



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

March 13, 2012

U. S. Army Corps of Engineers
Regulatory Field Office
Heritage Trade Drive, Suite 105
Wake Forest, NC 27587

ATTN: Mr. Monte Matthews
NCDOT Coordinator

Subject: **Application for Regional General Permit 198200031 and 401 General Water Quality Certification** for the proposed replacement of Bridge No. 718 over Middle Fork Reddies River on SR 1580 (Kuenzel-Eller Driver) in Wilkes County, Federal Aid Project No. BRZ-1580(2); Division 11; TIP No. B-4325; WBS 33662.1.1; **Debit order \$240.00**

Dear Mr. Matthews:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 718, a 50-foot single-span bridge over Middle Fork Reddies River on Kuenzel-Eller Drive (SR 1580), with a 65-foot single-span bridge slightly south of existing location. No in-stream work is required for bridge removal. There will be 21 linear feet of permanent impacts from the use of riprap for bank stabilization at ditch outfalls, one located northeast and one southwest of the bridge. There are no temporary impacts associated with the replacement of bridge No.718.

Due to the presence of an archeological site that is eligible for listing in the National Register of Historic Places, included in this application for reference is a copy of the Memorandum of Agreement (dated January 2012) between the Federal Highway Administration, NCDOT, State Historic Preservation Officer, and Eastern Band of the Cherokee Indians for this project.

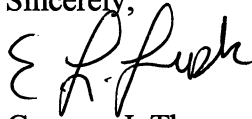
Comments from the North Carolina Wildlife Resources Commission (NCWRC) will be required prior to authorization by the Corps of Engineers. By copy of this letter and attachments, NCDOT hereby requests NCWRC review. NCDOT requests that NCWRC forward their comments to the Corps of Engineers and the NCDOT within 30 calendar days of receipt of this application.

Please see enclosed copies of the Pre-Construction Notification (PCN) Form, Memorandum of Agreement, Stormwater Management Plan, Permit drawings and Design plans. The Categorical Exclusion (CE) was completed on May 2, 2006. A right of way consultation was completed on November 18, 2010. Documents were distributed shortly thereafter. Additional copies are available upon request.

This project calls for a letting date of February 19, 2013 and a review date of January 1, 2013; however the let date may advance as additional funding becomes available.

A copy of this permit application and its distribution list will be posted on the NCDOT website at: <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>. If you have any questions or need additional information, please call Jennifer Harrod at (919) 707-6124.

Sincerely,



for

Gregory J. Thorpe, Ph.D., Manager

Project Development Environmental Analysis Unit

Cc: NCDOT Permit Application Standard Distribution List
File



Office Use Only:
 Corps action ID no. _____
 DWQ project no. _____
 Form Version 1.3 Dec 10 2008

Pre-Construction Notification (PCN) Form

A. Applicant Information

1. Processing

1a. Type(s) of approval sought from the Corps:	<input checked="" type="checkbox"/> Section 404 Permit	<input type="checkbox"/> Section 10 Permit
1b. Specify Nationwide Permit (NWP) number: _____ or General Permit (GP) number: 198200031		
1c. Has the NWP or GP number been verified by the Corps?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input checked="" type="checkbox"/> 401 Water Quality Certification – Regular <input type="checkbox"/> Non-404 Jurisdictional General Permit <input type="checkbox"/> 401 Water Quality Certification – Express <input type="checkbox"/> Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Project Information

2a. Name of project:	Replacement of Bridge 718 over Middle Fork Reddies River on NC 1580
2b. County:	Wilkes
2c. Nearest municipality / town:	Wilbar
2d. Subdivision name:	<i>not applicable</i>
2e. NCDOT only, T.I.P. or state project no.:	B-4325

3. Owner Information

3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation
3b. Deed Book and Page No.	<i>not applicable</i>
3c. Responsible Party (for LLC if applicable):	<i>not applicable</i>
3d. Street address:	1598 Mail Service Center
3e. City, state, zip:	Raleigh, NC 27699-1598
3f. Telephone no.:	(919) 707-6124
3g. Fax no.:	(919) 212-5785
3h. Email address:	jwharrod@ncdot.gov

4. Applicant Information (if different from owner)	
4a. Applicant is:	<input type="checkbox"/> Agent <input type="checkbox"/> Other, specify:
4b. Name:	<i>not applicable</i>
4c. Business name (if applicable):	
4d. Street address:	
4e. City, state, zip:	
4f. Telephone no.:	
4g. Fax no.:	
4h. Email address:	
5. Agent/Consultant Information (if applicable)	
5a. Name:	<i>not applicable</i>
5b. Business name (if applicable):	
5c. Street address:	
5d. City, state, zip:	
5e. Telephone no.:	
5f. Fax no.:	
5g. Email address:	

B. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 36.272952 (DD.DDDDDD) Longitude: - 81.300716 (-DD.DDDDDD)
1c. Property size:	0.85 acre
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	Middle Fork Reedies River
2b. Water Quality Classification of nearest receiving water:	WS-II;Tr; HQW
2c. River basin:	Yadkin-Pee Dee
3. Project Description	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: Rural residential and agricultural land	
3b. List the total estimated acreage of all existing wetlands on the property: 0.00	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: 154	
3d. Explain the purpose of the proposed project: To replace a structurally deficient and functionally obsolete bridge.	
3e. Describe the overall project in detail, including the type of equipment to be used: The project involves replacing a 50-foot single span bridge with a 65-foot single span bridge on the downstream side and maintain traffic on existing bridge during construction. Standard road building equipment, such as trucks, dozers, and cranes will be used.	
4. Jurisdictional Determinations	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known):	Agency/Consultant Company: Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

C. Proposed Impacts Inventory

1. Impacts Summary

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

- Wetlands Streams - tributaries Buffers
 Open Waters Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
2g. Total wetland impacts					

2h. Comments:

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Streambank stabilization	Middle Fork Reedies River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	13
Site 1 <input checked="" type="checkbox"/> P <input type="checkbox"/> T	Streambank stabilization	Middle Fork Reedies River	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps <input type="checkbox"/> DWQ	12	15
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
3h. Total stream and tributary impacts						28 Perm 0 Temp

3i. Comments:

4. Open Water Impacts

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

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

4g. Comments:

5. Pond or Lake Construction

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

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

5g. Comments:

5h. Is a dam high hazard permit required?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, permit ID no:
5i. Expected pond surface area (acres):	
5j. Size of pond watershed (acres):	
5k. Method of construction:	

6. Buffer Impacts (for DWQ)

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


6a. Project is in which protected basin?		<input type="checkbox"/> Neuse <input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Other: <input type="checkbox"/> Catawba <input type="checkbox"/> Randleman			
6b. Buffer impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name	6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)
B1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
B3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No		
6h. Total buffer impacts					
6i. Comments:					

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. The proposed bridge is a single-span structure, 15 feet longer than the existing structure. 2:1 fill slopes will be utilized where practicable.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. Surficial bridge runoff will not be directed into Middle Fork Reedies River via deck drains. There are no impacts associated with the removal of the existing bridge and no temporary access is required. There will be no interior bents in the water associated with the new structure. Policies outlined in Best Management Practices (BMP's) for protection of surface waters and a strict erosion control schedule will be followed. A moratorium prohibiting in-stream work is in place from October 15 to April 15 to protect trout egg and fry stages of trout. Design Standards in Sensitive Watersheds will be adhered to.		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, explain: impacts are due to the use of riprap for bank stabilization and is not considered a loss of waters of the U.S.	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	linear feet (linear feet of impact)	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	square feet	
4e. Riparian wetland mitigation requested:	acres (acres of impact)	
4f. Non-riparian wetland mitigation requested:	acres	
4g. Coastal (tidal) wetland mitigation requested:	acres	
4h. Comments:		
5. Complete if Using a Permittee Responsible Mitigation Plan		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ				
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.				
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)
Zone 1			3 (2 for Catawba)	
Zone 2			1.5	
6f. Total buffer mitigation required:				
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).				
6h. Comments:				

