



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

July 21, 2008

US Army Corps of Engineers
Raleigh Regulatory Field Office
3331 Heritage Trade Drive, Suite 105
Wake Forest, NC 27587

ATTENTION: Eric Alsmeyer
NCDOT Coordinator

Dear Sir:

Subject: **Application for Section 404 Nationwide Permits 13 and 33 and Tar-Pamlico Riparian Buffer Authorization** for the replacement of Bridge No. 151 on SR 1146 over Camping Creek, Franklin County. Federal Aid Project Number BRZ-1146(5), WBS 33469.1.1, Division 5, T.I.P. No. B-4114

Debit \$240 to WBS 33469.1.1

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 151 over Camping Creek. The project involves replacing the bridge on the existing alignment, while maintaining traffic with an on-site detour during construction.

The proposed structure will be a single span, 70 foot long box beam bridge with a width sufficient enough to provide for two 11 foot travel lanes with 3 foot offsets on each side. The existing roadway will be widened to a 22 foot pavement width to provide two 11 foot lanes. Six foot unpaved shoulders (nine foot with guardrails) will be provided on each side. Please find enclosed the Pre-Construction Notification, permit drawings and design plans. A Categorical Exclusion (CE) and Right of Way Consultation were completed for this project in February 2006 and December 2007, respectively, and distributed shortly thereafter. Additional copies are available upon request.

IMPACTS TO WATERS OF THE UNITED STATES

The project is located in the Tar-Pamlico River Basin, sub-basin 03-03-01, Hydrologic Unit 03020101. Camping Creek [DWQ Index # 28-2-5], a perennial stream, and two riverine wetlands comprise the Waters of the U.S. within the project impact area. Camping Creek is assigned a Best Usage Classification of C NSW. There are no High Quality Waters (HQW), Water Supplies (WS-I:

MAILING ADDRESS:

NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
NATURAL ENVIRONMENT UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-715-1334 or
919-715-1335

FAX: 919-715-5501

WEBSITE: WWW.NCDOT.ORG

LOCATION:

2728 CAPITAL BLVD, SUITE 240
RALEIGH NC 27604

undeveloped watersheds or WS-II: predominately undeveloped watersheds), or Outstanding Resource Waters (ORW) within 1.0 mile of the project study area. No streams within the project study area or within 1.0 mile downstream of the project study area are included on the 2006 Final 303(d) list of impaired waters. Eric Alsmeyer of the U.S. Army Corps of Engineers (USACE) issued a written Jurisdictional Determination (JD) for Waters of the U.S. within the project study area on November 12, 2003. This JD expires on November 12, 2008.

Permanent Impacts

There will be 10 feet of permanent impacts to Camping Creek. This is for the placement of rip rap for bank stabilization for the tie in of a ditch outlet.

There are no permanent impacts to wetlands.

Temporary Impacts

There are 0.1 acres of temporary wetland impacts for the on-site detour.

Utility Impacts

Wake EMC (power) and Telephone will be aerial and staying within the foot print of the Project, located left of the on site Detour. There will be no impacts to jurisdictional areas from utilities.

Bridge Demolition

The existing bridge is a four span structure that consists of timber decking on timber joints with an asphalt wearing surface. The substructure is composed of timber caps on timber piles and steel crutch bents at mid points of spans 1 and 2. NCDOT will remove the existing structure without dropping any components into the creek. The timber piles in the stream bed will be pulled from the stream and if necessary will be cut to stream bed level. Best Management Practices for Bridge Demolition and Removal will be implemented during removal of the bridge.

IMPACTS TO TAR-PAMLICO RIPARIAN BUFFER

Construction of the new bridge will result in impacts to the Tar-Pamlico Riparian Buffers of Camping Creek. Buffer impacts are described in Table 1 below. Under the Tar-Pamlico Buffer Rules, impacts to the buffers of Camping Creek resulting from the construction of the temporary detour (temporary roads) are allowable. Impacts resulting from the construction of the new bridge are allowable. There will be some road crossing impacts from the construction of the bridge. These impacts are less than 150 feet and one-third of an acre and so they are allowable.

Table 1. Tar-Pamlico Buffer Impacts (Square Feet)

	Bridge	Road Crossing*	Temporary Road
Zone 1 Impact (sq. ft.)	1,009	1,597	2,197
Zone 2 Impact (sq. ft.)	0	1,438	1,576
Total Impacts (sq. ft.)	1,009	3,035	3,773
Mitigation requirements (exempt, allowable, or allowable with mitigation)	Allowable	Allowable	Allowable

The existing bridge has been determined to be structurally deficient and functionally obsolete. The replacement of this inadequate structure will result in safer and more efficient traffic operations. Because this bridge needs to be replaced, impacts to the riparian buffers are unavoidable, and there are no practicable alternatives.

Utility Impacts to Riparian Buffers

Wake EMC (power) and Telephone will be aerial and staying within the foot print of the Project, located left of the on site Detour. There will be no utility impacts to buffers resulting from this project.

RESTORATION PLAN

Following construction of the culvert and roadway, all material used in construction will be removed. Temporary fill placed in surface waters for access or dewatering will be removed down to the natural streambed, and all temporary erosion control devices will be removed upon completion of construction. Pre-project elevations will be restored.

REMOVAL AND DISPOSAL PLAN

The contractor will be required to submit a reclamation plan for the removal of and disposal of all material off-site at an upland location. The contractor will use excavation equipment for removal of any earthen material. Heavy-duty trucks, dozers, cranes, and various other pieces of mechanical equipment necessary for construction of roadways and bridges will be used on site. The contractor will have the option of reusing any of the materials that the engineer deems suitable in the construction of project. After the erosion control devices are no longer needed, all temporary materials will become the property of the contractor.

FEDERALLY PROTECTED SPECIES

Plants and animals with federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE), and Proposed Threatened (PT) are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. The United States Fish and Wildlife Service (USFWS) lists three species for Franklin County (Table 2).

Table 2. Federally Protected Species in Franklin County, NC

Common Name	Scientific Name	Federal Status*	Biological Conclusion	Habitat Present
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	E	May affect, not likely to adversely affect	Yes
Tar River spiny mussel	<i>Elliptio steinstansana</i>	E	May affect, not likely to adversely affect	Yes
Michaux's sumac	<i>Rhus michauxii</i>	E	No Effect	Yes

*E= endangered

Surveys were conducted for mussels and no federally protected mussels were found, although habitat does exist within the project area. The USFWS concurred with a May Affect-not likely to adversely affect for the dwarf wedgemussel and the Tar River spiny mussel in a letter dated June 27, 2005 (included in CE). This concurrence was contingent on the conservation measures that NCDOT has suggested and are as follows:

- Weep holes shall be configured so that the run-off does not fall directly into the stream.
- NCDOT resident engineer is responsible for providing a written invitation to the North Carolina Wildlife Resources Commission, Non-game Protected Species Branch, and the USFWS prior to construction.
- Special sediment and erosion control fencing will be used at the toe of slope parallel to Camping Creek. Standard silt fencing will be used at the toe of slope perpendicular to Camping Creek. If during the final plan design phase, it is determined that the special sediment and erosion control fencing is not practical to use at this location, then a moratorium on clearing and grubbing will be implemented from November 15 to April 1 from the top of bank out 50 feet from the stream
- There will be no in-stream work during the construction of the new or temporary bridge. This should include no work pads or causeway in the stream
- A pre-construction survey will be conducted prior to let date.
- Utilize stone or timber work pads in the work zone and access areas.
- This is an environmental sensitive area and all Roadside Environmental special provisions shall apply

The most recent survey for Michaux's sumac was conducted on July 1, 2008 by NCDOT biologists. Potential habitat exists along roadsides of the project area. No specimens of Michaux's sumac were found; therefore, the biological conclusion of "No Effect" remains valid. Concurrence on all three species was received from the USFWS in a letter dated June 27, 2005 and included in the CE.

MITIGATION OPTIONS

Avoidance and Minimization and Compensatory Mitigation

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional impacts, and to provide full compensatory mitigation of all remaining, unavoidable jurisdictional impacts. Avoidance measures were taken during the planning and NEPA compliance stages; minimization measures were incorporated as part of the project design.

According to the Clean Water Act (CWA) §404(b)(1) guidelines, NCDOT must avoid, minimize, and mitigate, in sequential order, impacts to waters of the US. The following is a list of the project's jurisdictional stream, wetlands, and Tar-Pamlico Buffer avoidance/minimization activities proposed or completed by NCDOT:

Avoidance/Minimization

- Temporary construction impacts due to erosion and sedimentation will be minimized through implementation of stringent erosion control methods and use of Best Management Practices (BMPs).
- Design Standards in Sensitive Watersheds will be implemented.
- Best Management Practices for Protection of Surface Waters will be implemented.
- Avoided permanent impacts to wetlands
- A preformed scour hole will be constructed on the northeast side of the bridge, outside of the buffers.
- New bridge will be built on existing location.

Compensatory Mitigation:

No mitigation is proposed for the 10 feet of permanent impacts to Camping Creek. The impacts are minimal and are only due to bank stabilization and will not incur a loss of aquatic use to the stream. No mitigation is proposed for buffers since all impacts are allowable.

SCHEDULE

The project calls for a letting March 17, 2009 (review date of January 27, 2009) with a date of availability of February 2008. It is expected that the contractor will choose to start construction in February 2008.

REGULATORY APPROVALS

Section 404 Permit: The NCDOT requests that the temporary impacts be authorized by Nationwide Permits 33 and the bank stabilization be authorized by a Nationwide 13.

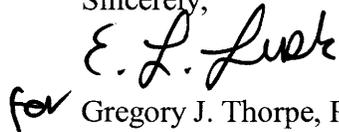
Section 401 Permit: We anticipate Section 401 General Water Quality Certification (WQC) numbers 3688, 3689, will apply to this project. Written concurrence from NCDWQ will be required for the

Tar-Pamlico Buffer Authorization. In compliance with Section 143-215.3D(e) of the NCAC, we will provide \$240.00 as payment for processing the Section 401 permit application. In accordance with 15A NCAC 2H, Section .0500(a) and 15A NCAC 2B.0200 we are providing five copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for their review.

Buffer Certification: This project has been designed to comply with the Tar-Pamlico Riparian Buffer Regulations (15A NCAC 2B.0242). NCDOT requests a Tar-Pamlico Riparian Buffer Authorization from the Division of Water Quality.

A copy of this permit application will be posted on the NCDOT website at: <http://www.ncdot.org/doh/preconstruct/pe/>. If you have any questions or need additional information, please call Rachelle Beauregard at 919-715-1383.

Sincerely,



for Gregory J. Thorpe, Ph.D.

Environmental Management Director, PDEA

w/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)
Mr. J. Wally Bowman, PE., Division Engineer
Mr. Chris Murray, DEO

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC
Mr. Tracy Walter, PDEA

USACE Action ID No. _____ DWQ No. _____

(If any particular item is not applicable to this project, please enter "Not Applicable" or "N/A".)

I. Processing

- 1. Check all of the approval(s) requested for this project:

<input checked="" type="checkbox"/> Section 404 Permit	<input checked="" type="checkbox"/> Riparian or Watershed Buffer Rules
<input type="checkbox"/> Section 10 Permit	<input type="checkbox"/> Isolated Wetland Permit from DWQ
<input checked="" type="checkbox"/> 401 Water Quality Certification	<input type="checkbox"/> Express 401 Water Quality Certification
- 2. Nationwide, Regional or General Permit Number(s) Requested: NWP 13 & 33
- 3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here:
- 4. If payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed for mitigation of impacts, attach the acceptance letter from NCEEP, complete section VIII, and check here:
- 5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here:

II. Applicant Information

- 1. Owner/Applicant Information

Name: Gregory J. Thorpe, Ph.D., Environmental Management Director

Mailing Address: North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

Telephone Number: (919) 733-3141 Fax Number: (919) 733-9794

E-mail Address: _____
- 2. Agent/Consultant Information (A signed and dated copy of the Agent Authorization letter must be attached if the Agent has signatory authority for the owner/applicant.)

Name: _____

Company Affiliation: _____

Mailing Address: _____

Telephone Number: _____ Fax Number: _____

E-mail Address: _____

III. Project Information

Attach a **vicinity map** clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed **site plan** showing property boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1. Name of project: Replacement of Bridge No. 151 on SR 1146 over Camping Creek
2. T.I.P. Project Number or State Project Number (NCDOT Only): B-4114
3. Property Identification Number (Tax PIN): N/A
4. Location
County: Franklin Nearest Town: Louisburg
Subdivision name (include phase/lot number): N/A
Directions to site (include road numbers/names, landmarks, etc.): take NC 401 towards Louisburg, east turn left SR 1110, then left on SR 1109, then left on SR 1146
5. Site coordinates (For linear projects, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)
Decimal Degrees (6 digits minimum): _____°N _____°W
6. Property size (acres): N/A
7. Name of nearest receiving body of water: Camping Creek
8. River Basin: Tar-Pamlico
(Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at <http://h2o.enr.state.nc.us/admin/maps/>.)
9. Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: SR 1146 is classified as a rural local route by the statewide functional classification system. Land use includes pasture land, forested areas, and few single-family residences.
10. Describe the overall project in detail, including the type of equipment to be used: _____

The project involves replacing the bridge on the existing alignment, while maintaining traffic with an on-site temporary detour during construction. The proposed structure will be a single span, 70 foot long box beam bridge with a width sufficient enough to provide for two 11 foot travel lanes with 3 foot offsets on each side. The existing roadway will be widened to a 22 foot pavement width to provide two 11 foot lanes. Six foot unpaved shoulders (nine foot with guardrails) will be provided on each side. Heavy duty excavation equipment will be used such as trucks, dozers, cranes, and other various equipment necessary for roadway construction.

11. Explain the purpose of the proposed work: The existing bridge, built in 1960 and having a sufficiency rating of 59.65 out of a possible 100 (for a new structure), is considered functionally obsolete and is in need of replacement. The replacement of this inadequate structure will result in safer traffic operations.

IV. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules. Jurisdictional Determination dated November 12, 2003 (Action ID 200321194)

V. Future Project Plans

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application.

N/A

VI. Proposed Impacts to Waters of the United States/Waters of the State

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. Each impact must be listed separately in the tables below (e.g., culvert installation should be listed separately from riprap dissipater pads). Be sure to indicate if an impact is temporary. All proposed impacts, permanent and temporary, must be listed, and must be labeled and clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) should be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for

wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

1. Provide a written description of the proposed impacts: Please refer to cover letter.

2. Individually list wetland impacts. Types of impacts include, but are not limited to mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

Wetland Impact Site Number (indicate on map)	Type of Impact	Type of Wetland (e.g., forested, marsh, herbaceous, bog, etc.)	Located within 100-year Floodplain (yes/no)	Distance to Nearest Stream (linear feet)	Area of Impact (acres)
Site 1	Temporary road	Forested	yes	0	0.1
Total Wetland Impact (acres)					

3. List the total acreage (estimated) of all existing wetlands on the property: 0.05

4. Individually list all intermittent and perennial stream impacts. Be sure to identify temporary impacts. Stream impacts include, but are not limited to placement of fill or culverts, dam construction, flooding, relocation, stabilization activities (e.g., cement walls, rip-rap, crib walls, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included. To calculate acreage, multiply length X width, then divide by 43,560.

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
Site 1	Camping Creek	Permanent Bank Stabilization	perennial	20-25 ft	10	n/a
Total Stream Impact (by length and acreage)					10	n/a

5. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.). Open water impacts include, but are not limited to fill, excavation, dredging, flooding, drainage, bulkheads, etc.

Open Water Impact Site Number (indicate on map)	Name of Waterbody (if applicable)	Type of Impact	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)	Area of Impact (acres)
Total Open Water Impact (acres)				0

6. List the cumulative impact to all Waters of the U.S. resulting from the project:

Stream Impact (acres):	
Wetland Impact (acres):	0.1
Open Water Impact (acres):	0
Total Impact to Waters of the U.S. (acres)	0.05
Total Stream Impact (linear feet):	10

7. Isolated Waters

Do any isolated waters exist on the property? Yes No

Describe all impacts to isolated waters, and include the type of water (wetland or stream) and the size of the proposed impact (acres or linear feet). Please note that this section only applies to waters that have specifically been determined to be isolated by the USACE.

