



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

September 16, 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 Nationwide Permit 14 and Section 401 Water Quality Certification** for the Proposed Interstate Access Addition to I-485 at Weddington Road (SR 3468), Mecklenburg County, Division 10, STIP No. R-0211EC, Debit \$570.00 from WBS 43609.3.2.

Dear Madam:

The North Carolina Department of Transportation (NCDOT) proposes to construct a half-clover interchange with ramps and loops in the northeast and southeast quadrants for the interchange at I-485 and Weddington Road (SR 3468) in Mecklenburg County. Bike lanes and a sidewalk are also included and improvements will be made to the Weddington Road and McKee Road intersection.

As a result of the interstate access addition at Weddington Road, there will be 59 linear feet of stream bank stabilization, 66 linear feet of permanent stream impacts, and <0.01 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, State Historic Preservation Office (SHPO) concurrence form, and a letter recommending no archaeological survey. An Environmental Assessment (EA) was completed in May 2007 and a Finding of No Significant Impact (FONSI) was completed in February 2009 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,

A handwritten signature in black ink that reads "Michael" followed by a stylized signature.

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

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:

R-0211EC

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

Nationwide Permit (NWP) Number:

14 - Linear transportation

NWP Numbers (for multiple NWPS):

List all NW 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

R-0211EC DMS Acceptance 2019.pdf

80.22KB

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: *

R-0211EC, Interstate Access Addition to I-485 at Weddington Road (SR 3468)

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town: *

Charlotte/Matthews

2. Project Identification



2a. Property Identification Number:

(tax PIN or parcel ID)

not applicable

2b. Property size:

(in acres)

80.1

2c. Project Address

Street Address

Address Line 2

City

Charlotte/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: *

35.089500

ex: 34.208504

Longitude: *

-80.730048

-77.796371

3. Surface Waters

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

Fourmile Creek, Sixmile 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 the existing I-485 and Weddington Road right-of-way, including paved roadway, maintained shoulder, and adjacent forested areas. Land use in the project vicinity consists primarily of residential and commercial development, interspersed with forestland within undeveloped parcels.

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)

371

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

The purpose of the project is to improve access to I-485 from Weddington Road and surrounding communities in Weddington, Matthews, and Charlotte city limits. Currently, Weddington Road is not directly accessible from I-485. The proposed interchange, located between the John Street and NC 16 (Providence Road) interchanges, will provide a closer and improved route from the project area to I-485.

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

The project is located in southeastern Mecklenburg County within City of Charlotte and the town of Matthews and will provide direct access to I-485 for the predominantly residential neighborhoods in the vicinity of the project area.

The project consists of constructing a half-clover interchange with ramps and loops in the northeast and southeast quadrants. This interchange will provide 16-foot wide ramps and 18-foot wide loops. Weddington Road will be widened within the project area to 73-feet from face-of-curb to face-of-curb, and will have five travel lanes and bike lanes. A 6-foot wide sidewalk will be provided on the west side and a 10-foot wide sidewalk will be provided on the east side of Weddington Road, including the bridge over I-485. Left turn lanes will be provided on Weddington Road at the ramp and loop intersections. Improvements will be made to the Weddington Road and McKee Road intersection. Impacts to jurisdictional resources will result from culvert extensions (one 6' x 6' reinforced concrete box culvert and one 72" reinforced concrete pipe) at the proposed interchange ramps and related outfall protection and stream bank stabilization.

An existing sewer line is located within the existing 6' x 6' reinforced concrete box culvert (RCBC). A sewer line extension will be conducted by the City of Charlotte and will be located within the footprint of the culvert extension and bank stabilization at the outlet end of the culvert.

Standard road building equipment, such as loaders, compactors, excavators, dozers, and pavers 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

R-0211EC Permit Drawings.pdf	6.25MB
R-0211EC Roadway Plans.pdf	17.92MB

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.

/25/2015 (AJD), 7/1/2019 (PJD) Both of these determinations were for TIP I-5507, but cover R-0211EC 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 * <small>Average (feet)</small>	3h. Impact length * <small>(linear feet)</small>
S1	Site 1 - Extend 6'x6' RCBC	Permanent	Culvert	SBF	Perennial	Both	6	16

S2	Site 1 - Rip Rap Fill	Permanent	Rip Rap Fill	SBF	Perennial	Both	6 Average (feet)	34 (linear feet)
S3	Site 1 - Rip Rap Fill	Temporary	Rip Rap Fill	SBF	Perennial	Both	6 Average (feet)	19 (linear feet)
S4	Site 1 - Bank Stabilization	Permanent	Bank Stabilization	SBF	Perennial	Both	6 Average (feet)	6 (linear feet)
S5	Site 1 - Bank Stabilization	Temporary	Bank Stabilization	SBF	Perennial	Both	6 Average (feet)	20 (linear feet)
S6	Site 2 - Extend 72" RCP	Permanent	Culvert	SBE	Perennial	Both	5 Average (feet)	16 (linear feet)
S7	Site 2 - Bank Stabilization	Permanent	Bank Stabilization	SBE	Perennial	Both	5 Average (feet)	53 (linear feet)
S8	Site 2 - Bank Stabilization	Temporary	Bank Stabilization	SBE	Perennial	Both	5 Average (feet)	27 (linear feet)

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

3i. Total jurisdictional ditch impact in square feet:

0

3i. Total permanent stream impacts:

125

3i. Total temporary stream impacts:

66

3i. Total stream and ditch impacts:

191

3j. Comments:

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 2, <0.01 (26 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 and wingwalls 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. A preformed scour hole at Station -L- 790+50 LT and dry detention basin at Station Y5LPD- 20+00 RT are included in the design.

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)

66

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

warm

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 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 dry 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 "R-0211EC_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 areas where development can still occur are minimal therefore this project will have little influence on additional development. The areas that will be directly impacted are mostly built out. It appears that growth in this area has preceded the proposed project. These areas are directly influenced by the zoning the local municipalities have in place. Any additional development in the area would be required to adhere to local stormwater rules.

4. Sewage Disposal (DWR Requirement)

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

Yes No NA

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

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 (NCNHP) data explorer, October 2018 Freshwater Mussel Survey Report, and August 2018 NEPA Construction Consultation 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 for the northern long-eared bat on the grounds that the proposed action is consistent with the final 4(d) rule under Section 7 of the Endangered Species Act (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](#)

I-5507 & R-0211EC Mecklenburg 4(d) NLEB memo 2019.pdf

202.39KB

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/hpoweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? *

Yes No

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

May 2007 Environmental Assessment, August 2018 NEPA Construction Consultation, and State Historic Preservation Office HPOWEB GIS Service

7c. Historic or Prehistoric Information Upload

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

R-0211EC SHPO Concurrence Form.pdf

39.05KB

R-0211EC SHPO Letter - Recommendation No Archaeological Survey.pdf

50.58KB

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

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 U-4714AB. Separate permit applications are being prepared and submitted for I-5507 and U-4714AB.

Miscellaneous attachments not previously requested.

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

R-0211EC_HYD_SMP.pdf	156.77KB
R-0211 EC Cover Letter.pdf	300.78KB

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

9/16/2019



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

TIM BAUMGARTNER
Director

September 13, 2019

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:

R-0211EC, New Interchange on I-485 and SR 3468 (Weddington Road), 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	66.0	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 mitigation acceptance letters issued on March 12 and August 31, 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
DMS Asset Management Supervisor

cc: Mr. Monte Matthews, USACE – Raleigh Regulatory Field Office
Ms. Amy Chapman, NCDWR
File: R-0211EC Revised





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



(Version 2.08; Released April 2018)

WBS Element: TIP No.: R-0211EC County(ies): Mecklenburg Page 1 of 3

General Project Information

WBS Element:		TIP Number:	R-0211EC	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):	Catawba		CAMA County?	No			
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	0.8 miles	Surrounding Land Use:	Urban (residential and commercial)					
	Proposed Project			Existing Site				
Project Built-Upon Area (ac.)	14.1	ac.	13.7	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.			There are 2 existing cross section on 485. - 3 lanes each direction with a paved median from 77- to Johnston Road. - Then as you travel east its is 2 lanes either direction with a variable width grassed median to US-74.				
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)	<p>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</p> <p>The Impacts for R-0211 EC are located on Sheets 60 and 61 of the plan set and are in relation to the widening of 485 that is needed to accomodate a new interchange at Weddington Road.</p> <p>Construction will unavoidably impact several streams. 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.</p> <p><u>Best Management Practices:</u> *Dry Detention Basin. *Promotion of sheet flow and infiltration with grassed shoulders except were 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.</p>							

*

Surface Water Body (1):	Fourmile Creek		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:	SBF SBE		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)						

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-0211EC	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
43609.3.2	N/A	Design-Build	
			

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-0211EC); 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**

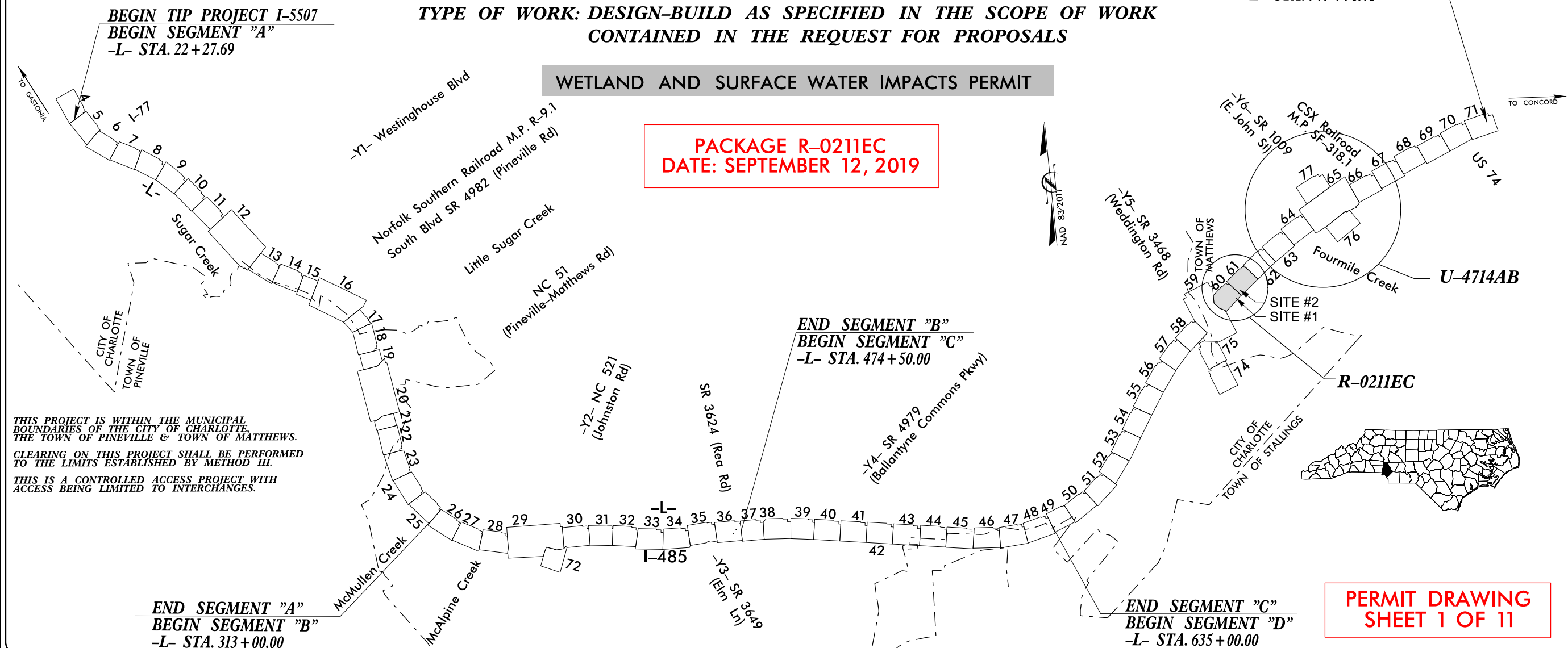
**END TIP PROJECT I-5507
END SEGMENT "D"
-L- STA. 947+96.48**

