



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

March 6, 2020

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

ATTN: Ms. Lori Beckwith  
NCDOT Coordinator

Subject: **Application for Section 404 Regional General Permit 31 and 401 Water Quality Certification** for the proposed replacement of Bridge No. 35 on NC 67 (Reynolda Road) over the Yadkin River in Yadkin and Forsyth Counties, Divisions 11 & 9, **TIP No. B-5825**, Debit \$570 from WBS Element 45778.1.1.

Dear Madam:

NCDOT proposes to replace Bridge No. 35 on NC 67 (Reynolda Road) over the Yadkin River with a new bridge slightly north of the existing alignment. Traffic will be maintained on-site using the existing bridge and roadway alignment during construction. NCDOT Structures Management Unit records indicate Bridge No. 35 has a sufficiency rating of 4 out of a possible 100, and the bridge is considered structurally deficient due to a superstructure appraisal of 3 out of 9 according to Federal Highway standards. The replacement of this bridge also necessitates the need to shift an adjacent intersecting road, which has an existing 72-inch Corrugated Metal Pipe (CMP) that is significantly undersized for the drainage area that will be replaced with a 1 @ 9'X 9' Reinforced Concrete Box Culvert (RCBC).

There are four (4) impact sites:

- Site 1 has a total of 134 lf of permanent impacts to a perennial stream (0 lf of streambed / loss of waters impacts and 134 lf of bank stabilization impacts); 57 lf (0.85 ac.) of temporary stream impacts (includes temporary work pads); and no wetland impacts.
- Site 2 has a total of 168 lf of permanent impacts to an intermittent stream (168 lf of streambed / loss of waters impacts and no bank stabilization impacts); 12 lf (<0.01 ac.) of temporary stream impacts; and 0.03 ac. of permanent wetland impacts.
- Site 3 has no permanent or temporary stream impacts; and 0.08 ac. of permanent wetland impacts.
- Site 4 has a total of 361 lf of permanent impacts to a perennial stream (298 lf of streambed / loss of waters impacts and 63 lf of bank stabilization impacts); 87 lf (0.02 ac.) of temporary stream impacts, and no wetland impacts.

As a result of replacing the existing bridge, the cumulative impacts for the four sites will total 663 linear feet of permanent stream impacts (466 lf of streambed / loss of waters impacts and 197 linear feet of bank stabilization impacts); 156 linear feet (0.87 acre) of temporary stream impacts; and a total of 0.11 acre of permanent wetland impacts.

**Mitigation:**

NCDOT proposes a mitigation ratio of 2:1 for the 298 lf of impacts to the perennial stream at Site 4, resulting in 596 mitigation credits needed. NCDOT proposes a mitigation ratio of 1:1 for the relocation of the Intermittent stream at Site 2, resulting in 168 mitigation credits needed. A total of 764 lf feet of stream mitigation credits are therefore needed for this project.

For the stream impacts that require mitigation, stream mitigation credits have been purchased from the Brushy Mountain Mitigation Bank, which is located within the Yadkin River Basin Cataloging Unit 03040101. Per a letter dated January 24, 2020, the USACE has released 2,052 SMUs at this Mitigation Bank (see attached). NCDOT has purchased 1,539 stream credits from the Brushy Mountain Mitigation Bank (see the two [2] attached Transfer of Credit Affidavits, dated January 29, 2019 and October 2, 2019) and will be applying 764 stream credits to B-5825 (see Table 1).

**Table 1. Mitigation Bank - Stream**

Mitigation Site Name	Stream Type	Bank Developer	NCDOT Stream Mitigation Credits (lf)	B-5825 Stream Impacts (lf)	B-5825 Stream Mitigation Required	Notes
Brushy Mountain	Warm	Restoration Systems	1,539	466	764	298 LF impacts to perennial stream @ 2:1 ratio = 596 LF  168 LF re-location of Intermittent stream @ 1:1 ratio = 168 LF

The 0.11 acre of wetland impacts will be mitigated via the DMS (see attached DMS letter).


There will be no utility impacts for this project.

Please see enclosed copies of the Pre-Construction Notification (PCN), Minimum Criteria Determination Checklist (MCDC), stormwater management plan, permit drawings and design plans for the above-referenced project.

This project calls for a letting date of June 16, 2020 and a review date of April 28, 2020.

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 Bill Barrett at [wabarrett@ncdot.gov](mailto:wabarrett@ncdot.gov) or (919) 707-6103.

Sincerely,

  
for Philip S. Harris III, P.E., C.P.M.  
Environmental Analysis Unit Head

cc: NCDOT Permit Application Standard Distribution List



## Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits  
(along with corresponding Water Quality Certifications)

September 29, 2018 Ver 3

Please note: fields marked with a red asterisk \* below are required. You will not be able to submit the form until all mandatory questions are answered.

Also, if at any point you wish to print a copy of the E-PCN, all you need to do is right-click on the document and you can print a copy of the form.

Below is a link to the online help file.

<https://edocs.deq.nc.gov/WaterResources/0/edoc/624704/PCN%20Help%20File%202018-1-30.pdf>

### A. Processing Information

**County (or Counties) where the project is located:\***

Yadkin

Forsyth

**Is this project a public transportation project?\***

Yes  No

This is any publicly funded by municipal, state or federal funds road, rail, airport transportation project.

**Is this a NCDOT Project?\***

Yes  No

**(NCDOT only) T.I.P. or state project number:**

B-5825

**WBS #\***

45778.1.1

(for NCDOT use only)

**1a. Type(s) of approval sought from the Corps:\***

Section 404 Permit (wetlands, streams and waters, Clean Water Act)

Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

**1b. What type(s) of permit(s) do you wish to seek authorization?\***

Nationwide Permit (NWP)

Regional General Permit (RGP)

Standard (IP)

This form may be used to initiate the standard/individual permit process with the Corps. Please contact your Corps representative concerning submittals for standard permits. All required items that are not provided in the E-PCN can be added to the miscellaneous upload area located at the bottom of this form.

**1c. Has the NWP or GP number been verified by the Corps?\***

Yes  No

Regional General Permit (RGP) Number:

198200031 - NCDOT Bridges, Widening Projects 2015

**RGP Numbers (for multiple RGPs):**

List all RGP numbers you are applying for not on the drop down list.

**1d. Type(s) of approval sought from the DWR:\***

check all that apply

401 Water Quality Certification - Regular

Non-404 Jurisdictional General Permit

Individual Permit

401 Water Quality Certification - Express

Riparian Buffer Authorization

**1e. Is this notification solely for the record because written approval is not required?**

\*

For the record only for DWR 401 Certification:

Yes  No

For the record only for Corps Permit:

Yes  No

**1f. Is this an after-the-fact permit application?\***

Yes  No

**1g. 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

Yes  No

**Acceptance Letter Attachment**

Click the upload button or drag and drop files here to attach document

B-5825 Mitigation packet.pdf

574.7KB

FILETYPE MUST BE PDF

**1h. Is the project located in any of NC's twenty coastal counties? \***

Yes  No

**1j. Is the project located in a designated trout watershed? \***

Yes  No

Link to trout information: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout.aspx>

## B. Applicant Information

**1a. Who is the Primary Contact? \***

NCDOT

**1b. Primary Contact Email: \***

wabarrett@ncdot.gov

**1c. Primary Contact Phone: \***

(xxx)xxx-xxxx  
(919)707-6103

**1d. Who is applying for the permit? \***

Owner  
(Check all that apply)

Applicant (other than owner)

**1e. Is there an Agent/Consultant for this project? \***

Yes  No

## 2. Owner Information

**2a. Name(s) on recorded deed: \***

NCDOT

**2b. Deed book and page no.:**

**2c. Responsible party:**

(for Corporations)

**2d. Address \***

Street Address

1000 Birch Ridge Drive

Address Line 2

City

Raleigh

Postal / Zip Code

27610

State / Province / Region

NC

Country

US

**2e. Telephone Number: \***

(xxx)xxx-xxxx

(919)707-6103

**2f. Fax Number:**

(xxx)xxx-xxxx

**2g. Email Address: \***

pharris@ncdot.gov

## C. Project Information and Prior Project History

### 1. Project Information

**1a. Name of project: \***

B-5825

**1b. Subdivision name:**

(if appropriate)

**1c. Nearest municipality / town: \***

Donnaha

## 2. Project Identification



### 2a. Property Identification Number:

(tax PIN or parcel ID)

### 2b. Property size:

(in acres)

### 2c. Project Address

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

Country

### 2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

#### Latitude: \*

36.216144  
ex: 34.208504

#### Longitude: \*

-80.432081  
-77.796371

## 3. Surface Waters

### 3a. Name of the nearest body of water to proposed project: \*

Yadkin River

### 3b. Water Resources Classification of nearest receiving water: \*

WS-IV

[Surface Water Lookup](#)

### 3c. What river basin(s) is your project located in? \*

Yadkin-PeeDee

### 3d. Please provide the 12-digit HUC in which the project is located. \*

030401011007

[River Basin Lookup](#)

## 4. Project Description and History

### 4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: \*

Predominately undeveloped forest, along with agriculture land, some rural residences, and Donnaha Park located on the west side of the Yadkin River.

### 4b. Have Corps permits or DWR certifications been obtained for this project (including all prior phases) in the past? \*

Yes  No  Unknown

### 4d. Attach an 8 1/2 X 11 excerpt from the most recent version of the USGS topographic map indicating the location of the project site. (for DWR)

[Click the upload button or drag and drop files here to attach document](#)

File type must be pdf

### 4e. Attach an 8 1/2 X 11 excerpt from the most recent version of the published County NRCS Soil Survey map depicting the project site. (for DWR)

[Click the upload button or drag and drop files here to attach document](#)

File type must be pdf

### 4f. List the total estimated acreage of all existing wetlands on the property:

0.11

### 4g. List the total estimated linear feet of all existing streams on the property:

(intermittent and perennial)

### 4h. Explain the purpose of the proposed project: \*

To replace a structurally deficient bridge. Bridge No. 35 has a sufficiency rating of 4 out of 100. The bridge is considered structurally deficient due to a superstructure appraisal of 3 out of 9 according to Federal Highway standards. This also necessitates the need to replace an existing 72-inch Corrugated Metal Pipe (CMP).

### 4i. Describe the overall project in detail, including indirect impacts and the type of equipment to be used: \*

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge number 980035 on NC 67 (Reynolda Road) over the Yadkin River (STIP B-5825) in Yadkin & Forsyth Counties. The replacement structure will be a 72-inch girder bridge approximately 1,065-feet long providing a minimum clear roadway width of 32-feet on new alignment to the north. The bridge will include two 12-foot travel lanes, 4-foot offsets, and bicycle safe rails. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be raised from 3 feet to 6 feet. The 72" Corrugated Metal Pipe (CMP) on SR 1600 (Donnaha Road) over an unnamed tributary to the Yadkin River will be replaced with a single 9' x 10' Reinforced Box Culvert (RCBC). The existing single 9' x 9' RCBC on NC 67 (Reynolda Road) over an unnamed tributary to the Yadkin River east of Bridge No. 980035 will be retained and extended. Project construction on NC 67 (Reynolda Road) will extend approximately 1,533-feet from the west end of the new bridge and 1,402-feet from the east 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 4-foot paved.

Project construction on SR 1600 (Donnaha Road) will extend approximately 968-feet north from NC 67. SR 1600 will be realigned and widened to improve the sight distance to the west. The realignment of SR 1600 to the east will include two 12-foot travel lanes with 8-foot shoulders (11-feet with guardrail). NC 67 has a functional classification of Minor Arterial and will be designed using Regional Tier Guidelines with a 60 mile per hour design speed.

### 4j. Please upload project drawings for the proposed project.

Click the upload button or drag and drop files here to attach document

B-5825\_Permit\_Drawings\_2020-02-26.pdf

5.11MB

File type must be pdf

## 5. Jurisdictional Determinations

5a. Have the wetlands or streams been delineated on the property or proposed impact areas? \*

Yes  No  Unknown

**Comments:**

No Agency site visit has occurred.

5b. If the Corps made a jurisdictional determination, what type of determination was made? \*

Preliminary  Approved  Not Verified  Unknown  N/A

**Corps AID Number:**

Example: SAW-2017-99999

5c. If 5a is yes, who delineated the jurisdictional areas?

Name (if known): Paul Masten

Agency/Consultant Company: AECOM

Other:

### 5d1. Jurisdictional determination upload

Click the upload button or drag and drop files here to attach document

File type must be PDF

## 6. Future Project Plans

6a. Is this a phased project? \*

Yes  No

Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

No.

## D. Proposed Impacts Inventory

### 1. Impacts Summary

1a. Where are the impacts associated with 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.

"W." will be used in the table below to represent the word "wetland".

2a. Site # * (?)	2a1 Reason * (?)	2b. Impact type * (?)	2c. Type of W. *	2d. W. name *	2e. Forested *	2f. Type of Jurisdiction * (?)	2g. Impact area *
2	Fill	P	Headwater Forest	Wetland A	Yes	Corps	0.010 (acres)
2	Mechanized Clearing	P	Headwater Forest	Wetland A	Yes	Corps	0.020 (acres)
3	Mechanized Clearing	P	Bottomland Hardwood Forest	Wetland B	No	Corps	0.080 (acres)

**2g. Total Temporary Wetland Impact**

0.000

**2g. Total Permanent Wetland Impact**

0.110

**2g. Total Wetland Impact**

0.110

**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.

"S." will be used in the table below to represent the word "stream".

	3a. Reason for impact* (?)	3b. Impact type *	3c. Type of impact *	3d. S. name *	3e. Stream Type* (?)	3f. Type of Jurisdiction *	3g. S. width* Average (feet)	3h. Impact length* (linear feet)
S1	Site 1: Temp. Work Pads	Temporary	Workpad/Causeway	Yadkin River	Perennial	Both	345 Average (feet)	14 (linear feet)
S2	Site 1: Bank stabilization	Permanent	Bank Stabilization	Yadkin River	Perennial	Both	345 Average (feet)	134 (linear feet)
S3	Site 1: Bank stabilization	Temporary	Bank Stabilization	Yadkin River	Perennial	Both	345 Average (feet)	43 (linear feet)
S4	Site 2: stream relocation	Permanent	Relocation	SB (UT to Yadkin)	Intermittent	Both	3 Average (feet)	168 (linear feet)
S5	Site 2: 3' Std. base ditch	Temporary	Other	SB (UT to Yadkin)	Perennial	Both	3 Average (feet)	12 (linear feet)
S6	Site 4: pipe removal channel improvement	Permanent	Rip Rap Fill	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	34 (linear feet)
S7	Site 4: pipe removal channel improvement	Temporary	Rip Rap Fill	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	26 (linear feet)
S8	Site 4: 1 @ 9'x 10' RCBC	Permanent	Fill	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	165 (linear feet)
S9	Site 4: 1 @ 9'x 10' RCBC	Temporary	Other	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	30 (linear feet)
S10	Site 4: culvert improvement	Permanent	Bank Stabilization	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	31 (linear feet)
S11	Site 4: culvert improvement	Temporary	Bank Stabilization	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	20 (linear feet)
S12	Site 4: 1 @ 9'x 9' RCBC Extension	Permanent	Fill	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	99 (linear feet)
S13	Site 4: channel improvement	Permanent	Bank Stabilization	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	32 (linear feet)
S14	Site 4: channel improvement	Temporary	Bank Stabilization	SC (UT to Yadkin)	Perennial	Both	9 Average (feet)	11 (linear feet)

\*\* All Perennial or Intermittent streams must be verified by DWR or delegated local government.

**3i. Total jurisdictional ditch impact in square feet:**

0

**3i. Total permanent stream impacts:**

663

**3i. Total temporary stream impacts:**

156

**3i. Total stream and ditch impacts:**

819

**3j. Comments:**

Of the total of 663 linear feet of permanent stream impact, 197 linear feet are Bank Stabilization impacts (not requiring mitigation). Therefore, mitigation is required for 466 linear feet of permanent stream impacts. [see Comment in Section 4h]

**E. Impact Justification and Mitigation**

**1. Avoidance and Minimization**

**1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project:\***

Minimizing shoulder section; providing adequate ground cover; stabilizing embankments and drainage ditches; providing adequate energy dissipation; utilizing natural features and drainage pathways (existing drainage pathways were utilized to the maximum extent practicable); and minimizing direct discharges from the bridge.

The existing bridge has four (4) bents in the Yadkin River; the proposed bridge will only have two (2) bents in the Yadkin River.