8. Pond Creation

If construction of a pond is proposed, associated wetland and stream impacts should be included above in the wetland and stream impact sections. Also, the proposed pond should be described here and illustrated on any maps included with this application.

Pond to be created in (check all that apply): uplands stream wetlands

Describe the method of construction (e.g., dam/embankment, excavation, installation of draw-down valve or spillway, etc.): _____

Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond, local stormwater requirement, etc.): _____

Current land use in the vicinity of the pond: _____

Size of watershed draining to pond: _____ Expected pond surface area: _____

VII. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction

techniques to be followed during construction to reduce impacts. Please refer to cover letter.

VIII. Mitigation

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE – In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on January 15, 2002, mitigation will be required when necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCEEP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ’s Draft Technical Guide for Stream Work in North Carolina, available at <http://h2o.enr.state.nc.us/newetlands/strmgide.html>.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.

No mitigation proposed

2. Mitigation may also be made by payment into the North Carolina Ecosystem Enhancement Program (NCEEP). Please note it is the applicant’s responsibility to contact the NCEEP at (919) 715-0476 to determine availability, and written approval from the NCEEP indicating that they are will to accept payment for the mitigation must be attached to this form. For additional information regarding the application process for the NCEEP, check the NCEEP

website at <http://h2o.enr.state.nc.us/wrp/index.htm>. If use of the NCEEP is proposed, please check the appropriate box on page five and provide the following information:

Amount of stream mitigation requested (linear feet): _____
Amount of buffer mitigation requested (square feet): _____
Amount of Riparian wetland mitigation requested (acres): _____
Amount of Non-riparian wetland mitigation requested (acres): _____
Amount of Coastal wetland mitigation requested (acres): _____

IX. Environmental Documentation (required by DWQ)

1. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? Yes No
2. If yes, does the project require preparation of an environmental document pursuant to the requirements of the National or North Carolina Environmental Policy Act (NEPA/SEPA)?
Note: If you are not sure whether a NEPA/SEPA document is required, call the SEPA coordinator at (919) 733-5083 to review current thresholds for environmental documentation.
Yes No
3. If yes, has the document review been finalized by the State Clearinghouse? If so, please attach a copy of the NEPA or SEPA final approval letter. Yes No

X. Proposed Impacts on Riparian and Watershed Buffers (required by DWQ)

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to required state and local buffers associated with the project. The applicant must also provide justification for these impacts in Section VII above. All proposed impacts must be listed herein, and must be clearly identifiable on the accompanying site plan. All buffers must be shown on a map, whether or not impacts are proposed to the buffers. Correspondence from the DWQ Regional Office may be included as appropriate. Photographs may also be included at the applicant's discretion.

1. Will the project impact protected riparian buffers identified within 15A NCAC 2B .0233 (Neuse), 15A NCAC 2B .0259 (Tar-Pamlico), 15A NCAC 02B .0243 (Catawba) 15A NCAC 2B .0250 (Randleman Rules and Water Supply Buffer Requirements), or other (please identify _____)? Yes No

2. If “yes”, identify the square feet and acreage of impact to each zone of the riparian buffers. If buffer mitigation is required calculate the required amount of mitigation by applying the buffer multipliers.

Zone*	Impacts (square feet)	Multiplier	Required Mitigation (square feet)
1	4803	3 (2 for Catawba)	
2	3014	1.5	
Total	7817		

*Zone 1 extends out 30 feet perpendicular from the top of the near bank of channel; Zone 2 extends an additional 20 feet from the edge of Zone 1.

3. If buffer mitigation is required, please discuss what type of mitigation is proposed (i.e., Donation of Property, Riparian Buffer Restoration / Enhancement, or Payment into the Riparian Buffer Restoration Fund). Please attach all appropriate information as identified within 15A NCAC 2B .0242 or .0244, or .0260. No mitigation proposed, all impacts are allowable
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XI. Stormwater (required by DWQ)

Describe impervious acreage (existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property. If percent impervious surface exceeds 20%, please provide calculations demonstrating total proposed impervious level.

XII. Sewage Disposal (required by DWQ)

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.

N/A

XIII. Violations (required by DWQ)

Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules?

Yes No

Is this an after-the-fact permit application? Yes No

XIV. Cumulative Impacts (required by DWQ)

Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? Yes No

If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at <http://h2o.enr.state.nc.us/nwetlands>. If no, please provide a short narrative description: _____

N/A

XV. Other Circumstances (Optional):

It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).

N/A

E. J. Luke

7-21-08

Applicant/Agent's Signature

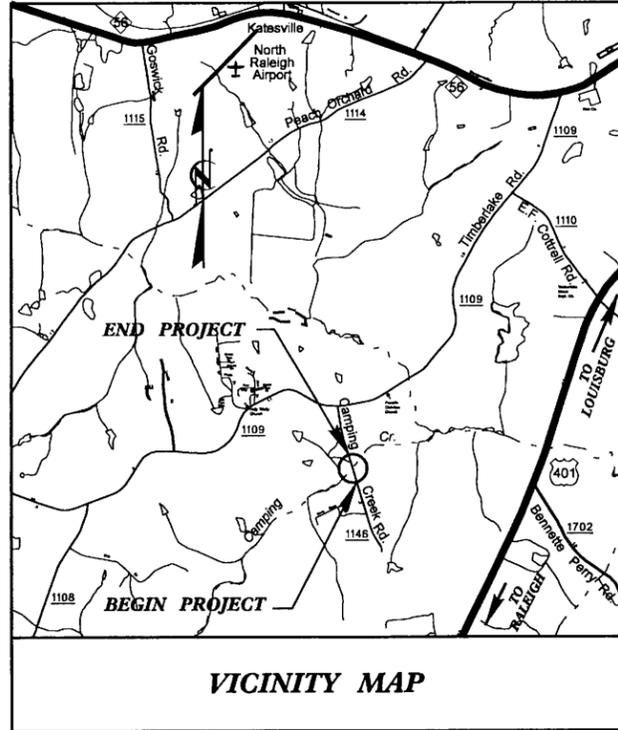
Date

(Agent's signature is valid only if an authorization letter from the applicant is provided.)

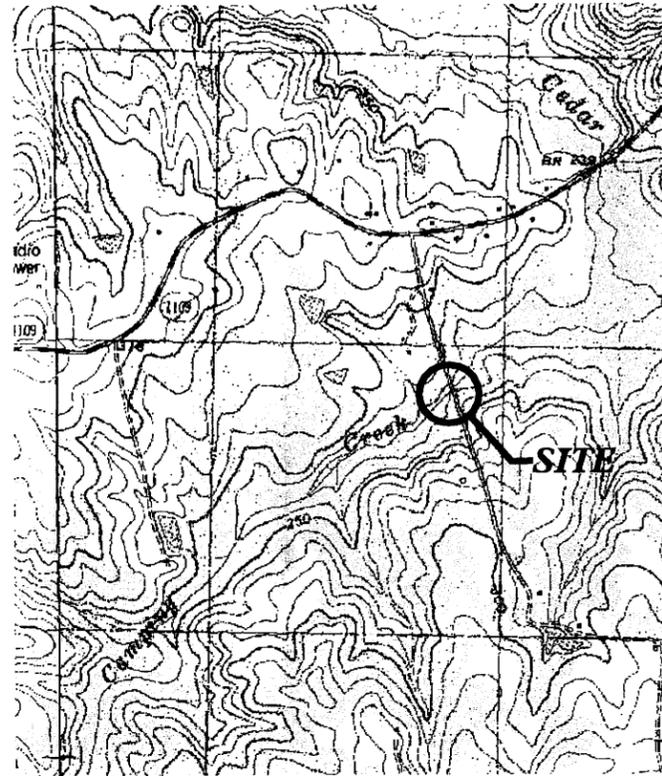
CONTRACT: TIP PROJECT: B-4114
 30-MAY-2008 15:00
 quills\permits-env\coment\drawings\b4114_hyd-prm-tsh.dgn
 snar.dgn AT 11:23:33

CONTRACT: TIP PROJECT: B-4114

CONTRACT:



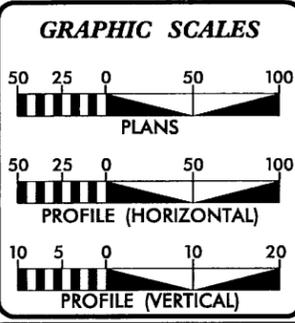
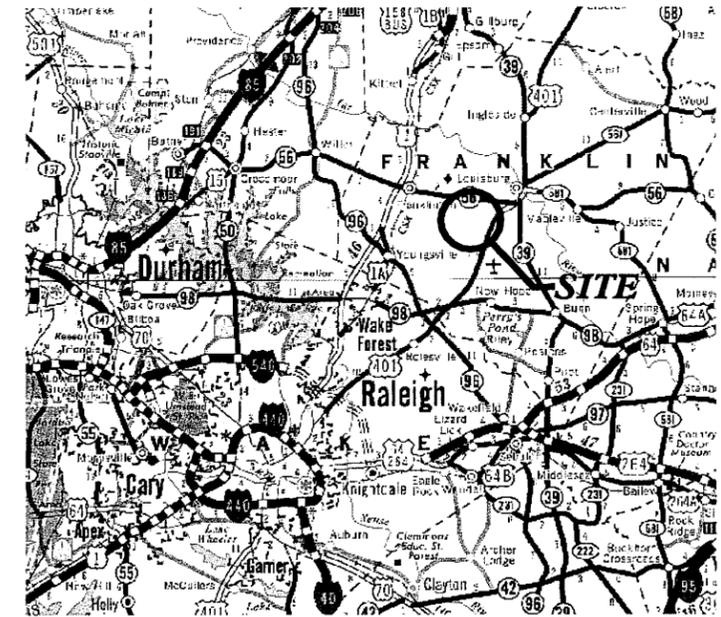
VICINITY MAP



LOUISBURG QUAD MAP

WETLAND PERMIT SITE AND LOCATION MAPS

Permit Drawing
 Sheet 1 of 7



DESIGN DATA

ADT 2009	=	350 VPD
ADT 2030	=	700 VPD
DHV	=	10 %
D	=	60 %
* T	=	3 %
V	=	60 MPH
* (TTST 1% + DUAL 2%)		
FUNC. CLASS.	=	RURAL LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4114	=	0.148 MILE
LENGTH STRUCTURE TIP PROJECT B-4114	=	0.013 MILE
TOTAL LENGTH TIP PROJECT B-4114	=	0.161 MILE

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

2006 STANDARD SPECIFICATIONS RIGHT OF WAY DATE: <u>MARCH 7, 2008</u> LETTING DATE: <u>MARCH 17, 2009</u>	GLENN W. MUMFORD, P.E. PROJECT ENGINEER JEFFREY L. TEAGUE, P.E. PROJECT DESIGN ENGINEER
--	--

HYDRAULICS ENGINEER

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

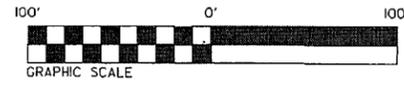
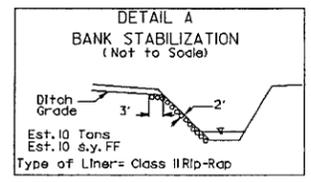
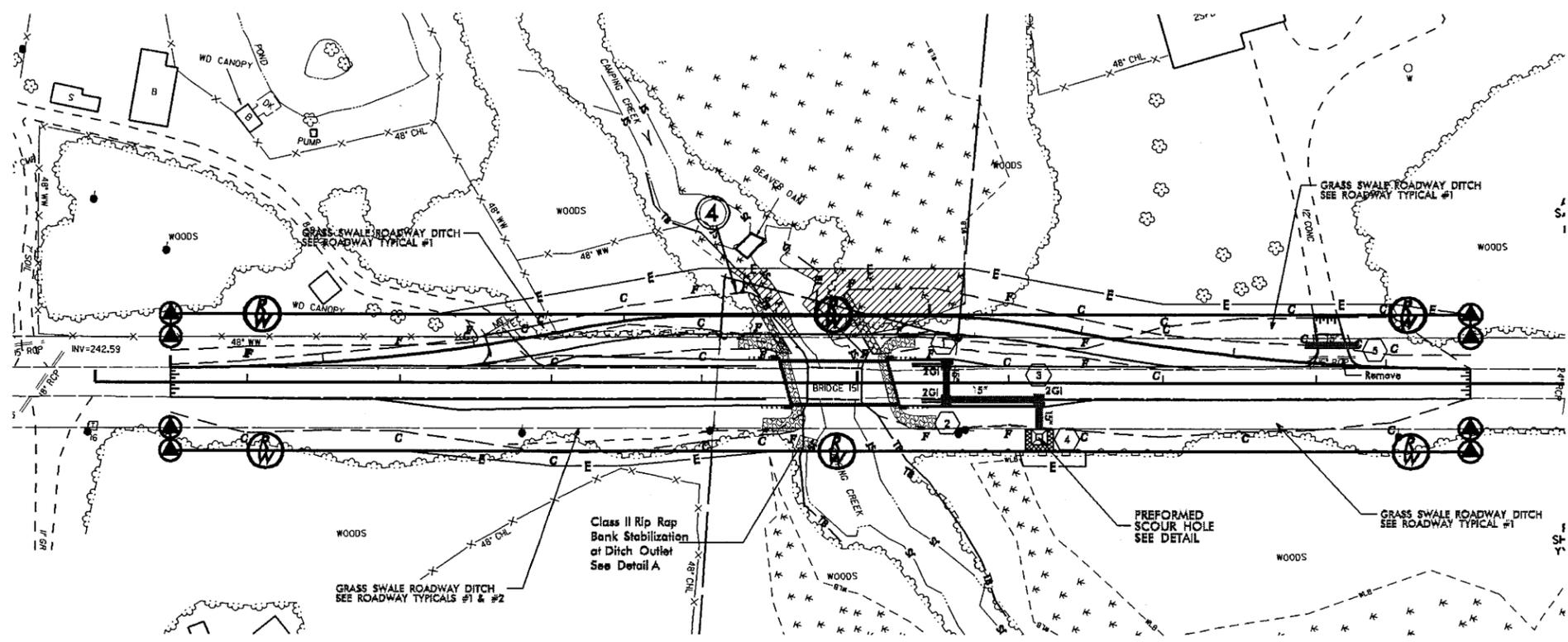
DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER
 P.E.

