



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

July 31, 2008

U. S. Army Corps of Engineers
Regulatory Field Office
3331 Heritage Trade Drive Suite 105
Wake Forest, NC 27587

ATTENTION: Mr. Monte Matthews
NCDOT Coordinator

SUBJECT: **Nationwide Permit 23 and 33 Application** for the replacement of Bridge No. 38 over Saddle Mountain Creek on SR 1330 in Surry County, Federal Aid Project No. BRZ-1330(5), State Project No. 8.2742601, WBS Element 33346.1.1, **TIP No. B-3911**. \$240.00 Debit work order 8.2742601.

Dear Sir:

Please see the enclosed Pre-Construction Notification (PCN), Permit Drawings and Design plans for the above referenced project. A Categorical Exclusion was completed for this project in August 2007 and distributed shortly thereafter. Additional copies are available upon request. NCDOT proposes to replace the existing one-span, 52-foot long bridge, with a new 85-foot long single-span bridge. There will be no permanent surface water impacts to Saddle Mountain Creek. The <0.01 acre of temporary impacts to Saddle Mountain Creek is for the construction of a temporary work bridge. There will be 0.02 acres of permanent impacts to riparian wetlands.

IMPACTS TO WATERS OF THE UNITED STATES

General Description:

The water resources impacted for project B-3911 are Saddle Mountain Creek and a seep wetland located in a pasture southeast quadrant. Saddle Mountain Creek is located in the Yadkin River Basin (Division of Water Quality (DWQ) subbasin 03-07-02) and is approximately 15 feet wide and 3 to 6 inches deep within the project area. The DWQ Index number for this section of Saddle Mountain Creek is 12-62-(1) and the Hydrological Cataloguing Unit is 03040101. The DWQ classifies Saddle Mountain Creek as "B-Tr-ORW". Within the project area, Saddle Mountain Creek is not listed as a 303(d) water. There are no 303(d) waters within a mile downstream of the project area.

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

Permanent Impacts:

There will be 0.01 acres of permanent fill in wetlands and 0.01 acres of mechanized clearing in wetlands. There are no permanent stream impacts to Saddle Mountain Creek.

Temporary Impacts:

There will be approximately <0.01 acre of temporary impacts to Saddle Mountain Creek from the construction of the temporary work bridge.

Utility Impacts:

There will be no utility impacts to jurisdictional resources.

Bridge Demolition:

The existing bridge’s superstructure consists of a one-span low steel truss (pony truss), at 52’-3”, with timber floor and a 1.5” asphalt overlay and an 11’-1” clear roadway width. The existing substructure consists of reinforced concrete abutments. Abutments will be partially (vertically) sawed off; the remaining portion of the abutments will hold back riprap. Bridge No. 38 can be removed without dropping fill into Saddle Mountain Creek. Best Management Practices (BMPs) for the Protection of Surface Waters and BMPs for Bridge Demolition and Removal will be followed.

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 January 31, 2008, the United States Fish and Wildlife Service (USFWS) lists three federally protected species for Surry 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. Schweinitz’s sunflower was last surveyed on October 9, 2006 and small-whorled pogonia on April 26, 2007, no plants were found resulting in a biological conclusion of No Effect.

Table 1. Federally Protected Species for Surry County

Common Name	Scientific Name	Status	Habitat	Biological Conclusion
Bog Turtle	<i>Clemmys muhlenbergii</i>	T (S/A)	Not Subject	N/A
Schweinitz’s sunflower	<i>Helianthus schweinitzii</i>	E	Yes	No Effect
Small-whorled pogonia	<i>Isotria medeoloides</i>	T	No	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". In addition, the following measures will be incorporated for this project.

- A trout moratorium on in-water construction is to be enforced from October 15 to April 15.
- Preformed scour hole
- Design Standards of Sensitive Water Shed will be adhered to for this project.

Mitigation:

Due to the minimal impacts of 0.02 acre associated with this project, NCDOT proposes no mitigation.

Schedule:

The project schedule calls for a January 20, 2009 Let date and a review date of **November 28, 2009**.

REGULATORY APPROVALS

Section 404 Permit:

It is anticipated that the permanent impacts to Saddle Mountain Creek will be authorized under Section 404 Nationwide Permit 23 (Approved Categorical Exclusion). We are, therefore, requesting the issuance of a Nationwide Permit 23 to encompass the 0.02 acre of impacts to wetlands. A Nationwide Permit 33 (Temporary Constuction, Access and Dewatering) is also requested to authorize <0.01 acre of temporary impacts due to the construction of a temporary work bridge.

Section 401 Permit:

We anticipate 401 General Certification numbers 3701 and 3688 will apply to this project. All general conditions of the General Certification will be adhered to. The wetland impacted on this project site is adjacent to ORW waters, therefore NCDOT is requesting written concurrence from the DWQ. In accordance with 15A NCAC 2H .0501(a) We are submitting five copies of this permit application to the North Carolina Department of Environmental and Natural Resources, Division of Water Quality, for your approval.

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

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. The application will be posted at <http://207.4.62.65/PDEA/PermApps/>.

Sincerely,



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

cc:

W/attachment

Mr. Brian Wrenn, NCDWQ (5 copies)
Ms. Marella Buncick, USFWS
Ms. Marla Chambers, NCWRC

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Michael Pettyjohn, P.E., Division Engineer
Mr. Heath Slaughter, DEO
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P.E., Programming and TIP
Mr. Art McMillian, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Ms. Natalie Lockhart, 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 23 and 33

3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here:

4. If payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed for mitigation of impacts, attach the acceptance letter from NCEEP, complete section VIII, and check here:

5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here:

II. Applicant Information

1. Owner/Applicant Information

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

Mailing Address: 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. 38 on SR 1330 over Saddle Mountain Ceek.
2. T.I.P. Project Number or State Project Number (NCDOT Only): B-3911
3. Property Identification Number (Tax PIN): N/A
4. Location
County: Surry Nearest Town: Devotion, NC
Subdivision name (include phase/lot number): N/A
Directions to site (include road numbers/names, landmarks, etc.): I-40 West; to exit 6B towards US 52 North; Follow signs to I-77 S. to US 21; Right on Thurmond, Left on Haystack Road, Arrive: B-3911.
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): 36'26'18.27 °N 80'54'44.10 °W
6. Property size (acres): N/A
7. Name of nearest receiving body of water: Mitchell River
8. River Basin: Yadkin
(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: Pasture, White Pine Plantation, Mesic Mixed Hardwood Forest (Piedmont Subtype), Residential, Riparian Buffer, Roadside and Disturbed.
10. Describe the overall project in detail, including the type of equipment to be used: Bridge No. 38 will be replaced with a 85 ft. long single-span bridge.

11. Explain the purpose of the proposed work: NCDOT Bridge Maintenance Unit records indicate Bridge No. 38 has a sufficiency rating of 41.7 out of a possible 100 for a new structure. The bridge is considered structurally deficient and functionally obsolete. The replacement of this inadequate structure will result in safer and more efficient traffic operations.

IV. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules. 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 0.01 acres of permanent fill and 0.08 acres of mechanized clearing to wetlands in the project study area. There will be <0.01 feet (approximately 30 square feet) of temporary stream impacts to Saddle Mountain Creek
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)
1	Fill and Mechanized Clearing	Non-riverine Seep	Yes	130	0.02
Total Wetland Impact (acres)					

3. List the total acreage (estimated) of all existing wetlands on the property: 0.02

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	Saddle Mountain Creek	Temporary	Perennial	25'	20'	<0.01
Total Stream Impact (by length and acreage)					20'	<0.01

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):	<0.01 (temp.)
Wetland Impact (acres):	0.02
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):	20' (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. The current bridge will be replaced just upstream of the existing location. Traffic will be maintained on the existing bridge during construction. 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 <0.01 linear feet of permanent impacts to Saddle Mountain Creek. These impacts are from use of a temporary work bridge, which will not have an adverse effect or result in 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. Stormwater from this bridge replacement will not be directly discharged into Saddle Mountain 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

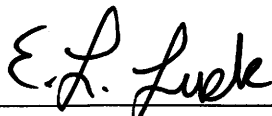
If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at <http://h2o.enr.state.nc.us/ncwetlands>. If no, please provide a short narrative description: _____

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



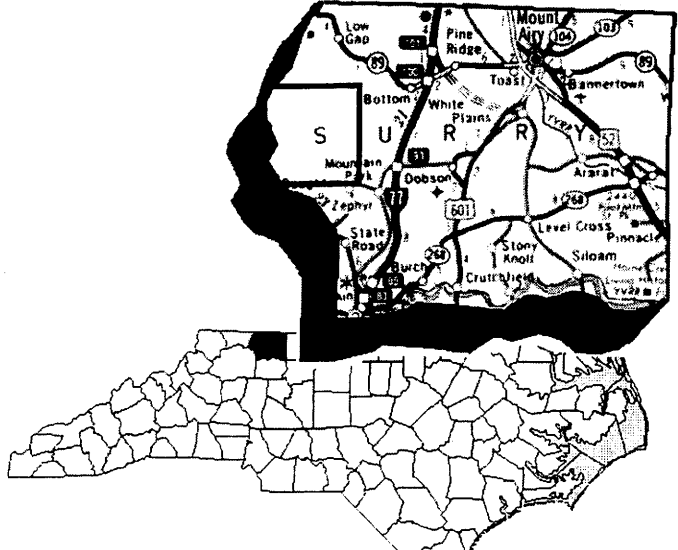
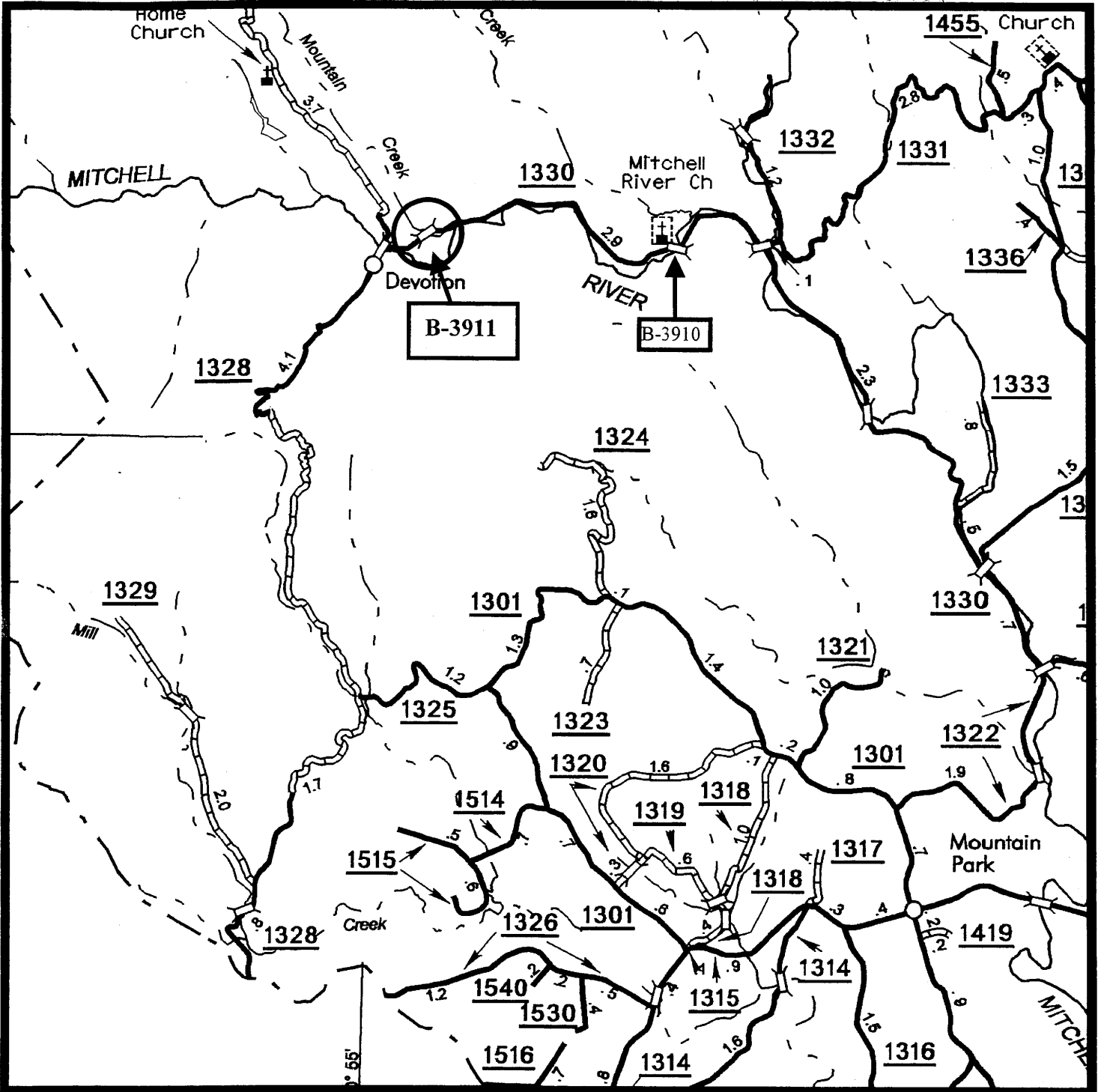
7.31.08

Applicant/Agent's Signature

Date

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

p.15 Gazetteer



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS BRANCH</p>
<p align="center">SURRY COUNTY REPLACE BRIDGE NO. 38 ON SR 1330 OVER SADDLE MOUNTAIN CREEK B-3911</p>	
<p align="right">~*Figure 1</p>	

Permit Drawing
Sheet 1 of 1



Property Owner Contact Report

TIP # B-3911

Owner Last Name/ Business	Owner First Name	Address	City/Town	State	Zip Code	Contact/ Relationship	Home Phone	Contacted By	Contact Date	How Contacted	Comments
1 Arcadia, LLC		1006 Harvey St.	Raleigh	NC	27608-2332			ALB	2/25/05	Letter	CERTIFIED LETTER
2 Reynolds	Kathryn Taylor	P.O. Box 1744	Clemmons	NC	27012-1744			ALB	2/25/05	Letter	CERTIFIED LETTER
Reynolds, II	William Neal	P.O. Box 24787	WinstonNC Salern		27114-4787			ALB	2/25/05	Letter	CERTIFIED LETTER
Snow	Billy Jack	7713 Haystack Rd.	Dobson	NC	27017-6034	Billy	(336) 366-3122	ALB	2/25/05	Phone/Letter	
Tuttle, PE, PLS	Pat	P.O. Box 1210	King	NC	27021-1210			ALB	2/25/05	Letter	

Permit Drawing
Sheet 2 of 10

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS								
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Cleaning in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)			
1	17+19 TO 18+07 -L- RT	24" RCP	0.01			0.008									
2		Temporary Work Bridge													<0.01
TOTALS:			0.01												<0.01

METHOD III CLEARING TO BE UTILIZED FOR THIS PROJECT

THE MAXIMUM TEMPORARY IMPACT IN THE STREAM FROM THE CONSTRUCTION OF THE TEMPORARY WORK BRIDGE IS AN AREA APPROXIMATELY 30 SQUARE FEET. (PER STRUCTURE DESIGN UNIT.)

