



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

August 8, 2005

MEMORANDUM TO: Mr. M. L. Holder, P.E.
Division 12 Engineer

FROM: Philip S. Harris, III, P.E. *PSH*
Natural Environment Unit Head
Project Development and
Environmental Analysis Branch

SUBJECT: Hickory and Catawba Counties, Hickory East Side Thoroughfare
from North of Interchange at I-40 to North of SR 1692 (Tate
Boulevard) (AD section) From North of SR 1692 (Tate
Boulevard) to SR 1453 (Springs Road) (AE section); State
Project No. 8.2790906; Federal Aid Project STP-5621(6); TIP
U-2307AD/U-2307AE

Attached is the modification to the DWQ Water Quality Certification Nos.00-0914 and 00-1587 for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

cc: Mr. Art McMillan, P.E.
Mr. Omar Sultan
Mr. Jay Bennett, P.E.
Mr. David Chang, P.E.
Mr. Randy Garris, P.E.
Mr. Greg Perfetti, P.E.
Mr. Mark Staley
Mr. John F. Sullivan, III, FHWA
Ms. Trish Simon, Division 12 DEO

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

TELEPHONE: 919-733-3141
FAX: 919-733-9794

WEBSITE: WWW.DOT.ORG

LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

PROJECT COMMITMENTS

Hickory East Side Thoroughfare
From North of Interchange at 1-40 to North of SR 1692 (Tate Boulevard) (AD section)
From North of SR 1692 (Tate Boulevard) to SR 1453 (Springs Road) (AE section)
Hickory, Catawba County
F.A. Project STP-5621(6), State Project 8.2790906
TIP Project U-2307AD/U-2307AE

In addition to the standard Individual Permit Conditions, Section 404 Only Conditions, Regional Conditions, State Consistency Conditions, General Certification Conditions, the Section 401 Conditions of Certification and Best Management Practices for Protection of Surface Waters, the following Environmental Commitments were developed through Project Development and Design and have been agreed to by NCDOT:

Commitments Developed Through Project Development and Design

Current status, changes, or additions to the project commitments as shown in the environmental impact statement are printed in *italics*. Commitments listed in the EIS which are standard procedures have not been listed below.

Project Development & Environmental Analysis Branch, Hydraulics Unit

Stream relocations will be coordinated with the US Fish & Wildlife Service and will be designed in accordance with NCDOT Best Management Practices, including a new channel with similar cross-section, gradient, substrate, and sinuosity. New channel banks will be stabilized immediately with appropriate vegetative cover and will be planted with desirable tree and shrub species to provide replacement habitat. Filling of the existing stream channel will be minimized, leaving the remainder of the stream as a backwater area, and fill will be placed in accordance with NCDOT Best Management Practices.

Stream relocations have been coordinated with the US Army Corps of Engineers (USACE) as part of the permitting process. This included a public notice that allowed the US Fish & Wildlife Service an opportunity to comment. Commitments in the permit (pertaining to stream relocation) supercede the above project commitments that were listed in the EIS.

Division 12 Construction Engineer

Wetland areas will not be utilized as disposal areas for excavated spoil materials, as source areas for borrow materials, nor as staging areas for equipment or storage of construction materials.

Sites utilized for borrow or waste materials will be reviewed by Division personnel to ensure compliance with wetland and protected species regulations.

PROJECT COMMITMENTS (continued)

Hydraulics Unit

NCDOT will coordinate with the City of Hickory to ensure compliance with local floodplain ordinances.

The NCDOT Hydraulics Unit has coordinated with the City of Hickory in preparation of a floodway modification for Lyle Creek (applicable to segment AE).

Commitments Developed Through Permitting

Division 12 Construction Engineer

A pre-construction meeting between NCDOT representatives, the contractor and a representative of the USACE, Asheville Regulatory Field Office will be held prior to any work in jurisdictional waters and wetlands to ensure that there is a mutual understanding of all terms and conditions of the permit. The USACE must be notified at least 30 days prior to the meeting. In addition, the USACE must be informed (by facsimile or electronic mail) in advance of water diversion into the newly constructed channel (condition 11 of the permit).