B-4114	
HWY SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

Permit Drawing
Sheet 2 of 7

WETLAND IMPACTS



DENOTES TEMPORARY
FILL IN WETLAND

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
FRANKLIN COUNTY
PROJECT: 33469.1.1 (B-4114)
BRIDGE NO. 151
ON SR. 1146
OVER CAMPING CREEK
 SHEET OF

REVISIONS

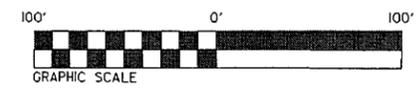
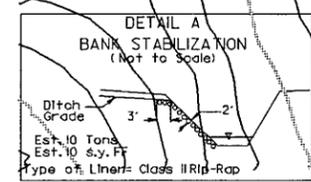
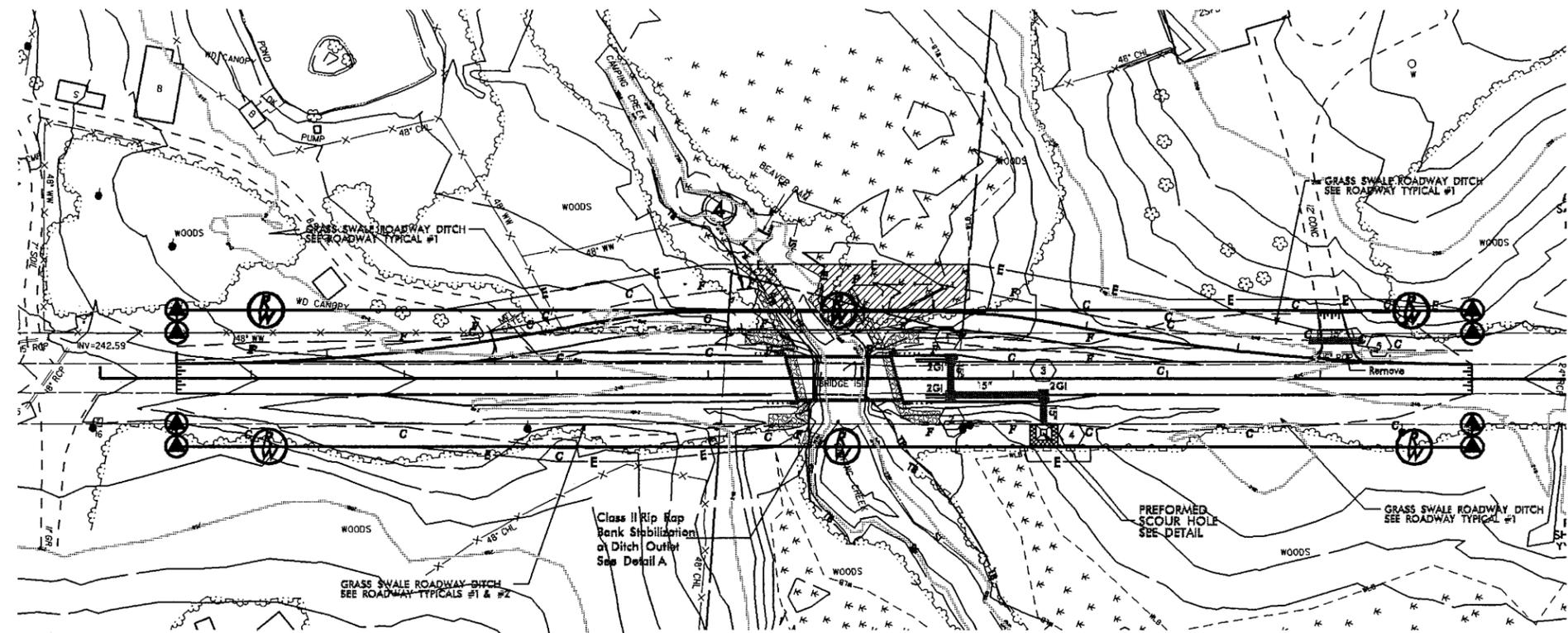
02-JUL-2008 16:29
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8/17

PROJECT REFERENCE NO. B-4114		SHEET NO.	
RW SHEET NO.		HYDRAULICS	
ROADWAY DESIGN ENGINEER		ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

Permit Drawing
Sheet 3 of 7

WETLAND IMPACTS



DENOTES TEMPORARY FILL IN WETLAND

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
FRANKLIN COUNTY

PROJECT: 33469.1.1 (B-4114)
BRIDGE NO. 151
ON SR. 1146
OVER CAMPING CREEK

SHEET OF

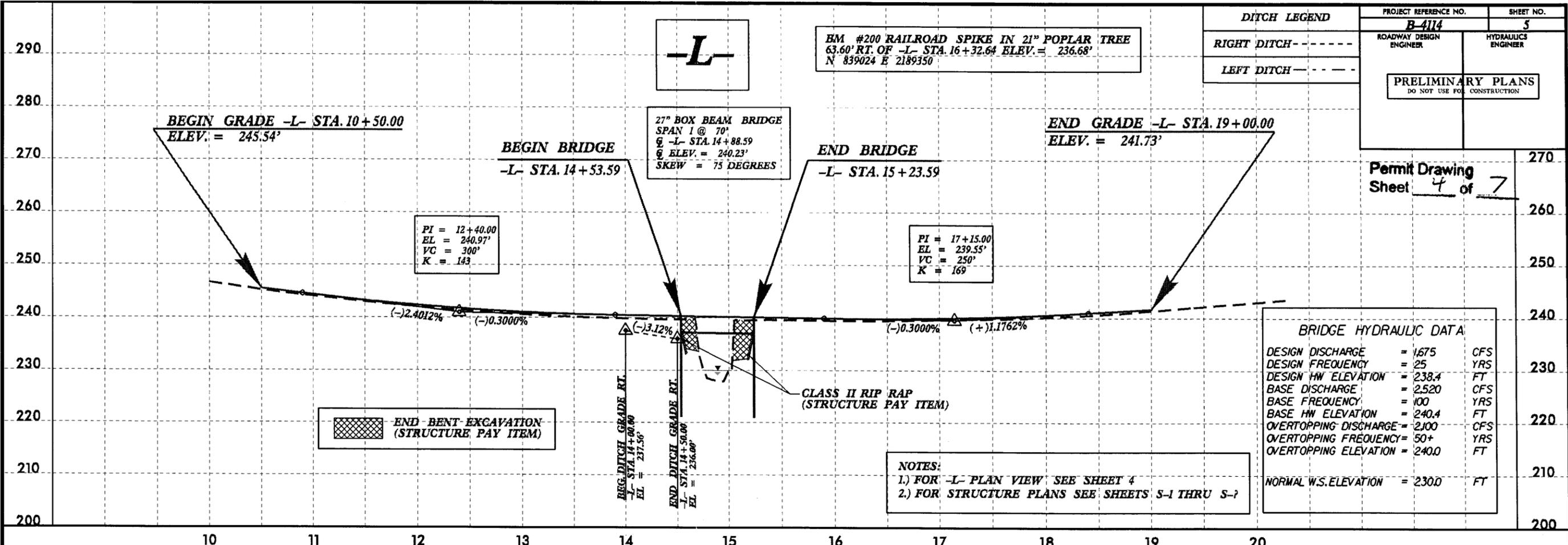
REVISIONS

8/17/9

02-JUL-2008 16:27
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5/28/99

PROJECT REFERENCE NO. B-4114		SHEET NO. 5	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			



BM #200 RAILROAD SPIKE IN 21" POPLAR TREE
63.60' RT. OF -L- STA. 16+32.64 ELEV. = 236.68'
N 839024 E 2189350

-L-

27" BOX BEAM BRIDGE
SPAN 1 @ 70'
SKEW = 75 DEGREES
ELEV. = 240.23'

END GRADE -L- STA. 19+00.00
ELEV. = 241.73'

PI = 12+40.00
EL = 240.97'
VC = 300'
K = 143

PI = 17+15.00
EL = 239.55'
VC = 250'
K = 169

END BENT EXCAVATION
(STRUCTURE PAY ITEM)

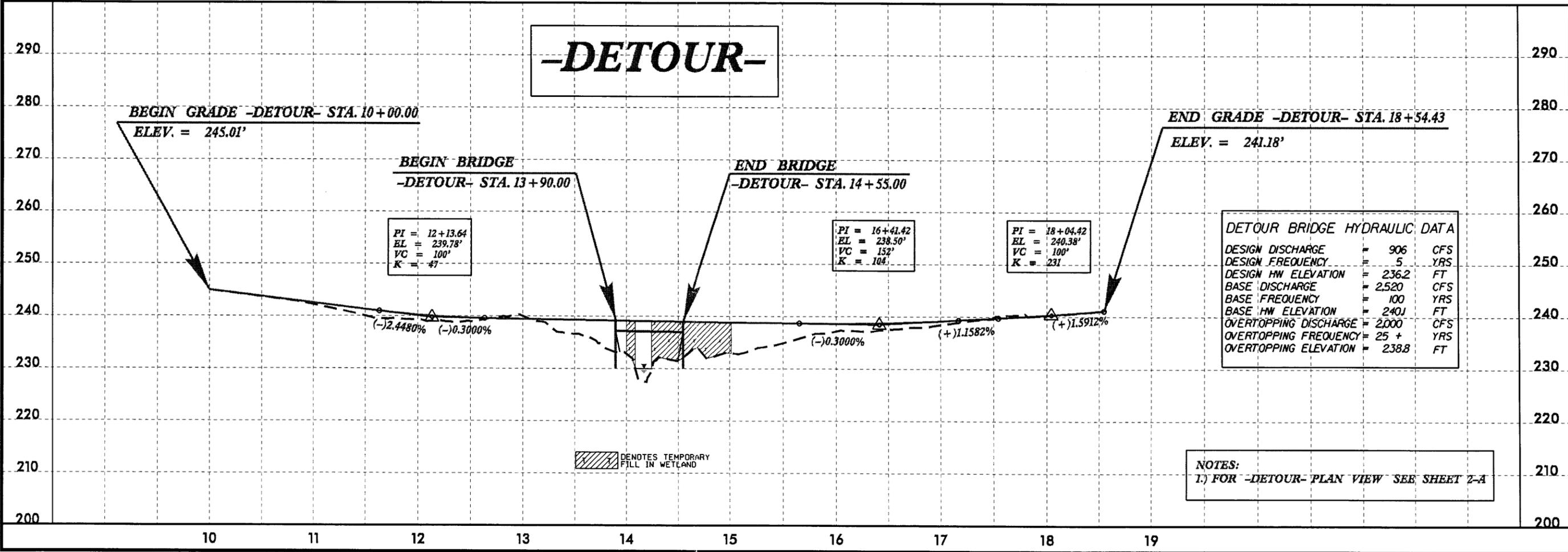
CLASS II RIP RAP
(STRUCTURE PAY ITEM)

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1675	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 238.4	FT
BASE DISCHARGE	= 2520	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 240.4	FT
OVERTOPPING DISCHARGE	= 2100	CFS
OVERTOPPING FREQUENCY	= 50+	YRS
OVERTOPPING ELEVATION	= 240.0	FT
NORMAL W.S. ELEVATION	= 230.0	FT

NOTES:
1.) FOR -L- PLAN VIEW SEE SHEET 4
2.) FOR STRUCTURE PLANS SEE SHEETS S-1 THRU S-?

Permit Drawing
Sheet **4** of **7**



-DETOUR-

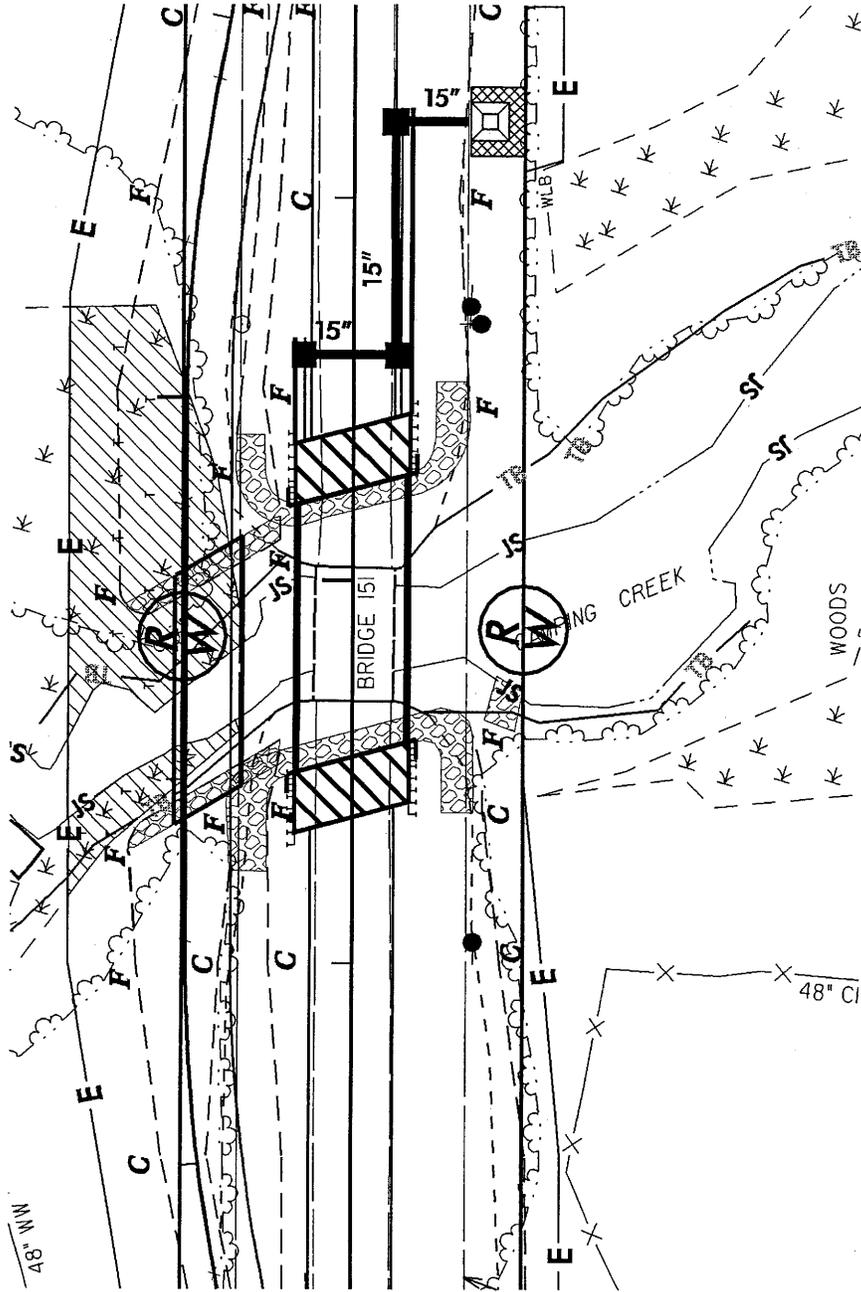
DETOUR BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 906	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 236.2	FT
BASE DISCHARGE	= 2520	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 240.1	FT
OVERTOPPING DISCHARGE	= 2000	CFS
OVERTOPPING FREQUENCY	= 25 +	YRS
OVERTOPPING ELEVATION	= 238.8	FT

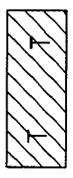
NOTES:
1.) FOR -DETOUR- PLAN VIEW SEE SHEET 2-A

DENOTES TEMPORARY
FILL IN WETLAND

07-JUL-2008 10:04
r:\hydr\autics\permits\environmental\drawings\b4114_hyd-prm-pf1.dgn
5/28/99



WETLAND IMPACTS ENLARGEMENT

 DENOTES TEMPORARY
FILL IN WETLAND

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
FRANKLIN COUNTY

PROJECT: 33469.1.1 (B-4114)
BRIDGE NO. 151
ON SR. 1146
OVER CAMPING CREEK

SHEET 5 OF 7

PROPERTY OWNERS
NAMES AND ADDRESSES

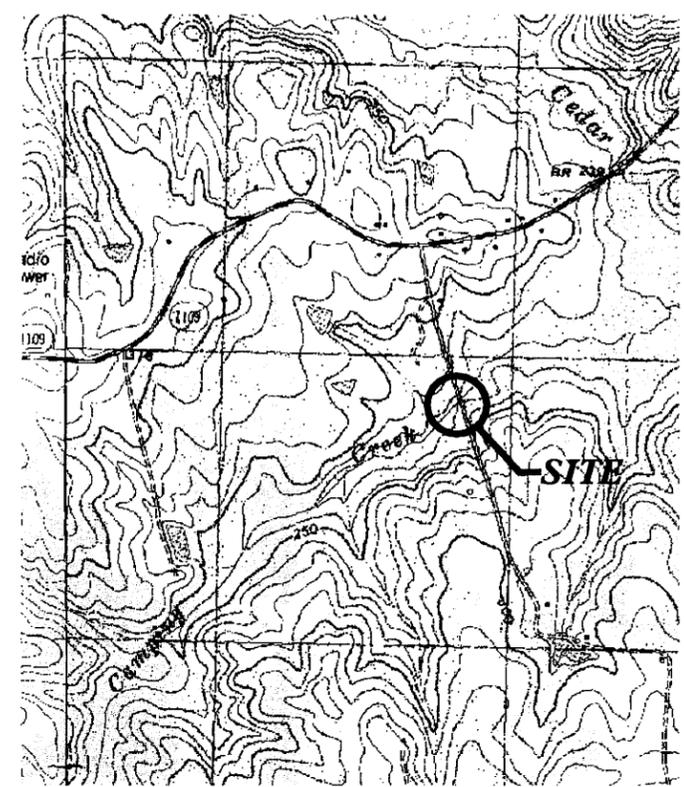
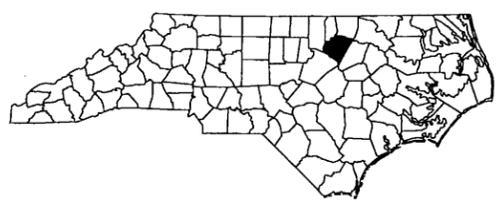
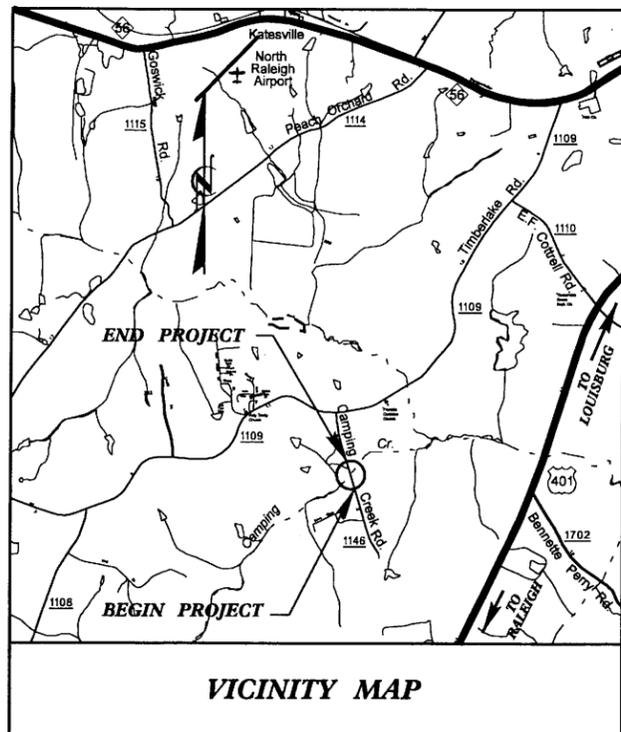
PARCEL NO.	NAME	ADDRESS
1	Burt H. Pearson III	241 Camping Creek Road Franklinton NC 27525
3	Margaret M. Mulholland	228 Camping Creek Road Franklinton NC 27525
4	Dupree and others	1051 Timberlake Road Franklinton NC 27525
5	Alvin and Sandra Moss	154 Camping Creek Road Franklinton NC 27525

