



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

September 17, 2019

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

ATTN: Ms. Nicholle Braspennickx  
NCDOT Coordinator

Subject: **Application for Section 404 General Permit 198200031 and Section 401 Water Quality Certification** for the Proposed I-485 and East John Street - Old Monroe Road (SR 1009) Interchange Improvements in Mecklenburg County, Division 10, STIP No. U-4714AB, Debit \$570.00 from WBS 43609.3.2.

Dear Madam:

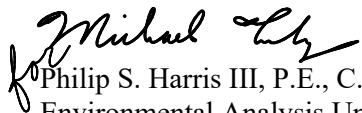
The North Carolina Department of Transportation (NCDOT) proposes to construct a partial cloverleaf interchange to replace the current diamond interchange at I-485 and East John Street – Old Monroe Road (SR 1009).

As a result of the interchange improvements, there will be 159 linear feet of stream bank stabilization, 242 linear feet of permanent stream impacts, and 0.03 acre of temporary stream impacts.

Please see enclosed copies of the Pre-Construction Notification (PCN), Division of Mitigation Services (DMS) mitigation acceptance letter, Stormwater Management Plan (SMP), permit drawings, roadway plan sheets, northern long-eared bat memo, and State Historic Preservation Office (SHPO) concurrence letters. An Environmental Assessment (EA) was completed in July 2016 and a Finding of No Significant Impact (FONSI) was completed in June 2018 and distributed shortly thereafter. Additional copies are available upon request.

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 call Erin Cheely at (919) 707-6108.

Sincerely,

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

Cc:  
NCDOT Permit Application Standard Distribution List

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

Telephone: (919) 707-6000  
Fax: (919) 250-4224  
Customer Service: 1-877-368-4968  
Website: [www.ncdot.gov](http://www.ncdot.gov)

Location:  
1000 BIRCH RIDGE DRIVE  
RALEIGH NC 27610



## 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: \*

Mecklenburg

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:

U-4714AB

WBS # \*

43609.3.2

(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

U-4714AB DMS Acceptance 2019.pdf

76.93KB

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? \***

North Carolina Department of Transportation, Erin Cheely

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

ekcheely@ncdot.gov

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

(xxx)xxx-xxxx

(919)707-6108

**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: \***

North Carolina Department of Transportation

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

**2c. Responsible party:**

(for Corporations)

**2d. Address \***

Street Address

1598 Mail Service Center

Address Line 2

City

Raleigh

Postal / Zip Code

27699

State / Province / Region

NC

Country

USA

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

(xxx)xxx-xxxx

(919)707-6000

**2f. Fax Number:**

(919)250-4224

(xxx)xxx-xxxx

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

pharris@ncdot.gov

## C. Project Information and Prior Project History

### 1. Project Information

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

U-4714AB, Interchange Improvements to I-485 and East John Street-Old Monroe Road (SR 1009)

**1b. Subdivision name:**

(if appropriate)

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

Matthews

## 2. Project Identification



### 2a. Property Identification Number:

(tax PIN or parcel ID)

### 2b. Property size:

(in acres)

77.3

### 2c. Project Address

Street Address

Address Line 2

City

Matthews

Postal / Zip Code

State / Province / Region

NC

Country

USA

### 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: \*

35.102524

ex: 34.208504

### Longitude: \*

-80.709087

-77.796371

## 3. Surface Waters

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

Fourmile Creek

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

C

[Surface Water Lookup](#)

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

Catawba

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

030501030105

[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: \*

The project area includes paved roadway, maintained shoulder, and adjacent forested areas of the existing intersection for I-485 and East John Street - Old Monroe Road. Land use in the project vicinity consists of forestland within undeveloped parcels and residential and commercial development.

### 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:

N/A

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

(intermittent and perennial)

654

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

The purpose of this project is to improve existing and projected traffic flow and operational efficiency at the I-485 and East John Street - Old Monroe Road interchange.

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

The project involves constructing a partial cloverleaf interchange to replace the current diamond interchange at I-485 / East John Street - Old Monroe Road. The partial cloverleaf loop ramps will be constructed in the northeast and southwest quadrants of the interchange and the existing I-485 ramps will be shifted slightly in all quadrants. The dual I485 bridges would be widened to add an acceleration lane and deceleration lane on I485 that connect to the loop ramps. The bridge widening and auxiliary lanes will be included in STIP No. I48507.

Construction activities include earth removal, hauling, grading, and paving. Standard road building equipment, such as trucks, bulldozers, and cranes will be used.

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



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

U-4714AB Permit Drawings.pdf

11.84MB

U-4714AB Roadway Plans.pdf

17.28MB

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:

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

SAW-2013-02330

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

Name (if known):

Agency/Consultant Company: Environmental Services, Inc., RK&K, and NCDOT

Other:

5d. List the dates of the Corp jurisdiction determination or State determination if a determination was made by the Corps or DWR.

8/25/2015 (AJD), 7/1/2019 (PJD) Both of these determinations were for TIP I-5507, but cover U-4714AB resources in their entirety.

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.

## 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

### 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 - Extend 2 @ 7' x 6' RCBC	Permanent	Culvert	SBC	Perennial	Both	6 Average (feet)	14 (linear feet)
S2	Site 1 - Bank stabilization	Permanent	Bank Stabilization	SBC	Perennial	Both	6 Average (feet)	45 (linear feet)
S3	Site 1 - Bank stabilization	Temporary	Bank Stabilization	SBC	Perennial	Both	6 Average (feet)	33 (linear feet)
S4	Site 2 - Extend 2 @ 7' x 6' RCBC	Permanent	Culvert	SBB	Perennial	Both	6 Average (feet)	31 (linear feet)
S5	Site 2 - Bank stabilization	Permanent	Bank Stabilization	SBB	Perennial	Both	6 Average (feet)	51 (linear feet)
S6	Site 2 - Bank stabilization	Temporary	Bank Stabilization	SBB	Perennial	Both	6 Average (feet)	31 (linear feet)
S7	Site 2 - Bank stabilization	Permanent	Bank Stabilization	SBB	Perennial	Both	6 Average (feet)	6 (linear feet)

<b>S8</b>	Site 2 - Bank Stabilization	Temporary	Bank Stabilization	SBB	Perennial	Both	6 <i>Average (feet)</i>	20 <i>(linear feet)</i>
<b>S9</b>	Site 3 - 30" RCP	Permanent	Culvert	SSG	Perennial	Both	5 <i>Average (feet)</i>	197 <i>(linear feet)</i>
<b>S10</b>	Site 3 - Bank Stabilization	Permanent	Bank Stabilization	SSG	Perennial	Both	5 <i>Average (feet)</i>	31 <i>(linear feet)</i>
<b>S11</b>	Site 3 - Bank Stabilization	Temporary	Bank Stabilization	SSG	Perennial	Both	5 <i>Average (feet)</i>	10 <i>(linear feet)</i>
<b>S12</b>	Site 4 - Bank Stabilization	Permanent	Bank Stabilization	SAG (Fourmile Creek)	Perennial	Both	10 <i>Average (feet)</i>	26 <i>(linear feet)</i>
<b>S13</b>	Site 4 - Bank Stabilization	Temporary	Bank Stabilization	SAG (Fourmile Creek)	Perennial	Both	10 <i>Average (feet)</i>	24 <i>(linear feet)</i>

\*\* 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:**

401

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

118

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

519

**3j. Comments:**

At Site 1 on the north side of I-485, the 2 @ 7'x6' RCBC culvert will be extended and the accumulated sediment deposition in the culvert will be removed. A 12" high bench will be left to remain in front of the western barrel to promote low flow at the adjacent barrel. At Sites 1 and 2, the existing culvert is not buried, therefore the culvert extension will not be buried. The bottom elevation of the culvert will match the elevation of the existing stream bed. At Site 1, 0.01 (45 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts. At Site 2, 0.01 (51 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts. At Site 3, <0.01 (31 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

## 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: \***

The final project design avoids and minimizes impacts to streams to the greatest extent practicable. Due to the location of the interchange ramps to be constructed, impacts to streams were unavoidable. Headwalls have been included in the design to shorten fill slopes and reduce stream impact length, protect the ends of the pipe, and guard against erosion. 2:1 slopes will be utilized at each stream crossing to minimize impacts. At Site 1 on the north side of I-485, the 2 @ 7'x6' RCBC culvert will be extended and the accumulated sediment deposition in the culvert will be removed. A 12" high bench will be left to remain in front of the western barrel to promote low flow at the adjacent barrel. A grassed detention basin will be constructed for stormwater runoff at Station -Y6LPC- 15+00LT.

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

NCDOT's Best Management Practices (BMPs) for Construction and Maintenance Activities and Protection of Surface Waters will be adhered to. Erosion control devices such as silt fence, rock inlet sediment traps, slope drains, clean water diversions, and silt bags will also be utilized to minimize water quality impacts. Installation of the culvert extensions will be conducted utilizing pump around techniques to dewater the work zone. The pump around at stream crossings will utilize temporary dams, pumps, and stilling basins to divert the channel baseflow around the work area rather than installing a temporary pipe and diversion channel. By using this method, grading in the stream channel will be less intensive and will result in less stream impacts. In locations where temporary construction activities will take place in the stream, the stream bed will be restored to pre-construction contours.

### 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)

242

#### 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)

#### 4f. Non-riparian wetland mitigation requested:

(acres)

#### 4g. Coastal (tidal) wetland mitigation requested:

(acres)

#### 4h. Comments

No mitigation is required for the stream bank stabilization or temporary stream impacts as these impacts do not constitute a loss of waters of the U.S.

## 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:

The water resources within the project area are not in any buffered basins and not on the main stem of the Catawba River.

### 2. Stormwater Management Plan

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

☒ Yes ☐ No

#### Comments:

BMPs that will be used include a detention basin, the promotion of sheet flow and infiltration with grassed shoulders except where shoulder berm gutter is required, drainage systems outlet to riprap pads or riprap lined ditches, and riprap on embankments to prevent erosion where ditches enter streams.

The stormwater management plan "U-4714AB\_HYD\_SMP" is attached at the end of the ePCN.

## 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

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.

The project would not likely influence the intensity of development activities. Land use will continue to be guided by adopted zoning and land use plans. The project is generally consistent with local land use plans. Any additional development in the area would adhere to local stormwater rules.

### 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

5c. If yes, indicate the USFWS Field Office you have contacted.

Asheville

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

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)

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? \*

The USFWS county list, North Carolina Natural Heritage Program data explorer, and June 2018 Finding of No Significant Impact (FONSI) were used. A biological conclusion of No Effect was rendered for Carolina heelsplitter, Michaux's sumac, Schweinitz's sunflower, and smooth coneflower. NCDOT determined that the proposed action does not require separate consultation on the grounds that the action is consistent with the Final 4(d) rule under Section 7 of the Endangered Species Act for the northern long-eared bat (see attached memo). The rusty-patched bumble bee was recently listed as endangered but as a historic record. Because the project area is in the historical range of rusty-patched bumble bee, no Section 7 consultation is needed.

### Consultation Documentation Upload

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

U-4714 Mecklenburg 4(d) NLEB memo 2019.pdf

202.04KB

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? \*

National Oceanic and Atmospheric Administration Essential Fish Habitat Mapper

## 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/hpweb/>)

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? \*

The State Historic Preservation Office (SHPO) Historic Properties Map, June 2018 FONSI, and correspondence letters with SHPO (see attached) were used to make a determination. No historic properties or significant archaeological resources will be impacted by this project.

### 7c. Historic or Prehistoric Information Upload

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

SHPO Correspondence Letters.pdf

1.49MB

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's Hydraulics Unit will coordinate with FEMA and local authorities to ensure compliance with applicable floodplain management ordinances. Since this project involves construction on or adjacent to FEMA regulated streams, NCDOT Division 10 shall submit sealed as-built construction plans to NCDOT's Hydraulics Unit upon completion of project construction, certifying that the drainage structures and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

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

FEMA Floodplain Maps

## Miscellaneous

**Comments**

This TIP is being permitted and constructed concurrently with I-5507 and R-0211EC. Separate permit applications are being prepared and submitted for I-5507 and R-0211EC.

**Miscellaneous attachments not previously requested.**

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

U-4714AB_HYD_SMP.pdf	141.35KB
U-4714AB Cover Letter.pdf	266.94KB

**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 Turchy

**Signature**



**Date**

9/17/2019



NORTH CAROLINA  
Environmental Quality

September 13, 2019

ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

TIM BAUMGARTNER

Director

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

Dear Mr. Harris:

Subject: Mitigation Acceptance Letter:

**U-4714AB**, SR 1009 (John Street / Old Monroe Road) at I-485 – Improve Interchange,  
Mecklenburg County

The purpose of this letter is to notify you that the Division of Mitigation Services (DMS) will provide the compensatory stream mitigation for the subject project. Based on the information supplied by you on September 13, 2019, the impacts are located in CU 03050103 of the Catawba River basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

Catawba 03050103 SP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	242.0	0	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.

**This mitigation acceptance letter replaces the acceptance letter issued March 12, 2018.** The impacts and associated mitigation needs were under projected by the NCDOT in the 2019 impact data. DMS will commit to implement sufficient compensatory stream 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 and consistent with the Guidance for Expanded Service Area for Mitigating Impacts within the Lower Catawba River Basin approved by the IRT. 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  
Asset Management Supervisor

cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office  
Ms. Amy Chapman, NCDWR  
File: U-4714AB Revised





## North Carolina Department of Transportation

Highway Stormwater Program  
STORMWATER MANAGEMENT PLAN

(Version 2.08; Released April 2018)

FOR NCDOT PROJECTS

WBS Element: TIP No.: U-4714AB County(ies): Mecklenburg Page 1 of 2

## General Project Information

WBS Element:		TIP Number:	U-4714AB	Project Type:	Roadway Widening	Date:	6/7/2019
NCDOT Contact:	Malcolm Watson			Contractor / Designer:	Blythe Construction/WSP (Karl Dauber)		
	Address:	1020 Birch Ridge Drive Raleigh, NC 27610			Address:	1001 Morehead Square Drive Suite 610 Charlotte, NC 28203	
	Phone:	(919) 707-6614			Phone:	(704) 342-5403	
	Email:	mcwatson@ncdot.gov			Email:	Karl.Dauber@wsp.com	
City/Town:	Charlotte			County(ies):	Mecklenburg		
River Basin(s):	Yadkin-Pee Dee			CAMA County?	No		
Wetlands within Project Limits?	No						

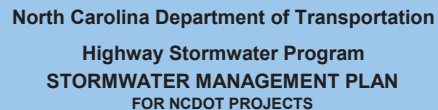
## Project Description

Project Length (lin. miles or feet):	0.5 miles	Surrounding Land Use:	Urban (residential and commercial)					
	Proposed Project		Existing Site					
Project Built-Upon Area (ac.)	4.6	ac.	4.5	ac.				
Typical Cross Section Description:	There are several cross sections for this project in the typicals provided with the Redline Drainage Plans. Essentially, the project adds toll lanes in the median. In some cases a ditch section is revised to provide pavement. In other cases a large paved median is reduced to account for this new traffic pattern. John street will be expanded to 2 lanes either direction.			There are 2 existing cross section on 485. - Then as you travel on I 485 there are 2 lanes either direction with a variable width grassed median. -John Street is a typically one lane either direction and a middle turn lane.				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	1592	Year:	2040	Existing:	1186	Year:	2015

General Project Narrative: (Description of Minimization of Water Quality Impacts)	The NCDOT is widening a section of I-485 that lies within the municipal boundaries of the Cities of Charlotte and Matthews. The Design-Build Project I-5507 / R-0211EC / U-4714AB will provide an eastbound and westbound Express Lane within the I-485 median from I-77 to US 74 (Independence Boulevard), a distance of approximately 16.6 miles. The project will also provide an I-485 / Weddington Road interchange, and modify the I-485 / East John Street - Old Monroe Road interchange.  The Impacts for U-4714AB are located on Sheets 64, 65 and 77 of the plan set and are in relation to the widening of 485 and John Street that is needed to accomodate an upgraded interchange at John Street.  Construction will unavoidably impact several streams and wetlands. Where practicable, 2:1 slopes will be used to minimize impacts. Where culverts are being extended in jurisdictional streams rip rap for stabilization is being installed on banks only.  Best Management Practices: *Detention Basin *Promotion of sheet flow and infiltration with grassed shoulders except where shoulder berm gutter was required. *Drainage systems outlet to rip rap pads or riprap lined ditches. *Riprap on embankments was used to prevent erosion where ditches enter streams.						
--	--	--	--	--	--	--	--