Roadside Environmental Unit

Stability of the natural channel that is being relocated will be monitored for a period of 3 years or at least two bankfull flow events following completion of the channel relocation. Monitoring will include photos, plant survival and channel stability analysis as indicated in the permit (condition 12).

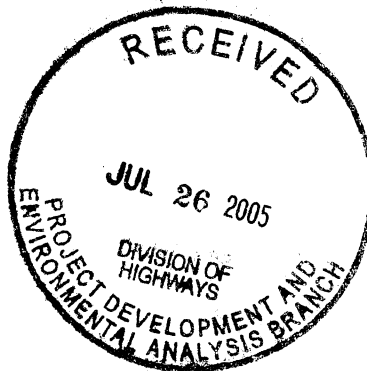
Commitments Developed Through Permit Modification

Division 12 Construction Engineer/Hydraulics Unit

The rock cross vane weirs and rock cross vane step/pool structures shall be constructed as depicted in the application and shall be installed in such a manner that the original stream profiles are not altered (i.e., the depth of the channel must not be reduced by a widening of the streambed). Existing stream dimensions (including pattern and profile) are to be maintained above and below the location of the rock cross vane weirs and the rock cross vane step/pool structures. The structures shall be designed and installed to allow for wildlife movement as well as prevent headcutting of the stream.



LUSTY K. VANDERKAM - CHIEF OF BUREAU
 Michael F. Easley, Governor
 William G. Ross Jr., Secretary
 North Carolina Department of Environment and Natural Resources
 Alan W. Klimek, P.E. Director
 Division of Water Quality



July 21, 2005

Dr. Gregory J. Thorpe, PhD, Manager
 Project Development and Environmental Analysis Branch
 North Carolina Department of Transportation
 1548 Mail Service Center
 Raleigh, NC 27699-1548

**RE: Certification Pursuant to Section 401 of the Federal Clean Water Act,
 Modification to Hickory East Side Thoroughfare, TIP No. U-2307AB, Federal Aid Project No. STP-5621(6), State Project No. 8.2790906, WQC Project Nos. 00-0914 and 00-1587, Catawba County**

Dear Dr. Thorpe:

Attached is a modification to Certification Nos. 00-0914 and 00-1587 originally issued to the North Carolina Department of Transportation (NCDOT) on January 2, 2001. The attached modification authorizes the construction of rock cross vane weirs at Permit Sites 11 and 12 as described in your permit modification application received by the Division of Water Quality (DWQ) on July 7, 2005. This modification is applicable only to the additional proposed activities. All of the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 2, 2001, still apply except where superceded by this certification.

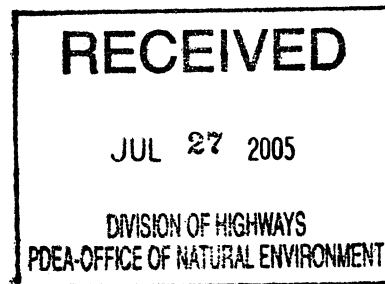
This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, **please telephone Polly Lespinasse in the Mooresville Regional Office at 704-663-1699.**

Sincerely,

for Alan W. Klimek, P.E.

Attachments

cc: Steve Lund, USACE Asheville Field Office
 Rob Ridings, DWQ Wetlands Unit
 Megan Willis, DOT PDEA
 File Copy



One North Carolina Naturally

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

This Certification is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H, Section .0500. The attached modification authorizes the construction of rock cross vane weirs at Permit Sites 11 and 12. This modification is applicable only to the additional proposed activities. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated January 2, 2001, still apply except where superceded by this certification.

Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H.0506(h)(6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) those required by Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This Certification shall expire three (3) years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding US Army Corps of Engineers (USACE) Permit, whichever is sooner.

