

**PROJECT SPECIAL PROVISION**

(10-18-95)

Z-1

**PERMITS**

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<b><u>PERMIT</u></b>	<b><u>AUTHORITY GRANTING THE PERMIT</u></b>
Water Quality (401)	Division of Environmental Management, DENR State of North Carolina
Buffer Certification	Division of Environmental Management, DENR State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by \* are the responsibility of the department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-14 of the *Standard Specifications* and the following:

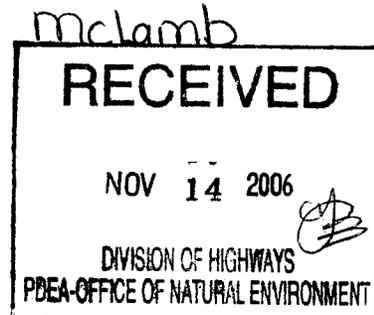
Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

**Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such a manner as to not affect the waters or wetlands.**



November 9, 2006  
Wake County  
DWQ Project No. 20061671  
Bridge 255 on SR 1006  
TIP No. B-4299

**APPROVAL of NEUSE BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS**



Dr. Gregory J. Thorpe, Ph.D.  
NCDOT, Project Development and Environmental Analysis  
1598 Mail Service Center  
Raleigh, NC 27699-1598

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge 255 in Wake County:

**Neuse Riparian Buffer Impacts**

Site	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
1	6,286	0	6,286	N/A	3,065	0	3,065	N/A
<b>Totals</b>	<b>6,286</b>	<b>0</b>	<b>6,286</b>	<b>0</b>	<b>3,065</b>	<b>0</b>	<b>3,065</b>	<b>0</b>

\* n/a = Total for Site is less than 1/3 acre and 150 linear feet of impact, no mitigation required

**Total Buffer Impact for Project: 9,351 square feet.**

The project shall be constructed in accordance with your application dated received October 24, 2006. After reviewing your application, we have decided that these impacts are covered by the Neuse Riparian Buffer Rules (15A NCAC 2B.0233). In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire after five years from the issue date.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must 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 total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification.



**Conditions of Certification:**

1. Strict adherence to the most recent version of NCDOT's Best Management Practices For Bridge Demolition and Removal approved by the US Army Corps of Engineers is a condition of the 401 Water Quality Certification.
2. Bridge deck drains should not discharge directly into the stream. Stormwater should be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of *Stormwater Best Management Practices*.
3. All stormwater runoff shall be directed as sheetflow through stream buffers at nonerosive velocities, unless otherwise approved by this certification.
4. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular DOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction.
5. Pursuant to NCAC15A 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
6. If concrete is used during construction, a dry work area should be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete should not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
7. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
8. The dimension, pattern and profile of the stream above and below the crossing should not be modified. Disturbed floodplains and streams should be restored to natural geomorphic conditions.
9. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
10. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
11. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
12. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
13. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.



14. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §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.
15. A copy of this Certification shall be posted on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
16. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
- \* 17. Upon completion of the project, the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the Certification has been completed.
18. Native riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.
19. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this certification without appropriate modification. Should waste or borrow sites be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.
20. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
  - b. 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 sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - c. 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*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
21. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, they shall be removed and the natural grade restored upon completion of the project.



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. This certification and its conditions are final and binding unless you ask for a hearing. 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 contact Rob Ridings at (919) 733-9817.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan W. Klimek", is written over the typed name below.

Alan W. Klimek, P.E.