NCDOT
DIVISION OF HIGHWAYS
FRANKLIN COUNTY
PROJECT: 33469.1.1 (B-4114)
BRIDGE NO. 151
ON SR. 1146
OVER CAMPING CREEK

08/08/09

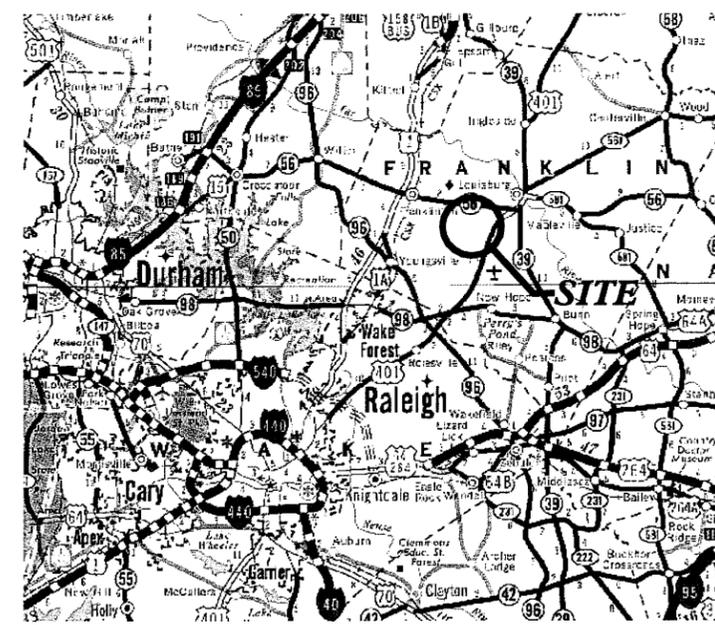
TIP PROJECT: B-414

CONTRACT:

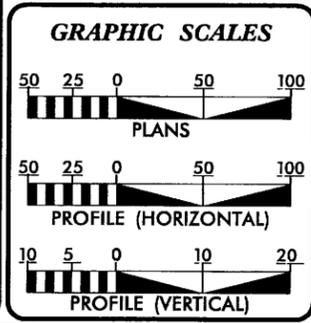


BUFFER PERMIT SITE AND LOCATION MAPS

Buffer Drawing
Sheet 1 of 5



28-MAY-2008 10:48
s:\permits_environmental\drawings\b414_hyd.prm.tsh_buffer.dgn
smcchan AT 11:23:38



DESIGN DATA

ADT 2009	=	350 VPD
ADT 2030	=	700 VPD
DHV	=	10 %
D	=	60 %
* T	=	3 %
V	=	60 MPH
* (TTST 1% + DUAL 2%)		
FUNC. CLASS.	=	RURAL LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-414	=	0.148 MILE
LENGTH STRUCTURE TIP PROJECT B-414	=	0.013 MILE
TOTAL LENGTH TIP PROJECT B-414	=	0.161 MILE

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	<u>GLENN W. MUMFORD, P.E.</u> PROJECT ENGINEER
LETTING DATE:	<u>JEFFREY L. TEAGUE, P.E.</u> PROJECT DESIGN ENGINEER

MARCH 7, 2008
MARCH 17, 2009

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.
STATE HIGHWAY DESIGN ENGINEER

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

P.E.
STATE HIGHWAY DESIGN ENGINEER

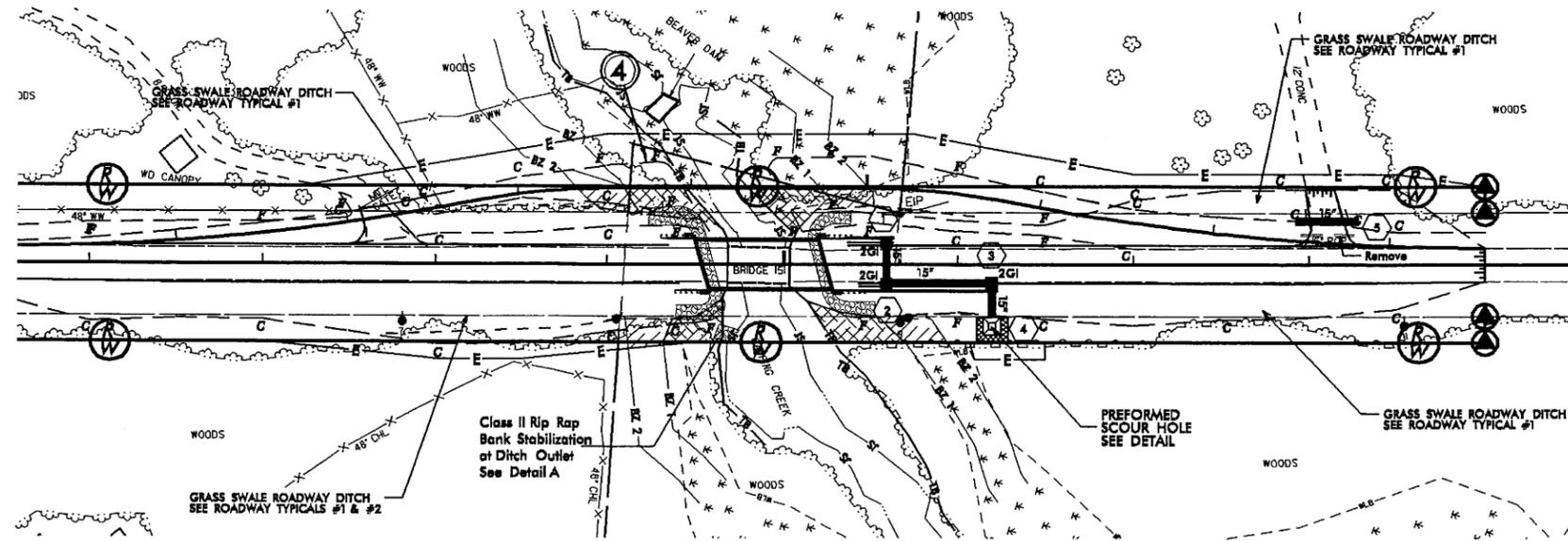
B-4114	
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

Scale 2" = 5'

BUFFER IMPACTS

GRASS SWALE DATA
 DA= 0.2ac.
 SLOPE= 0.4%
 L REQ.= 20ft.
 L PRO.= 100ft.
 Q2= 0.5 cfs
 V2= 0.8 fps
 D2= 0.4 ft.
 Q10= 0.6 cfs
 V10= 0.9 fps
 D10= 0.5 ft.

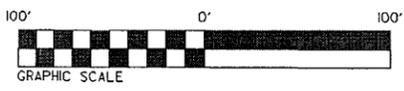
GRASS SWALE DATA
 DA= 0.9ac.
 SLOPE= 1%
 L REQ.= 90ft.
 L PRO.= 150ft.
 Q2= 1.2 cfs
 V2= 1.3 fps
 D2= 0.4 ft.
 Q10= 1.8 cfs
 V10= 1.9 fps
 D10= 0.5 ft.



GRASS SWALE DATA
 DA= 2.3ac.
 SLOPE= 0.4%
 L REQ.= 230ft.
 L PRO.= 430ft.
 Q2= 1.2 cfs
 V2= 1.0 fps
 D2= 0.6 ft.
 Q10= 2.1 cfs
 V10= 1.1 fps
 D10= 0.7 ft.

PREFORMED SCOUR HOLE DATA
 Q10= 0.6 cfs

GRASS SWALE DATA
 DA= 0.3ac.
 SLOPE= 1%
 L REQ.= 30 ft.
 L PRO.= 250 ft.
 Q2= 0.7 cfs
 V2= 1.2 fps
 D2= 0.4 ft.
 Q10= 1.0 cfs
 V10= 1.4 fps
 D10= 0.5 ft.



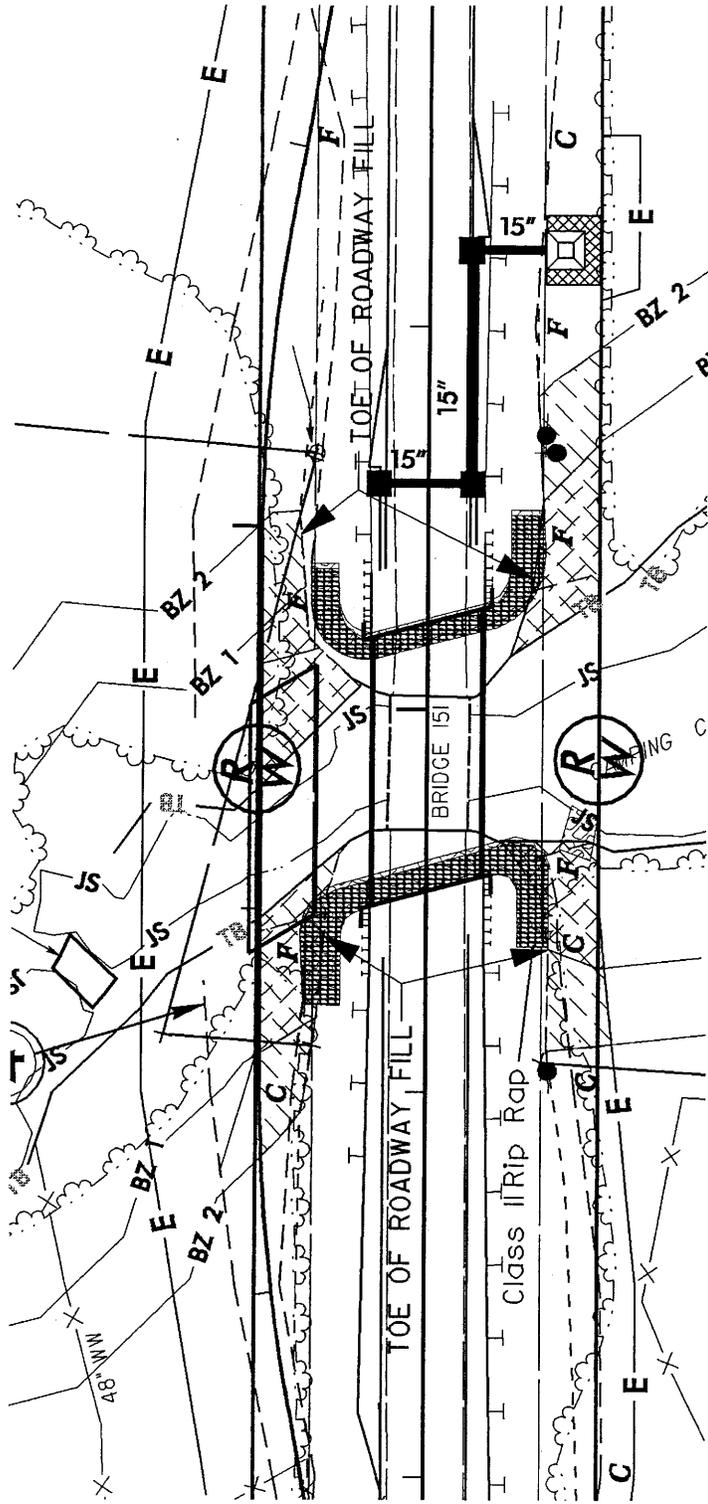
- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
FRANKLIN COUNTY
PROJECT: 33469.1.1 (B-4114)
BRIDGE NO. 151
ON SR. 1146
OVER CAMPING CREEK
 SHEET OF

REVISIONS

26-JUN-2008 14:02 C:\hyd\autoback\environmental\drawings\4114_hyd_prm_buf.dgn

8/174



-L- BUFFER IMPACTS ENLARGEMENT



ALLOWABLE IMPACTS ZONE 1



ALLOWABLE IMPACTS ZONE 2



N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
FRANKLIN COUNTY

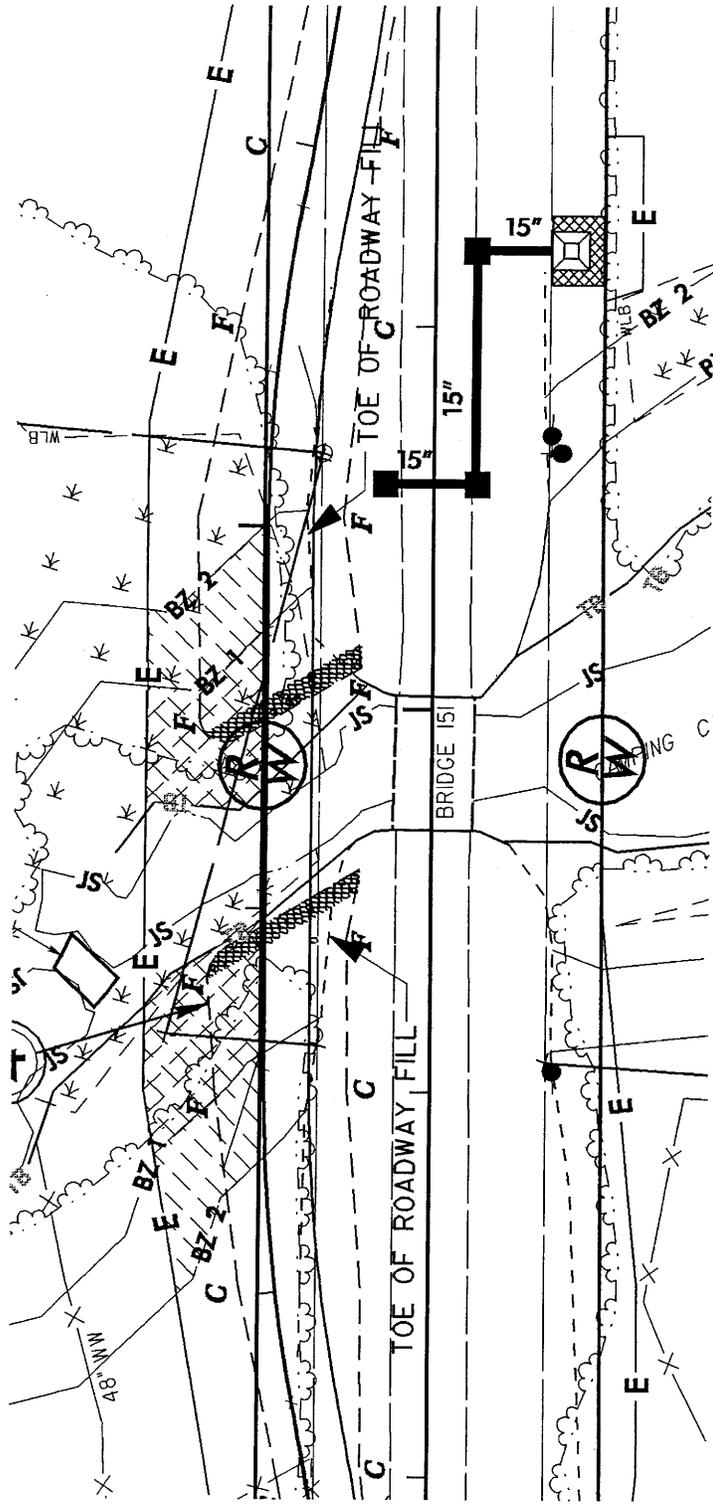
PROJECT: 33469.1.1 (B-4114)