Conditions of Certification:

1. The rock cross vane weirs shall be constructed as depicted in the application and shall be installed in such a manner that the original stream profiles are not altered (i.e., the depth of the channel must not be reduced by a widening of the streambed). Existing stream dimensions (including pattern and profile) are to be maintained above and below the location of the rock cross vane weirs and the rock cross vane step/pool structures. The structures shall be designed and installed to allow for wildlife movement as well as prevent headcutting of the stream. The applicant may be required to provide evidence that the equilibrium has been maintained, if requested in writing by the DWQ.
2. Erosion and sediment control practices must utilize Best Management Practices (BMP) and be in full compliance with all specifications governing the proper design, installation, and operation and maintenance of such BMP in order to protect surface water standards:
 - a. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow pit sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - b. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - c. The reclamation measures and implementation of these measures must be in accordance with the requirements of the Sedimentation Pollution Control Act.
3. Sediment and erosion control measures shall not be placed in wetlands or waters to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored within 30 days after the Division of Land Resources has released the project.
4. Upon completion of the project, the NCDOT shall complete and return the enclosed "Certification of Completion Form" to notify the DWQ when all work included in the 401 Certification has been completed. The responsible party shall complete the attached form and return it to the 401/Wetlands Unit of the Division of Water Quality upon completion of the project.

5. All other conditions written into the previous Water Quality Certification, dated January 2, 2001, for the project still apply.
6. Continuing Compliance. NCDOT shall conduct its activities in a manner so as not to contravene any state water quality standard [including any requirements for compliance with section 303(d) of the Clean Water Act] and any other appropriate requirements of state and federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that state or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification to include conditions appropriate to assure compliance with such standards and requirements in accordance with 15 A NCAC 2H.0507(d). Before codifying the certification, DWQ shall notify NCDOT and the USACE, provide public notice in accordance with 15A NCAC 2H.0503, and provide opportunity for public hearing in accordance with 15A NCAC 2H.0504. Any new or revised conditions shall be provided to NCDOT in writing, shall be provided to the USACE for reference in any permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.

Violations of any condition herein set forth shall result in revocation of this Certification and may result in criminal and/or civil penalties. If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

