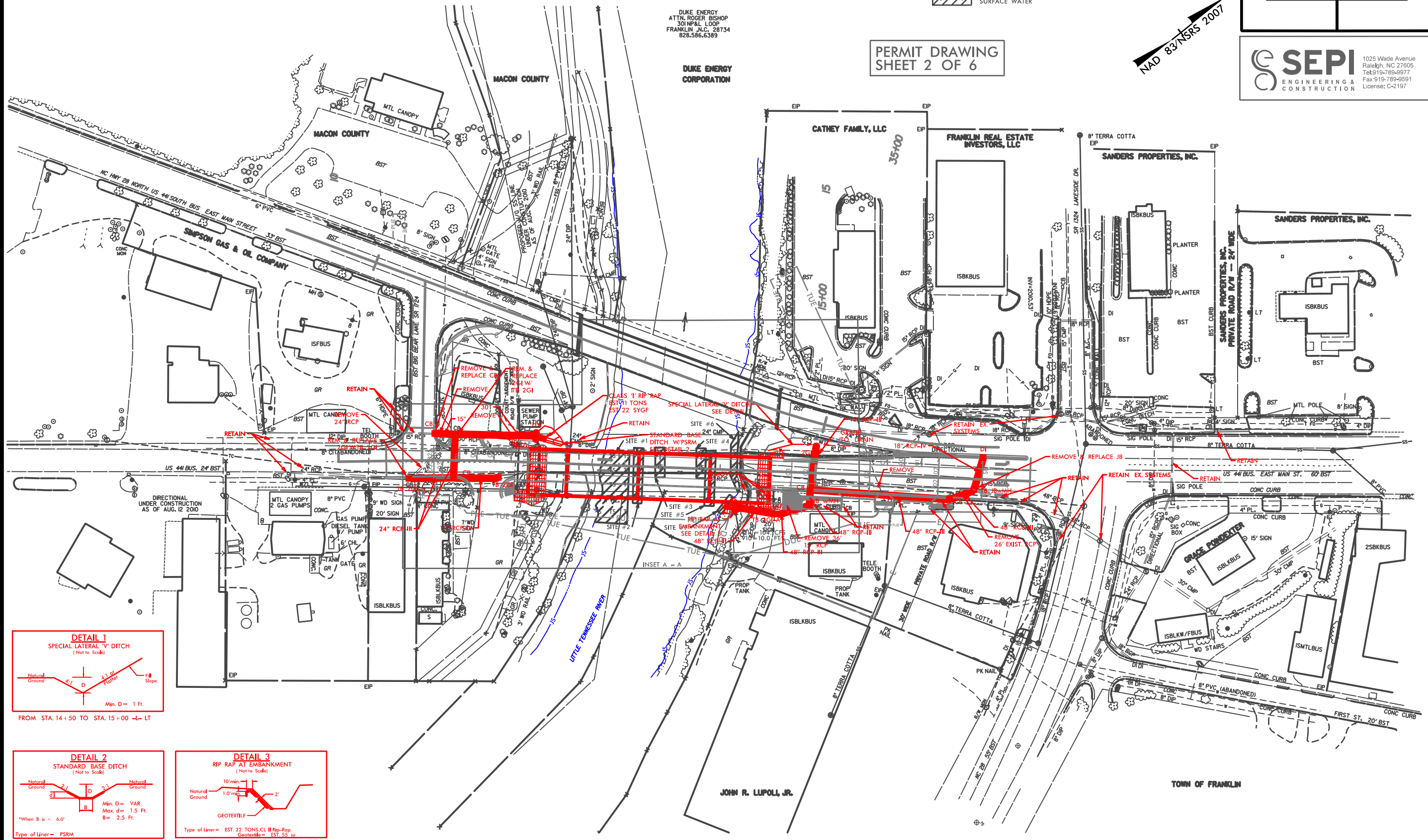
DENOTES IMPACTS IN SURFACE WATER

NAD 83 NRS 2007

**PERMIT DRAWING
SHEET 2 OF 6**

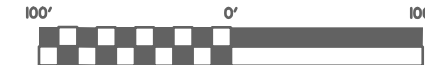
DUKE ENERGY
ATTN: ROGER BISHOP
301 N P&L LOOP
FRANKLIN, NC 28734
828.586.6389

DUKE ENERGY CORPORATION



SDATES
SIUSERNAME\$
SFILE\$

8/17/99



DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 DENOTES IMPACTS IN SURFACE WATER