## Waterbody Information

Surface Water Body (1):	Fourmile Creek (SBB,SBC, SSG, SAG)		NCDWR Stream Index No.:	11-137-9-4		
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class C			
	Supplemental Classification:					
Other Stream Classification:	None					
Impairments:	None					
Aquatic T&E Species?	Comments:					
NRTR Stream ID:	N/A		Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?	No	Deck Drains Discharge Over Buffer?	No	Dissipator Pads Provided in Buffer?		N/A
Deck Drains Discharge Over Water Body?	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)						



**WBS Element:**

**TIP No.: U-4714AB**

**County(ies):** Mecklenburg

Page 2 of 2

## Other Best Management Practices

[illegible]

### Additional Comments



9/12/2019  
\\prodw\cs01\cs\_workingdir\3094\336401\_4058\U-4714AB\_hyd\_prm\_wet\_psh01\_TSH.dgn  
PROP\CS01

TIP PROJECT: U-4714AB

CONTRACT: C203970

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

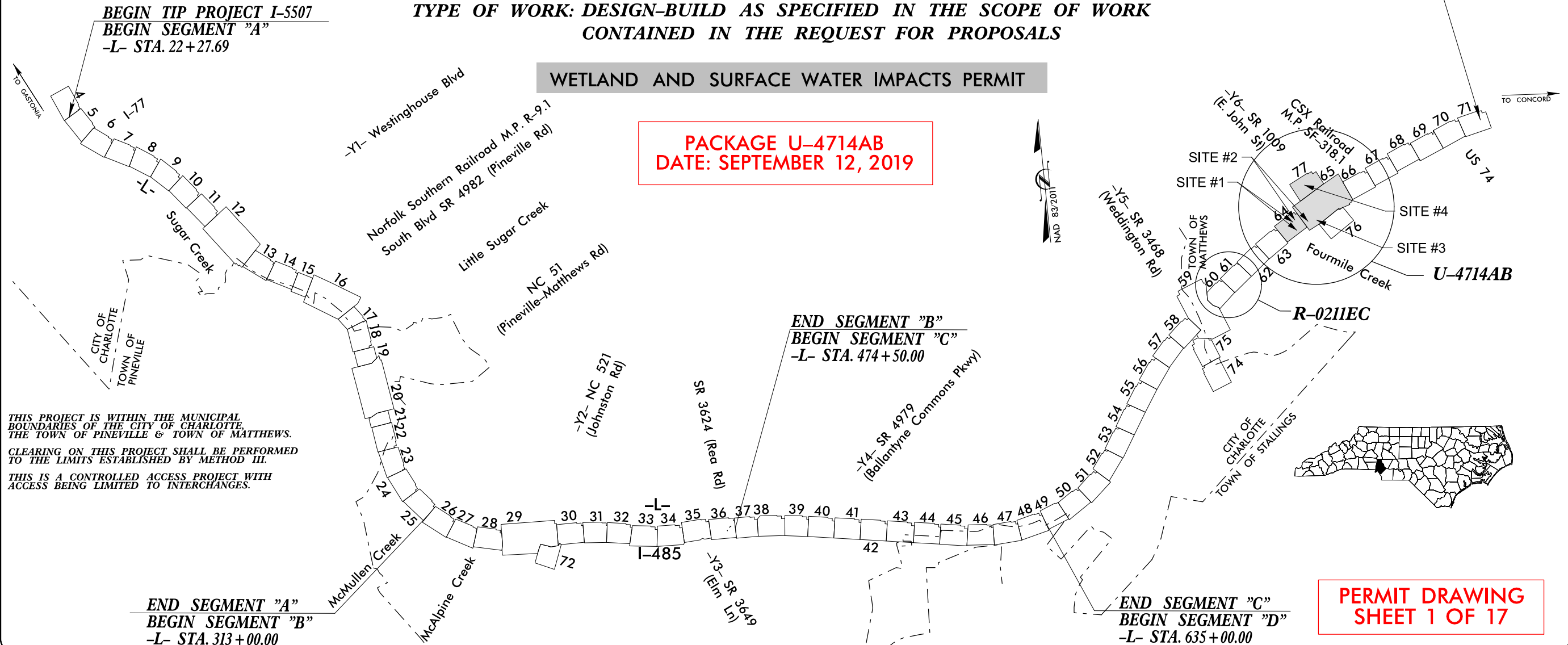
MECKLENBURG COUNTY

LOCATION: I-485 FROM I-77 TO US 74 (INDEPENDENCE BOULEVARD) (I-5507);  
I-485 / WEDDINGTON ROAD INTERCHANGE (R-021IEC); AND I-485 /  
EAST JOHN STREET - OLD MONROE ROAD INTERCHANGE (U-4714AB)

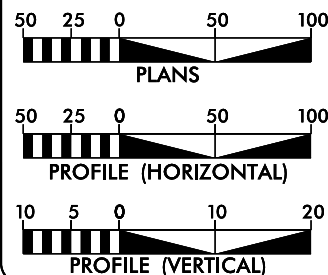
TYPE OF WORK: DESIGN-BUILD AS SPECIFIED IN THE SCOPE OF WORK  
CONTAINED IN THE REQUEST FOR PROPOSALS

WETLAND AND SURFACE WATER IMPACTS PERMIT

PACKAGE U-4714AB  
DATE: SEPTEMBER 12, 2019



GRAPHIC SCALES



DESIGN DATA

ADT 2018 = 118,400  
ADT 2040 = 159,200  
DHV = 9 %  
D = 55 %  
T = 9 % \*  
V = 70/75 MPH  
\*( TTST 4 + DUAL 5 )  
FUNCTIONAL CLASSIFICATION:  
INTERSTATE  
STATEWIDE TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT I-5507 = 17.137 mi  
LENGTH OF STRUCTURES TIP PROJECT I-5507 = 0.395 mi  
(BASED ON 485 WB BRIDGES)  
TOTAL LENGTH OF TIP PROJECT I-5507 = 17.532 mi

NCDOT CONTACT:

TIM MCFADDEN, PE  
DESIGN BUILD PROJECT ENGINEER -  
TRANSPORTATION PROGRAM MANAGEMENT UNIT

Prepared In the Office of:



1001 Morehead Square Dr.  
Suite 610  
Charlotte, NC, 28203  
NC LIC NO. F-0165

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY:  
SEPTEMBER 18, 2018

LETTING DATE:  
SEPTEMBER 18, 2018

DANIEL H. BRIDGES, PE  
DESIGN PROJECT MANAGER

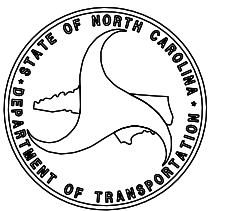
DAVID B. GOURLEY, PE  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.  
ROADWAY DESIGN  
ENGINEER

SIGNATURE: P.E.

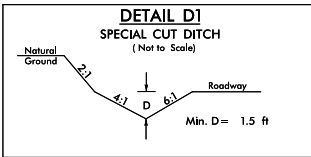
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA



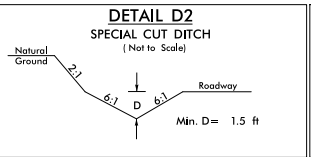
8/7/99



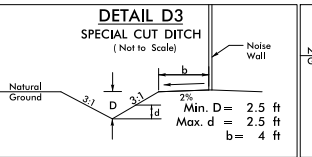
PROJECT REFERENCE NO.		SHEET NO.
U-4714AB		2D-1
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
<div>INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION</div>		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



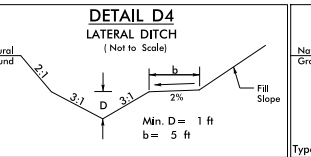
-L- FROM STA. 615+81 TO 619+50 LT  
-L- FROM STA. 688+57 TO 701+37 LT  
-L- FROM STA. 706+21 TO 711+00 LT  
-L- FROM STA. 753+98 TO 760+32 LT  
-L- FROM STA. 794+62 TO 795+50 LT  
-L- FROM STA. 764+81 TO 767+50 LT  
-L- FROM STA. 916+63 TO 917+50 LT  
-L- FROM STA. 929+50 TO 931+50 LT  
-L- FROM STA. 709+81 TO 713+00 RT  
-L- FROM STA. 804+50 TO 805+50 RT  
-L- FROM STA. 901+00 TO 905+17 RT  
-Y5RPD- FROM STA. 24+00 TO 26+50 RT  
-Y6RPC- FROM STA. 24+50 TO 26+50 RT



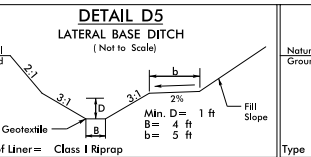
-L- FROM STA. 615+81 TO 619+50 LT



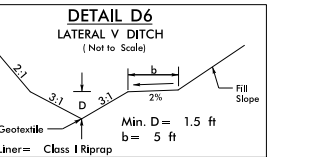
-L- FROM STA. 628+73 TO 634+63 LT



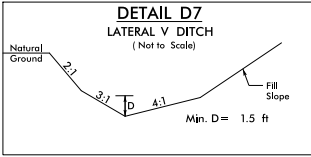
-L- FROM STA. 890+47 TO 892+50 LT  
-L- FROM STA. 898+00 TO 900+00 LT  
-L- FROM STA. 936+50 TO 940+50 LT  
-L- FROM STA. 885+00 TO 888+19 RT  
-L- FROM STA. 892+00 TO 897+09 RT



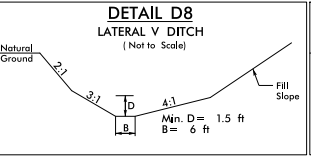
-L- FROM STA. 791+50 TO 793+50



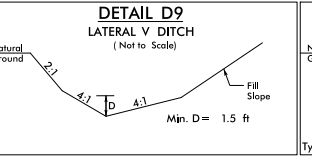
-L- FROM STA. 835+50 TO 837+27 LT  
-L- FROM STA. 893+84 TO 898+00 LT  
-L- FROM STA. 888+19 TO 890+77 RT  
-L- FROM STA. 890+91 TO 892+00 RT  
-L- FROM STA. 897+24 TO 899+50 RT



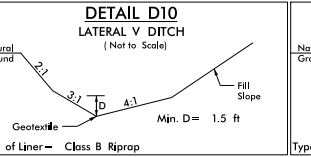
-Y5LPA- FROM STA. 14+78 TO 15+28 LT  
-Y5RPA- FROM STA. 20+24 TO 22+00 LT



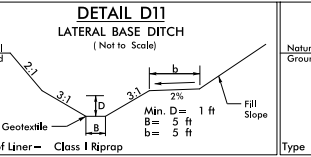
-Y5LPA- FROM STA. 15+28 TO 15+73



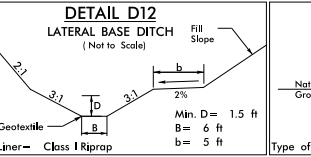
-Y5LPA- FROM STA. 15+73 TO 17+00 LT



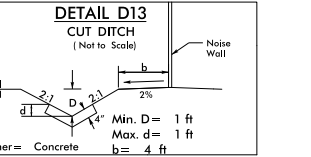
-Y5RPA- FROM STA. 19+50 TO 20+24 LT



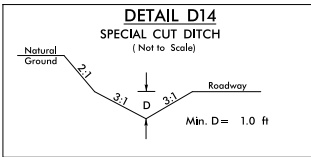
-L- FROM STA. 788+50 TO 790+00



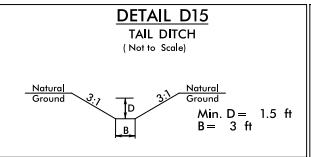
-Y6RPB- FROM STA. 9+77 TO 11+02 LT



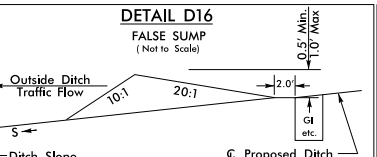
-L- FROM STA. 706+50 TO 711+41 RT  
-L- FROM STA. 727+77 TO 729+44 RT  
-Y6RPB- FROM STA. 15+11 TO 22+63 RT



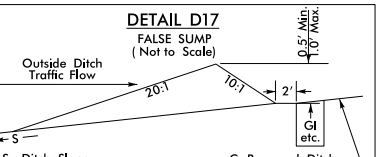
-Y6LPA- FROM STA. 10+74 TO 11+87 LT



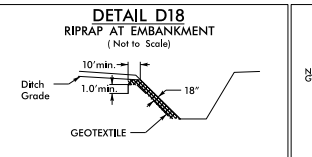
-L- STA. 777+37 LT



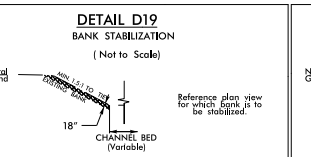
-L- STA. 794+55 LT  
-L- STA. 709+74 RT  
-L- STA. 760+50 RT  
-L- STA. 774+58 RT  
-L- STA. 827+52 RT  
-Y6RPB- STA. 17+70 LT



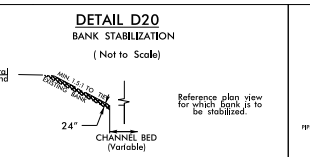
-L- STA. 701+58 LT  
-L- STA. 827+52 LT  
-L- STA. 832+03 LT  
-L- STA. 617+94 RT  
-L- STA. 795+69 RT  
-L- STA. 808+22 RT  
-Y5RPA- STA. 15+25 LT  
-Y5RPD- STA. 21+39 LT  
-Y5RPD- STA. 21+31 RT



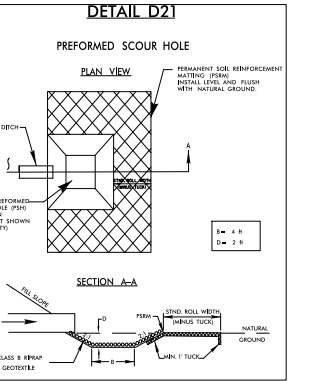
-L- STA. 615+00 LT  
-L- STA. 654+53 LT  
-L- STA. 654+58 LT  
-L- STA. 658+97 LT  
-L- STA. 683+21 LT  
-L- STA. 729+85 LT  
-L- STA. 730+13 LT  
-L- STA. 741+73 LT  
-L- STA. 746+32 LT  
-L- STA. 791+36 LT  
-L- STA. 808+85 LT  
-L- STA. 816+10 LT  
-L- STA. 818+86 LT  
-L- STA. 890+43 LT  
-L- STA. 893+74 LT  
-L- STA. 893+80 LT  
-L- STA. 910+17 LT  
-L- STA. 612+67 RT  
-L- STA. 730+00 RT  
-L- STA. 730+04 RT  
-L- STA. 740+42 RT  
-L- STA. 740+45 RT  
-L- STA. 746+32 RT  
-L- STA. 749+98 RT  
-L- STA. 750+09 RT  
-L- STA. 788+69 RT  
-L- STA. 792+60 RT  
-L- STA. 806+28 RT  
-L- STA. 806+46 RT  
-L- STA. 818+46 RT  
-L- STA. 837+46 RT  
-L- STA. 890+82 RT  
-L- STA. 890+86 RT  
-L- STA. 897+08 RT  
-L- STA. 897+16 RT  
-Y6RPC- STA. 15+28 RT



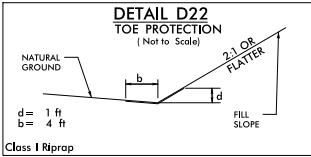
-L- STA. 764+97 LT  
-L- STA. 890+34 LT  
-L- STA. 893+72 LT  
-Y19RPC- STA. 18+60 RT  
-Y19RPC- STA. 18+64 RT