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 SURRY COUNTY
 WBS - 33346.1.1 (B-3911)

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3911	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33346.1.1	BRZ-1330(5)	PE	

02/27/2008

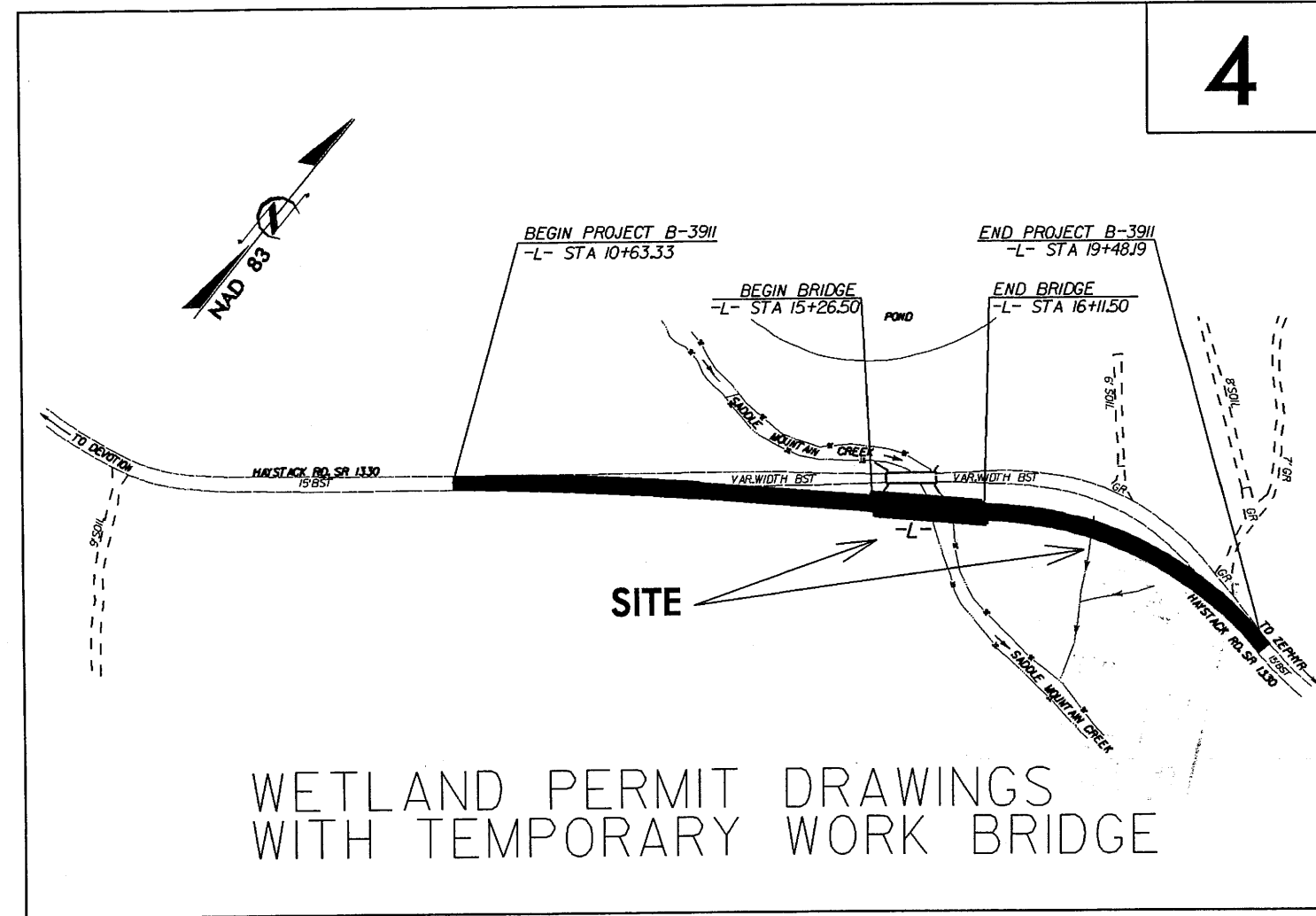
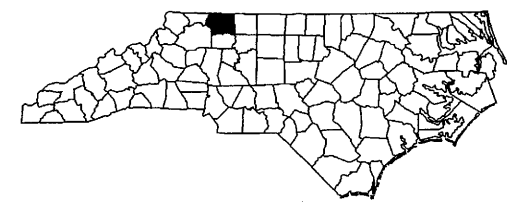
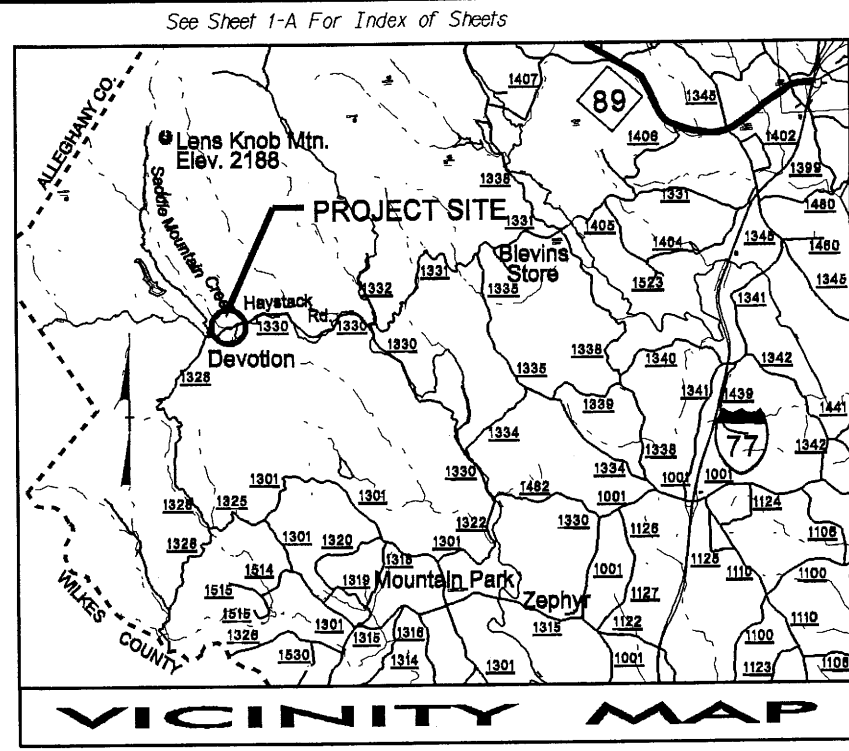
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

LOCATION: BRIDGE 38 OVER SADDLE MOUNTAIN CREEK
ON SR 1330 (HAYSTACK RD.)

TYPE OF WORK: STRUCTURES, GRADING, GUARDRAIL, DRAINAGE, AND PAVING

CONTRACT: TIP PROJECT: B-3911

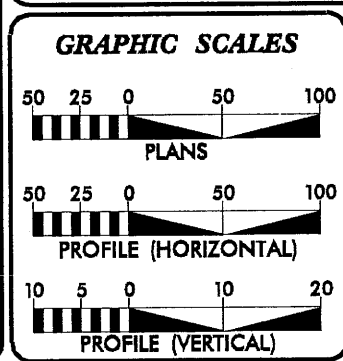


WETLAND PERMIT DRAWINGS
WITH TEMPORARY WORK BRIDGE

4

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
** DESIGNED USING 2001 AASHTO GUIDELINES FOR GEOMETRIC DESIGN OF VERY LOW-VOLUME LOCAL ROADS (ADT < 400); A DESIGN SPEED EXCEPTION IS REQUIRED.

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



DESIGN DATA

ADT 2004 =	200
ADT 2030 =	300
DHV =	14 %
D =	60 %
T =	3 % *
V =	35 MPH**
* TTST 1% DUAL 2% FUNC. CLASS =	LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-3911 =	0.52 MILES
LENGTH STRUCTURE TIP PROJECT B-3911 =	0.016 MILES
TOTAL LENGTH TIP PROJECT B-3911 =	0.536 MILES

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

2006 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: JANUARY 18, 2008	JASON MOORE, P.E. PROJECT ENGINEER
LETTING DATE: JANUARY 20, 2009	BRYAN KEY, P.E. 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 P.E.

03-MAR-2008 08:56
ra_hydrulics\permit\p-3911\hyd_prm-fsh.dgn
pshpard A:HY239419

CONTRACT:

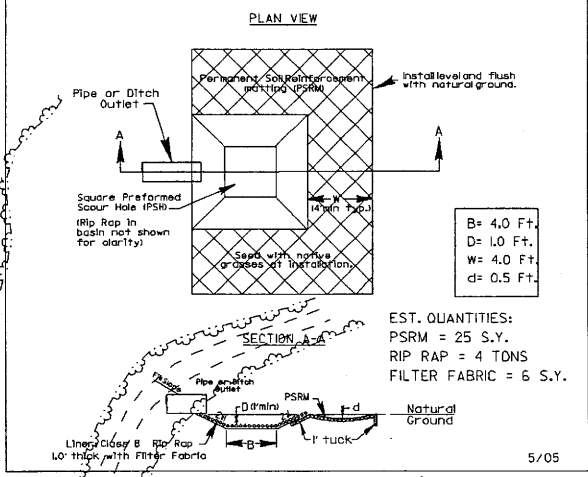
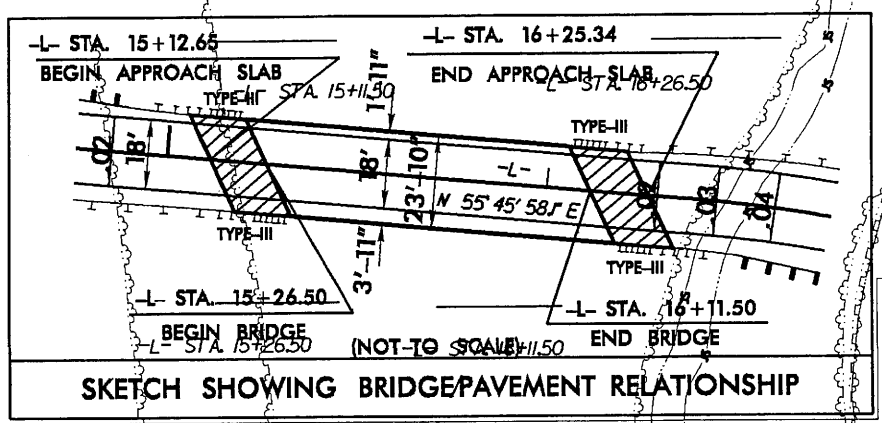
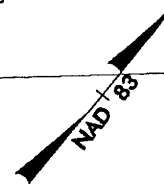
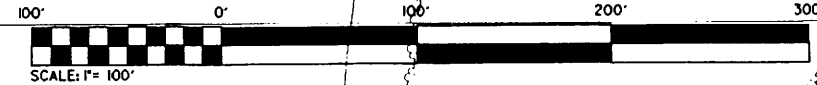
PAVEMENT REMOVAL

PREFORMED SCOUR HOLE

- L -		
PI Sta 11+91.26	PI Sta 18+02.90	PI Sta 20+00.93
Δ = 4° 53' 00.2" (RT)	Δ = 4° 16' 28.0" (RT)	Δ = 1° 00' 43.1" (LT)
D = 154' 35.5"	D = 15' 16' 43.9"	D = 18' 11' 20.9"
L = 255.69'	L = 309.44'	L = 104.52'
T = 127.92'	T = 164.12'	T = 52.75'
R = 3000.00'	R = 375.00'	R = 315.00'
SE = .04	SE = .04	SE = Existing
VD = 60 mph	VD = 35 mph	VD = Existing

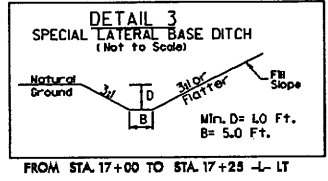
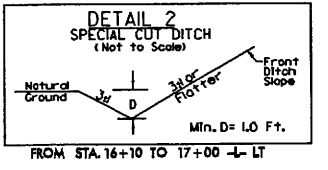
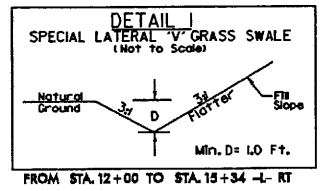
DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING



REVISIONS

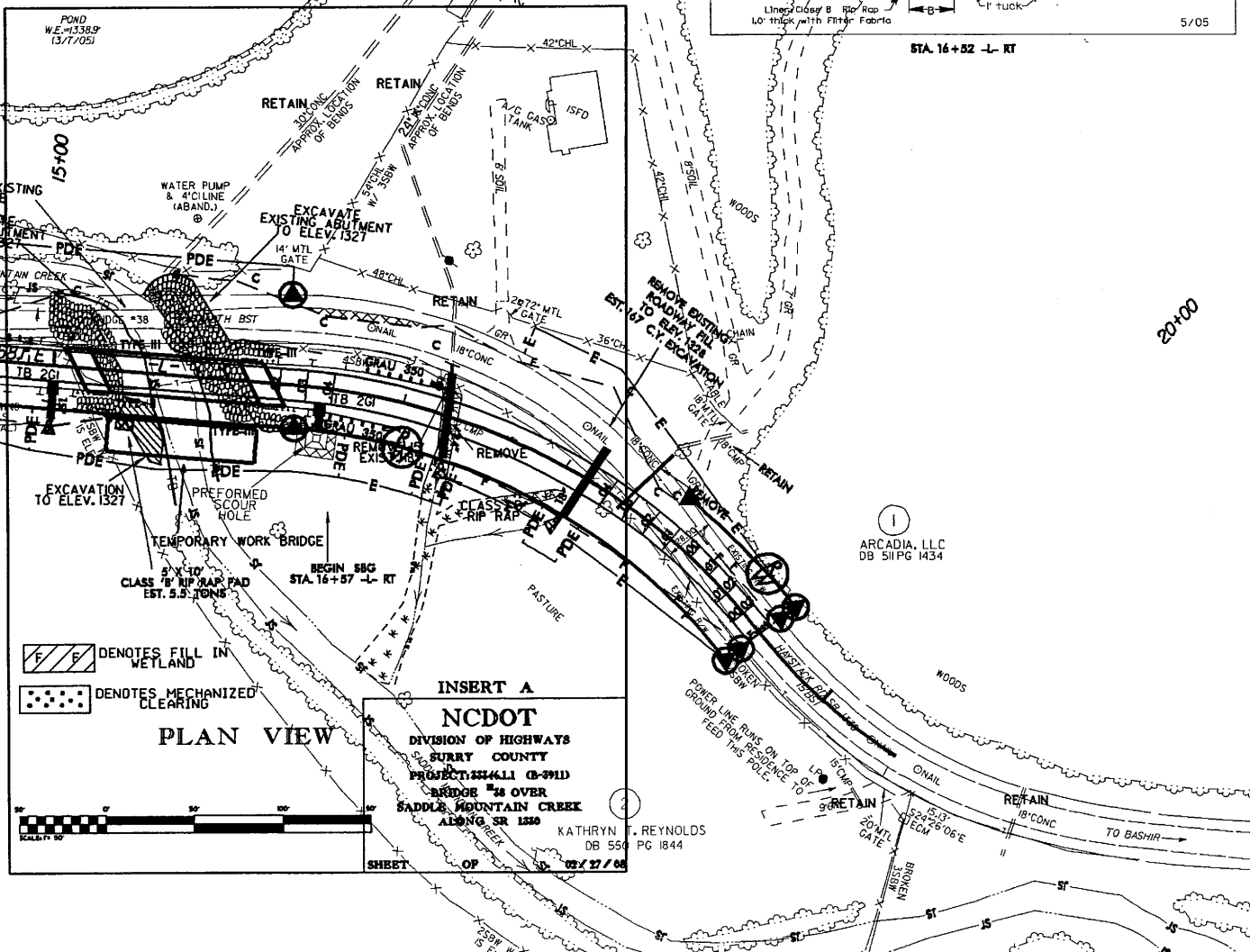
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K:\highways\open\m11\3911_hyd\21-APR-2008 11:08 AM



NOTE:
USE 10' SIDE SLOPES FROM STA. 11+00 TO 12+00 -L- LT
USE 8' TO 6' SIDE SLOPES FROM STA. 10+63 TO 11+50 -L- RT

KATHRYN T. REYNOLDS
DB 550 PG 1844

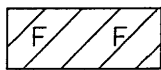
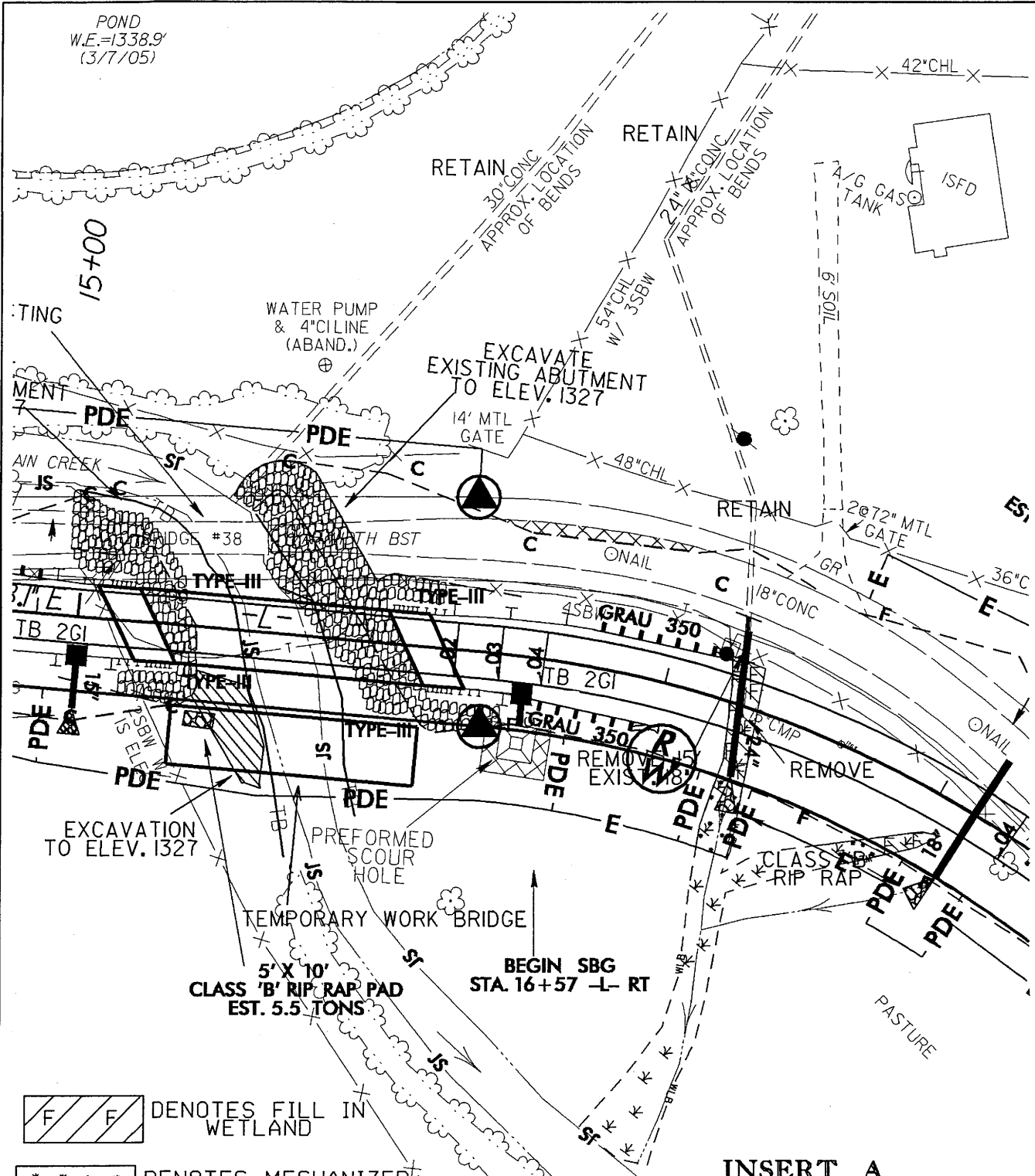
NOTE:
NO DECK DRAINS WILL BE ALLOWED TO DISCHARGE DIRECTLY INTO SADDLE MOUNTAIN CREEK
USE 8" X 4" SLOTTED DECK DRAINS
BEGIN SLOTTED DECK DRAINS @ STA. 15+39 -L- RT
END SLOTTED DECK DRAINS @ STA. 15+51 -L- RT
BEGIN SLOTTED DECK DRAINS @ STA. 15+92 -L- RT
END SLOTTED DECK DRAINS @ STA. 16+08 -L- RT
BEGIN BRIDGE STA. 15+26.5 -L- RT
END BRIDGE STA. 16+11.5 -L- RT
1 @ 86' 33" BOX BEAM



INSERT A
NCDOT
DIVISION OF HIGHWAYS
SURRY COUNTY
PROJECT 2344611 (B-3911)
BRIDGE OVER
SADDLE MOUNTAIN CREEK
ALONG SR 1330
KATHRYN T. REYNOLDS
DB 550 PG 1844
SHEET OF 03/27/08

SEE SHEET S-1 FOR L- PROFILE
SEE SHEET S-1 THRU S- FOR STRUCTURE PLANS

POND
 W.E.=1338.9'
 (3/7/05)

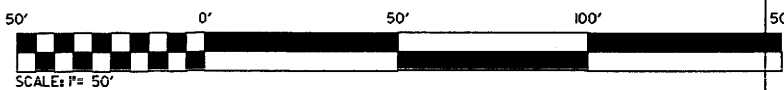


DENOTES FILL IN WETLAND



DENOTES MECHANIZED CLEARING

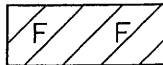
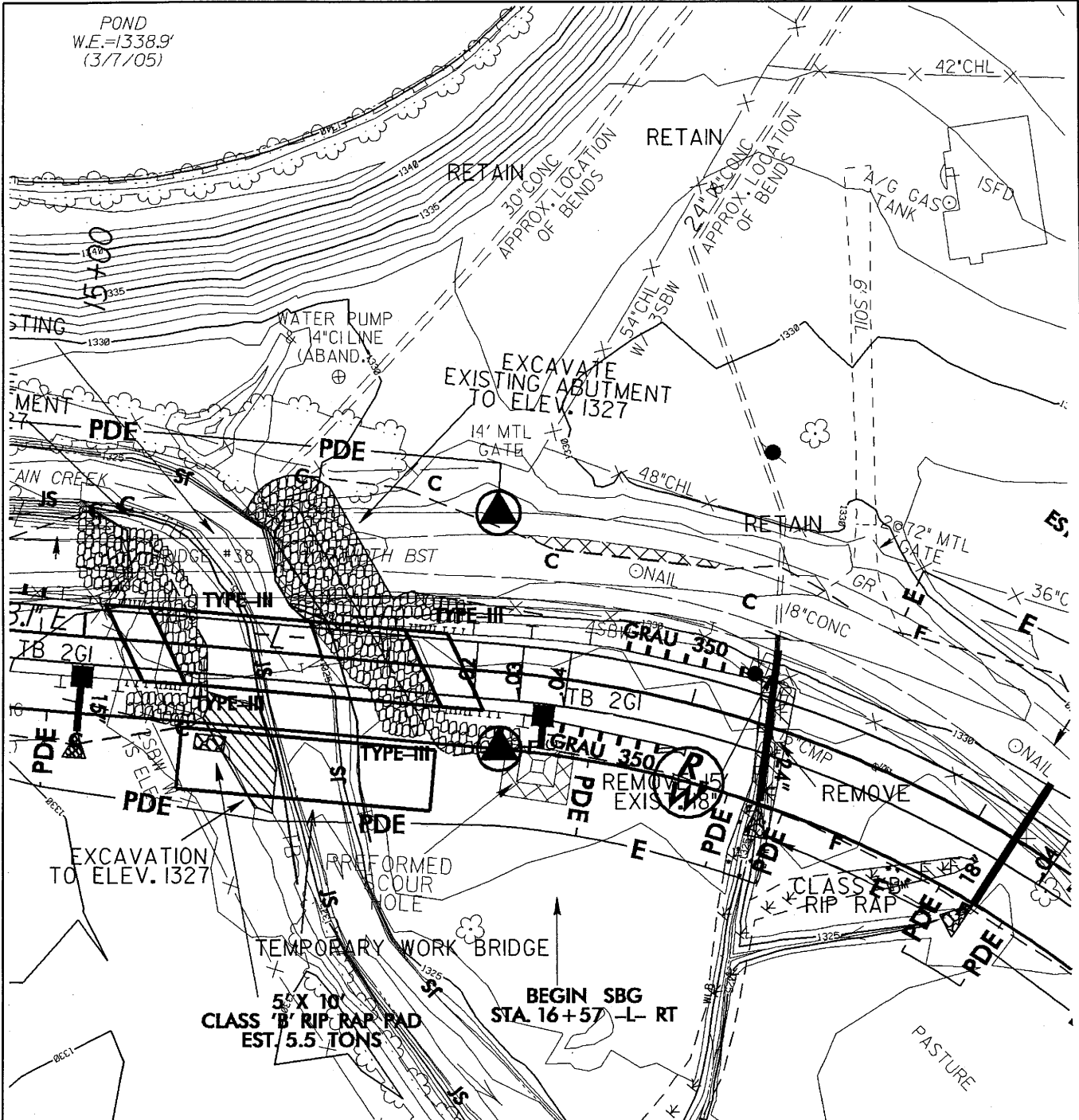
PLAN VIEW



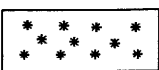
INSERT A

NCDOT
 DIVISION OF HIGHWAYS
 SURRY COUNTY
 PROJECT: 33346.11 (B-3911)
 BRIDGE #38 OVER
 SADDLE MOUNTAIN CREEK
 ALONG SR 1330

POND
W.E.=1338.9'
(3/7/05)

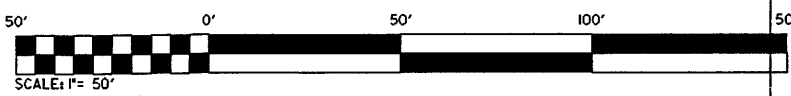


DENOTES FILL IN WETLAND



DENOTES MECHANIZED CLEARING

PLAN VIEW



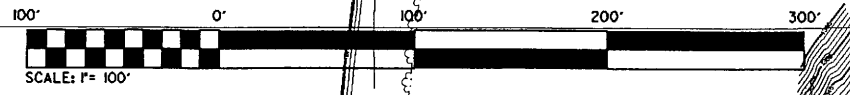
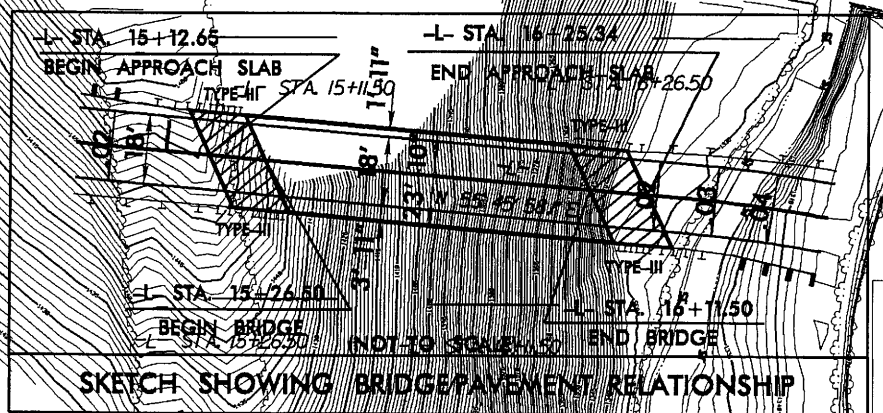
INSERT A