TIP PROJECT: R-0211EC

CONTRACT: C203970

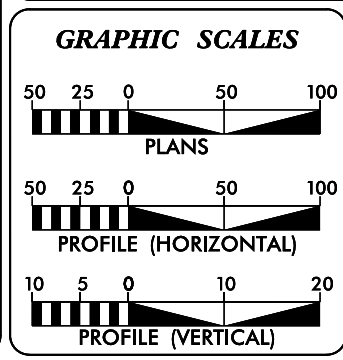
WETLAND AND SURFACE WATER IMPACTS PERMIT

**PACKAGE R-0211EC
DATE: SEPTEMBER 12, 2019**



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF CHARLOTTE, THE TOWN OF PINEVILLE & TOWN OF MATTHEWS. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III. THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

**PERMIT DRAWING
SHEET 1 OF 11**



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:
wsp
1901 Morehead Square Dr.
Suite 610
Charlotte, NC, 28203
NC LIC NO. F-0165

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

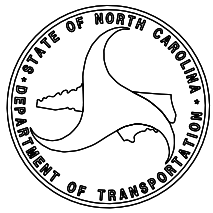
RIGHT OF WAY: SEPTEMBER 18, 2018	DANIEL H. BRIDGES, PE DESIGN PROJECT MANAGER
LETTING DATE: SEPTEMBER 18, 2018	DAVID B. GOURLEY, PE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.
**ROADWAY DESIGN
ENGINEER**

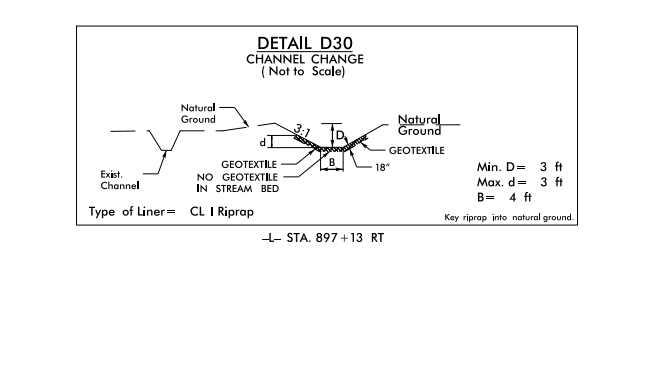
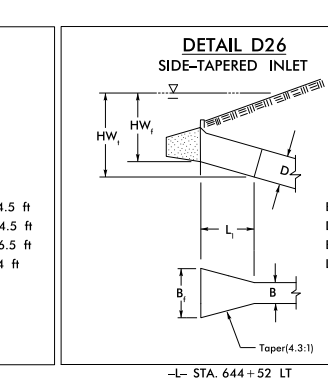
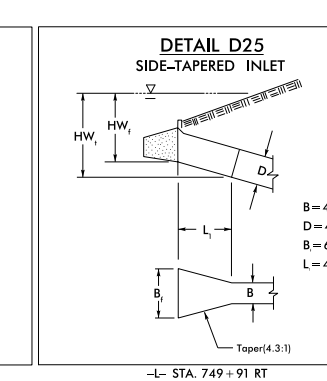
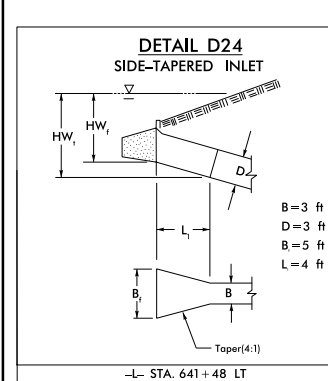
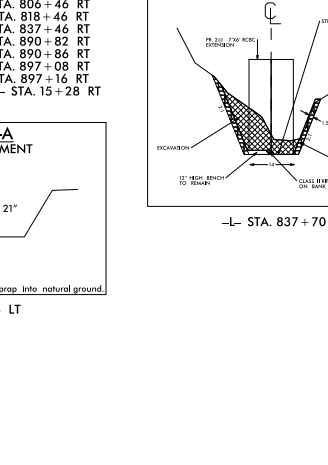
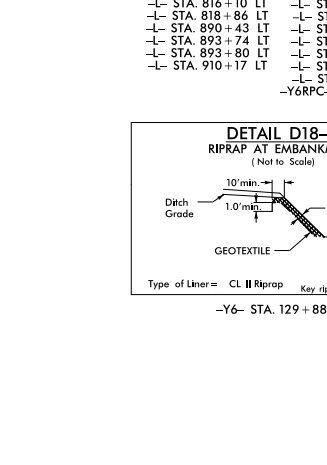
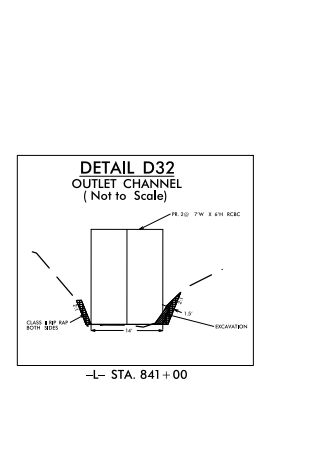
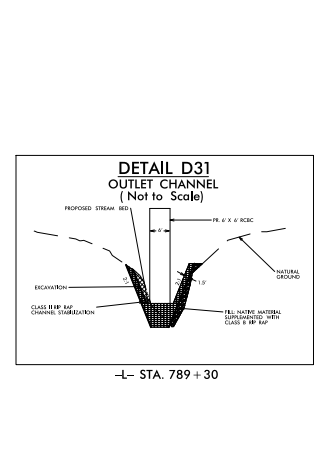
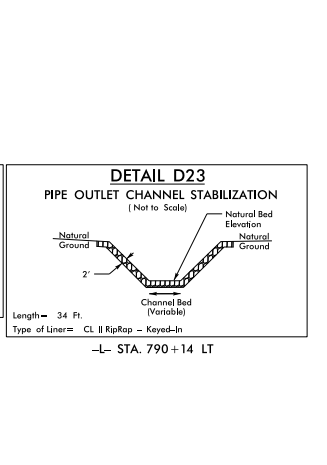
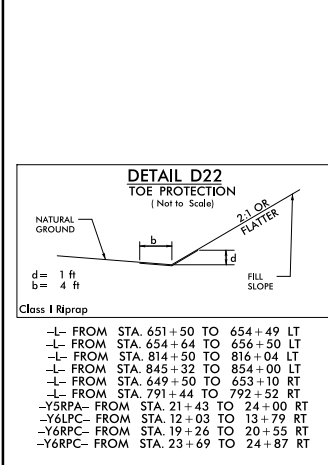
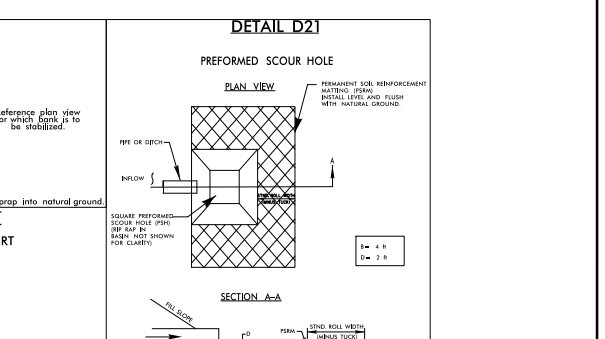
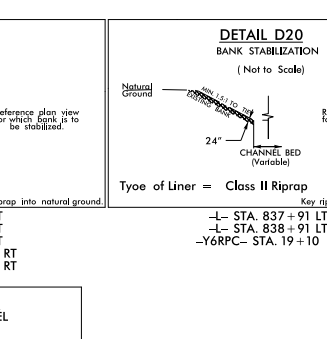
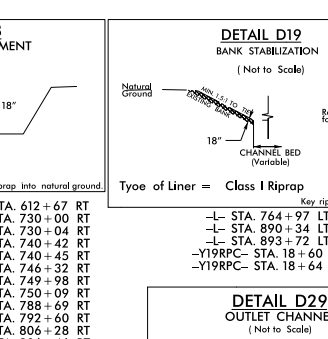
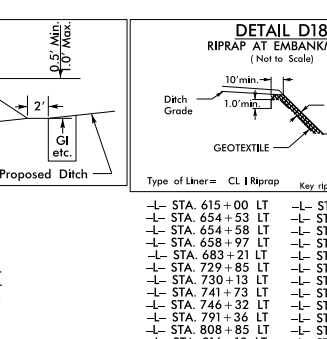
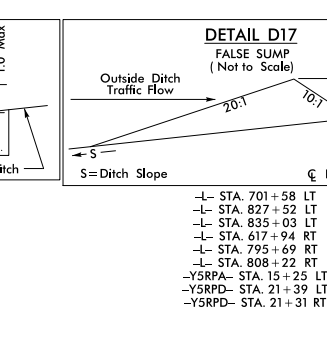
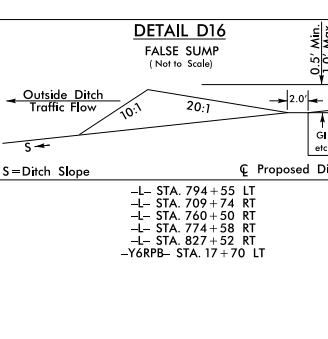
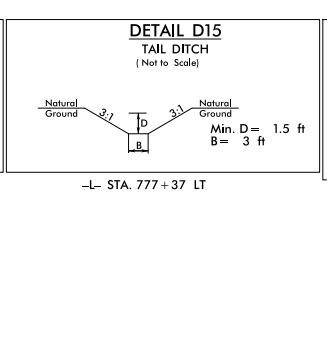
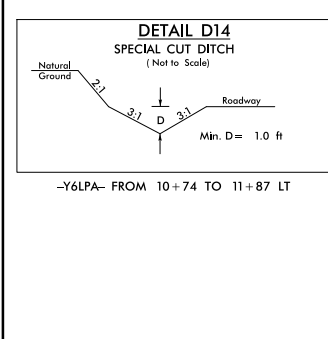
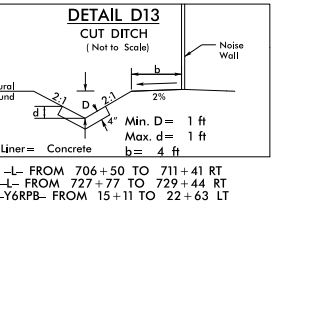
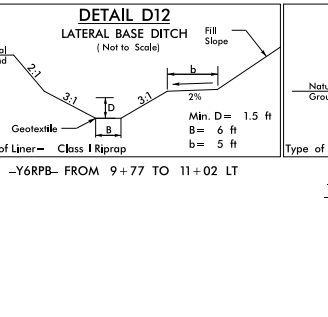
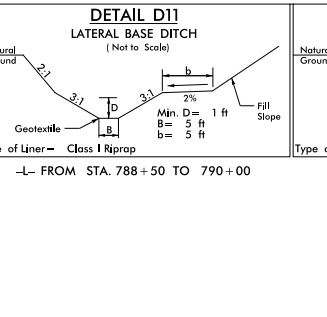
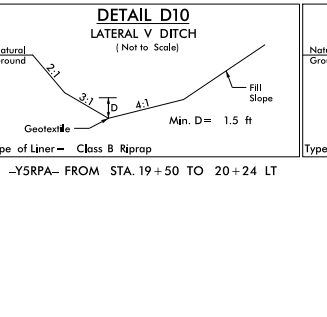
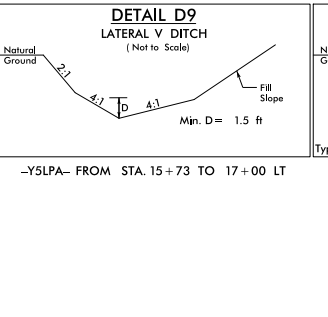
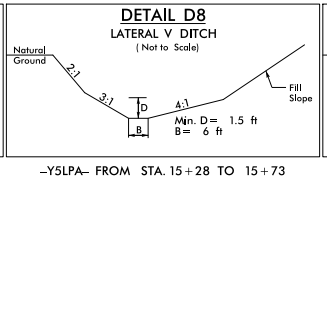
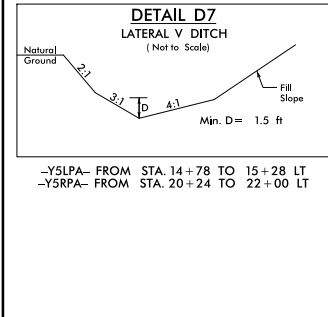
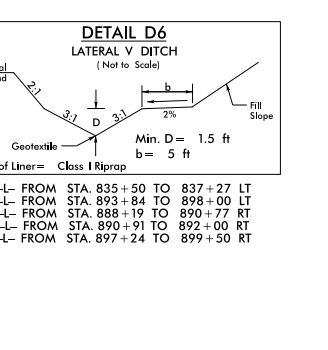
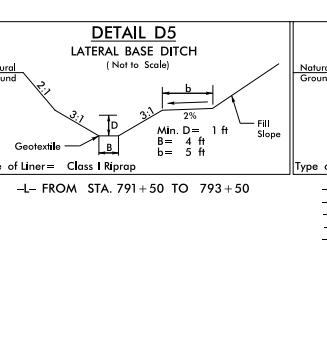
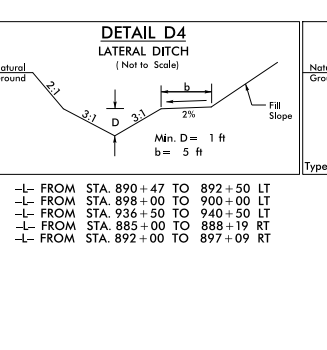
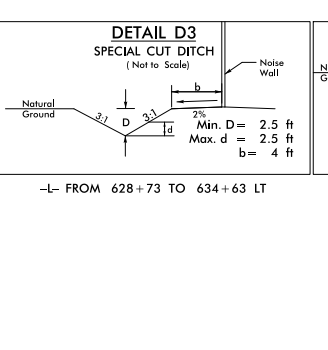
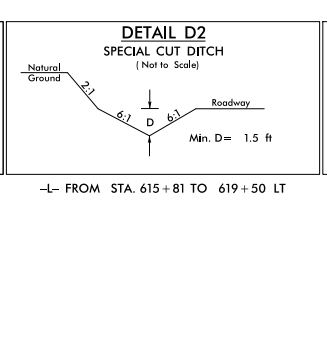
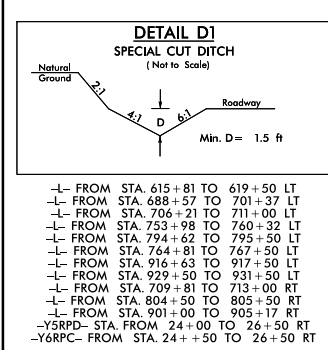
SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