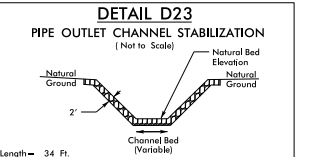
-L- STA. 837+91 LT  
-L- STA. 838+91 LT  
-Y6RPC- STA. 19+10 RT



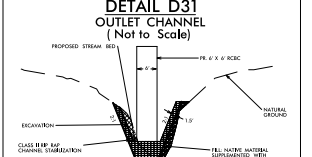
-L- STA. 790+75 LT



-L- FROM STA. 651+50 TO 654+49 LT  
-L- FROM STA. 654+64 TO 656+50 LT  
-L- FROM STA. 814+50 TO 816+04 LT  
-L- FROM STA. 845+32 TO 854+00 LT  
-L- FROM STA. 649+50 TO 653+10 RT  
-L- FROM STA. 791+44 TO 792+52 RT  
-Y5RPA- FROM STA. 21+43 TO 24+00 RT  
-Y6LPC- FROM STA. 12+03 TO 13+79 RT  
-Y6RPC- FROM STA. 19+26 TO 20+55 RT  
-Y6RPC- FROM STA. 23+69 TO 24+87 RT



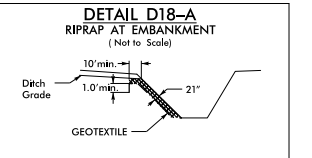
-L- STA. 790+14 LT



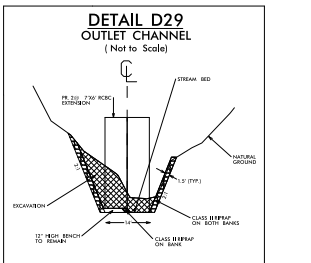
-L- STA. 789+30



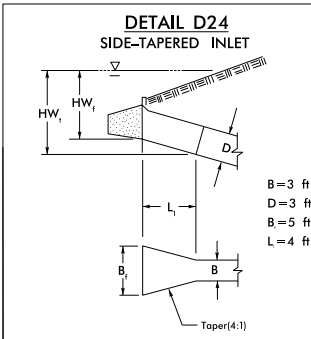
-L- STA. 841+00



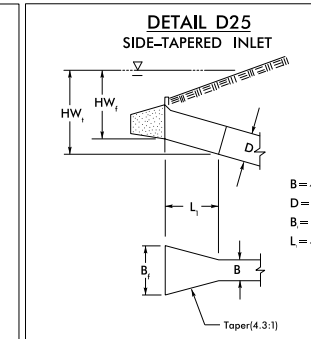
-Y6- STA. 129+88 LT



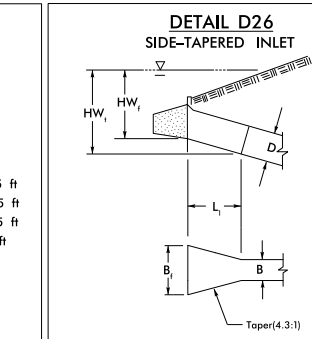
-L- STA. 837+70 LT



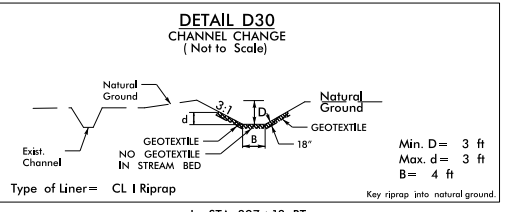
-L- STA. 641+48 LT



-L- STA. 749+91 RT  
-Y24RPA- STA. 18+83 RT

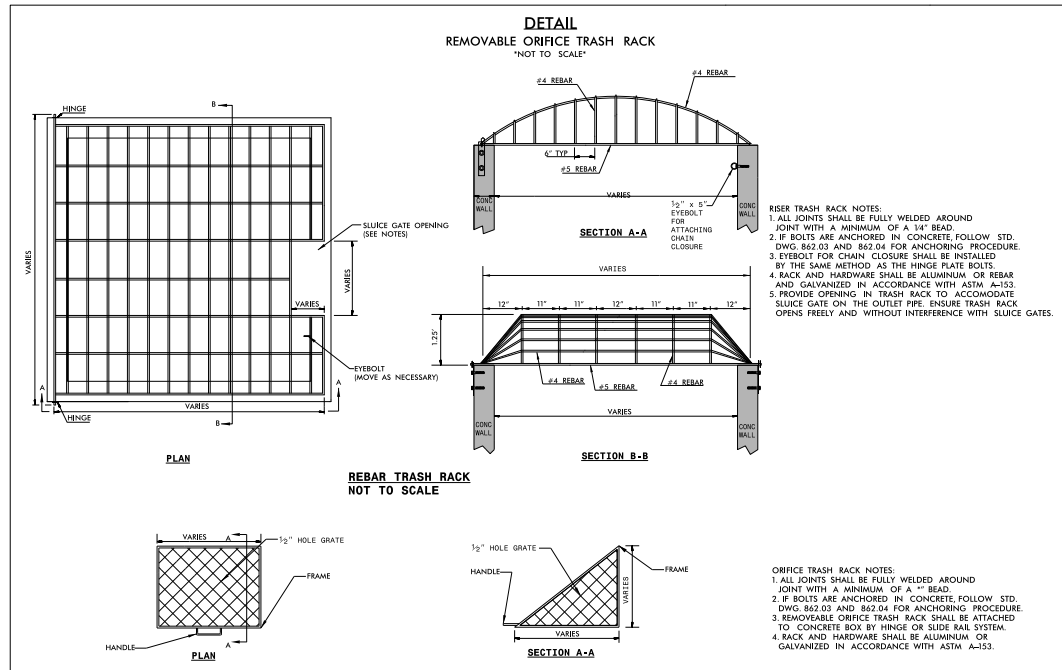


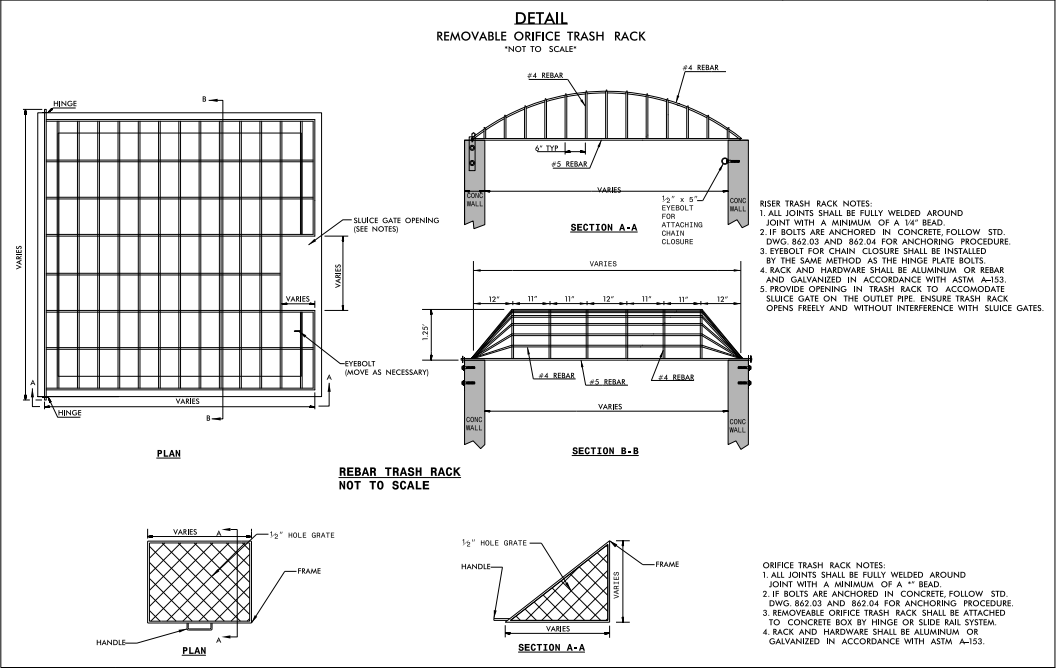
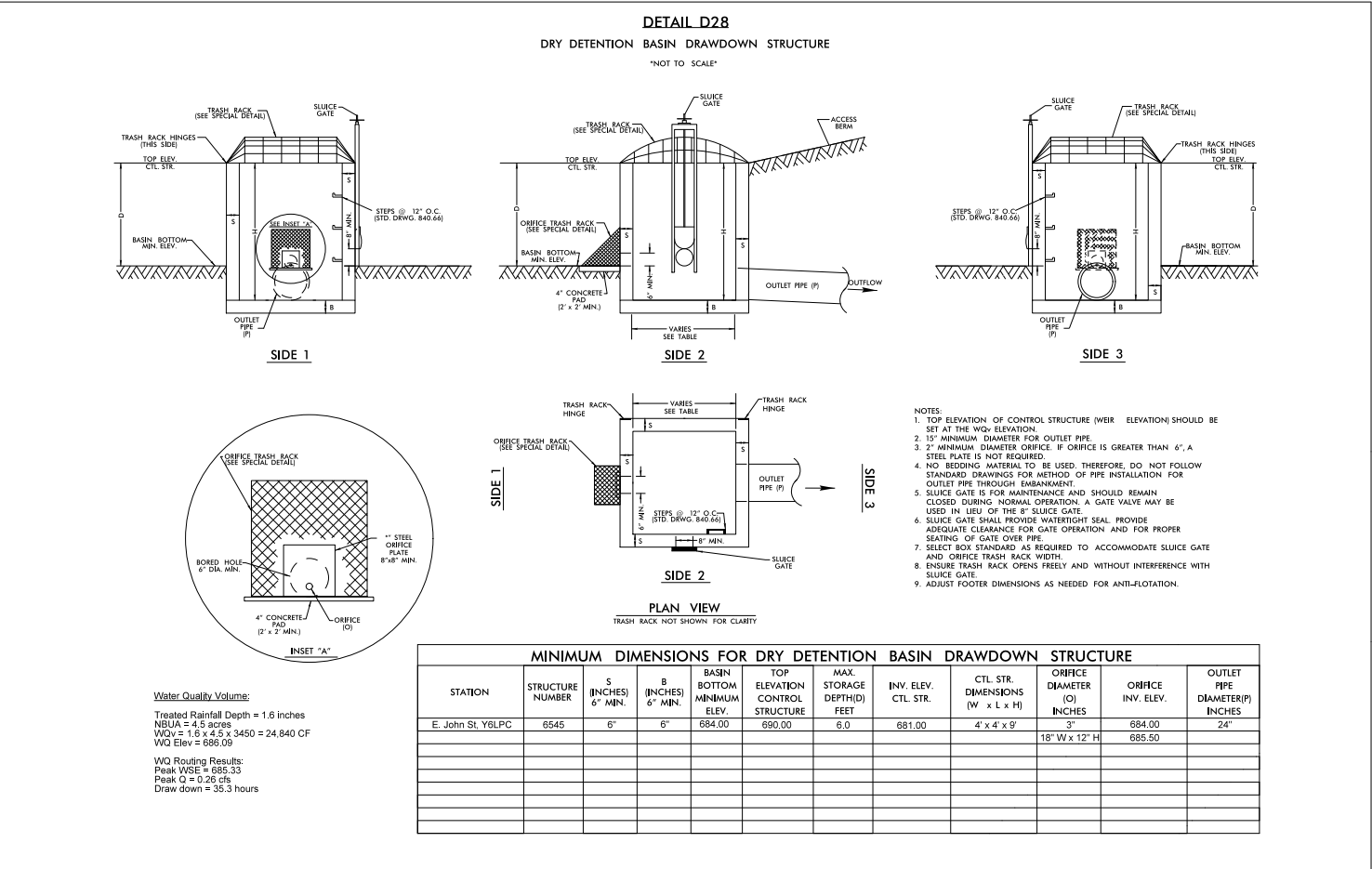
-L- STA. 644+52 LT



-L- STA. 897+13 RT

PERMIT DRAWING  
SHEET 2 OF 17







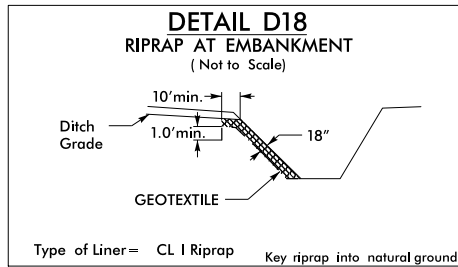
8/17/99

REVISIONS

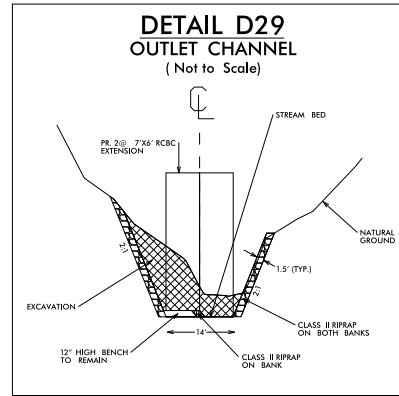
1.9/5/19 - ADDED BOX 6440.

9/12/2019  
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P:\DWG\3094

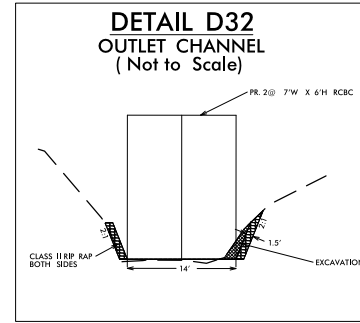
MATCH LINE SEE SHEET 63  
-L- STA. 829 + 00.00



NOTE: APPLY TO EITHER BANK  
AS SHOWN ON THE PLANS.



-L- STA. 837 + 70 LT



-L- STA. 841 + 00

SS DENOTES IMPACTS IN SURFACE WATER  
TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

**wsp**  
1001 Morehead Square Dr.  
Suite 610  
Charlotte NC, 28203  
NC LIC NO. F-0165

PROJECT REFERENCE NO.	SHEET NO.
U-4714AB	64
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SITES #1 AND #2 NOTE:  
THE EXISTING CULVERT IS NOT BURIED, THEREFORE  
THE CULVERT EXTENSION WILL NOT BE BURIED. THE  
BOTTOM ELEVATION OF THE EXTENDED CULVERT WILL  
MATCH THE ELEVATION OF THE EXISTING STREAM BED.