**PERMIT DRAWING
SHEET 3 OF 6**

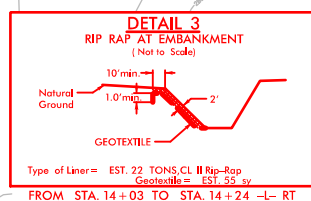
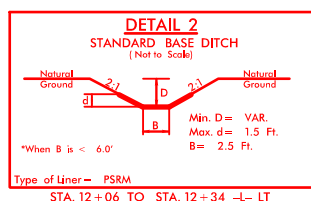
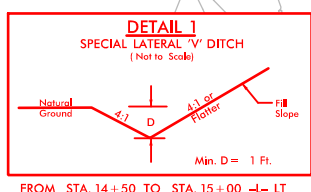
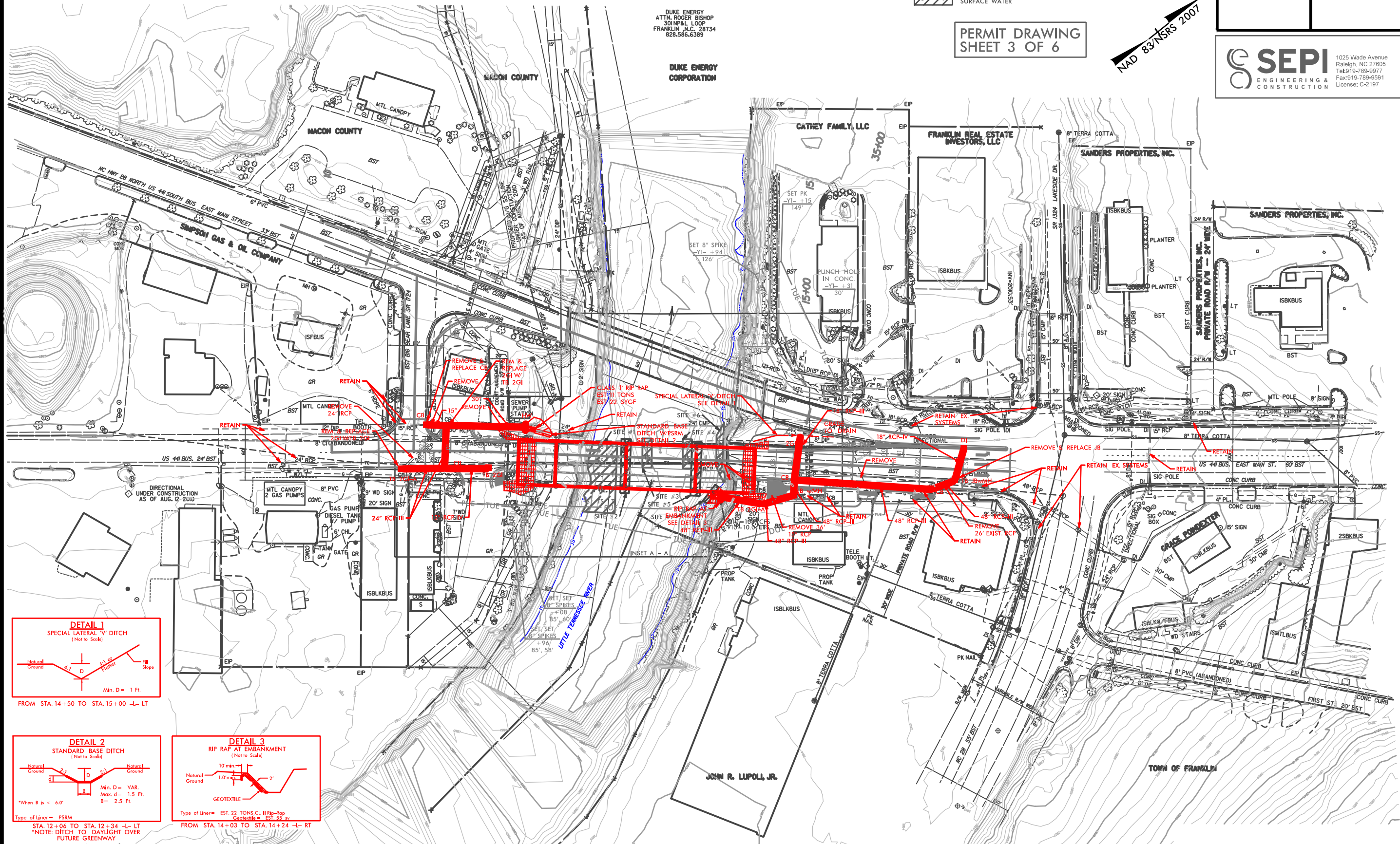
NAD 83 NRS 2007

DUKE ENERGY
ATTN: ROGER BISHOP
301 N P&L LOOP
FRANKLIN, NC 28734
828.586.6389

DUKE ENERGY CORPORATION

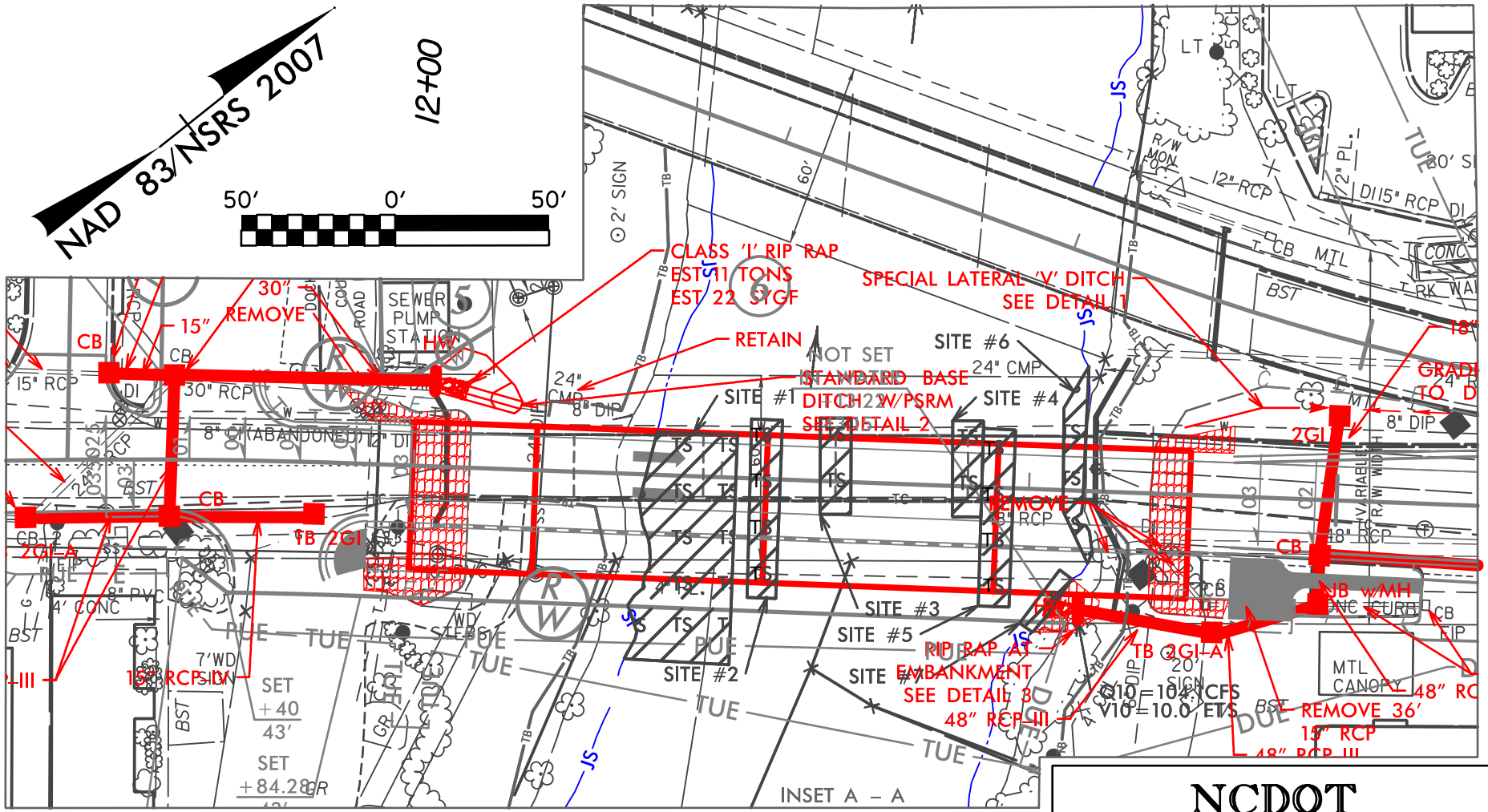
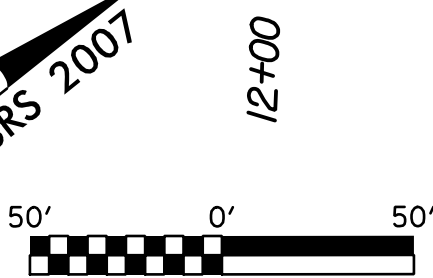
SEPI ENGINEERING & CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-0591
License: C-2197