**1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques:\***

At Site 2, a portion of a 30-inch RCP will be removed and approximately 100 linear feet of stream will be 'day-lighted'.

At Site 4, a 72-inch CMP will be removed and approximately 100 linear feet of stream will be 'day-lighted'.

During the use of temporary work pads for the bridge demolition/construction, stream flow blockage will be limited to 50% (or less) at any one time.

Best Management Practices for Surface Waters will be used during all phases of construction.

**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?

Yes  No

2c. If yes, mitigation is required by (check all that apply):

DWR  Corps

2d. If yes, which mitigation option(s) will be used for this project?

Mitigation bank  Payment to in-lieu fee program  Permittee Responsible Mitigation

### 4. Complete if Making a Payment to In-lieu Fee Program

4a. Approval letter from in-lieu fee program is attached.

Yes  No

4b. Stream mitigation requested:

(linear feet)

466

4c. If using stream mitigation, what is the stream temperature:

warm

NC Stream Temperature Classification Maps can be found under the Mitigation Concepts tab on the Wilmington District's RIBITS website.

4d. Buffer mitigation requested (DWR only):

(square feet)

4e. Riparian wetland mitigation requested:

(acres)

0.11

4f. Non-riparian wetland mitigation requested:

(acres)

4g. Coastal (tidal) wetland mitigation requested:

(acres)

4h. Comments

NCDOT does not propose mitigation for the 197 linear feet of bank stabilization impacts, as bank stabilization does not require fill in the stream bed and therefore, under Section 404 of the Clean Water Act, does not constitute Loss of Waters of the U.S. and is not subject to compensatory mitigation.

Wetland mitigation has been obtained from DMS.

Stream mitigation has been obtained from Brushy Mountain Mitigation Bank.

### 6. Buffer mitigation (State Regulated Riparian Buffer Rules) - required by DWR

6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation? If yes, you must fill out this entire form - please contact DWR for more information.

Yes  No

## F. Stormwater Management and Diffuse Flow Plan (required by DWR)

\*\*\* Recent changes to the stormwater rules have required updates to this section .\*\*\*

### 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?

Yes  No

For a list of options to meet the diffuse flow requirements, click [here](#).

If no, explain why:

It is not located within a Buffer Basin.

### 2. Stormwater Management Plan

2a. Is this a NCDOT project subject to compliance with NCDOT's Individual NPDES permit NCS000250? \*

Yes  No

Comments:

see attached Permit Drawings.

## G. Supplementary Information

### 1. Environmental Documentation

1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? \*

Yes  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)? \*

Yes  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.) \*

Yes  No

## NEPA or SEPA Final Approval Letter

[Click the upload button or drag and drop files here to attach document](#)

B-5825 MCDC 10Jul19.pdf

4.99MB

FILETYPE MUST BE PDF

## 2. Violations (DWR Requirement)

2a. Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)? \*

Yes  No

## 3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? \*

Yes  No

3b. If you answered "no," provide a short narrative description.

Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.

## 4. Sewage Disposal (DWR Requirement)

4a. Is sewage disposal required by DWR for this project? \*

Yes  No  N/A

## 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? \*

Yes  No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? \*

Yes  No

5d. Is another Federal agency involved? \*

Yes  No  Unknown

5e. Is this a DOT project located within Division's 1-8? \*

Yes  No

5f. Will you cut any trees in order to conduct the work in waters of the U.S.? \*

Yes  No

5g. Does this project involve bridge maintenance or removal? \*

Yes  No

5g(1). If yes, have you inspected the bridge for signs of bat use such as staining, guano, bats, etc.? Representative photos of signs of bat use can be found in the NLEB SLOPES, Appendix F, pages 3-7.

Yes  No

Link to the NLEB SLOPES document: [http://saw-reg.usace.army.mil/NLEB/1-30-17-signed\\_NLEB-SLOPES&apps.pdf](http://saw-reg.usace.army.mil/NLEB/1-30-17-signed_NLEB-SLOPES&apps.pdf)

If you answered "Yes" to 5g(1), did you discover any signs of bat use? \*

Yes  No  Unknown

\*\*\* If yes, please show the location of the bridge on the permit drawings/project plans.

5h. Does this project involve the construction/installation of a wind turbine(s)? \*

Yes  No

5i. Does this project involve (1) blasting, and/or (2) other percussive activities that will be conducted by machines, such as jackhammers, mechanized pile drivers, etc.? \*

Yes  No

If yes, please provide details to include type of percussive activity, purpose, duration, and specific location of this activity on the property.

[Click the upload button or drag and drop files here to attach document](#)

File must be PDF

5j. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? \*

USFWS website, NCNHP website, and on-site pedestrian surveys.

## Consultation Documentation Upload

[Click the upload button or drag and drop files here to attach document](#)

B-5825 2020-02-24 NLEB Slopes.pdf

265.58KB

File type must be PDF

## 6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? \*

Yes  No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? \*

NMFS County Index

## 7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpoweb/>)

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)? \*

Yes  No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? \*

NSEPA Documentation

7c. Historic or Prehistoric Information Upload

[Click the upload button or drag and drop files here to attach document](#)

B-5825 Historic\_Prehistoric.pdf

846.33KB

File must be PDF

## 8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? \*

Yes  No

8b. If yes, explain how project meets FEMA requirements:

NCDOT Hydraulics Unit coordination with FEMA

8c. What source(s) did you use to make the floodplain determination? \*

FEMA Maps

## Miscellaneous

### Comments

[from the MCDC]: Donnaha Park is owned by the State of North Carolina and is not a Section 6(f) resource. The land was donated to the State of North Carolina by the United States of America as a recreational use for the traveling public and as a source for roadway materials in connection with the maintenance and operation of a public highway. Donnaha Park will be impacted with the proposed project due to the relocation of Donnaha Road.

To address Donnaha Park closure and to address potential river users during bridge demolition/construction, Division 11 personnel will be meeting on-site with the NCWRC, scheduled for March 4, 2020, for discussion of logistics.

Miscellaneous attachments not previously requested.

[Click the upload button or drag and drop files here to attach document](#)

B-5825 App Cov Ltr.pdf

375.64KB

File must be PDF or KMZ

## Signature

\*

By checking the box and signing below, I certify that:

- I have given true, accurate, and complete information on this form;
- I agree that submission of this PCN form is a "transaction" subject to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the "Uniform Electronic Transactions Act");
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the PCN form.

Full Name: \*

Michael Anthony Turchy

Signature



Date

3/6/2020



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

TIM BAUMGARTNER  
Director

March 4, 2020

Mr. Philip S. Harris, III, P.E.  
Environmental Analysis Unit  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

Subject: Mitigation Acceptance Letter:

**B-5825**, Replace Bridge Number 35 over the Yadkin River on NC 67, Yadkin County

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory wetland mitigation for the subject project. Based on the information supplied by you on March 2, 2020, the impacts are located in CU 03040101 of the Yadkin River basin in the Central Piedmont (CP) Eco-Region, and are as follows:

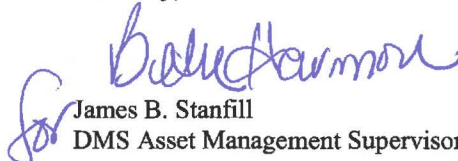
Yadkin 03040101 CP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	0	0.11	0	0	0	0

\*Some of the stream and/or wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

The impacts and associated mitigation needs were under projected by the NCDOT in the 2020 impact data. DMS will commit to implement sufficient compensatory wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of the In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from DMS.

If you have any questions or need additional information, please contact Beth Harmon at 919-707-8420.

Sincerely,

  
James B. Stanfill  
DMS Asset Management Supervisor

cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office  
Ms. Amy Chapman, NCDWR  
File: B-5825



## Brushy Mountain Mitigation Site

The Brushy Mountain mitigation site is in western North Carolina. Specifically, the site is located on Macemore Road, three miles south of Elkin, in Yadkin County, North Carolina, within the Yadkin River Basin Cataloging Unit (03040101).

In order to offset impacts associated with B-5825, NCDOT will be debiting the Brushy Mountain mitigation site for 764 linear feet. Impacts are shown below in the table.

Site Name	Stream Type	Bank Developer	Stream Mitigation Credits (lf)	B-5825 Stream Impacts (lf)	B-5825 Mitigation Required	Notes
Brushy Mountain	Warm	Restoration Systems	1,539	466	764	298 LF perm. Impacts to perennial stream @ 2:1 ratio = 596 LF  168 LF re-location of Intermittent stream @ 1:1 ratio = 168 LF



**DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
151 PATTON AVENUE  
ROOM 208  
ASHEVILLE, NORTH CAROLINA 28801-5006**

January 24, 2020

Regulatory Division

Action ID No. SAW-2017-01463

Re: Monitoring Year 1 Credit Release of the Yadkin 01 Umbrella Mitigation Banking Instrument and Brushy Mountain Mitigation Site

Restoration Systems, Inc.  
Attn: Raymond Holz  
1101 Haynes Street, Suite 211  
Raleigh, North Carolina 27604

Dear Mr. Holz:

This correspondence is in reference to the Yadkin 01 Umbrella Mitigation Bank, Brushy Mountain Mitigation Site Year 1 Annual Monitoring Report received November 25, 2019. The Brushy Mountain Site is located on Macemore Road, three miles south of Elkin, in Yadkin County, North Carolina, within the Yadkin River Basin Cataloging Unit (03040101). This 23.29 acre project involves stream and wetland restoration, enhancement and/or preservation of approximately 5,593 linear feet of stream and 5.31 acres of wetland, with the goal of generating 5,130 Stream Mitigation Units (SMU's) and 4.75 Riparian Wetland Mitigation Units (WMU's). The purpose of this letter is to provide comments on the reports and to confirm the release of credits from the Bank pursuant to the completion of required tasks, as described in Section VII, of the Mitigation Banking Instrument (MBI) for this project.

We have reviewed the Year 1 Monitoring Report and did not identify any outstanding concerns associated with overall performance of the bank. We did note several items and recommend that these areas be monitored for future evaluation. A late planting occurred for this site, although monitoring was pushed back to account for this and all vegetation monitoring plots met success criteria, it will be important to monitor success in Monitoring Year 2. Also, 1,000 live stakes were planted along approximately 1,300 linear feet of UT-1 and UT-2 on December 9, 2019 and their success will not be known until at least Monitoring Year 2. Groundwater monitoring gauges were installed at various times during the first monitoring year and several did not meet success criteria. Future monitoring years will help indicate whether this was due to the delayed installation times or whether other issues meeting success criteria become apparent. Finally, some cross-section profiles depict minor incision in riffles or filling in pools which should be monitored for ongoing trends as the newly constructed channels adjust.

With regard to the annual credit release, the Mitigation Banking Instrument (UMBI) entitled, Yadkin 01 UMB-Brushy Mountain Mitigation Site, approved January 25, 2019,

stipulates that ten percent (10%) of the Bank's total credits for streams shall be available for sale immediately after submittal of the first year monitoring report, provided the channel is stable and all other success measures are met. By copy of this correspondence, we confirm that you have satisfied the above requirements for the Monitoring Year 1 credit release and 513 SMU's and 0.475 WMU's are now available for sale. This total includes 10% of the additional credits as approved in the final mitigation plan for non-standard buffer widths and 10% of stream preservation which was to be released throughout the monitoring period instead of in the initial release. As of the date of this correspondence, a total of 2,052 SMU's and 1.9 WMU's (40% of the Bank's total credit potential) have been released.

Thank you for your interest in restoring and protecting waters of the United States. If you have questions regarding this letter, please contact Steve Kichefski, Asheville Regulatory Field Office at [steven.l.kichefski@usace.army.mil](mailto:steven.l.kichefski@usace.army.mil) or telephone (828) 271-7980, Extension 4234.

Sincerely,

for

Scott Jones, Chief

Asheville and Charlotte Regulatory Field Offices

Electronic Copies Furnished:

Todd Bowers – USEPA

Mac Haupt – NCDWR

Erin Davis – NCDWR

Byron Hamstead – USFWS

Olivia Munzer – NCWRC

Todd Tugwell – USACE

Kim Browning – USACE

Scott Jones - USACE



**BRUSHY MOUNTAIN MITIGATION BANK  
TRANSFER OF CREDIT AFFIDAVIT**

Permittee: NC DEPARTMENT OF TRANSPORTATION  
Project Name: Transportation Improvement Projects

**Compensatory Mitigation Credits:** 769.5 stream credits  
**Mitigation Site Debited:** Brushy Mountain Mitigation Bank

Mitigation Site Info: Located in Yadkin County, Yadkin River Basin, and Cataloging Unit 03040101 and authorized by the Interagency Review Team (IRT) pursuant to the Yadkin 01 Umbrella Stream Mitigation Bank "Mitigation Banking Instrument" (MBI) approved January 23, 2019 (Bank).

**Statement of Mitigation Liability Acceptance:** I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document, associated with the USACE Permittee shown. I also verify that released credits, as approved by the USACE, are currently available at the mitigation site identified above.

**Mitigation Sponsor Name:** Restoration Systems, LLC

**Name of Sponsor's Authorized Representative:** John Preyer

  
\_\_\_\_\_  
Signature of Sponsor's Authorized Representative

01/29/2019  
\_\_\_\_\_  
Date of Signature





**BRUSHY MOUNTAIN MITIGATION BANK  
TRANSFER OF CREDIT AFFIDAVIT**

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**Mitigation Sponsor Name:** Restoration Systems, LLC



**Name of Sponsor's Authorized Representative:** John Preyer

  
\_\_\_\_\_  
Signature of Sponsor's Authorized Representative

10/02/2019  
\_\_\_\_\_  
Date of Signature

Please fill out all yellow cells as completely as possible. Use pick lists where provided. For more information on the NCDOT Stormwater Management Plan form, please refer to the document, NCDOT Stormwater Best Management Practices Toolbox (2014).

If the project drains to multiple water bodies, please drag the print area down such that Water Bodies 2 through 6 print on Page 2

		North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS					
(Version 2.02; Released April 2015)							
<b>WBS Element:</b> 45778.1.1		<b>TIP No.:</b> B-5825		<b>County(ies):</b> Forsyth Yadkin		<b>Page</b> 1 <b>of</b> 2	
General Project Information							
<b>WBS Element:</b> 45778.1.1		<b>TIP Number:</b> B-5825		<b>Project Type:</b> Bridge Replacement		<b>Date:</b> 2/26/2020	
<b>NCDOT Contact:</b> David Stutts, PE		<b>Contractor / Designer:</b> TGS Engineers (Ben Henegar, P.E.)					
<b>Address:</b> NCDOT-Structures Management Unit 1000 Birch Ridge Drive Raleigh, NC 27610		<b>Address:</b> 706 Hillsborough Street Suite 200 Raleigh, NC 27603					
<b>Phone:</b> (919) 707-6442		<b>Phone:</b> (919) 773-8887 ext. 123					
<b>Email:</b> dstutts@ncdot.gov		<b>Email:</b> bhenegar@tgsengineers.com					
<b>City/Town:</b> Tobaccoville		<b>County(ies):</b> Forsyth Yadkin					
<b>River Basin(s):</b> Yadkin-Pee Dee		<b>CAMA County?</b> No No					
<b>Wetlands within Project Limits?</b> Yes							
Project Description							
<b>Project Length (lin. miles or feet):</b> 0.76 miles		<b>Surrounding Land Use:</b> Forest, Rural Residential, Agricultural					
<b>Proposed Project</b>				<b>Existing Site</b>			
<b>Project Built-Upon Area (ac.):</b> 4.2 ac.		<b>Project Built-Upon Area (ac.):</b> 3.3 ac.					
<b>Typical Cross Section Description:</b> Two 12' wide paved travel lanes, two 4' paved shoulders, 4' grassed shoulders, and grassed side slopes ranging from 6(H):1(V) to 2(H):1(V).		<b>Typical Cross Section Description:</b> Two 11' wide paved travel lanes with 2' to 4' grassed shoulders and grassed side slopes ranging from 6(H):1(V) to 2(H):1(V).					
<b>Annual Avg Daily Traffic (veh/hr/day):</b> Design/Future: 5600 Year: 2040		<b>Annual Avg Daily Traffic (veh/hr/day):</b> Existing: 5100 Year: 2020					
<b>General Project Narrative: (Description of Minimization of Water Quality Impacts)</b>		R-5825 involves the replacement of bridge No. 980035 on NC-67 (Reynolda Rd) over the Yadkin River in Forsyth and Yadkin Counties, NC. The proposed 1,065' long by 35.3' wide nine-span bridge would replace the existing 1,084' long by 32.3' wide fifteen-span bridge. The proposed grade will be about 6' above existing grade within the vicinity of the bridge and roughly matching existing grade outside of the bridge. The project will also involve retaining and extending an existing 1@9'x9' RCBC under NC-67 (Reynolda Rd) and replacing an existing 1 @ 72" CSP with a proposed 1@9'x10' RCBC (buried 1') under realigned SR 1600 (Donnaha Rd).  Project minimum measures include: >Maximizing Shoulder Section. >Minimizing Roadway Side Slopes. >Providing Adequate Ground Cover. >Stabilizing Embankments and Drainage Ditches. >Providing Adequate Energy Dissipation. >Utilizing Natural Features and Drainage Pathways - Existing drainage pathways were utilized to the maximum extent practicable. >Minimizing direct discharges from bridges.					
Waterbody Information							
<b>Surface Water Body (1):</b> Yadkin River		<b>NCDWR Stream Index No.:</b> 12-(78.7)					
<b>NCDWR Surface Water Classification for Water Body</b>		<b>Primary Classification:</b> Water Supply IV (WS-IV)					
		<b>Supplemental Classification:</b> None					
<b>Other Stream Classification:</b> None							
<b>Impairments:</b> None							
<b>Aquatic T&amp;E Species?</b> No		<b>Comments:</b>					
<b>NRTR Stream ID:</b> Yadkin River		<b>Buffer Rules in Effect:</b> N/A					
<b>Project Includes Bridge Spanning Water Body?</b> Yes		<b>Deck Drains Discharge Over Buffer?</b> No		<b>Dissipator Pads Provided in Buffer?</b> N/A			
<b>Deck Drains Discharge Over Water Body?</b> No		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)			
(If yes, provide justification in the General Project Narrative)							