SEE SHEET 64A

SITE #1

SITE #2 (PART 1)

SBC

SBB

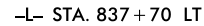
SITE #1


SEE SHEET 64A


PERMIT DRAWING  
SHEET 5 OF 17

100 0 100  
GRAPHIC SCALE

MATCH LINE SEE SHEET 65  
-L- STA. 842 + 00.00

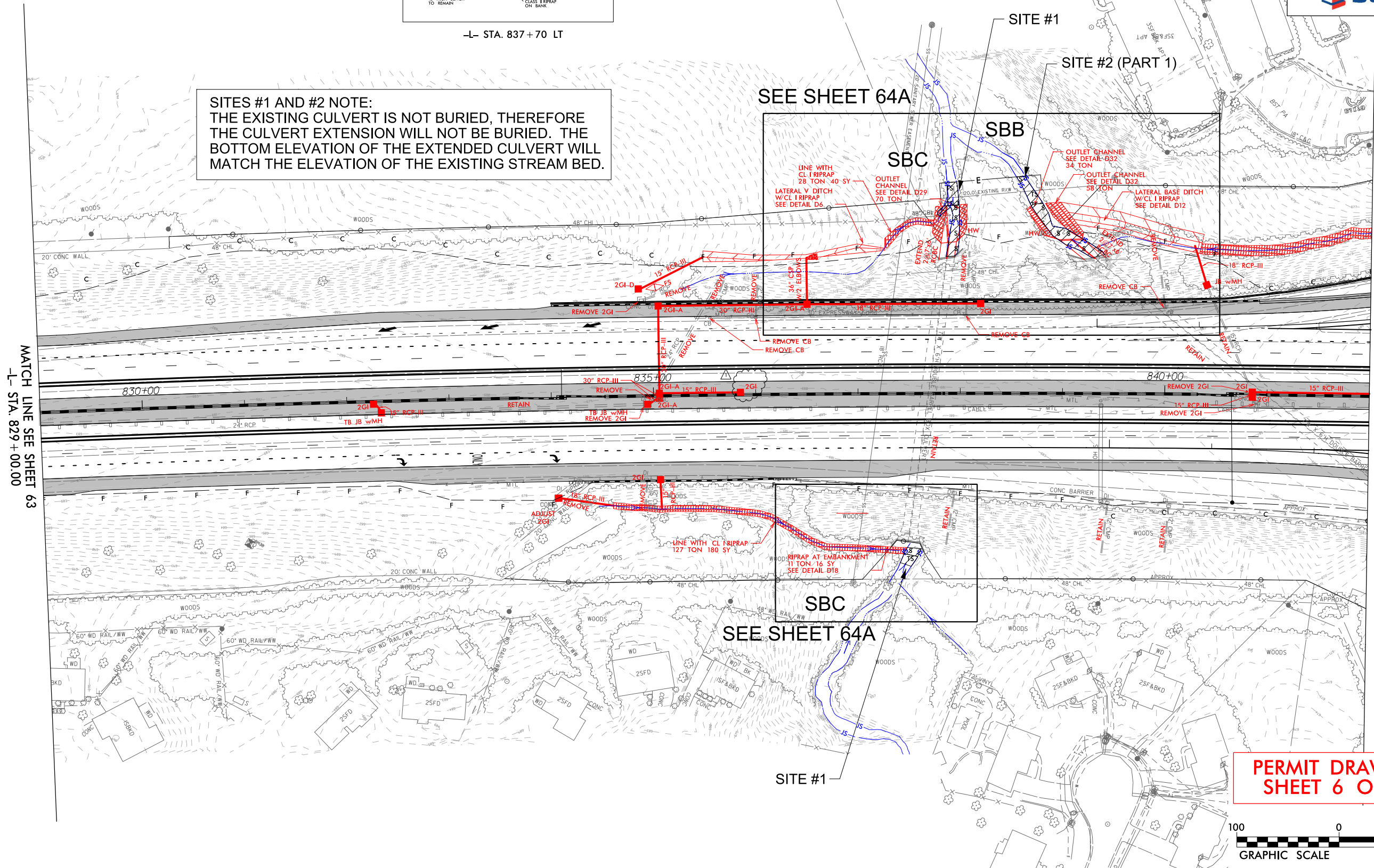


 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

NAD 83/201

SITES #1 AND #2 NOTE:  
THE EXISTING CULVERT IS NOT BURIED, THEREFORE  
THE CULVERT EXTENSION WILL NOT BE BURIED. THE  
BOTTOM ELEVATION OF THE EXTENDED CULVERT WILL  
MATCH THE ELEVATION OF THE EXISTING STREAM BED.



**PERMIT DRAWING  
SHEET 6 OF 17**

100 0 100

GRAPHIC SCALE

1. 9/5/19 - ADDED BOX 6440.

MATCH LINE SEE SHEET 63  
-L- STA. 829 + 00.00

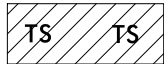
MATCH LINE SEE SHEET 65  
-L- STA. 842 + 00.00



8/17/99



DENOTES IMPACTS IN  
SURFACE WATER




DENOTES TEMPORARY  
IMPACTS IN SURFACE  
WATER

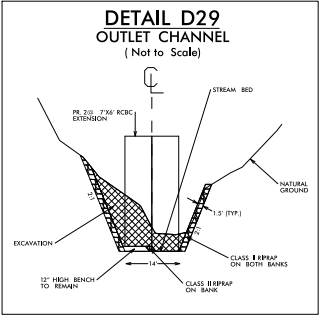
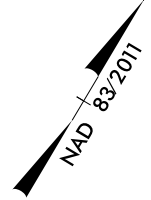
SBC

SITE #1  
SBB

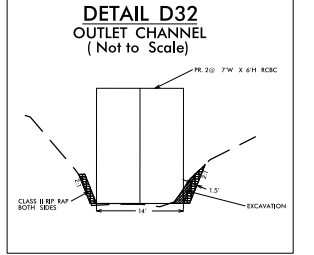
SITE #2 (PART 1)

**wsp**  
1001 Morehead Square Dr.  
Suite 610  
Charlotte NC, 28203  
NC LIC NO. F-0165

PROJECT REFERENCE NO. <b>U-4714AB</b>		SHEET NO. <b>64A</b>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			
 <b>BLYTHE</b>			



-L- STA. 837+70 LT



-L- STA. 841+00

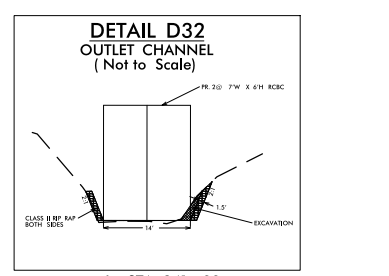
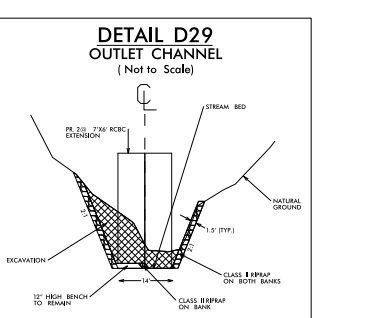
SITES #1 AND #2 NOTE:  
THE EXISTING CULVERT IS NOT BURIED, THEREFORE  
THE CULVERT EXTENSION WILL NOT BE BURIED. THE  
BOTTOM ELEVATION OF THE EXTENDED CULVERT WILL  
MATCH THE ELEVATION OF THE EXISTING STREAM BED.

**PERMIT DRAWING  
SHEET 7 OF 17**

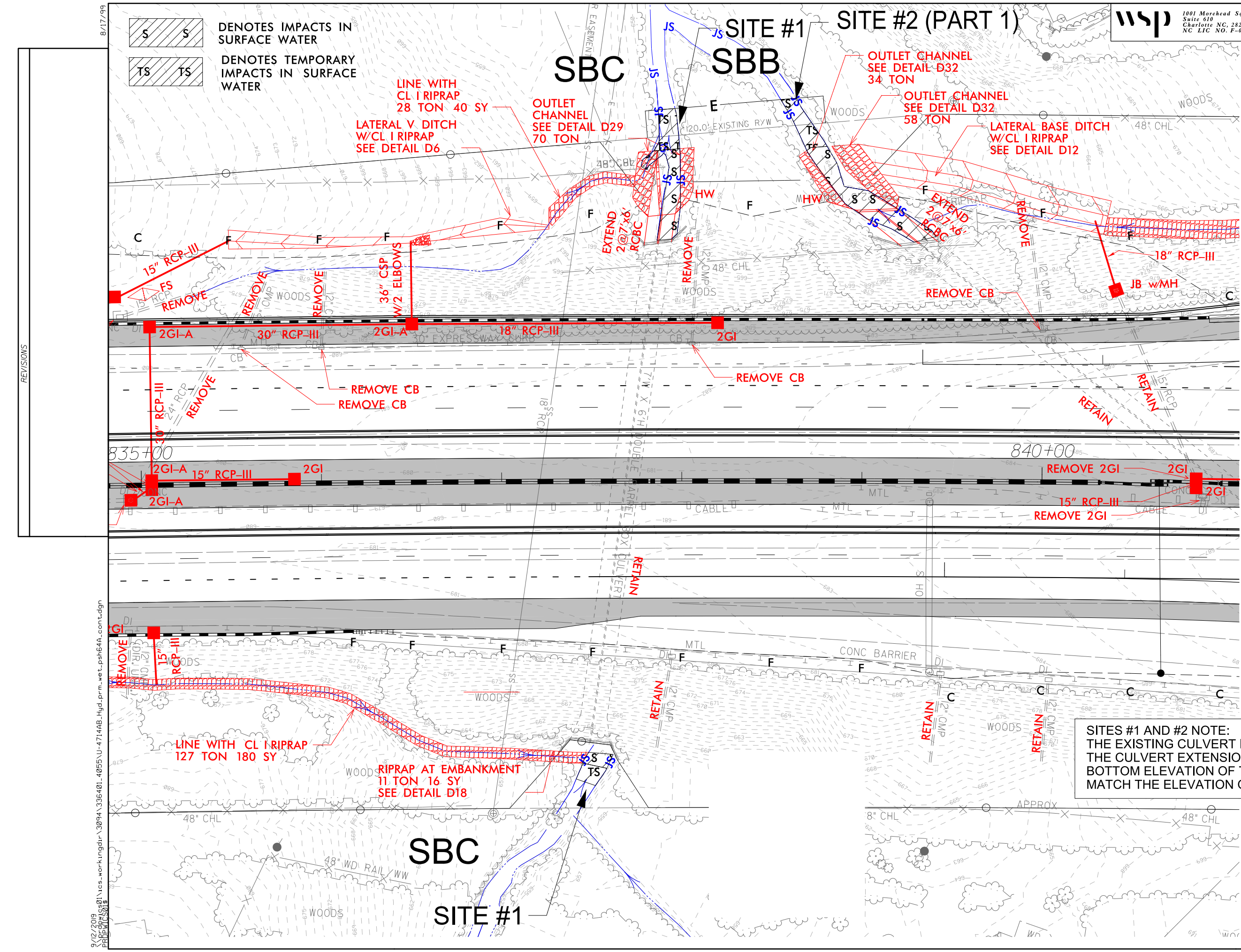
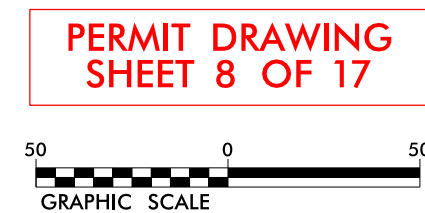


REVISIONS

9/12/2019  
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END W/C/S/15



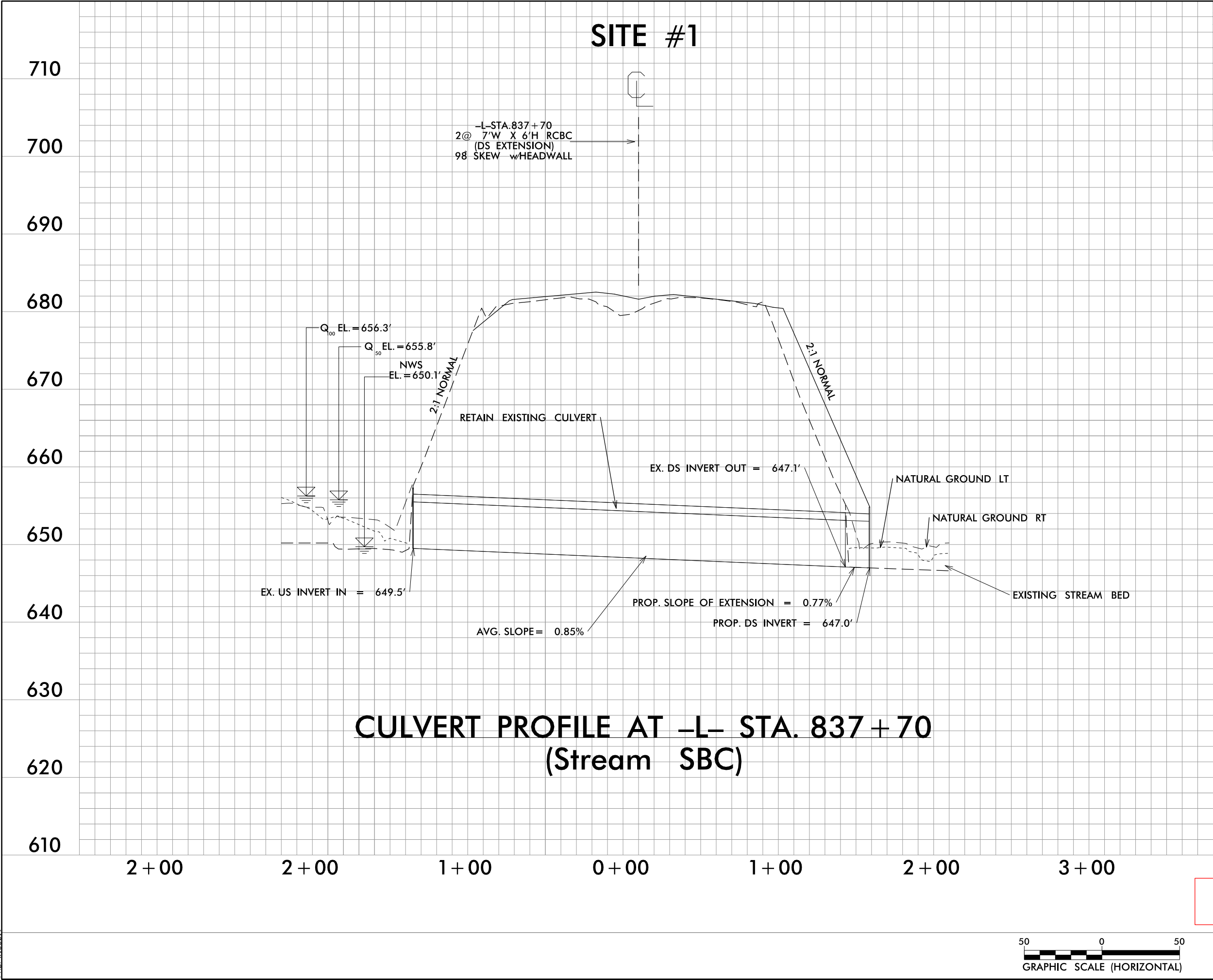
SITES #1 AND #2 NOTE:  
THE EXISTING CULVERT IS NOT BURIED, THEREFORE  
THE CULVERT EXTENSION WILL NOT BE BURIED. THE  
BOTTOM ELEVATION OF THE EXTENDED CULVERT WILL  
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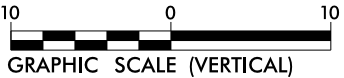
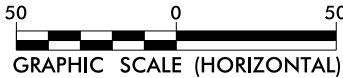
5/28/99

9/12/2019  
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P:\DWG\CS01



PROJECT REFERENCE NO.		SHEET NO.	
U-4714AB		64-1	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

PERMIT DRAWING  
SHEET 9 OF 17



5/28/99

9/12/2019  
\\spsdpc\csg01\ics\_workingdir\3094\336401\_4060\U-4714AB\_Hyd\_prm\_wet\_psh64.pfl\_culvert-841.dgn  
PRD\WCS01

SITE #2

PROJECT REFERENCE NO.		SHEET NO.
U-4714AB		64-2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

710

700

690

680

670

660

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670

660

650

640

630

620

610

2 + 00

2 + 00

1 + 00

0 + 00

1 + 00

2 + 00

3 + 00

CULVERT PROFILE AT -L- STA. 841+00  
(Stream SBB)

-L-STA. 841+00  
2 @ 7' X 6' RCBC  
(DS EXTENSION)

Q<sub>100</sub> EL.=663.4'  
Q<sub>50</sub> EL.=663.2'  
NWS EL.=658.7'

2:1 NORMAL

RETAIN EXISTING CULVERT AND EXTEND  
IN DOWNSTREAM

SIDE-TAPERED INLET

EX. US INVERT = 657.2'

BOX CULVERT SLOPE= 1.45%

EX. DS INVERT = 648.9'

PR. SLOPE OF EXTENSION = 1.1%

PR. DS INVERT = 648.5'