This, the 21st day of July 2005

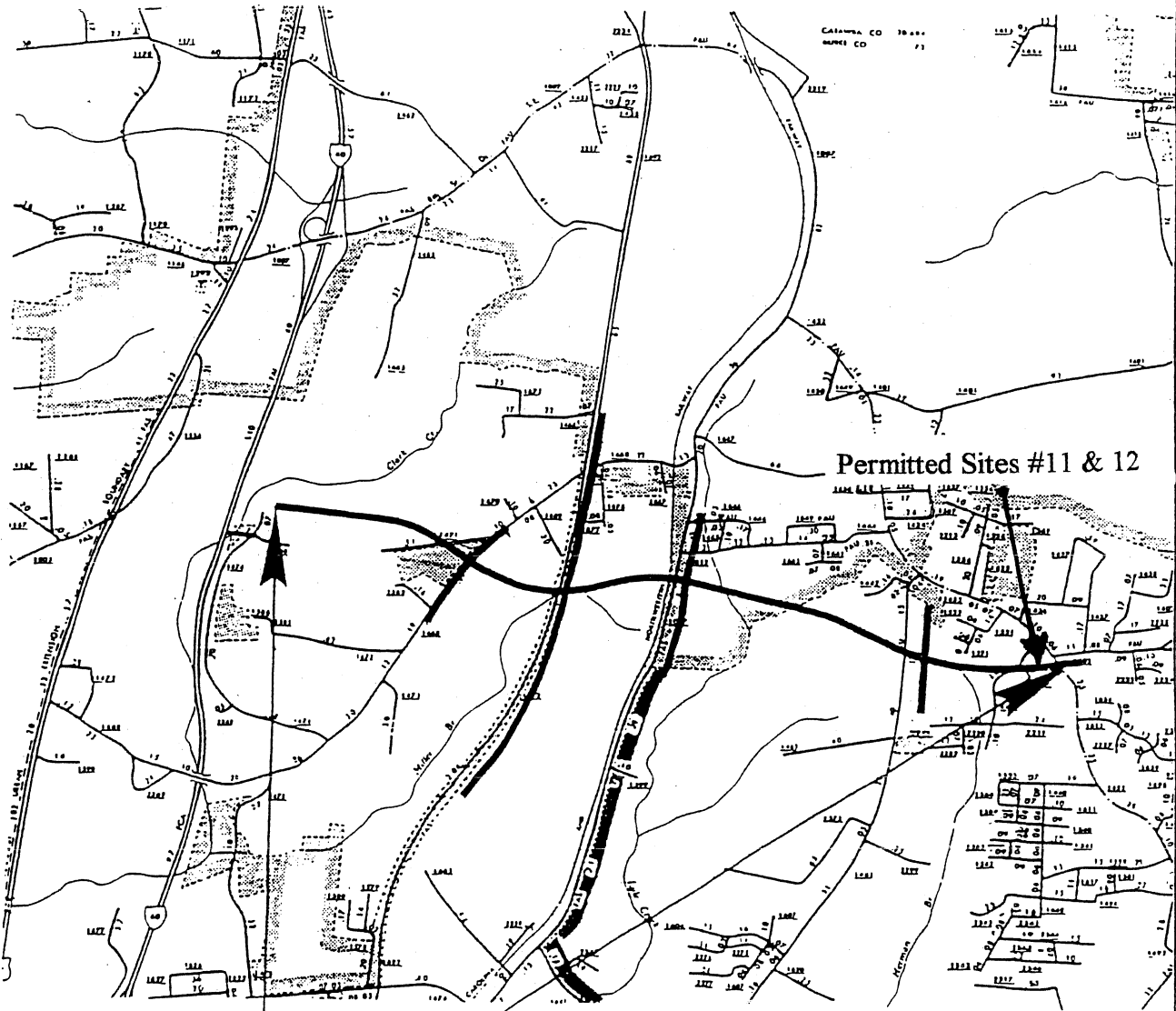
DIVISION OF WATER QUALITY



for Alan W. Klimek, P.E.
Director

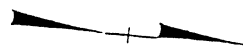
Modification to WQC Nos. 00-0914 and 00-1587