**North Carolina Department of Transportation**  
**Highway Stormwater Program**  
**STORMWATER MANAGEMENT PLAN**  
**FOR NCDOT PROJECTS**



(Version 2.02; Released April 2015)

**WBS Element:** 45778.1.1     
**TIP No.:** B-5825     
**County(ies):** Forsyth Yadkin     
**Page** 2 **of** 2

**Additional Waterbody Information**

<b>Surface Water Body (2):</b>	UT to Yadkin River		<b>NCDWR Stream Index No.:</b>	N/A	
<b>NCDWR Surface Water Classification for Water Body</b>	<b>Primary Classification:</b>	Water Supply IV (WS-IV)			
	<b>Supplemental Classification:</b>	None			
<b>Other Stream Classification:</b>	None				
<b>Impairments:</b>	None				
<b>Aquatic T&amp;E Species?</b>	No	<b>Comments:</b>			
<b>NRTR Stream ID:</b>	SC				<b>Buffer Rules in Effect:</b>
<b>Project Includes Bridge Spanning Water Body?</b>	No	<b>Deck Drains Discharge Over Buffer?</b>	No	<b>Dissipator Pads Provided in Buffer?</b>	
<b>Deck Drains Discharge Over Water Body?</b>	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)					

<b>Surface Water Body (3):</b>			<b>NCDWR Stream Index No.:</b>		
<b>NCDWR Surface Water Classification for Water Body</b>	<b>Primary Classification:</b>				
	<b>Supplemental Classification:</b>				
<b>Other Stream Classification:</b>					
<b>Impairments:</b>					
<b>Aquatic T&amp;E Species?</b>		<b>Comments:</b>			
<b>NRTR Stream ID:</b>					<b>Buffer Rules in Effect:</b>
<b>Project Includes Bridge Spanning Water Body?</b>		<b>Deck Drains Discharge Over Buffer?</b>		<b>Dissipator Pads Provided in Buffer?</b>	
<b>Deck Drains Discharge Over Water Body?</b>		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)					

<b>Surface Water Body (4):</b>			<b>NCDWR Stream Index No.:</b>		
<b>NCDWR Surface Water Classification for Water Body</b>	<b>Primary Classification:</b>				
	<b>Supplemental Classification:</b>				
<b>Other Stream Classification:</b>					
<b>Impairments:</b>					
<b>Aquatic T&amp;E Species?</b>		<b>Comments:</b>			
<b>NRTR Stream ID:</b>					<b>Buffer Rules in Effect:</b>
<b>Project Includes Bridge Spanning Water Body?</b>		<b>Deck Drains Discharge Over Buffer?</b>		<b>Dissipator Pads Provided in Buffer?</b>	
<b>Deck Drains Discharge Over Water Body?</b>		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)					

<b>Surface Water Body (5):</b>			<b>NCDWR Stream Index No.:</b>		
<b>NCDWR Surface Water Classification for Water Body</b>	<b>Primary Classification:</b>				
	<b>Supplemental Classification:</b>				
<b>Other Stream Classification:</b>					
<b>Impairments:</b>					
<b>Aquatic T&amp;E Species?</b>		<b>Comments:</b>			
<b>NRTR Stream ID:</b>					<b>Buffer Rules in Effect:</b>
<b>Project Includes Bridge Spanning Water Body?</b>		<b>Deck Drains Discharge Over Buffer?</b>		<b>Dissipator Pads Provided in Buffer?</b>	
<b>Deck Drains Discharge Over Water Body?</b>		(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	
(If yes, provide justification in the General Project Narrative)					

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

# YADKIN & FORSYTH COUNTIES

LOCATION: REPLACE BRIDGE NO. 35 OVER THE  
YADKIN RIVER ON NC 67

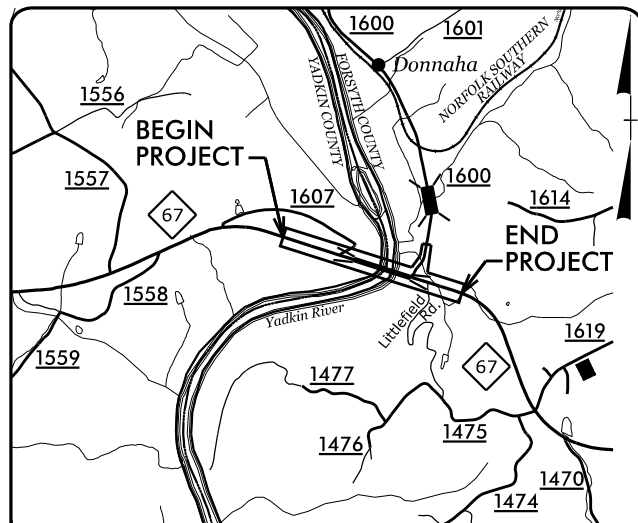
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES

**WETLAND AND SURFACE WATER IMPACTS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5825	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45778.1.1	N/A	PE	
45778.2.1	N/A	RW & UTIL	
45778.3.1	N/A	CONST.	

PERMIT DRAWING  
SHEET 1 OF 9

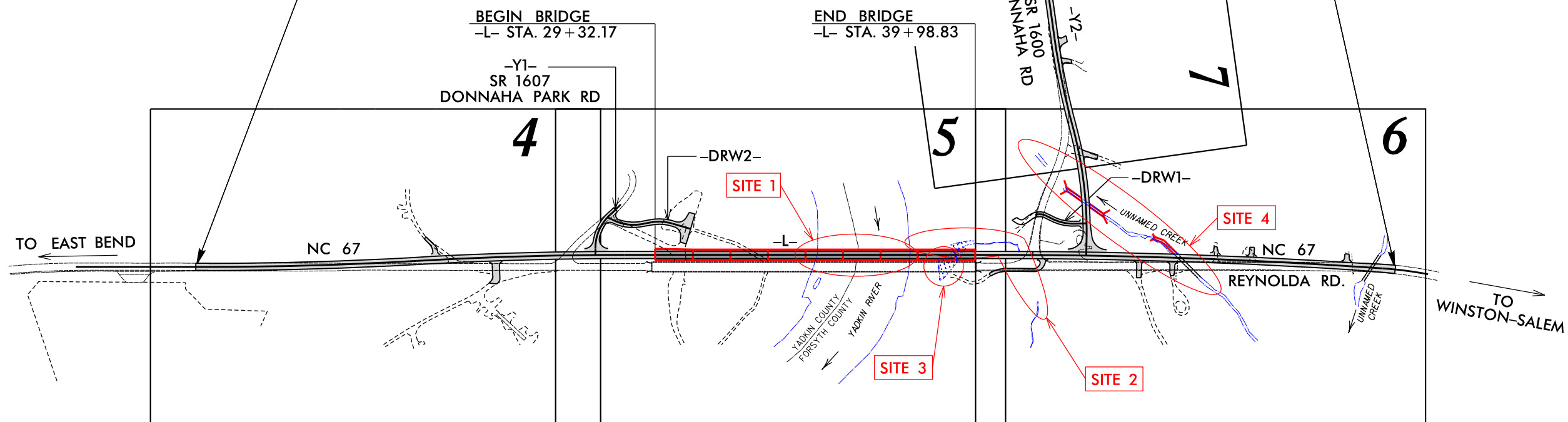
TIP PROJECT: B-5825



VICINITY MAP

BEGIN TIP PROJECT B-5825  
-L- STA. 14 + 00.00

END TIP PROJECT B-5825  
-L- STA. 54 + 00.00

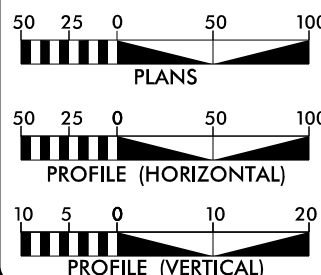


**DESIGN EXCEPTION**  
-L- LINE PAVEMENT CROSS SLOPE  
ON ROADWAY APPROACHES AND  
BRIDGE DECK

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

CONTRACT:

**GRAPHIC SCALES**



**DESIGN DATA**

ADT 2020 = 5100  
ADT 2040 = 5600  
K = 12 %  
D = 80 %  
T = 4 % \*  
V = 60 MPH  
\* TTST = 1% DUAL 3%  
FUNC CLASS =  
MINOR ARTERIAL  
REGIONAL TIER

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT B-5825 = 0.556 mile  
LENGTH STRUCTURES TIP PROJECT B-5825 = 0.202 mile  
TOTAL LENGTH TIP PROJECT B-5825 = 0.758 mile

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

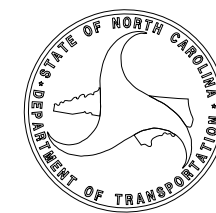
By:  
TGS ENGINEERS  
706 HILLSBOROUGH ST  
SUITE 200  
RALEIGH, NC 27603  
PH (919) 773-8887  
CORP. LICENSE NO.: C-0275

2018 STANDARD SPECIFICATIONS  
RIGHT OF WAY DATE:  
JULY 30, 2019  
LETTING DATE:  
JUNE 16, 2020

**TOMMY REGISTER, PE**  
PROJECT ENGINEER  
**V. MARCUS LOWERY, PE**  
PROJECT DESIGN ENGINEER  
**DAVID STUTTS, PE**  
NCDOT CONTACT

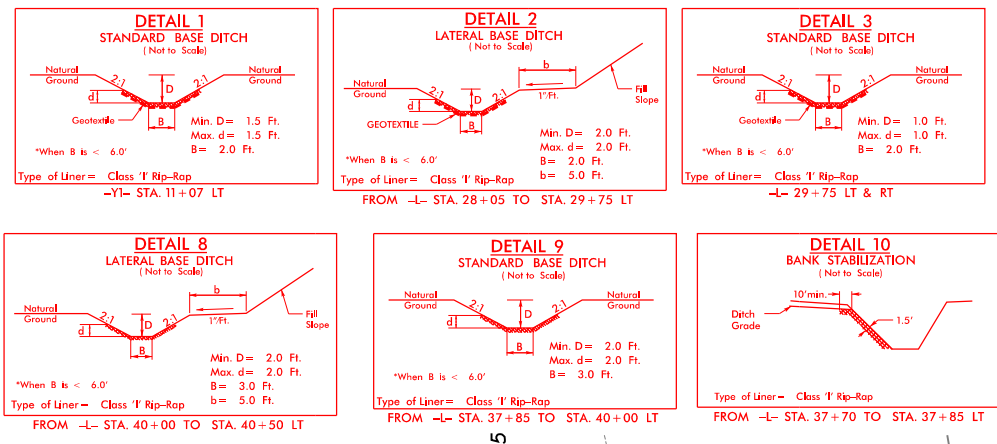
HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.  
**ROADWAY DESIGN ENGINEER**  
SIGNATURE: \_\_\_\_\_ P.E.

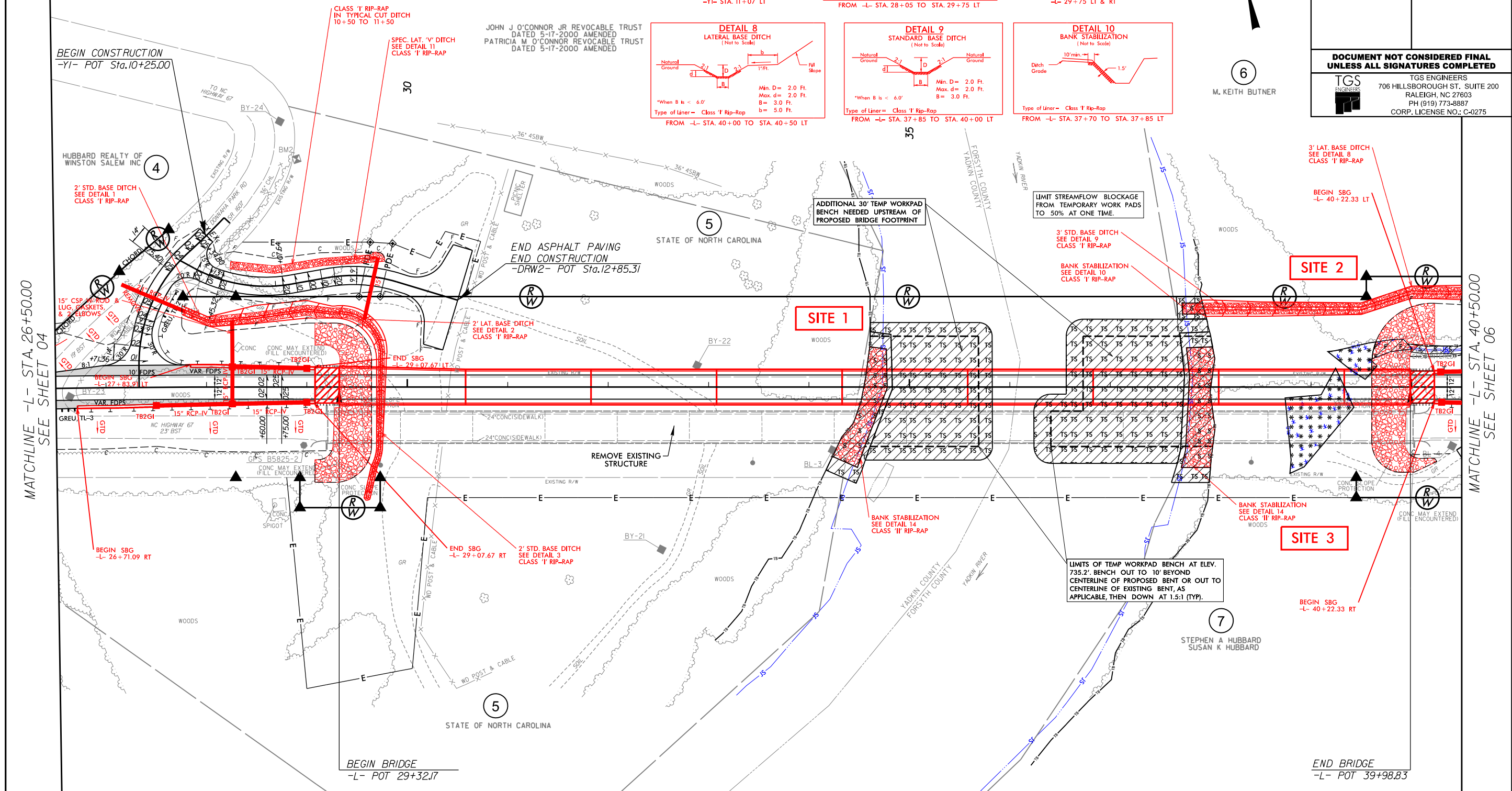


- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

**PERMIT DRAWING  
SHEET 2 OF 9**

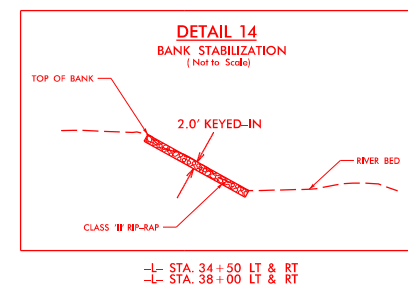
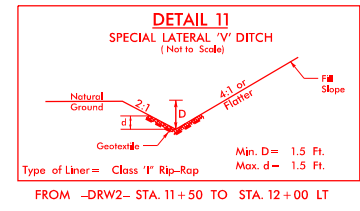


