



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

January 15, 2008

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

ATTENTION: Mr. Steve Lund
NCDOT Coordinator

SUBJECT: **Application for NW 13, 33, and 12 Application** for the replacement of Bridge No. 79 over Hildebran Creek on SR 1156 in Catawba County, Federal Aid Project No. BRZ-1156 (2), State Project No. 8.2792101, WBS Element33423.1.1, **TIP No. B-4059.**

Dear Sir:

Please see the enclosed PCN, Permit Drawings and Design plans for the above referenced project. A Categorical Exclusion (and ROW Consultation) was completed for this project in June 2006 and distributed shortly thereafter. Additional copies are available upon request. NCDOT proposes to replace the existing 41-foot long bridge, No. 79 with a new 55-foot long bridge. There will be 81 linear feet of permanent impacts and 0.01 acre of temporary impacts incurred from the construction of this project. Traffic will be detoured offsite.

IMPACTS TO WATERS OF THE UNITED STATES

General Description:

The single water resource impacted for project B-4059 is Hildebran Creek. Hildebran Creek is located in the Catawba River Basin (Division of Water Quality (DWQ) subbasin 03-08-35) and is approximately 12 feet wide and 3 inches deep within the project area. The DWQ Index number for this section of Hildebran Creek is 11-129-5-3 and the Hydrological Cataloguing Unit is 03050102. The DWQ classifies Hildebran Creek as "C". Within the project area, Hildebran Creek is not listed as a 303(d) water. There are no 303(d) waters within a mile downstream of the project area. No High Quality Waters (HQW), Water Supplies (WS-I or WSII), or Outstanding Resource Waters (ORW) occur within one mile of the project study area. There are no wetlands within the project

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

TELEPHONE: 919-715-1334
FAX: 919-715-5501

WEBSITE: WWW.NCDOT.ORG

LOCATION:
PARKER LINCOLN BUILDING,
2728 CAPITAL BLVD.
RALEIGH NC 27604

study area.

Permanent Impacts:

There will be 81 linear feet of permanent stream impacts to Hildebran Creek resulting from bank stabilization from riprap at the output ends of three new lateral ditches.

Temporary Impacts:

There will be a total of 0.01 acre of temporary impacts to Hildebran Creek resulting from temporary fill needed for the removal of existing abutments.

Utility Impacts:

Due to the relocation of a 12" diameter ductile iron water line, excavation of the bottom of the stream of approximately 3' wide and 13' in length will be required; resulting in <0.01 ac of temporary jurisdictional impacts. The excavated material will be placed back in the streambed after the proposed water line is installed.

Bridge Demolition:

The existing bridge's superstructure consists of asphalt over wood with steel supports and vertical abutments. It should be possible to remove the bridge with no resulting debris in Hildebran Creek based on standard demolition practices. The old timber substructure of Bridge No. 79 is fifty years old, approaching the end of its useful life. The substructure consists of timber caps and pile on timber bulkheads. The superstructure consists of a timber deck on steel I-beams. All guidelines for bridge demolition and removal will be followed in addition to Best Management Practices (BMPs) for the Protection of Surface Waters and BMPs for Bridge Demolition and Removal.

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. As of September 28, 2007, the United States Fish and Wildlife Service (USFWS) lists two federally protected species for Catawba County (Table 1). The Bald Eagle has been de-listed from the Endangered Species Act as of August 8, 2007 but is still protected under the Bald and Golden Eagle Act. There was no suitable habitat in the project study area for either listed species; thus Dwarf-flowered heartleaf is No Effect.

Table 1. Federally Protected Species for Catawba County

Common Name	Scientific Name	Status	Survey Notes	Biological Conclusion
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	No Habitat	De-listed
Dwarf-flowered heartleaf	<i>Hexastylis naniflora</i>	T	No Habitat	No Effect

AVOIDANCE, MINIMIZATION AND MITIGATION

Avoidance and Minimization:

Avoidance examines all appropriate and practicable possibilities of averting impacts to “Waters of the United States.” The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional stages; minimization measures were incorporated as part of the project design. In addition, Best Management Practices will be followed as outlined in “NCDOT’s Best Management Practices for Construction and Maintenance Activities”.

- Open Floodplain approximately 15 feet (creating/enlarging) therefore allowing better hydrologic connectivity
- Traffic will be detoured offsite during the construction period.

Mitigation:

NCDOT proposes no mitigation for the 81 linear feet of permanent impacts to Hildebran Creek because bank stabilization is not considered a loss of waters of the United States.

Schedule:

The project schedule calls for a May 20, 2008 Let date and a review date of **April 1, 2008**. The date of availability for construction is on June 1, 2008.

REGULATORY APPROVALS

Section 404 Permit:

It is anticipated that the temporary impacts to Hildebran Creek will be authorized under Section 404 Nationwide Permit 33 (Temporary Construction Access and Dewatering). We are, therefore, requesting the issuance of a Nationwide Permit 33. A Nationwide Permit 12 (Utility Line Activities) is also needed in order to install a water line within the project study area. Other aspects of this project will be covered by a NW Permit 13 (Bank Stabilization) for the placement of riprap at the end of lateral base ditches.

Section 401 Permit:

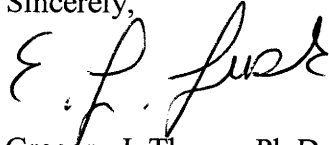
We anticipate 401 General Certification numbers 3689, 3688 and 3699 will apply to this project. All general conditions of the General Certification will be adhered to, therefore we are not requesting concurrence from the DWQ. In accordance with 15A NCAC 2H .0501(a) We are submitting two copies of this permit application to the North Carolina Department of Environmental and Natural Resources, Division of Water Quality, for your records.

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 attachment, 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.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Jennifer Harrod at jwharrod@dot.state.nc.us or (919) 715-7241.

Sincerely,



for

Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis Branch

cc:

W/attachment

Mr. John Hennessy, NCDWQ (2 Copies)
Ms. Marella Buncick, USFWS
Ms. Marla Chambers, NCWRC

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Mark Staley, Roadside Environmental
Mr. M.L. Holder, P.E., Division Engineer
Ms. Trish Simon, DEO
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
Gregory Blakeney, PDEA Project Planning Engineer

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:

- Section 404 Permit
- Section 10 Permit
- 401 Water Quality Certification
- Riparian or Watershed Buffer Rules
- Isolated Wetland Permit from DWQ
- Express 401 Water Quality Certification

2. Nationwide, Regional or General Permit Number(s) Requested: Nationwide 13 ,33 and 12

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: 1598 Mail Service Center

Telephone Number: (919) 733-3141 Fax Number: (919) 733-9794
E-mail Address: jwharrod@dot.state.nc.us

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: Bridge No. 79 over Hildebran Creek on Sr 1156
2. T.I.P. Project Number or State Project Number (NCDOT Only): B-4059
3. Property Identification Number (Tax PIN): N/A
4. Location
County: Catawba Nearest Town: Newton
Subdivision name (include phase/lot number): N/A
Directions to site (include road numbers/names, landmarks, etc.): Sr.1156, West15th Street/Laffon Rd.
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): 35°40'44.80 °N 81°13'55.54 °W
6. Property size (acres): N/A
7. Name of nearest receiving body of water: Clark Creek
8. River Basin: Catawba
(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: Residential, Disturbed Urban Area, Forested: stream banks
10. Describe the overall project in detail, including the type of equipment to be used: Bridge No. 79 will be replaced with a single-span bridge that is 55 feet long. Standard bridge replacement equipment such as bulldozers, cranes etc. will likely be used.

11. Explain the purpose of the proposed work: NCDOT Bridge Maintenance Unit records indicate Bridge No. 79 has a sufficiency rating of 29.4 out of a possible 100 for a new structure. The bridge is considered structurally deficient and functionally obsolete due to a structural appraisal of 2 out of 9.

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. N/A

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: There will be 81 linear feet of permanent stream impacts to Hildebran Creek resulting from bank stabilization, with associated lateral ditches. Riprap will be at the output ends of the three new ditches. There will be a total of 0.01 acre of temporary impacts to Hildebran Creek resulting from temporary fill needed for the removal of existing abutments. There will be jurisdictional impacts

associated with the relocation of utilities for this project. The stream impact due to water line installation involves excavation of the bottom of the stream to allow installation of a proposed 12" diameter ductile iron water line. Excavation will be placed back in the streambed after the proposed water line is installed.

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)
No Wetlands					
Total Wetland Impact (acres)					

3. List the total acreage (estimated) of all existing wetlands on the property: 0 _____

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)
1	Hildebran	Permanent	Perennial	12'	81	0.02
1	Hildebran	Temporary	Perennial	12'	31	0.01
Total Stream Impact (by length and acreage)					112	0.03

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):	0.02 (perm) 0.01 (temp)
Wetland Impact (acres):	0
Open Water Impact (acres):	0
Total Impact to Waters of the U.S. (acres)	0.02 (perm) 0.01 (temp)
Total Stream Impact (linear feet):	112 (perm + temp)

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. _____

Traffic will be detoured offsite during the constuction period. The offsite detour would include SR 1149, SR 1155 and US 321 Business of which most traffic is through traffic. NCDOT Best Management Practices will be implemented during all phases of construction and demolition.

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/ncwetlands/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.

NCDOT proposes no mitigation for the 81 linear feet of permanent impacts to Hildebran Creek because they are not considered to be loss of waters of the United States.

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): 0

Amount of buffer mitigation requested (square feet): 0

Amount of Riparian wetland mitigation requested (acres): 0

Amount of Non-riparian wetland mitigation requested (acres): 0
 Amount of Coastal wetland mitigation requested (acres): 0

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*	Impact (square feet)	Multiplier	Required Mitigation
1		3 (2 for Catawba)	
2		1.5	
Total			

* 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. _____

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.

All stormwater from this bridge replacement project shall be directed to lateral base ditches which will allow for storm water treatment before discharging into Hildebran Creek.