Attachment (Certificate of Completion form)

cc: Chris Murray, Division 5 Environmental Officer  
Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office  
Travis Wilson, NC Wildlife Resources Commission  
DWQ Raleigh Regional copy  
File Copy



DWQ Project No.: \_\_\_\_\_ County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of Water Quality Certification: \_\_\_\_\_

**\* Certificate of Completion**

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

**Applicant's Certification**

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Agent's Certification**

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Engineer's Certification**

\_\_\_\_\_ Partial \_\_\_\_\_ Final

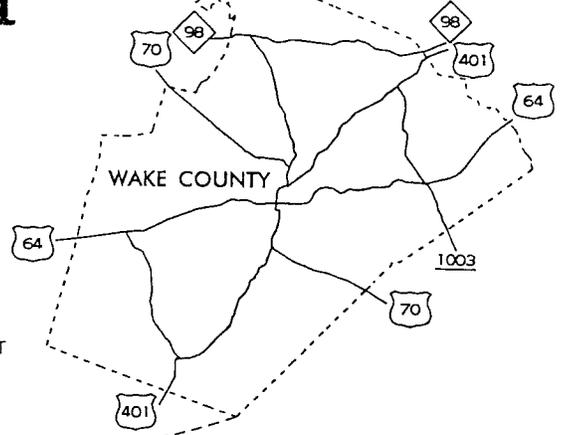
I, \_\_\_\_\_, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature \_\_\_\_\_ Registration No. \_\_\_\_\_

Date \_\_\_\_\_



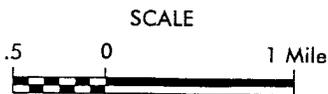
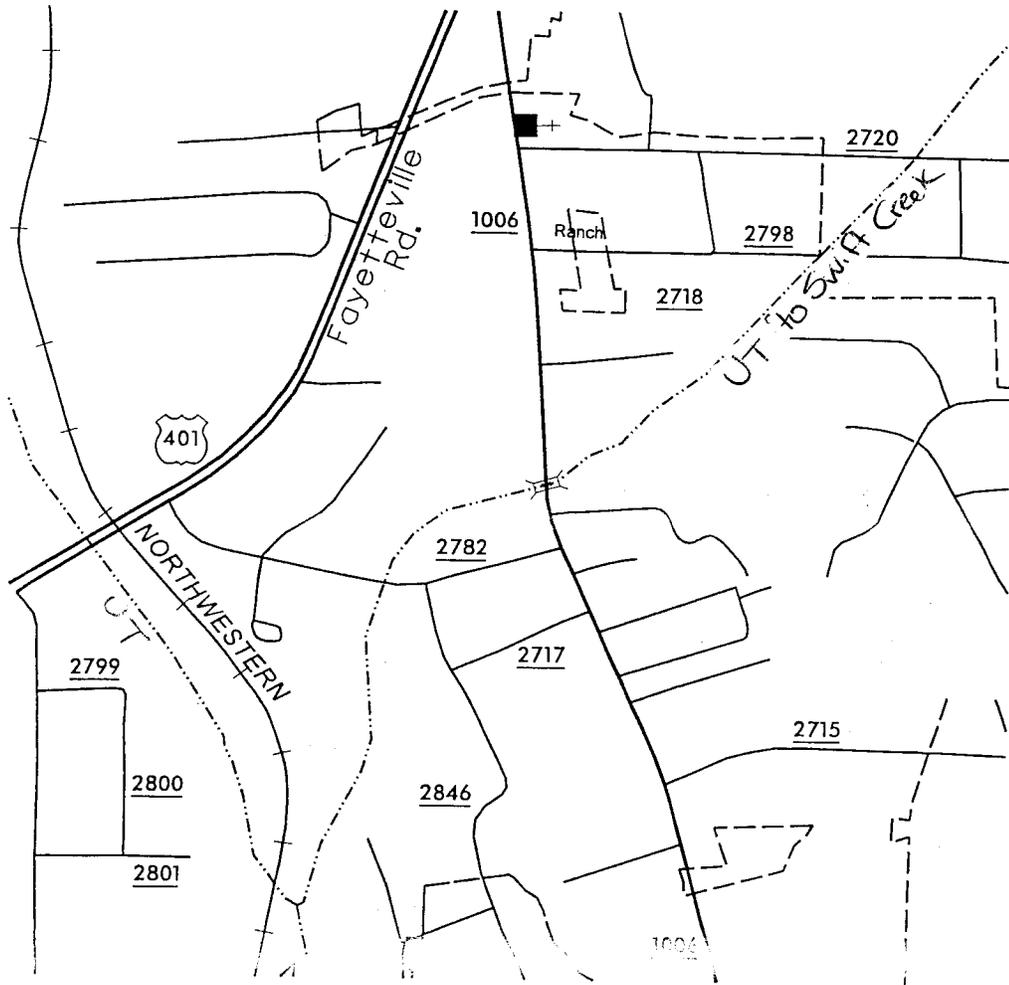
101