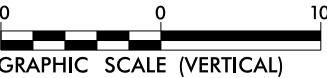
2:1 NORMAL

NATURAL GROUND LT

NATURAL GROUND RT

STREAM BED

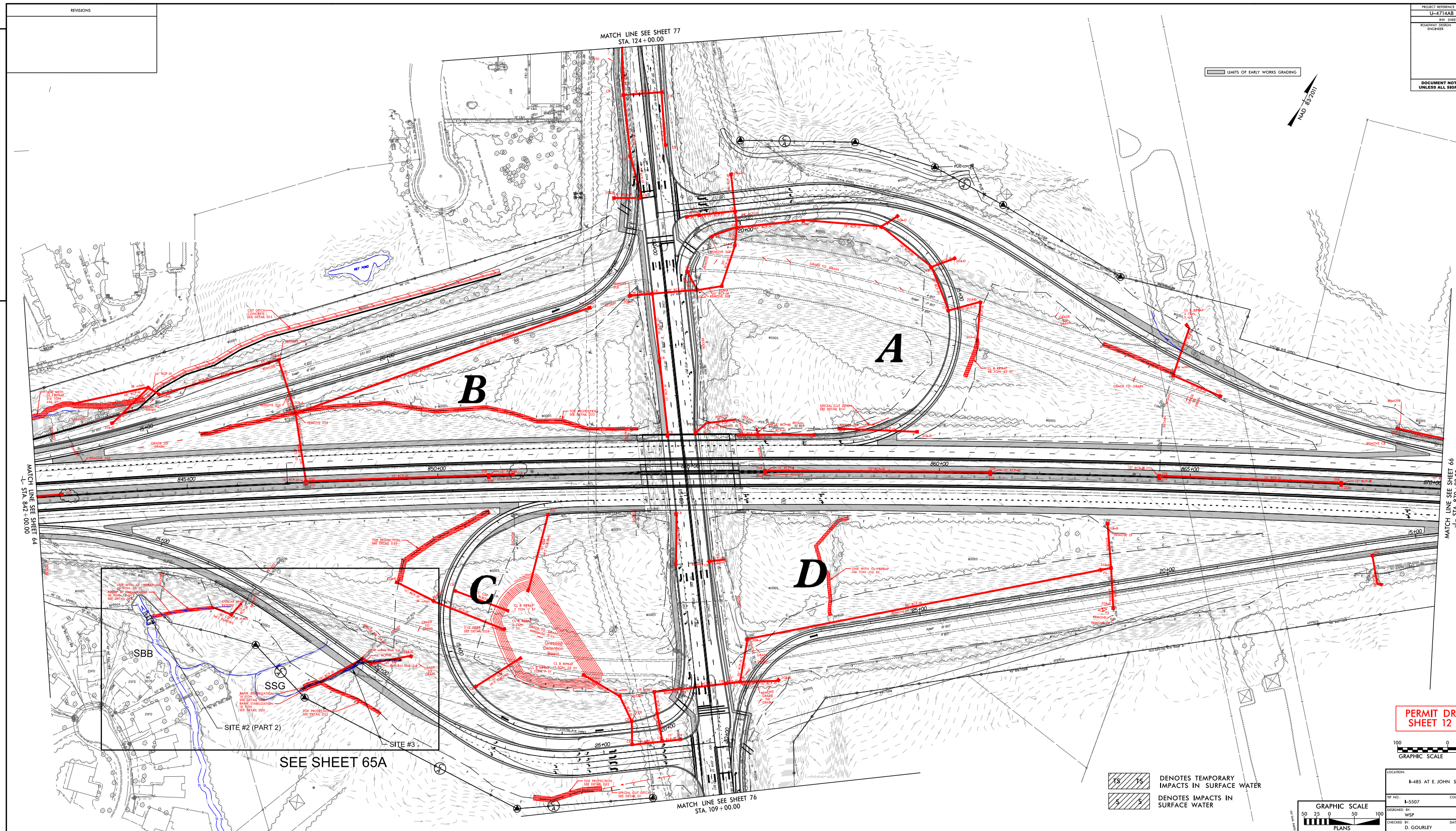
PERMIT DRAWING  
SHEET 10 OF 17







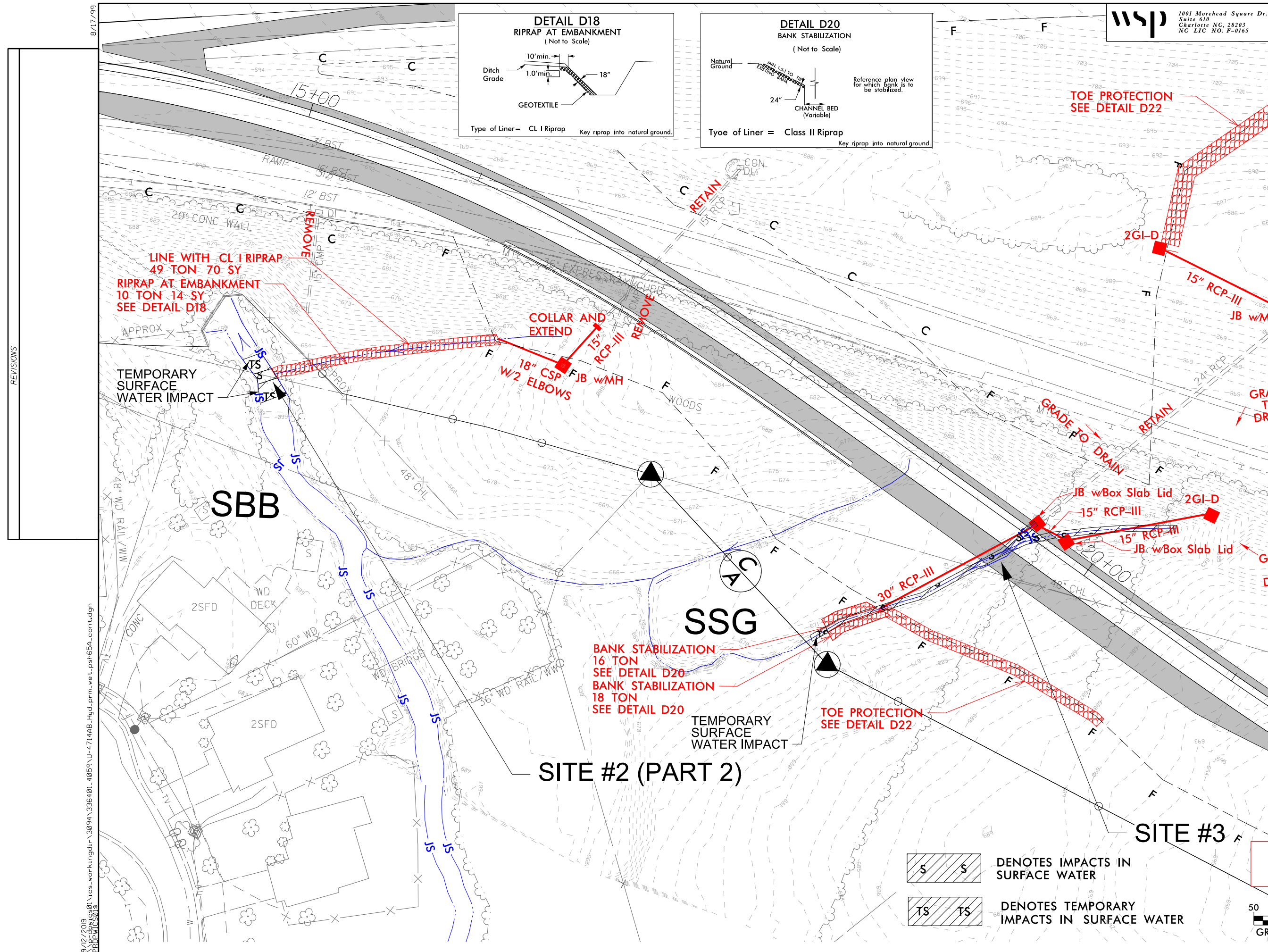
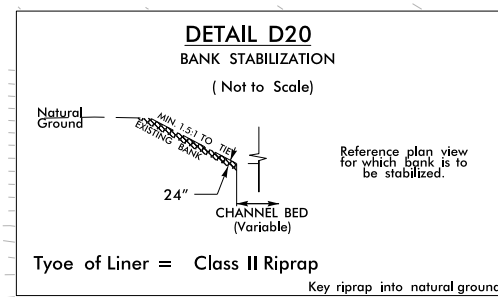
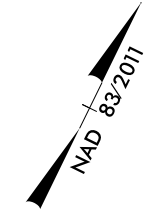
PROJECT REFERENCE NO.		SHEET NO.	
U-4714AB		65	
BY SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>			



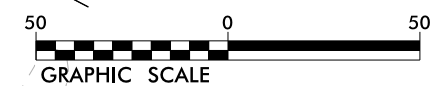





**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

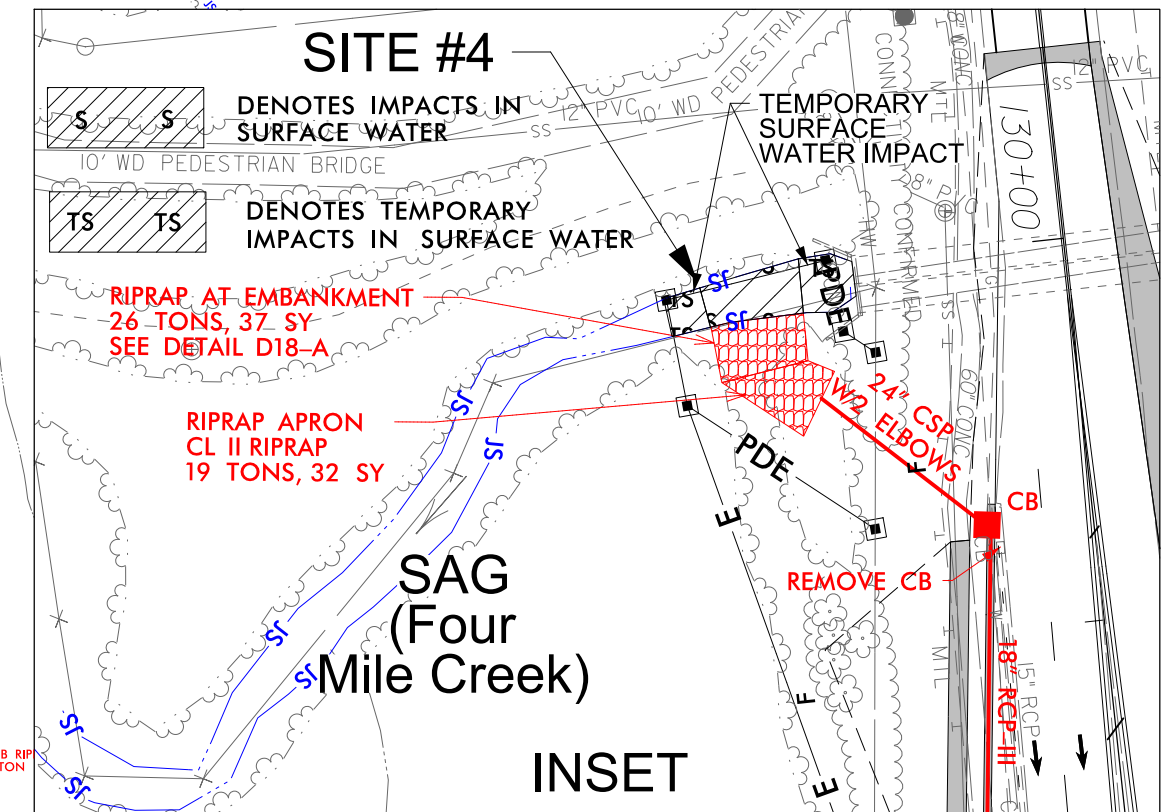
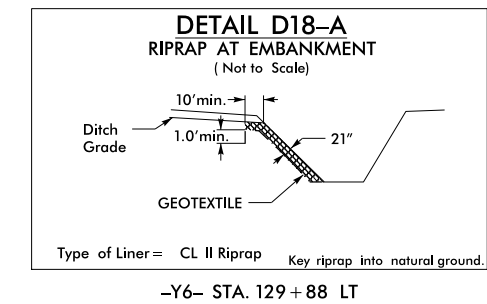




**PERMIT DRAWING  
SHEET 14 OF 17**



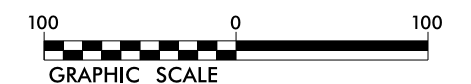


PROJECT REFERENCE NO.	SHEET NO.
U-4714AB	77
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>	
	



 DENOTES TEMPORARY IMPACTS IN SURFACE WATER  
 DENOTES IMPACTS IN SURFACE WATER

PERMIT DRAWING  
SHEET 15 OF 17



MATCH LINE SEE SHEET 65  
STA. 124+00.00

SITE #4 —  
SEE INSET

RIPRAP AT EMBANKMENT  
26 TONS, 37 SY  
SEE DETAIL D18-A

RIPRAP APRON —  
CL II RIPRAP  
19 TONS, 32 SY

SAG  
(Four  
Mile Creek)

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY  
IMPACTS IN SURFACE WATER

**RIPRAP AT EMBANKMENT  
- 26 TONS, 37 SY  
SEE DETAIL D18-A**

RIPRAP APRON  
CL II RIPRAP  
19 TONS, 32 S

SAG  
(Four  
le Creek)

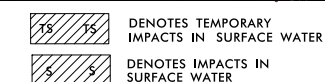
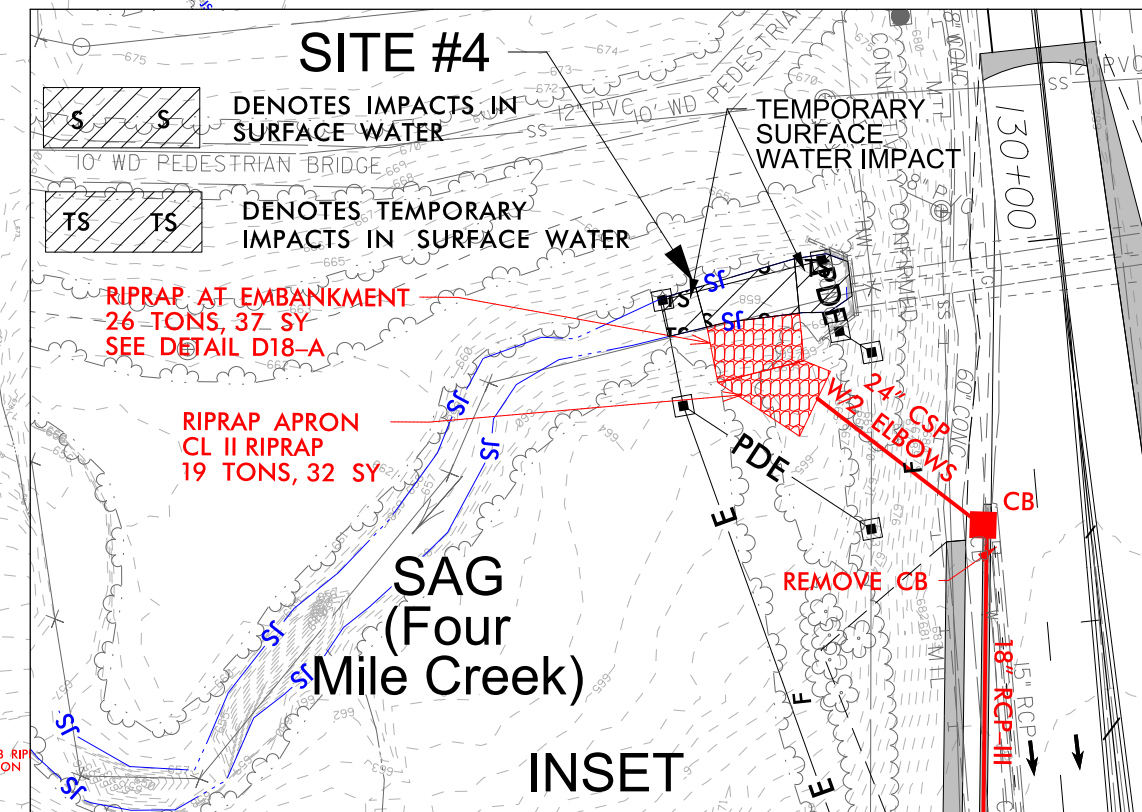
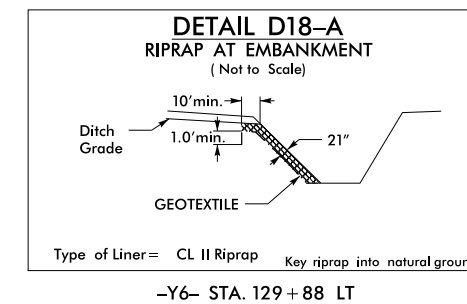
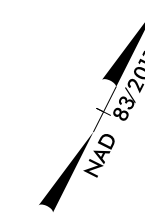
## INSET

REVISIONS

8/17/99

9/12/2019  
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PROD\WICS01\$





PERMIT DRAWING  
SHEET 16 OF 17



**MATCH LINE SEE SHEET 65**  
**STA. 124+00.00**

SITE #4 —  
SEE INSET

RIPRAP AT EMBANKMENT  
26 TONS, 37 SY  
SEE DETAIL D18-A

RIPRAP APRON  
CL II RIPRAP  
19 TONS, 32 S

SAG  
(Four  
Mile Creek)

**DENOTES IMPACTS IN SURFACE WATER**

**DENOTES TEMPORARY  
IMPACTS IN SURFACE WATER**

**RIPRAP AT EMBANKMENT  
26 TONS, 37 SY  
SEE DETAIL D18-A**

RIPRAP APRON  
CL II RIPRAP  
19 TONS, 32 SY

SAG  
(Four  
ile Creek)

## INSET

## REVISIONS

8/17/99

9/12/2019  
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PRDPWICS01\$



WETLAND AND SURACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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	837+80 -L- (LT)	Extend 2 @ 7' x 6' RCBC						< 0.01		14		
1	837+80 -L-	Bank Stabilization						0.01	< 0.01	45	33	
2	839+00 -L- (LT)	Extend 2 @ 7' x 6' RCBC						< 0.01		31		
2	839+00 -L- (LT)	Bank Stabilization						0.01	< 0.01	51	31	
2	15+20 -Y6RPC- (RT)	Bank Stabilization						< 0.01	< 0.01	6	20	
3	19+50 -Y6RPC (RT)	30" RCP						0.02		197		
3	19+50 -Y6RPC (RT)	Bank Stabilization						< 0.01	< 0.01	31	10	
4	129+50 -Y6-	Bank Stabilization						< 0.01	< 0.01	26	24	
TOTALS*:								0.06	0.03	401	118	0

\*Rounded totals are sum of actual impacts

NOTES:

At Sites 1 and 2, the existing culvert is not buried, therefore the culvert extension will not be buried. The bottom elevation of the extended culvert will match the elevation of the existing stream bed.