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/ncwetlands>. If no, please provide a short narrative description:

This project is limited to a bridge replacement. No indirect or cumulative impacts are anticipated

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



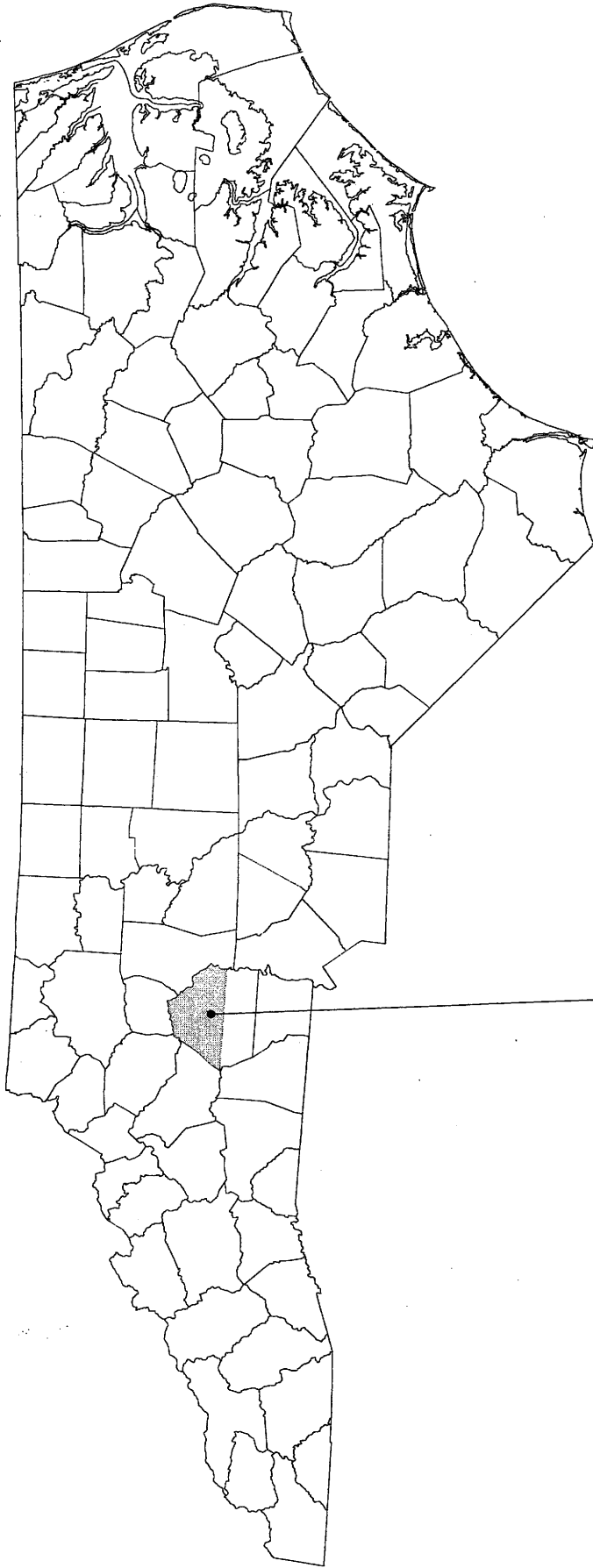
Applicant/Agent's Signature

1.15.08

Date

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

COUNTY LOCATION VICINITY MAP



SITE LOCATION
IN CATAWBA COUNTY

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

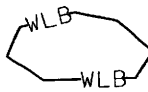
PROJECT: 53423.1.1 (B-4059)

BRIDGE NO. 79 OVER
HILDEBRAN CREEK ON SR 1156

Permit Drawing
Sheet 1 of 11

WETLAND LEGEND

— WLB — WETLAND BOUNDARY

 WETLAND

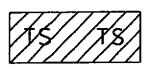
 DENOTES FILL IN WETLAND

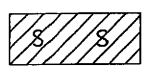
 DENOTES FILL IN SURFACE WATER

 DENOTES FILL IN SURFACE WATER (POND)

 DENOTES TEMPORARY FILL IN WETLAND

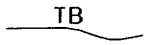
 DENOTES EXCAVATION IN WETLAND

 DENOTES TEMPORARY SURFACE WATER IMPACTS

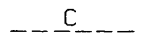
 DENOTES PERMANENT SURFACE WATER IMPACTS

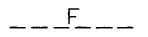
 DENOTES MECHANIZED CLEARING

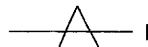
— FLOW DIRECTION

 TOP OF BANK

 EDGE OF WATER

 PROP. LIMIT OF CUT

 PROP. LIMIT OF FILL

 PROP. RIGHT OF WAY

--- NG --- NATURAL GROUND

--- PL --- PROPERTY LINE

— TDE — TEMP. DRAINAGE EASEMENT

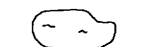
— PDE — PERMANENT DRAINAGE EASEMENT

-- EAB -- EXIST. ENDANGERED ANIMAL BOUNDARY

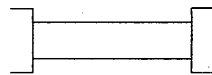
-- EPB -- EXIST. ENDANGERED PLANT BOUNDARY

 WATER SURFACE

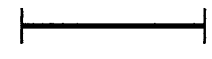
 LIVE STAKES

 BOULDER


--- CORE FIBER ROLLS

 PROPOSED BRIDGE

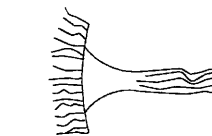
 PROPOSED BOX CULVERT

 PROPOSED PIPE CULVERT
12"-48" PIPES
(DASHED LINES DENOTE EXISTING STRUCTURES)
54" PIPES & ABOVE

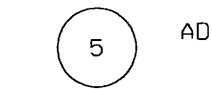
 SINGLE TREE

 WOODS LINE

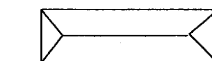
 DRAINAGE INLET


 ROOTWAD

 RIP RAP

 ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE

 PREFORMED SCOUR HOLE (PSH)

 LEVEL SPREADER (LS)

 GRASS SWALE

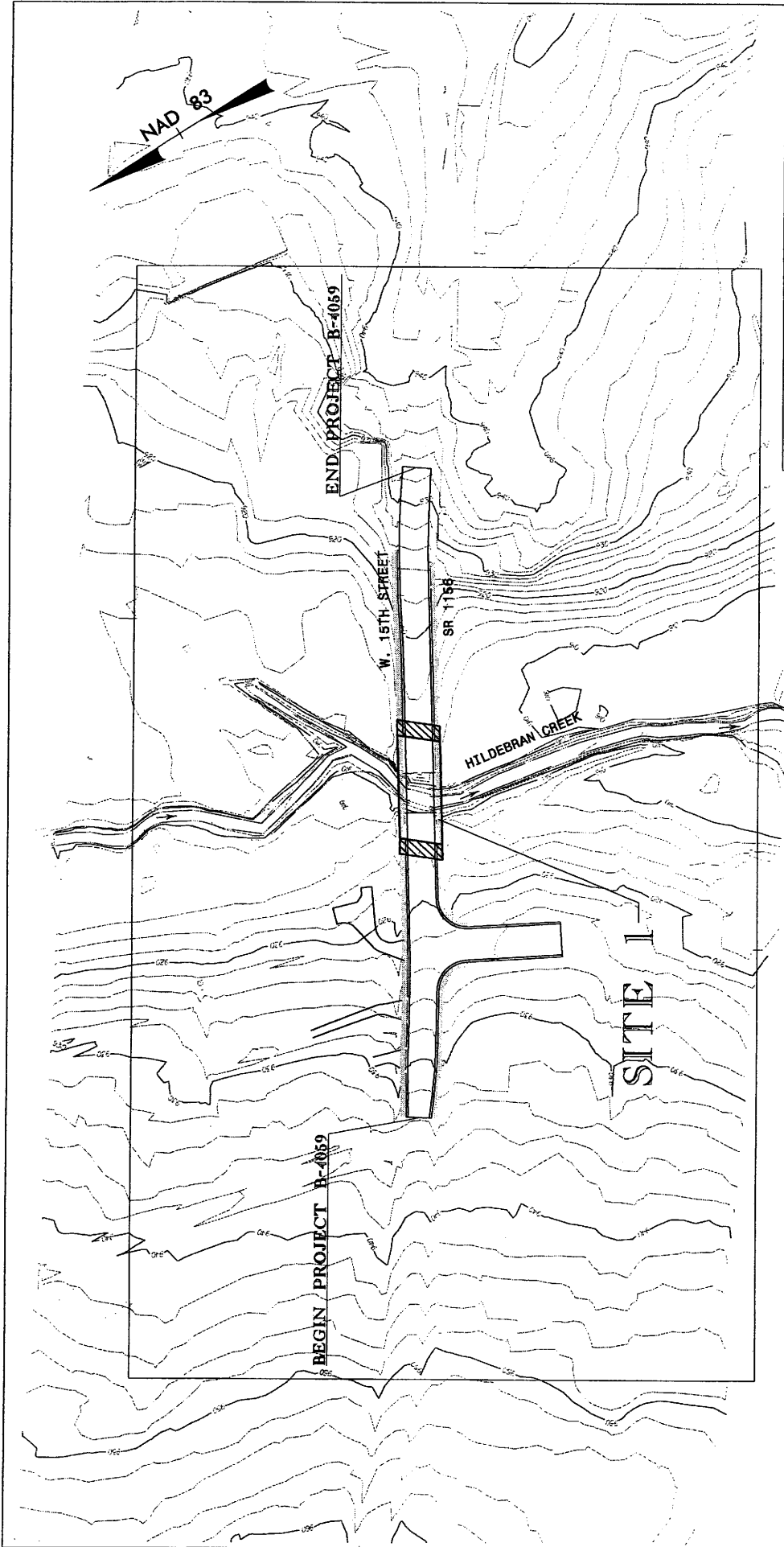
**N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
CATABWA COUNTY**

PROJECT: 33423.1.1 (B-4059)