SEE INSET BELOW



WAKE COUNTY



N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS

WAKE COUNTY

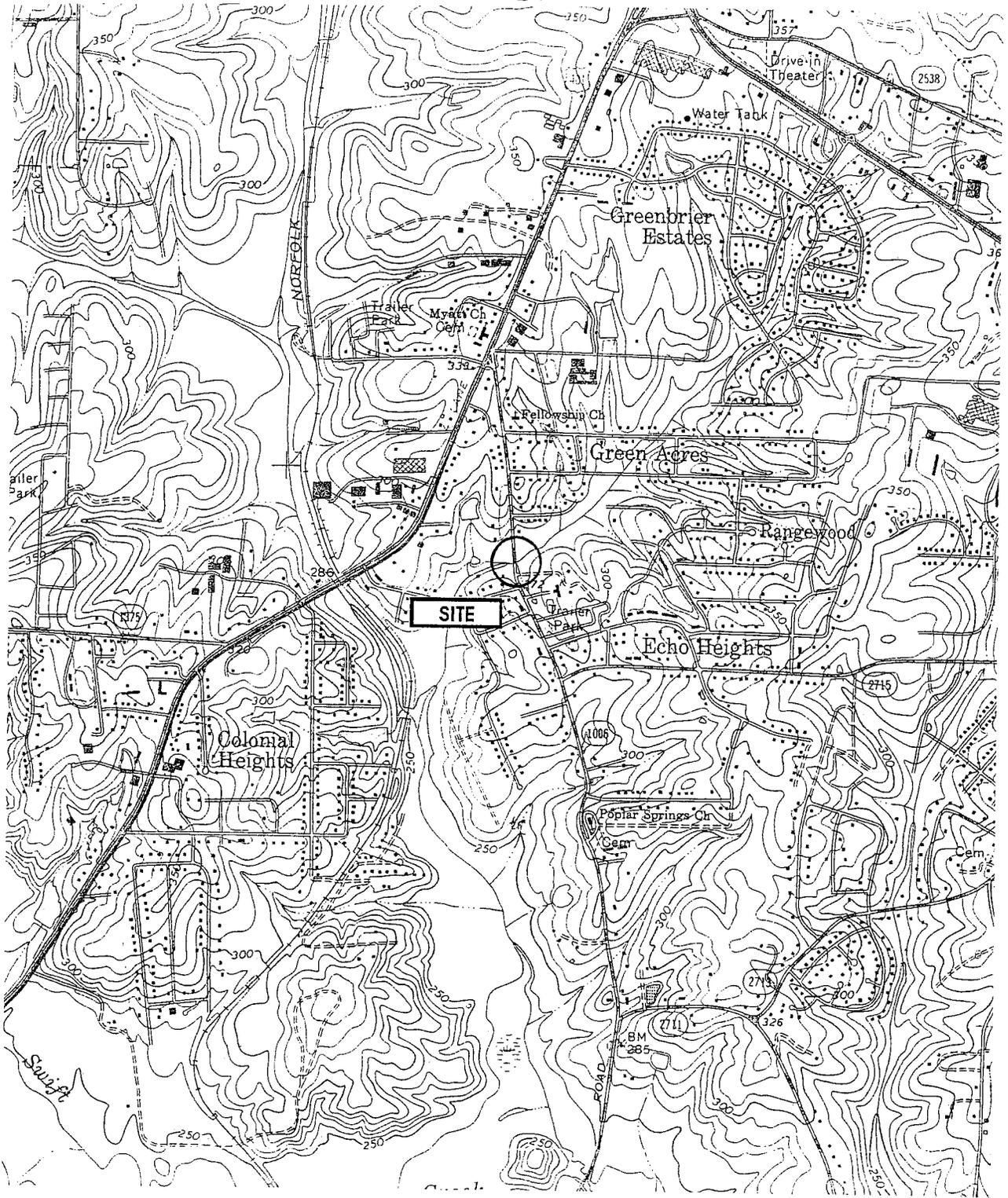
PROJECT: 33636.1.1 (B-4299)