NCDOT
DIVISION OF HIGHWAYS
SURRY COUNTY
PROJECT: 33346.1.1 (B-3911)
BRIDGE #38 OVER
SADDLE MOUNTAIN CREEK
ALONG SR 1330

- L -		
PI Sta 11+91.26	PI Sta 18+02.90	PI Sta 20+00.93
$\Delta = 4^{\circ} 53' 00.2" (RT)$	$\Delta = 47^{\circ} 16' 28.0" (RT)$	$\Delta = 19^{\circ} 00' 43.1" (LT)$
D = 154' 35.5"	D = 15' 16' 43.9"	D = 18' 11' 20.9"
L = 255.69'	L = 309.41'	L = 104.52'
T = 127.92'	T = 164.12'	T = 52.75'
R = 3,000.00'	R = 375.00'	R = 315.00'
SE = .04	SE = .04	SE = Existing
V _D = 60 mph	V _D = 35 mph	V _D = Existing

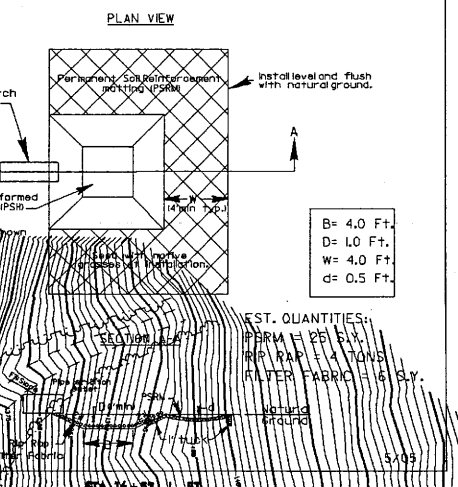
DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

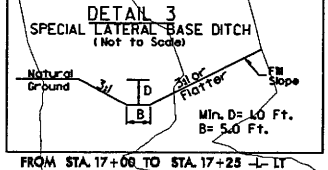
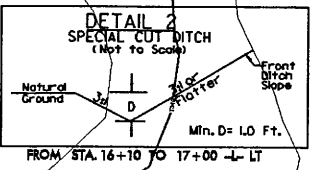
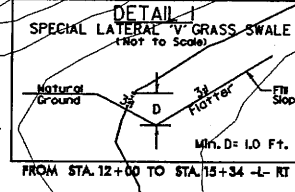
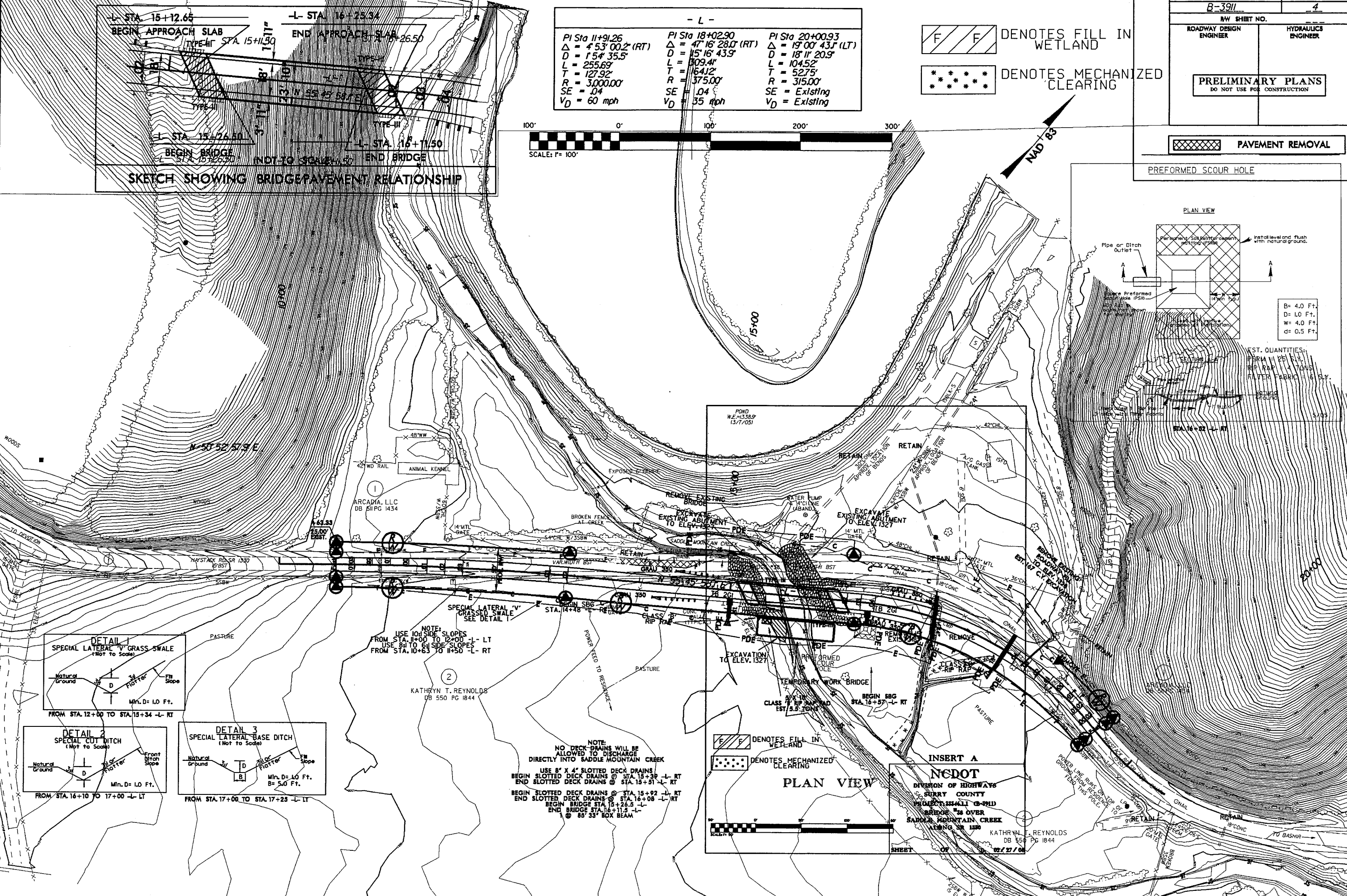


PAVEMENT REMOVAL

PREFORMED SCOUR HOLE



EST. QUANTITIES:
 RIP RAP = 251 CY
 RIP RAP = 4 TONS
 FILTER FABRIC = 6 S.Y.



NOTE:
 USE 10% SIDE SLOPES FROM STA. 11+00 TO 12+00 -L- LT
 USE 8% TO 8% SIDE SLOPES FROM STA. 10+83 TO 11+50 -L- RT

NOTE:
 NO DECK DRAINS WILL BE ALLOWED TO DISCHARGE DIRECTLY INTO SADDLE MOUNTAIN CREEK
 USE 8" X 4" SLOTTED DECK DRAINS @ STA. 14+39 -L- RT
 END SLOTTED DECK DRAINS @ STA. 15+81 -L- RT
 BEGIN SLOTTED DECK DRAINS @ STA. 15+92 -L- RT
 END SLOTTED DECK DRAINS @ STA. 16+08 -L- RT
 BEGIN BRIDGE STA. 15+26.5 -L- RT
 END BRIDGE STA. 16+11.5 -L- RT @ 8' 33" BOX BEAM

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

INSERT A

NC DOT
 DIVISION OF HIGHWAYS
 SURRY COUNTY
 PROJECT # 11411 G-2911
 BRIDGE # 28 OVER
 SADDLE MOUNTAIN CREEK
 ALONG SR 1280
 KATHRYN T. REYNOLDS
 DB 550 PG 1844
 02/27/08



21-APR-2008 11:00 AM
 P:\hydraulics\projects\11411\11411-2911\11411-2911.dwg
 Available At 11411-2911

SEE SHEET 5 FOR -L- PROFILE
 SEE SHEET 5-1 THRU 5-4 FOR STRUCTURE PLANS

5/14/98

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 1332.4	FT
BASE DISCHARGE	= 2200	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 1334.0	FT
OVERTOPPING DISCHARGE	= 160	CFS
OVERTOPPING FREQUENCY	= 10+	YRS
OVERTOPPING ELEVATION	= 1334	FT

DATE OF SURVEY = 8/30/06
 WS ELEVATION AT DATE OF SURVEY = 1333.95 FT

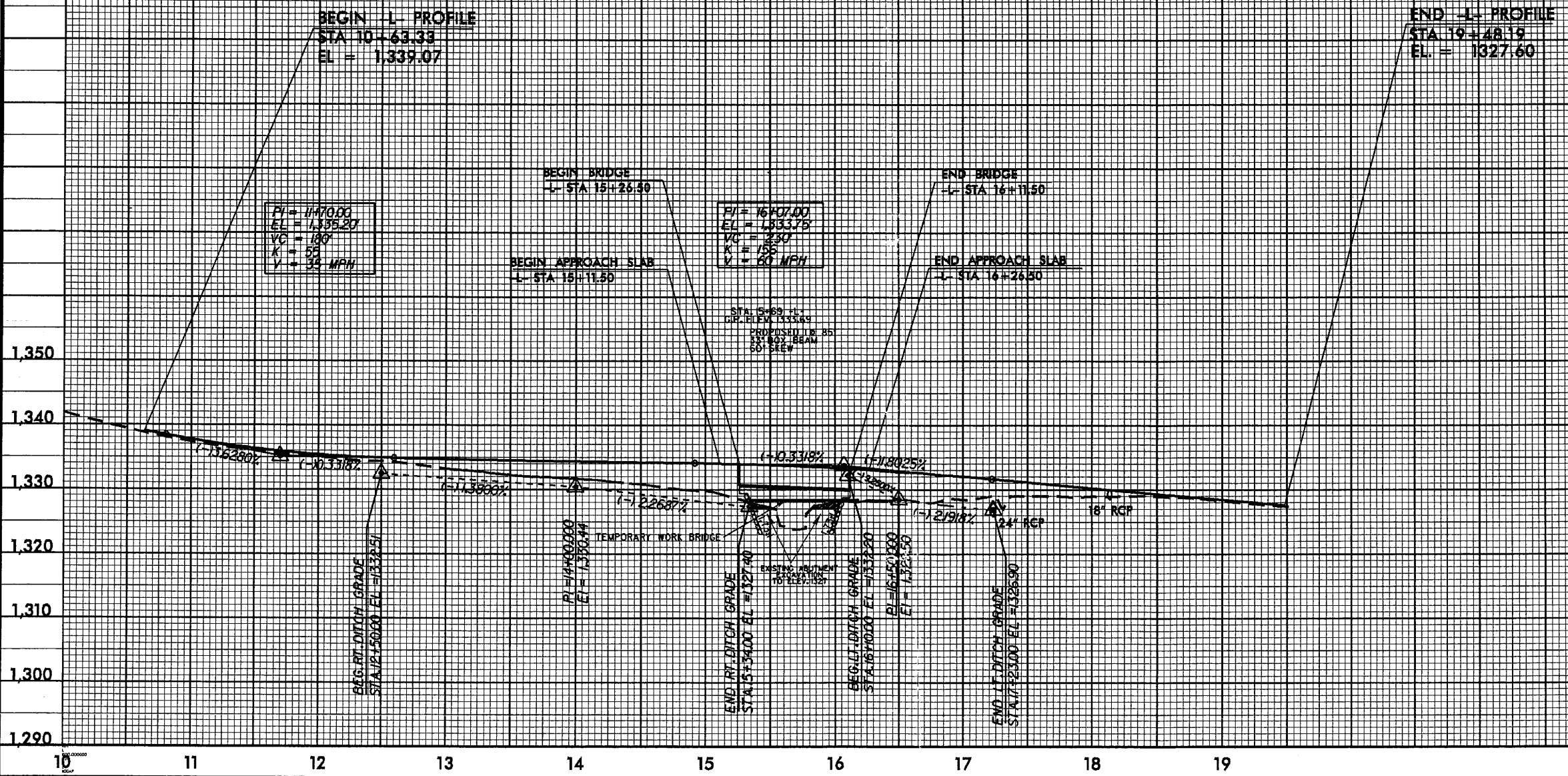
**PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.3**

DRAINAGE AREA	= 24	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 65	CFS
DESIGN HW ELEVATION	= 1328.2	FT
100 YEAR DISCHARGE	= 77	CFS
100 YEAR HW ELEVATION	= 1328.1	FT
OVERTOPPING FREQUENCY	= N/A	YRS
OVERTOPPING DISCHARGE	= 49	CFS
OVERTOPPING ELEVATION	= 1331.5	FT

**PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.1**

DRAINAGE AREA	= 41	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 69	CFS
DESIGN HW ELEVATION	= 1329.0	FT
100 YEAR DISCHARGE	= 110	CFS
100 YEAR HW ELEVATION	= 1329.8	FT
OVERTOPPING FREQUENCY	= 50+	YRS
OVERTOPPING DISCHARGE	= 101	CFS
OVERTOPPING ELEVATION	= 1329.4	FT