BRIDGE NO. 151

ON SR. 1146

OVER CAMPING CREEK

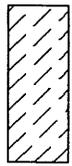
SHEET 3 OF 5



DETOUR BUFFER IMPACTS ENLARGEMENT



ALLOWABLE IMPACTS ZONE 1



ALLOWABLE IMPACTS ZONE 2



N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 FRANKLIN COUNTY
 PROJECT: 33469.1.1 (B-4114)
 BRIDGE NO. 151
 ON SR. 1146
 OVER CAMPING CREEK

CONTRACT: TIP PROJECT: B-4114

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

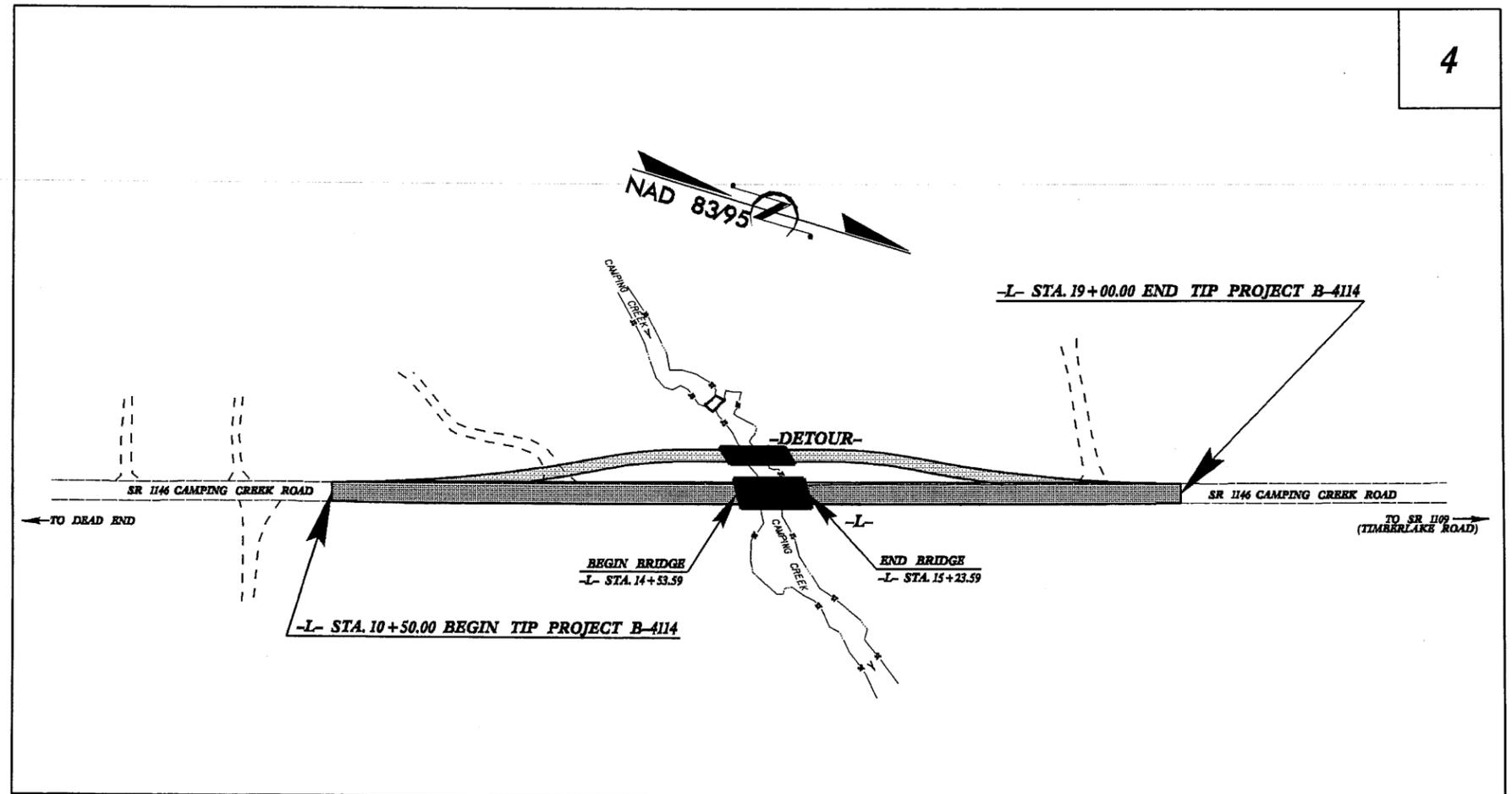
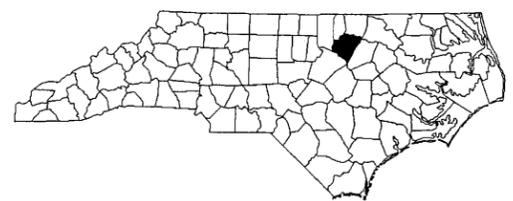
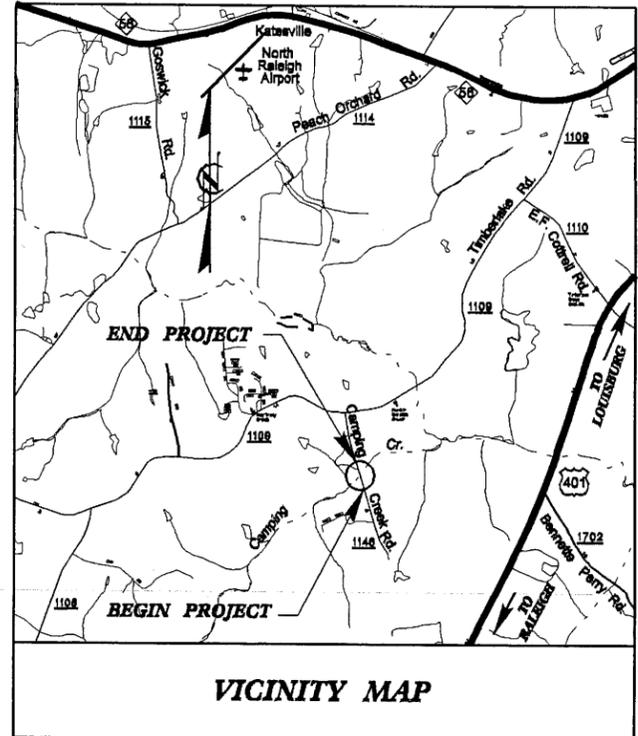
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

FRANKLIN COUNTY

**LOCATION: BRIDGE NO. 151 OVER CAMPING CREEK AND
APPROACHES ON SR 1146 (CAMPING CREEK ROAD)**

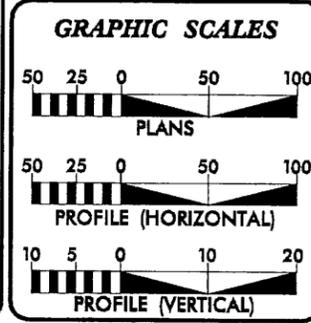
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4114	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33469.1.1	BRZ-1146(5)	P.E.	
33469.2.1	BRZ-1146(5)	RW & UTIL.	



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



DESIGN DATA

ADT 2009	=	350 VPD
ADT 2030	=	700 VPD
DHV	=	10 %
D	=	60 %
*T	=	3 %
V	=	60 MPH
* (TTST 1% + DUAL 2%)		
FUNC. CLASS.	=	RURAL LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4114	=	0.148 MILE
LENGTH STRUCTURE TIP PROJECT B-4114	=	0.013 MILE
TOTAL LENGTH TIP PROJECT B-4114	=	0.161 MILE

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	GLENN W. MUMFORD, P.E. PROJECT ENGINEER
MARCH 7, 2008	
LETTING DATE:	JEFFREY L. TEAGUE, P.E. PROJECT DESIGN ENGINEER
MARCH 17, 2009	

HYDRAULICS ENGINEER

SIGNATURE: P.E.
ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.
STATE HIGHWAY DESIGN ENGINEER

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

P.E.
STATE HIGHWAY DESIGN ENGINEER

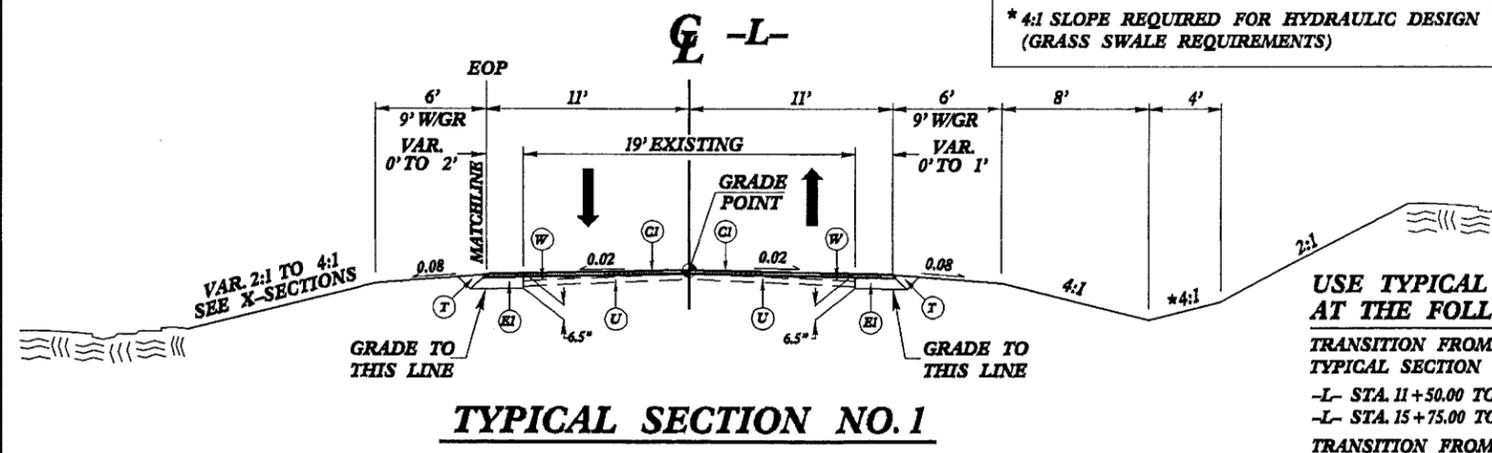
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6/2/99

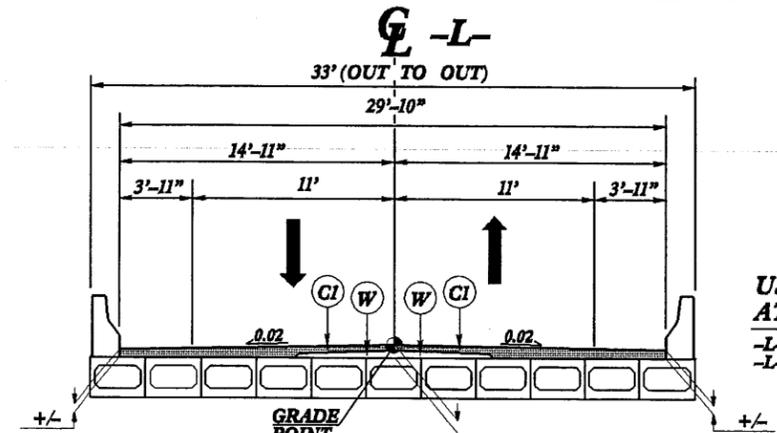
PROJECT REFERENCE NO. B-414	SHEET NO. 2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 2½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 1" IN DEPTH OR GREATER THAN 1½" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
J1	PROP. 6" AGGREGATE BASE COURSE.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

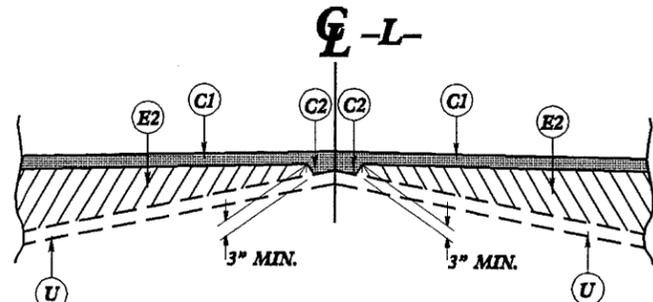


USE TYPICAL SECTION NO. 1 AT THE FOLLOWING LOCATIONS:
 TRANSITION FROM EXISTING @ -L- STA. 10+50.00 TO TYPICAL SECTION NO. 1 @ -L- STA. 11+50.00
 -L- STA. 11+50.00 TO 14+00.00
 -L- STA. 15+75.00 TO 18+00.00
 TRANSITION FROM TYPICAL SECTION NO. 1 @ -L- STA. 18+00.00 TO EXISTING @ -L- STA. 19+00.00

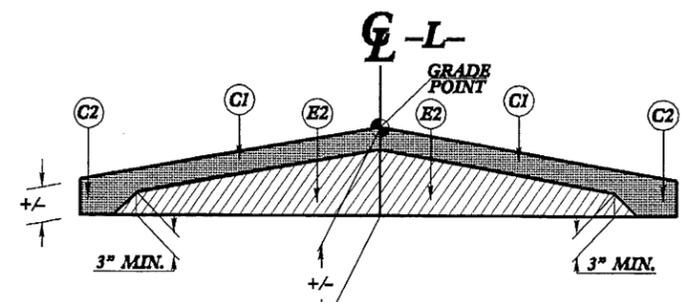


USE TYPICAL SECTION NO. 4 AT THE FOLLOWING LOCATION:
 -L- STA. 14+53.59 (BEGIN BRIDGE) TO
 -L- STA. 15+23.59 (END BRIDGE)