PROJECT REFERENCE NO. <b>B-5825</b>		SHEET NO. <b>05</b>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			
		<b>TGS ENGINEERS</b> 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	



MATCHLINE -L- STA. 26+50.00  
SEE SHEET 04

MATCHLINE -L- STA. 40+50.00  
SEE SHEET 06



MAY 2011  
M. KEITH BUTNER

JOHN J O'CONNOR JR REVOCABLE TRUST  
DATED 5-17-2000 AMENDED  
PATRICIA M O'CONNOR REVOCABLE TRUST  
DATED 5-17-2000 AMENDED

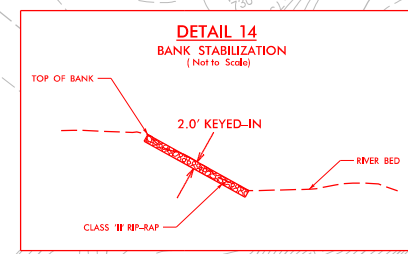
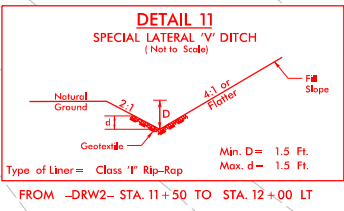
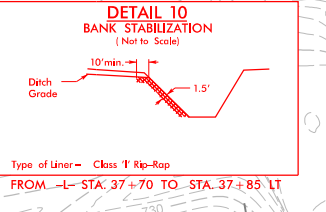
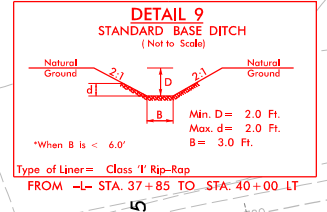
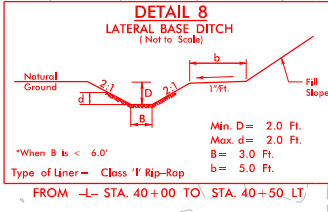
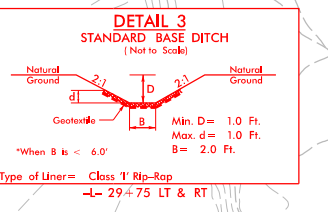
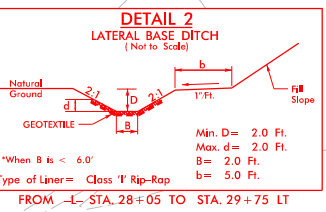
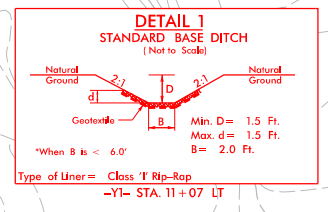
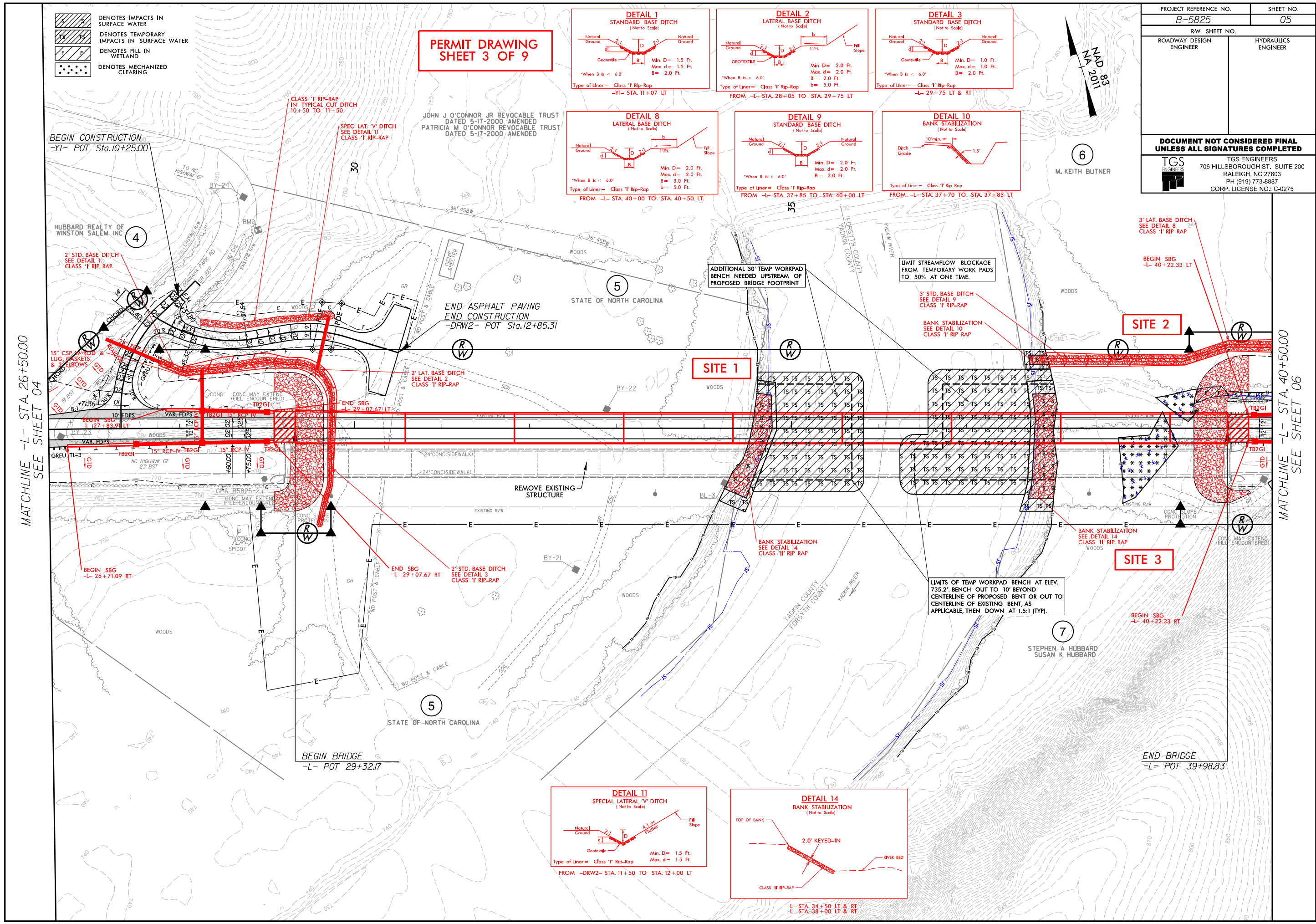
LIMIT STREAMFLOW BLOCKAGE  
FROM TEMPORARY WORK PADS  
TO 50% AT ONE TIME.

LIMITS OF TEMP WORKPAD BENCH AT ELEV.  
735.2'. BENCH OUT TO 10' BEYOND  
CENTERLINE OF PROPOSED BENT OR OUT TO  
CENTERLINE OF EXISTING BENT, AS  
APPLICABLE, THEN DOWN AT 1.5:1 (TYP).

- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING

**PERMIT DRAWING  
SHEET 3 OF 9**

PROJECT REFERENCE NO. <b>B-5825</b>		SHEET NO. <b>05</b>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			
		TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	




MATCHLINE -L- STA. 26+50.00  
SEE SHEET 04

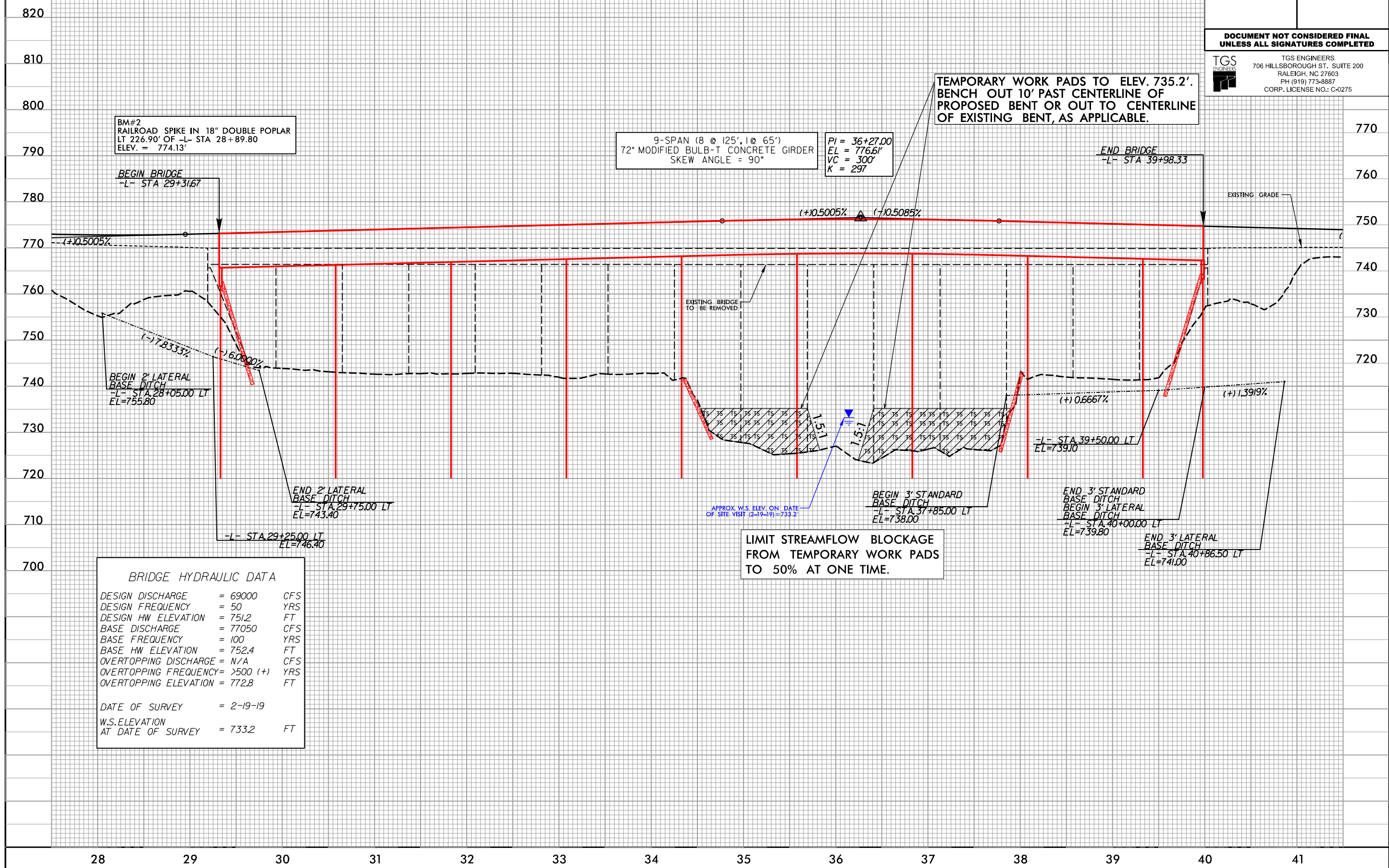
MATCHLINE -L- STA. 40+50.00  
SEE SHEET 06

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

**-L-**  
NC 67

**PERMIT DRAWING**  
SHEET 4 OF 9

PROJECT REFERENCE NO. <b>B-5825</b>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
 <b>TGS ENGINEERS</b> 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	



BM#2  
RAILROAD SPIKE IN 18" DOUBLE POPLAR  
LT 226.90' OF -L- STA 28+89.80  
ELEV. = 774.13'

9-SPAN (8 @ 125', 1 @ 65')  
72" MODIFIED BULB-T CONCRETE GIRDER  
SKEW ANGLE = 90°  
PI = 36+27.00  
EL = 776.61'  
VC = 300'  
K = 297

TEMPORARY WORK PADS TO ELEV. 735.2'.  
BENCH OUT 10' PAST CENTERLINE OF  
PROPOSED BENT OR OUT TO CENTERLINE  
OF EXISTING BENT, AS APPLICABLE.

BEGIN BRIDGE  
-L- STA 29+31.67

END BRIDGE  
-L- STA 39+98.33

BEGIN 2' LATERAL  
BASE DITCH  
-L- STA 28+05.00 LT  
EL=755.80

END 2' LATERAL  
BASE DITCH  
-L- STA 29+75.00 LT  
EL=743.40

BEGIN 3' STANDARD  
BASE DITCH  
-L- STA 37+85.00 LT  
EL=738.00

END 3' STANDARD  
BASE DITCH  
-L- STA 40+00.00 LT  
EL=739.80

END 3' LATERAL  
BASE DITCH  
-L- STA 40+86.50 LT  
EL=741.00

LIMIT STREAMFLOW BLOCKAGE  
FROM TEMPORARY WORK PADS  
TO 50% AT ONE TIME.

BRIDGE HYDRAULIC DATA		
DESIGN DISCHARGE	= 69000	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 751.2	FT
BASE DISCHARGE	= 77050	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 752.4	FT
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING FREQUENCY	= >500 (+)	YRS
OVERTOPPING ELEVATION	= 772.8	FT
DATE OF SURVEY	= 2-19-19	
W.S. ELEVATION AT DATE OF SURVEY	= 733.2	FT

APPROX. W.S. ELEV. ON DATE  
OF SITE VISIT (2-19-19) = 733.2'

MATCHLINE -Y2- STA. 17+00.00  
SEE SHEET 07

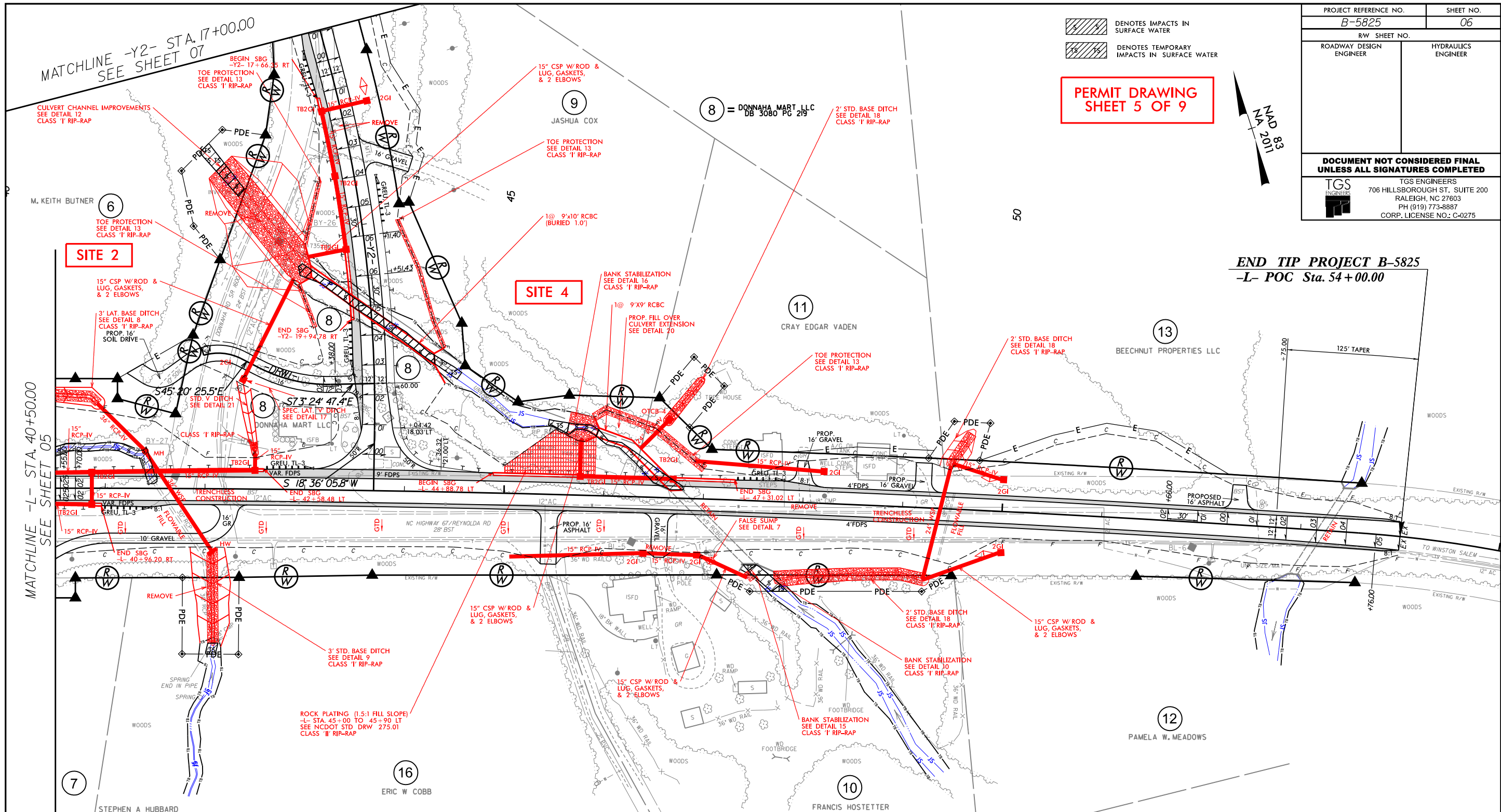
5/8 DENOTES IMPACTS IN SURFACE WATER  
15/8 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