9/12/2019 \\drdw\cs01\cs_wor\kingdir\3091\336401_4043\R-0211EC_hyd_perm_wet_psh01_TSH.dgn
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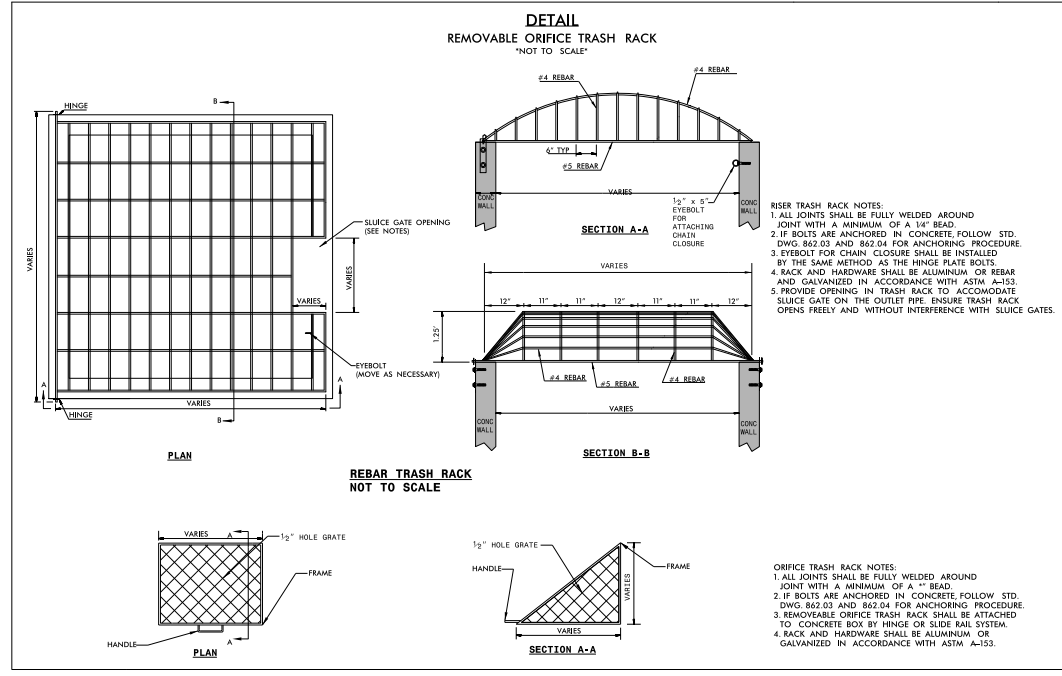
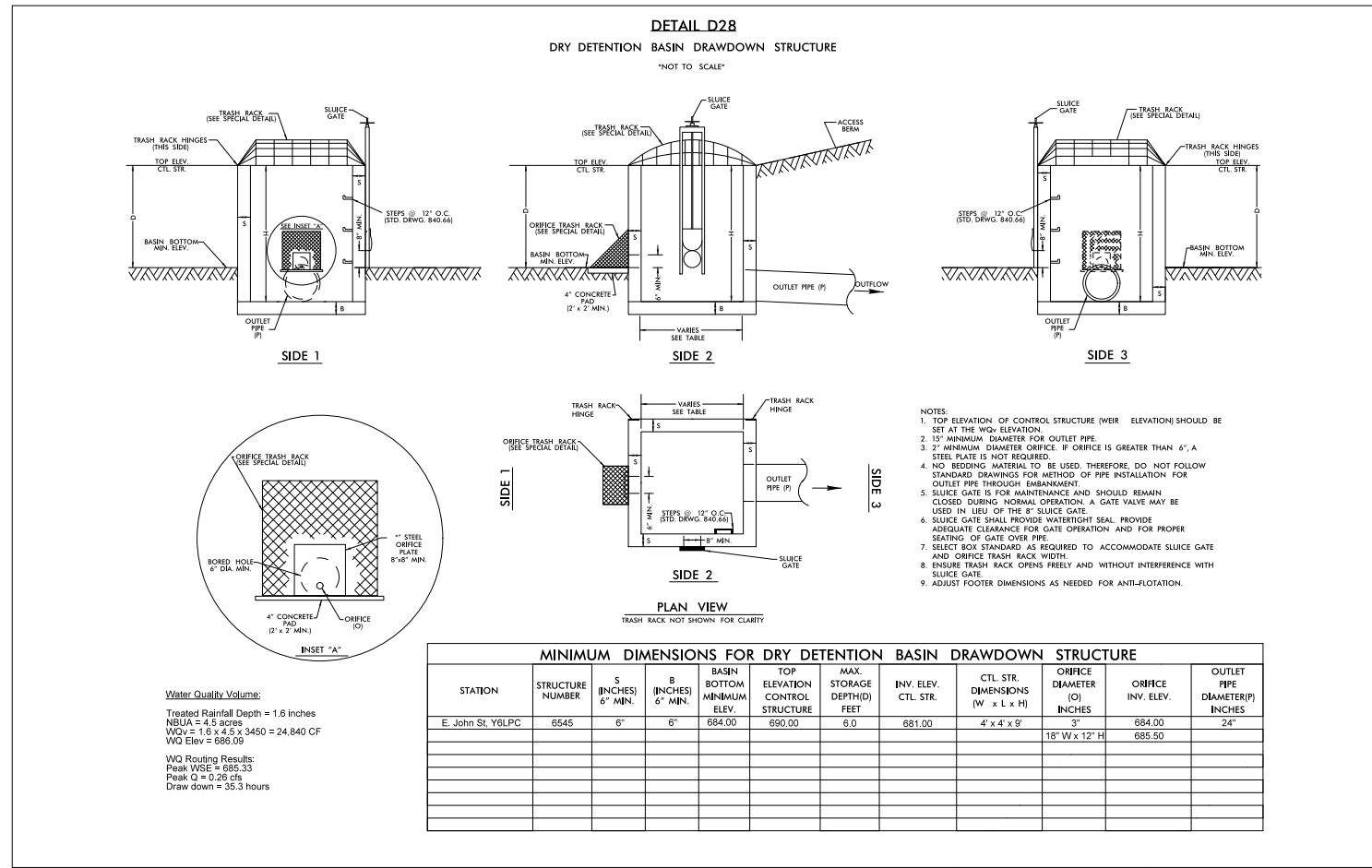
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**PERMIT DRAWING
SHEET 2 OF 11**

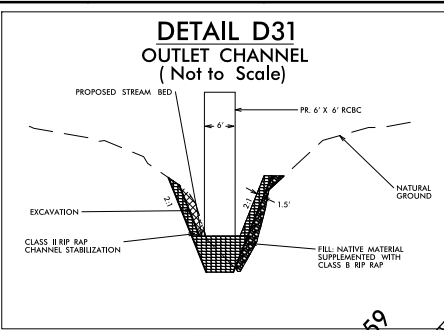
8/17/99
1/12/2019
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PROJECT REFERENCE NO. R-0211EC	SHEET NO. 2D-3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**PERMIT DRAWING
SHEET 4 OF 11**

8/17/99



-L- STA. 789+30

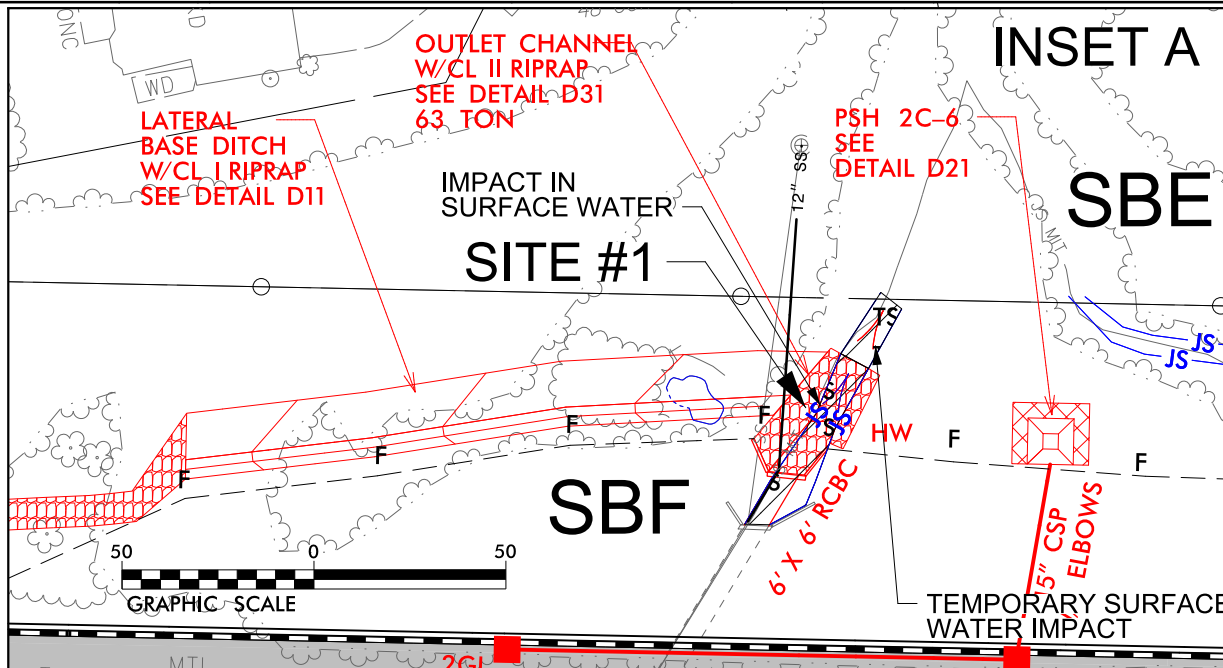
MATCH LINE SEE SHEET 59
-L- STA. 20+00.00

MATCH LINE SEE SHEET 59
-L- STA. 778+50.00

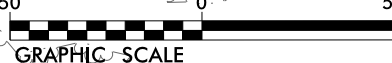
MATCH LINE SEE SHEET 59
-L- STA. 16+25.00

S S
DENOTES IMPACTS IN SURFACE WATER

TS TS
DENOTES TEMPORARY IMPACTS IN SURFACE WATER



SITE #1 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.