BRIDGE NO. 255 OVER

UT to Swift Creek  
ON SR 1006

SHEET 1 OF 3

01 / 27 / 05



N.C. DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 33636.1.1 (B-4299)

BRIDGE NO. 255 OVER

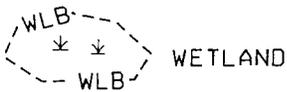
UT to Swift Creek  
 ON SR 1006

SHEET 2 OF 8

01 / 27 / 05

# 103 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 FILL IN SURFACE WATER



DENOTES MECHANIZED CLEARING

— BZ — RIPARIAN BUFFER ZONE

← ← FLOW DIRECTION

— TB — TOP OF BANK

— WE — EDGE OF WATER

— C — PROP. LIMIT OF CUT

— F — 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

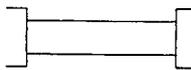
— EPB — PLANT BOUNDARY

▽ WATER SURFACE

X X X LIVE STAKES

BOULDER

— COIR FIBER ROLLS



PROPOSED BRIDGE



PROPOSED BOX CULVERT



PROPOSED PIPE CULVERT

(DASHED LINES DENOTE EXISTING STRUCTURES)

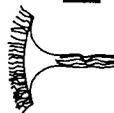


SINGLE TREE

WOODS LINE



DRAINAGE INLET



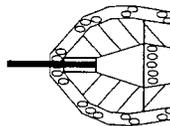
ROOTWAD



RIP RAP



ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE



RIP RAP ENERGY DISSIPATOR BASIN

N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 33636.1.1 (B-4299)

BRIDGE NO. 255 OVER

UT to Swift Creek  
ON SR 1006

SHEET 3 OF 8

01 / 27 / 05

Project No. 33636.1.1 (B-4299)

**Property Owner List**

Parcel Number	Name	Address
2	John Henry Battz	5500 Old Stage Road Raleigh, NC 27603
5	Richard D. Abernathy	5616 Old Stage Road Raleigh, NC 27603
6	George F. Horton	5412 Old Stage Road Raleigh, NC 27603

N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS

WAKE COUNTY

PROJECT: 33636.1.1 (B-4299)