**PERMIT DRAWING  
SHEET 5 OF 9**



PROJECT REFERENCE NO. B-5825	SHEET NO. 06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	

**END TIP PROJECT B-5825  
-L- POC Sta. 54+00.00**



**SITE 2**

**SITE 4**

**7**

**16**

**10**

**12**

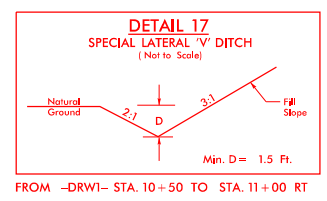
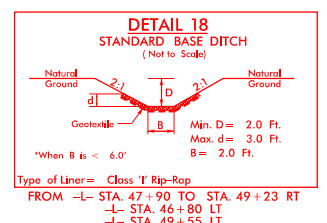
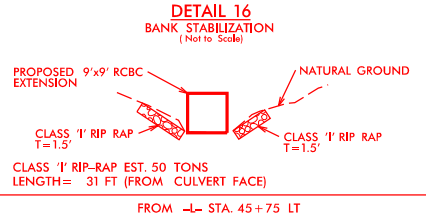
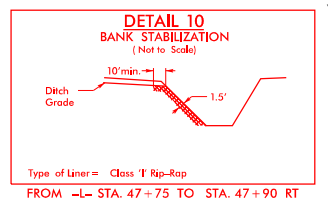
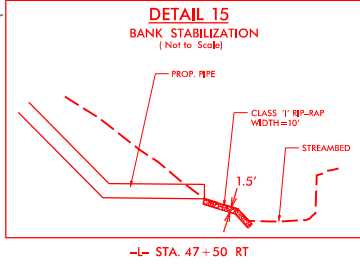
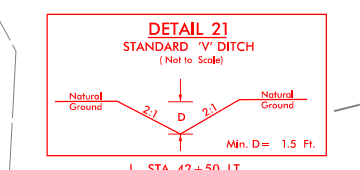
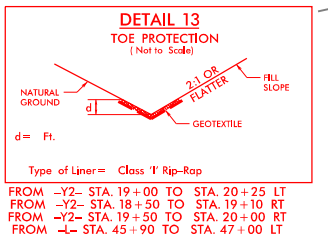
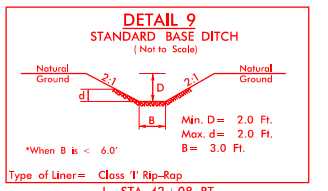
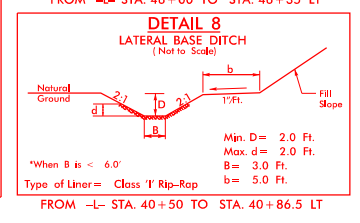
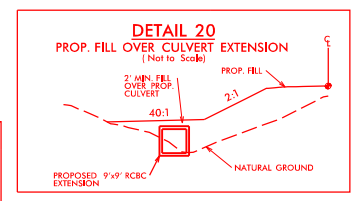
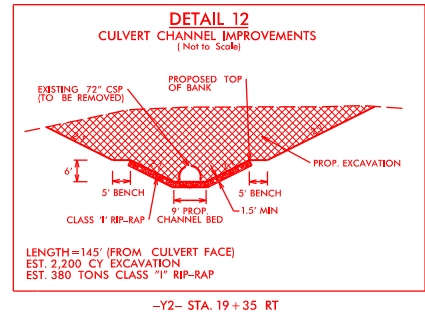
**13**

**11**


**8**

**9**

**6**

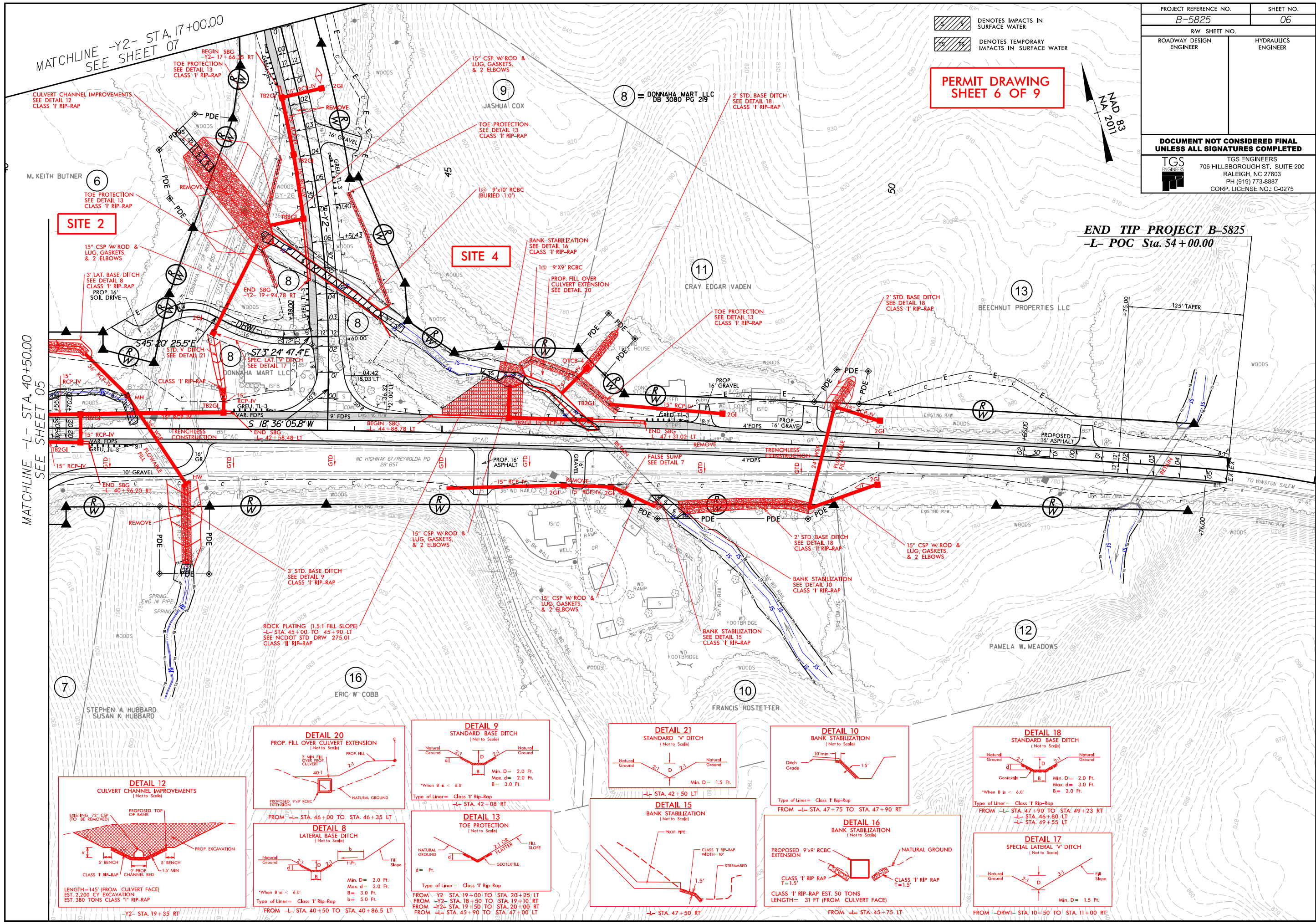




PROJECT REFERENCE NO. B-5825	SHEET NO. 06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
 TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	

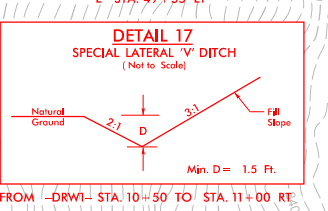
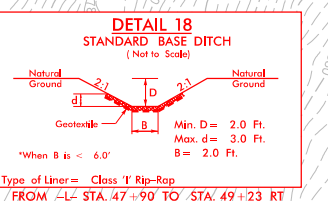
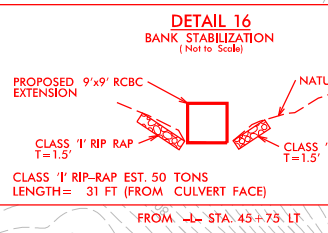
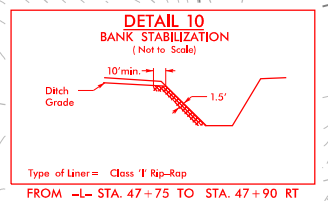
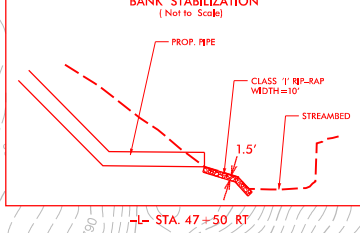
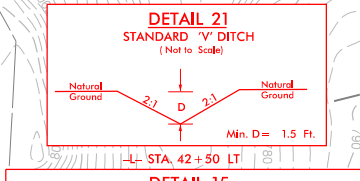
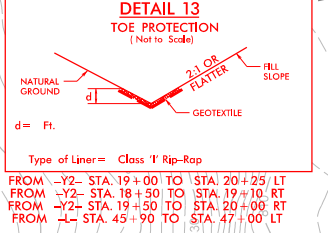
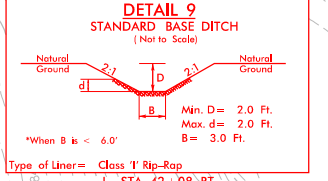
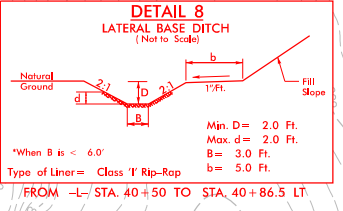
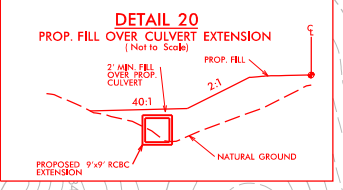
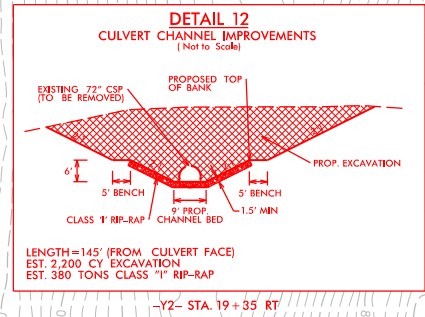
PERMIT DRAWING  
SHEET 6 OF 9