SDATES
SUSERSNAME\$
SFILE\$

NAD 83/NSRS 2007

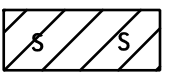


INSET A - A

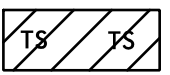
PERMIT DRAWING
SHEET 4 OF 6

PLAN VIEW

SEPI
ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197



DENOTES IMPACTS
IN SURFACE WATER



DENOTES TEMPORARY
IMPACTS IN SURFACE WATER

NCDOT
DIVISION OF HIGHWAYS
MACON COUNTY
PROJECT: 42271.1.1 (B-5125)
REPLACE BRIDGE NO. 22
OVER LITTLE TENNESSEE RIVER
ON US 441 BUSINESS

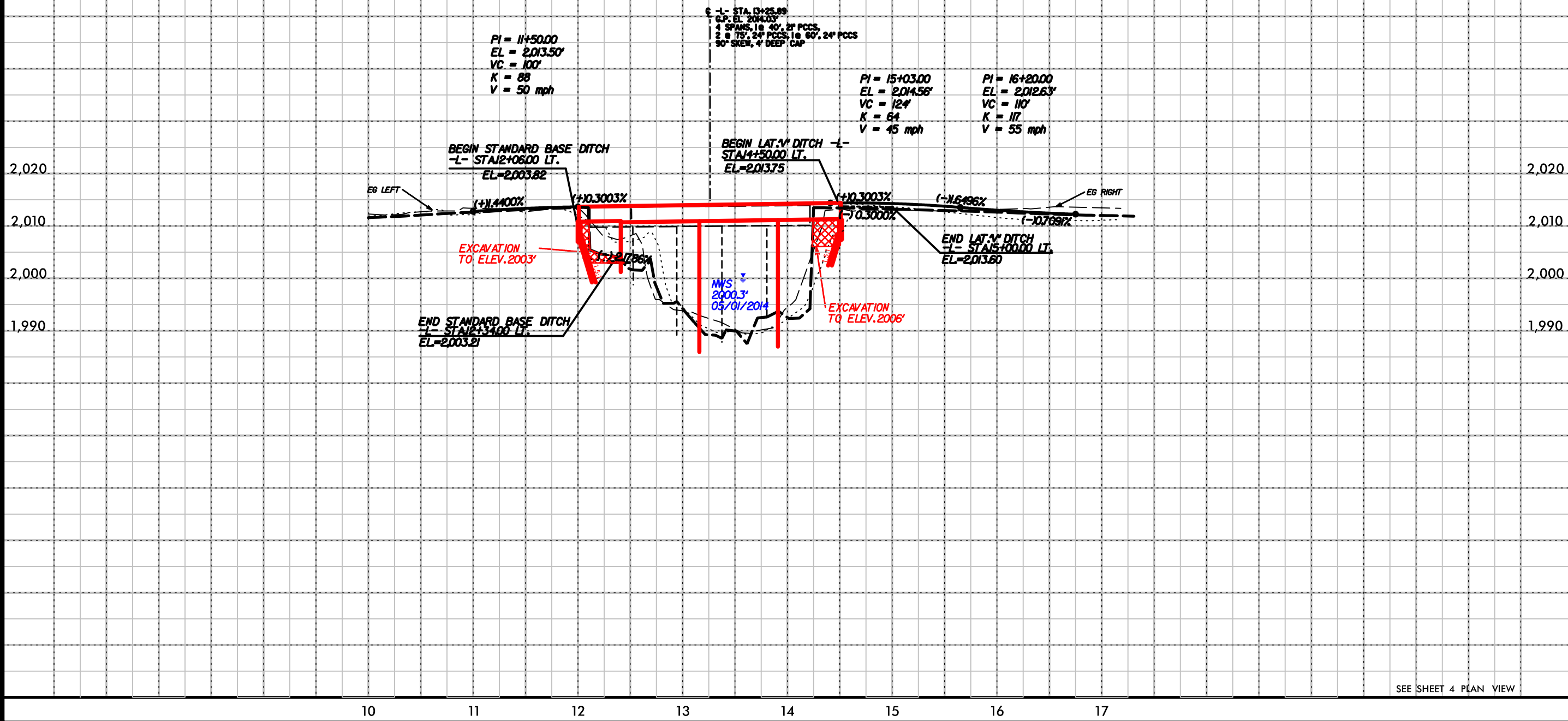
SHEET 4 OF 6 06/29/15

5/14/99

PROJECT REFERENCE NO. B-5125	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**PERMIT DRAWING
SHEET 5 OF 6**

DITCH GRADE LEFT -----
DITCH GRADE RIGHT -----



SYTIME DGN

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	@ 12+70 -L-	TEMPORARY PLATFORM						0.05		74		
2	@ 13+16 -L-	PROP. INTERIOR BENT #2 Cofferdams - Temp Dewatering						0.01	*			
3	@ 13+37 -L-	EXISTING INTERIOR BENT #3						< 0.01				
4	@ 13+80 -L-	EXISTING INTERIOR BENT #4						< 0.01				
5	@ 13+86 -L-	PROP. INTERIOR BENT #3 Cofferdams - Temp Dewatering						0.01	*			
6	@ 14+11 -L-	REMOVAL OF EX. WINGWALL						< 0.01		66		
7	13+99 TO 14+14 -L- RT	BANK STABILIZATION						< 0.01		22		
TOTALS*:								< 0.01	0.07	22	140**	0

NOTES:

*Permanent stream impacts due to two bents with three drilled piers each are estimated at 58 square feet.