VICINITY MAP



Permitted Sites #11 & 12

SITE



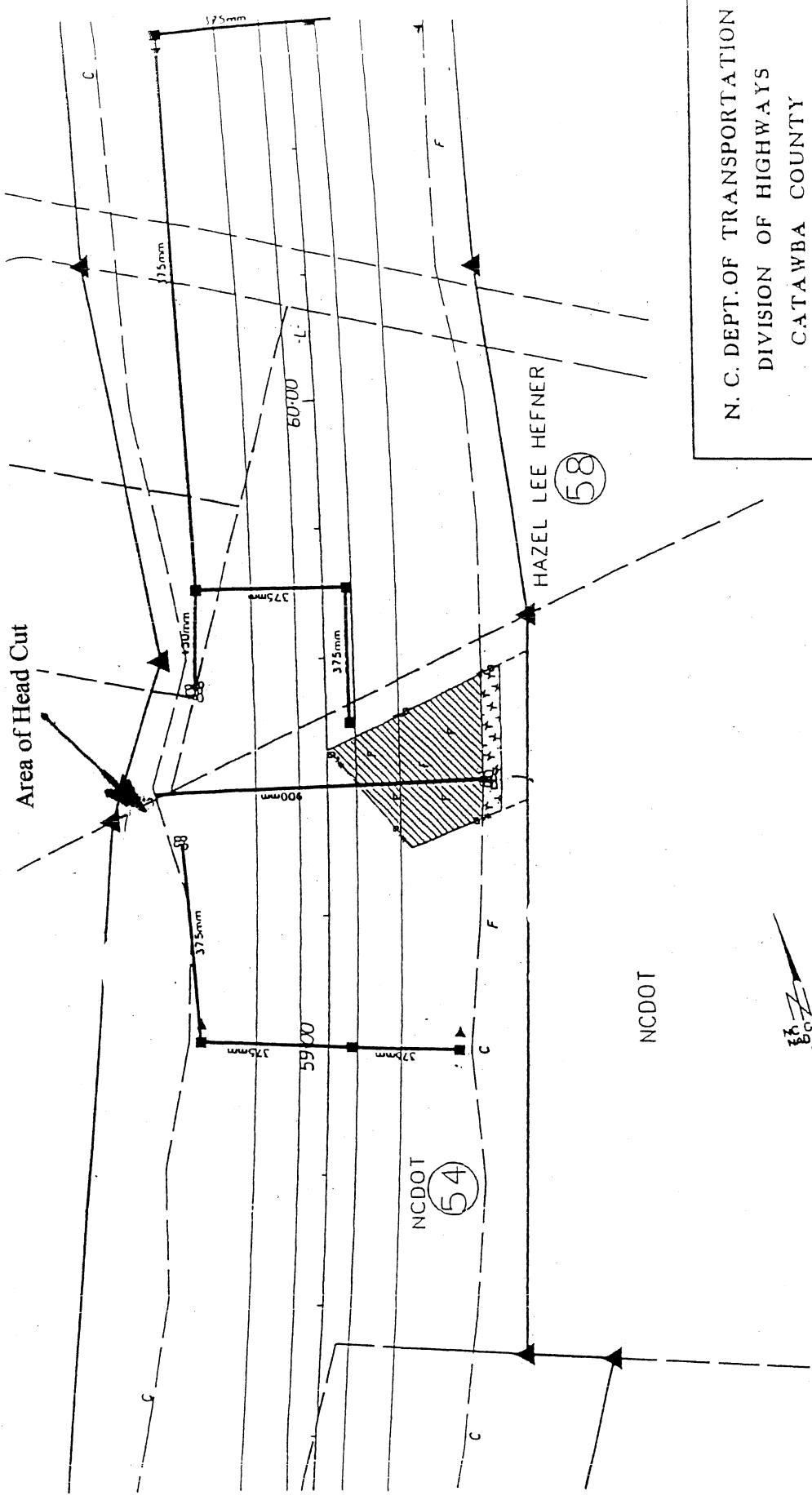
N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
CATAWBA COUNTY



PROJECT: 8.2790901 (U-2307AB)