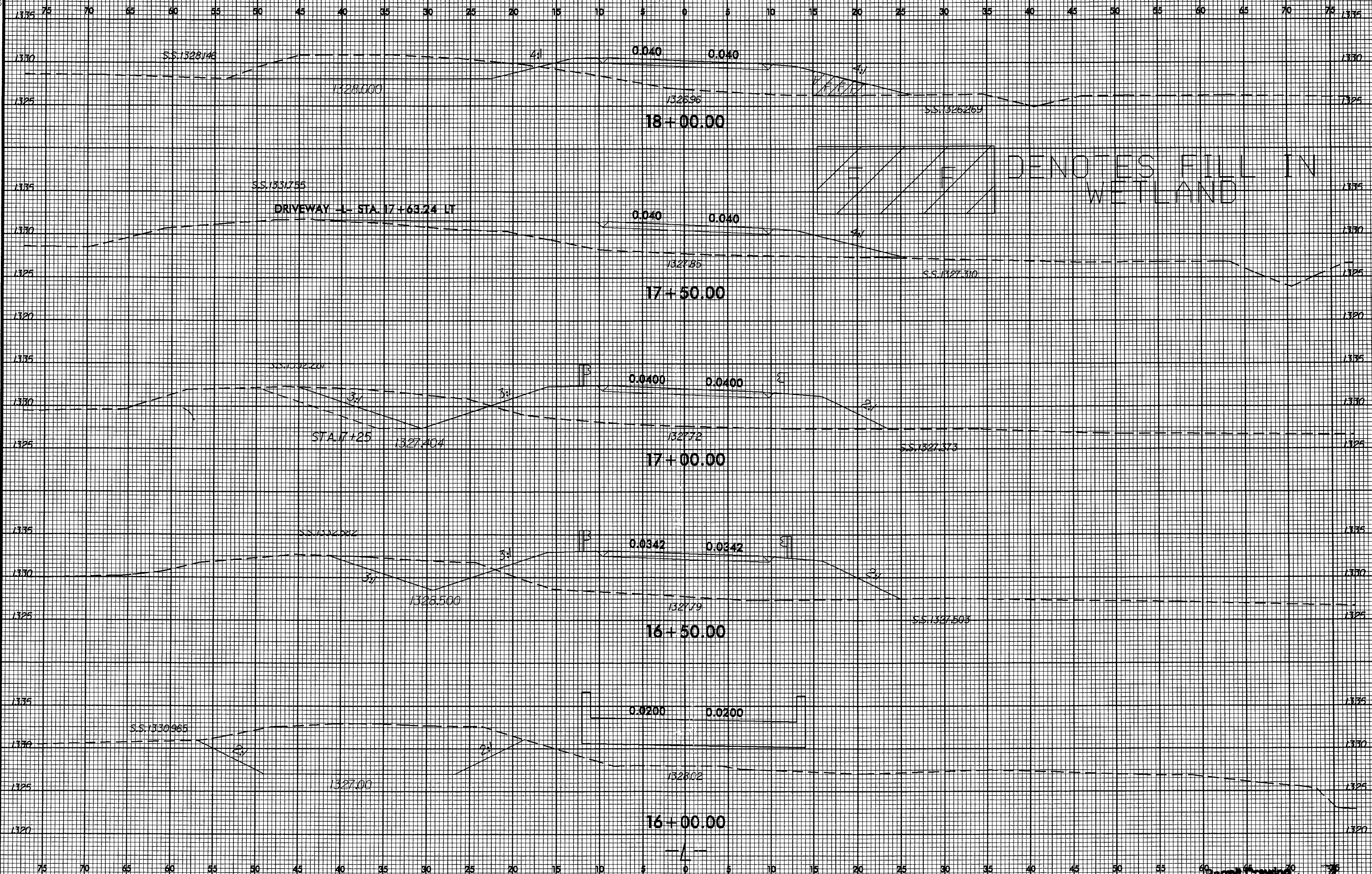
BM 32 ELEV. 1332.09 RAILROAD SPIKE
 IN BASE OF 48" TIE
 -L- STA. 17+84.24 - 121.94' LT.



02-MAR-2008 08:56
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 3911_hyd.dwg

RIGHT DITCH
 LEFT DITCH

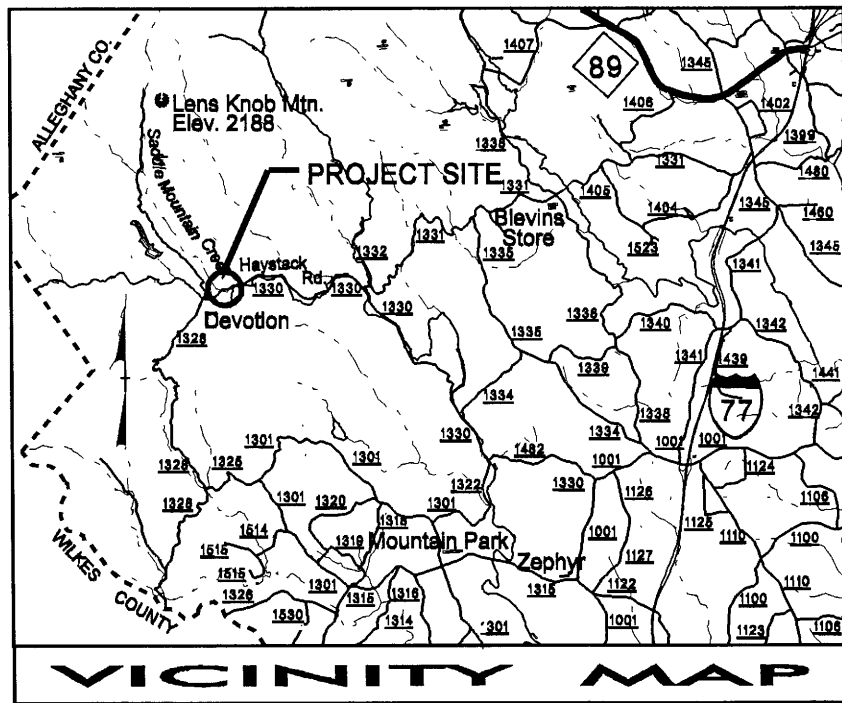
8/23/96



03-MAR-2008 06:57
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shppard A: H23413

09/08/09

See Sheet 1-A For Index of Sheets



VICINITY MAP



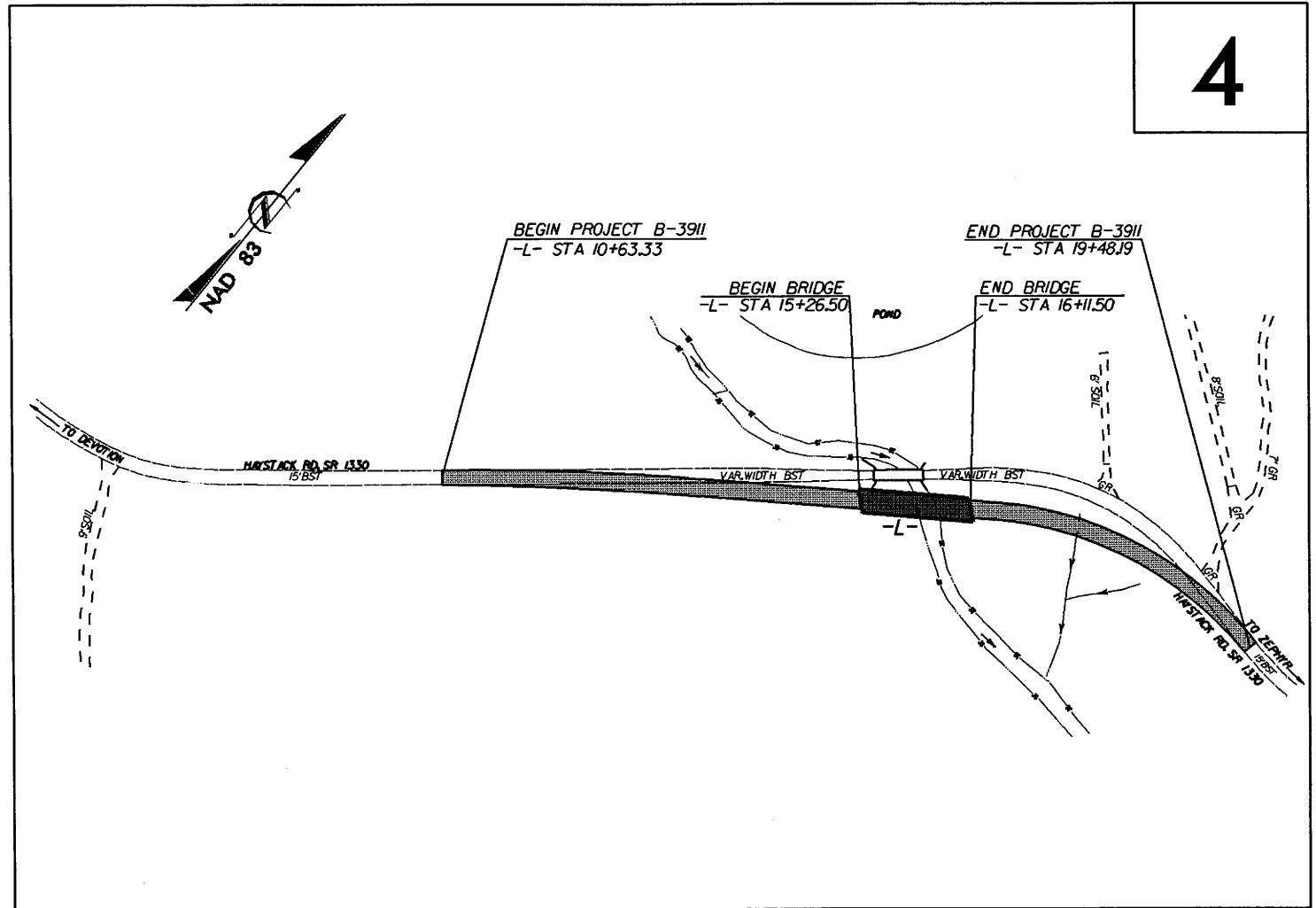
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

**LOCATION: BRIDGE 38 OVER SADDLE MOUNTAIN CREEK
ON SR 1330 (HAYSTACK RD.)**

TYPE OF WORK: STRUCTURES, GRADING, GUARDRAIL, DRAINAGE, AND PAVING

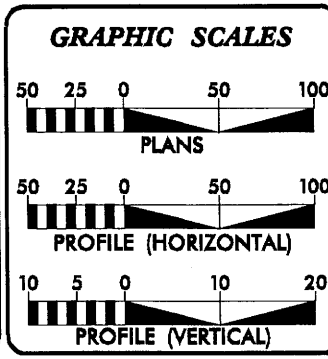
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3911	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
33346.1.1	BRZ-1330(5)	PE	
33346.2.1	BRZ-1330(5)	R/W & Util	



4

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
** DESIGNED USING 2001 AASHTO GUIDELINES FOR GEOMETRIC DESIGN OF VERY LOW-VOLUME LOCAL ROADS (ADT < 400); A DESIGN SPEED EXCEPTION IS REQUIRED.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



DESIGN DATA

ADT 2004 =	200
ADT 2030 =	300
DHV =	14 %
D =	60 %
T =	3 %
V =	35 MPH**
* TTST 1% DUAL 2% FUNC. CLASS =	LOCAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-3911 =	0.152 MILES
LENGTH STRUCTURE TIP PROJECT B-3911 =	0.016 MILES
TOTAL LENGTH TIP PROJECT B-3911 =	0.168 MILES

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

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JANUARY 18, 2008

LETTING DATE:
JANUARY 20, 2009

JASON MOORE, P.E.
PROJECT ENGINEER

BRYAN KEY, P.E.
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: C202022
 TIP PROJECT: B-3911
 02-APR-2008 12:22
 r:\roadway\proj\11-b-3911\rdy_tsh.dgn
 \$\$\$USERNAME\$\$\$

10/25/05

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for 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, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for buildings and other culture: Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for hydrology: Stream or Body of Water, Hydro, Pool or Reservoir, Jurisdictional Stream, Buffer Zone 1, Buffer Zone 2, Flow Arrow, Disappearing Stream, Spring, Swamp Marsh, Proposed Lateral, Tail, Head Ditch, False Sump.

RAILROADS:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY:

Table listing symbols for right of way: Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Utility Easement.

ROADS AND RELATED FEATURES:

Table listing symbols for roads and related features: Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Wheel Chair Ramp, Curb Cut for Future Wheel Chair Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Equality Symbol, Pavement Removal.

VEGETATION:

Table listing symbols for vegetation: Single Tree, Single Shrub, Hedge, Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for 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:

Table listing symbols for utilities: POWER: Existing Power Pole, Proposed Power Pole, Existing Joint Use Pole, Proposed Joint Use Pole, Power Manhole, Power Line Tower, Power Transformer, U/G Power Cable Hand Hole, H-Frame Pole, Recorded U/G Power Line, Designated U/G Power Line (S.U.E.*); TELEPHONE: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, Recorded U/G Telephone Cable, Designated U/G Telephone Cable (S.U.E.*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.*).

WATER:

Table listing symbols for water: Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.*), Above Ground Water Line.

TV:

Table listing symbols for TV: TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.*).

GAS:

Table listing symbols for gas: Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.*), Above Ground Gas Line.

SANITARY SEWER:

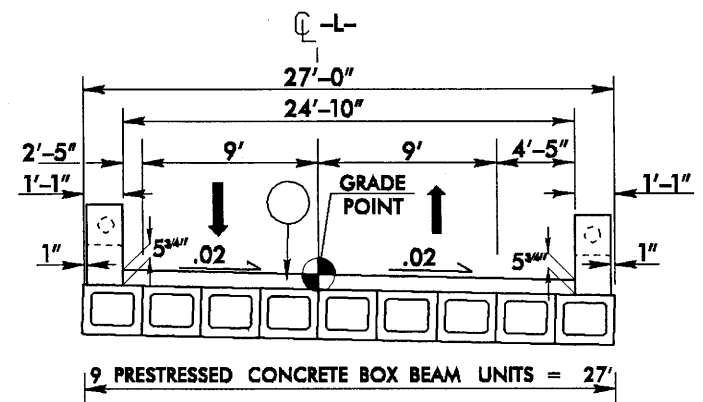
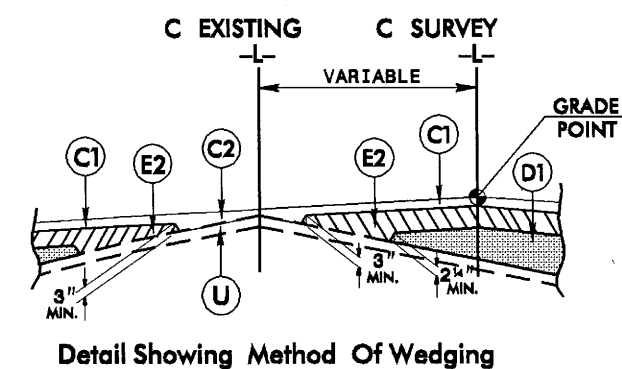
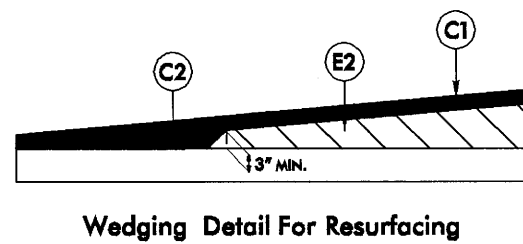
Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.*).