**BRIDGE NO. 79 OVER
HILDEBRAN CREEK ON SR 1156**

SHEET 4 OF

7 / 12 / 07

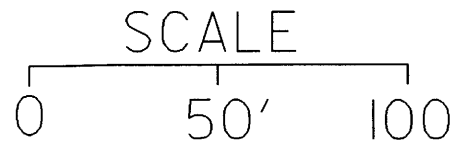
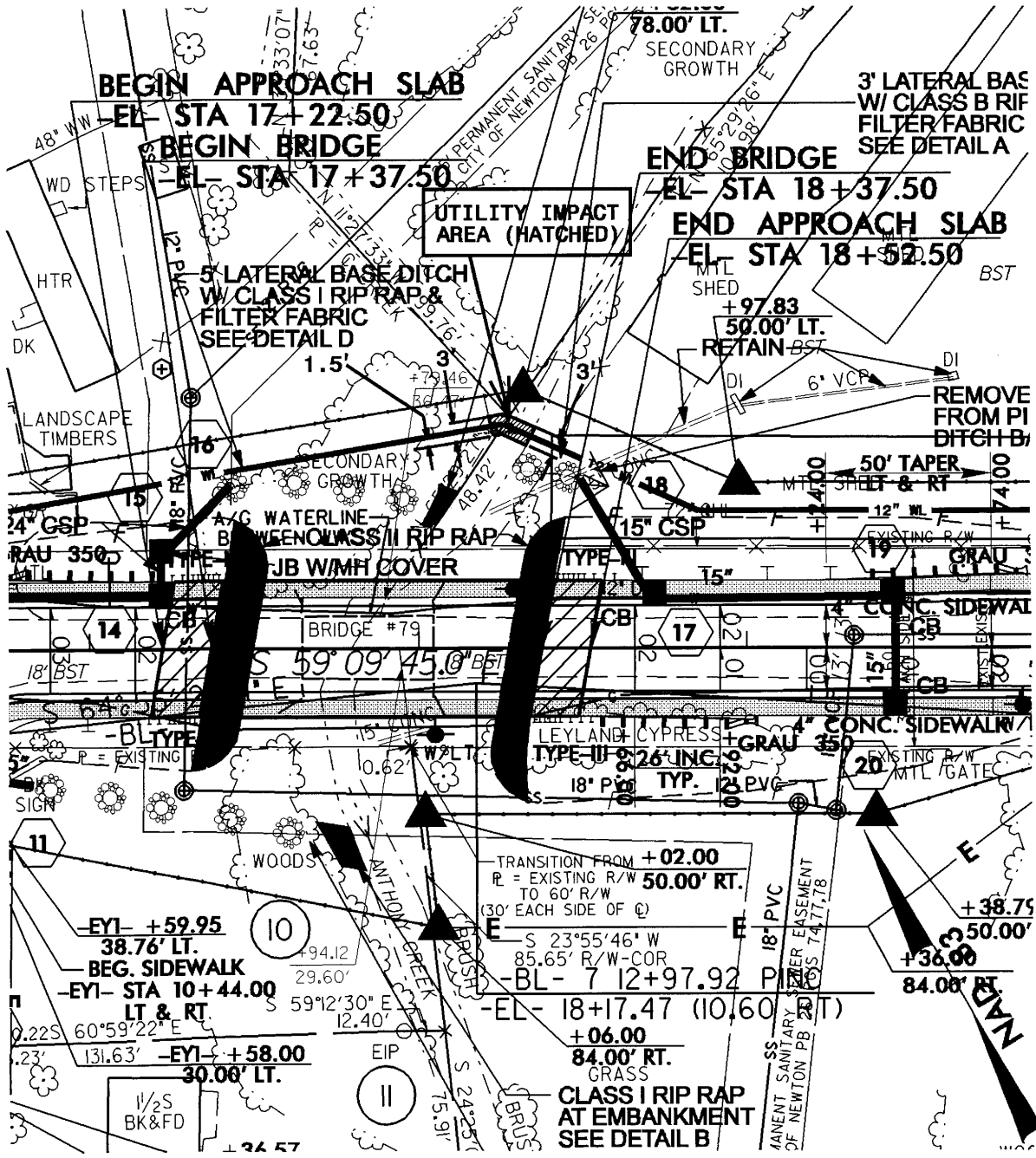


N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CATABWA COUNTY

PROJECT: 33423.1.1 (B-4059)

BRIDGE NO. 79 OVER
 HILDEBRAN CREEK ON SR 1156

SITE LOCATION MAP



N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CATAWBA COUNTY
 WBS 33423.I.I
 B-4059 UTILITY
 BRIDGE 79 OVER HILDEBRAN CREEK ON SR 1156

PROPERTY OWNERS

<u>PARCEL</u>	<u>OWNER NAME</u>	<u>ADDRESS</u>
9	IMOGENE S. MATHESON DELLINGER	804 W. 15TH STREET, NEWTON, NC 28658
10	ONEAL BUILDING AND REAL ESTATE, INC. C/O GRADY ONEAL	402 RAGAN ROAD
12	NEWTON CENTER, LLC	PO BOX 369, RAMSEY, NJ 07446
13	ETHELENE HUGGINS ERVIN	428 CLOVER LANE, NEWTON, NC 28658
14	GEORGE A. LEES, JR.	731 W. 15TH STREET, NEWTON, NC 28658

N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

CATAWBA COUNTY
PROJECT: 33423.1.1 (B-4059)

BRIDGE NO. 79 OVER
HILDEBRAN CREEK ON SR 1156

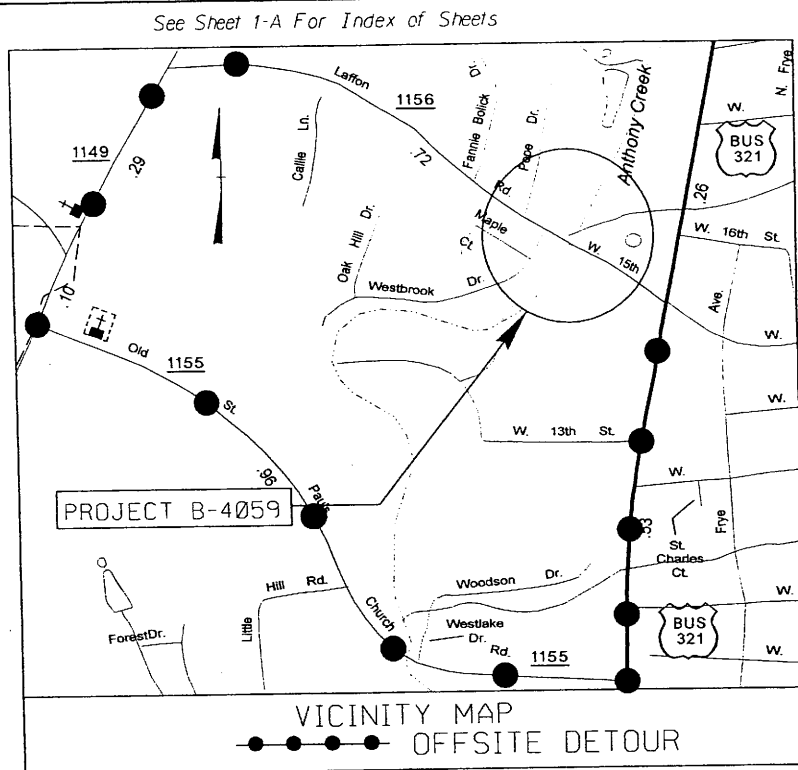
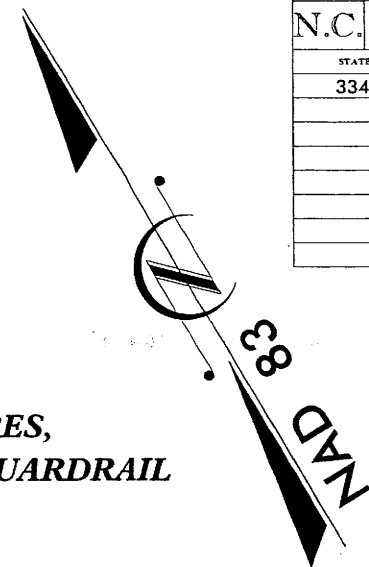
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4059	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33423.1.1	BRZ-1156(2)	PE	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

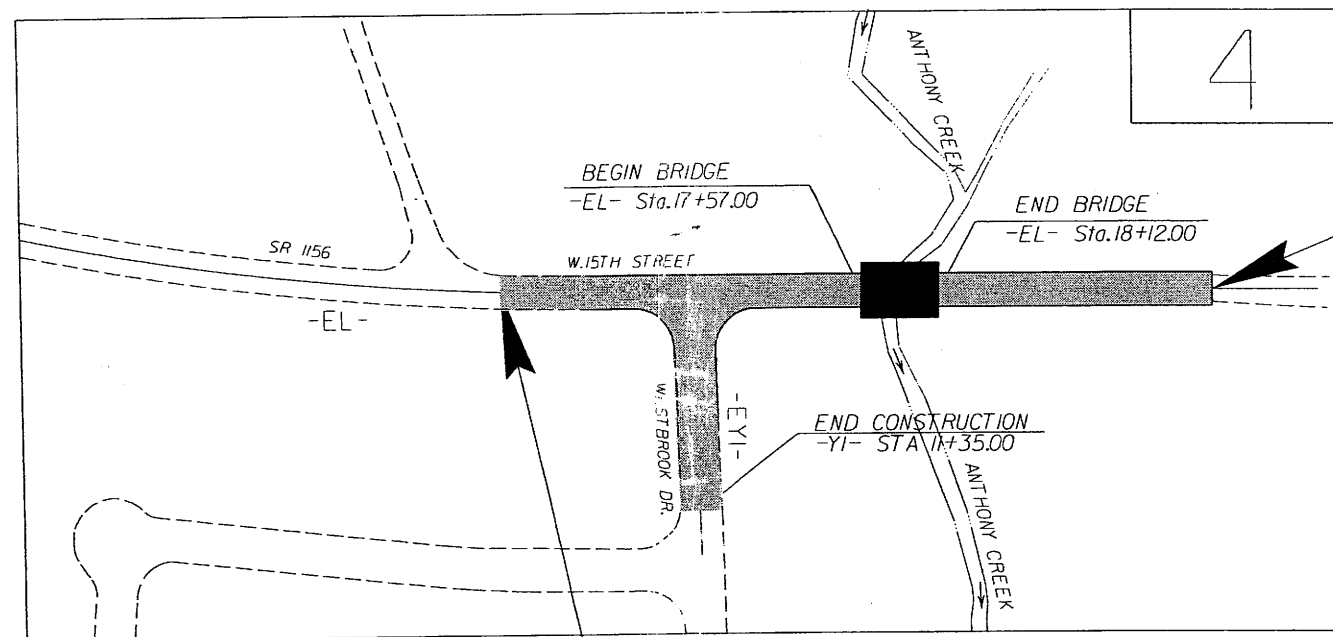
CATAWBA COUNTY

LOCATION: BRIDGE NO. 79 OVER HILDEBRAN CREEK
ON SR 1156 IN NEWTON

TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES,
SIDEWALK, CURB AND GUTTER, AND GUARDRAIL



STA. 21+00.00 -EL- END TIP PROJECT B-4059



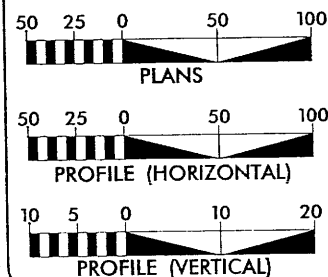
STA. 14+70.00 -EL- BEGIN TIP PROJECT B-4059