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

F. Supplementary Information	
1. Environmental Documentation (DWQ Requirement)	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Violations (DWQ Requirement)	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
3. Cumulative Impacts (DWQ Requirement)	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.	
4. Sewage Disposal (DWQ Requirement)	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input type="checkbox"/> Raleigh	<input type="checkbox"/> Asheville
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? Only one Endangered and Threatened species is listed for Wilkes County, the Bog turtle for which the biological conclusion is "No Effect".		
6. Essential Fish Habitat (Corps Requirement)		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? NMFS County Index		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NEPA Documentation and Coordination with FHWA, SHPO and EBCI. (MOA Attached)		
8. Flood Zone Designation (Corps Requirement)		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics Unit coordination with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA Maps		
<u>Dr. Gregory J. Thorpe, Ph D</u> Applicant/Agent's Printed Name	 _____ Applicant/Agent's Signature (Agent's signature is valid only if an authorization letter from the applicant is provided.)	3-12-12 Date

**MEMORANDUM OF AGREEMENT
BETWEEN THE
FEDERAL HIGHWAY ADMINISTRATION,
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
STATE HISTORIC PRESERVATION OFFICER,
AND
EASTERN BAND OF THE CHEROKEE INDIANS
FOR
THE REPLACEMENT OF BRIDGE NO. 718 ON SR 1580 (Keunzel-Eller Drive) OVER MIDDLE
FORK REDDIES RIVER,
B-4325, FEDERAL AID PROJECT BRZ-1580(2), STATE PROJECT 8.2731601,
WILKES COUNTY, NORTH CAROLINA**

Whereas, the Federal Highway Administration (FHWA), through the North Carolina Department of Transportation (NCDOT) will fund the replacement of Bridge No. 718 on SR 1580 (Keunzel-Eller Drive) over Middle Fork Reddies River (the Undertaking) and the parties have consulted with the North Carolina State Historic Preservation Officer (SHPO) and the Eastern Band of the Cherokee Indians (EBCI); and

Whereas, the Undertaking will affect archaeological site 31Wk257, a property determined eligible for listing in the National Register of Historic Places: and

Whereas, in accordance with 36 CFR Part 800, the NCDOT acknowledges and accepts the advice and conditions outlined in the Advisory Council on Historic Preservation's (Council) "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," published in the Federal Register (FR Doc. 99-12055) on May 17, 1999; and

Whereas, the consulting parties agree that the recovery of significant information from the archaeological site listed above may be done in accordance with the published guidance: and

Whereas, the consulting parties agree that it is in the public interest to expend funds for the recovery of significant information from this archaeological site to mitigate the adverse effects of the project: and

Whereas, the FHWA has notified the Eastern Band of the Cherokee Indians (EBCI) and they have been invited to participate as a consulting party in the development of this Memorandum of Agreement (MOA); and

Now, therefore, the FHWA and the North Carolina SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on the historic property.

STIPULATIONS

- I. The NCDOT will develop a Data Recovery Plan (DRP) for Site 31 Wk257, which will be affected by the subject project, in consultation with the SHPO and the EBCI.
- II. The NCDOT will ensure that the DRP, will be implemented after Right-of-Way is acquired or once Right-of-Entry is secured from the property owners and prior to construction activities within the site location as shown in the DRP.
- III. Upon completion of the Data Recovery efforts, the NCDOT will prepare and forward a Management Summary to the SHPO and the EBCI detailing the results of the Data Recovery field investigations. The Management Summary will contain sufficient information to demonstrate that the field investigation portion of the DRP has been implemented.

- IV. Upon receipt of the Management Summary, the SHPO and the EBCI will respond within ten (10) days to the recommendations contained within the document.
- V. Upon acceptance of the recommendations contained in the Management Summary, the SHPO will issue the NCDOT documentation that the Data Recovery field investigations have been completed.
- VI. The analysis and report preparation, detailing Site 31Wk257, will be completed by the NCDOT, or their consultants, within twelve (12) months after completion of the fieldwork.

VII. **Dispute Resolution**

Should any of the Signatory or Concurring Party(ies) object within (30) days to any plans or documentation provided for review pursuant to this Agreement, the FHWA shall consult with the objecting party(ies) to resolve the objection. If the FHWA or the objecting party(ies) determines that the objection cannot be resolved, the FHWA will forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- 1. Provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding the dispute, or
- 2. Notify the FHWA that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the FHWA in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; FHWA and NCDOT's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

VIII. **Amendments**

If any Signatory to this MOA believes that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation VII will be followed.

IX. **Termination**

Any of the Signatory Party(ies) may terminate the agreement by providing notice to the other parties, provided that the signatories and concurring parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

X. **Duration**

Unless terminated pursuant to Stipulation IX above, this MOA will be in effect until FHWA, in consultation with the other Signatory and Concurring Party(ies), determines that all of its terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to construct the Undertaking.

Execution of this Memorandum of Agreement by FHWA and the North Carolina SHPO, and implementation of its terms, evidence that FHWA has afforded the Council an opportunity to comment on the Undertaking, and that FHWA has taken into account the effects of the Undertaking on the historic properties.

SIGNATORIES:

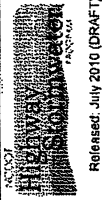
By: Michael O. Estey Date: 1-23-12
John F. Sullivan, III, P.E.
Federal Highway Administration, North Carolina

By: Jeffrey J. Crow Date: 1/12/12
Jeffrey J. Crow
North Carolina State Historic Preservation Officer

CONCURRING PARTIES:

By: _____ Date: _____
Eastern Band of the Cherokee Indians
Honorable Principle Chief Michell Hicks

By: Robert Andrew Joyner Date: 1/6/12
Robert Andrew Joyner, P.E.
Manager, Human Environment Section



North Carolina Department of Transportation
 Highway Stormwater Program
STORMWATER MANAGEMENT PLAN



Version 1.1

Page _____ of _____

General Project Information

Project No.:	33662.1.1	Date:	3/21/2011
City/Town:	North Wilkesboro	Designer:	Weadon
County(ies):	Wilkes County	Project Manager:	Clawson
River Basin(s):	Yadkin-Pee Dee	CAMA County?	TVA County?
Primary Receiving Water:	Middle Fork Reddies River	NCDWQ Stream Index:	
NCDWQ Surface Water Classification for Primary Receiving Water		Primary:	Water Supply II (WS-II)
		Supplemental:	Trout Waters (Tr)
Other Stream Classification:			
303(d) Stream?		Type(s) of Impairment:	
State Stormwater Permit Required?	yes	If yes, why?	
Could the Project Impact Threatened or Endangered Species?			Project Requires an Erosion and Sediment Control Plan and drains to a HQW stream

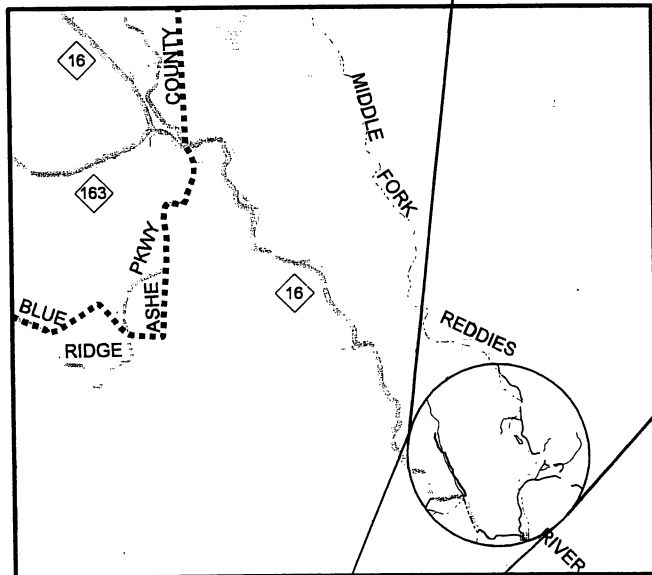
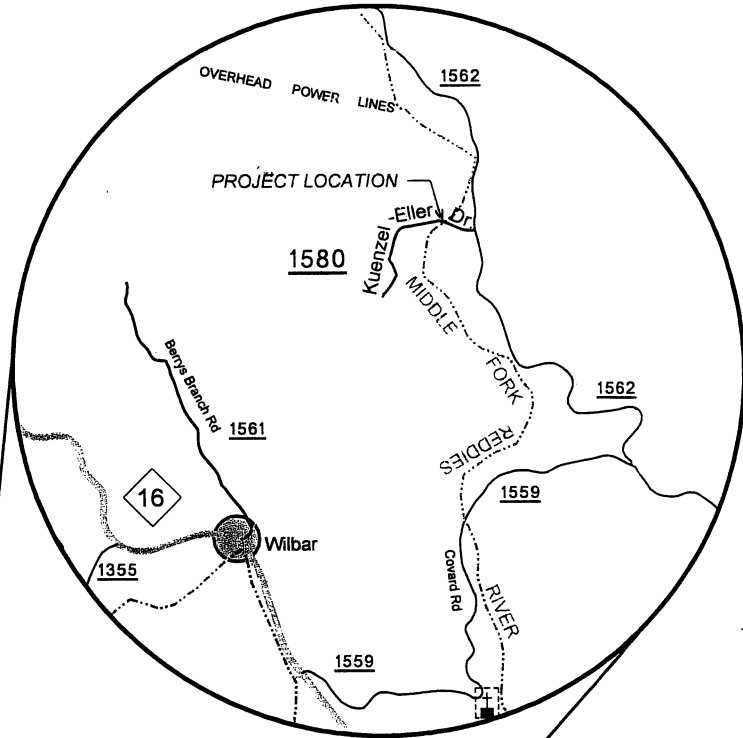
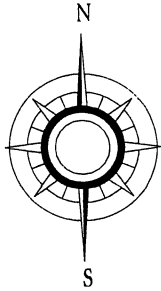
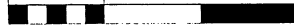
Description:	
Anadromous Fish Present?	
Description:	
Buffer Rules in Effect?	no
	Existing Site
	Buffer Rules:

Description of Existing Project Area:	Project is in rural mountainous area
Average Daily Traffic (existing):	143
Existing Cross Section:	16' wide with variable shoulder widths and a BST wearing surface
Surrounding Land Use:	Rural pasture land
General Comments:	
	Project Description

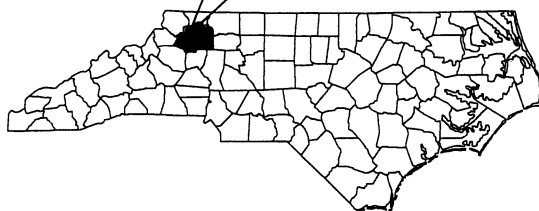
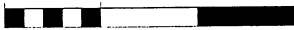
Description of Proposed Project:	Replacement of Bridge # 718 over the Middle Fork Reddies River
Average Daily Traffic (proposed):	230
Proposed Cross-Section:	2-9' lanes with 2' wide shoulders proposed bridge width is 21' with a 2% super all to the right
Interchange Modification:	
Terminus:	
Terminus:	
Project Length (lin. miles/feet):	0.127 mi / 669'
Added Impervious Area (ac.):	0.04
Median Type:	

General Comments:	This bridge is located on a dead end road thus the only traffic generated is from the property owners. For this reason we are using the Texas T-101 bridge rail. The existing 51' single span bridge is being replaced with a 65' single span bridge.
-------------------	---

0.25 0 0.25 0.5 MILES



1 0 1 2 MILES



**NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT &
ENVIRONMENTAL ANALYSIS BRANCH**

WILKES COUNTY TIP NO. B-4325

**BRIDGE NO. 718 ON SR 1580
OVER MIDDLE FORKS REDDIES RIVER**

VICINITY MAP

FIGURE 1

Property Owners

Parcel Number	Names	Addresses
---------------	-------	-----------

1	William Trivette & Susan	721 Kuenzel Eller Dr. Millers Creek NC 28651
---	--------------------------	--

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

WILKES COUNTY
WBS - 33662.1.1 (B-4325)

SHEET

7/19/2011

09/08/09

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Symbology

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

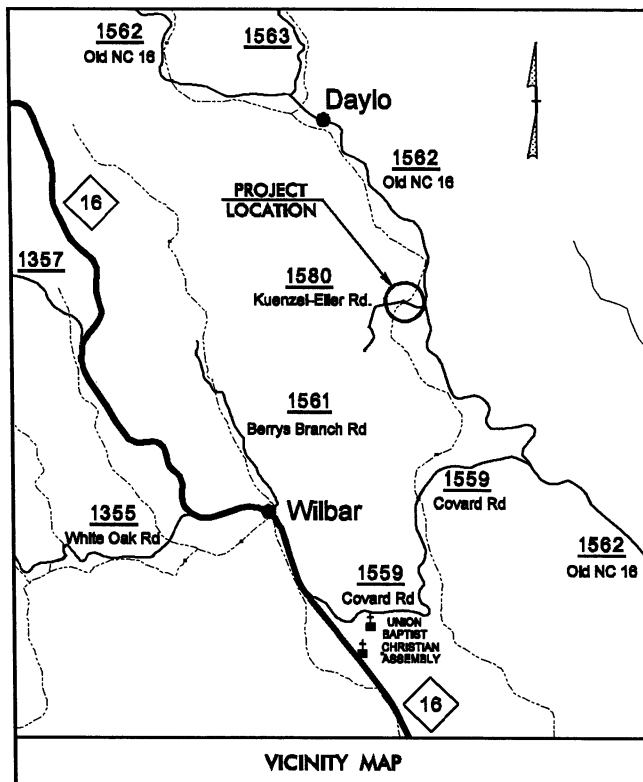
WILKES COUNTY

**LOCATION: BRIDGE NO. 718 OVER MIDDLE FORK REDDIES RIVER
ON SR 1580 (KUENZEL-ELLER DRIVE)**

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

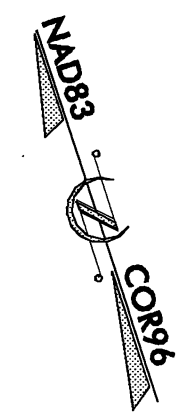
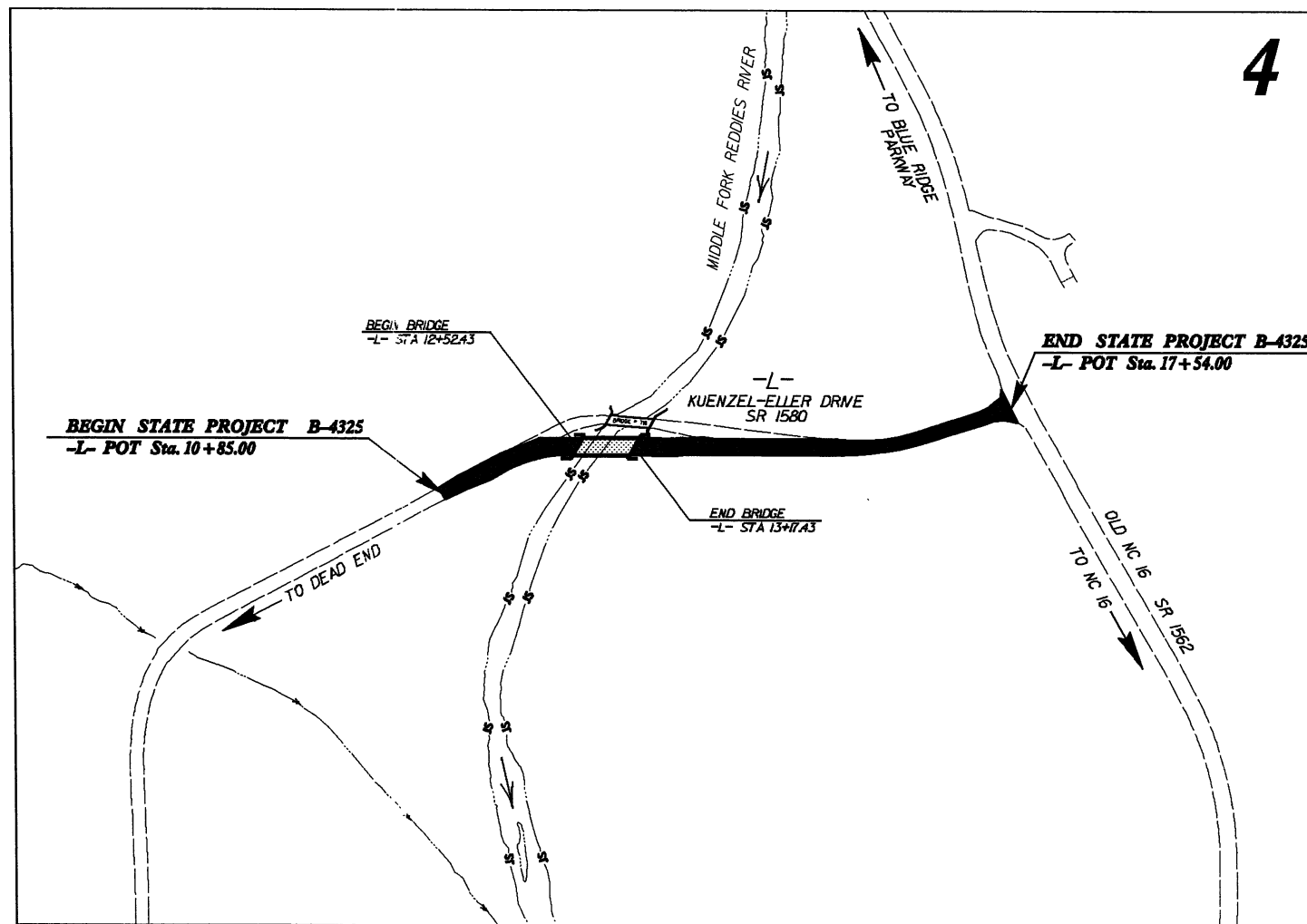
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4325	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33662.1.1	BRZ-1580 (2)	PE	
33662.2.1	BRZ-1580 (2)	RAW, UTILITIES	