At Site 1, 0.01 ac (45 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 2, 0.01 ac (51 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

At Site 3, <0.01 ac (31 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

NC DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

09/12/2019

MECKLENBURG

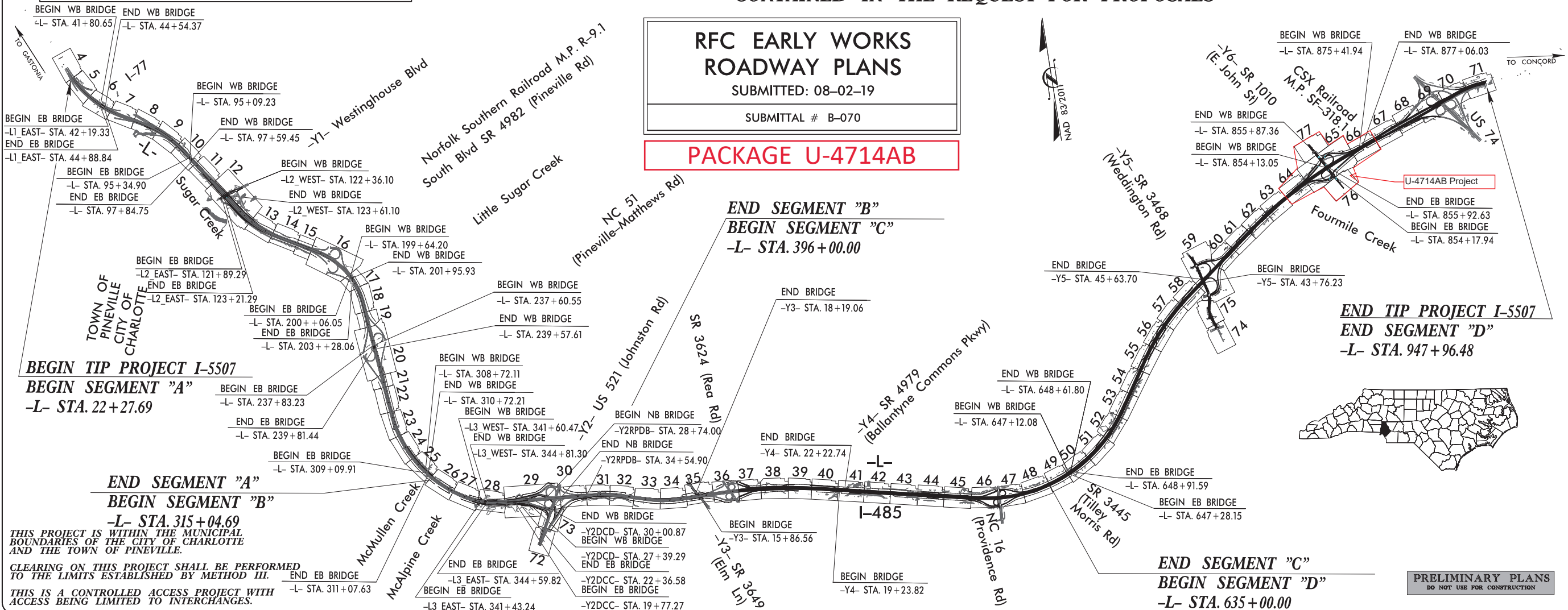
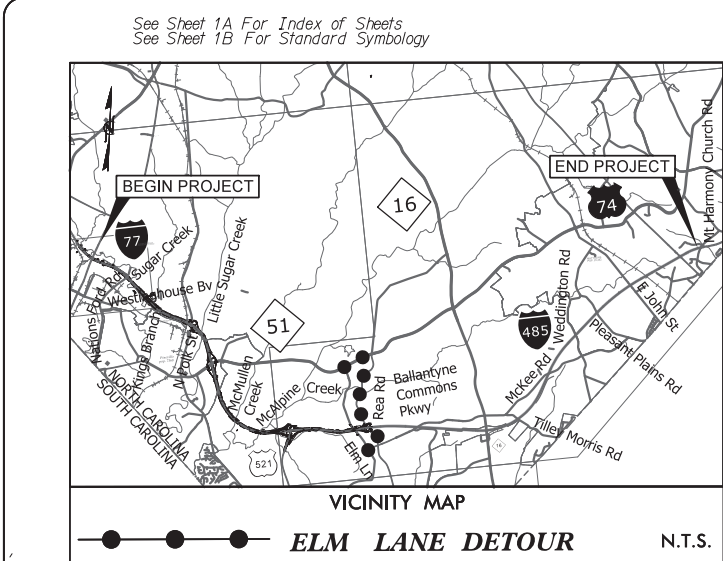
TIP NO. U-4714AB

WBS NO. 39078.1.1

SHEET 17 OF 17

8/28/2019  
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PROP\WC501\$

CONTRACT: C203970 TIP PROJECT: I-5507/R-0211EC/U-4714AB



<p><b>GRAPHIC SCALES</b></p> <p>50 25 0 50 100 PLANS</p> <p>50 25 0 50 100 PROFILE (HORIZONTAL)</p> <p>10 5 0 10 20 PROFILE (VERTICAL)</p>	<p><b>DESIGN DATA</b></p> <p>ADT 2018 = 118,400 ADT 2040 = 159,200 DHV = 9 % D = 55 % T = 9 % * V = 70/75 MPH (TTST 4 + DUAL 5)</p> <p>FUNCTIONAL CLASSIFICATION: INTERSTATE STATEWIDE TIER</p>	<p><b>PROJECT LENGTH</b></p> <p>LENGTH OF ROADWAY TIP PROJECT I-5507 = 17.137 mi LENGTH OF STRUCTURES TIP PROJECT I-5507 = 0.395 mi (BASED ON 485 WB BRIDGES)</p> <p>TOTAL LENGTH OF TIP PROJECT I-5507 = 17.532 mi</p> <p>NCDOT CONTACT: <b>TIM MCFADDEN, PE</b> DESIGN BUILD PROJECT ENGINEER - TRANSPORTATION PROGRAM MANAGEMENT UNIT</p>	<p>Prepared In the Office of:</p> <p><b>WSP BLYTHE</b></p> <p>FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</p> <p>2018 STANDARD SPECIFICATIONS</p> <p><b>RIGHT OF WAY:</b> SEPTEMBER 18, 2018</p> <p><b>LETTING DATE:</b> SEPTEMBER 18, 2018</p>	<p><b>HYDRAULICS ENGINEER</b></p> <p><b>DAVID B. GOURLEY, PE</b> PROJECT ENGINEER</p> <p><b>SEAN R. MELVILLE, PE</b> PROJECT DESIGN ENGINEER</p>	<p><b>DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA</b></p> <p><b>ROADWAY DESIGN ENGINEER</b></p>
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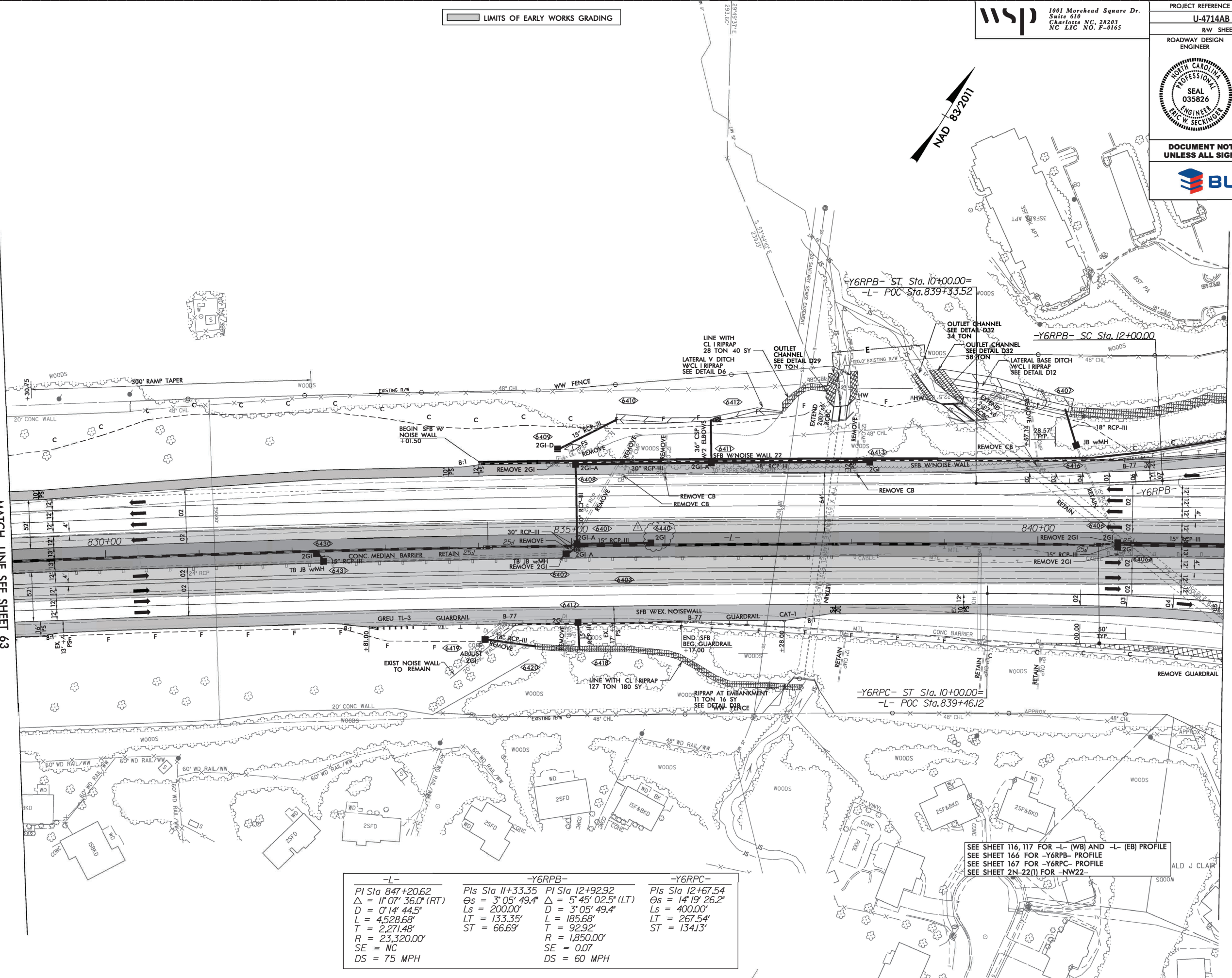
8/17/99

REVISIONS

1.9/5/19 - ADDED BOX 6440.

9/12/2019  
\\bpc\dev\cs01\cs\_workingdir\3107\335941\_3968\15507\_rdy\_psh64.dgn  
PRD\WICSO\

MATCH LINE SEE SHEET 63  
-L- STA. 829 + 00.00



MATCH LINE SEE SHEET 65  
-L- STA. 842 + 00.00

-L-	-Y6RPB-	-Y6RPC-
PI Sta 847+20.62	PIs Sta 11+33.35	PI Sta 12+92.92
$\Delta = 11^{\circ}07'36.0''$ (RT)	$\Delta = 3^{\circ}05'49.4''$	$\Delta = 5^{\circ}45'02.5''$ (LT)
$D = 0^{\circ}14'44.5''$	$Ls = 200.00'$	$D = 3^{\circ}05'49.4''$
$L = 4528.68'$	$L = 133.35'$	$L = 185.68'$
$T = 2271.48'$	$ST = 66.69'$	$T = 92.92'$
$R = 23,320.00'$		$R = 1,850.00'$
$SE = NC$		$SE = 0.07$
$DS = 75$ MPH		$DS = 60$ MPH

SEE SHEET 116, 117 FOR -L- (WB) AND -L- (EB) PROFILE  
SEE SHEET 166 FOR -Y6RPB- PROFILE  
SEE SHEET 167 FOR -Y6RPC- PROFILE  
SEE SHEET 2N-22(1) FOR -NW22-

wsp 1001 Morehead Square Dr.  
Suite 610  
Charlotte NC, 28203  
NC LIC NO. F-0165

PROJECT REFERENCE NO. <b>U-4714AB</b>		SHEET NO. <b>64</b>
R/W SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		





LOCATION:	
I-485 AT E. JOHN STREET (SR 1010)	
TRF NO.:	COUNTY:
I-5507	MECKLENBURG
DESIGNED BY:	
WSP	
CHECKED BY:	DATE:
D. GOURLEY	9/12/2019



8/17/99

wsp 1001 Morehead Square Dr.  
Suite 610  
Charlotte NC, 28203  
NC LIC NO. F-0165

PROJECT REFERENCE NO.		SHEET NO.
U-4714AB		66
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
		