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ____.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF NEWTON.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:

GRAPHIC SCALES



DESIGN DATA

ADT 2006 = 2700
ADT 2025 = 3800
DHV = 12 %
D = 60 %
T = 4 % *
V = 40 MPH
* TTST 1% DUAL 3%

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4059 = 0.109 MILES
LENGTH OF STRUCTURES TIP PROJECT B-4059 = 0.010 MILES
TOTAL LENGTH OF TIP PROJECT B-4059 = 0.119 MILES

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

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 18, 2007

LETTING DATE:
MAY 20, 2008

T. S. WALLS
PROJECT ENGINEER

PROJECT DESIGN ENGINEER

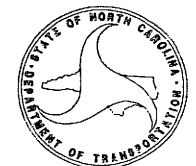
HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN
ENGINEER

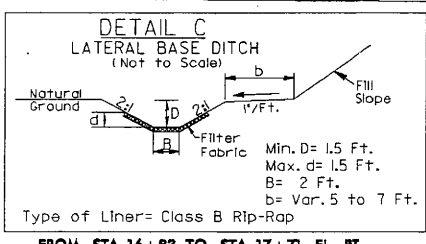
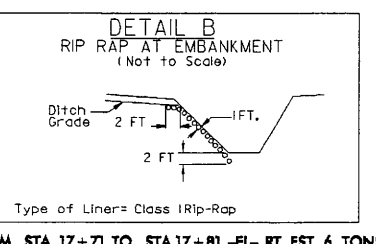
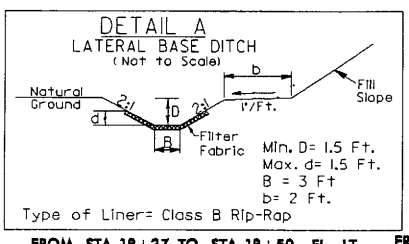
SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



STATE HIGHWAY DESIGN ENGINEER

Permit Drawing



PI Sta 11+68.95 Δ = 10' 40" 31.0' (LT)
 D = 5' 12" 31.3"
 L = 204.95'
 T = 102.77'
 R = 1100.00'

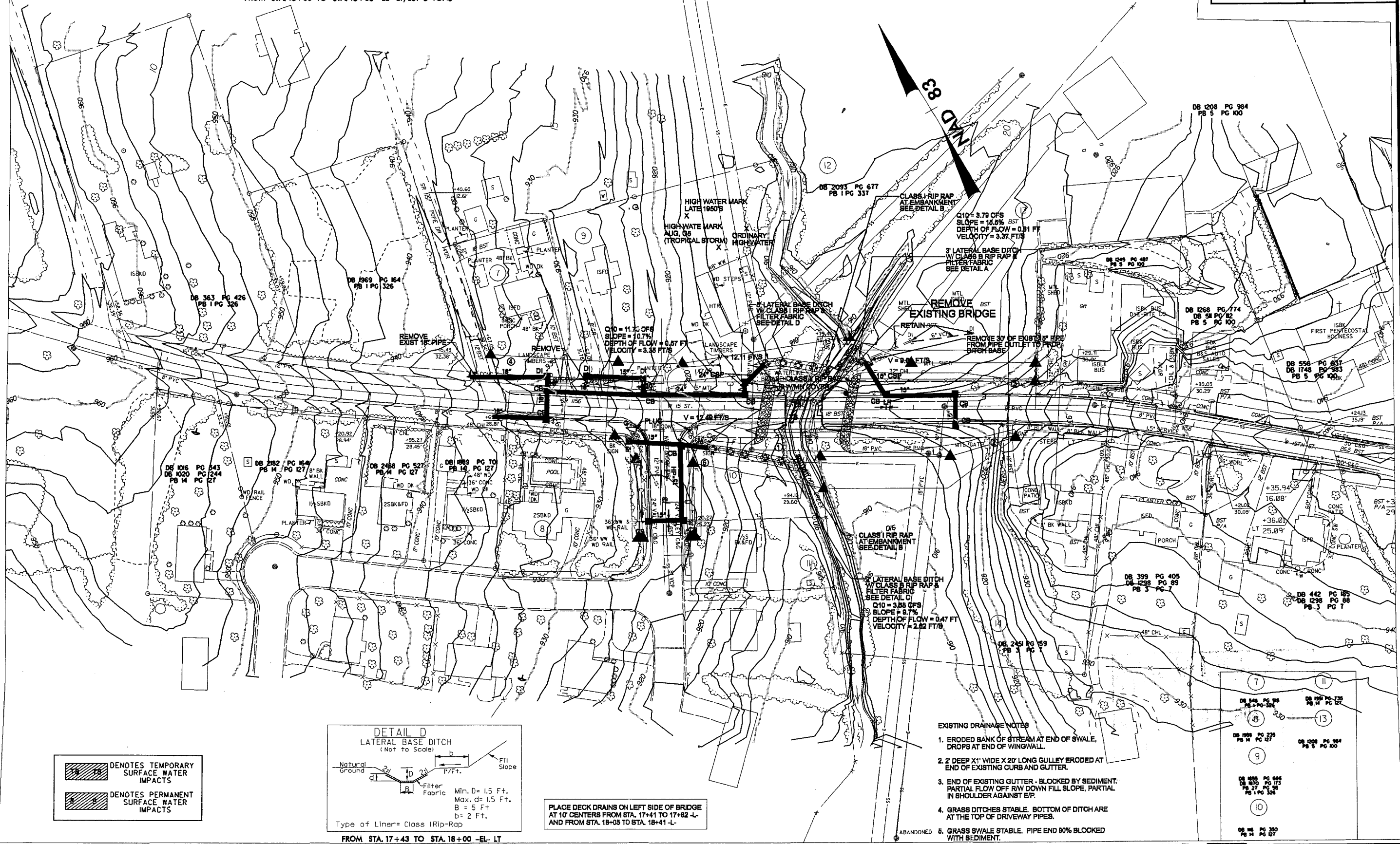
PI Sta 14+27.79 Δ = 2' 23" 36.0' (LT)
 D = 0' 45" 50.2"
 L = 313.29'
 T = 156.67'
 R = 7,500.00'

PI Sta 16+20.25 Δ = 2' 44" 13.0' (LT)
 D = 3' 49" 11.0"
 L = 71.65'
 T = 35.83'
 R = 1,500.00'

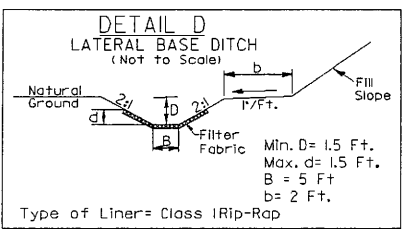
PI Sta 20+87.42 Δ = 10' 00" 20.0' (RT)
 D = 6' 21" 58.3"
 L = 157.17'
 T = 78.78'
 R = 900.00'

RO = SEE PLANS

FROM STA. 18+27 TO STA. 18+50 -EL- LT
 FROM STA. 17+71 TO STA. 17+81 -EL- RT, EST. 6 TONS
 FROM STA. 18+00 TO STA. 18+08 -EL- LT, EST. 3 TONS
 FROM STA. 16+83 TO STA. 17+71 -EL- RT

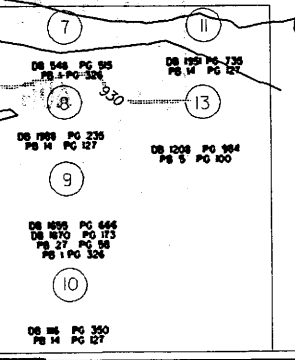


▨ DENOTES TEMPORARY SURFACE WATER IMPACTS
 ▨ DENOTES PERMANENT SURFACE WATER IMPACTS



PLACE DECK DRAINS ON LEFT SIDE OF BRIDGE AT 10' CENTERS FROM STA. 17+41 TO 17+82 -L- AND FROM STA. 18+05 TO STA. 18+41 -L-

- EXISTING DRAINAGE NOTES**
1. ERODED BANK OF STREAM AT END OF SWALE. DROPS AT END OF WINGWALL.
 2. 2' DEEP X1' WIDE X 20' LONG GULLEY ERODED AT END OF EXISTING CURB AND GUTTER.
 3. END OF EXISTING GUTTER - BLOCKED BY SEDIMENT. PARTIAL FLOW OFF RW DOWN FILL SLOPE, PARTIAL IN SHOULDER AGAINST E.P.
 4. GRASS DITCHES STABLE. BOTTOM OF DITCH ARE AT THE TOP OF DRIVEWAY PIPES.
 5. ABANDONED
 6. GRASS SWALE STABLE. PIPE END 90% BLOCKED WITH SEDIMENT.