MISCELLANEOUS:

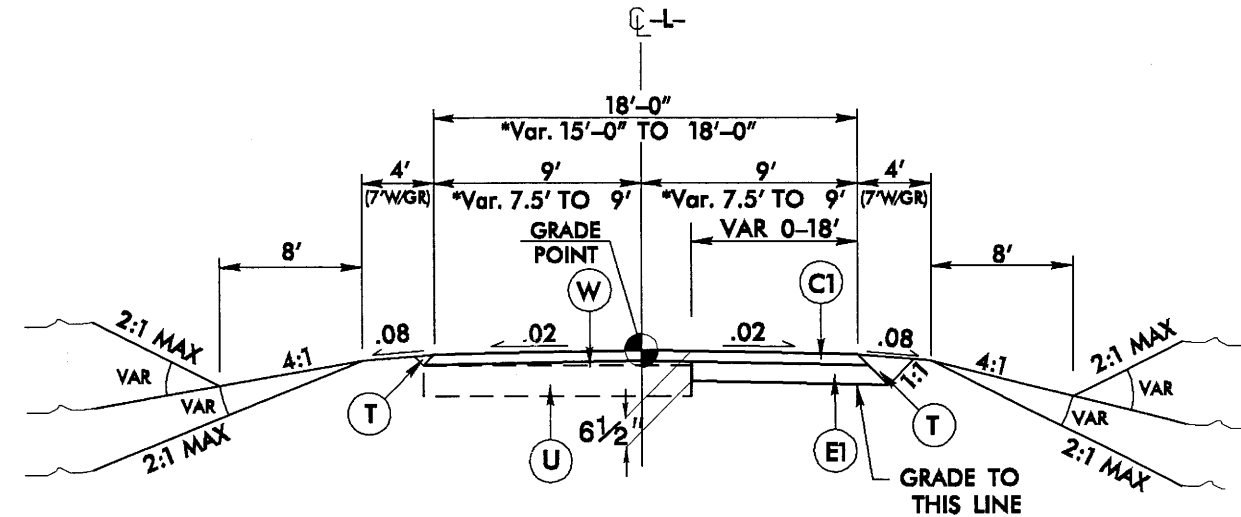
Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, A/G Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information.

PAVEMENT SCHEDULE			
C1	PROP. APPROX. 2½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS	E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 6½" IN DEPTH
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1" IN DEPTH OR GREATER THAN 1½" IN DEPTH.	T	EARTH MATERIAL.
D1	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2¼" IN DEPTH OR GREATER THAN 4" IN DEPTH.	U	EXISTING PAVEMENT.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL BELOW)

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



USE TYPICAL SECTION ON STRUCTURE
-L- STA 15+26.50 TO STA 16+11.50

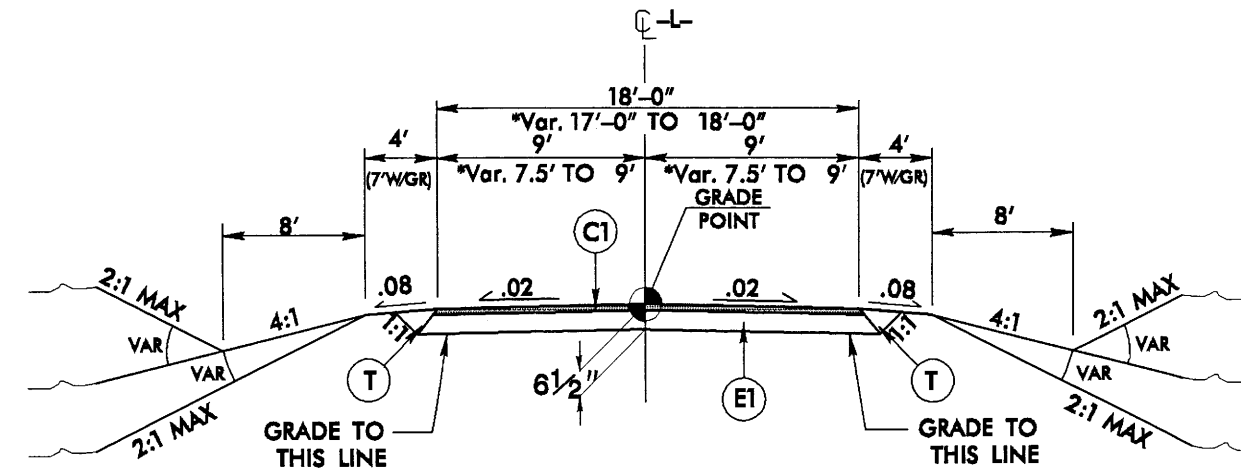


USE TYPICAL SECTION NO.1

- * -L- STA 10+63.33 TO STA 12+13.33
- L- STA 12+13.33 TO STA 13+74.78
- * -L- STA 18+43.49 TO STA 19+48.19

NOTE: (PER HYDRO) USE IN CONJUNCTION W/TYPICAL NO.1

- USE 10:1 SIDE SLOPES
- L- LT. STA. 11+00 TO 12+00
- USE 8:1 TO 6:1 SIDE SLOPES
- L- RT. STA. 10+63 TO 11+50



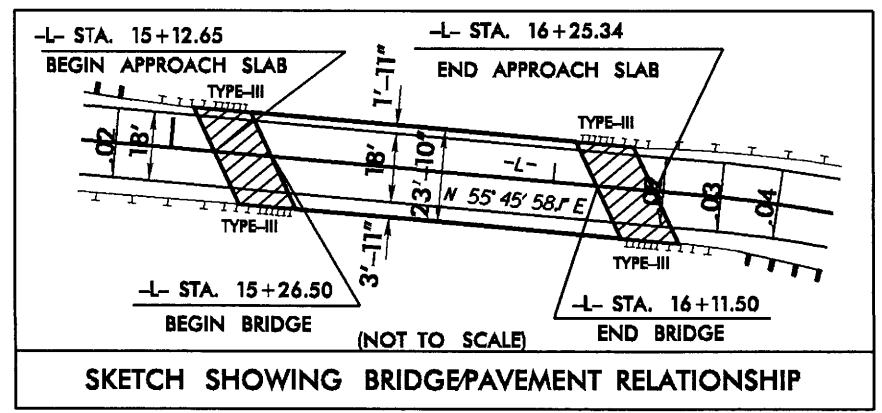
USE TYPICAL SECTION NO.2

- L- STA 13+74.78 TO STA 15+26.50
- L- STA 16+11.50 TO STA 17+98.19
- * -L- STA 17+98.19 TO STA 18+43.49

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PRELIMINARY PLANS
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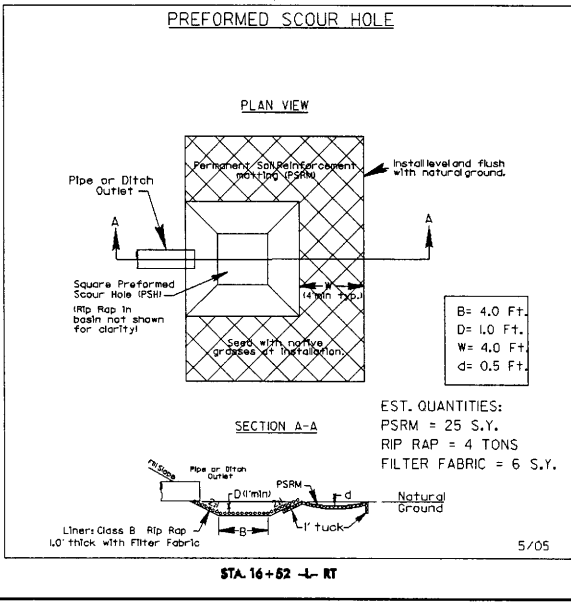
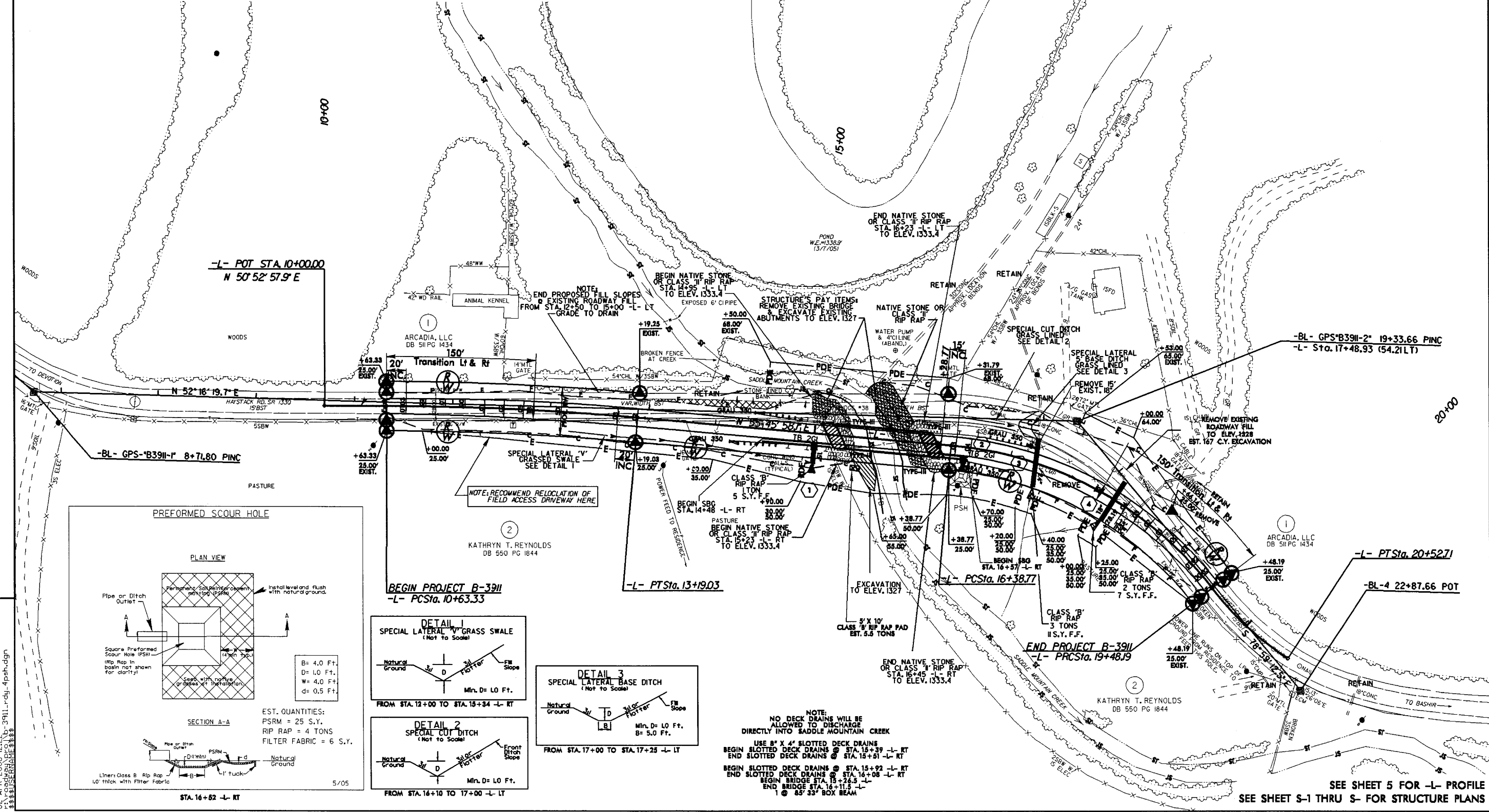
- L -		
PI Sta 11+91.26	PI Sta 18+02.90	PI Sta 20+00.93
$\Delta = 4' 53'' 00.2'' (RT)$	$\Delta = 4' 16'' 28.0'' (RT)$	$\Delta = 1' 00'' 43.1'' (LT)$
$D = 1' 54'' 35.5''$	$D = 1' 16'' 43.9''$	$D = 1' 11'' 20.9''$
$L = 255.69'$	$L = 309.41'$	$L = 104.52'$
$T = 127.92'$	$T = 164.12'$	$T = 52.75'$
$R = 3,000.00'$	$R = 375.00'$	$R = 315.00'$
$SE = .04$	$SE = .04$	$SE = Existing$
$V_D = 60 \text{ mph}$	$V_D = 35 \text{ mph}$	$V_D = Existing$



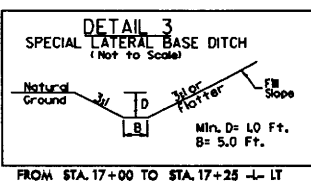
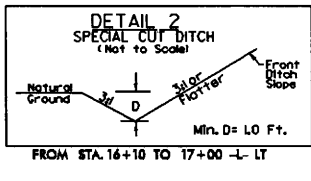
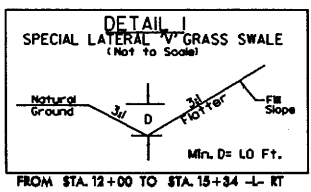
SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP

8/17/99

REVISIONS



EST. QUANTITIES:
 PSRM = 25 S.Y.
 RIP RAP = 4 TONS
 FILTER FABRIC = 6 S.Y.