TIP PROJECT: B-4325



ROW

**WETLAND
PERMIT**

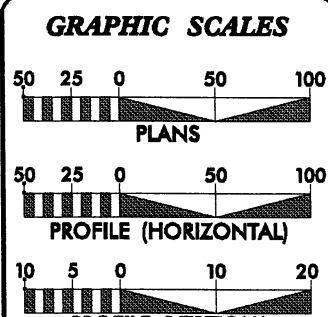


PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

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

NCDOT CONTACT:
K. ZAK HAMIDI, PE
ENGINEERING COORDINATION SECTION ENGINEER
ROADWAY DESIGN UNIT



DESIGN DATA

ADT 2012 =	143
ADT 2032 =	230
DHV =	10 %
D =	65 %
T =	4 % *
V =	25 MPH
FUNCT CLASS =	RURAL LOCAL
* (TTST 1% + DUAL 3%)	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4325	=	0.115 mile
LENGTH STRUCTURES TIP PROJECT B-4325	=	0.012 mile
TOTAL LENGTH TIP PROJECT B-4325	=	0.127 mile

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610
By:
M A Engineering Consultants, Inc.
598 East Chatham Street - Suite 137
Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 15, 2011

LETTING DATE:
APRIL 17, 2012

BURKE EVANS, PE
PROJECT ENGINEER

KEVIN S. HUTCHENS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.

ROADWAY DESIGN ENGINEER

P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

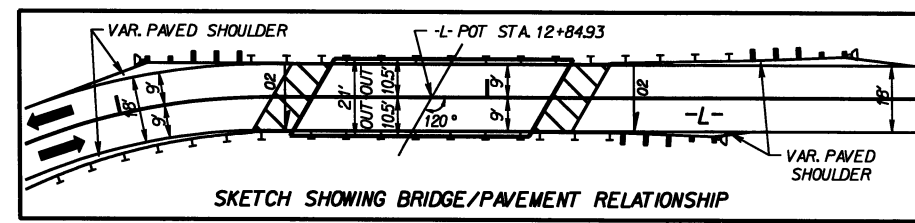
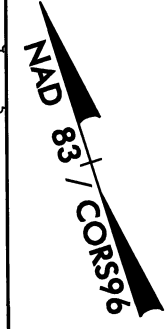
Permit Drawing
Sheet 4 of 8

1/2011
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CONTRACT:

B/17/99

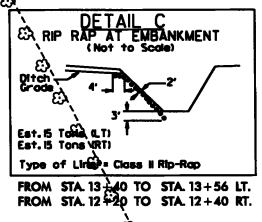
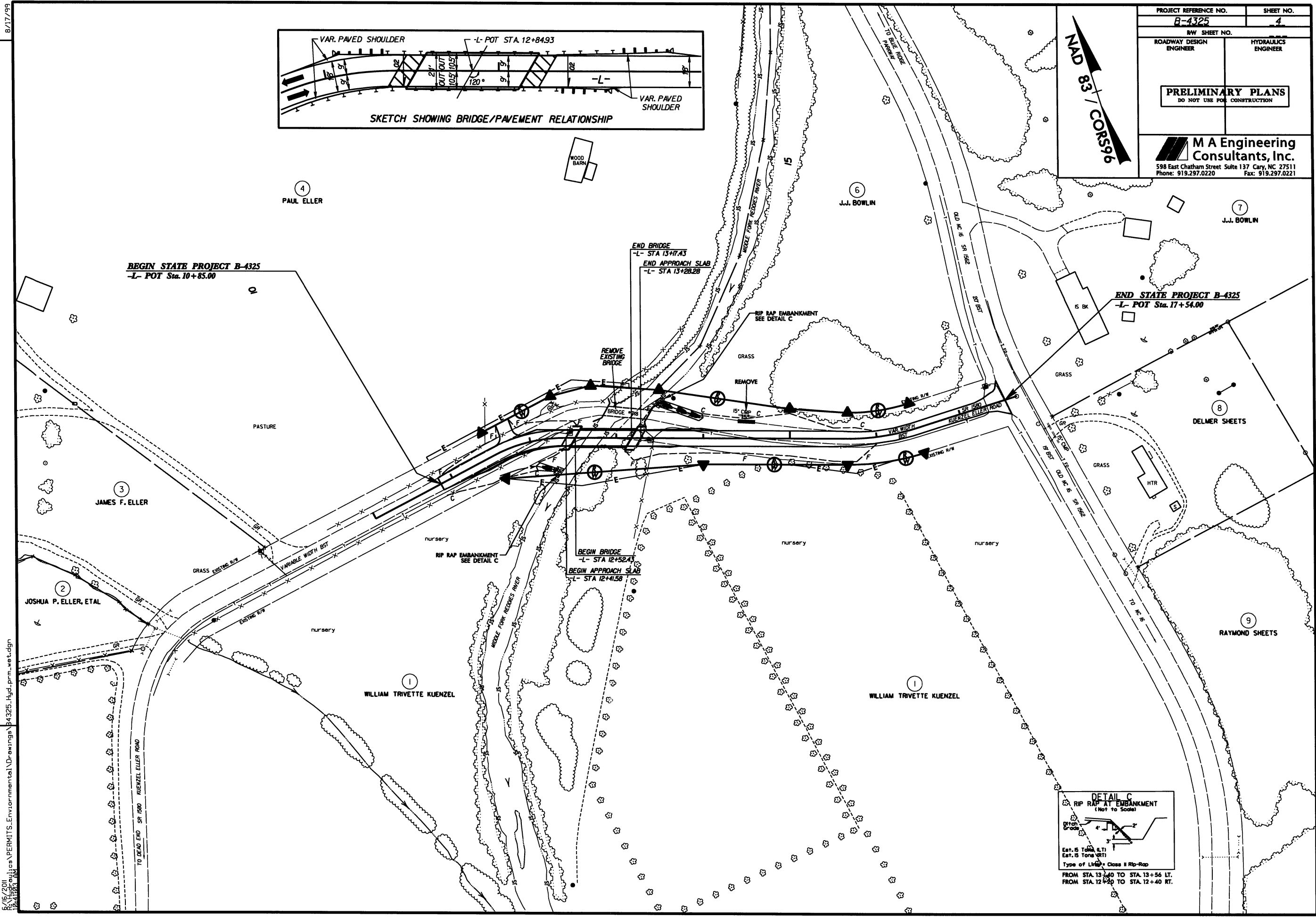
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
M A Engineering Consultants, Inc. 598 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221	