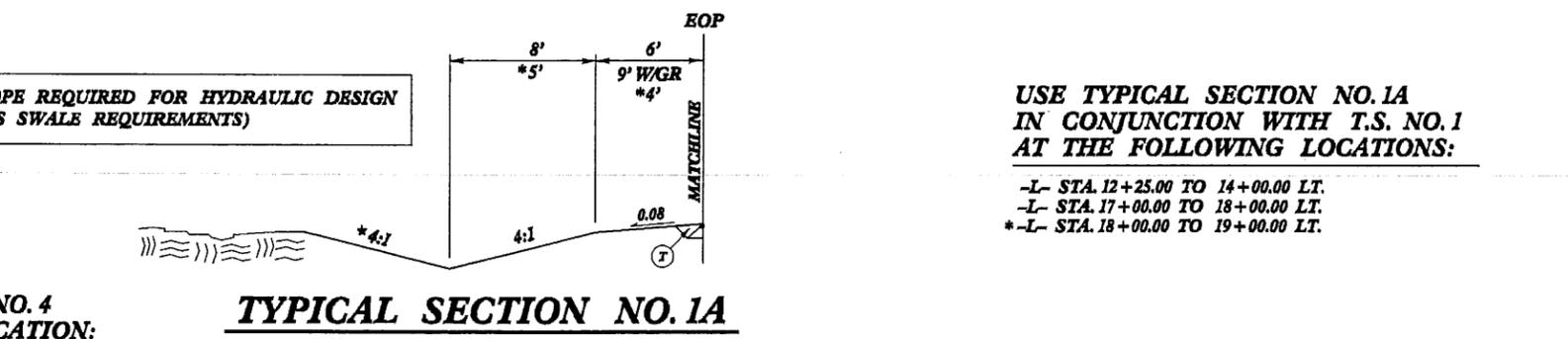
TYPICAL SECTION NO. 4
 BOX BEAM BRIDGE
 SEE STRUCTURE PLANS



DETAIL SHOWING METHOD OF WEDGING
 USE IN CONJUNCTION WITH TYPICAL SECTION NO. 1

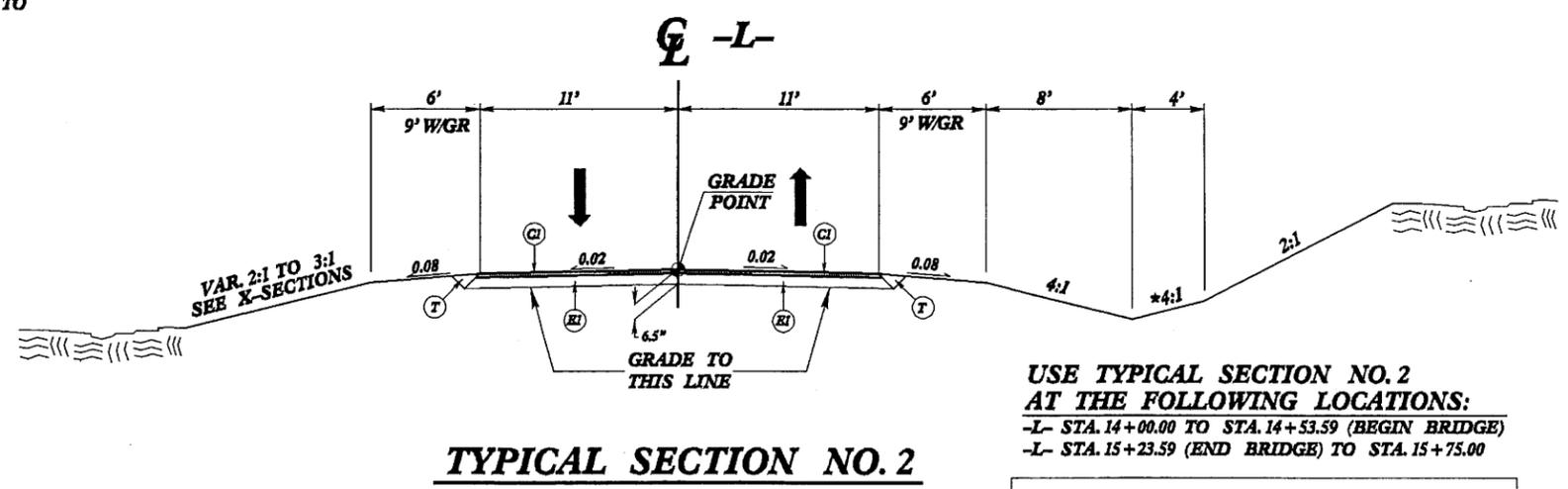


DETAIL SHOWING METHOD OF WEDGING ON BRIDGE
 USE IN CONJUNCTION WITH TYPICAL SECTION NO. 4



USE TYPICAL SECTION NO. 1A IN CONJUNCTION WITH T.S. NO. 1 AT THE FOLLOWING LOCATIONS:
 -L- STA. 12+25.00 TO 14+00.00 LT.
 -L- STA. 17+00.00 TO 18+00.00 LT.
 * -L- STA. 18+00.00 TO 19+00.00 LT.

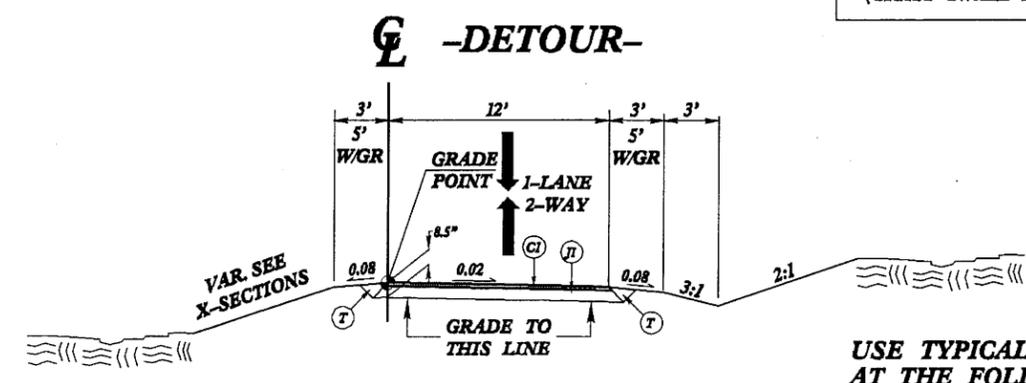
TYPICAL SECTION NO. 1A



USE TYPICAL SECTION NO. 2 AT THE FOLLOWING LOCATIONS:
 -L- STA. 14+00.00 TO STA. 14+53.59 (BEGIN BRIDGE)
 -L- STA. 15+23.59 (END BRIDGE) TO STA. 15+75.00

* 4:1 SLOPE REQUIRED FOR HYDRAULIC DESIGN (GRASS SWALE REQUIREMENTS)

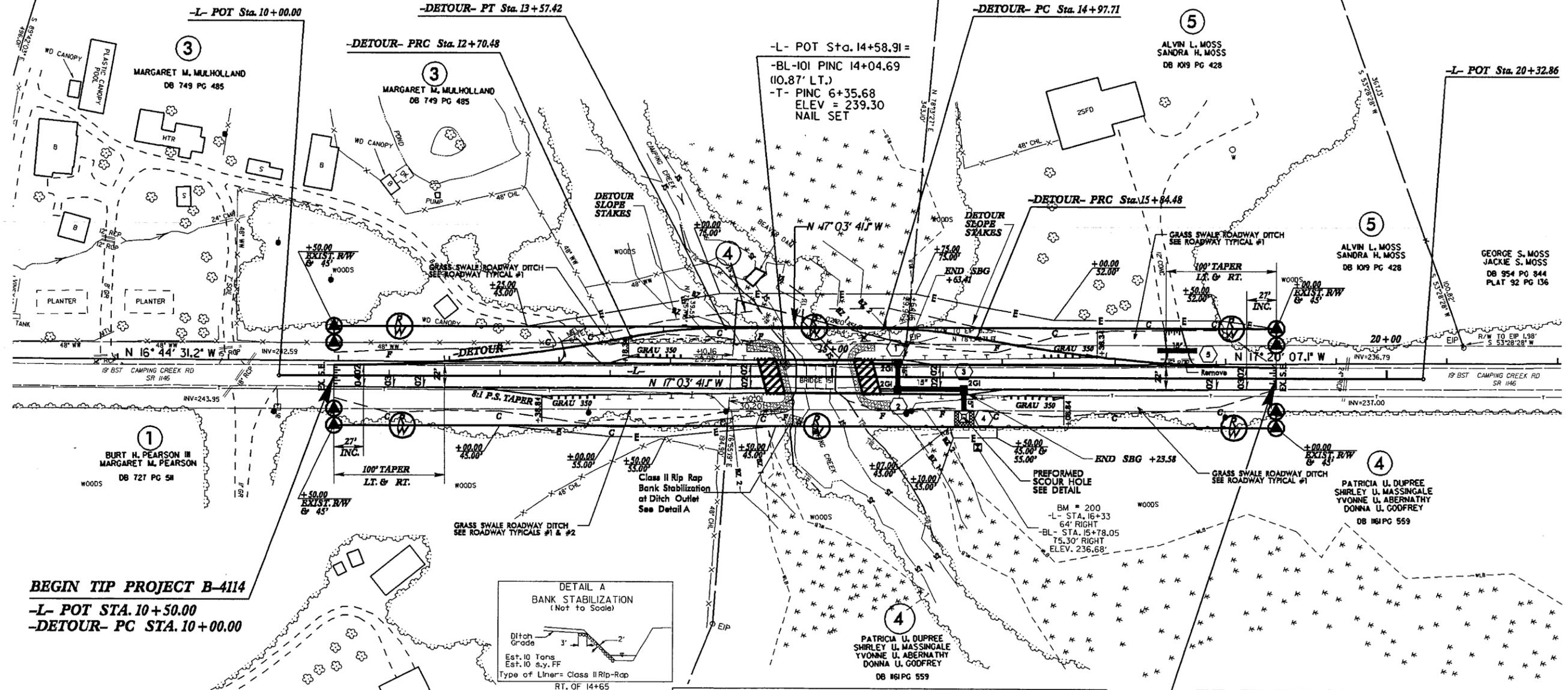
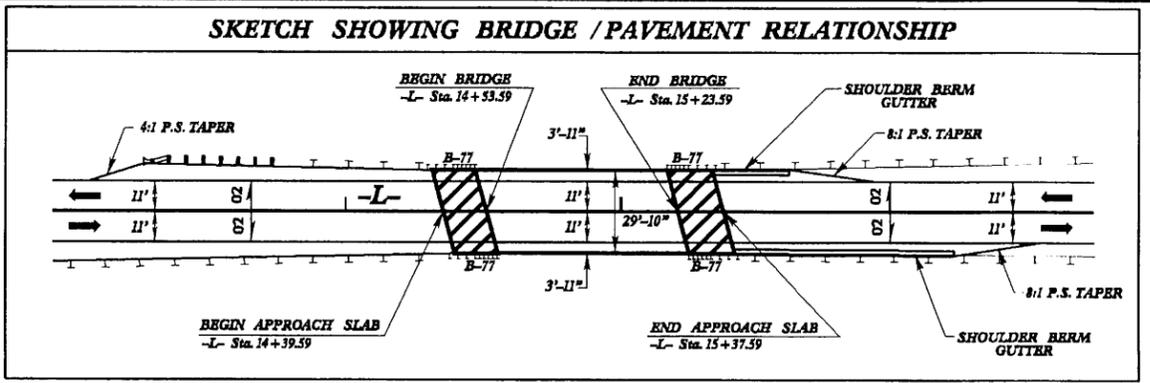
TYPICAL SECTION NO. 2



USE TYPICAL SECTION NO. 3 AT THE FOLLOWING LOCATIONS:
 -DETOUR- STA. 10+00.00 TO STA. 13+90.00 (BEGIN BRIDGE)
 -DETOUR- STA. 14+55.00 (END BRIDGE) TO STA. 18+54.43

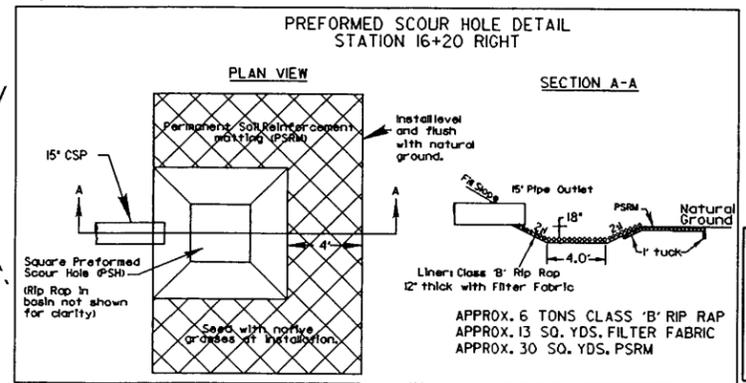
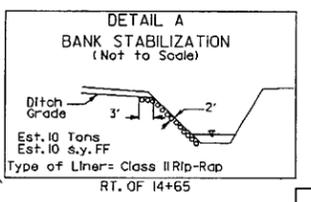
TYPICAL SECTION NO. 3

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BEGIN TIP PROJECT B-4114
-L- POT STA. 10+50.00
-DETOUR- PC STA. 10+00.00

END TIP PROJECT B-4114
-L- POT STA. 19+00.00
-DETOUR- PT STA. 18+54.42



-DETOUR-			
PI Sta 11+35.66	PI Sta 13+14.08	PI Sta 15+41.23	PI Sta 17+19.87
N 17° 03' 41" W (BACK)	Δ = 11° 04' 10.2" (RT)	Δ = 11° 02' 51.8" (RT)	N 17° 03' 41" W (AHEAD)
Δ = 11° 04' 10.2" (LT)	D = 12' 43" 56.6"	D = 12' 43" 56.6"	D = 12' 43" 51.8" (LT)
D = 4' 05" 33.2"	L = 86.94'	L = 86.77'	D = 4' 05" 33.2"
L = 270.48'	T = 43.61'	T = 43.52'	L = 269.95'
T = 135.66'	R = 450.00'	R = 450.00'	T = 135.39'
R = 1,400.00'	SE = 0.02	SE = 0.02	R = 1,400.00'
SE = 0.02	RO = SEE PLANS	RO = SEE PLANS	SE = 0.02
RO = SEE PLANS			RO = SEE PLANS

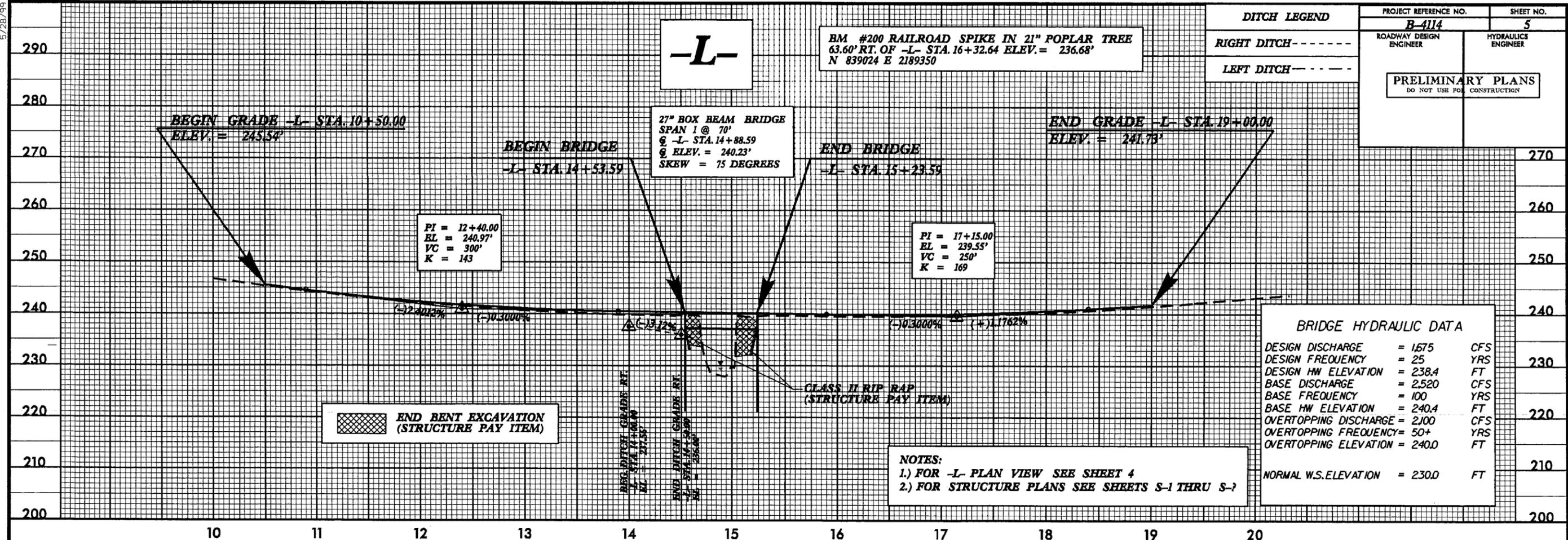
- NOTES:**
- 1.) FOR **-L- PROFILE** SEE SHEET 5
 - 2.) FOR **-DETOUR- PLAN VIEW** SEE SHEET 2-A
 - 3.) FOR **-DETOUR- PROFILE** SEE SHEET 5
 - 4.) ALL DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE ON PLANS.
 - 5.) FOR STRUCTURE PLANS SEE SHEETS S-1 THRU S-7

REVISIONS

B171799

5/28/99

DITCH LEGEND	PROJECT REFERENCE NO.	SHEET NO.
	B-4114	5
RIGHT DITCH - - - - -	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
LEFT DITCH - - - - -	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