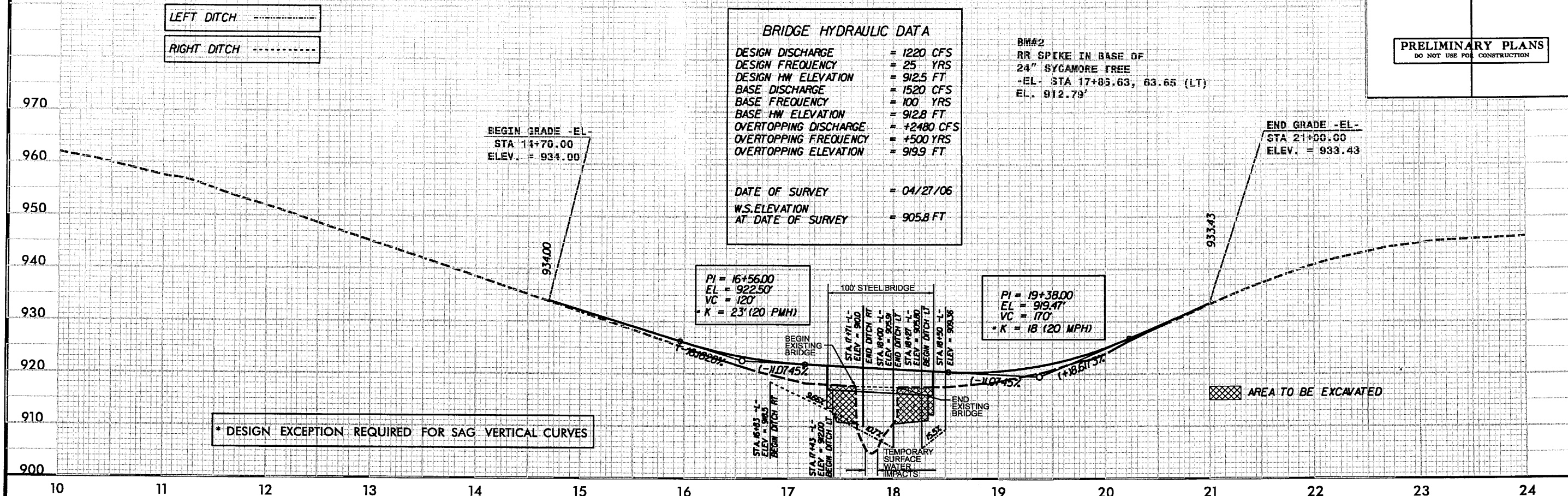
8/17/99
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 14-011-1521521

5/28/99

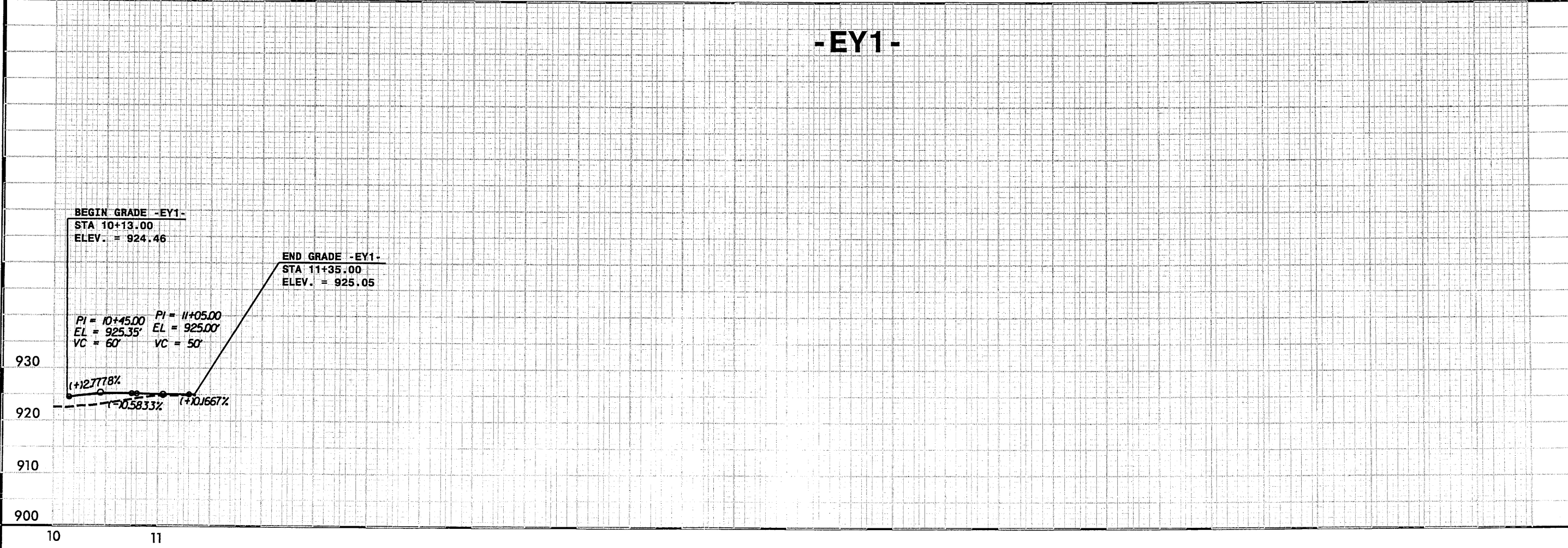
PROJECT REFERENCE NO. B-4059	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-EL-

SEE PLAN SHEET 4 FOR PLAN VIEW



-EY1-



5/28/99

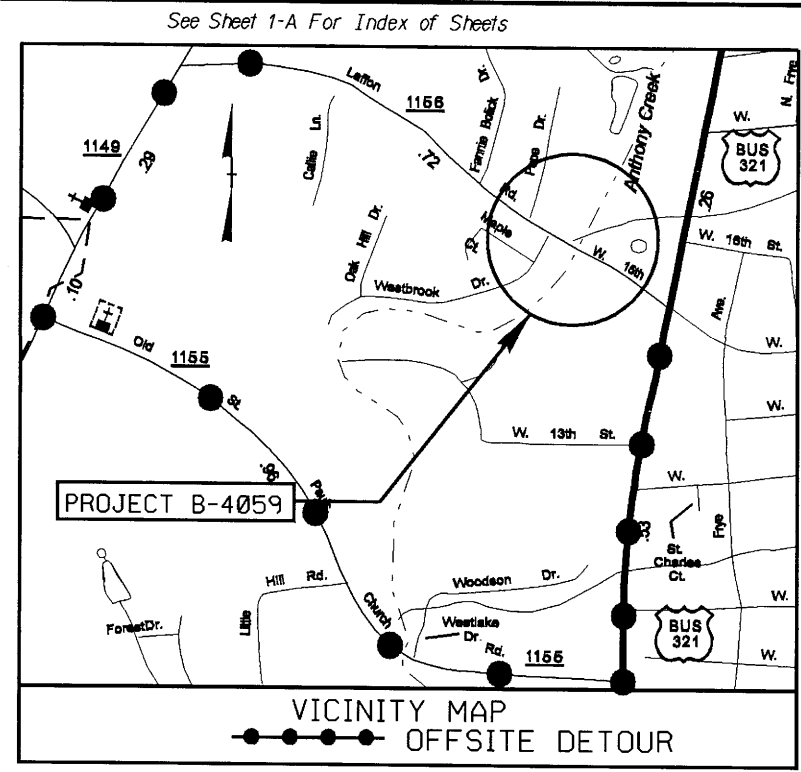
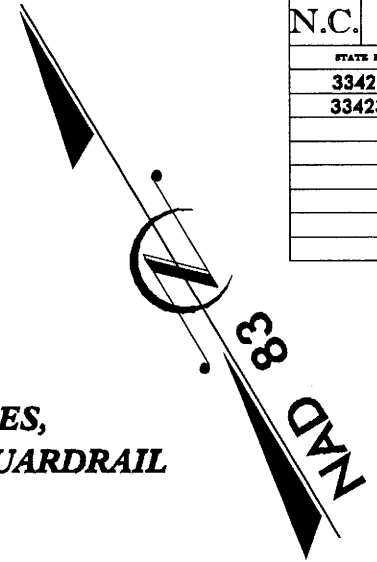
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4059	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33423.1.1	BRZ-1156(2)	PE	
33423.2.1	BRZ-1156(2)	RW & UTIL	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