PROJECT REFERENCE NO. R-0211EC		SHEET NO. 60
RW SHEET NO. ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

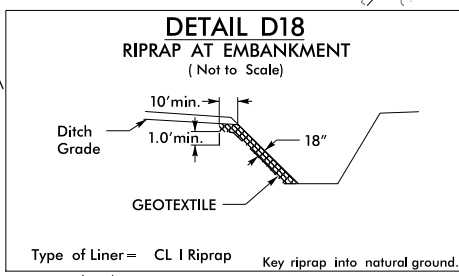
S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

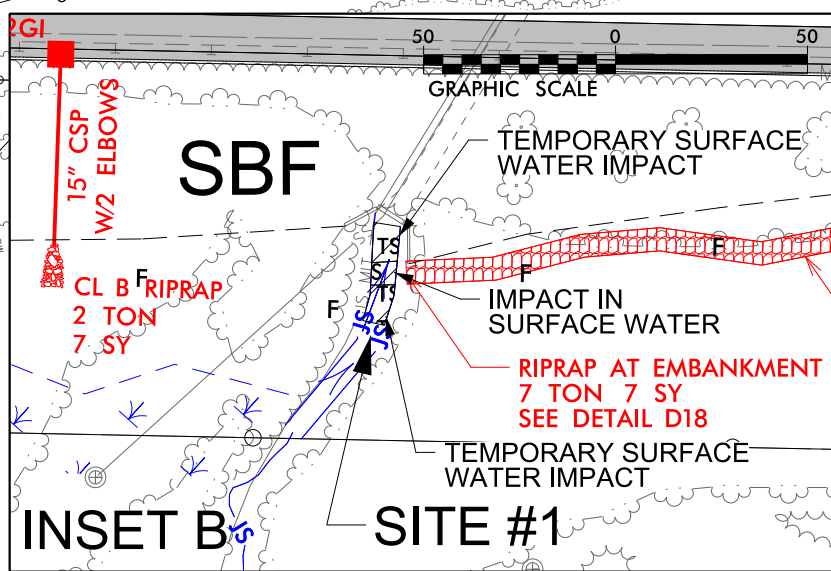


REVISIONS
7/9/5/19 - ADDED BOXES 6050 AND 6060.

9/12/2019
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PDP\WCS01E



Type of Liner = CL I Riprap Key riprap into natural ground.



S S
DENOTES IMPACTS IN SURFACE WATER

TS TS
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

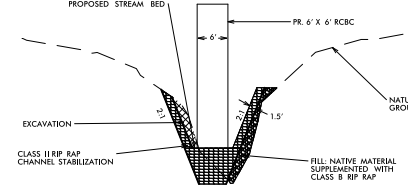


PERMIT DRAWING
SHEET 5 OF 11

MATCH LINE SEE SHEET 61
-L- STA. 791+00.00

8/17/99

DETAIL D31 OUTLET CHANNEL (Not to Scale)



-L- STA. 789+30

MATCH LINE SEE SHEET 59
STA. 20+00.00

MATCH LINE SEE SHEET 59
-L- STA. 778+50.00

MATCH LINE SEE SHEET 59
STA. 16+25.00

S S
DENOTES IMPACTS IN SURFACE WATER

TS TS
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

LATERAL BASE DITCH
W/CL I RIPRAP
SEE DETAIL D11

OUTLET CHANNEL
W/CL II RIPRAP
SEE DETAIL D31
63 TON

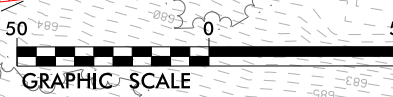
PSH 2C-6
SEE
DETAIL D21

INSET A

SBE

SBF

TEMPORARY SURFACE WATER IMPACT



SITE #1 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.

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



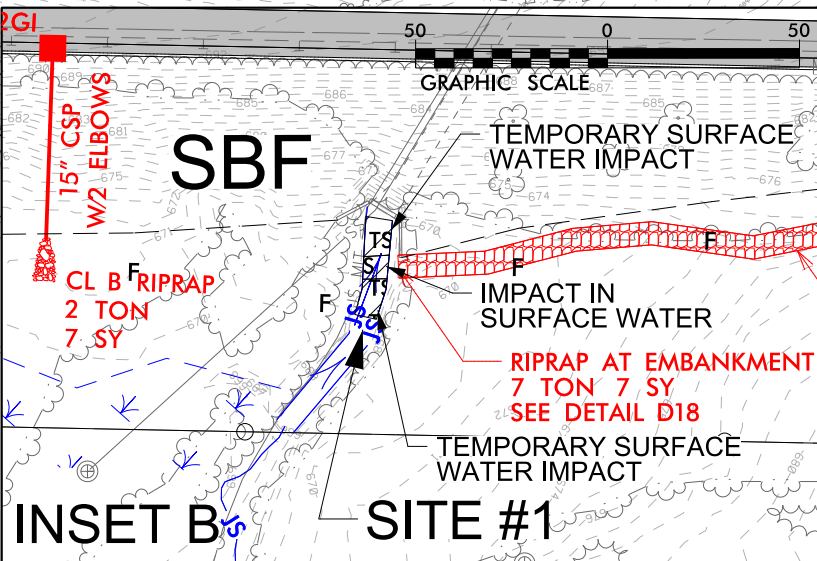
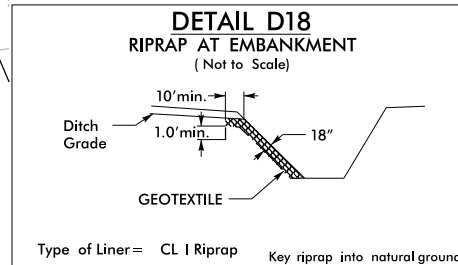
PROJECT REFERENCE NO. R-0211EC	SHEET NO. 60
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

S S DENOTES IMPACTS IN SURFACE WATER
TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



REVISIONS
7/9/5/19 - ADDED BOXES 6050 AND 6060.

9/12/2019
S:\p-cad\lgs01\ics_workingdir\3091\336401_4041\R-0211EC_Hyd_prm_wet_psh60_cont.dgn
PDPWCS01E



S S
DENOTES IMPACTS IN SURFACE WATER

TS TS
DENOTES TEMPORARY IMPACTS IN SURFACE WATER



**PERMIT DRAWING
SHEET 6 OF 11**

MATCH LINE SEE SHEET 61
-L- STA. 791+00.00

5/28/99

PROJECT REFERENCE NO. R-0211EC	SHEET NO. 60-1
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SITE #1

730

720

710

700

690

680

670

660

650

640

630

710

700

690

680

670

660

650

640

630

-L- STA. 789 + 30
6'X6' RCBC
(DS EXTENSION)
120° SKEW w/HEADWALLS

Q₁₀₀ EL. = 672.0'
Q₅₀ EL. = 671.8'
NWS EL. = 666.1'

EX. US INVERT = 665.2'

RETAIN EXISTING CULVERT

AVG. CULVERT SLOPE = 0.94%

EX. DS INVERT = 662.7'

EXTENSION SLOPE = 0.67%

PR. DS INVERT = 662.6'

EXISTING STREAM BED

NATURAL GROUND LT

NATURAL GROUND RT

FILL: NATIVE MATERIAL SUPPLEMENTED WITH CLASS B RIP RAP

CULVERT PROFILE AT -L- STA. 789 + 30 (Stream SBF)

2 + 00

1 + 00

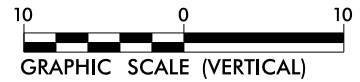
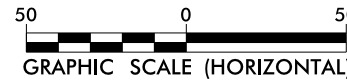
0 + 00

1 + 00

2 + 00

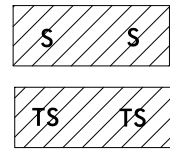
3 + 00

PERMIT DRAWING
SHEET 7 OF 11

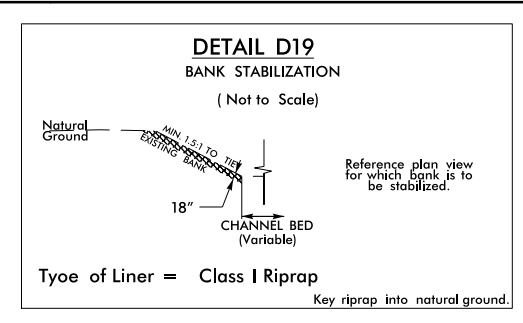
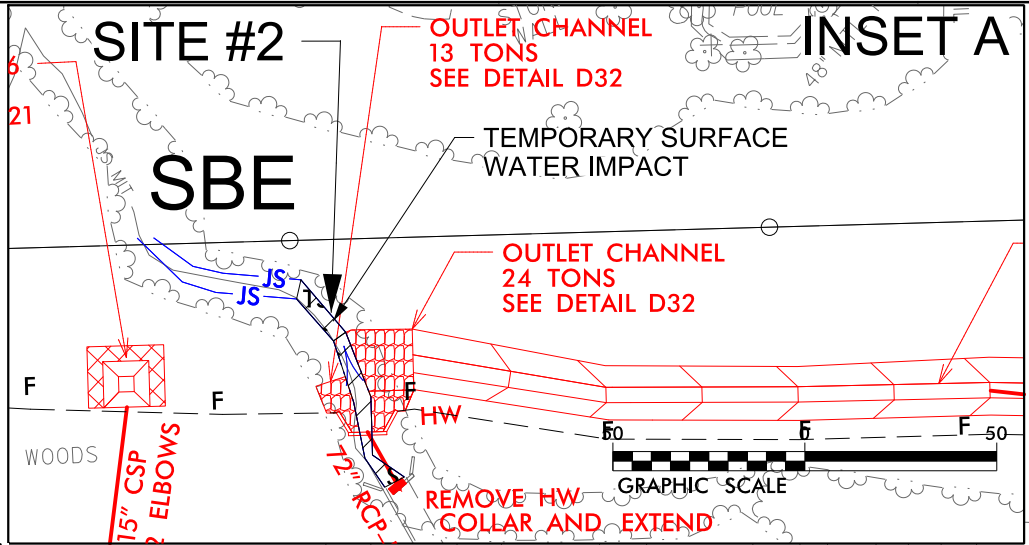


9/12/2019
 \\spsc01\cs_workingdir\3091\336401-4039\AR-0211EC_Hyd_prm_wet_psh60.plt_culvert_789.dgn
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8/17/99