NOTE:
 NO DECK DRAINS WILL BE ALLOWED TO DISCHARGE DIRECTLY INTO SADDLE MOUNTAIN CREEK
 USE 8\"/>

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 5/05

SEE SHEET 5 FOR -L- PROFILE
 SEE SHEET S-1 THRU S- FOR STRUCTURE PLANS

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 1332.4	FT
BASE DISCHARGE	= 2200	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 1334.0	FT
OVERTOPPING DISCHARGE	= 100	CFS
OVERTOPPING FREQUENCY	= 10+	YRS
OVERTOPPING ELEVATION	= 1331.1	FT

DATE OF SURVEY = 8/30/06
W.S. ELEVATION AT DATE OF SURVEY = 1333.95 FT

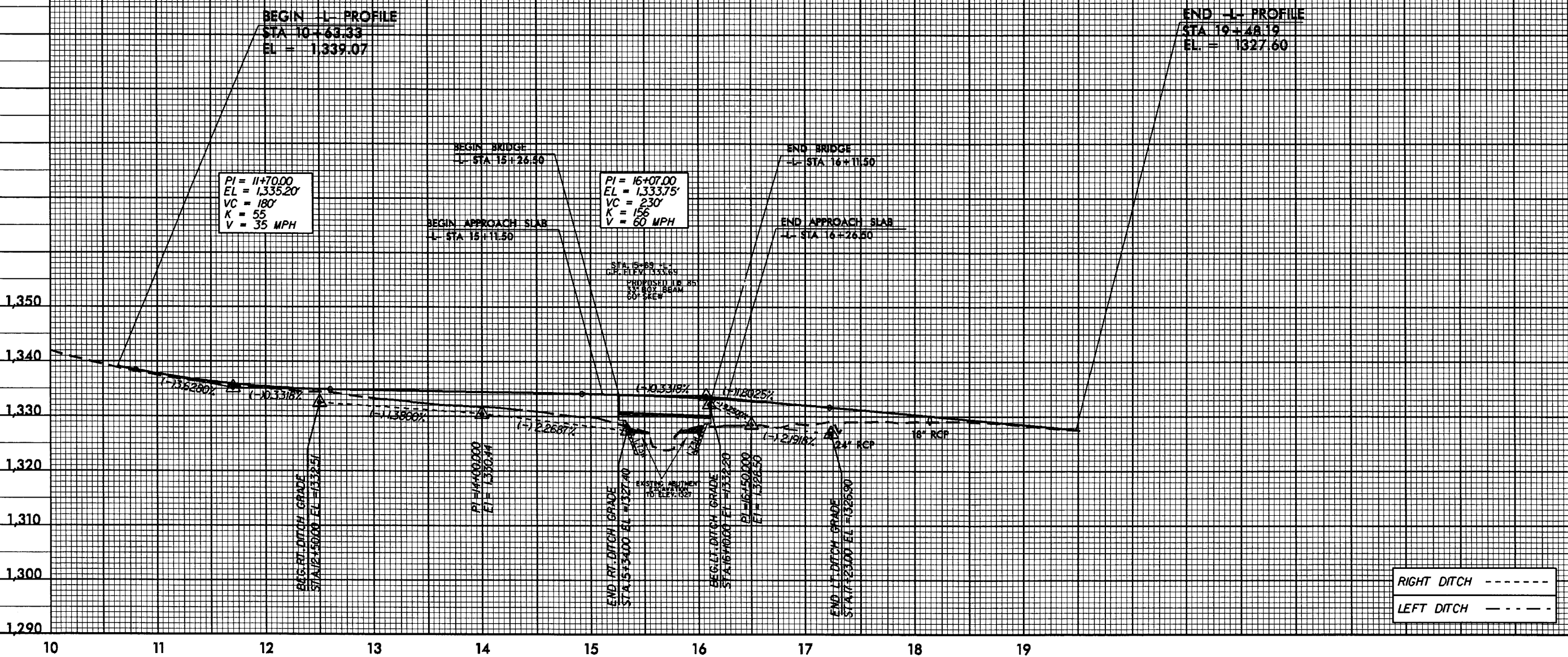
**PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.3**

DRAINAGE AREA	= 2.4	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 65	CFS
DESIGN HW ELEVATION	= 1328.2	FT
100 YEAR DISCHARGE	= 77	CFS
100 YEAR HW ELEVATION	= 1328.3	FT
OVERTOPPING FREQUENCY	= N/A	YRS
OVERTOPPING DISCHARGE	= 49	CFS
OVERTOPPING ELEVATION	= 1331.5	FT

**PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.4**

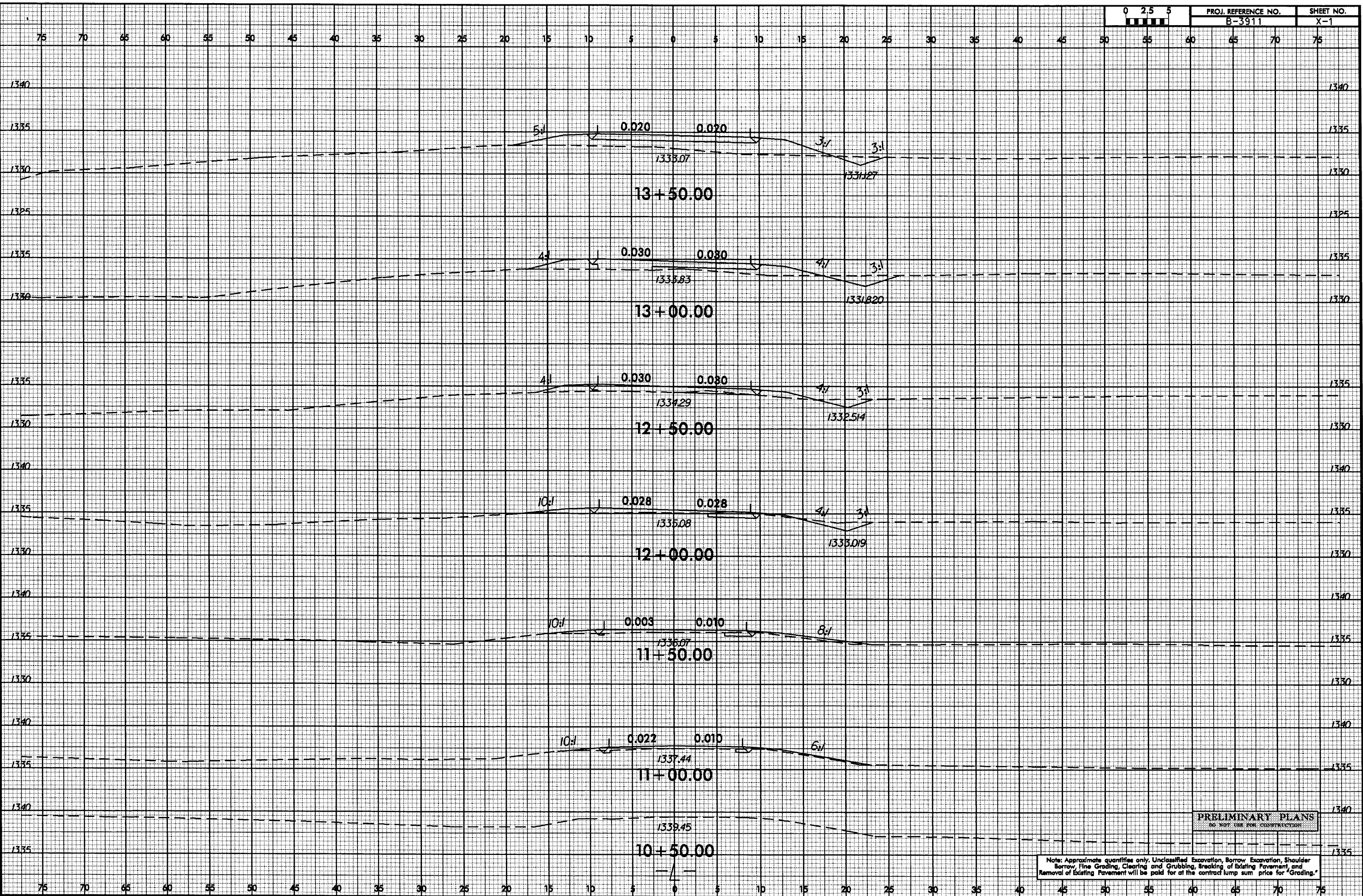
DRAINAGE AREA	= 4.1	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 69	CFS
DESIGN HW ELEVATION	= 1329.0	FT
100 YEAR DISCHARGE	= 110	CFS
100 YEAR HW ELEVATION	= 1329.8	FT
OVERTOPPING FREQUENCY	= 50+	YRS
OVERTOPPING DISCHARGE	= 101	CFS
OVERTOPPING ELEVATION	= 1329.5	FT

BM 32 ELEV. 1332.09' RAILROAD SPIKE
IN BASE OF 48" TREE
-L- STA. 17+84.44, -121.94' LT.



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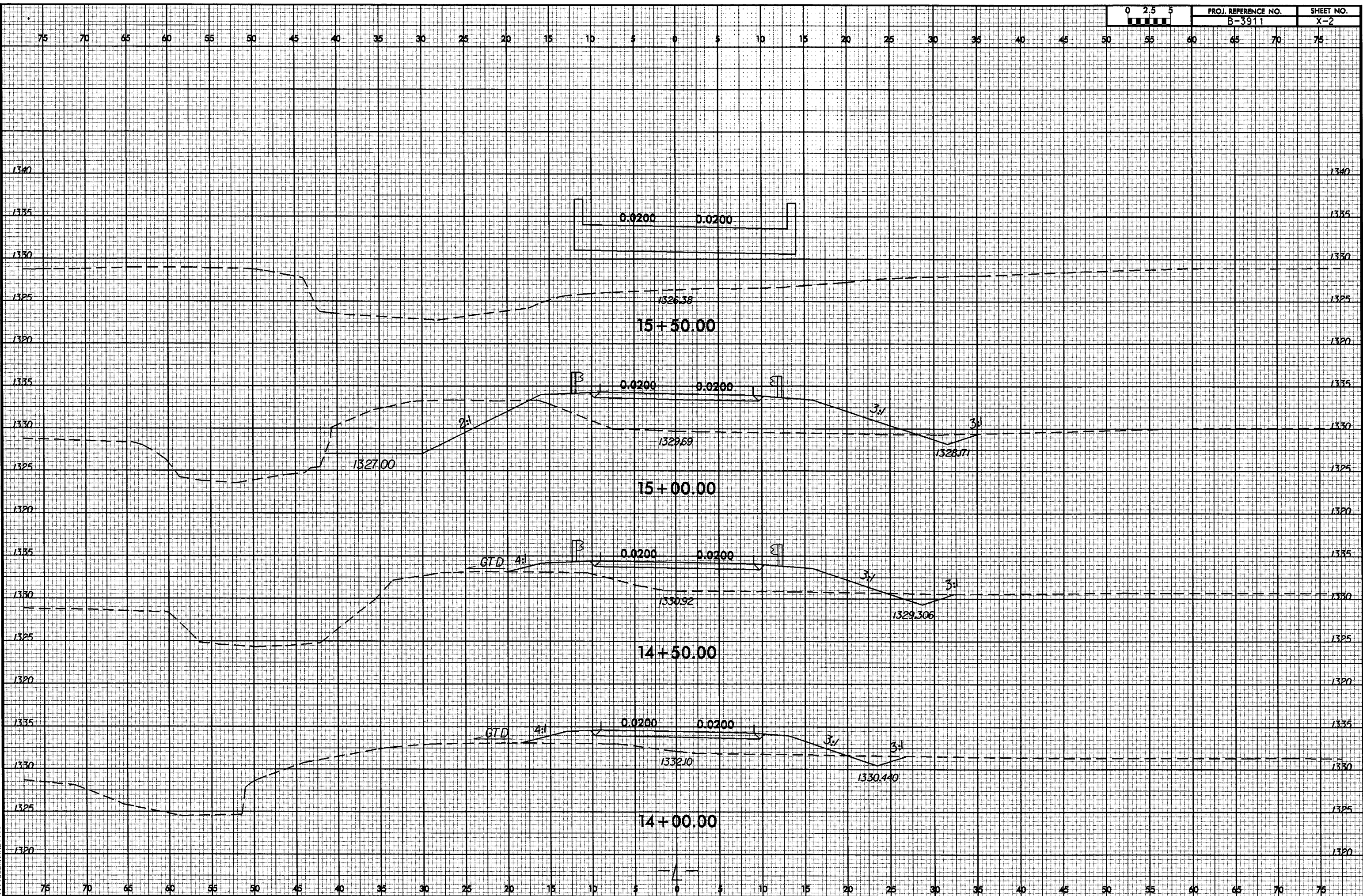


PRELIMINARY PLANS
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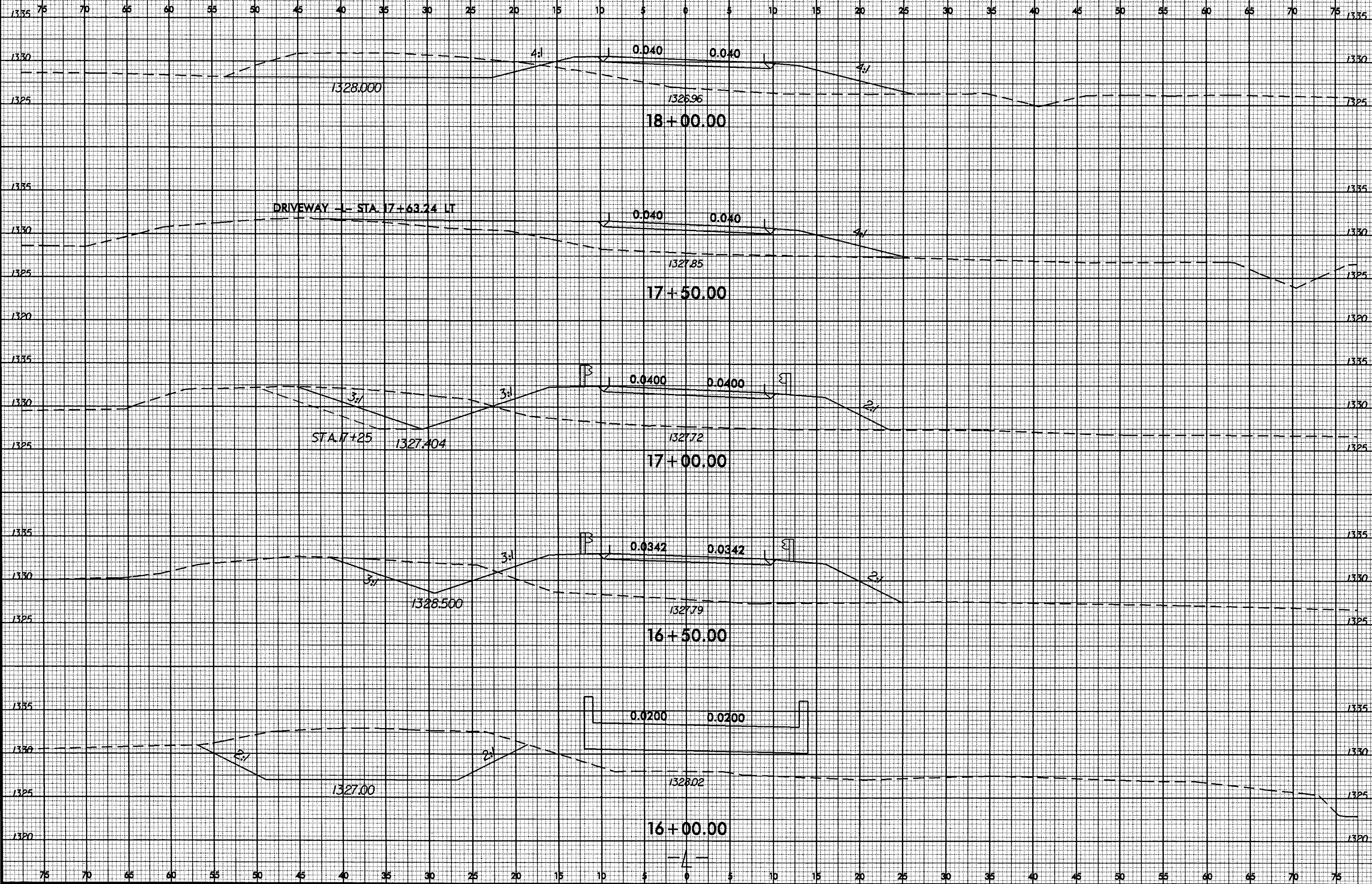
Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, Breaking of Existing Pavement, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