** Temporary impacts overlap, the actual total temporary linear stream impact is 96'.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 05/04/2015
 MACON COUNTY
 B-5125
 42271.1.1

09/08/99

See Sheet 1A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

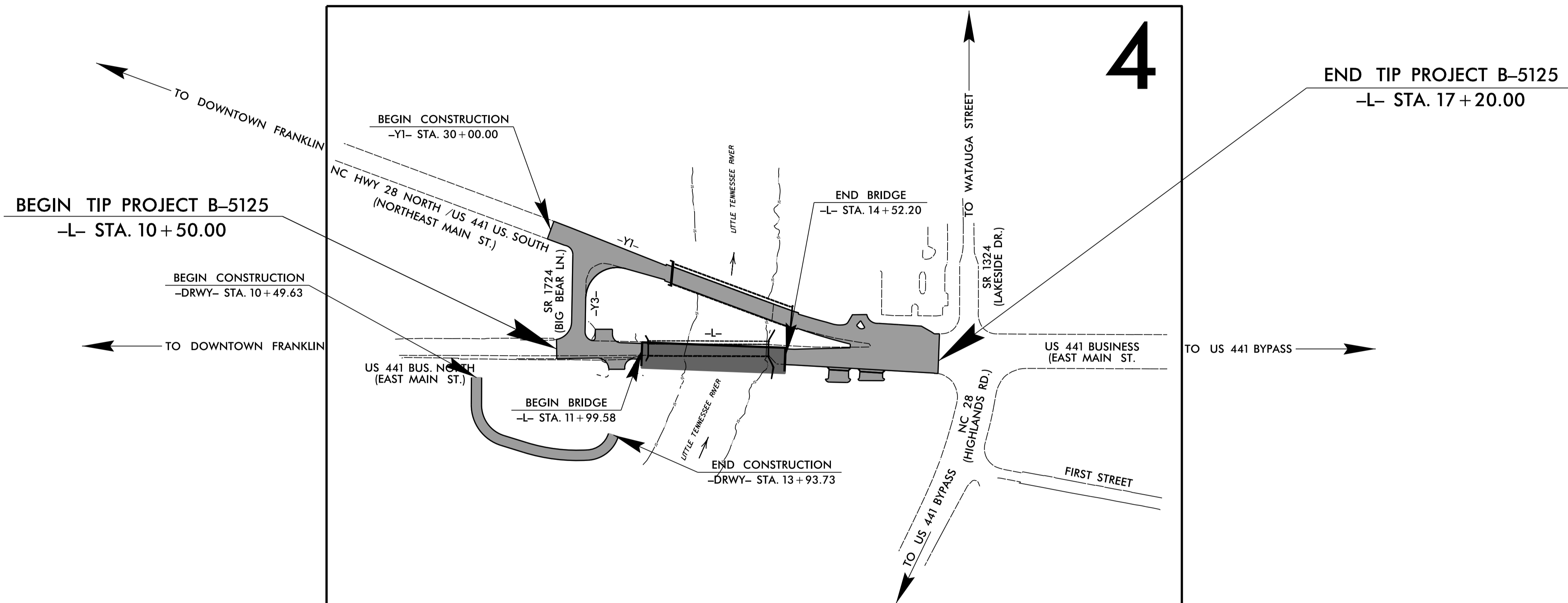
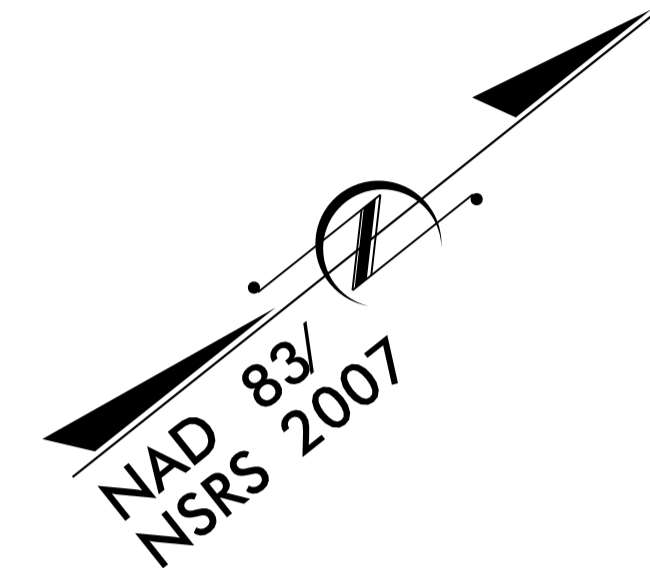
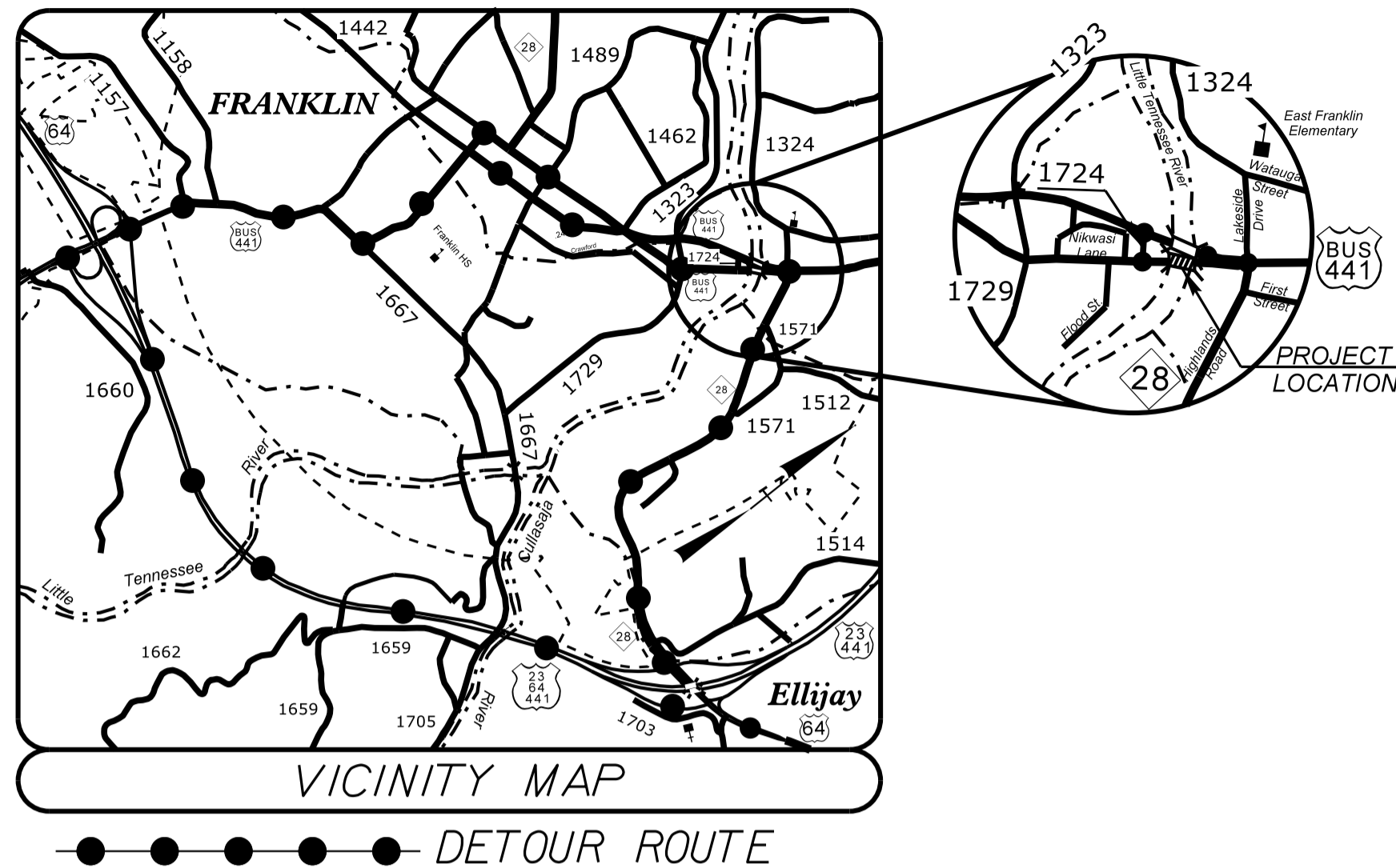
MACON COUNTY