S 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. R-0211EC
SHEET NO. 61

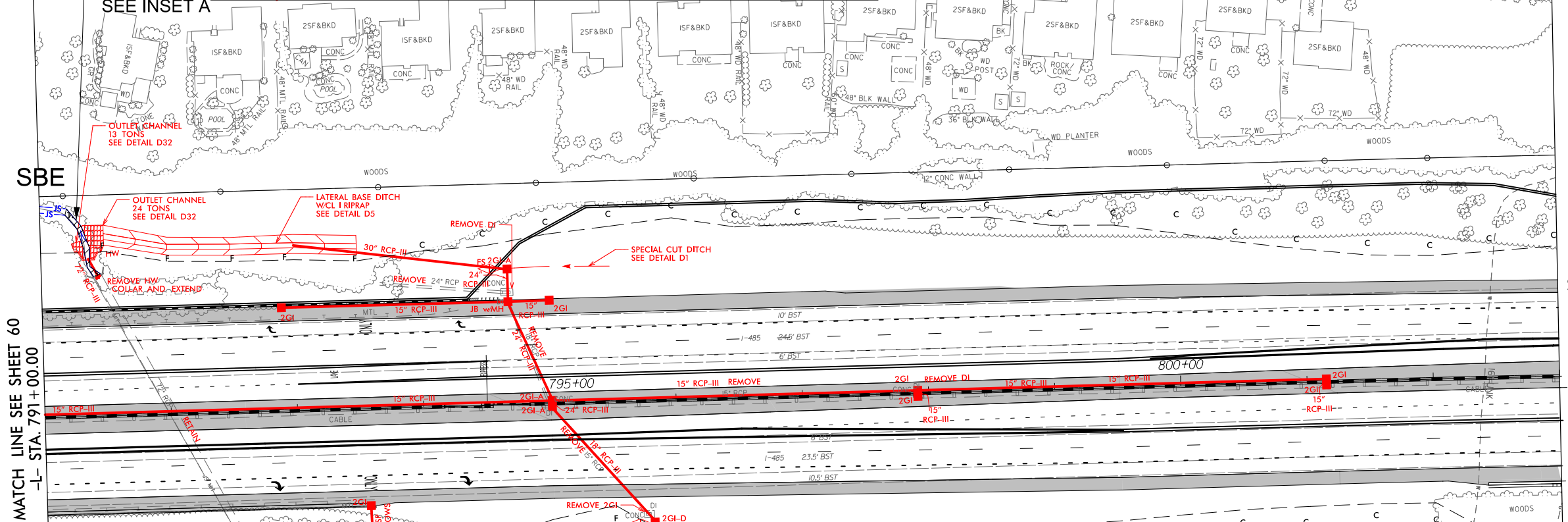
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

BLYTHE

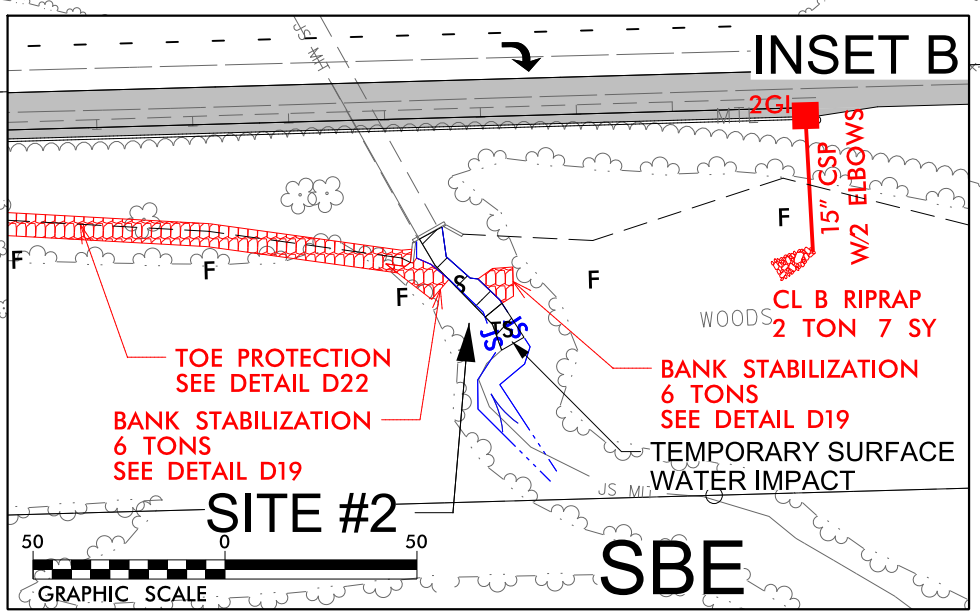
NAD 83/2011

SITE #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.

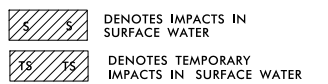


MATCH LINE SEE SHEET 60
 -L- STA. 791+00.00

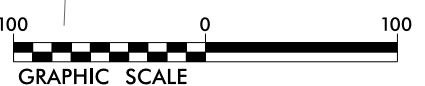
MATCH LINE SEE SHEET 62
 -L- STA. 803+00.00



S DENOTES IMPACTS IN SURFACE WATER
TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER



PERMIT DRAWING SHEET 8 OF 11

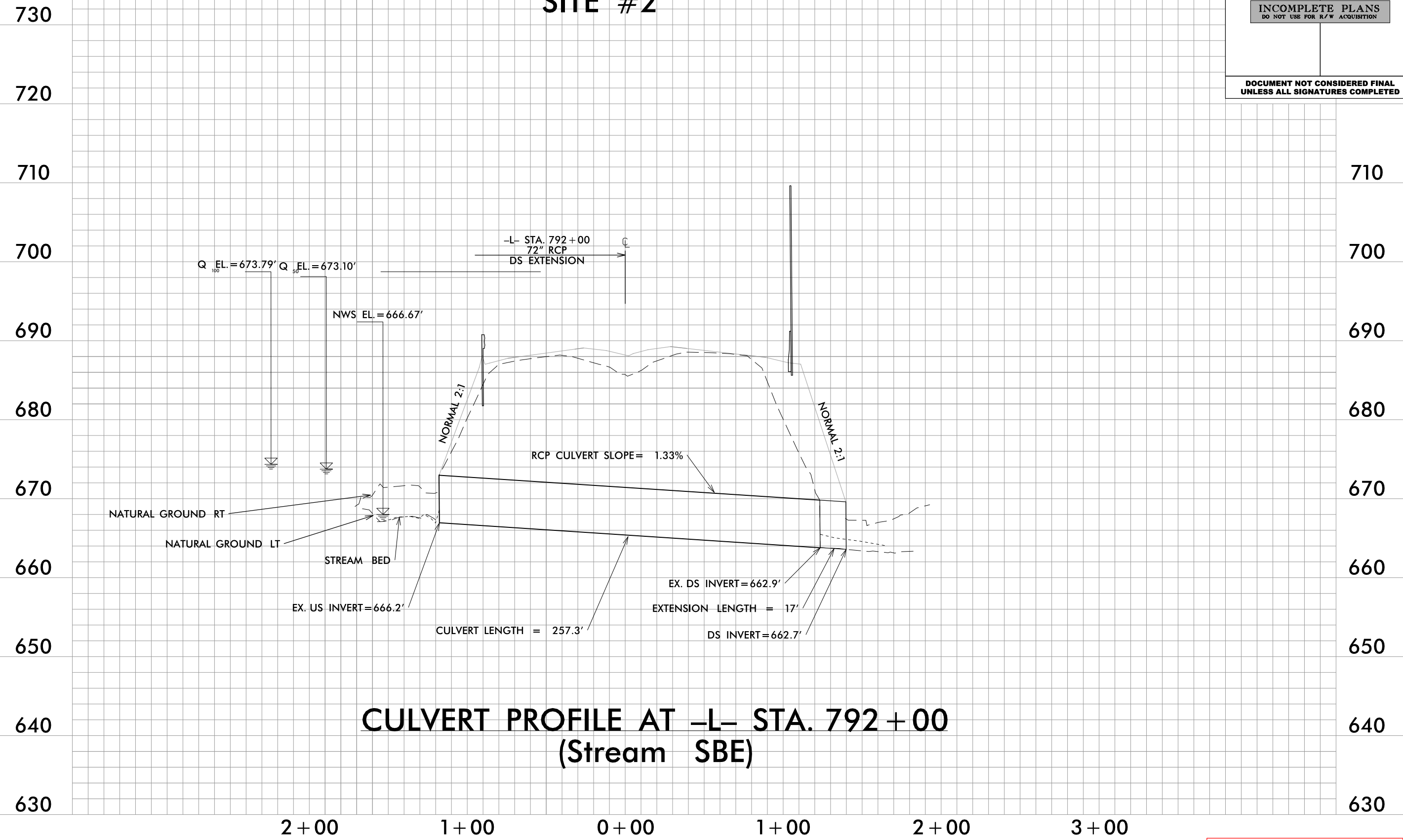


9/12/2019
 S:\p\proj\01\ics\workingdir\3091\336401\4038\AR-0211EC_Hyd_prm_wet.psh61.dgn
 P:\P\WCS01E

5/28/99

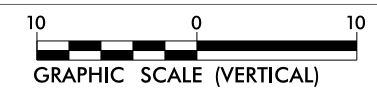
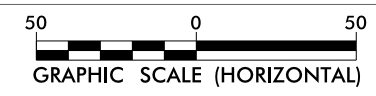
PROJECT REFERENCE NO. R-0211EC	SHEET NO. 61-1
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SITE #2



CULVERT PROFILE AT -L- STA. 792 + 00 (Stream SBE)

PERMIT DRAWING
SHEET 10 OF 11



9/12/2019
\\spsc01\cs_workingdir\3091\336401_4044\AR-0211EC_Hyd_prm_wet_psh61.pf1_culvert.dgn
PDEWCS01E

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	790+00 -L- (LT)	Extend 6' x 6' RCBC						< 0.01		16		
1	790+00 -L (LT)	Riprap Fill						< 0.01	< 0.01	34	19	
1	788+50 -L- (RT)	Bank Stabilization						< 0.01	< 0.01	6	20	
2	791+30 -L-	Extend 72" RCP						< 0.01		16		
2	791+30/792+70 -L-	Bank Stabilization						< 0.01	< 0.01	53	27	
TOTALS*:								0.02	< 0.01	125	66	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 2, <0.01 ac (26 lf) of temporary impacts due to construction activities are included within the bank stabilization impacts.

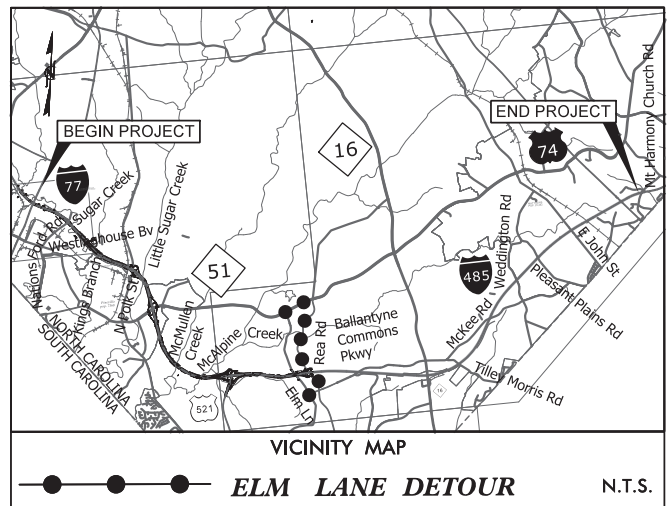
NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 09/12/19
 MECKLENBURG
 TIP NO. R-0211EC
 WBS NO. 34331.1.7