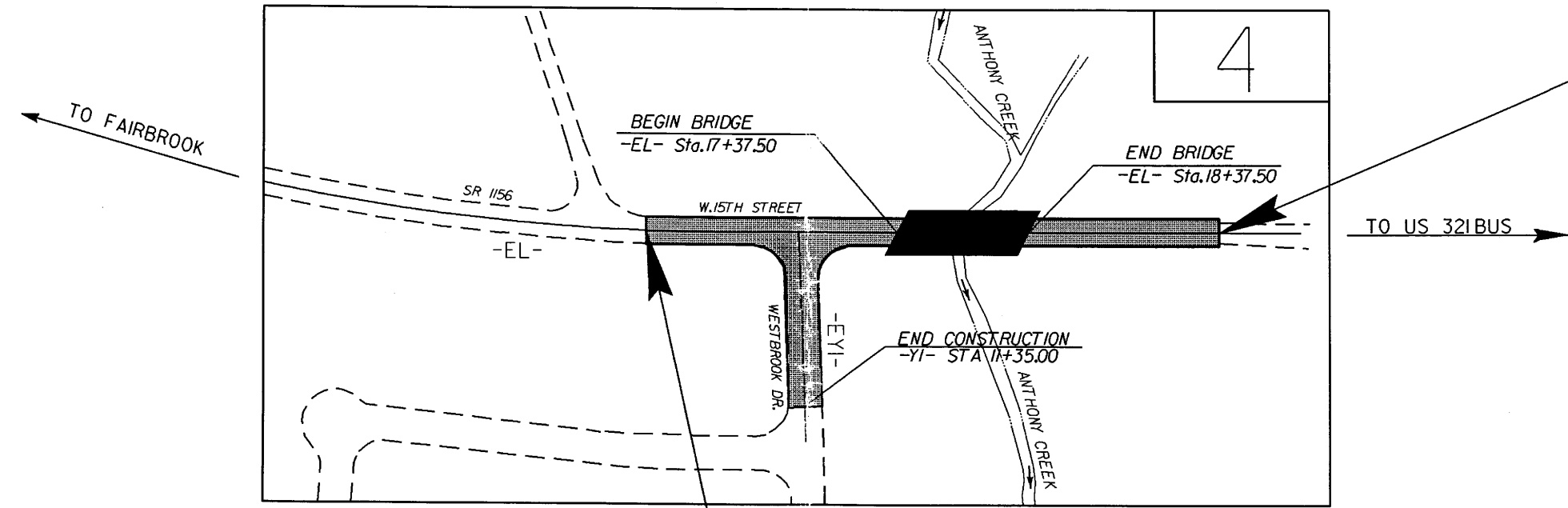
CATAWBA COUNTY

**LOCATION: BRIDGE NO. 79 OVER HILDEBRAN CREEK
ON SR 1156 IN NEWTON**

**TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES,
SIDEWALK, CURB AND GUTTER, AND GUARDRAIL**



STA. 21+00.00 -EL- END TIP PROJECT B-4059



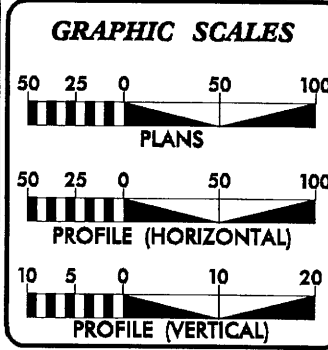
STA. 14+70.00 -EL- BEGIN TIP PROJECT B-4059

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF NEWTON.

** DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVES

JUL 18 2007
DIVISION OF HIGHWAYS
HYDRAULICS UNIT

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



DESIGN DATA

ADT 2006 =	2700
ADT 2025 =	3800
DHV =	12 %
D =	60 %
T =	4 % *
V =	40 MPH
* TTST 1%	DUAL 3%

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4059 =	0.100 MILES
LENGTH OF STRUCTURES TIP PROJECT B-4059 =	0.019 MILES
TOTAL LENGTH OF TIP PROJECT B-4059 =	0.119 MILES

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

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 22, 2007

LETTING DATE:
MAY 20, 2008

TED S. WALLS
PROJECT ENGINEER

ALLISON K. WHITE
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

CONTRACT: TIP PROJECT: B-4059

CONTRACT: TIP PROJECT: B-4059

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\$\$\$\$\$USERNAME\$\$\$\$\$

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	-v-l-
Proposed Wetland Boundary	-v-l-
Existing Endangered Animal Boundary	-e-a-
Existing Endangered Plant Boundary	-e-p-

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	-j-
Buffer Zone 1	-bz 1-
Buffer Zone 2	-bz 2-
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	-v-l-
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	-e-
Proposed Temporary Construction Easement	-e-
Proposed Temporary Drainage Easement	-tde-
Proposed Permanent Drainage Easement	-pde-
Proposed Permanent Utility Easement	-pue-

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-c-
Proposed Slope Stakes Fill	-f-
Proposed Wheel Chair Ramp	⊙
Proposed Wheel Chair Ramp Curb Cut	⊙
Curb Cut for Future 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	AATUR
End of Information	E.O.I.

5/28/99

PROJECT REFERENCE NO. B-4059	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-EL-

SEE PLAN SHEET 4 FOR PLAN VIEW

LEFT DITCH - - - - -

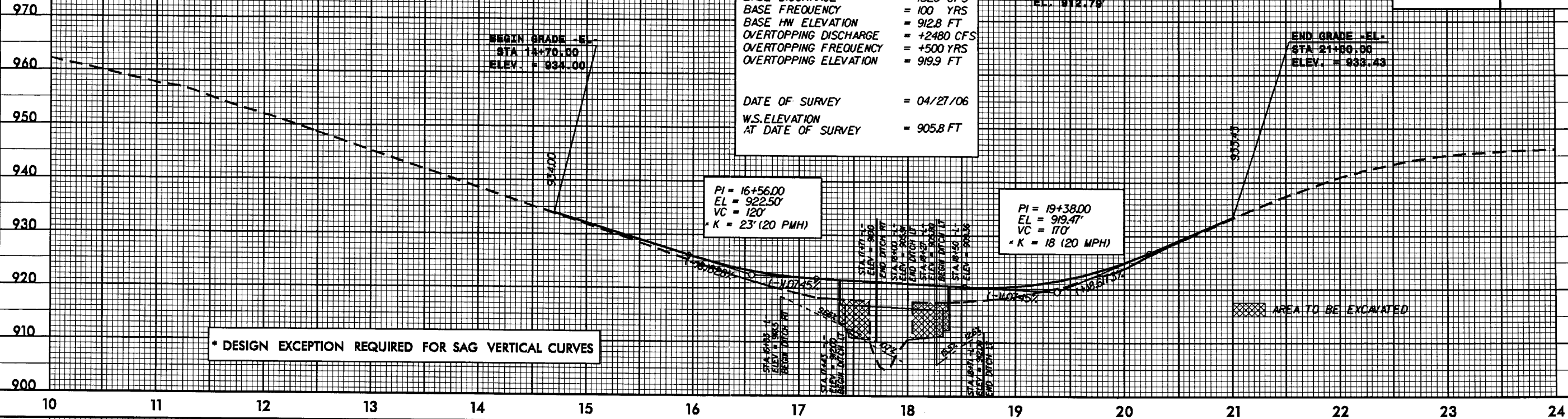
RIGHT DITCH - - - - -

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE = 1220 CFS
 DESIGN FREQUENCY = 25 YRS
 DESIGN HW ELEVATION = 912.5 FT
 BASE DISCHARGE = 1520 CFS
 BASE FREQUENCY = 100 YRS
 BASE HW ELEVATION = 912.8 FT
 OVERTOPPING DISCHARGE = +2480 CFS
 OVERTOPPING FREQUENCY = +500 YRS
 OVERTOPPING ELEVATION = 919.9 FT

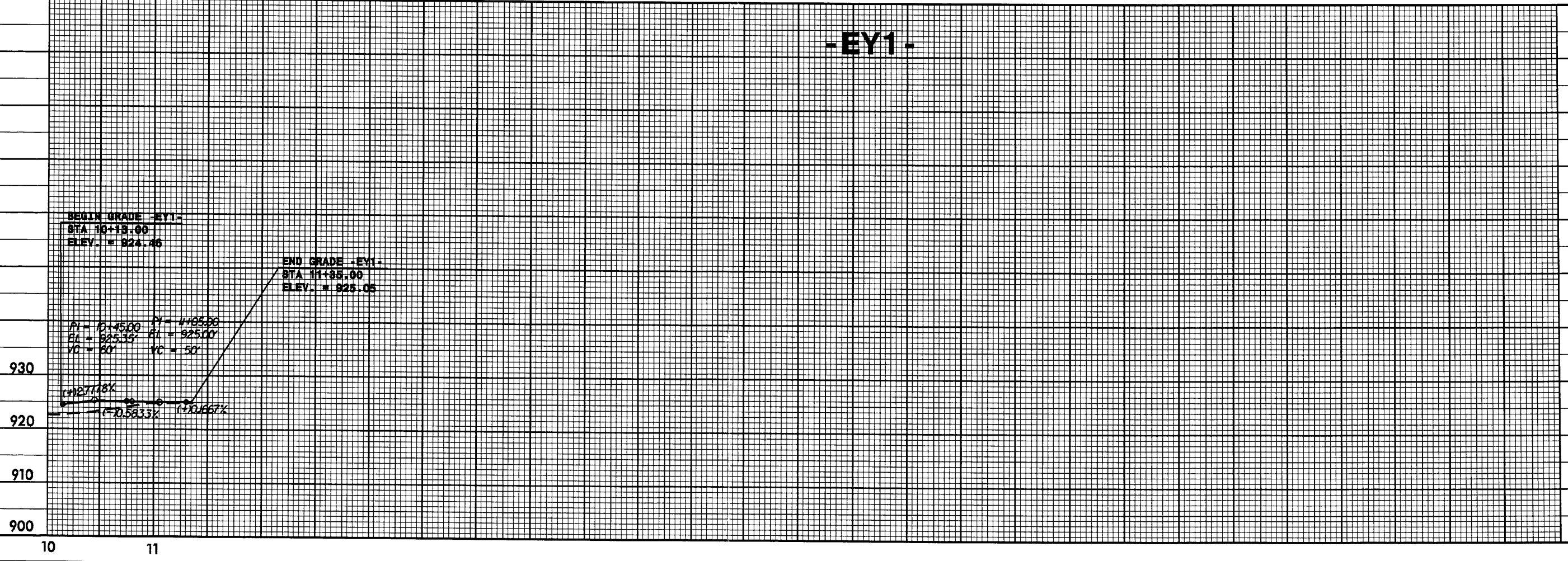
DATE OF SURVEY = 04/27/06
 W.S. ELEVATION AT DATE OF SURVEY = 905.8 FT

BM#2
 RR SPIKE IN BASE OF
 24" SYCAMORE TREE
 +EL- STA 17+85.63, 85.65 (LT)
 EL. 912.79'



* DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVES

-EY1-



I:\JUL_2007_0336_b-4059_rdy.plt.dgn

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project No.	<u>B-4059</u>
State Project No.	<u>8.2792101</u>
W.B.S. No.	<u>33423.1.1</u>
Federal Project No.	<u>BRZ-1156(2)</u>

A. Project Description:

The purpose of this project is to replace Catawba County Bridge No. 79 on SR 1156 (Laffon Road) over Hildebran Creek (also referred to as Anthony Creek). Bridge No. 79 is 41 feet long with vertical abutments. The replacement structure will be a bridge approximately 55 feet long providing a minimum 41 feet clear deck width. The bridge will include two 13-foot lanes, 2-foot offsets and 5'6" sidewalk on both sides. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 260 feet from the northwest end of the new bridge and 220 feet from the southeast end of the new bridge. The approaches will be widened to include a 26-foot pavement width providing two 13-foot lanes. Eight-foot berms with curb and gutter and 5-foot sidewalks will be provided on each side. The roadway will be designed as a Local Urban Route with a 40 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

B. Purpose and Need:

NCDOT Bridge Maintenance Unit records indicate Bridge No. 79 has a sufficiency rating of 29.4 out of a possible 100 for a new structure. The bridge is considered structurally deficient and functionally obsolete due to a structural appraisal of 2 out of 9 and a deck geometry appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA's Bridge Replacement Program.