END TIP PROJECT B-5825  
-L- POC Sta. 54+00.00



SITE 2

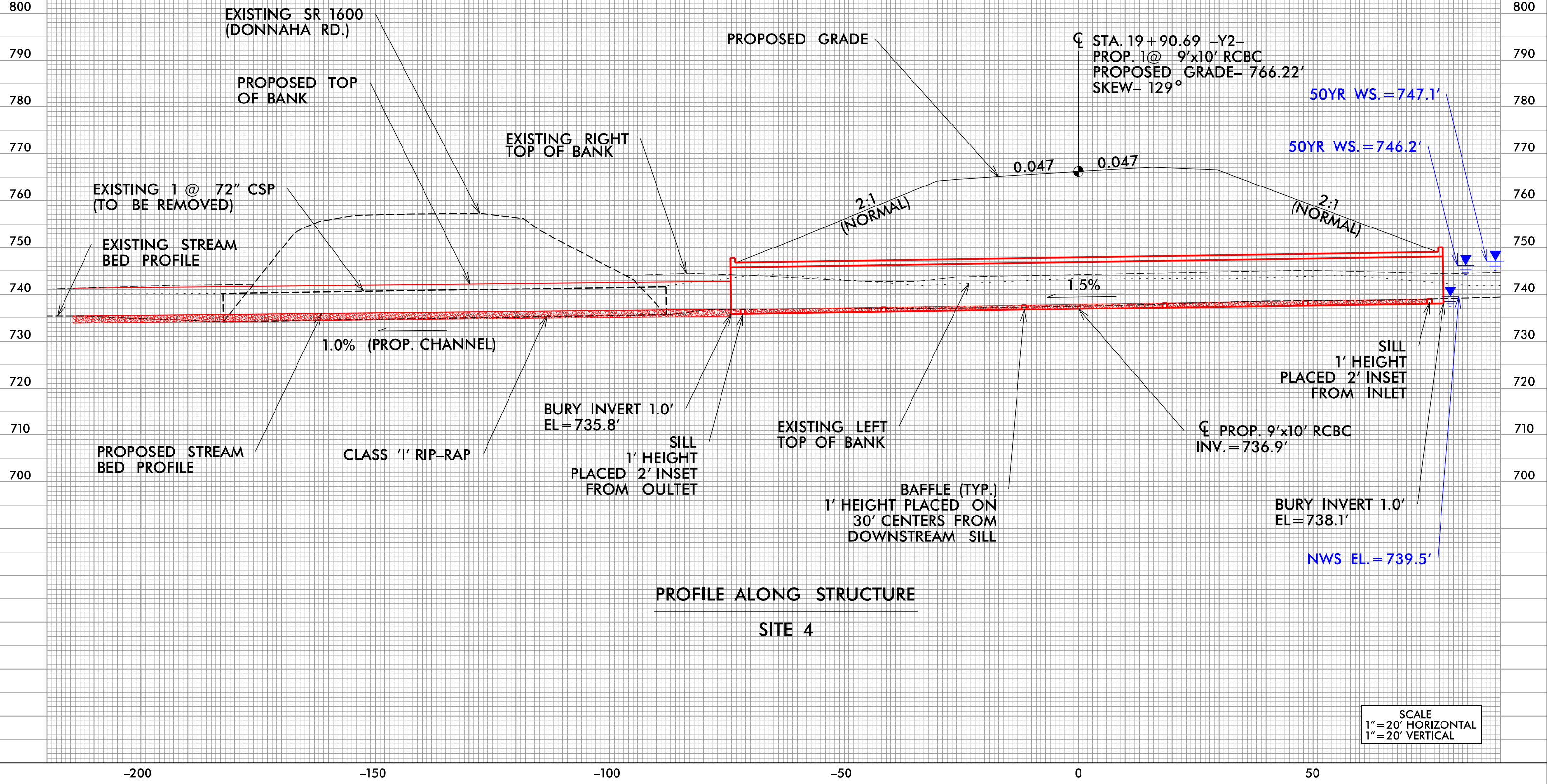
SITE 4



**-Y2-**  
**SR 1600**

**PERMIT DRAWING**  
**SHEET 7 OF 9**

PROJECT REFERENCE NO. <i>B-5825</i>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
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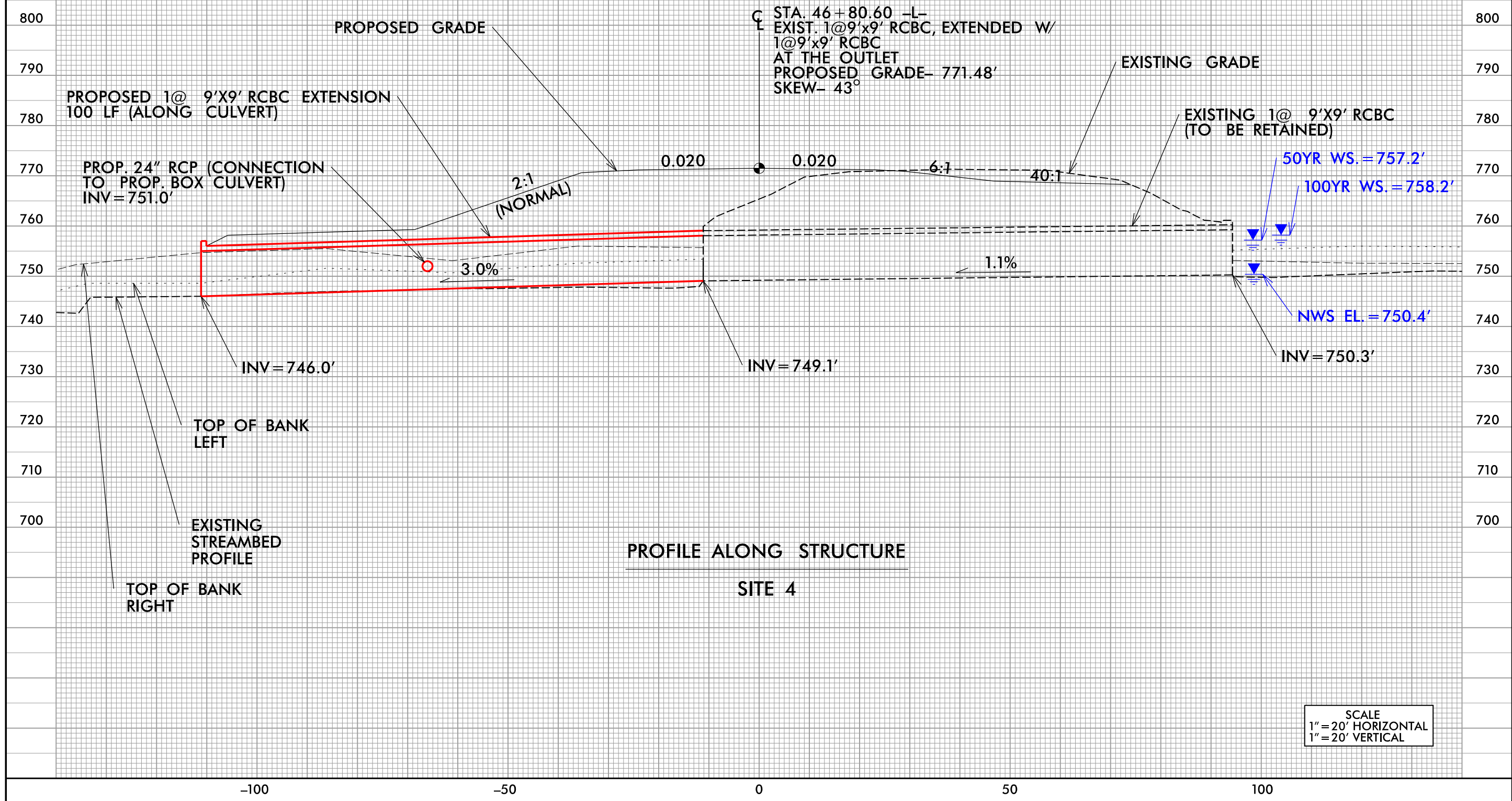
**PROFILE ALONG STRUCTURE**  
**SITE 4**

SCALE  
1" = 20' HORIZONTAL  
1" = 20' VERTICAL

**-L-**  
NC 67

**PERMIT DRAWING  
SHEET 8 OF 9**

PROJECT REFERENCE NO. <i>B-5825</i>	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-0275	



**WETLAND AND SURFACE WATER IMPACTS 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	-L- 34+15 to 38+05 LT & RT	Temporary Workpads						0.77		14		
1	-L- 34+25 to 38+05 LT & RT	Bank Stabilization						0.13	0.08	134	43	
2	-L- 40+00 to 41+50 LT	Stream Relocation						0.01		168		
2	-L- 39+15 to 40+00 LT	Permanent Fill / Mechanized Clearing in Wetlands	0.01			0.02						
2	-L- 42+00 to 42+15 RT	3' Standard Base Ditch						< 0.01			12	
3	-L- 38+75 to 39+45 RT	Mechanized Clearing in Wetlands				0.08						
4	-Y2- 17+85 to 18+50 RT	Culvert Channel Improvements						< 0.01	< 0.01	34	26	
4	-Y2- 19+35 RT to 20+55 LT	Prop. 1 @ 9' x 10' RCBC						0.03	< 0.01	165	30	
4	-L- 45+40 to 45+90 LT	Bank Stabilization						< 0.01	< 0.01	31	20	
4	-L- 45+90 to 46+70 LT	Prop. 1 @ 9' x 9' RCBC Extension						0.02		99		
4	-L- 47+40 to 47+90 RT	Bank Stabilization						< 0.01	< 0.01	32	11	
TOTALS*:			0.01			0.10		0.21	0.87	663	156	

\*Rounded totals are sum of actual impacts

**NOTES:**

- 1. <0.01 acres of Permanent SW impacts for bridge interior bents at -L- 35+58 and 36+83.
- 2. <0.01 acres of Permanent Wetland impacts bridge for interior bents at -L- 39+33.
- 3. Site 1 - Temporary Workpads - Temporary stream impact length shown is the remainder of stream length between abutting bank stabilization impacts covered by the workpad footprint.

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 2/26/20  
 YADKIN AND FORSYTH COUNTIES  
 B-5825  
 45778.1.1  
 SHEET **9** OF **9**

**MINIMUM CRITERIA DETERMINATION CHECKLIST**

**STIP No.:** B-5825  
**WBS No.:** 45778.1.1

**Project Location:** Bridge No. 980035 on NC 67 (Reynolda Road) over the Yadkin River in Yadkin and Forsyth Counties.

**Project Description:** The proposed project involves replacing Bridge No. 980035 on NC 67 over the Yadkin River in Yadkin and Forsyth Counties. Right-of-way acquisition and construction are scheduled for state fiscal year 2020.

The replacement structure will be a 72-inch girder bridge approximately 1,065-feet long providing a minimum clear roadway width of 32-feet on new alignment to the north. The bridge will include two 12-foot travel lanes, 4-foot offsets, and bicycle safe rails. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be raised from 3-feet to 6-feet.

The 72" Corrugated Metal Pipe (CMP) on SR 1600 (Donnaha Road) over an unnamed tributary to the Yadkin River will be replaced with a single 9' x 10' Reinforced Box Culvert (RCBC). The existing single 9' x 9' RCBC on NC 67 (Reynolda Road) over an unnamed tributary to the Yadkin River east of Bridge No. 980035 will be retained and extended.

Project construction on NC 67 (Reynolda Road) will extend approximately 1,533-feet from the west end of the new bridge and 1,402-feet from the east 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 4-foot paved.

Project construction on SR 1600 (Donnaha Road) will extend approximately 968-feet north from NC 67. SR 1600 will be realigned and widened to improve the sight distance to the west. The realignment of SR 1600 to the east will include two 12-foot travel lanes with 8-foot shoulders (11-feet with guardrail).

NC 67 has a functional classification of Minor Arterial and will be designed using Regional Tier Guidelines with a 60 mile per hour design speed.

Traffic will be maintained on-site using the existing bridge and roadway alignment during construction (see Figure 1).

**Anticipated Permit or Consultation Requirements:** A Section 404 Nationwide Permit (NWP) No. 33 will likely be applicable. An NWP No. 33 may also apply for temporary construction activities that are often used during bridge construction or rehabilitation. The USACE holds the final discretion as to what permit will be required to authorize project construction. If a Section 404 permit is required, then a corresponding Section 401 Water Quality Certification from NCDWR will also be required.

**Special Project Information:**

**Purpose and Need:** The purpose of the proposed project is to replace a structurally deficient bridge. NCDOT records indicates Bridge 980035 has a sufficiency rating of 4 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to a superstructure appraisal of 3 out of 9 according to Federal Highway Administration standards.

### MINIMUM CRITERIA DETERMINATION CHECKLIST

**Design Exception:** Design exception required for the pavement cross slope on NC 67.

**Relocations:** One relocation is anticipated with the proposed project. The Donnaha Mart on the corner of NC 67 (Reynolda Road) and SR 1600 (Donnaha Road) will be impacted due to realignment of NC 67.

**Environmental Commitments:** The list of project commitments (green sheets) are located at the end of the checklist.

**Pedestrian and Bicycle Accommodations:** The bridge is located on a designated bike route. The Division of Bicycle and Pedestrian Transportation recommends that the replacement bridge include a 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 for moderate hazards such as winds, high traffic and speeds of vehicles, and/or high drop-off to the ground surface.

The design will include 4-foot paved shoulders and bicycle safe rails to accommodate bicyclists.

**Bridge Demolition:** Bridge No. 980035 is constructed of concrete and steel and should be possible to remove with no resulting debris in the water based on standard demolition practices.

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

**PART A: MINIMUM CRITERIA**

**YES                  NO**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Is the proposed project listed as a type and class of activity allowed under the Minimum Criteria Rule in which environmental documentation is <u>not</u> required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|-------------------------------------|--------------------------|

If the answer to number 1 is “no,” then the project does not qualify as a minimum criteria project. A state environmental assessment is required.

If yes, under which category? **Category 8**

**PART B: MINIMUM CRITERIA EXCEPTIONS**

**YES                  NO**

- |  |                          |                                     |
|--|--------------------------|-------------------------------------|
| 2. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications that an uncommon concern for its environmental effects has been expressed to the Department? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**MINIMUM CRITERIA DETERMINATION CHECKLIST**

- 5. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value?
- 6. Will the proposed activity endanger the existence of a species on the Department of Interior's threatened and endangered species list?
- 7. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or ground water impacts?
- 8. Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits or shellfish, finfish, wildlife, or their natural habitats?

**PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS**

- |  | <b>YES</b>                          | <b>NO</b>                           |
|--|-------------------------------------|-------------------------------------|
| 9. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 10. Does the action require the placement of temporary or permanent fill in waters of the United States?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 11. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 12. Is the proposed action located in an Area of Environmental Concern, as defined in the coastal Area Management Act?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 13. Does the project require stream relocation or channel changes?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Cultural Resources**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 14. Will the project have an "effect" on a property or site listed on the National Register of Historic Places?                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 15. Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

## MINIMUM CRITERIA DETERMINATION CHECKLIST

### **Response to Question 9: Threatened and Endangered Species**

**Small-anthered Bittercress:** Suitable habitat is present within the project study area, however, this species is only known to occur in the Dan River drainage of the Roanoke River Basin. A review of the NCNHP records, updated April 2019, indicates no known occurrences of the small-anthered bittercress within 1.0 mile of the project study area. Due to the lack of habitat, a biological conclusion of NO EFFECT has been rendered for this species.

**Northern Long-eared Bat (NLEB):** A review of NCNHP records, updated April 2019, indicates no known occurrences of the NLEB within 1.0 mile of the project study area. The nearest hibernacula record is 77 miles southwest of the project study area. There are no known NLEB roost trees 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. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

### **Response to Question 10: Waters of the United States**

Three jurisdictional streams (totaling approximately 900 linear feet) and two jurisdictional wetlands (totaling approximately 0.05 acres) were identified within the study area. Exact impact acreages, including required extent of fill placement, will be determined during final design. The amount of water resources and wetlands within the study area, described above, represents the maximum extent of potential fill in Waters of the United States. NCDOT will be pursuing the required USACE and NCDWR permits.

### **Response to Question 15: Parkland**

Donnaha Park is owned by the State of North Carolina and is not a Section 6(f) resource. The land was donated to the State of North Carolina by the United States of America as a recreational use for the traveling public and as a source for roadway materials in connection with the maintenance and operation of a public highway.

Donnaha Park will be impacted with the proposed project due to the relocation of Donnaha Road. The Park will be closed during construction.



### MINIMUM CRITERIA DETERMINATION CHECKLIST

**PART D:( To be completed when either category #8, 12(i) or #15 of the rules are used.)**

Project length: 0.758-miles

Right of Way width: Variable 100-feet to 220-feet

Project completion date: June 2022

Total acres of newly disturbed ground surface: 7-acres

Total acres of wetland impacts: 0.05-acre

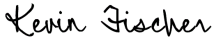
Total linear feet of stream impacts: 900-linear feet permanent

Project purpose: The purpose of the proposed project is to replace a structurally deficient bridge. NCDOT records indicates Bridge 980035 has a sufficiency rating of 4 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to a superstructure appraisal of 3 out of 9 according to Federal Highway Administration standards.

If Part D of the checklist is completed, send a copy of the entire checklist document to:

David B. Harris, PE  
 State Roadside Environmental Engineer  
 Mail Service Center 1557  
 Raleigh, NC 27699-1557  
 (919) 707-2920  
 Fax: (919) 715-2554  
 Email: davidharris@ncdot.gov


Reviewed by:

DocuSigned by:  
  
 FD19A18D98FC496

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

Date: 7/12/2019 | 2:50 PM EDT

Prepared by:

DocuSigned by:  
  
 E3EB7119684E416

Stacy B. Oberhausen, PE, CPM  
 TGS Engineers

Date: 7/12/2019 | 11:15 AM PDT

**PROJECT COMMITMENTS**

**STIP No. B-5825**

**WBS No. 45778.1.1**

**Bridge No. 35 on NC 67 over the Yadkin River  
Yadkin and Forsyth Counties**

**NCDOT Hydraulic Design Unit – FEMA Coordination**

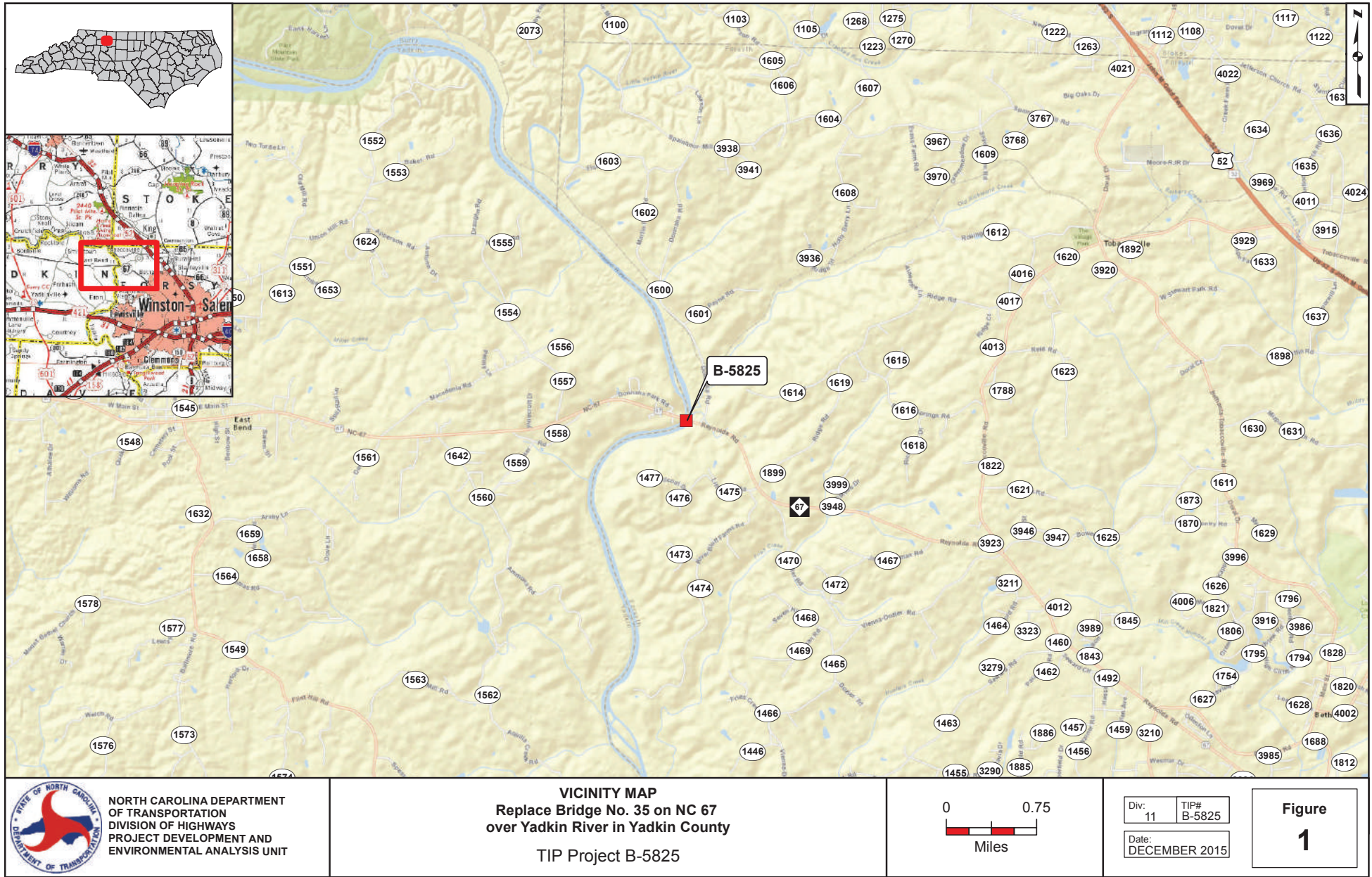
The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine the status of the project with regard to applicability of NCDOT’S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

**Division Construction - FEMA**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

**Division 11 – Donnaha Park**

Donnaha Park will be closed during construction. NCDOT will maintain coordination with Yadkin County Parks and Recreation during construction.





STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

April 11, 2017

TO: Michael Turchy, Environmental Program Consultant  
Environmental Coordination & Permitting Group Western, NES - PDEA

CC: Angela Sanderson, Project Engineer  
Project Development Group - Western Region, PDEA

FROM: Chris Manley, Environmental Program Consultant  
Biological Surveys Group, NES - PDEA

SUBJECT: *Streamline Section 7 Consultation for the Northern Long-Eared Bat* associated with the replacement of Bridge No. 35 over the Yadkin River on NC 67 in Yadkin County, **TIP No. B-5825**.

The North Carolina Department of Transportation (NCDOT, Division 11) proposes to replace Bridge No. 35 over the Yadkin River on NC 67 in Yadkin County, TIP No. B-5825. The existing bridge is a 15 span reinforced concrete, continuous I-beams structure with concrete guardrails. The overall length of the structure is 1084 feet. Construction plans for the new structure have not been finalized as of this writing.

The project to replace Bridge No. 35 has been reviewed for effects on the northern long-eared bat (NLEB). As of May 4, 2015, NLEB is listed by the U.S. Fish and Wildlife Service (USFWS) as "Threatened" under the Endangered Species Act of 1973. As of April 11, 2017, NLEB is listed by USFWS ([http://www.fws.gov/raleigh/species/cntylist/nc\\_counties.html](http://www.fws.gov/raleigh/species/cntylist/nc_counties.html)) as "Probable/Potential" in Yadkin County. USFWS also established a final rule under the authority of section 4(d) of the Endangered Species Act that provides measures for the conservation of NLEB. The USFWS has tailored the final 4(d) rule to prohibit the take of NLEB from certain activities within areas where they are in decline. This incidental take protection applies only to known NLEB occupied maternity roost trees and known NLEB hibernacula. Effective February 16, 2016, incidental take resulting from tree removal is prohibited if it 1) occurs within a ¼ mile radius of known NLEB hibernacula; or 2) cuts or destroys known occupied maternity roost trees, or any other trees within a 150-foot radius from the known maternity tree during the pup season (June 1-July 31).

Mailing Address:  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT &  
ENVIRONMENTAL ANALYSIS UNIT  
1598 MAIL SERVICE CENTER  
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000  
FAX: 919-212-5785  
WEBSITE: NCDOT.GOV

Location:  
CENTURY CENTER, BUILDING B  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610

According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated January 2017, **the nearest NLEB hibernacula record is 77 miles southwest of the project (EO ID 32171) and no known NLEB roost trees occur within 150 feet of the project area.** EO 32171 represents Black Rock Cliffs site with multiple observations from 1986 to 2011.

NCDOT has also reviewed the USFWS Asheville Field office website ([http://www.fws.gov/asheville/htmls/project\\_review/NLEB\\_in\\_WNC.html](http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html)) for consistency with NHP records. This project is located entirely outside of the red highlighted areas (12-digit HUC) that the USFWS Asheville Field Office has determined to be representative of an area that may require consultation.

For the proposed action, NCDOT has committed to the conservation measures listed below:

- 1) No alterations of a known hibernacula entrance or interior environment if it impairs an essential behavioral pattern, including sheltering northern long-eared bats (January 1 through December 31);
- 2) No tree removal within a 0.25 mile radius of a known hibernacula (January 1 through December 31); and
- 3) No cutting or destroying a known, occupied maternity roost tree, or any other trees within a 150-foot radius from the known, occupied maternity tree during the period from June 1 through and including July 31.

**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 C.F.R. § 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.

If you need any additional information, please contact Chris Manley at 919-707-6135.

16-01-0080



**NO NATIONAL REGISTER OF HISTORIC PLACES  
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES  
PRESENT 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.

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**PROJECT INFORMATION**

*Project No:* B-5825                      *County:* Yadkin  
*WBS No:* 45778.1.1                      *Document:* Categorical Exclusion  
*F.A. No:*                                      *Funding:*       State       Federal

*Federal Permit Required?*       Yes       No      *Permit Type:* Nationwide

***Project Description:*** Replace Bridge 35 on NC 67 over the Yadkin River in Yadkin and Forsyth Counties. The Area of Potential Effects (A.P.E.) is approximately 620 meters (2,033 ft.) long and 75 meters (250 ft.) wide. No design plans were provided.

**SUMMARY OF ARCHAEOLOGICAL FINDINGS**

***The North Carolina Department of Transportation (NCDOT) Archaeology Group reviewed the subject project and determined:***

- There are no National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects. (Attach any notes or documents as needed.)
- No subsurface archaeological investigations were required for this project.
- Subsurface investigations did not reveal the presence of any archaeological resources.
- Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.

***Brief description of review activities, results of review, and conclusions:***  
**see attached report**

**SUPPORT DOCUMENTATION**

See attached:     Map(s)       Previous Survey Info       Photos       Correspondence

Other:

Signed:

**CALEB SMITH**

**1/4/2017**

---

NCDOT ARCHAEOLOGIST

Date

16-01-0080



**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**

<b>Project No:</b>	B-5825	<b>County:</b>	Yadkin
<b>WBS No.:</b>	45778.1.1	<b>Document Type:</b>	CE
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	NWP
<b><u>Project Description:</u></b>			
Replace Bridge No. 35 on NC 67 over Yadkin River.			

**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 5, 2016. Based on this review, there are no existing NR, DE, LL, SL or SS properties in the project area. One house constructed in 1945 and one store built in 1940 are within the Area of Potential Effects; however neither the house nor the store possess the architectural integrity and/or distinction to meet the criteria for National Register listing either individually or as a historic district.. The bridge itself, Yadkin County Bridge No. 67, was built in 1950. 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, 2016

Date



02/08/19

See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional Plan Sheet Symbols  
See Sheet RW-?? For Survey Control Sheets

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

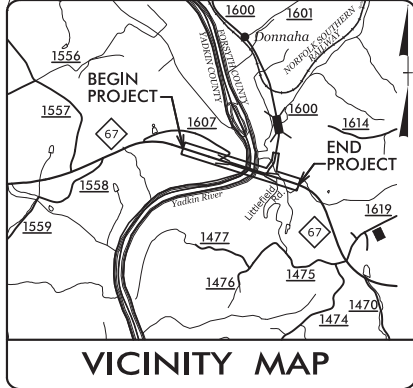
**YADKIN & FORSYTH COUNTIES**

LOCATION: REPLACE BRIDGE NO. 35 OVER THE  
YADKIN RIVER ON NC 67

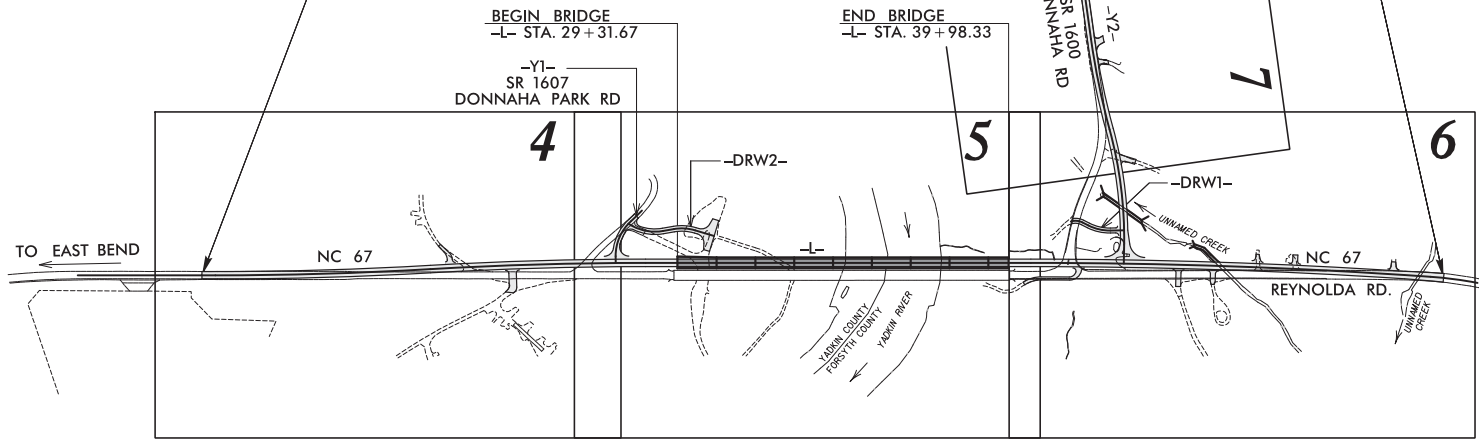
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5825	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45778.1.1	N/A	PE	
45778.2.1	N/A	RW & UTIL	
45778.3.1	N/A	CONST.	

**TIP PROJECT: B-5825**



BEGIN TIP PROJECT B-5825  
-L- STA. 14 + 00.00

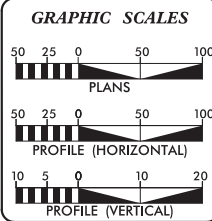


**DESIGN EXCEPTION**  
-L- LINE PAVEMENT CROSS SLOPE ON ROADWAY APPROACHES AND BRIDGE DECK

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III. 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

**CONTRACT:**



**DESIGN DATA**

ADT 2020 =	5100
ADT 2040 =	5600
K =	12 %
D =	80 %
T =	4 % *
V =	60 MPH
* TTST = 1% DUAL 3%	
FUNC CLASS = MINOR ARTERIAL REGIONAL TIER	

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT B-5825	=	0.556 mile
LENGTH STRUCTURES TIP PROJECT B-5825	=	0.202 mile
TOTAL LENGTH TIP PROJECT B-5825	=	0.758 mile

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

TGS ENGINEERS  
706 HILLSBOROUGH ST SUITE 200  
RALEIGH, NC 27603

By: PH (919) 773-8887  
CORP. LICENSE NO.: C-0276

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
JULY 26, 2019

LETTING DATE:  
JUNE 16, 2020

**TOMMY REGISTER, PE**  
PROJECT ENGINEER

**V. MARCUS LOWERY, PE**  
PROJECT DESIGN ENGINEER

**DAVID STUTTS, PE**  
NCDOT CONTACT

**HYDRAULICS ENGINEER**


SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.



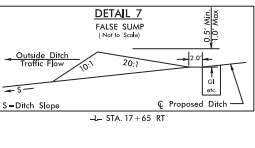
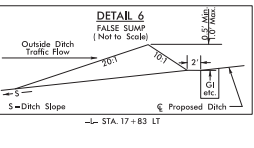
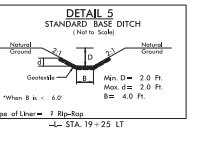
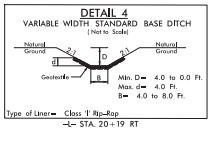
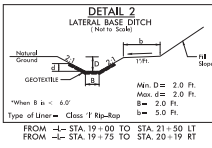
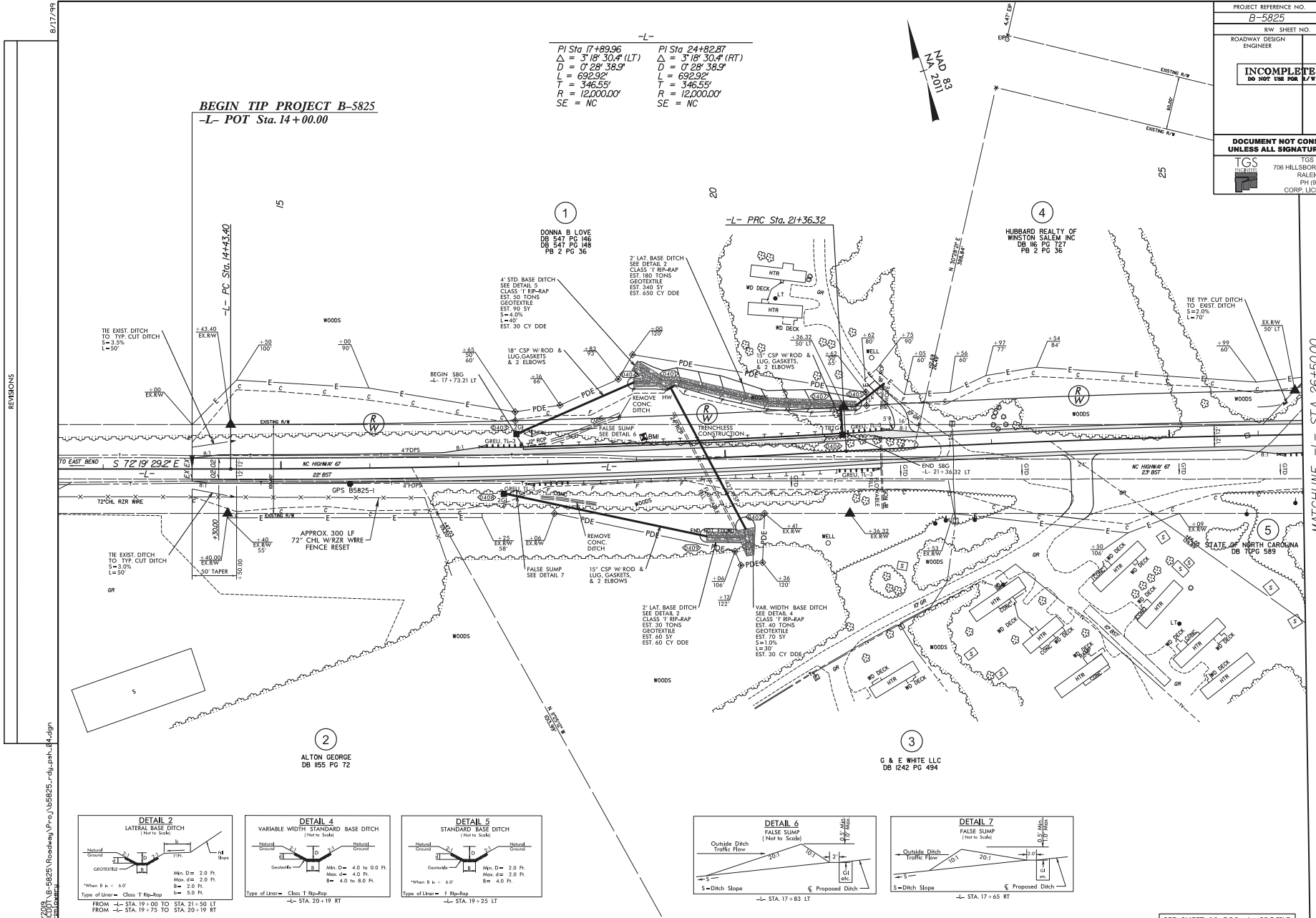
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PROJECT REFERENCE NO. <b>B-5825</b>	SHEET NO. <b>04</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ANY ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> <b>UNLESS ALL SIGNATURES COMPLETED</b>	
 <b>TGS ENGINEERS</b> 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-0887 CORP. LICENSE NO.: C-4275	

-L-

PI Sta 17+89.96 $\Delta = 3' 18'' 30.4'' (LT)$ $D = 0' 28'' 36.9''$ $L = 692.92'$ $T = 346.55'$ $R = 12,000.00'$ SE = NC	PI Sta 24+82.87 $\Delta = 3' 18'' 30.4'' (RT)$ $D = 0' 28'' 36.9''$ $L = 692.92'$ $T = 346.55'$ $R = 12,000.00'$ SE = NC
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-L- POT Sta. 14+00.00