SHEET 11 OF 11

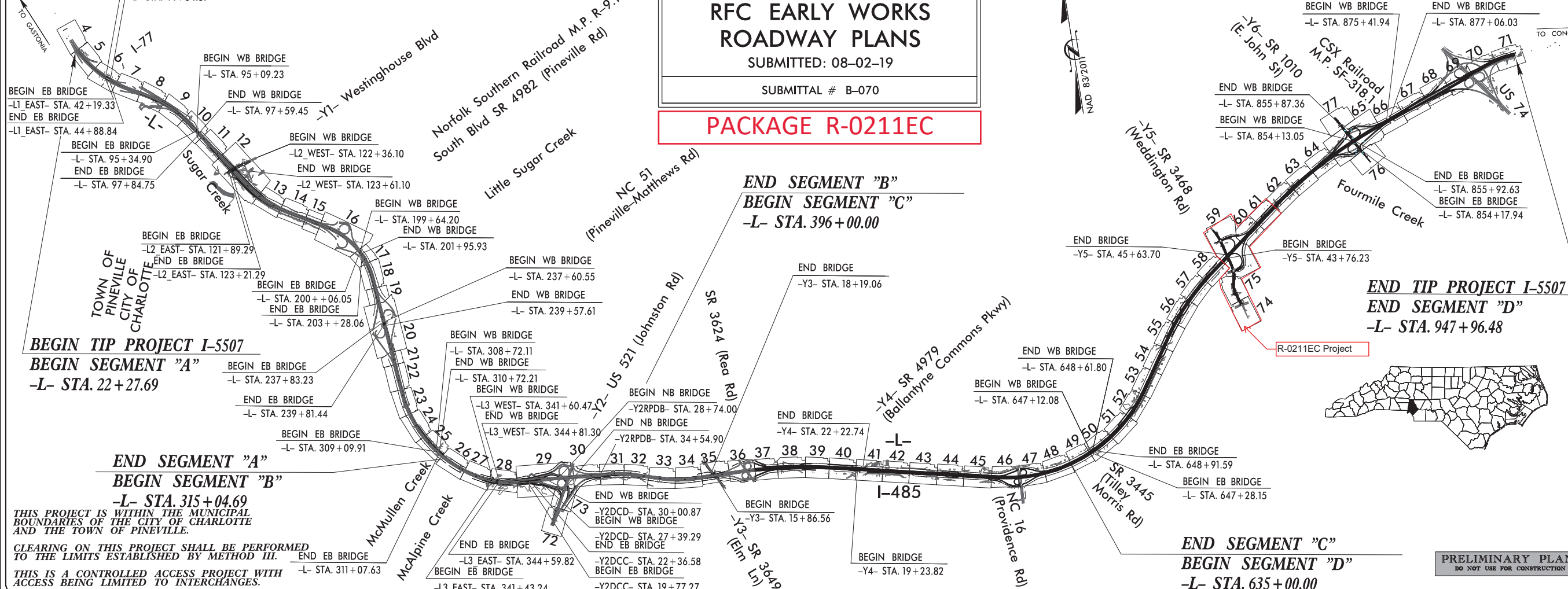
CONTRACT: C203970 TIP PROJECT: I-5507/R-0211EC/U-4714AB

8/28/2019 \\drp\wics01\ics_workingdir\2014\335941_3573\I5507_r.dy_TSH.dgn
PROP WICS01

See Sheet 1A For Index of Sheets
See Sheet 1B For Standard Symbolology



BEGIN WB BRIDGE -L- STA. 41+80.65
END WB BRIDGE -L- STA. 44+54.37



RFC EARLY WORKS ROADWAY PLANS
SUBMITTED: 08-02-19
SUBMITTAL # B-070
PACKAGE R-0211EC

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5507 / R-0211EC / U-4714AB	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
43609.3.2	N/A	Design-Build	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MECKLENBURG COUNTY

**LOCATION: I-485 FROM I-77 TO US 74 (INDEPENDENCE BOULEVARD);
I-485 / WEDDINGTON ROAD INTERCHANGE; AND I-485 /
EAST JOHN STREET - OLD MONROE ROAD INTERCHANGE**

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

**BEGIN TIP PROJECT I-5507
BEGIN SEGMENT "A"**
-L- STA. 22+27.69

**END SEGMENT "A"
BEGIN SEGMENT "B"**
-L- STA. 315+04.69

**END SEGMENT "B"
BEGIN SEGMENT "C"**
-L- STA. 396+00.00

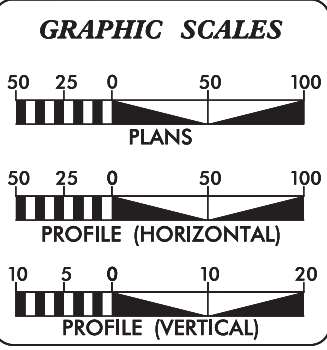
**END SEGMENT "C"
BEGIN SEGMENT "D"**
-L- STA. 635+00.00

**END TIP PROJECT I-5507
END SEGMENT "D"**
-L- STA. 947+96.48

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF CHARLOTTE AND THE TOWN OF PINEVILLE.

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

THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.



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 (BASED ON 485 WB BRIDGES)	=	0.395 mi
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:

WSP BLYTHE
FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY:
SEPTEMBER 18, 2018

LETTING DATE:
SEPTEMBER 18, 2018

DAVID B. GOURLEY, PE
PROJECT ENGINEER

SEAN R. MELVILLE, PE
PROJECT DESIGN ENGINEER

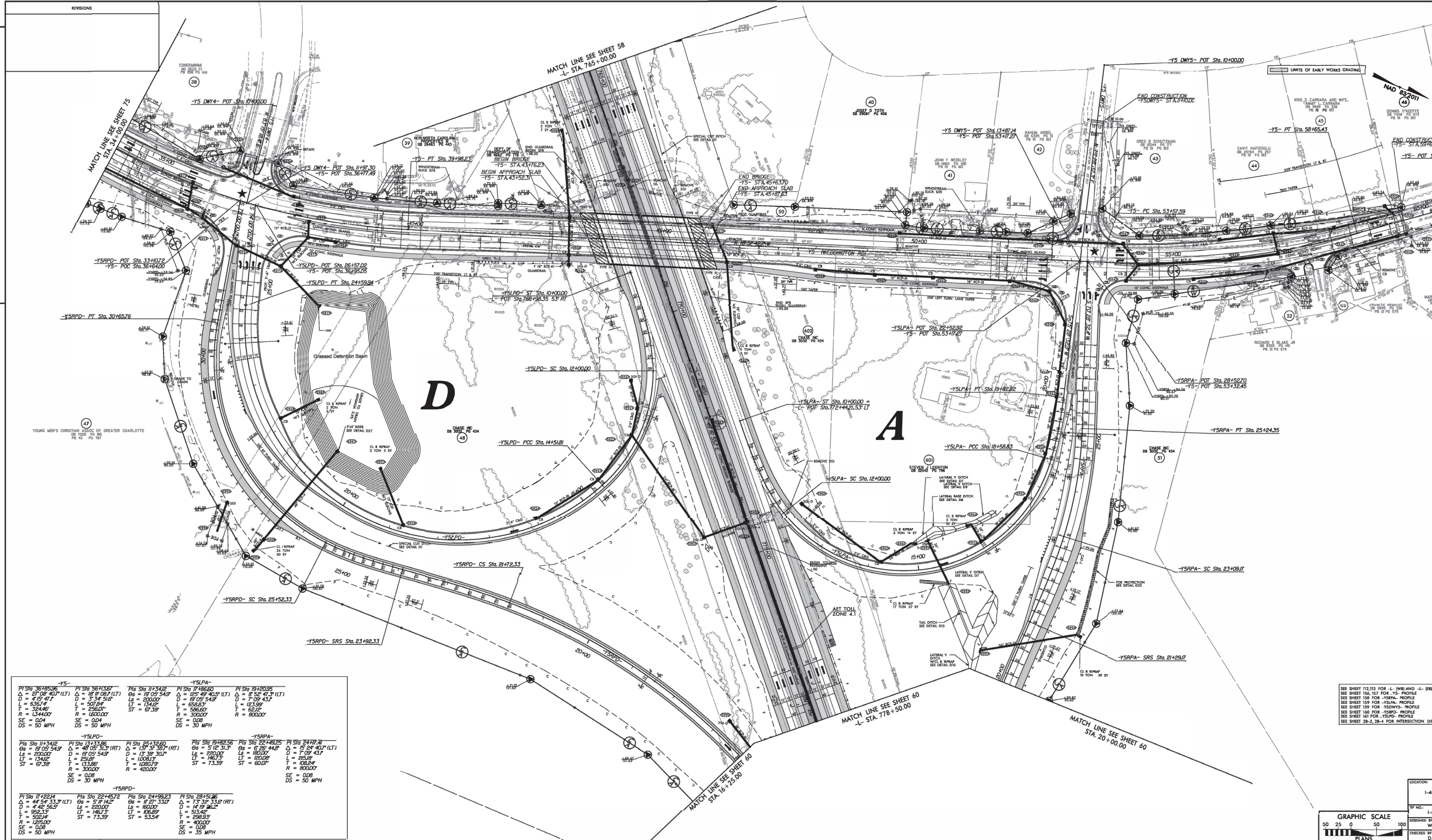
HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

Signature lines for David B. Gourley, PE and Sean R. Melville, PE.



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

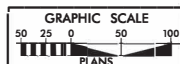


-YS-		-YSLPA-	
PI Sta 36+85.56	PI Sta 56+13.67	PI Sta 11+34.12	PI Sta 17+86.50
$\Delta = 67^{\circ} 09' 40.7''$ (LT)	$\Delta = 18^{\circ} 08' 11.7''$ (LT)	$\Delta = 19^{\circ} 05' 54.9''$	$\Delta = 125^{\circ} 49' 40.9''$ (LT)
$D = 41^{\circ} 54' 51.8''$	$D = 200.00'$	$D = 19^{\circ} 05' 54.9''$	$D = 7^{\circ} 09' 43.7''$
$L = 635.74'$	$L = 507.84'$	$L = 134.26'$	$L = 123.59'$
$T = 324.46'$	$T = 256.01'$	$T = 67.39'$	$T = 596.00'$
$R = 1344.00'$	$R = 1800.00'$	$R = 3000.00'$	$R = 8000.00'$
$SE = 0.04$	$SE = 0.04$	$SE = 0.08$	$SE = 0.08$
$DS = 50$ MPH	$DS = 50$ MPH	$DS = 30$ MPH	$DS = 30$ MPH

-YSLPD-		-YSRPA-	
PI Sta 11+34.12	PI Sta 13+31.86	PI Sta 19+89.56	PI Sta 22+48.25
$\Delta = 19^{\circ} 05' 54.9''$	$\Delta = 48^{\circ} 08' 31.3''$ (RT)	$\Delta = 51^{\circ} 21' 31.3''$	$\Delta = 15^{\circ} 24' 40.7''$ (LT)
$D = 200.00'$	$D = 19^{\circ} 05' 54.9''$	$D = 220.00'$	$D = 7^{\circ} 09' 43.7''$
$L = 134.26'$	$L = 1208.13'$	$L = 180.00'$	$L = 295.09'$
$T = 67.39'$	$T = 133.86'$	$T = 108.84'$	$T = 108.84'$
$R = 3000.00'$	$R = 3000.00'$	$R = 8000.00'$	$R = 8000.00'$
$SE = 0.08$	$SE = 0.08$	$SE = 0.08$	$SE = 0.08$
$DS = 30$ MPH	$DS = 30$ MPH	$DS = 50$ MPH	$DS = 50$ MPH

-YSRPD-	
PI Sta 17+22.14	PI Sta 22+48.25
$\Delta = 44^{\circ} 54' 33.3''$ (LT)	$\Delta = 11^{\circ} 21' 33.0''$ (RT)
$D = 4^{\circ} 42' 56.5''$	$D = 14^{\circ} 18' 26.2''$
$L = 952.33'$	$L = 513.42'$
$T = 502.94'$	$T = 295.33'$
$R = 1265.00'$	$R = 4000.00'$
$SE = 0.08$	$SE = 0.08$
$DS = 50$ MPH	$DS = 35$ MPH

SEE SHEET 112.113 FOR -L- (WB) AND -L- (SB) PROFILE
 SEE SHEET 154.157 FOR -YS- PROFILE
 SEE SHEET 158 FOR -YSRPA- PROFILE
 SEE SHEET 159 FOR -YSLPA- PROFILE
 SEE SHEET 159 FOR -YS-DWY- PROFILE
 SEE SHEET 160 FOR -YSRPA- PROFILE
 SEE SHEET 161 FOR -YSLPD- PROFILE
 SEE SHEET 28-3, 28-4 FOR INTERSECTION DETAILS