BRIDGE NO. 255 OVER

UT to Swift Creek

ON SR 1006

SHEET 4 OF 8

01 / 27 / 05

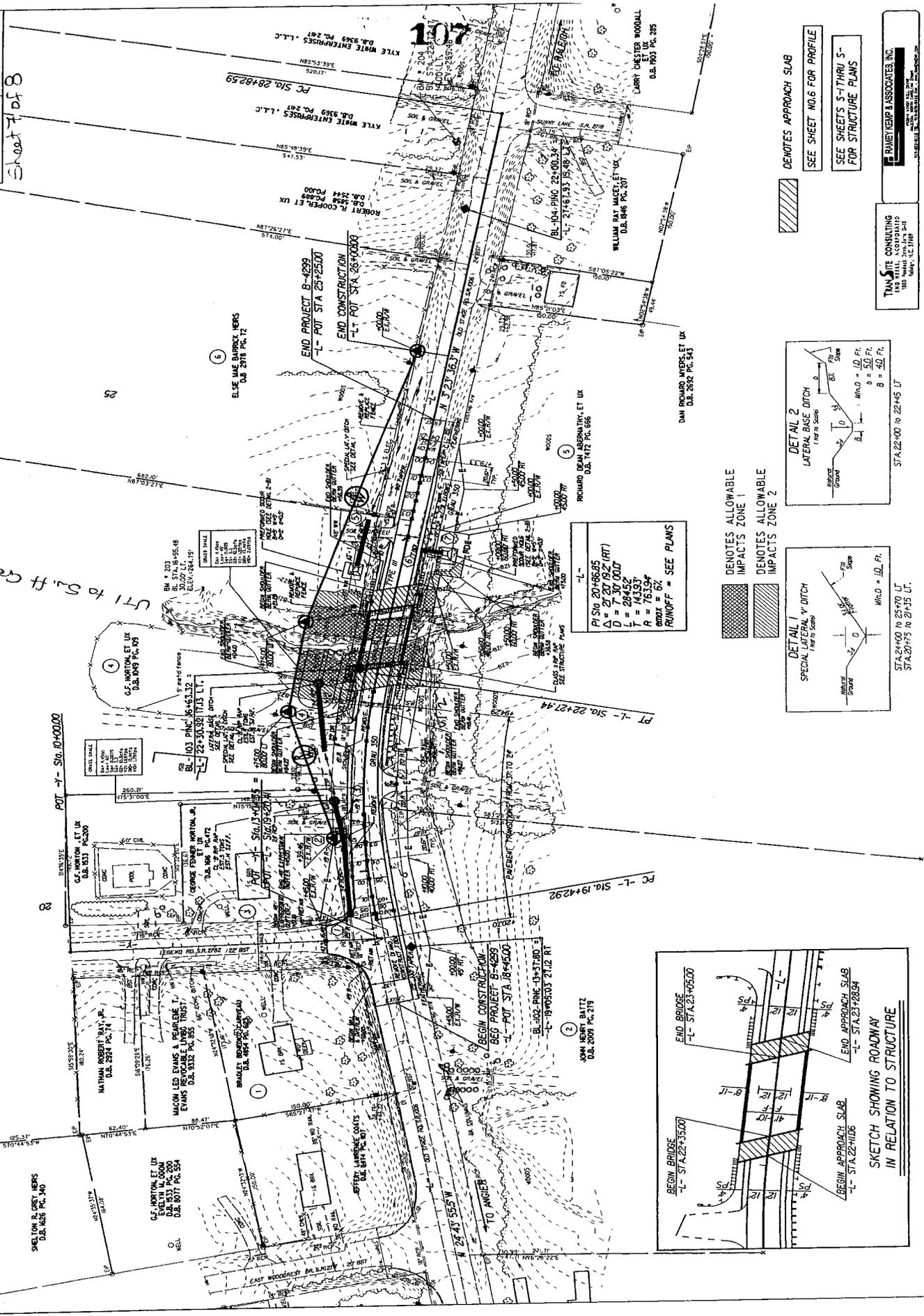




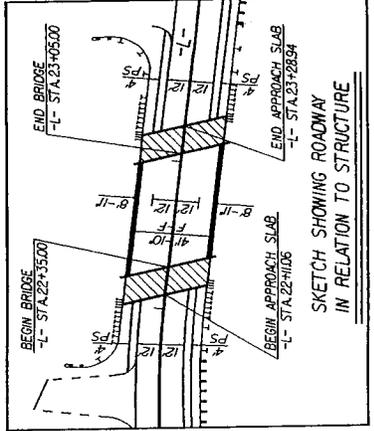
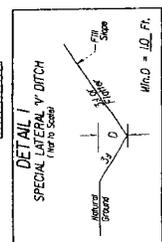
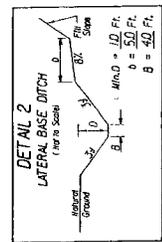
PROJECT REFERENCE NO. B-4299  
 SHEET NO. 4  
 ROADWAY DESIGN  
 PROFESSIONAL SEAL 2011  
 RICHARD WOODALL  
 PROFESSIONAL SEAL 1846  
 RICHARD WOODALL