HICKORY EAST
SIDE THOROUGHFARE

SHEET 1 OF 19

12/7/04



 DENOTES FILL IN WETLAND
 DENOTES MECHANIZED CLEARING

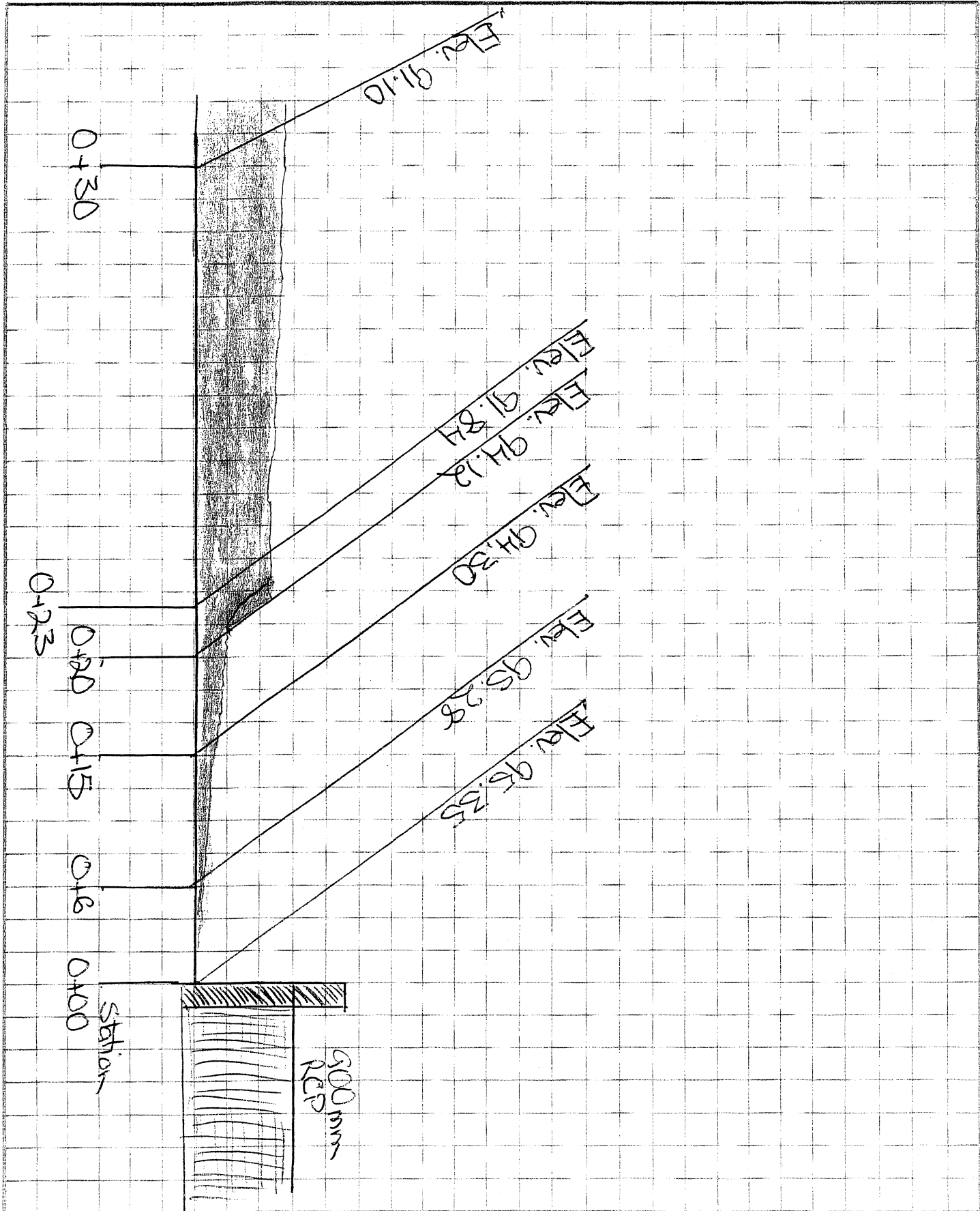
PLAN VIEW
 SITE II

N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CATAWBA COUNTY
 PROJECT: 8-2790901 (U-2307 AB)
 HICKORY EAST
 SIDE THOROUGHFARE
 SHEET 13 OF 19 12/7/04

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY BUILDING
P. O. BOX 25201
RALEIGH, NORTH CAROLINA 27611

SUBJECT Permit Site # 11
Action 10 # 2000.31274
PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____