BM #200 RAILROAD SPIKE IN 2" POPLAR TREE
63.60' RT. OF -L- STA. 16+32.64 ELEV. = 236.68'
N 839024 E 2189350

-L-

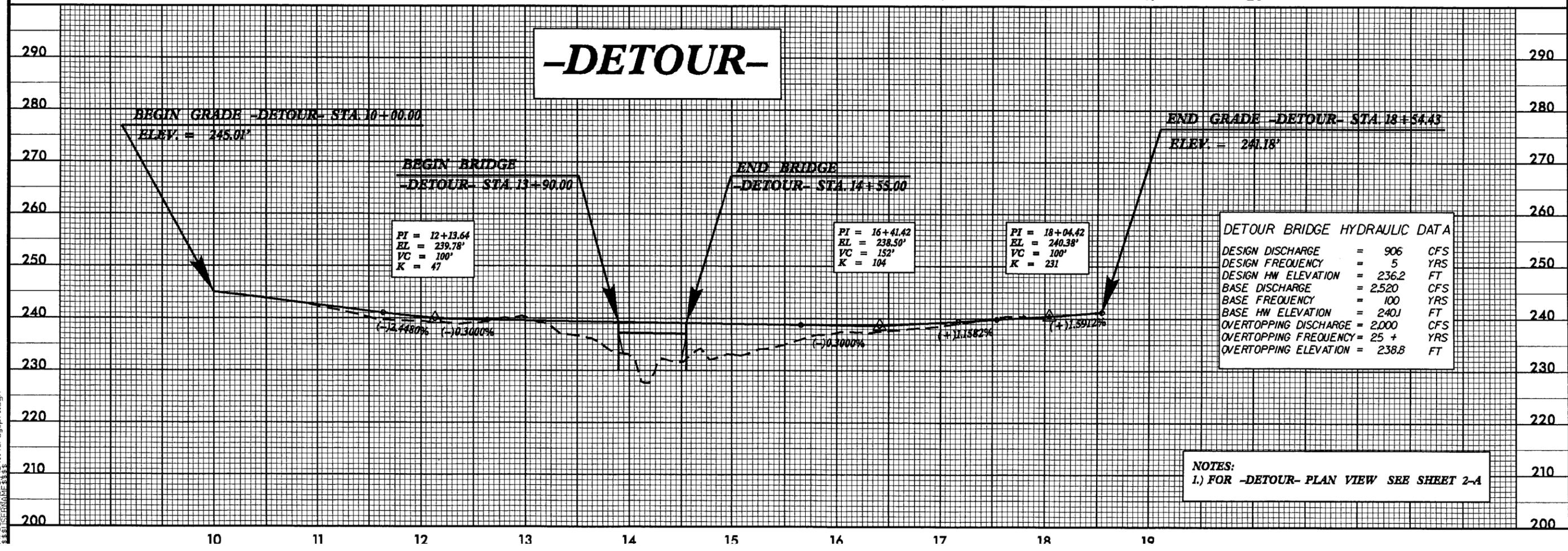
PI = 12+40.00
EL = 240.97'
VC = 300'
K = 143

PI = 17+15.00
EL = 239.55'
VC = 250'
K = 169

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1675	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 238.4	FT
BASE DISCHARGE	= 2520	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 240.4	FT
OVERTOPPING DISCHARGE	= 2100	CFS
OVERTOPPING FREQUENCY	= 50+	YRS
OVERTOPPING ELEVATION	= 240.0	FT
NORMAL W.S. ELEVATION	= 230.0	FT

NOTES:
1.) FOR -L- PLAN VIEW SEE SHEET 4
2.) FOR STRUCTURE PLANS SEE SHEETS S-1 THRU S-?



-DETOUR-

DETOUR BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 906	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 236.2	FT
BASE DISCHARGE	= 2520	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 240.1	FT
OVERTOPPING DISCHARGE	= 2000	CFS
OVERTOPPING FREQUENCY	= 25 +	YRS
OVERTOPPING ELEVATION	= 238.8	FT

NOTES:
1.) FOR -DETOUR- PLAN VIEW SEE SHEET 2-A

3-MAY-2008 15:56
C:\WORK\PROJECTS\B-4114-rdy-pl.dgn

**Franklin County
Bridge No. 151 on SR 1146
Over Camping Creek
Federal Project BRZ-1146 (5)
State Project 8.2360801
WBS 33469.1.1
TIP No. B-4114**

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

Approved:

2/14/06
DATE

Gregory J. Thorpe, PhD
FOR Gregory J. Thorpe, PhD
Environmental Management Director, PDEA

2/21/06
DATE

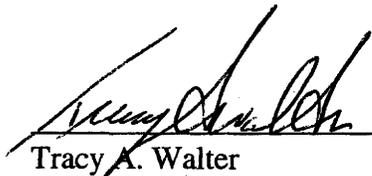
John F. Sullivan, III
for John F. Sullivan, III
Division Administrator, FHWA

**Franklin County
Bridge No. 151 on SR 1146
Over Camping Creek
Federal Project BRZ-1146 (5)
State Project 8.2360801
WBS 33469.1.1
TIP No. B-4114**

CATEGORICAL EXCLUSION

Documentation Prepared in
Project Development and Environmental Analysis Branch By:

February 2006



Tracy A. Walter
Project Planning Engineer



John L. Williams, PE, Unit Head
Bridge Replacement Planning Unit

Franklin County
Bridge No. 151 on SR 1146
Over Camping Creek
Federal Project BRZ-1146(5)
State Project 8.2360801
WBS 33469.1.1
TIP No. B-4114

INTRODUCTION: Bridge No. 151 is included in the latest approved North Carolina Department of Transportation (NCDOT) Transportation Improvement Program (TIP) and is eligible for the Federal-Aid Bridge Replacement and Rehabilitation Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal "Categorical Exclusion".

I. PURPOSE AND NEED STATEMENT

Bridge Maintenance Records indicate the bridge has a sufficiency rating of 59.6 out of a possible 100, a structural appraisal of 5 out of a possible 9, and a deck geometry appraisal of 3 out of a possible 9. The existing structure has a higher than expected sufficiency rating and structural appraisal from the addition of temporary support bents. Therefore, based on Federal Highway Administration (FHWA) standards, the structure is still to be considered structurally deficient and functionally obsolete making the bridge eligible for the FHWA's Highway Bridge Replacement and Rehabilitation Program. The replacement of this inadequate structure will result in safer traffic operations.

Bridge No. 151 is composed of both a timber substructure and a timber superstructure which typically do not last beyond 40 to 50 years of age due to the natural deterioration rates of wood. Rehabilitation of a timber structure is generally practical only when a few members are damaged or prematurely deteriorated. The condition of Bridge No. 151 has deteriorated to the point that additional supports have been added which makes rehabilitation impractical. Replacement of the bridge will result in safer traffic operations.

II. EXISTING CONDITIONS

The project is located in the central area of Franklin County between Louisburg and Youngsville (see Figure 1). The project vicinity is predominantly rural in nature with a mixture of residential homes, agriculture, and forestry operations.

SR 1146 is classified as a rural local route in the Statewide Functional Classification System and it is not a National Highway System Route. This route is not a designated bicycle route and there is no indication that an unusual number of bicyclists use this roadway.

In the vicinity of the bridge, SR 1146 has an 18-foot pavement width with grass shoulders that vary between four feet and six feet in width. The roadway grade is in a slight sag vertical curve through the project area. The existing bridge is on a tangent alignment. The roadway is situated approximately 10.0 feet above the creek bed.

Bridge No. 151 is a four span structure that consist of timber decking on timber joists with an asphalt wearing surface. The substructure is composed of timber caps on timber piles and steel crutch bents at mid points of spans 1 and 2. The existing bridge was constructed in 1960. The overall length of the structure is 36 feet. The clear roadway width is 19.1 feet.

Overhead power lines are located on the east side of SR 1146. An underground telephone line is located along the east side of SR 1146 that becomes aerial at the bridge. There are no utilities attached to the existing structure. Utility impacts are expected to be low.

The current traffic volume of 100 vehicles per day (VPD) is expected to increase to 600 VPD by the year 2030. The projected volume includes one percent truck-tractor semi-trailer (TTST) and two percent dual-tired vehicles (DT). The speed limit is 45 miles per hour in the project area. Two school buses cross the bridge daily on their morning and afternoon routes.

There were no accidents reported in the vicinity of Bridge No. 151 during a recent three year period.

III. ALTERNATIVES

A. Project Description

The replacement structure will consist of a bridge approximately 70 feet long with a width sufficient enough to provide for two 11 foot lanes with 3 foot offsets on each side.

The roadway grade of the proposed structure will be slightly higher than the existing grade at this location.

The existing roadway will be widened to a 22 foot pavement width to provide two 11 foot lanes. Six foot unpaved shoulders (nine foot with guardrail) will be provided on each side.

B. Reasonable and Feasible Alternatives

The two alternatives for replacing Bridge No. 151 that were studied are described below.

Alternative 1 (preferred) involves replacement of the structure along the existing roadway alignment. Improvements to the approach roadways will be required for a distance of approximately 310 feet to the north and 260 feet to the south of the structure. Traffic will be maintained onsite with the use of a temporary one-lane detour structure constructed upstream (west) to the existing bridge. The temporary detour structure would need to be approximately 80 feet in length with a roadway elevation approximately the same as the existing structure. Temporary signals will be used to direct traffic during detour use.

Alternative 2 involves replacement of the structure along the existing roadway alignment. Improvements to the approach roadways will be required for a distance of approximately 310 feet to the north and 260 feet to the east of the structure. Traffic will be maintained onsite using the existing structure while utilizing stage construction methods for construction of the proposed bridge.

C. Alternatives Eliminated from Further Consideration

The “do-nothing” alternative will eventually necessitate closure of the bridge. This is not acceptable due to bridge no. 151 providing the only access to residences south of it’s location along SR 1146.

“Rehabilitation” of the existing bridge is not practical due to being composed of timber and the natural deterioration of timber. Additional supports have been added due to the condition of the existing timber structure.

SR 1146 is a dead end road making an offsite detour not possible. An on-site detour to the east was considered and rejected due to the substantial amount of wetlands located in the northeast quadrant of the bridge.

D. Preferred Alternative

Bridge No. 151 will be replaced at the existing location as shown by Alternate 1 in Figure 2. Since SR 1146 is a dead end road an offsite detour is unavailable.

Although the cost and environmental impacts are higher than Alternate 2, by separating the travelling public from the construction area Alternate 1 provides both a safer work zone and a higher degree of public safety.

The NCDOT Division 5 Engineer concurs with the selection of alternative 1 as the preferred alternative.

IV. ESTIMATED COSTS

The estimated costs for the two alternatives are as follows:

	Alternative 1 (Preferred)	Alternative 2
Structure	\$ 166,600	\$ 226,800
Roadway Approaches	\$ 133,100	\$ 151,000
Detour Structure and Approaches	\$ 124,000	- 0 -
Structure Removal	\$ 9,000	\$ 9,000
Misc. & Mob.	\$ 113,300	\$ 93,000
Temporary Signals	\$ 50,000	\$ 50,000
Eng. & Contingencies	\$ 104,000	\$ 95,000
Total Construction Cost	\$ 700,000	\$ 624,800
Right-of-way Costs	\$ 15,000	\$ 15,000
Total Project Cost	\$ 715,000	\$ 639,800

V. NATURAL RESOURCES

INTRODUCTION

The proposed project consists of replacing Bridge No. 151 on SR 1146 over Camping Creek in the central portion of Franklin County, North Carolina.

WATER RESOURCES

The proposed project will impact surface waters of the Tar-Pamlico River Basin, Hydraulic Unit 03020101. The project area is located in sub-basin 03-03-01. Study area waters drain into the Tar River.

Jurisdictional streams located within the study area are Camping Creek and two unnamed tributaries to Camping Creek. Camping Creek has been assigned a best usage classification of C NSW [index #28-29-5]. Neither High Quality Waters (HQW), Water Supplies (WS-I: undeveloped watersheds or WS-II: predominately undeveloped watersheds), nor Outstanding Resource Waters (ORW) occur within 1.0 mi. of project study area. A review of the 303(d) list for North Carolina indicates that Camping Creek in the Tar-Pamlico River Basin is not listed as an impaired waterway.

BIOTIC RESOURCES

Three terrestrial communities exist within the project area. These are dry-mesic oak-hickory forest, headwater forest and maintained/disturbed communities. Three aquatic communities may be impacted by the proposed project. These include Camping Creek and two unnamed tributaries to Camping Creek. Any construction related activities in or near these resources have the potential to impact biological functions.

JURISDICTIONAL TOPICS

Waters of the United States

Camping Creek and its two unnamed tributaries are all considered jurisdictional surface waters under Section 404 of the Clean Water Act. Table 2 below states the possible impacts of each stream within the project corridor. Usually, project construction does not require the use of the entire study area, therefore actual impacts may be considerably less.

Table 2 - Impacts of streams within the study corridor

Stream	Length ft	Stream Status
Camping Creek	400	Perennial
UT 1	75	Intermittent
UT 2	50	Intermittent

Table 3 states the area of each wetland within the study corridor. Usually, project construction does not require the use of the entire study area, therefore actual impacts may be considerably less.

Table 3 - Area of each wetland within the study corridor

Wetland	Area (acre)
Northwest Quadrant	0.23
Northeast Quadrant	1.74
Southwest Quadrant	0.03
Southeast Quadrant	0.26

Jurisdictional surface waters within the project area may be subject to the Tar-Pamlico River Basin Buffer Rules. These Buffer Rules apply to 50-foot wide riparian buffers directly adjacent to surface waters in the Tar-Pamlico River Basin. This rule does not apply to portions of the riparian buffer where a use is existing and ongoing. Any change in land use within the riparian buffer is characterized as an impact. The Nutrient Sensitive Waters Management Strategy and Protection and Maintenance of Existing Riparian Buffers (15 NCAC 02B.0259) provides a designation for uses that cause impacts to riparian buffers within the Tar-Pamlico River Basin.

PERMITS

In accordance with provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344), a Section 404 Nationwide Permit 23 from the USACE is likely to be applicable for all impacts to Waters of the United States resulting from the proposed project. A NWP No. 33 may be required if temporary construction including cofferdams, access and dewatering are required for this project. A North Carolina Division of Water Quality (DWQ) Section 401 Water Quality General Certification is required prior to the issuance of the Section 404 Nationwide 23 and/or NWP 33. The corresponding Certification number for a NWP 23 is #3361 and NWP 33 is #3366. Since this project is located in the Tar-Pamlico River Basin, a Buffer Certification may be required from DWQ for this project.

PROTECTED SPECIES

Plants and animals with federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE) and Proposed Threatened (PT) are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. As of January 29, 2003, the USFWS lists the following federally-protected species for Franklin County. A brief description of each species' characteristics and habitat follows.

Federally – Protected species for Franklin County

SCIENTIFIC NAME	COMMON NAME	STATUS
Alasmidonta heterdon	Dwarf wedge mussel	E
Elliptio steinstansana	Tar spinymussel	E
Rhus michauxii	Michaux's sumac	E

"E" denotes Endangered (a species in danger of extinction throughout all or a significant portion of its range).

Dwarf wedgemussel

Biological Conclusion: May Affect – Not Likely to Adversely Affect (see attached USFWS letter of concurrence)

Stream habitat with substrates including sand and gravel with areas of slow to moderate current area present within the project area. A 14 January 2003 review of the NC Natural heritage Programs database of threatened and endangered species revealed no known populations within 1.0 mi. of the project area.

Tar Spiny mussel

Biological Conclusion: May Affect – Not Likely to Adversely Affect (see attached USFWS letter of concurrence)

Stream habitat with substrates including coarse sand and gravel are present within the project area. A January 14, 2003 review of the NC Natural heritage Programs database of threatened and endangered species, however, revealed no known populations within 1.0 mile of the project area.

Michaux's sumac

Biological Conclusion: No effect

This species prefers sandy, rocky, open woods and roadsides. Its survival is dependent on disturbance (mowing, clearing, and fire) to maintain an open habitat. It is often found with other members of its genus as well as with poison ivy (*Toxicodendron radicans*). There is no longer believed to be an association between this species and specific soil types.