REVISIONS

BEGIN STATE PROJECT B-4325
-L- POT Sta. 10+85.00

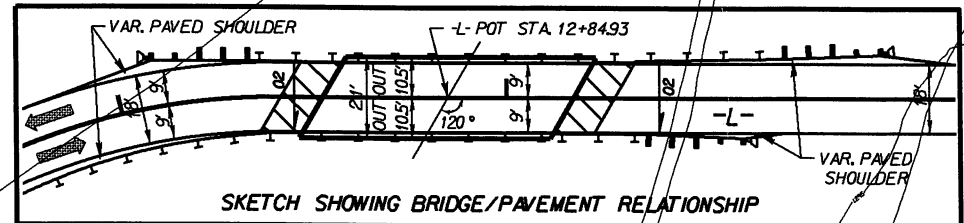
END STATE PROJECT B-4325
-L- POT Sta. 17+54.00



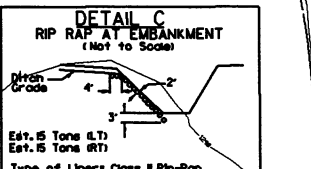
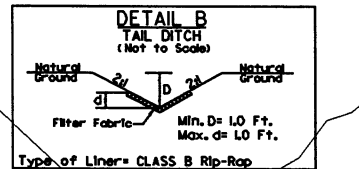
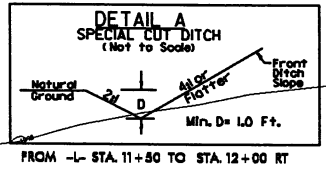
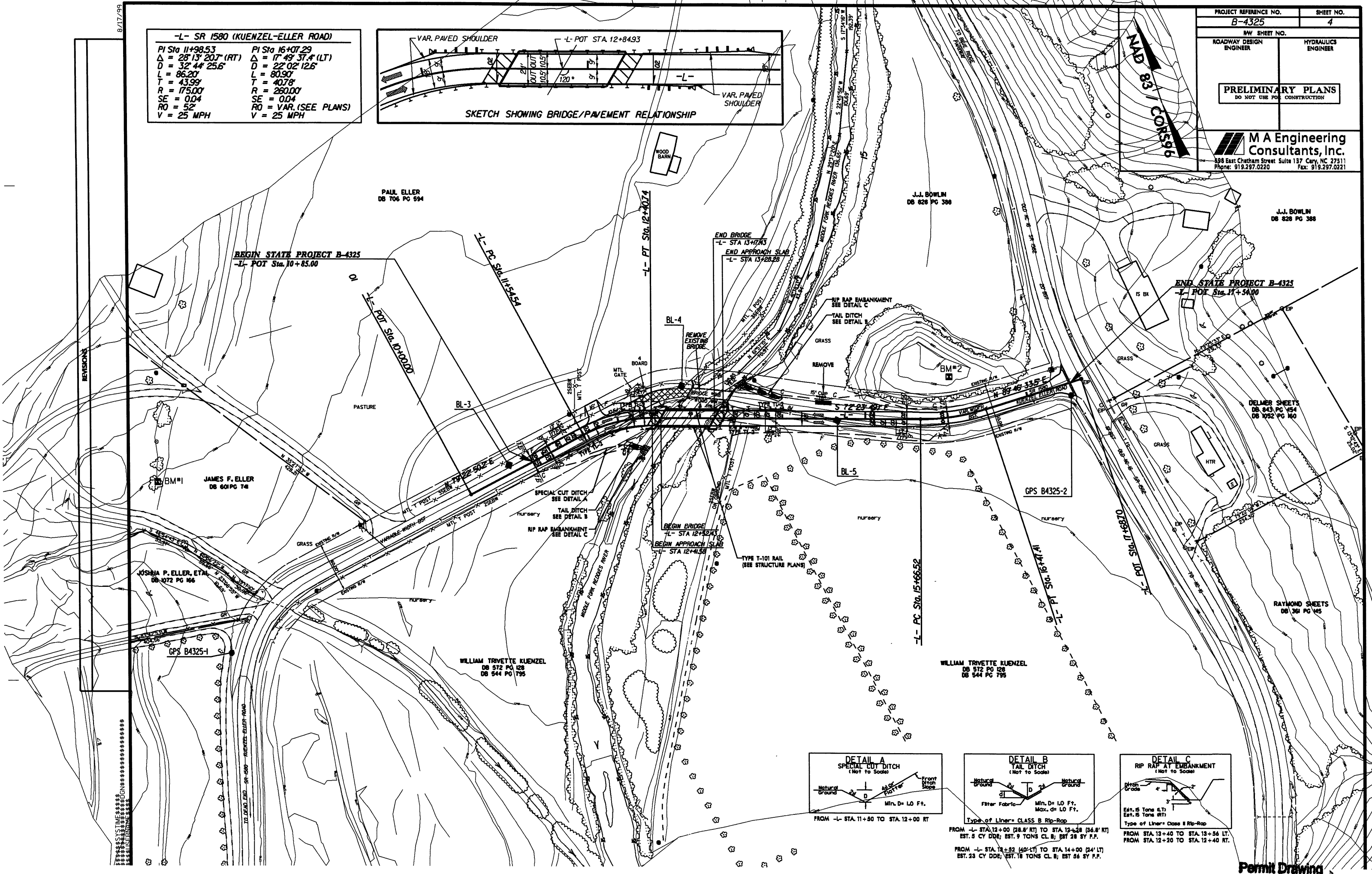
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8/17/99

-L- SR 1580 (KUENZEL-ELLER ROAD)	
PI Sta 11+98.53	PI Sta 16+07.29
$\Delta = 28' 13" 20.7" (RT)$	$\Delta = 17' 49" 37.4" (LT)$
$D = 32' 44" 25.6"$	$D = 22' 02" 12.6"$
$L = 86.20'$	$L = 80.90'$
$T = 43.99'$	$T = 40.78'$
$R = 175.00'$	$R = 260.00'$
$SE = 0.04$	$SE = 0.04$
$RO = 52'$	$RO = VAR. (SEE PLANS)$
$V = 25 \text{ MPH}$	$V = 25 \text{ MPH}$



PROJECT REFERENCE NO. B-4325	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
 M A Engineering Consultants, Inc. 398 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221	