LOCATION: REPLACEMENT OF BRIDGE No. 22 OVER LITTLE TENNESSEE RIVER ON US 441 BUSINESS

TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS & STRUCTURES.

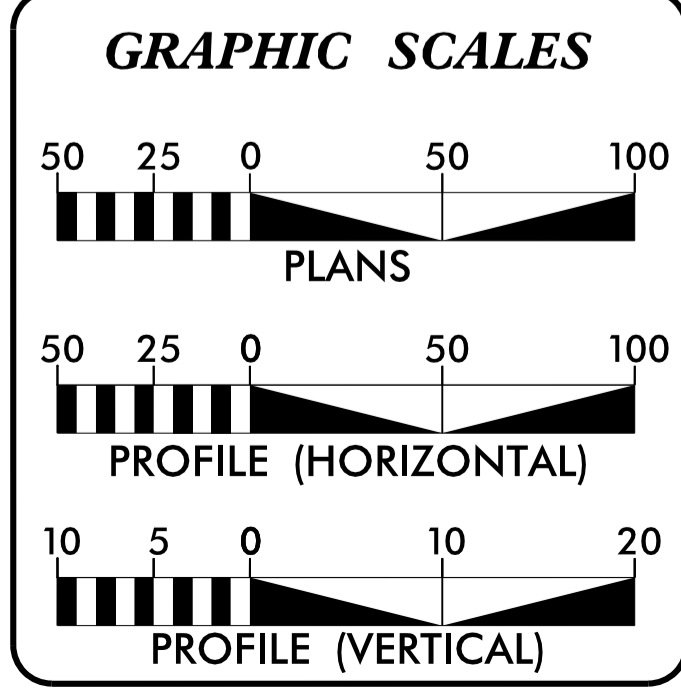
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5125	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42271.1.1	BRNHS-0441(8)	P.E.	
42271.2.FR1	BRNHS-0441(8)	RW & UTILITIES CONSTRUCTION	

TIP PROJECT: B-5125



**THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF FRANKLIN.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO LIMITS ESTABLISHED BY METHOD II.**

CONTRACT:



DESIGN DATA

ADT 2013 =	13,200
ADT 2035 =	17,000
K =	11 %
D =	100 %
T =	6 % *
V =	45 MPH
* TTST =	1% DUAL 5%
FUNC. CLASS =	COLLECTOR
REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT No. B-5125	=	0.079 Miles.
LENGTH STRUCTURE TIP PROJECT No. B-5125	=	0.048 Miles.
TOTAL LENGTH TIP PROJECT No. B-5125	=	0.127 Miles.

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

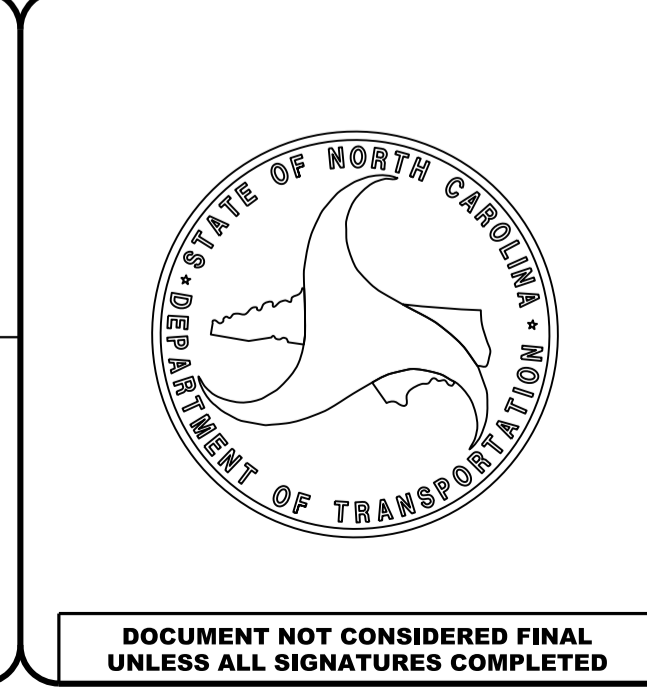
2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE:	KEVIN E. MOORE, PE PROJECT ENGINEER
JANUARY 16, 2015	
LETTING DATE:	STEVEN D. KENDALL, PE PROJECT DESIGN ENGINEER
AUGUST 16, 2016	