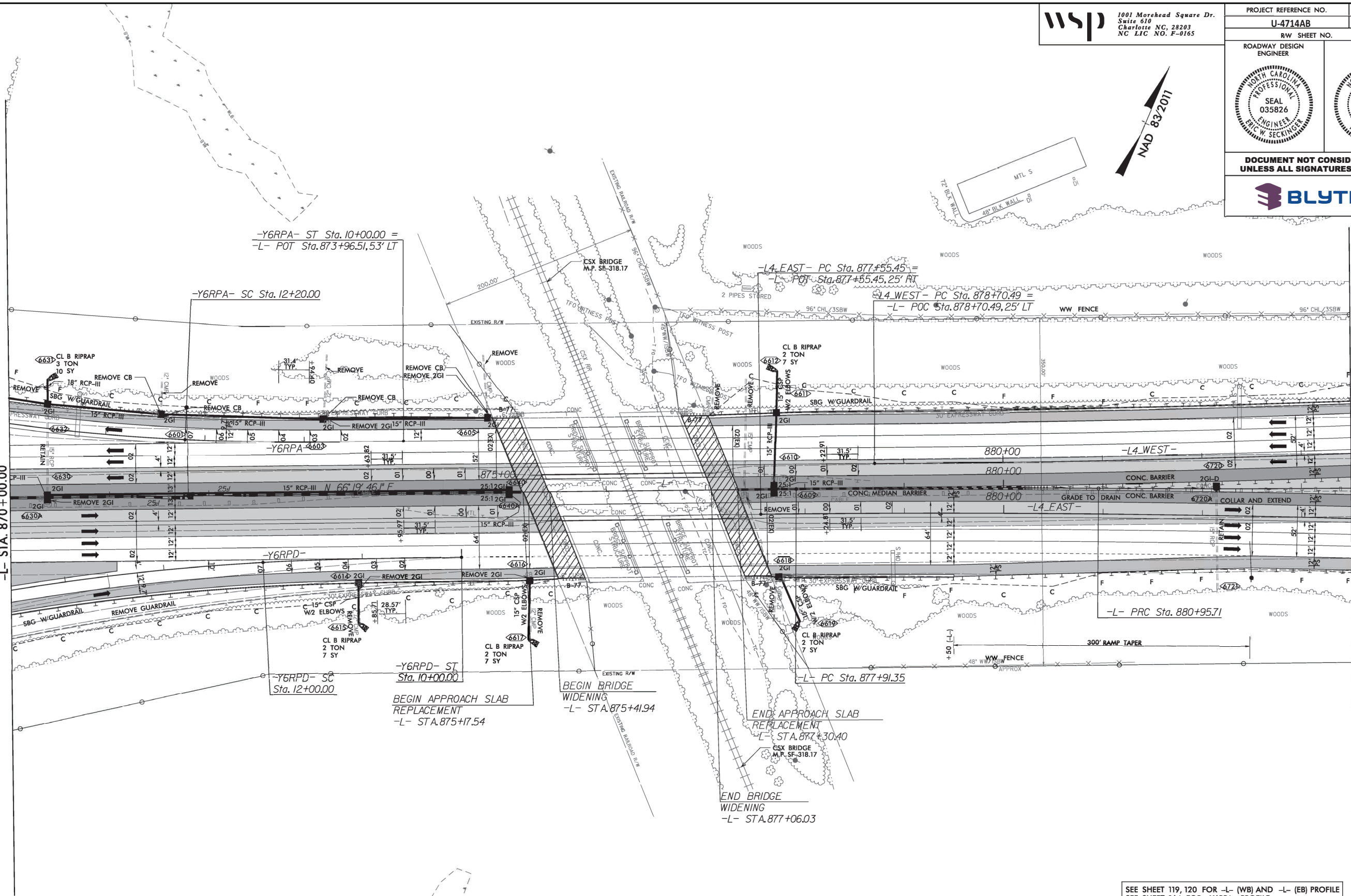
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



NAD 83/2011

MATCH LINE SEE SHEET 65  
-L- STA. 870+00.00

MATCH LINE SEE SHEET 67  
-L- STA. 883+50.00



-L4 EAST-	-L4 WEST-	-Y6RPA-	-Y6RPD-	-L-
PI Sta 881+40.18 $\Delta = 2' 44'' 16.0''$ (RT) $D = 0' 21'' 21.1''$ $L = 769.31'$ $T = 384.73'$ $R = 16,100.00'$ $SE = NC$ $DS = 75$ MPH	PI Sta 883+24.06 $\Delta = 3' 13'' 38.6''$ (LT) $D = 0' 21'' 21.1''$ $L = 906.89'$ $T = 453.57'$ $R = 16,100.00'$ $SE = NC$ $DS = 75$ MPH	PIs Sta 11+46.69 $\Theta s = 3' 13'' 55.5''$ $Ls = 220.00'$ $LT = 146.63'$ $ST = 73.36'$ $R = 1,950.00'$ $SE = 0.07$ $DS = 60$ MPH	PI Sta 13+42.43 $\Delta = 7' 05'' 13.1''$ (LT) $D = 2' 29'' 28.0''$ $L = 284.49'$ $T = 142.43'$ $R = 2,300.00'$ $SE = 0.07$ $DS = 60$ MPH	PIs Sta 11+33.35 $\Theta s = 2' 29'' 28.0''$ $Ls = 200.00'$ $LT = 133.35'$ $ST = 66.68'$ $R = 16,500.00'$ $SE = NC$ $DS = 75$ MPH
PI Sta 879+43.53 $\Delta = 1' 03'' 24.8''$ (RT) $D = 0' 20'' 50.1''$ $L = 304.36'$ $T = 152.18'$ $R = 16,500.00'$ $SE = NC$ $DS = 75$ MPH	PI Sta 882+51.22 $\Delta = 1' 04'' 48.0''$ (LT) $D = 0' 20'' 50.1''$ $L = 311.02'$ $T = 155.51'$ $R = 16,500.00'$ $SE = NC$ $DS = 75$ MPH			

SEE SHEET 119, 120 FOR -L- (WB) AND -L- (EB) PROFILE  
SEE SHEET 164 FOR -Y6RPA- PROFILE  
SEE SHEET 169 FOR -Y6RPD- PROFILE

9/12/2019  
\\spc\projects\01\cs\_workingdir\3107\335941\_3970\15507\_rdy\_psh66.dgn  
PRDW\CS01



**BLYTHE**

PI Sta 104+24.97	PI Sta 106+44.50
$\Delta = 1^\circ 37' 33.4" (LT)$	$\Delta = 1^\circ 31' 07.2" (RT)$
D = 0' 42" 58.3"	D = 0' 42" 58.3"
L = 227.02'	L = 212.05'
T = 113.52'	T = 106.03'
R = 8,000.00'	R = 8,000.00'
SE = NC	SE = NC
DS = 50 MPH	DS = 50 MPH

(62)

LESTER AND MARY YANDLE, LLC  
DB I4396 PG 692

NAD 83/2011

## REVISIONS

9/12/2019  
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8/17/99

-Y6-	
PI Sta 125+19.67 $\Delta = 3' 44' 30.9''$ (LT) $D = 2' 29' 28.0''$ $L = 150.21'$ $T = 75.13'$ $R = 2,300.00'$ $SE = 0.04$ $DS = 50$ MPH	PI Sta 127+06.72 $\Delta = 1' 37' 48.9''$ (RT) $D = 0' 43' 40.9''$ $L = 223.93'$ $T = 111.97'$ $R = 7,870.00'$ $SE = NC$ $DS = 50$ MPH

LIMITS OF EARLY WORKS SUBMITTAL

wsp 1001 Morehead Square Dr.  
Suite 610  
Charlotte NC, 28203  
NC LIC NO. F-0165

PROJECT REFERENCE NO.		SHEET NO.
U-4714AB		77
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



MATTHEWS GATEWAY PROJECT LLC  
DB 23668 PG 825  
PB 51PG 968

64

SEE SHEET 162, 163 FOR -Y6- PROFILE

MATCH LINE SEE SHEET 65  
STA. 124 + 00.00

REVISIONS

9/12/2019  
C:\projects\01\cs\_workingdir\3107\335941\_3981\5507\_rdy\_psh77.dgn  
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STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

July 30, 2019

TO: Erin Cheely, Environmental Program Consultant  
ECAP, Environmental Analysis Unit

FROM: Chris Manley, Environmental Program Consultant  
Biological Surveys Group, EAU

SUBJECT: Section 7 survey results for the northern long-eared bat (*Myotis septentrionalis*) associated with the widening of SR 1009 (Old Monroe Road, Union County/East John Street, Mecklenburg County) from SR 3448-SR 3474 (Trade Street) to SR 1377 (Wesley Chapel-Stouts Road) in Mecklenburg and Union Counties, **TIP No. U-4714**.

The North Carolina Department of Transportation (NCDOT, Division 10) proposes to widen the existing two-lane East John Street-Old Monroe Road (SR 1009) to a multi-lane facility from Trade Street (SR 3448-SR 3474) in the Town of Matthews in Mecklenburg County to Wesley Chapel-Stouts Road (SR 1377) in the Town of Indian Trail in Union County, TIP No. U-4714. The length of the project is approximately 6.5 miles long.

Northern long-eared bat

The project to widen SR 1009 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 July 30, 2019, 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 Mecklenburg 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).



According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated April 2019, **the nearest NLEB hibernacula record is 86 miles west of the project and no known NLEB roost trees occur within 150 feet of the project area.**

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.



## North Carolina Department of Cultural Resources

### State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory  
Secretary Susan Kluttz

Office of Archives and History  
Deputy Secretary Kevin Cherry

July 17, 2014

#### MEMORANDUM

TO: Shelby Reap  
Office of Human Environment  
NCDOT Division of Highways

FROM: Ramona M. Bartos *Reap for Ramona M. Bartos*

SUBJECT: Historic Structures Survey Report, Widening of John Street/Old Monroe Road (SR 1009)  
From Trade Street to Wesley Chapel/Stout Road, U-4714, Mecklenburg & Union Counties,  
ER 13-0879

Thank you for your June 10, 2014, letter transmitting the above-referenced report. We have reviewed the report and offer the following comments.

For the reasons outlined below, we believe the proposed **Matthews Commercial Historic District boundary expansion (MK3357 and MK3358) is not eligible for listing** in the National Register of Historic Places.

- To qualify as a boundary expansion, the area must have made a significant contribution to the history of Matthews' central business district and have historic integrity.
- The addition of the fence, stairs, and modern gazebo at the sidewalk edge has significantly altered the appearance of the property to the southeast.
- It is not clear if other gin-related buildings used to stand on the property in the now vacant area.
- No information is offered about what the auxiliary buildings were used for, and no case has been made for their importance.
- A case has not been made for the individual contribution of the 1957 store building to Matthews' downtown area and expanding the historic district's period of significance to include it would require such a claim. There has to be important history and/or architecture to add a very small number of buildings to a district.
- No context is offered in the report about why/how the post-1946 period in Matthews has historic significance.

We concur that the **Reid House (MK1191) is eligible for listing** in the National Register under Criterion C as a very good local representative example of the Queen Anne style. If the storage building/servants' quarters date from within 15-20 years of the house, then the building is a contributing resource to the historic setting for the house. If the building was built after 1910, we agree it is a noncontributing resource on the property.

We concur that the **Rowland - Clay House (MK2301) is eligible for listing** in the National Register under Criterion A for its association with the African American community in Matthews and represents the economic success of Charlie and Vivian Rowland to be able to purchase land and construct a house for themselves. The workshop to the rear of the house very likely contributes to the continuing history of the African American-owned parcel by the Clay family. The house may also qualify under Criterion C; however, more information about the interior integrity would be needed to make that judgment.

We concur that the **Banks H. Funderburk Store (UN0125) (Rock Store, local landmark) is eligible for listing** in the National Register under Criterion C for its intact picturesque architectural design using very distinctive ashlar rubble stone with raised joints. We are not certain that the stone is actually flint.

We agree that the **Sun Valley High School (UN1182) does not meet National Register criteria** due to changes to the setting and design of the historic school campus. The detached 1960 auditorium now has two large additions on either side. The rear modern additions to the main building do somewhat detract from the school's integrity. Other pre-1963 buildings to the southwest historically stood separately and they have been added on to the rear also. In addition to the post-1965 buildings, the original school building has been altered on the exterior. The alterations to the historic buildings and the new additions have lessened the integrity of the historic school sufficiently enough to result in the property not qualifying for the National Register.

The **Heywood - Killough House (UN0178) does not meet National Register criteria**. The application of synthetic siding, a modern rear addition, new windows, the replacement of the original porch with a Craftsman style porch, and extensive interior remodeling has significantly altered the appearance of this Queen Anne style house.

We believe that contrary to the finding of the report, the **Banks and Carolyn Funderburk House (UN1200) is eligible for listing** in the National Register under Criterion C for architecture as a good representative local example of a Split Level house. The sets of modern columns at the entrance to the living room do detract from the interior integrity of the house, but the excellent integrity of the rest of the main house block is more than enough for the house to have the distinctive characteristics of this house type.

Having reviewed the inventory of properties that were judged as not warranting further investigation, we would recommend additional study to more fully evaluate the following for National Register eligibility.

- No. 33 -- This hip-roofed concrete block house has a very distinctive exterior brick treatment, and the original metal windows are intact.
- No. 68 -- This house is also constructed of the stone found at the Funderburk Store, and it appears to have good integrity.
- No. 72 -- Other pyramidal cottages in the Mecklenburg/Union area have been listed in the Register or are designated as local landmarks, and I would like to know more about this house which appears to have relatively good integrity.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or [renee.gledhill-earley@ncdcr.gov](mailto:renee.gledhill-earley@ncdcr.gov). In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT

[mpfurr@ncdot.gov](mailto:mpfurr@ncdot.gov)



**North Carolina Department of Cultural Resources  
State Historic Preservation Office**

Ramona M. Bartos, Administrator

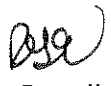
Pat McCrory, Governor  
Susan Kluttz, Secretary  
Kevin Cherry, Deputy Secretary

Office of Archives and History  
Division of Historical Resources

July 18, 2014

**MEMORANDUM**

To: Shelby Reap, Architectural Historian [slreap@ncdot.gov](mailto:slreap@ncdot.gov)  
NCDOT/PDEA/HES

From: Renee Gledhill-Earley   
Environmental Review Coordinator

Re: Historic Structures Survey Report, Widening of John Street/Old Monroe Road (SR 1009)  
From Trade Street to Wesley Chapel/Stout Road, U-4714, Mecklenburg & Union Counties,  
ER 13-0879

This memorandum is to correct a misstatement in our July 17, 2014, review of the above-referenced report and offer clarification on our recommendation for additional evaluation of three properties.

We concur that the **Banks and Carolyn Funderburk House (UN1200)** is eligible for listing in the National Register under Criterion C for architecture as a good representative local example of a Split Level house. The sets of modern columns at the entrance to the living room detract somewhat from the interior integrity of the house, but the rest of the main house block retains the distinctive characteristics of this house type.

Having reviewed the inventory of properties that were judged as not warranting further investigation, we would recommend additional study to more fully evaluate the following for National Register eligibility, if it appears the project may adversely affect them.

- No. 33 -- This hip-roofed concrete block house has a very distinctive exterior brick treatment, and the original metal windows are intact.
- No. 68 -- This house is also constructed of the stone found at the Funderburk Store, and it appears to have good integrity.
- No. 72 -- Other pyramidal cottages in the Mecklenburg/Union area have been listed in the Register or are designated as local landmarks, and I would like to know more about this house which appears to have relatively good integrity.

cc: Mary Pope Furr, NCDOT [mpfurr@ncdot.gov](mailto:mpfurr@ncdot.gov)



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

August 5, 2014

Ramona Bartos, Administrator  
State Historic Preservation Office  
Deputy State Historic Preservation Officer  
4617 Mail Service Center  
Raleigh, NC 27699-4617

RE: John Street/Old Monroe Road Widening, Mecklenburg and Union Counties, TIP# U-4714, ER 13-0879

Ms. Bartos,

Thank you for your correspondence of May 17, 2013 regarding the above-mentioned project. In response to comments provided by the Office of State Archaeology (OSA), consultation was held on Tuesday, August 5, 2014, between Paul J. Mohler (NCDOT Archaeologist) and John Mintz (OSA) to review and discuss preliminary design plans for the widening of SR 1009 (John Street/Old Monroe Road) from its intersection with Freemont Street in the Town of Matthews, Mecklenburg County, to its intersection with SR 1377 (Wesley Chapel/Stouts Road) in Union County.

Based on the mapping provided at this meeting as well as a thorough review of soil/landscape conditions, current commercial and residential development, previous archaeological survey results, and the nature and extent of the proposed project, it was determined that the project corridor, as depicted, is unlikely to contain intact and significant archaeological resources. Therefore, OSA does not recommend an archaeological survey be conducted for this project. However, if design plans change, then additional consultation regarding archaeology will be required.

Thank you for your assistance in this matter. If you have any questions concerning this project, please contact me at (919) 707-6089 or Mr. Paul J. Mohler, NCDOT Archaeologist, at (919) 707-6080.