8/17/99

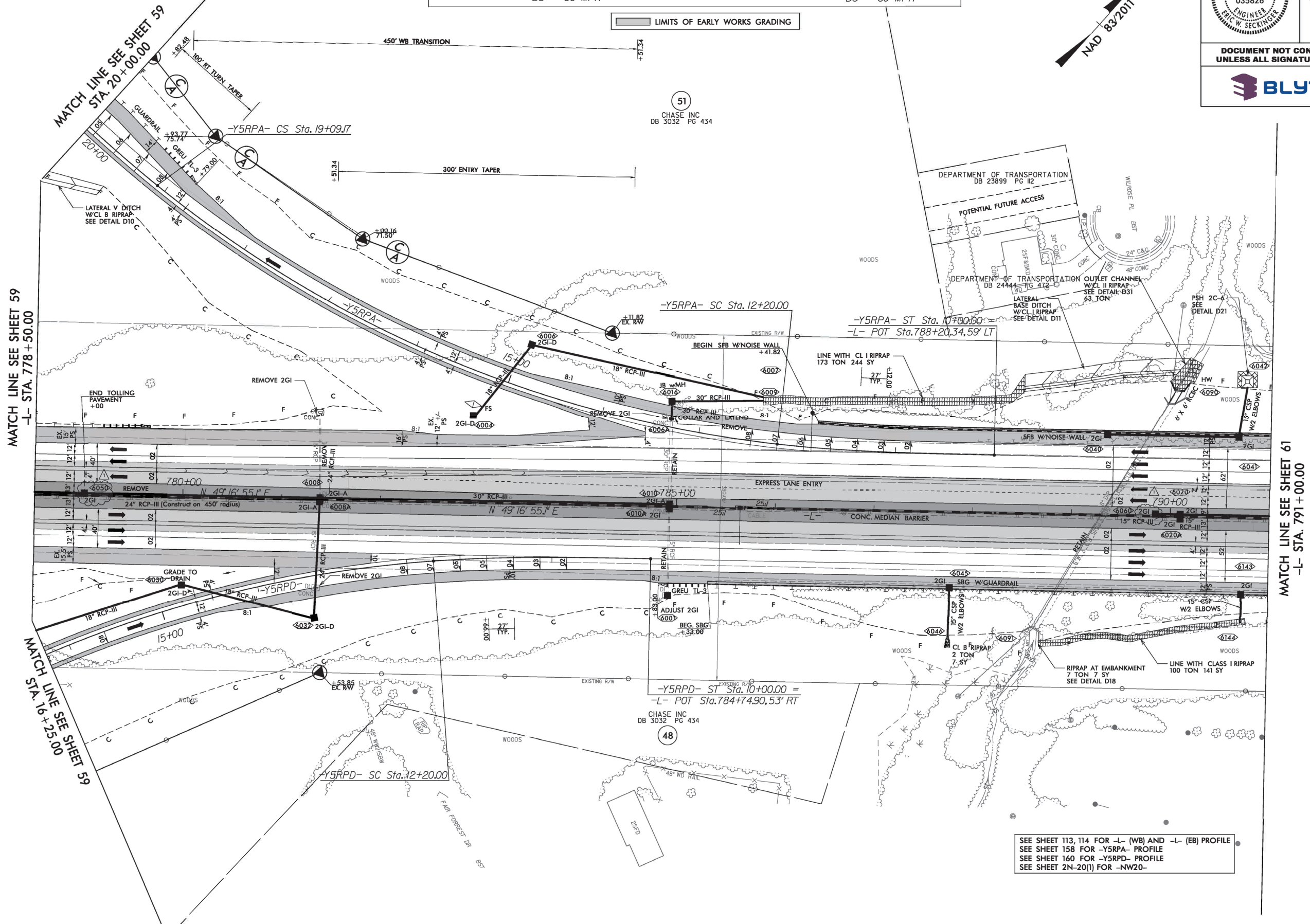
REVISIONS
1.9/5/19 - ADDED BOXES 6050 AND 6060.

9/12/2019
\\sdp\dev\lsc01\cs_work\mgdir\3107\335941_3964\15507_rdy_psh60.dgn
PDEWIC501

-Y5RPA-			-Y5RPD-		
Pls Sta 11+46.73	PI Sta 15+74.21	Pls Sta 19+82.56	Pls Sta 11+46.73	PI Sta 17+22.14	Pls Sta 17+22.14
$\Theta_s = 5' 12' 31.3"$	$\Delta = 32' 38' 00.1" (RT)$	$\Theta_s = 5' 12' 31.3"$	$\Theta_s = 5' 11' 14.2"$	$\Delta = 44' 54' 33.3" (LT)$	
$L_s = 220.00'$	$D = 4' 44' 06.7"$	$L_s = 220.00'$	$L_s = 220.00'$	$D = 4' 42' 56.5"$	
$LT = 146.73'$	$L = 689.17'$	$LT = 146.73'$	$LT = 146.73'$	$L = 952.33'$	
$ST = 73.39'$	$T = 354.21'$	$ST = 73.39'$	$ST = 73.39'$	$T = 502.14'$	
	$R = 1,210.00'$			$R = 1,215.00'$	
	$SE = 0.08$			$SE = 0.08$	
	$DS = 60 \text{ MPH}$			$DS = 60 \text{ MPH}$	

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

PROJECT REFERENCE NO. R-0211EC	SHEET NO. 60
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



SEE SHEET 113, 114 FOR -L- (WB) AND -L- (EB) PROFILE
SEE SHEET 158 FOR -Y5RPA- PROFILE
SEE SHEET 160 FOR -Y5RPD- PROFILE
SEE SHEET 2N-20(1) FOR -NW20-

MATCH LINE SEE SHEET 61
-L- STA. 791+00.00

MATCH LINE SEE SHEET 59
-L- STA. 778+50.00

MATCH LINE SEE SHEET 59
STA. 16+25.00

8/17/99

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

PROJECT REFERENCE NO. R-0211EC	SHEET NO. 61
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

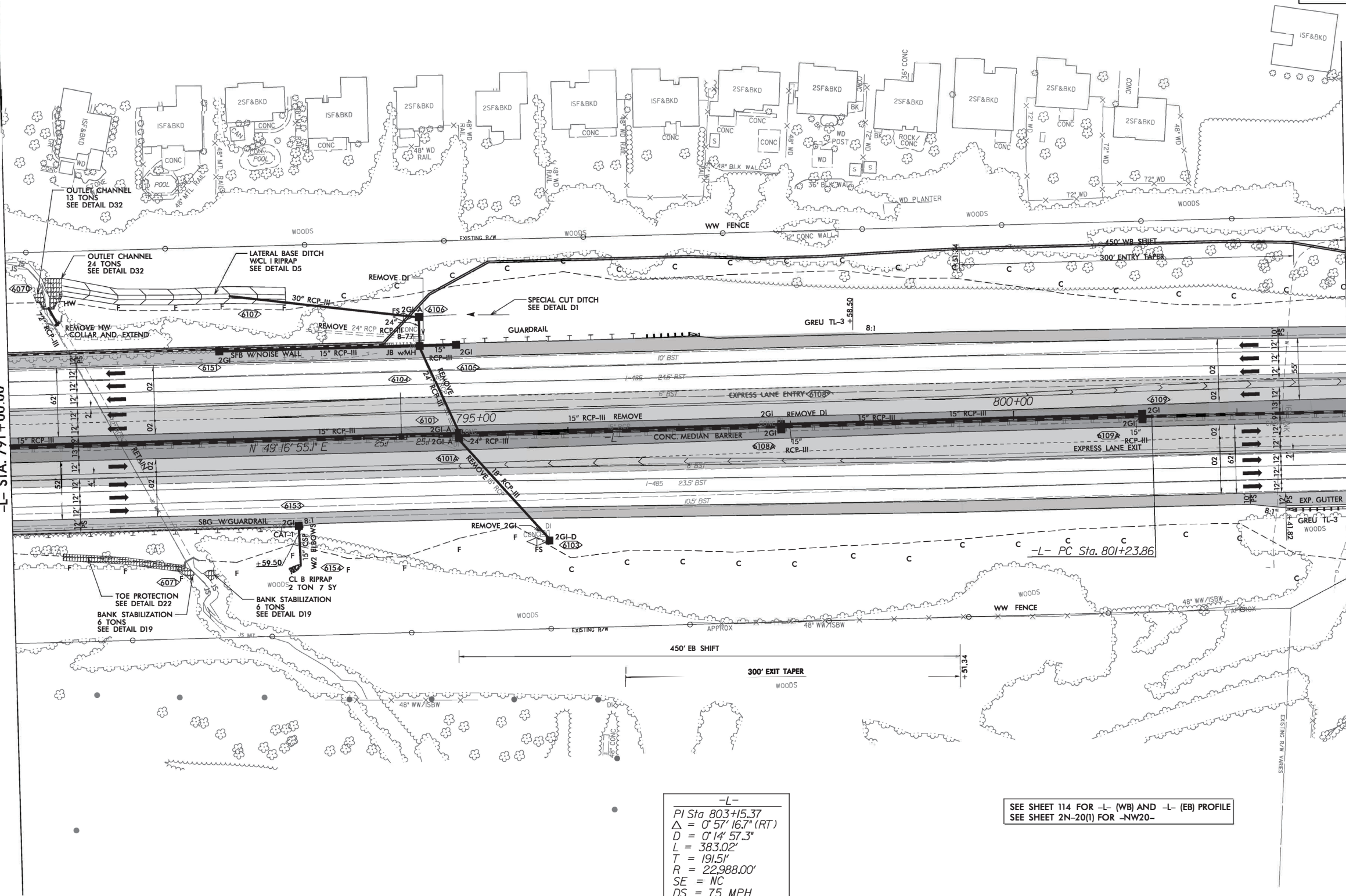
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