Bridge No. 79 and has a fifty-year old timber sub-structure. Timber structures have a typical life expectancy between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few members are damaged or prematurely deteriorated. However, past a certain degree of deterioration, timber structures become impractical to maintain and upon eligibility are programmed for replacement. Bridge No. 79 is approaching the end of its useful life.

C. Proposed Improvements:

Circle one or more of the following Type II improvements which apply to the project:

1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)
 - e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane)
 - i. Slide Stabilization
 - j. Structural BMP's for water quality improvement
2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - l. Installing bridge safety hardware including bridge rail retrofit
3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.
 - a. Rehabilitating, reconstructing, or replacing bridge approach slabs
 - b. Rehabilitating or replacing bridge decks
 - c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
 - d. Replacing a bridge (structure and/or fill)
4. Transportation corridor fringe parking facilities.
5. Construction of new truck weigh stations or rest areas.

6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.
7. Approvals for changes in access control.
8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.
12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3(b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.
13. Acquisition and construction of wetland, stream and endangered species mitigation sites.
14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

D. Special Project Information:

Estimated Costs:

Structure	\$ 220,000
Roadway Approaches	\$ 250,255
Detour Structure and Approaches	- 0 -
Structure Removal	\$ 11,536
Misc. & Mob.	\$ 148,209
Eng. & Contingencies	\$ 95,000
Total Construction Cost*	\$ 725,000
Right-of-way Costs	\$ 83,000
Total Project Cost	\$ 808,000

*The total construction cost listed above includes \$15,939 for sidewalks, which are included on both sides for the entire length of the project. The City of Newton will be responsible for the maintenance and liability of the proposed sidewalk, as well as, sharing in the cost of construction according to NCDOT requirements for a municipality with a population from 10,000 to 50,000 - 70% DOT (\$11,157) and 30% (\$4,782) municipality.

Estimated Traffic:

Current	-	2,400 vpd
Year 2025	-	3,800 vpd
TTST	-	1%
Dual	-	3%

Accidents: Traffic Engineering has evaluated a recent three year period and found two accidents occurring in the vicinity of the project. Neither accident was associated with the geometry of the bridge or its approach roadways.

Design Exceptions: There are no anticipated design exceptions for this project.

Bridge Demolition: Bridge No. 79 is constructed entirely of timber and steel and should be possible to remove with no resulting debris in Hildebran Creek based on standard demolition practices.

Alternatives Discussion:

No Build – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 1156.

Rehabilitation – The bridge was constructed in 1956 and the timber materials within the bridge are reaching the end of their useful life. Rehabilitation would require replacing the timber components which would constitute effectively replacing the bridge.

Offsite Detour – Bridge No. 79 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 1149, SR 1155, and US 321 Business. The majority of traffic on the road is through traffic. The detour for the average road user would result in 4 minutes additional travel time (1.9 miles additional travel). Up to a twelve-month duration of construction is expected on this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone the detour is acceptable. Catawba County Emergency Services along with Catawba County Schools Transportation have also indicated that the detour is acceptable. NCDOT Division 12 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour.

Onsite Detour – An onsite detour was not evaluated due to the presence of an acceptable offsite detour.

New Alignment – Given that the alignment for SR 1156 is acceptable, a new alignment was not considered as an alternative.

Other Agency Comments:

The N.C. Wildlife Resource Commission, U.S. Fish & Wildlife, the Army Corps of Engineers, and the N.C. Division of Water Quality had no special concerns for this project.

Public Involvement:

Location and Surveys personnel visited Catawba Valley Plumbing Supply and was informed the building being impacted was used for storage. This project will not impact access to the property.

The Location & Surveys Unit sent a letter to all other property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions

<u>ECOLOGICAL</u>	<u>YES</u>	<u>NO</u>
(1) Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Does the project involve habitat where federally listed endangered or threatened species may occur?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3) Will the project affect anadromous fish?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(4) If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) of an acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(5) Will the project require the use of U. S. Forest Service lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(6) Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(7) Does the project involve waters classified as Outstanding Water Resources (OWR) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(8) Will the project require fill in waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(9) Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PERMITS AND COORDINATION</u>	<u>YES</u>	<u>NO</u>
(10) If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(11) Does the project involve Coastal Barrier Resources Act resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(12) Will a U. S. Coast Guard permit be required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(13) Will the project result in the modification of any existing regulatory floodway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | |
|------|---|--------------------------|---------------------|
| (29) | Will the project affect any archaeological remains which are important to history or pre-history? | <input type="checkbox"/> | <u> X </u> |
| (30) | Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)? | <input type="checkbox"/> | <u> X </u> |
| (31) | Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended? | <input type="checkbox"/> | <u> X </u> |
| (32) | Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers? | <input type="checkbox"/> | <u> X </u> |

F. Additional Documentation Required for Unfavorable Responses in Part E

Response to Question 16: The structure impacted is currently used as storage for a plumbing supply company. They do have other storage facilities available and the business should be able to maintain operations at its current location.

G. CE Approval

TIP Project No.	<u>B-4059</u>
State Project No.	<u>8.2792101</u>
W.B.S. No.	<u>33423.1.1</u>
Federal Project No.	<u>BRZ-1156(2)</u>

Project Description:

The purpose of this project is to replace Catawba County Bridge No. 79 on SR 1156 (Laffon Road) over Hildebran Creek (also referred to as Anthony Creek). Bridge No. 79 is 41 feet long with vertical abutments. The replacement structure will be a bridge approximately 55 feet long providing a minimum 41 feet clear deck width. The bridge will include two 13-foot lanes, 2-foot offsets and 5'6" sidewalk on both sides. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 260 feet from the northwest end of the new bridge and 220 feet from the southeast end of the new bridge. The approaches will be widened to include a 26-foot pavement width providing two 13-foot lanes. Eight-foot berms with curb and gutter and 5-foot sidewalks will be provided on each side. The roadway will be designed as a Local Urban Route with a 40 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

Categorical Exclusion Action Classification:

 TYPE II(A)
 X TYPE II(B)

Approved:

7/7/06
Date

William T. Gooding
Bridge Project Development Engineer
Project Development & Environmental Analysis Branch

7/06/04
Date

John D. Williams
Project Engineer
Project Development & Environmental Analysis Branch

6/28/06
Date

Marc Sutter
Project Planning Engineer
Project Development & Environmental Analysis Branch

For Type II(B) projects only:

7-10-06
Date

John F. Sullivan, III
John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

PROJECT COMMITMENTS

Replacement of Bridge No. 79
on SR 1156 (Laffon Road) over Hildebran Creek
Catawba County
Federal-Aid No. BRZ-1156(2)
State Project No. 8.2792101
T.I.P. No. B-4059

Commitments Developed Through Project Development and Design

Division Twelve Construction, Resident Engineer's Office – Offsite Detour

In order to allow Catawba County Emergency Services time to prepare for road closure, the NCDOT Resident Engineer will notify Catawba County EMS at (828) 465-8233 of the bridge removal 30 days prior to road closure.