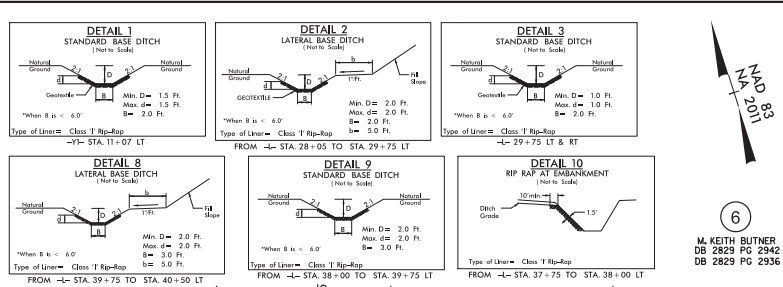
SEE SHEET 08 FOR -L- PROFILE

MATCHLINE -L- STA. 26+50.00  
SEE SHEET 05

REVISIONS  
8/17/09  
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16:00

8/17/09

-L-	-YI-	-YI-	-DRW2-
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PROJECT REFERENCE NO. **B-5825** SHEET NO. **05**

R/W SHEET NO. \_\_\_\_\_

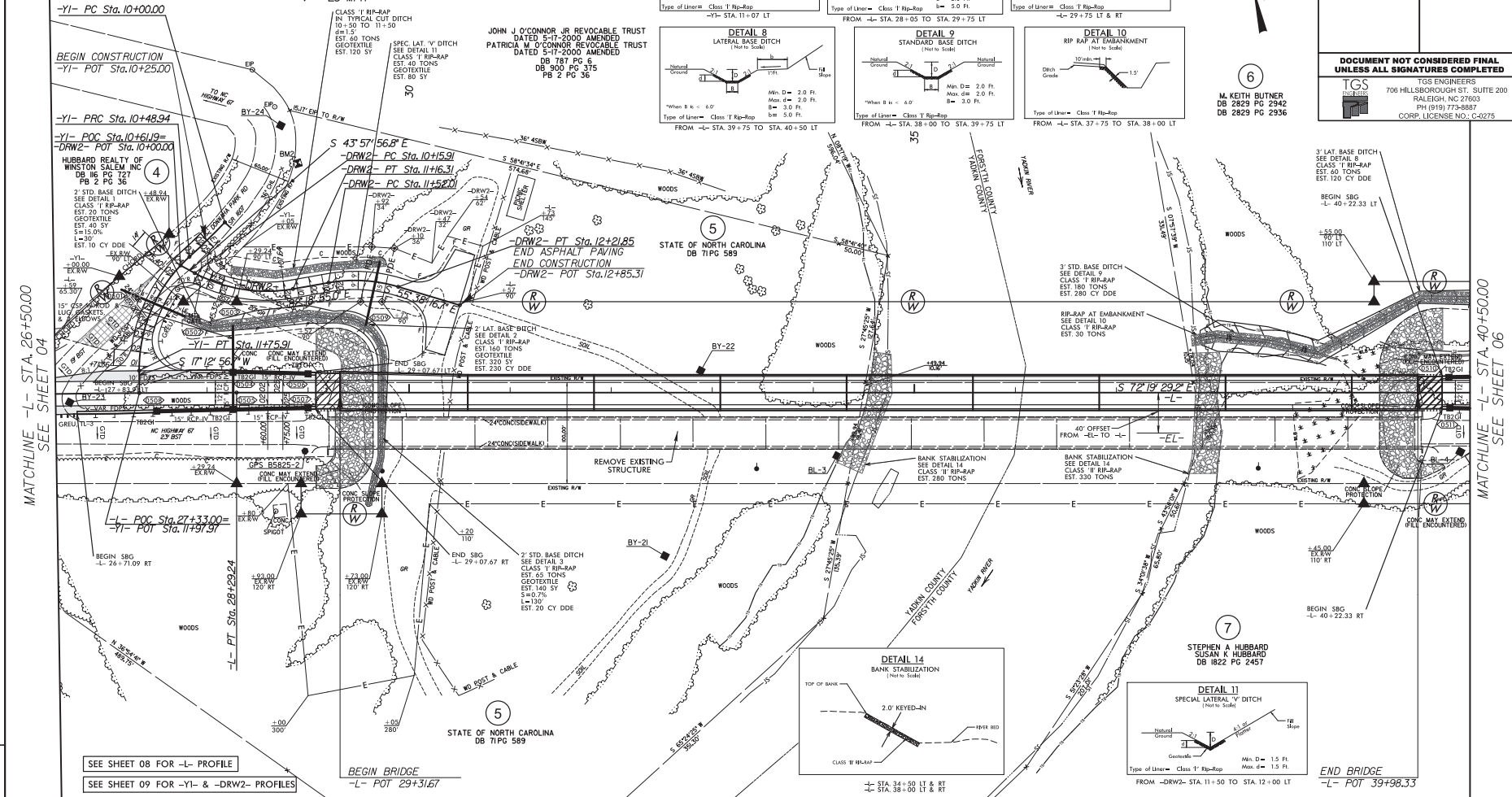
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**INCOMPLETE PLANS**  
DO NOT USE FOR A/R ACCREDITATION

---

**DOCUMENT NOT CONSIDERED FINAL**  
**UNLESS ALL SIGNATURES COMPLETED**

TGS ENGINEERS  
706 HILLSBOROUGH ST., SUITE 200  
RALEIGH, NC 27603  
PH (919) 773-8897  
CORR. LICENSE NO. C-0275

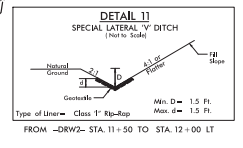
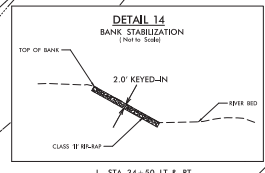


MATCHLINE -L- STA. 26+50.00  
SEE SHEET 04

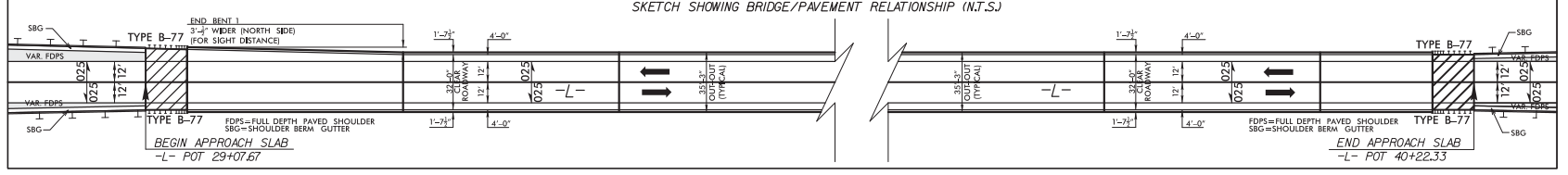
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SEE SHEET 06

SEE SHEET 08 FOR -L- PROFILE

SEE SHEET 09 FOR -YI- & -DRW2- PROFILES

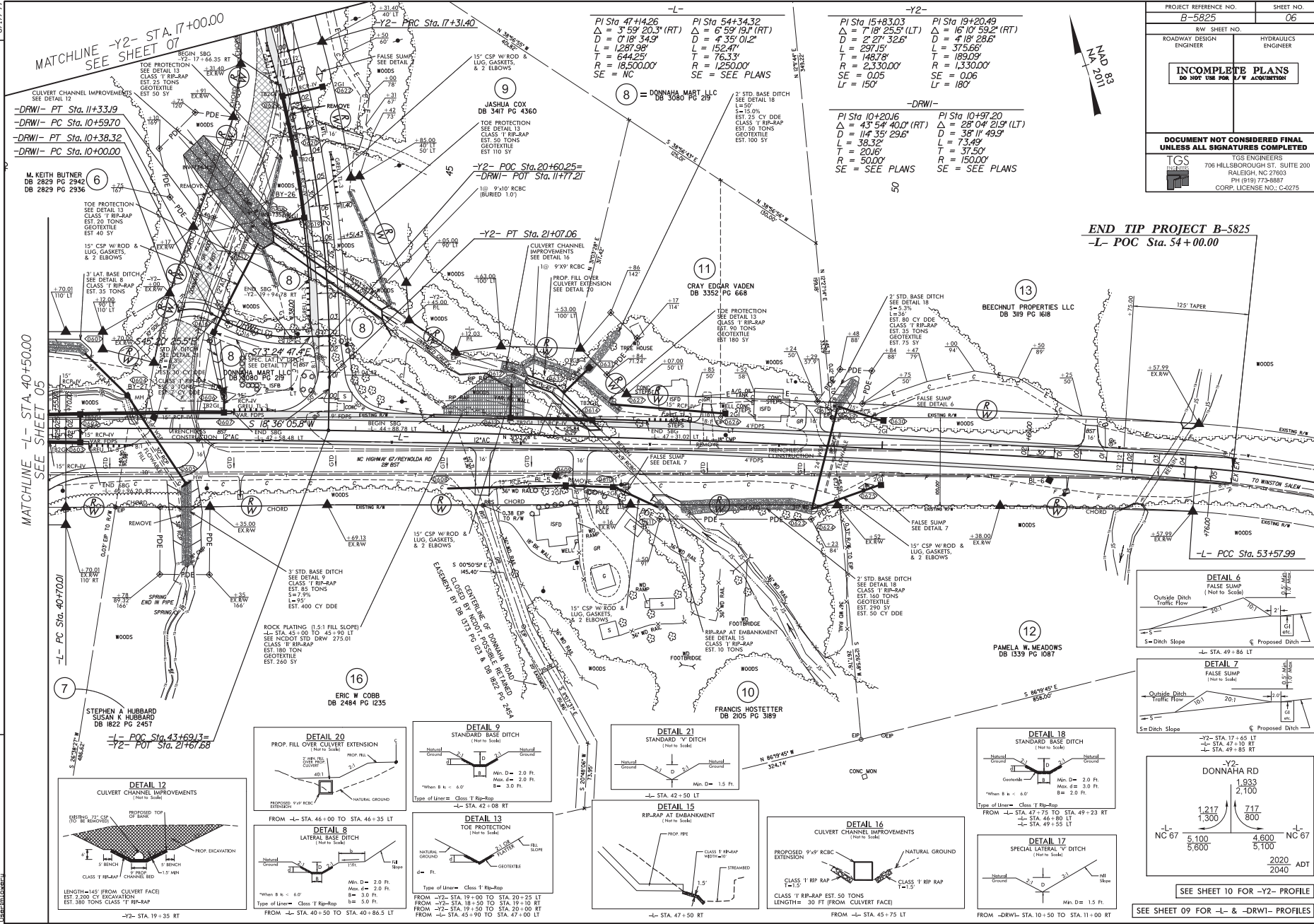


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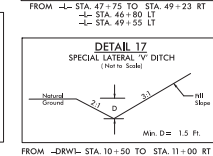
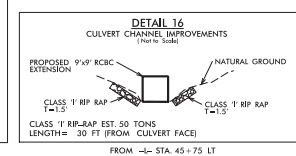
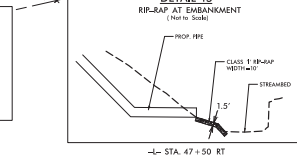
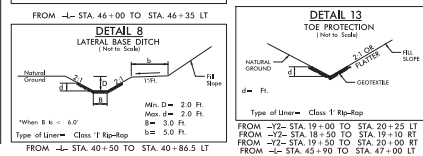
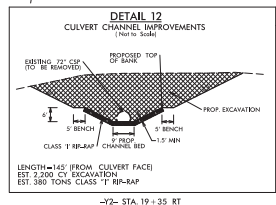
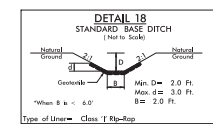
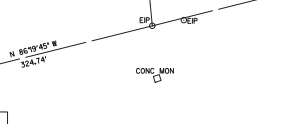
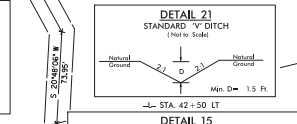
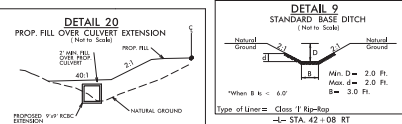
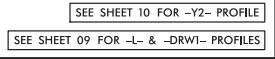
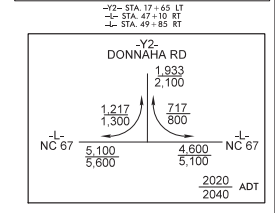
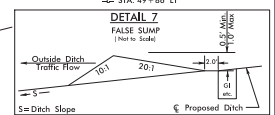
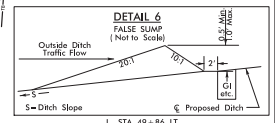
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8/17/09



PROJECT REFERENCE NO.	SHEET NO.
B-5825	06
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ANY ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	
 TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 CORP. LICENSE NO.: C-4275	

**END TIP PROJECT B-5825**  
 -L- POC Sta. 54+00.00



SEE SHEET 10 FOR -Y2- PROFILE  
 SEE SHEET 09 FOR -L- & -DRWI- PROFILES

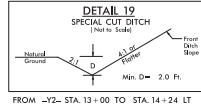
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 8/17/09  
 REVISIONS

8/17/09

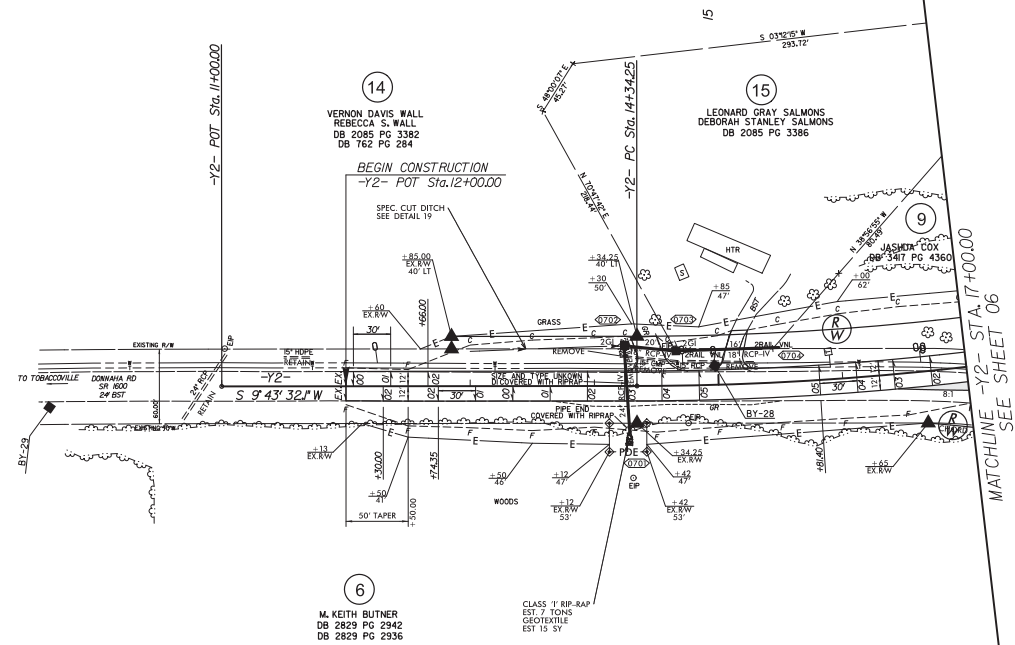
REVISIONS

\\c001\B-5825\Roadway\Proc\B5825\_rdy\_psl\_07.dgn  
 B5825.dwg

-Y2-  
 PI Sta. 15+83.03  
 $\Delta = 7' 18" 25.5' (LT)$   
 $D = 2' 27" 32.6'$   
 $L = 297.15'$   
 $T = 148.78'$   
 $R = 2,330.00'$   
 $SE = 0.05$   
 $Lr = 150'$



PROJECT REFERENCE NO. <b>B-5825</b>	SHEET NO. <b>07</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> <b>UNLESS ALL SIGNATURES COMPLETED</b>	
TGS ENGINEERS 706 HILLSBOROUGH ST., SUITE 200 RALEIGH, NC 27603 PH (919) 773-0887 CORR. LICENSE NO.: C-0275	



MATCHLINE -Y2- STA. 17+00.00  
SEE SHEET 06

SEE SHEET 10 FOR -Y2- PROFILE