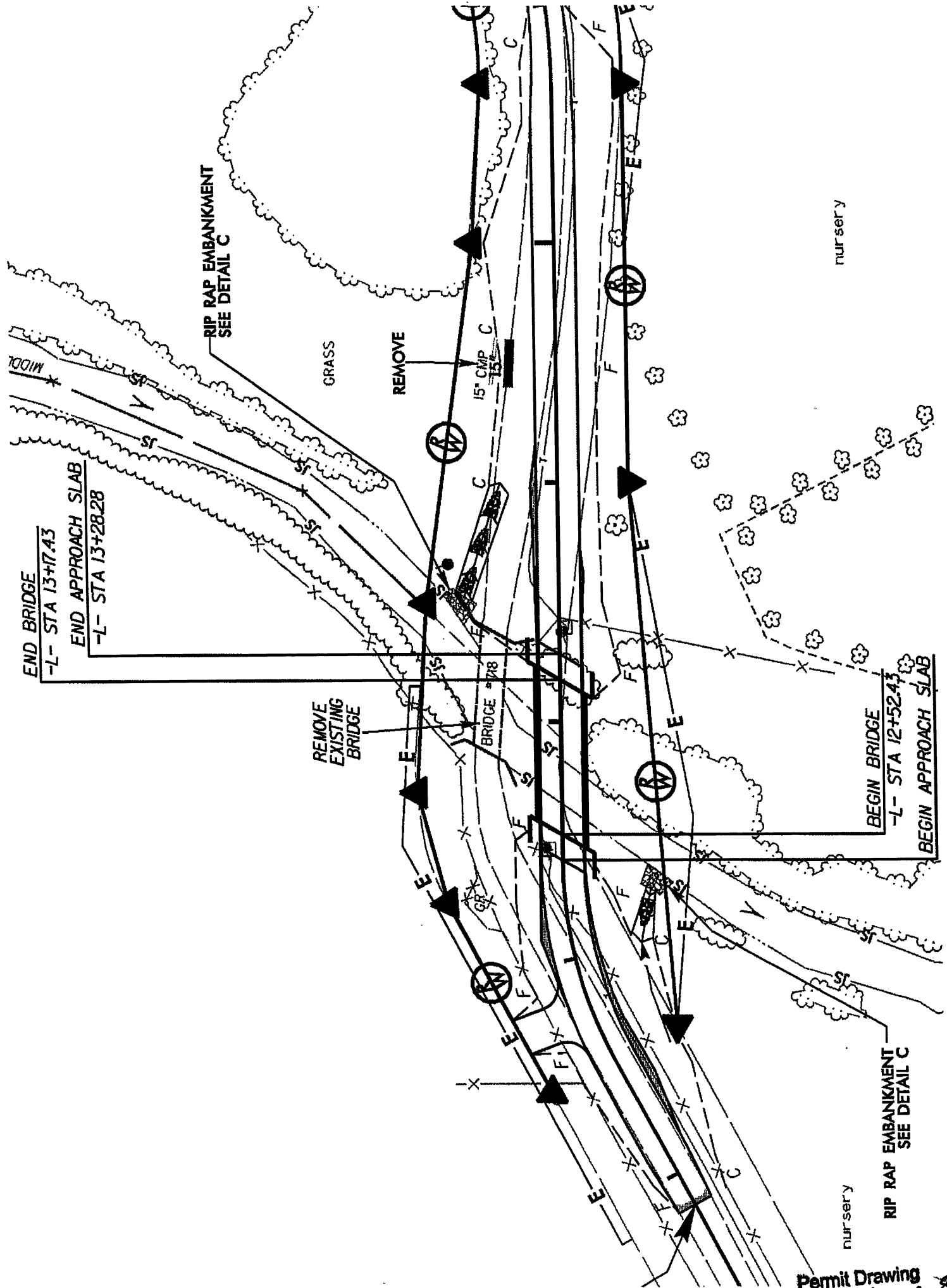


FROM -L- STA. 12+00 (28.8' RT) TO STA. 12+28 (36.8' RT)
EST. 5 CY DDE; EST. 9 TONS CL B; EST. 28 SY P.F.

FROM -L- STA. 13+40 TO STA. 13+56 LT
EST. 23 CY DDE; EST. 18 TONS CL B; EST. 56 SY P.F.

FROM STA. 13+40 TO STA. 13+56 LT
FROM STA. 12+20 TO STA. 12+40 RT.

Permit Drawing

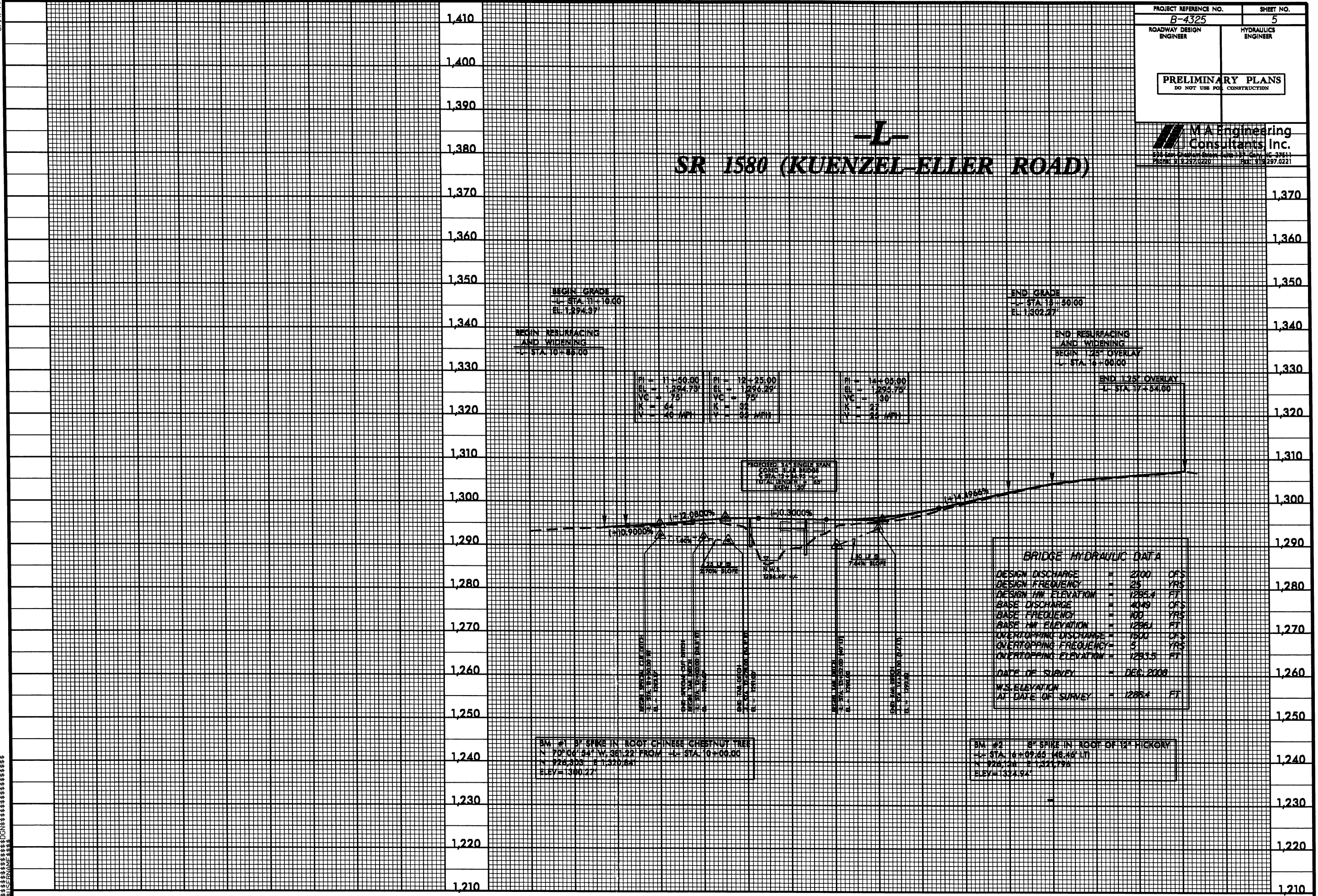


5/14/99

PROJECT REFERENCE NO. B-4325	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

M.A. Engineering Consultants Inc.
 594 East Division Street, Suite 117, Cary, NC 27511
 Phone: 919.237.0220 Fax: 919.237.0221

-L- SR 1580 (KUENZEL-ELLER ROAD)



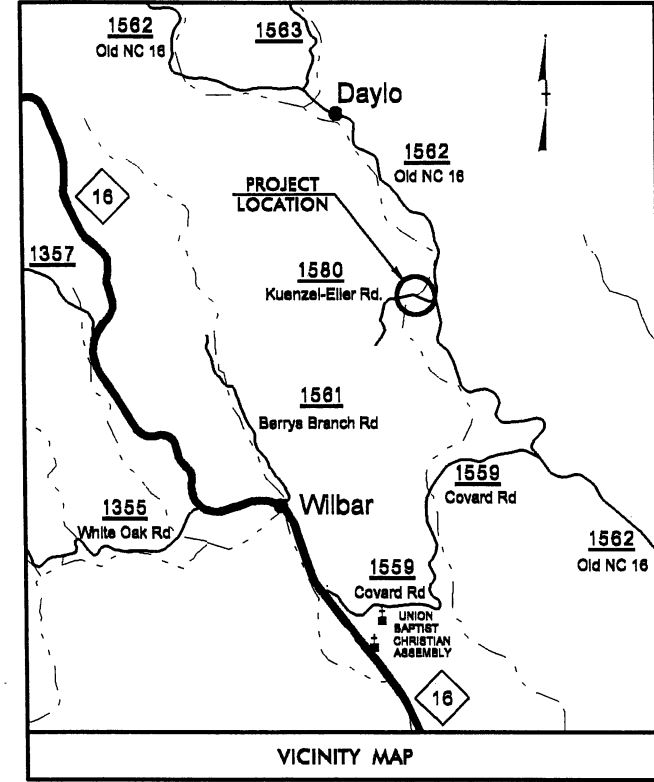
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N.C.	B-4325	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33662.1.1	BRZ-1580 (2)	PE	
33662.2.1	BRZ-1580 (2)	R/W, UTILITIES	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