Sincerely,

Matt Wilkerson  
Archaeology Supervisor  
Human Environment Section

MTW/pjm

cc: Elmo Vance, PDEA  
Paul J. Mohler, Archaeology

# Meeting Summary

## East John Street/Old Monroe Road Improvement Project

### Historic Effects Meeting

NCDOT PDEA CCB – Large Conference Room

October 20, 2015, 9:30 am

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**Purpose:** *To review the Preferred Alternative preliminary engineering design in relation to properties determined eligible for the National Register of Historic Places (NRHP) and to concur on the project effects to these properties.*

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### Attendees

Elmo Vance – NCDOT PDEA

Shelby Reap – NCDOT HES

Beverly Robinson – NCDOT PDEA

Theresa Ellerby – NCDOT PDEA

Kim Bereis – Atkins

Mary Pope Furr – NCDOT HES

Jill Gurak – Atkins

Renee Gledhill-Early – SHPO

Gina Schaar – Atkins

Donnie Brew – FHWA

### Material(s)

- Agenda
- Mapping with location of historic district/resources and their boundaries and cross sections

### Meeting Summary

1. **Brief Project Overview** – Kim provided a brief overview of the project, including the location and scope. The project is in a rapidly growing area approximately 12 miles southeast of Uptown Charlotte. The project consists of widening about 6.5 miles of East John Street-Old Monroe Road (SR 1009) from Trade Street (SR 3448-SR 3474) in the Town of Matthews to Wesley Chapel-Stouts Road (SR 1377) in the Town of Indian Trail. The road is known as East John Street through the Town of Matthews in Mecklenburg County and as Old Monroe Road through Stallings and Indian Trail in Union County. An EA is being prepared for the project, with FHWA approval scheduled for end of 2015/early 2016.

The area has experienced notable population growth over the past decade due to proximity to Charlotte, with all three towns in the project area becoming suburban bedroom communities. Existing East John Street-Old Monroe Road is a two-lane facility with no control of access that runs east-southeast from downtown Matthews to the Town of Indian Trail, generally parallel to US 74. The road is a commuter route heavily congested during peak periods. The purpose of the project is to improve existing and projected traffic flow and operations on this section of E. John Street-Old Monroe Road. The project will also enhance mobility for pedestrians and bicyclists along the corridor. Another desirable outcome is to enhance overall travel safety in the project study area.

The proposed widening consists of a 4-lane median-divided “hybrid” design. The design generally has the same cross section throughout the corridor (4-lane median divided with multi-use path on one side and sidewalk on the other), with differences at major intersections where strategic directional crossovers and non-traditional intersection designs were needed to achieve acceptable operations. Improvements at intersections would include full movement, Superstreet, and Michigan Left designs. All three Towns desire a complete street facility, but understand the importance of function for commuters and access to corridor destinations. There has been extensive coordination with the municipalities throughout the project.

# Meeting Summary

2. **Recap of (Internal) Preliminary Effects Review Meeting (September 2014)** – Kim provided a recap of the internal review meeting that was held in September 2014 to obtain a preliminary effects review on historic properties potentially impacted by the proposed roadway improvement. The main focus of that meeting was the “pinch point” in Stallings created by two eligible properties: Banks and Carolyn Funderburk House and the Banks H. Funderburk Store (locally known as the Rock Store Bar-B-Q), which are on opposite sides of the road and fairly close to each other. Since that meeting, the preliminary designs have been revised. Avoiding both of these resources resulted in impacts to the Stallings Plaza.

Also at that meeting, NCDOT HES requested that for the formal effects meeting with SHPO, the mapping include NRHP boundaries (for listed district and eligible properties), boundaries of the resources that were flagged for further investigation should the project result in impacts to those properties, and cross sections in the area of each resource. It was also noted that in addition to direct property impacts, factors such as access, visual, and noise impacts as well as drainage and utility design requirements are considered in the effects determinations.

Kim noted that since the project is still in preliminary design, an exact assessment of both the drainage and utility requirements are not possible at this time. Atkins has had discussions with hydraulic staff to assess what can be done to avoid impacts due to drainage requirements. None of the resources are located at potential outfall locations where stormwater measures would be located, so it appears that drainage designs will not be an issue with encroachment. Greg Brew (NCDOT Roadway) initiated coordination with the NCDOT Utilities Section, and they are aware of the historic resources. Greg noted that the expectation is that they will design the utilities/PUEs in a manner that does not affect these resources.

Mary Pope asked what the speed limit is along the corridor. Currently, it is 45 mph with the exception of the area through Stallings (Town speed limit of 35) and a small section in Matthews that is posted 25 mph. The design speed is 50 mph. Kim noted that in previous municipal coordination meetings Town staff have requested specific posted speeds. At the meetings where this was discussed, NCDOT Division noted that the decision on speed limit will come later on and will be coordinated with the Towns.

3. **Discussion/Effects Determinations for Area Historic Resources** – Kim noted that access would change for all of the historic resources to right-in/right-out (due to change from two lanes with no control of access to a four-lane median divided roadway). No noise impacts were identified for the eligible resources in the Draft Traffic Noise Analysis and visual impacts are not anticipated. A summary of the effects determinations for the historic architectural resources intensively surveyed are on the following page. *(Note: Signed Effects form received following the meeting is included with this meeting summary).*

Kim noted that regarding the resources that were flagged for further investigation if impacted, the following will not be in the construction limits of the project: No. 33 House at 230 Morris Road and No. 72 House at Old Monroe Road at Radiator Road. However, No. 68 House at 4800 Old Monroe Road could have minor right of way impacts and was identified as an impacted “receptor” in the Draft Traffic Noise Analysis. As such, Shelby noted that an eligibility study/report will be completed for No. 68 house.

# Meeting Summary

Property No.	Property Name	Site No.	Listed or Eligible Under Criterion	Effects Finding/ Conditions	Additional Notes
1	Matthews National Register Commercial Historic District	MK1417	Listed	No Effect	Begin project area in downtown Matthews. Boundary comprised of Trade Street just north of begin project, south of the RR tracks, and a section of East Charles Street. Outside of project area and no changes to Trade Street.
3	Reid House	MK1191 (Study List 1987/Local Landmark 1987)	C	No Adverse Effect with Conditions (No construction in ROW; no drainage easements; no PUEs; only replace C&G; keep existing sidewalk; no tree removal)	Preliminary designs were completed with limited survey data. In some places like near the Reid House, only LIDAR was available. When project moves forward into final design and final design survey is available, it likely can be designed so that the Reid House property can still be avoided. The widening is occurring to the other side of the road, no multi-use path is proposed in this section, and there was minimal concern of impacts to property/house by drainage features.
31	Rowland-Clay House	MK2301 (Study List 2002/Local Landmark 2005)	A/ Possibly C	No Effect	Eligible but outside corridor on East Charles Street. Not near construction limits so no concern.
55	Banks H. Funderburk Store (a.k.a. Rock Store Bar-B-Q)	UN0125 (Local Landmark)	C	No Adverse Effect with Conditions (no ROW; no permanent drainage easements)	Located in Stallings. Local Landmark. There is no construction within the boundary based on available survey. Access would change to right-in/right-out. Given the proximity of the resource to the road, there may need to be some design tweaks to make the drainage fit in without impacts such as by lowering the grade.
95	Banks and Carolyn Funderburk House	UN1200	C	No Adverse Effect with Conditions (No ROW; no easements; minimize tree removal; no PUEs; no PDEs).	Located west of the Rock Store on the opposite side of the road. Property has a lot of trees and is set well back so is buffered. Small concern of minor impacts to property by drainage and erosion control features, but adjustments can be made to the typical section (e.g. remove planting strip from design) to accommodate a swale and can adjust grade. Donnie noted that if property within the boundary is needed, it would likely <i>de minimis</i> and that an additional meeting would be necessary.
33	House – 230 Morris Road	N/A	N/A	N/A	<i>Additional study to more fully evaluate the following for NRHP eligibility if it appears the project may adversely affect them.</i> No. 68 House will need an eligibility report due to potential property impacts and noise impact.
68	House – 4800 Old Monroe Road	N/A	N/A	N/A	
72	House – Old Monroe Road/Radiator Road	N/A	N/A	N/A	



Federal Aid #: STPDA-1009(16) TIP#: U-4714 County: Mecklenburg & Union

**CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS**

**Project Description: Improve SR 1009 (John St/Old Monroe Rd) from SR 3448/SR 3474 (Trade St) to SR 1377 (Wesley Chapel/Stout Rd) in Matthews, Stallings, and Indian Trail.**

On October 20, 2015, representatives of the

- ☒ North Carolina Department of Transportation (NCDOT)
- ☒ Federal Highway Administration (FHWA)
- ☒ North Carolina State Historic Preservation Office (HPO)
- ☐ Other United States Army Corps of Engineers (USACE)

Reviewed the subject project and agreed on the effects findings listed within the table on the reverse of this signature page.

Signed:

Shelby Reap Oct 20, 2015  
Representative, NCDOT Date

John P. [Signature] 10-20-15  
FHWA, for the Division Administrator, or other Federal Agency Date

Renee Hedrick-Easley 10.20.15  
Representative, HPO Date

\_\_\_\_\_  
State Historic Preservation Officer Date

Federal Aid #: STPDA-1009(16)

TIP#: U-4714

County: Mecklenburg &amp; Union

Property and Status	Alternative	Effect Finding	Reasons
Matthews National Register Commercial Historic District (MK1417) NR		no effect	no changes to Tradee St. boundary outside APE
Reid House (MK1191) DE		no adverse effect	no construction in ROW, no easements no PVEs; only replace curb & gutter; keep existing sidewalk. No tree removal.
Rowland-Clay House (MK2301) DE		no effect	out side construction area
Banks H. Funderburk Store (UN0125) DE, LL		no adverse effect with conditions	right in, right out; no construction in boundary may <del>remove</del> remove planting strip from plans, no permanent drainage easements
Banks and Carolyn Funderburk House (UN1200) DE		no adverse effect w/conditions	no ROW; no easements, minimize tree removal No PVEs, No PDEs.

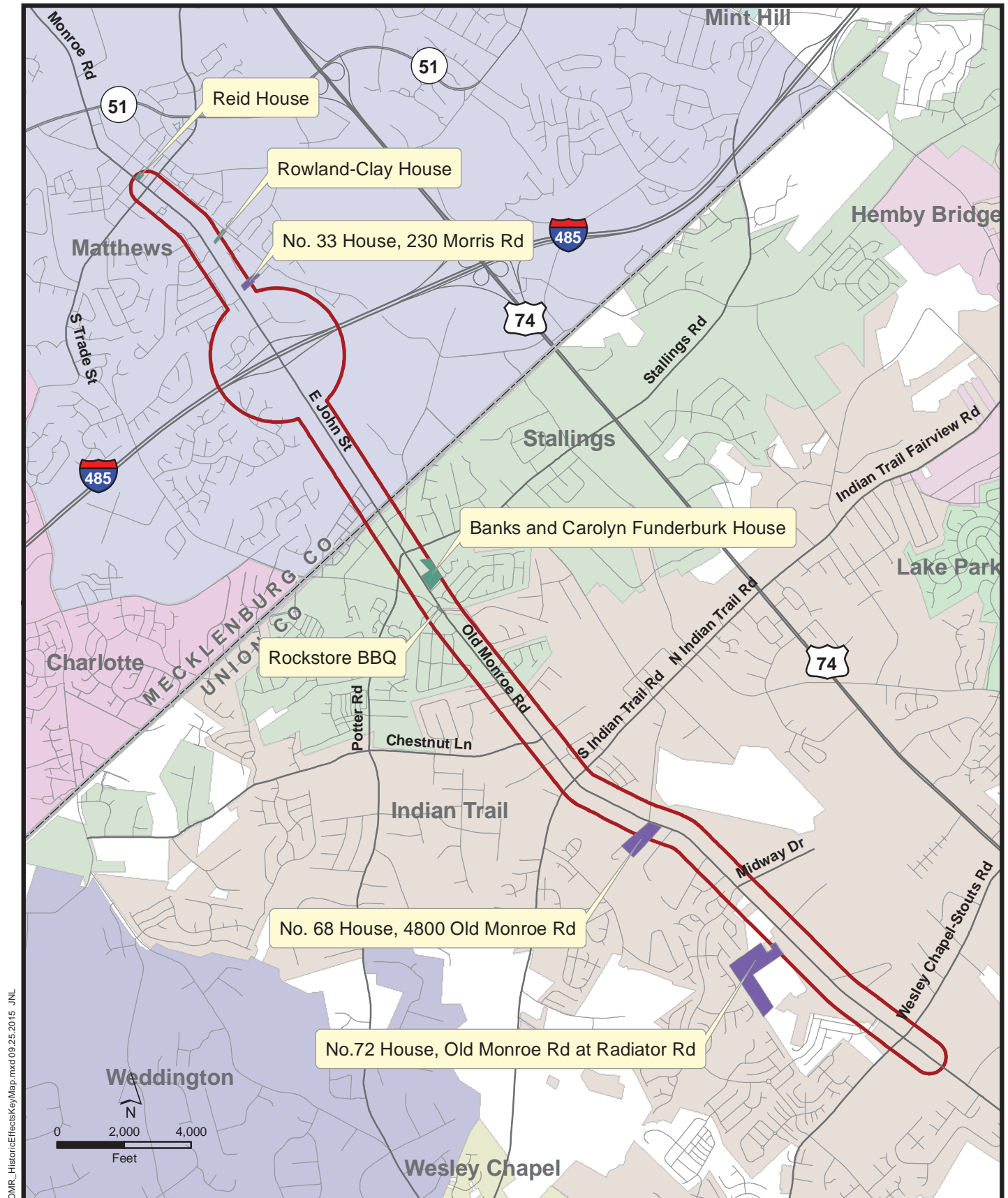
Initialed:

NCDOT

SJRFHWA  
USACEDJB

HPO \_\_\_\_\_

FHWA intends to use SHPO's concurrence as a basis of a "de minimis" finding for the following properties, pursuant to Section 4(f):



OMR\_HistoricEffectsKeyMap.mxd 09.25.2015 JNL



**E. JOHN STREET/  
OLD MONROE ROAD  
WIDENING PROJECT**  
STIP PROJECT NO. U-4714  
Mecklenburg and Union Counties,  
North Carolina

#### Legend

- Requires Additional Study
- Eligible for NRHP Listing
- Project Study Area

Source: Union County, NCDOT, Mecklenburg County



#### HISTORIC SITES

**FIGURE H-1**





**North Carolina Department of Natural and Cultural Resources  
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Roy Cooper  
Secretary Susi H. Hamilton

Office of Archives and History  
Deputy Secretary Kevin Cherry

June 20, 2017

**MEMORANDUM**

TO: Shelby Reap  
Office of Human Environment  
NCDOT Division of Highways

FROM: Renee Gledhill-Earley *Renee Gledhill-Earley*  
Environmental Review Coordinator

SUBJECT: Historic Structures Survey Report for Widening of John Street/Old Monroe Road  
(SR1009) from Trade Street to Wesley Chapel-Stout Road, U-4717,  
Mecklenburg & Union Counties, ER 13-0879

Thank you for your May 16, 2017, letter transmitting the above-referenced report addendum. We have reviewed the addendum and offer the following comments.

We concur that the following properties are not eligible for listing in the National Register of Historic Places for the reasons outlined in the report addendum.

- Matthews Presbyterian Church (MK3696)
- Orr House, 230 W. John St. (MK3697)

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or [environmental.review@ncdcr.gov](mailto:environmental.review@ncdcr.gov). In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT, [mfurr@ncdot.gov](mailto:mfurr@ncdot.gov)

17-03-0023



## 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>	U-4714	<b>County:</b>	Mecklenburg
<b>WBS No.:</b>	39078.1.1	<b>Document Type:</b>	EA
<b>Fed. Aid No:</b>	STPDA-1009(16)	<b>Funding:</b>	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	Unknown at this time
<b><u>Project Description:</u></b> Increased Area of Potential Effects (APE) from Freemont ST to Irwin Ln. U-4714 proposes to increase SR 1009 (John Street/Old Monroe Rd) to a multi-lane facility.			

### 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:** April 2017

#### **Description of review activities, results, and conclusions:**

Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on November 8, 2016. Based on this review there are no NR, DE, LL, SL, or SS in the project area. There two properties greater than 50 years old in the Area of Potential Effects (APE) of the project. An outside consultant conducted a site visit and wrote an eligibility evaluation for the properties (Matthews Presbyterian Church and the Orr House) and recommended that the neither property is eligible for National Register listing. In a letter dated June 20, 2017 the North Carolina Historic Preservation Office (NCHPO) concurred with our recommendation. No historic properties are present in the APE.

### SUPPORT DOCUMENTATION

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

**FINDING BY NCDOT ARCHITECTURAL HISTORIAN**

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

Shelly Reap  
NCDOT Architectural Historian

June 21, 2017  
Date