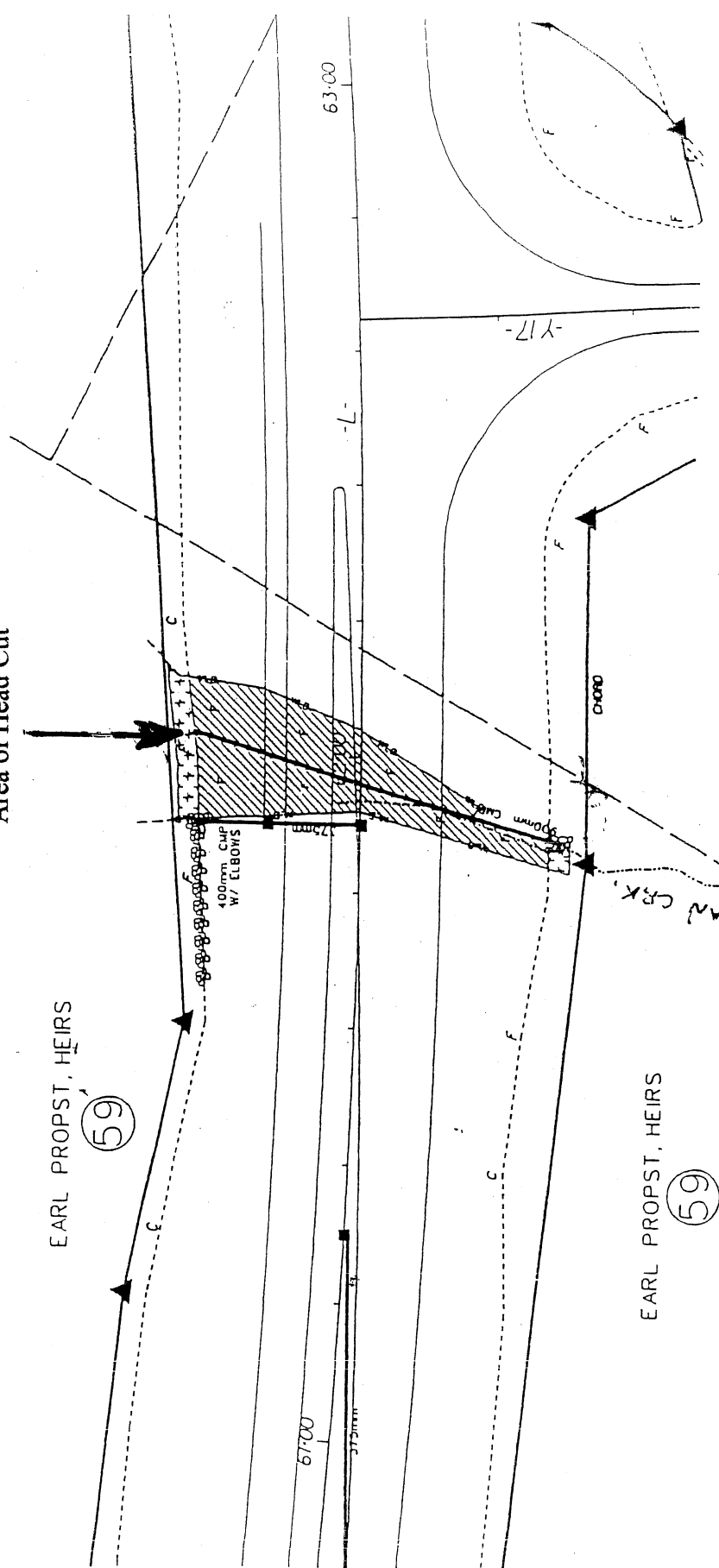
TWP PROJECT 0-2307AD/AE
Catawba COUNTY
STATION _____
STR NO. _____ SHEET _____ OF _____



Area of Head Cut

EARL PROBST, HEIRS

(59)



EARL PROBST, HEIRS

(59)

PLAN VIEW SITE 12



DENOTES FILL IN
WETLAND



DENOTES MECHANIZED
CLEARING

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

PROJECT: 8.2790901 (U-2307A.B)

HICKORY EAST

SIDE THOROUGHFARE

SHEET 14 OF 19

12/7/04

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY BUILDING
P. O. BOX 25201
RALEIGH, NORTH CAROLINA 27611

SUBJECT Permit Site # 12
Action ID # 200031274

TIP U-2307 AD/AE
Catawba COUNTY

PREPARED BY _____ DATE _____ STATION _____
CHECKED BY _____ DATE _____ STR NO _____ SHEET _____ OF _____