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



03-MAR-2016 09:13 R:\Roadway\Proj\B5125_Rdy_T1sh.dgn \$\$\$USERNAME\$\$\$

12/05/11

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EP
Property Corner	→
Property Monument	□ ECM
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	--- MLB
Proposed Wetland Boundary	--- MLB
Existing Endangered Animal Boundary	--- EAB
Existing Endangered Plant Boundary	--- EPB
Known Soil Contamination: Area or Site	☠ ☠
Potential Soil Contamination: Area or Site	☠ ? ☠ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	□ †
Building	□
School	□
Church	□
Dam	□

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
Jurisdictional Stream	--- JS
Buffer Zone 1	--- BZ 1
Buffer Zone 2	--- BZ 2
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	✕
Proposed Lateral, Tail, Head Ditch	→ FLOW
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ CSX TRANSPORTATION MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◇
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	○ R/W
Proposed Right of Way Line with Concrete or Granite R/W Marker	○ R/W
Proposed Control of Access Line with Concrete CA Marker	○ C/A
Existing Control of Access	○ C/A
Proposed Control of Access	○ C/A
Existing Easement Line	--- E
Proposed Temporary Construction Easement	--- E
Proposed Temporary Drainage Easement	--- TDE
Proposed Permanent Drainage Easement	--- PDE
Proposed Permanent Drainage / Utility Easement	--- DUE
Proposed Permanent Utility Easement	--- PUE
Proposed Temporary Utility Easement	--- TUE
Proposed Aerial Utility Easement	--- AUE
Proposed Permanent Easement with Iron Pin and Cap Marker	◇

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	--- C
Proposed Slope Stakes Fill	--- F
Proposed Curb Ramp	○ CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	□

VEGETATION:

Single Tree	☼
Single Shrub	☼
Hedge	-----
Woods Line	-----

Orchard	☼ ☼ ☼ ☼
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	□ CONC
Bridge Wing Wall, Head Wall and End Wall	□ CONC WW
MINOR:	
Head and End Wall	□ CONC HW
Pipe Culvert	□
Footbridge	□
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○
Storm Sewer	---

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	□
H-Frame Pole	●
Recorded U/G Power Line	--- P
Designated U/G Power Line (S.U.E.*)	--- P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	□
Telephone Cell Tower	⊗
U/G Telephone Cable Hand Hole	□
Recorded U/G Telephone Cable	--- T
Designated U/G Telephone Cable (S.U.E.*)	--- T
Recorded U/G Telephone Conduit	--- TC
Designated U/G Telephone Conduit (S.U.E.*)	--- TC
Recorded U/G Fiber Optics Cable	--- T FO
Designated U/G Fiber Optics Cable (S.U.E.*)	--- T FO

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	--- W
Designated U/G Water Line (S.U.E.*)	--- W
Above Ground Water Line	--- A/G Water

TV:

TV Satellite Dish	☼
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	--- TV
Designated U/G TV Cable (S.U.E.*)	--- TV
Recorded U/G Fiber Optic Cable	--- TV FO
Designated U/G Fiber Optic Cable (S.U.E.*)	--- TV FO

GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	--- G
Designated U/G Gas Line (S.U.E.*)	--- G
Above Ground Gas Line	--- A/G Gas

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	--- SS
Above Ground Sanitary Sewer	--- A/G Sanitary Sewer
Recorded SS Forced Main Line	--- FSS
Designated SS Forced Main Line (S.U.E.*)	--- FSS

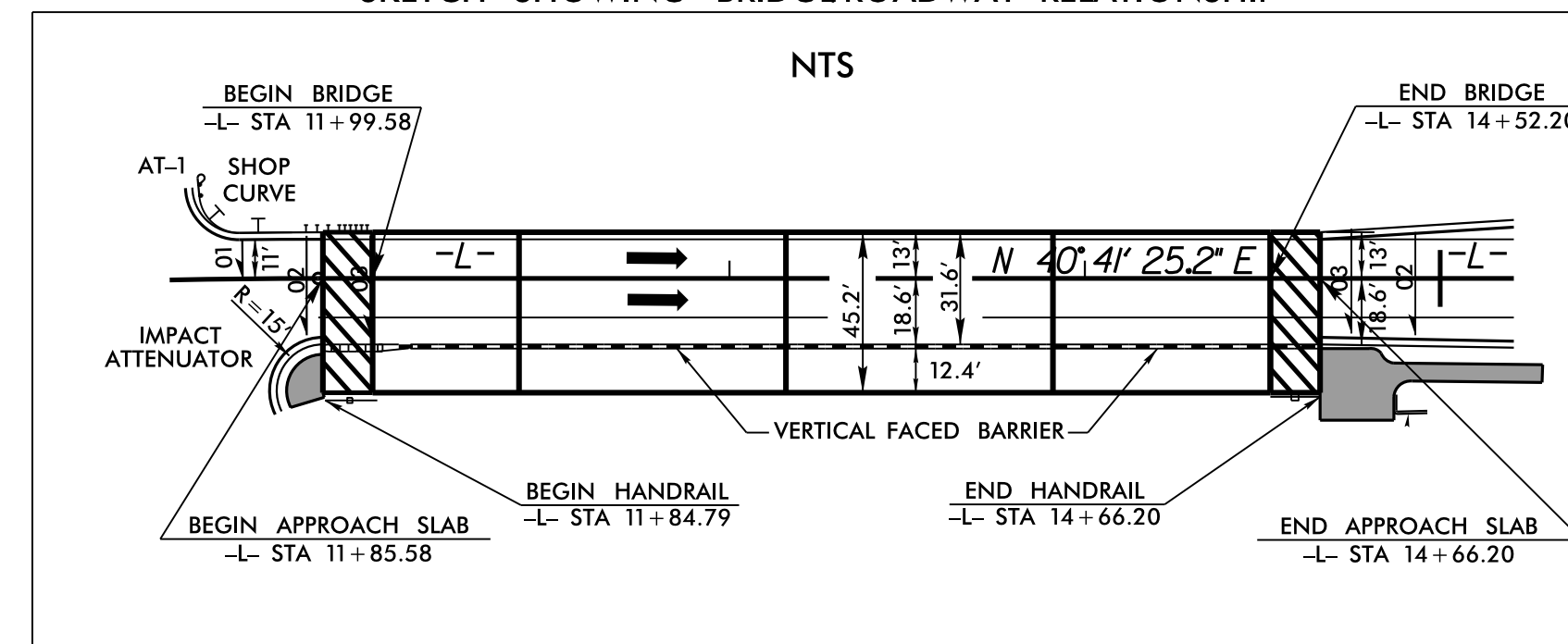
MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	□
Utility Unknown U/G Line	--- ?U/L
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	□ UST
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊗
U/G Test Hole (S.U.E.*)	⊗
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