REVISIONS

MATCH LINE SEE SHEET 60
-L- STA. 791+00.00


MATCH LINE SEE SHEET 62
-L- STA. 803+00.00



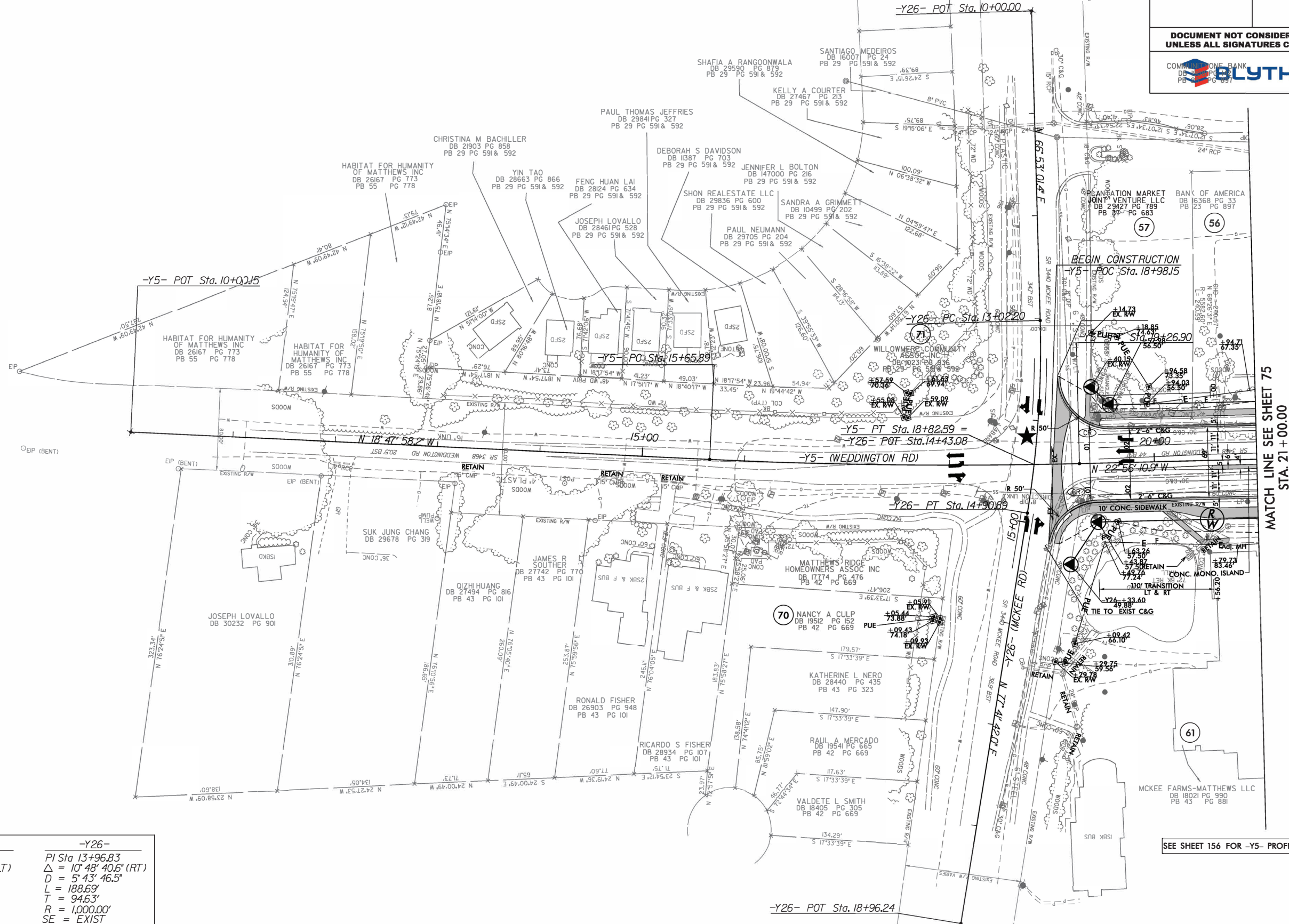
-L-
 PI Sta 803+15.37
 $\Delta = 0^\circ 57' 16.7''$ (RT)
 $D = 0' 14' 57.3''$
 $L = 383.02'$
 $T = 191.5'$
 $R = 22,988.00'$
 $SE = NC$
 $DS = 75$ MPH

SEE SHEET 114 FOR -L- (WB) AND -L- (EB) PROFILE
 SEE SHEET 2N-20(I) FOR -NW20-

9/12/2019
 C:\pwworking\wsp\1001 Morehead Square Dr.\3985\15507_rdy_psh61.dgn
 P:\DWG\CSW

PROJECT REFERENCE NO.	R-0211EC	SHEET NO.	74
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
			

REVISIONS



-Y5-	-Y26-
PI Sta 17+46.47	PI Sta 13+96.83
$\Delta = 4' 08'' 12.7''$ (LT)	$\Delta = 10' 48'' 40.6''$ (RT)
D = 1' 08'' 45.3''	D = 5' 43'' 46.5''
L = 361.01'	L = 188.69'
T = 180.58'	T = 94.63'
R = 5,000.00'	R = 1,000.00'
SE = EXIST	SE = EXIST
DS = 50	DS = EXIST

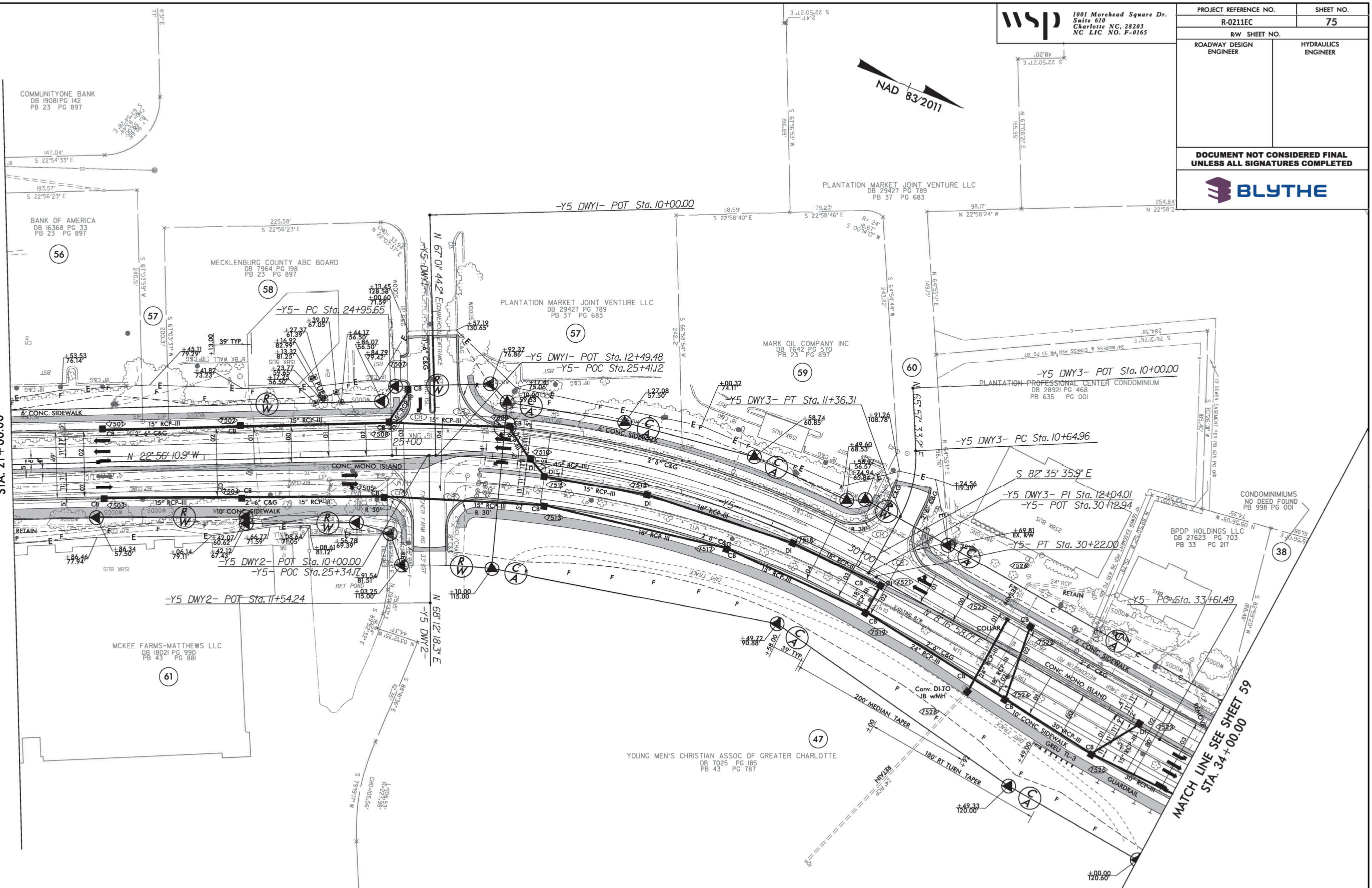
SEE SHEET 156 FOR -Y5- PROFILE

MATCH LINE SEE SHEET 75 STA. 21 + 00.00

PROJECT REFERENCE NO.		SHEET NO.
R-0211EC		75
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

MATCH LINE SEE SHEET 74 STA. 21+00.00

MATCH LINE SEE SHEET 59 STA. 34+00.00



REVISIONS

-Y5-	-Y5 DWY3-
PI Sta 27+65.54	PI Sta 11+01.56
$\Delta = 31^{\circ}13'08.9''$ (RT)	$\Delta = 31^{\circ}26'50.9''$ (RT)
D = 5'55'52.5"	D = 44'04'25.2"
L = 526.35'	L = 71.35'
T = 269.89'	T = 36.60'
R = 966.00'	R = 130.00'
SE = 0.04	SE = NC
DS = 50 MPH	

SEE SHEET 156 FOR -Y5- PROFILE

9/12/2019
C:\projects\1001 Morehead Square Dr.\1001 Morehead Square Dr.dwg
P:\DWG\1001 Morehead Square Dr.dwg



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

July 29, 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 improvement of I-485 (Charlotte Outer Loop) from I-77 to US 74 (Independence Boulevard) in Mecklenburg County, **TIP No. I-5507**; and the new interchange on I-485 and Weddington Road (SR 3468) in Mecklenburg County, **TIP No. R-0211EC**

The North Carolina Department of Transportation (NCDOT, Division 10) proposes to improve I-485 (Charlotte Outer Loop) from I-77 to US 74 (Independence Boulevard), plus a new interchange on I-485 at Weddington Road (SR 3468), in Mecklenburg County, TIP No. I-5507 and R-0211EC. The study area for I-5507 covered the project limits for R-0211EC. In cooperation with FHWA, NCDOT proposes improvements to approximately 17 miles of I-485 by adding one Express Lane in each direction in the existing median, plus adding a new interchange at the intersection of I-485 and Weddington Road. This project serves as part of a larger network of Express Lanes in coordination with other projects in the Charlotte area.

Northern long-eared bat

The project to improve I-485 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 29, 2019, NLEB is listed by USFWS (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

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

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

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

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 76 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) 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.

State Project
8.U670124

W.B.S. # 34331

County: Mecklenburg

**CONCURRENCE FORM FOR PROPERTIES NOT ELIGIBLE FOR
THE NATIONAL REGISTER OF HISTORIC PLACES**

Project Description: **Interchange for I-485 at SR 3468**

On **December 19, 2006** representatives of the

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (HPO)
- Other

Reviewed the subject project at

- Scoping meeting
- Historic architectural resources photograph review session/consultation
- Other

All parties present agreed

- There are no properties over fifty years old 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 properties over fifty years old within the project's Area of Potential Effects (APE), but based on the historical information available and the photographs of each property, the properties identified as _____ are considered not eligible for the National Register and no further evaluation of them is necessary.
- There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- All properties greater than 50 years of age located in the APE have been considered at this consultation, and based upon the above concurrence, all compliance for historic architecture with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.
- There are no historic properties affected by this project. (*Attach any notes or documents as needed*)

Signed:

Sarah Woodard Davis
Representative, NCDOT

December 19, 2006
Date

FHWA, for the Division Administrator, or other Federal Agency

Date

Sarah McGee
Representative, HPO

12-19-06
Date

Renee Medhill-Earley
State Historic Preservation Officer

12-19-06
Date



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

David L. S. Brook, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary

Division of Archives and History
Jeffrey J. Crow, Director

December 28, 2001

MEMORANDUM

TO: William D. Gilmore, Manager
Project Development and Environmental Analysis Branch
NCDOI, Division of Highways

FROM: David Brook *David Brook*

SUBJECT: Review of Scoping Sheets for I-485 (Charlotte Outer Loop) at SR 3468 (Weddington Road), Federal-Aid Project NHI-117-1(54), TIP No. R-211EC, State Project 8U670124, Mecklenburg County, ER 02-7632

We regret that a member of our staff was unable to attend the scoping meeting for the above project on September 25, 2001. Based on the information provided, we recommend an architectural survey of the undertaking's area of potential effect.

Because of the location and topography of the project area, it is unlikely that any archaeological sites which may be eligible for listing in the National Register of Historic Places will be affected by the proposed construction. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

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-Harley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

DB:kgc

cc: Mary Pope Furr, NCDOT

*715-1501
Mary Pope

**733-9794
Undré Major

Administration
Restoration

Location
507 N. Blount St, Raleigh, NC
515 N. Blount St, Raleigh, NC

Mailing Address
4617 Mail Service Center, Raleigh 27699-4617
4613 Mail Service Center, Raleigh 27699-4613
4618 Mail Service Center, Raleigh 27699-4618

Telephone/Fax
(919) 733-4763 • 733-8653
(919) 733-6547 • 715-4801
(919) 733-4763 • 715-4801