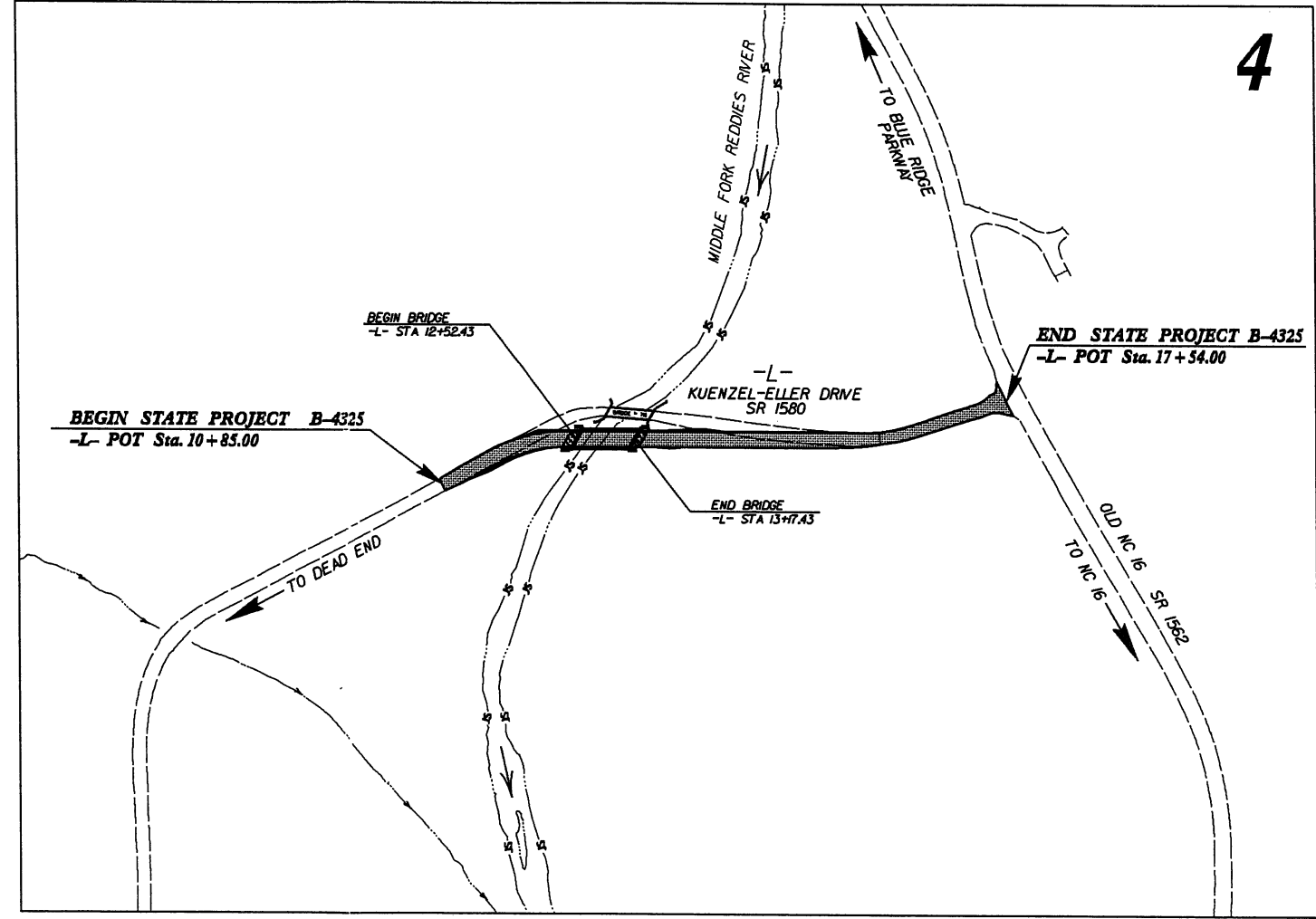
WILKES COUNTY

**LOCATION: BRIDGE NO. 718 OVER MIDDLE FORK REDDIES RIVER
ON SR 1580 (KUENZEL-ELLER DRIVE)**

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



ROW



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

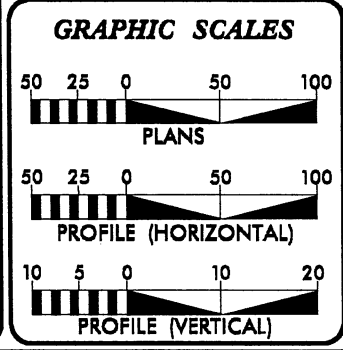
NGDOT CONTACT:
K. ZAK HAMIDI, PE
ENGINEERING COORDINATION SECTION ENGINEER
ROADWAY DESIGN UNIT

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

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

TIP PROJECT: B-4325

CONTRACT:



DESIGN DATA

ADT 2012 =	143
ADT 2032 =	230
DHV =	10 %
D =	65 %
T =	4 % *
V =	25 MPH
FUNCT CLASS =	RURAL LOCAL
* (TTST 1% + DUAL 3%)	
SUB-REGIONAL TEIR DESIGN	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4325	=	0.115 mile
LENGTH STRUCTURES TIP PROJECT B-4325	=	0.012 mile
TOTAL LENGTH TIP PROJECT B-4325	=	0.127 mile

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

By:
M A Engineering Consultants, Inc. 598 East Chatham Street - Suite 137
Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: **APRIL 15, 2011**

LETTING DATE: **APRIL 17, 2012**

BURKE EVANS, PE
PROJECT ENGINEER

KEVIN S. HUTCHENS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

\$\$\$SYTIME\$\$\$
\$\$\$CDN\$\$\$
\$\$\$SERNAME\$\$\$

5/17/07

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○
Property Corner	⊠
Property Monument	⊠
Parcel/Sequence Number	①②③
Existing Fence Line	—x—x—x—
Proposed Woven Wire Fence	—○—
Proposed Chain Link Fence	—□—
Proposed Barbed Wire Fence	—◇—
Existing Wetland Boundary	-----
Proposed Wetland Boundary	-----
Existing Endangered Animal Boundary	-----
Existing Endangered Plant Boundary	-----

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or UG Tank Cap	○
Sign	○
Well	○
Small Mine	⊗
Foundation	⊠
Area Outline	⊠
Cemetery	⊠
Building	⊠
School	⊠
Church	⊠
Dam	⊠

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	-----
Buffer Zone 1	-----
Buffer Zone 2	-----
Flow Arrow	-----
Disappearing Stream	-----
Spring	-----
Wetland	-----
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	-----
Switch	-----
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	-----
Proposed Right of Way Line with Concrete or Granite Marker	-----
Existing Control of Access	-----
Proposed Control of Access	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage / Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Permanent Easement with Iron Pin and Cap Marker	-----

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-----
Proposed Slope Stakes Fill	-----
Proposed Wheel Chair Ramp	-----
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	-----
Pavement Removal	-----

VEGETATION:

Single Tree	-----
Single Shrub	-----
Hedge	-----
Woods Line	-----
Orchard	-----
Vineyard	-----

EXISTING STRUCTURES:

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

UTILITIES:

POWER:	
Existing Power Pole	-----
Proposed Power Pole	-----
Existing Joint Use Pole	-----
Proposed Joint Use Pole	-----
Power Manhole	-----
Power Line Tower	-----
Power Transformer	-----
UG Power Cable Hand Hole	-----
H-Frame Pole	-----
Recorded UG Power Line	-----
Designated UG Power Line (S.U.E.*)	-----

TELEPHONE:

Existing Telephone Pole	-----
Proposed Telephone Pole	-----
Telephone Manhole	-----
Telephone Booth	-----
Telephone Pedestal	-----
Telephone Cell Tower	-----
UG Telephone Cable Hand Hole	-----
Recorded UG Telephone Cable	-----
Designated UG Telephone Cable (S.U.E.*)	-----
Recorded UG Telephone Conduit	-----
Designated UG Telephone Conduit (S.U.E.*)	-----
Recorded UG Fiber Optics Cable	-----
Designated UG Fiber Optics Cable (S.U.E.*)	-----

WATER:

Water Manhole	-----
Water Meter	-----
Water Valve	-----
Water Hydrant	-----
Recorded UG Water Line	-----
Designated UG Water Line (S.U.E.*)	-----
Above Ground Water Line	-----

TV:

TV Satellite Dish	-----
TV Pedestal	-----
TV Tower	-----
UG TV Cable Hand Hole	-----
Recorded UG TV Cable	-----
Designated UG TV Cable (S.U.E.*)	-----
Recorded UG Fiber Optic Cable	-----
Designated UG Fiber Optic Cable (S.U.E.*)	-----

GAS:

Gas Valve	-----
Gas Meter	-----
Recorded UG Gas Line	-----
Designated UG Gas Line (S.U.E.*)	-----
Above Ground Gas Line	-----

SANITARY SEWER:

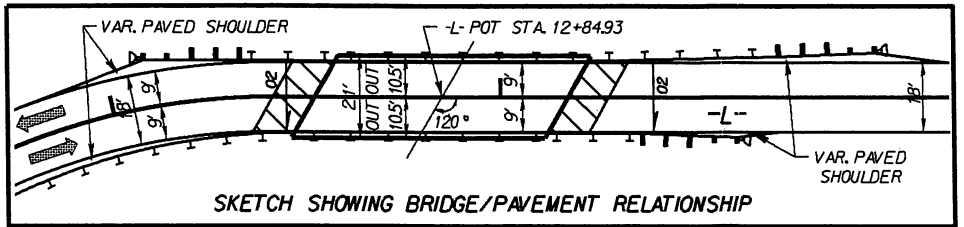
Sanitary Sewer Manhole	-----
Sanitary Sewer Cleanout	-----
UG Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
Recorded SS Forced Main Line	-----
Designated SS Forced Main Line (S.U.E.*)	-----

MISCELLANEOUS:

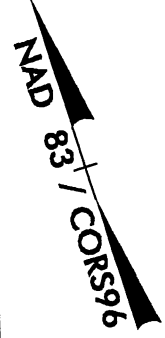
Utility Pole	-----
Utility Pole with Base	-----
Utility Located Object	-----
Utility Traffic Signal Box	-----
Utility Unknown UG Line	-----
UG Tank; Water, Gas, Oil	-----
A/G Tank; Water, Gas, Oil	-----
UG Test Hole (S.U.E.*)	-----
Abandoned According to Utility Records	-----
End of Information	-----

8/17/14

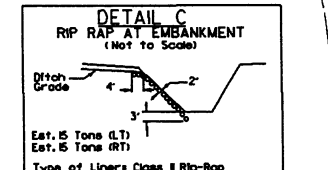
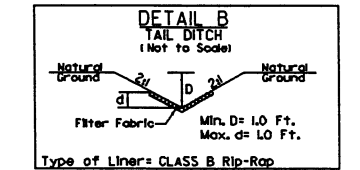
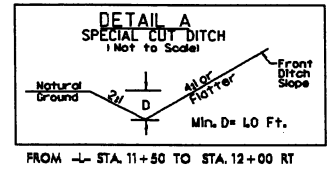
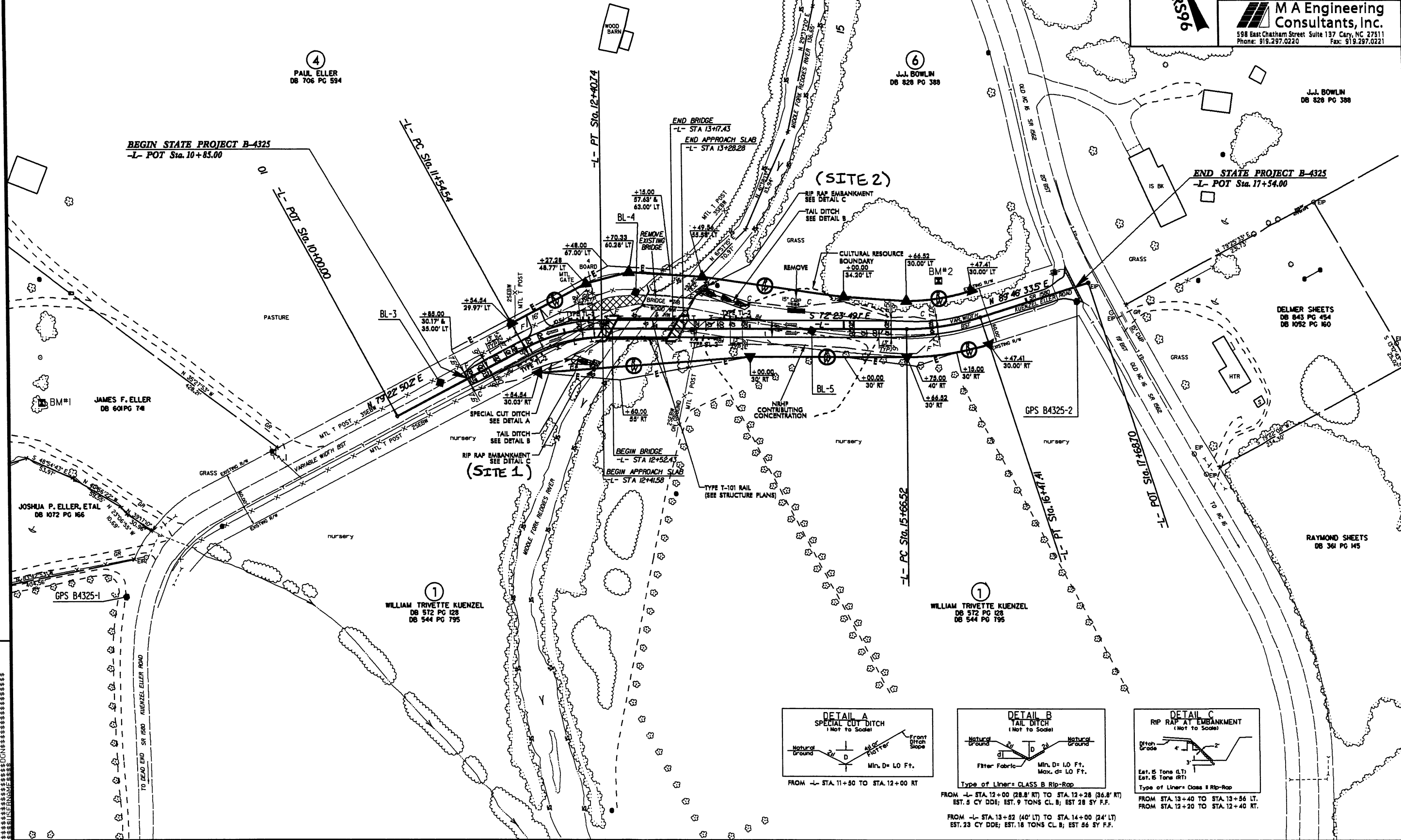
-L- SR 1580 (KUENZEL-ELLER ROAD)	
PI Sta 11+98.53	PI Sta 16+07.29
$\Delta = 28' 13" 20.7" (RT)$	$\Delta = 17' 49" 37.4" (LT)$
$D = 32' 44" 25.6'$	$D = 22' 02" 12.6'$
$L = 86.20'$	$L = 80.90'$
$T = 43.99'$	$T = 40.78'$
$R = 175.00'$	$R = 260.00'$
$SE = 0.04$	$SE = 0.04$
$RO = 52'$	$RO = VAR. (SEE PLANS)$
$V = 25 \text{ MPH}$	$V = 25 \text{ MPH}$



B-4325		4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION		
 M A Engineering Consultants, Inc. 598 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221		



REVISIONS



FROM -L- STA. 11+50 TO STA. 12+00 RT

FROM -L- STA. 12+00 (28.8' RT) TO STA. 12+28 (36.8' RT)
EST. 5 CY DDE; EST. 9 TONS CL. B; EST. 28 SY F.F.

FROM STA. 13+40 TO STA. 13+56 LT.
FROM STA. 12+20 TO STA. 12+40 RT.

FROM -L- STA. 13+52 (40' LT) TO STA. 14+00 (24' LT)
EST. 23 CY DDE; EST. 18 TONS CL. B; EST. 56 SY F.F.