PROPERTY OWNERS

2 THE LAND TRUST FOR THE LITTLE TENNESSEE RIVER, INC. DB T-36 PG 259	4 ABDUL M. WALIANY, ET. UX. DB G-14 PG 163	8 JESSIE M. REVIS DB T-29 PG 2040
3 MACON COUNTY DB Y-26 PG 1219 PLAT CARD #38II	5 "NOW OR FORMERLY" TOWN OF FRANKLIN DB K-8 PG 306	

SKETCH SHOWING BRIDGE/ROADWAY RELATIONSHIP

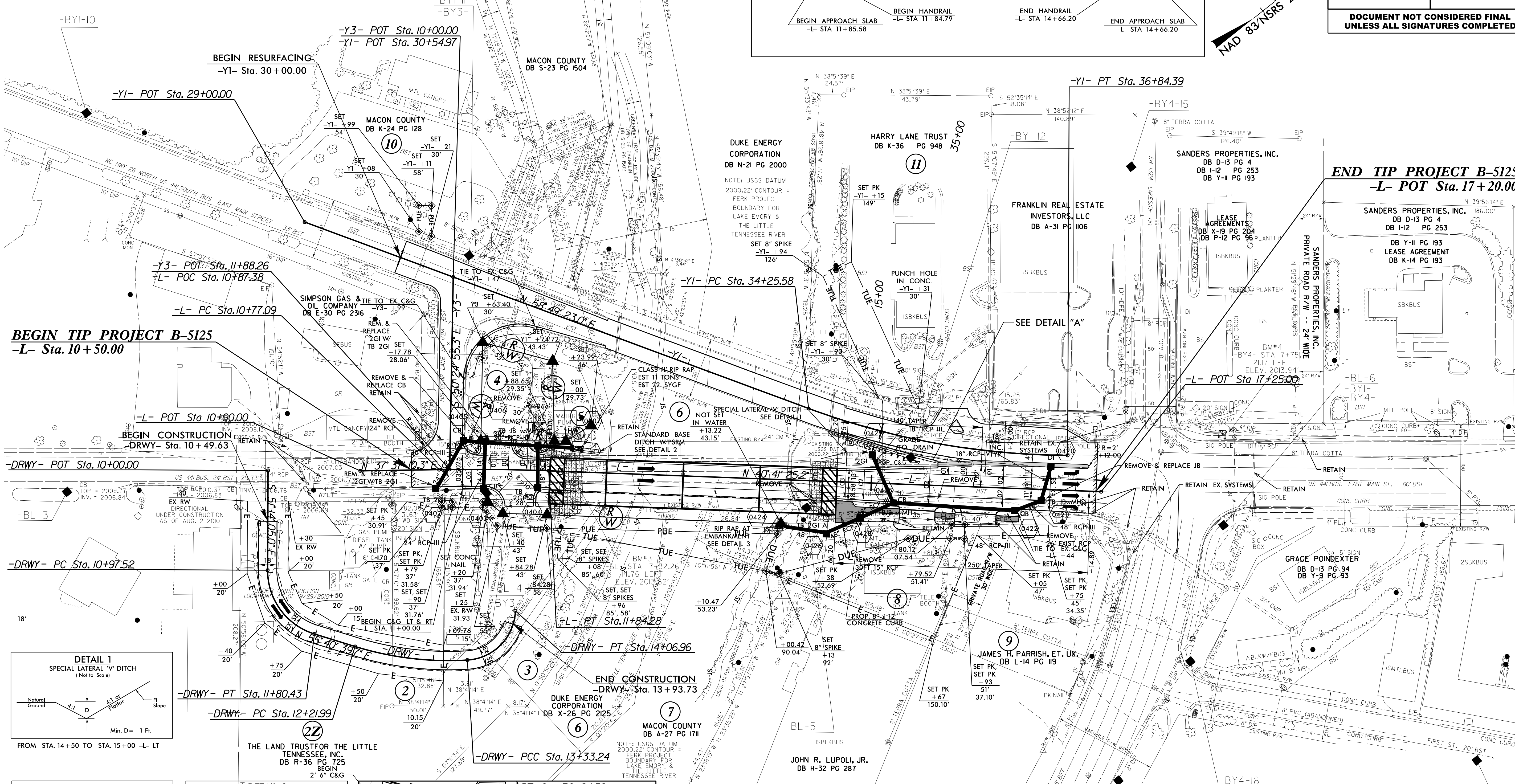


NAD 83 NSRS 2007

PROJECT REFERENCE NO. B-5125	SHEET NO. 4
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DESIGN REVISION: REVISING THE TEMPORARY DRIVEWAY LOCATION AND GRADE TO AVOID UTILITY CONFLICTS - TRM 2/14/16