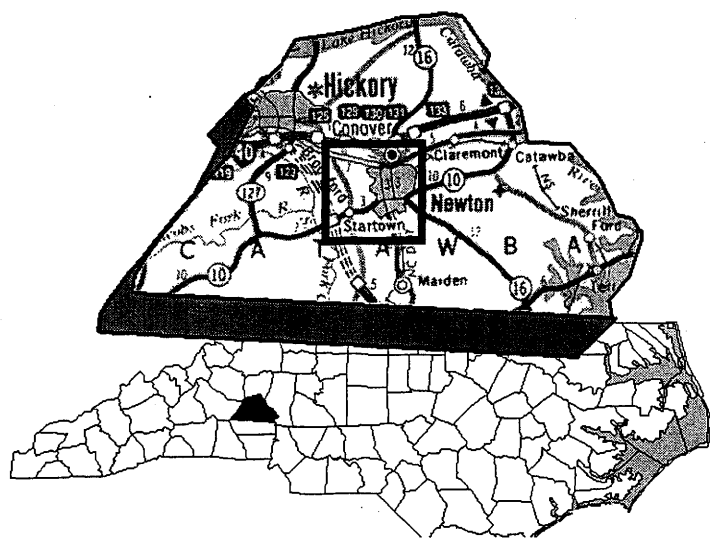
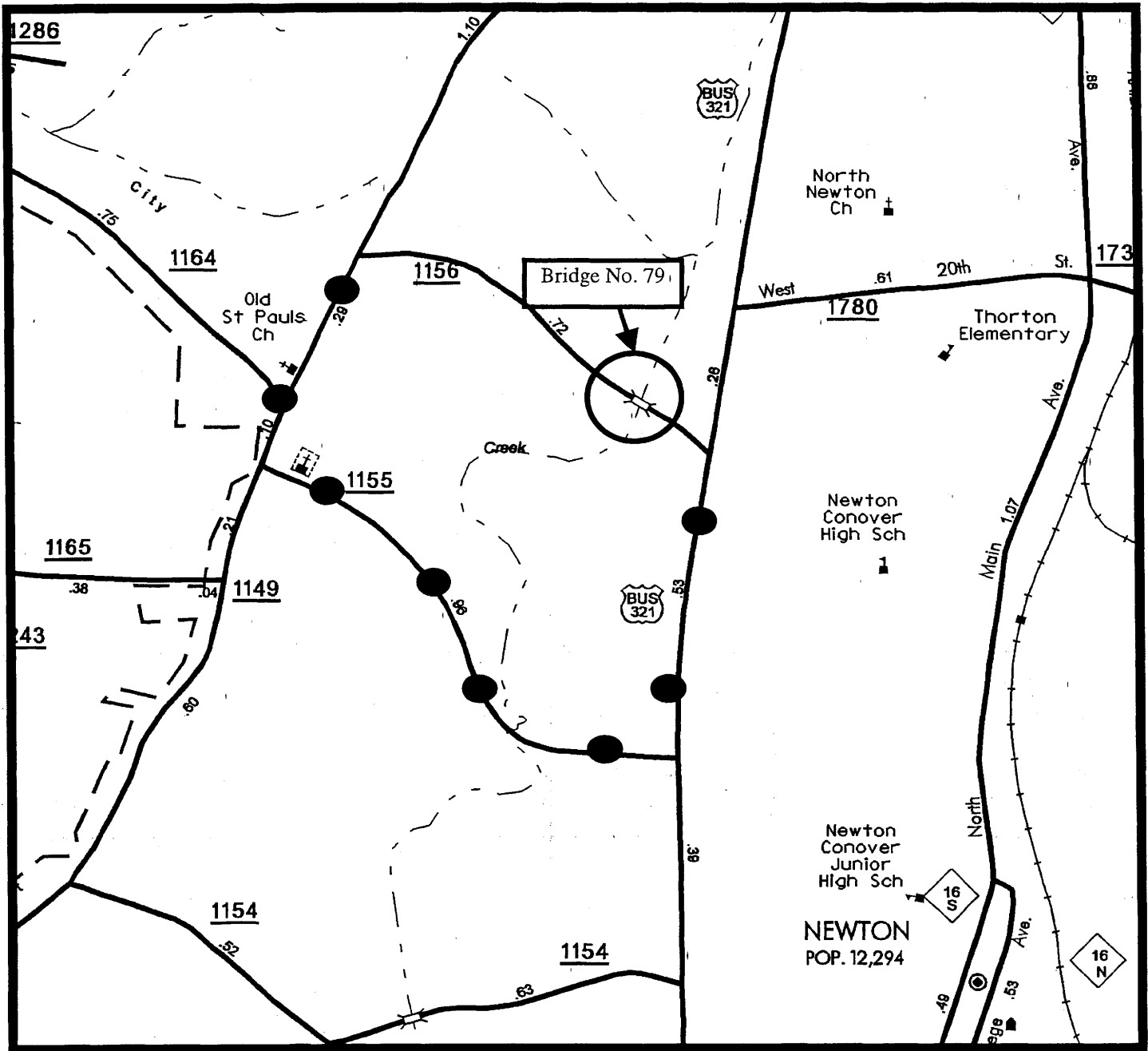
In order to allow Catawba County Schools time to prepare for road closure, the NCDOT Resident Engineer will notify the School Transportation Director at (828) 464-8333 of the bridge removal 30 days prior to road closure.

Natural Environment Unit - Bridge Demolition

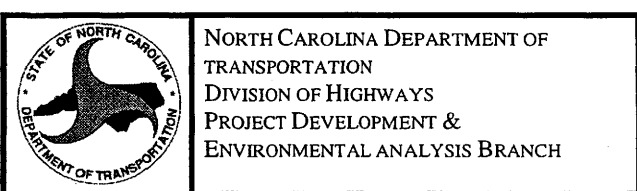
The entire bridge is constructed of timber and steel. Therefore, it is unlikely that there will be any temporary fill resulting from bridge demotion.

Roadway Design/Program Development Branch - Sidewalks

Sidewalks are included on both sides for the entire length of the project. The City of Newton will be responsible for the maintenance and liability of the proposed sidewalk, as well as, sharing in the cost of construction according to NCDOT requirements for a municipality with a population from 10,000 to 50,000 (70% DOT and 30% municipality).



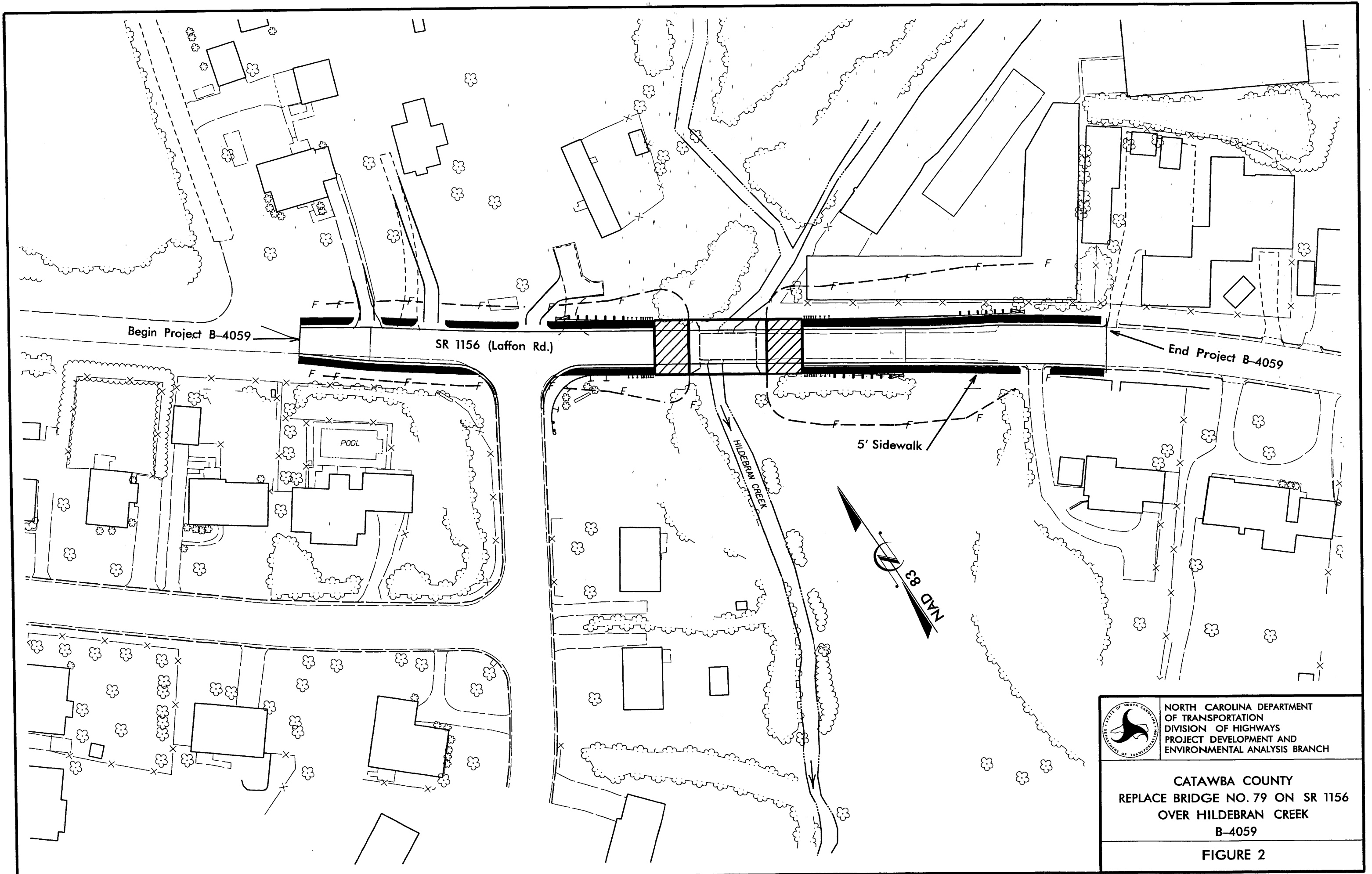
STUDIED DETOUR ROUTE —●—●—●—



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

**CATAWBA COUNTY
REPLACE BRIDGE NO. 79 ON SR 1156
OVER HILDEBRAN CREEK
B-4059**

Figure 1



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH</p>
<p>CATAWBA COUNTY REPLACE BRIDGE NO. 79 ON SR 1156 OVER HILDEBRAN CREEK B-4059</p>	
<p>FIGURE 2</p>	



North Carolina Department of Cultural Resources
State Historic Preservation Office

David L. S. Brook, Administrator

Michael F. Easley, Governor
Isisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary
Office of Archives and History

Division of Historical Resources
David J. Olson, Director

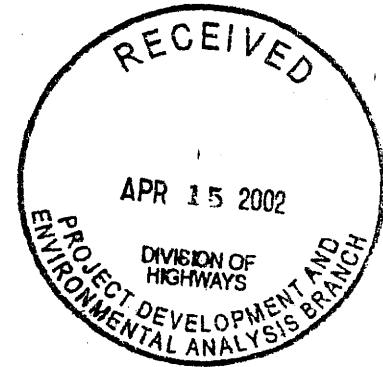
April 10, 2002

MEMORANDUM

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

FROM: David Brook *BJS for DB*

SUBJECT: Replace Bridge No. 79 on SR 1156 over ^{HILDEBRAN} Anthony Creek,
B-4059, Catawba County, ER 02-8604



Thank you for your memorandum of September 25, 2001, concerning the above project.

We have conducted a search of our maps and files and determined that these structures are not located in or adjacent to any district which is listed in or eligible for listing in the National Register of Historic Places. In addition, the structures are neither listed in nor eligible for listing in the National Register as individual properties. We, therefore, have no comment on the project.

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

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

DB:kgc

	Location	Mailing Address	Telephone/Fax
Administration	507 N. Blount St, Raleigh, NC	4617 Mail Service Center, Raleigh 27699-4617	(919) 733-4763 • 733-8653
Restoration	515 N. Blount St, Raleigh, NC	4613 Mail Service Center, Raleigh 27699-4613	(919) 733-6547 • 715-4801
Survey & Planning	515 N. Blount St, Raleigh, NC	4618 Mail Service Center, Raleigh 27699-4618	(919) 733-4763 • 715-4801