VI. CULTURAL RESOURCES

A. Compliance Guidelines

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at Title 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and afford the Advisory Council a reasonable opportunity to comment on such undertakings.

B. Historic Architecture

The Historic Preservation Office (HPO) reviewed the subject project. There are no known architectural or historic sites within the proposed project area. The SHPO concurs that the project is not likely to affect any resources of historical significance (see SHPO letter dated June 27, 2003).

C. Archaeology

The Historic Preservation Office (HPO) reviewed the subject project. There are no known archaeology sites within the proposed project area, and no archaeological investigation need be conducted (see SHPO letter dated June 27, 2003).

VII. GENERAL ENVIRONMENTAL EFFECTS

The project is expected to have an overall positive impact. Replacement of an inadequate bridge will result in safer traffic operations.

The project is considered to be a Federal "Categorical Exclusion" due to its limited scope and lack of substantial environmental consequences.

The bridge replacement will not have an adverse effect on the quality of the human or natural environment with the use of the current North Carolina Department of Transportation standards and specifications.

The project is not in conflict with any plan, existing land use, or zoning regulation. No change in land use is expected to result from the construction of the project.

No adverse impact on families or communities is anticipated. Right-of-Way acquisition will be limited. No relocatees are expected with implementation of the proposed alternative.

No adverse effect on public facilities or services is expected. The project is not expected to adversely affect social, economic, or religious opportunities in the area.

The proposed project will not require right-of-way acquisition or easement from any land protected under Section 4(f) of the Department of Transportation Act of 1966.

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impact to prime farmland of all land acquisition and construction projects. With the exception of the construction of a temporary detour, all work will be done within the existing right-of-way. There are no soils classified as prime, unique, or having state or local importance in the vicinity of the project. Therefore, the project will not involve the direct conversion of farmland acreage within these classifications.

This project is an air quality "neutral" project, so it is not required to be included in the regional emissions analysis and a project level CO analysis is not required. If vegetation is disposed of by burning, all burning shall be done in accordance with applicable local laws and regulations of the North Carolina State Implementation Plan (SIP) for air quality in compliance with 15 NCAC 2D.0520. No additional reports are required.

Noise levels could increase during construction but will be temporary. This evaluation completes the assessment requirements for highway traffic noise of Title 23, Code of Federal Regulation (CFR), Part 772 or damage air quality as defined by the 1990 Clean Air Act Amendments and the National Environmental Policy Act. No additional reports are required.

An examination of records at the North Carolina Department of Environment and Natural Resources, Division of Environmental Management, Groundwater Section and the North Carolina Department of Human Resources, Solid Waste Management Section revealed no underground storage tanks or hazardous waste sites in the project area.

Franklin County is not a participant in the National Flood Insurance Program. There are no practical alternatives to crossing the floodplain area. Any shift in alignment will result in an impact area of about the same magnitude. The proposed project is not anticipated to increase the level or extent of upstream flood potential.

On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project.

VIII. OTHER AGENCY COORDINATION

The North Carolina Wildlife Resource Commission provided standard comments on this project.

IX. Public Involvement

Location and Survey Unit notified local residents in the project area to make them aware of the upcoming bridge replacement project. They were invited to comment. No comments have been received to date.

PROJECT COMMITMENTS

Franklin County
Bridge No. 151 on SR 1146
Over Camping Creek
Federal Aid Project No. BRZ-1146 (5)
State Project No. 8.2360801
WBS No. 33469.1.1
T.I.P. No. B-4114

All standard procedures and measures, including NCDOT's Best Management Practices for Protection of Surface Waters, Guidelines for Best Management Practices for Bridge Demolition and Removal, will be implemented, as applicable, to avoid or minimize environmental impacts. The following special commitments have been agreed to by NCDOT:

Division 5 Construction, Roadside Environmental, Hydraulics Unit, Natural Environment Unit – Endangered Species

Due to possible impact to endangered species NCDOT resident engineer is responsible for providing a written invitation to the pre-construction meeting to the North Carolina Wildlife Resources Commission, Non-game and Protected Species Branch, and the US Fish and Wildlife Service.

A pre-construction survey for endangered species will be conducted prior to let date. A pre-construction survey is necessary due to the close proximity of endangered mussels and because the current survey expires before the project LET date. The survey is for all mussel species.

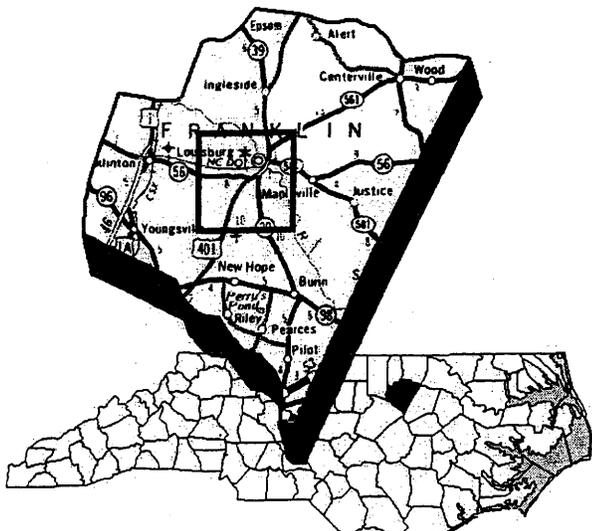
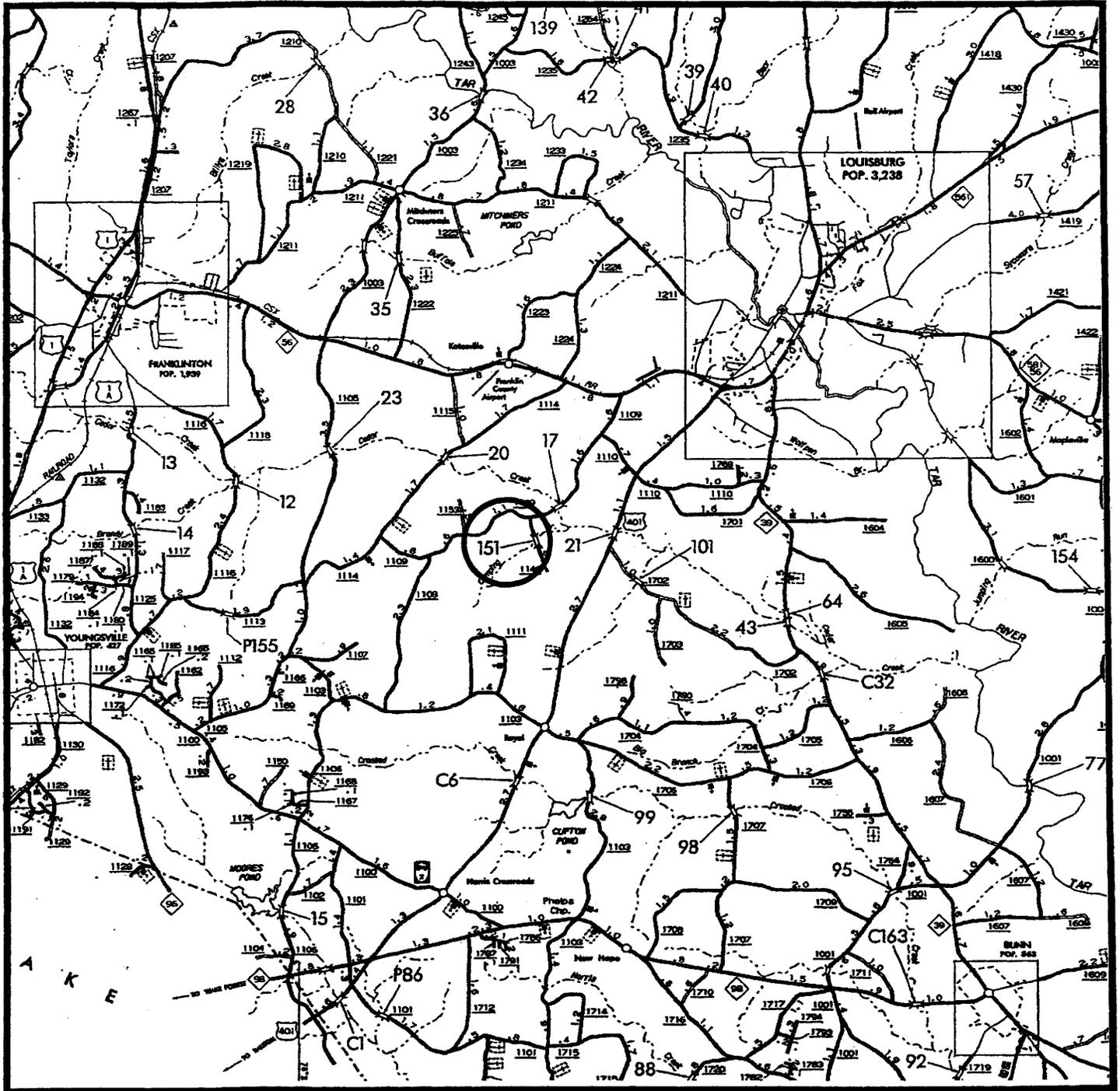
Special sediment and erosion control fencing will be used at the toe of slope parallel to Camping Creek. Standard silt fencing will be used at the toe of slope perpendicular to Camping Creek. If during the final plan design phase, it is determined that the special sediment and erosion control fencing is not practical to use at this location, then a moratorium on clearing and grubbing will be adhered to from November 15 to April 1 from the top of bank out 50 feet from the stream.

There will be no in-stream work during the construction of the new or temporary bridge. This should include no work pads or causeways in the stream.

This project falls within the Tar/Pamlico buffer area. All associated buffer rules apply.

Utilize stone or timber work pads in the work zone and access areas.

No deck drains will be allowed to discharge directly into Camping Creek.



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS BRANCH</p>
<p>FRANKLIN COUNTY REPLACE BRIDGE NO. 151 ON SR 1146 OVER CAMPING CREEK B-4114</p>	
<p>Figure 1</p>	



BEGIN PROJECT

REPLACE BRIDGE
NO. 151

CAMPING
CREEK

END PROJECT

TEMPORARY DETOUR

CAMPING
CREEK



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS BRANCH

FRANKLIN COUNTY
REPLACE BRIDGE NO. 151 ON SR 1146
OVER CAMPING CREEK
B-4114

FIGURE 2



North Carolina Department of Cultural Resources
State Historic Preservation Office

David L. S. Brook, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Division of Historical Resources
David J. Olson, Director

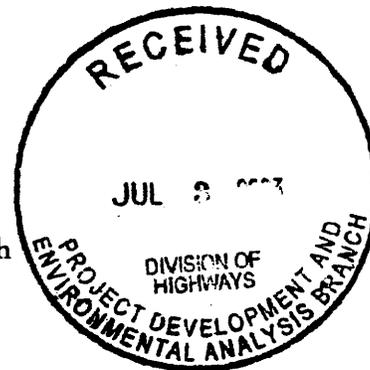
June 27, 2003

MEMORANDUM

TO: Greg Thorpe, Manager
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: David Brook *for David Brook*

SUBJECT: Replacement of Bridge No. 151 on SR 1146 over Camping Creek, B-4114,
Franklin County, ER03-0933



Thank you for your memorandum of April 7, 2003, concerning the above project.

We have conducted a review of the proposed undertaking and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the undertaking as proposed.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Matt Wilkerson, NCDOT
Mary Pope Furr, NCDOT

www.hpo.dcr.state.nc.us

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount St., Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919) 733-4763 • 733-8653
RESTORATION	515 N. Blount St., Raleigh NC	4613 Mail Service Center, Raleigh NC 27699-4613	(919) 733-6547 • 715-4801
SURVEY & PLANNING	515 N. Blount St., Raleigh NC	4618 Mail Service Center, Raleigh NC 27699-4618	(919) 733-6545 • 715-4801



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

June 14, 2005

Mr. Pete Benjamin
US Fish and Wildlife Service
P.O. Box 33726
Raleigh, NC 27636-3726

Dear Mr. Benjamin:

This letter is in reference to NCDOT's proposed bridge replacement of bridge No. 151 over Camping Creek on SR 1146 in Franklin County, TIP B-4114. The purpose of this letter is to request concurrence from the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*) (ESA).

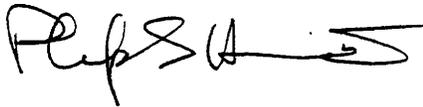
Please see the attached document concerning the latest survey reports for B-4114. Based on the information in the attached survey reports, NCDOT concludes that the proposed project's Biological Conclusion for Michaux's sumac (*Rhus Michauxii*) is, "No Effect". NCDOT concludes that the proposed project's Biological Conclusion for dwarf wedgemussel (*Alasmidonta heterodon*) and Tar spiny mussel (*Elliptio steinstansana*) is, "May Affect, Not Likely to Adversely Affect" with the following commitments:

1. Weep holes shall be configured so that the run-off does not fall directly into the stream.
2. NCDOT resident engineer is responsible or providing a written invitation to the North Carolina Wildlife Resources Commission, Non-game and Protected Species Branch, and the US Fish and Wildlife Service prior to construction.
3. Special sediment and erosion control fencing will be used at the toe of slope parallel to Camping Creek. Standard silt fencing will be used at the toe of slope perpendicular to Camping Creek. If during the final plan design phase, it is determined that the special sediment and erosion control fencing is not practical to use at this location, then a moratorium on clearing and grubbing will be implemented to from November 15 and April 1 from the top of bank out 50 feet from the stream.
4. There will be no in-stream work during the construction of the new or temporary bridge. This should include no work pads or causeway in the stream.

5. A pre-construction survey will be conducted prior to the let date.
6. Utilize stone or timber work pads in the work zone and access areas.
7. This is an environmental sensitive area and all Roadside Environmental special provisions shall apply.

NCDOT believes that the requirements of Section 7(a)(2) of the ESA have been satisfied and hereby request your concurrence.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip S. Harris, III". The signature is stylized and cursive.

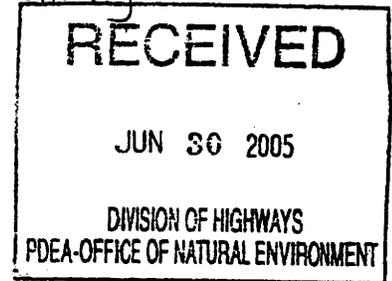
Philip S. Harris, III, P.E., Unit Head
PDEA – Natural Environment Unit

cc: Eric Alsmeyer, USACE
Dennis Pipkin, P.E., Project Engineer, PDEA
Deanna Riffey, Project Manager
File: B-4114



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726
June 27, 2005



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

Dear Mr. Harris:

This letter is in response to your letter of June 14, 2005 which provided the U.S. Fish and Wildlife Service (Service) with the biological determination of the North Carolina Department of Transportation (NCDOT) that the replacement of Bridge No. 151 on SR 1146 over Camping Creek in Franklin County (TIP No. B-4114) may affect, but is not likely to adversely affect the federally endangered dwarf wedgemussel (*Alasmodonta heterodon*) and Tar spiny mussel (*Elliptio steinstansana*). In addition, NCDOT has determined that the project will have no effect on the federally endangered Michaux's sumac (*Rhus michauxii*). These comments are provided in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

Based on the information provided, a mussel survey was conducted at the project site on August 14, 2003. The survey extended 100 meters upstream and 400 meters downstream of SR 1146. Although neither of the federally listed mussel species was observed, 505 individuals representing four other mussel species were observed. As the result of several conversations and email communications over the last year between your staff and Mr. Gary Jordan of my staff, several conservation measures have been agreed to. These conservation measures are listed in your letter. Based on the mussel survey results and the commitment to the conservation measures listed in your letter, the Service concurs with your determination that the proposed bridge replacement may affect, but is not likely to adversely affect the dwarf wedgemussel and Tar spiny mussel.

According to information provided, a plant survey was conducted at the project site on July 1, 2004 for Michaux's sumac. No specimens of Michaux's sumac were observed. The Service concurs that the project will have no effect on Michaux's sumac. We believe that the requirements of section 7(a)(2) of the ESA have been satisfied. We remind you that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered in this review; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by this identified action.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,

Pete Benjamin
Ecological Services Supervisor

cc: Eric Alsmeyer, USACE, Raleigh, NC
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