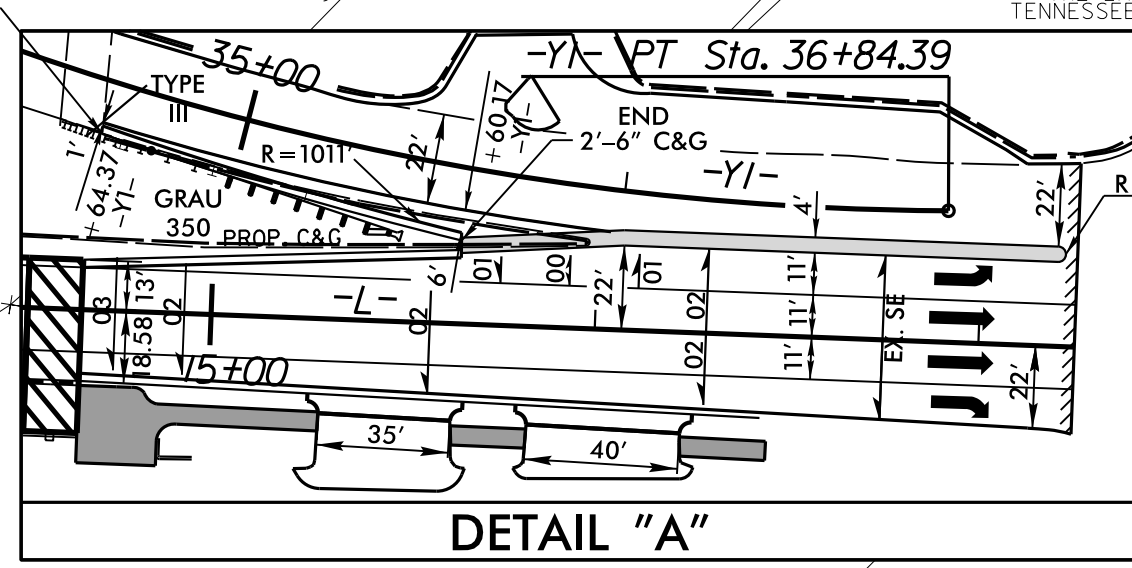
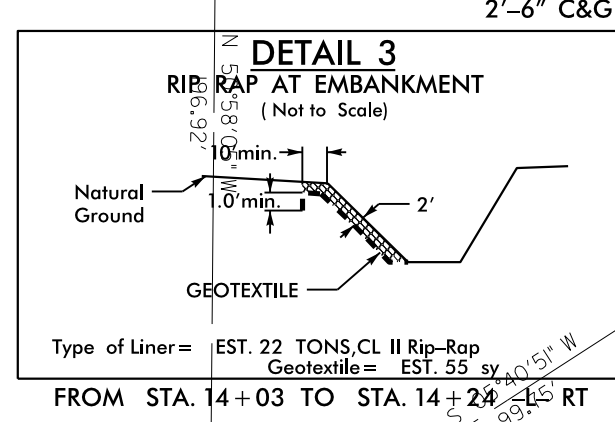
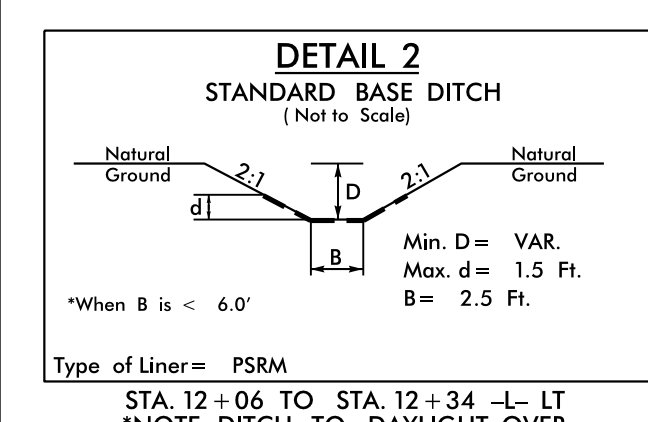
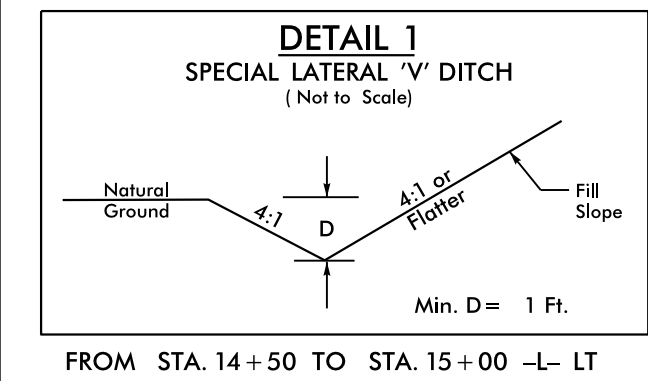


BEGIN TIP PROJECT B-5125
-L- Sta. 10+50.00

BEGIN CONSTRUCTION
-DRWY- Sta. 10+49.63

END CONSTRUCTION
-DRWY- Sta. 13+93.73

END TIP PROJECT B-5125
-L- POT Sta. 17+20.00



-DRWY-	-L-	-YI-
PI Sta. 11+45.69 Δ = 73° 05' 15.3" (LT) D = 88' 08" 50.5" L = 82.92' T = 48.17' R = 65.00'	PI Sta. 12+78.22 Δ = 20° 33' 41.9" (LT) D = 18' 28" 57.0" L = 111.25' T = 56.23' R = 310.00'	PI Sta. 13+78.64 Δ = 84° 28' 37.9" (LT) D = 114' 35" 29.6" L = 73.72' T = 45.40' R = 50.00'
	PI Sta. 11+30.70 Δ = 3° 04' 14.9" (RT) D = 2' 51" 53.2" L = 107.19' T = 53.61' R = 2,000.00'	PI Sta. 35+56.33 Δ = 20° 03' 28.0" (LT) D = 7' 45" 00.0" L = 258.81' T = 130.74' R = 739.30'

■ DENOTES SIDEWALK
SEE SHEET 2-B FOR STRUCTURE DETAIL
SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 6 FOR -DRWY- PROFILE
SEE SHEETS S-1 THRU S-2 FOR STRUCTURE PLANS

02-FEB-2016 14:10 A:\B125-Rdy-psn04.dgn 8/17/99