Sheet 7 of 8

REVISIONS  
 5-8-04  
 ADDITION OF RIGHT-OF-WAY PROPERTY LINES



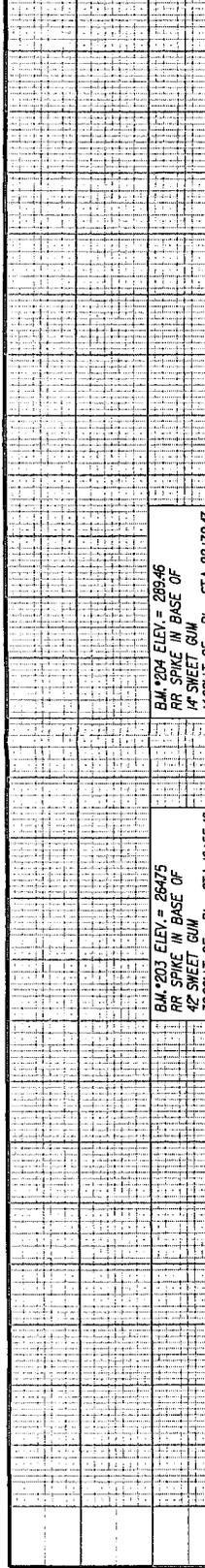
L-  
 P STA 20+48.65  
 $\Delta = 27.27$  822 (RT)  
 $D = 7.30$  0007  
 $L = 284.52$   
 $T = 1433.97$   
 $R = 763.94$   
 $ENDR = 6X$   
 RUNOFF = SEE PLANS



TRANSTATE CONSULTING  
 1500 W. 10th St., Suite 200  
 Lincoln, NE 68502  
 (402) 441-1111  
 FAX: (402) 441-1112  
 WWW.TRANSTATECONSULTING.COM

STA. 22+00 TO 22+45 LT  
 STA. 24+00 TO 25+70 LT  
 STA. 20+75 TO 21+55 LT

14.00' LT. OF -BL- STA. 22+72.47  
 30.00' LT. OF -BL- STA. 16+55.48  
 8.14' \*203 ELEV. = 264.75  
 RR SPIKE IN BASE OF 42' SWEEP CURVE  
 8.14' \*204 ELEV. = 265.46  
 RR SPIKE IN BASE OF 42' SWEEP CURVE  
 14.00' LT. OF -BL- STA. 22+72.47



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1600 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 265.9 FT.
BASE DISCHARGE	= 1900 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 266.3 FT
OVERTOPPING DISCHARGE	= 2300 CFS
OVERTOPPING FREQUENCY	= 200+/- YR.
OVERTOPPING ELEVATION	= 266.75 FT
DATE OF SURVEY	4-20-04
W.S. ELEVATION AT DATE OF SURVEY	= 256.76 FT

END PROJECT  
 STA 24+50.00  
 ELEV. = 266.73

END PROP BRIDGE  
 STA 22+92.59  
 ELEV. = 267.21

END LAT. BASE DITCH  
 STA 22+56.00  
 ELEV. = 268.00

END SPECIAL LAT. V. DITCH  
 STA 24+00.00  
 ELEV. = 261.2

END SPECIAL LAT. V. DITCH  
 STA 24+50.00  
 ELEV. = 262.00

END SPECIAL LAT. V. DITCH  
 STA 25+70.00  
 ELEV. = 266.00

PI = 20+40.00  
 EL = 268.05  
 K = 1.65  
 VC = 167

1/2% SLOPE  
 1/4% SLOPE

MATERIAL TO BE REMOVED (TYP)

FOR PLAN, SEE SHEET NO. 4

SEE SHEET S-1 THRU S-4 FOR STRUCTURE PLANS

TRAN-S-TE CONSULTING  
 1000 HARRIS DRIVE, SUITE C-10  
 RAYNES, N.C. 27879  
 919-437-5464

Rampy Kemp & Associates, Inc.  
 Transportation Consulting Engineers  
 2804 W. Holly Hill Drive, Suite 100  
 Raleigh, N.C. 27617  
 919-878-5464