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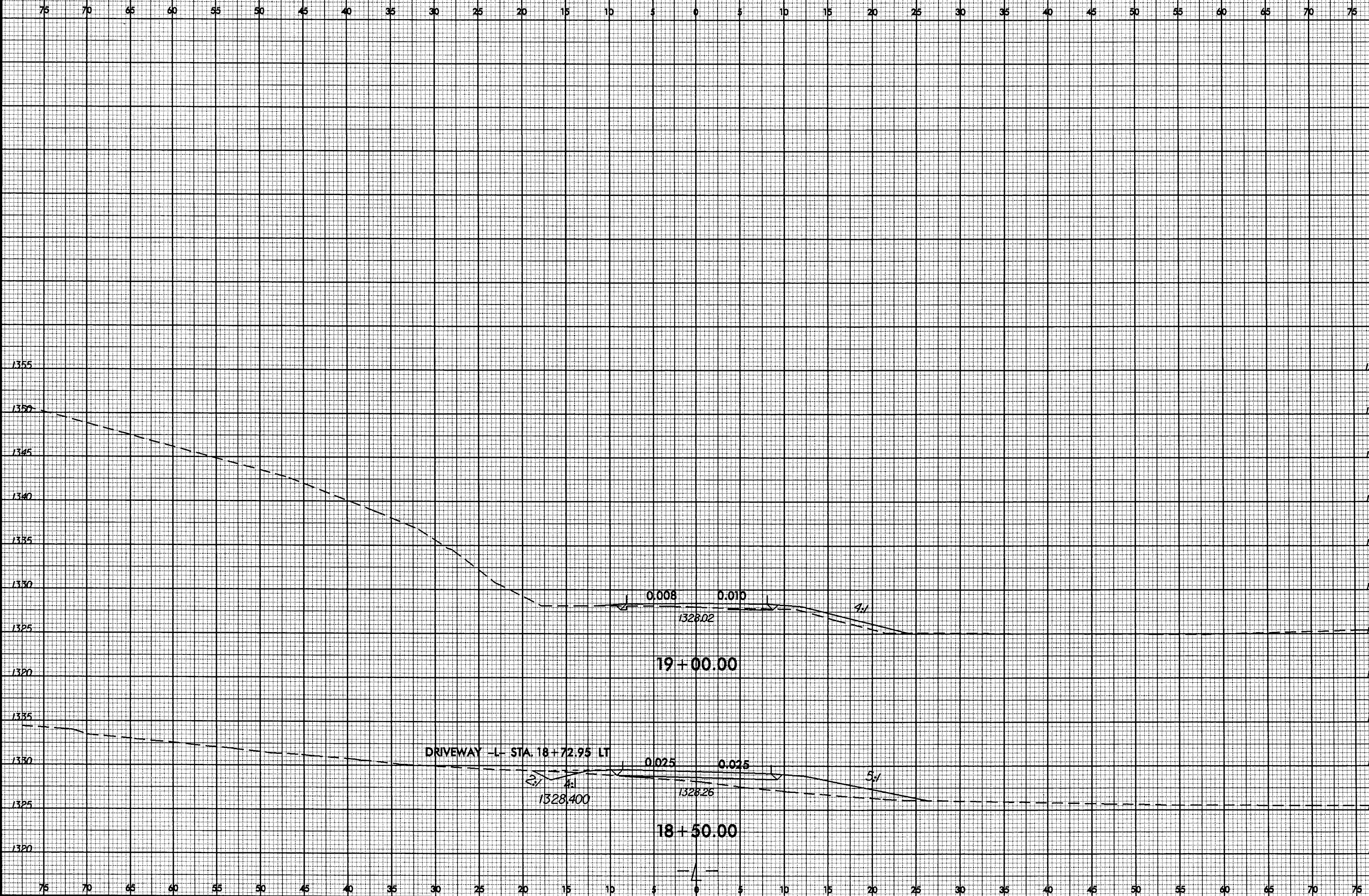


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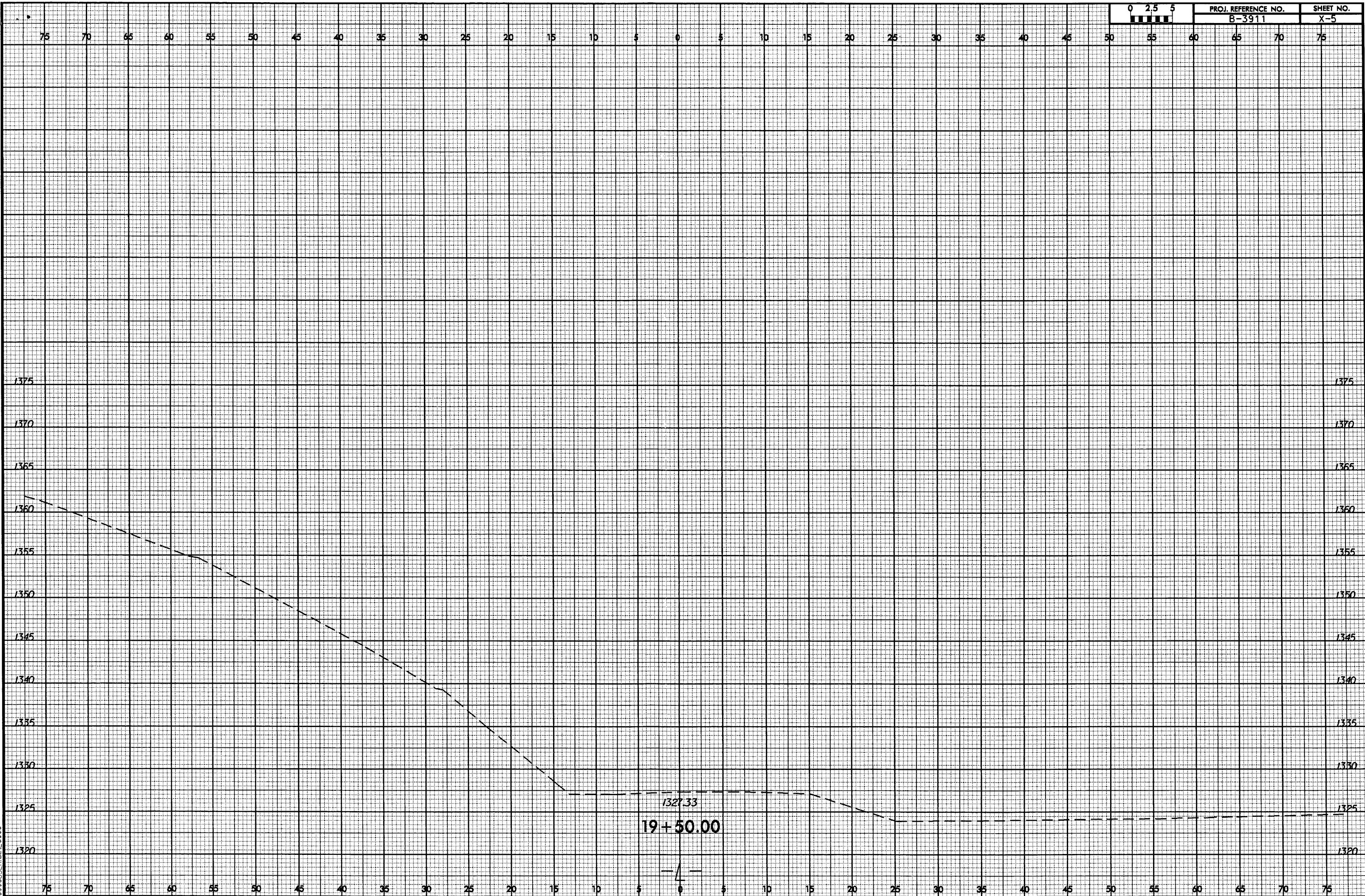


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**Surry County
Bridge No. 38 on SR 1330 (Haystack Rd.)
over Saddle Mountain Creek
Federal Aid Project No. BRZ-1330(5)
W.B.S. No. 33346.1.1
State Project No. 8.2742601
T.I.P. No. B-3911**

CATEGORICAL EXCLUSION & PROGRAMMATIC 4(f)

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

8/8/07

DATE

Gregory J. Thorpe, PhD

Environmental Management Director, PDEA

8/9/07

DATE

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

Surry County
Bridge No. 38 on SR 1330 (Haystack Rd.)
over Saddle Mountain Creek
Federal Aid Project No. BRZ-1330(5)
W.B.S. No. 33346.1.1
State Project No. 8.2742601
T.I.P. No. B-3911

CATEGORICAL EXCLUSION & PROGRAMMATIC 4(f)

Documentation Prepared in
Project Development and Environmental Analysis Branch By:

8/8/07
DATE

Natalie Lockhart
Natalie Lockhart
Project Planning Engineer
Bridge Project Development Unit

8/08/07
DATE

John L. Williams
John L. Williams, PE
Project Engineer
Bridge Project Development Unit



PROJECT COMMITMENTS:

**Surry County
Bridge No. 38 on SR 1330
Over Saddle Mountain Creek
Federal Aid Project No. BRZ-1330(5)
State Project No. 8.2742601
W.B.S. No. 33346.1.1
T.I.P. No. B-3911**

Office of Natural Environment – 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 demolition.

All Design Groups/Division Resident Engineer – Trout Issues

NCWRC has identified Saddle Mountain creek as supporting a trout population. Therefore a moratorium on all in water work will be in place from October 15 to April 15 of any given year.

NCDOT will implement Guidelines for Construction of Highway Improvements Adjacent to or Crossing Trout Waters in North Carolina in the design and construction of this project.

Structure Design Unit/Roadway Design Unit- Historic District

The impact to the Devotion Rural Historic District has been determined a “No Adverse Effect” with the following commitments:

- 1-Bar Metal Rail
- Straight Wall Parapet
- Use Native, Dark –Colored Stone for Rip Rap

All Design Groups/Division Resident Engineer- B-3910

TIP Project B-3910 shown in Figure 1 is to be let for construction in 2008. The construction of that project will not interfere with B-3911 as presently scheduled.

All Design Groups- Archaeology

There are no archaeological sites within the proposed project area, however it is required that a map is forwarded to State Historic Preservation Office to investigate the location of the project if it is on a new alignment.

Surry County
Bridge No. 38 on SR 1330 (Haystack Rd.)
over Saddle Mountain Creek
Federal Aid Project No. BRZ-1330(5)
W.B.S. No. 33346.1.1
State Project No. 8.2742601
T.I.P. No. B-3911

INTRODUCTION: Bridge No. 38 is included in the latest approved North Carolina Department of Transportation (NCDOT) Transportation Improvement Program and is eligible for the Federal-Aid Bridge Replacement Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal “Categorical Exclusion”.

I. PURPOSE AND NEED STATEMENT

NCDOT Bridge Maintenance Unit records indicate Bridge No. 38 has a sufficiency rating of 41.7 out of a possible 100 for a new structure. The bridge is considered functionally obsolete due to deck geometry appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA’s Bridge Replacement Program.

Built in 1923, Bridge No. 38 is a very aged pony truss bridge. Bridge No. 38 has one 11 foot lane with concrete abutments that have experienced substantial spalling. The bridge is posted at 17 tons for single vehicles and 24 tons for truck-tractor semi trailers.

The replacement of Bridge No. 38 will provide a new structure with no weight restrictions, a deck width consistent with current traffic standards, improved approach alignment and reducing the overall maintenance load on the state’s limited maintenance resources.

II. EXISTING CONDITIONS

The project is located in the rural area of Surry County that is west of I-77 and approximately 18 miles north of the Town of Elkin (see Figure 1). Development in the area is agricultural and residential in nature, mixed with large tracts of undeveloped land. This project is located within the Devotional Rural Historic District, which is recommended eligible for the National Register.

SR 1330 is classified as a rural local route in the Statewide Functional Classification System and it is not a National Highway System Route. This route is not a designated bicycle route and there is no indication that an unusual number of bicyclists use this roadway.

In the vicinity of the bridge, SR 1330 has a 11-foot pavement width with 2-foot grass shoulders (see Figures 3 and 4). The roadway grade is in a sag vertical curve through the project area. The existing bridge is on a tangent with a sharp curve beginning approximately 100 feet east of the bridge. The roadway is situated approximately 11 feet above the creek bed.

Bridge No. 38 is a one-span structure that consists of timber floor on low steel pony truss with an asphalt-wearing surface. There are reinforced concrete abutments. The existing bridge (see Figure 3) was constructed in 1923. The overall length of the structure is 52 feet. The clear roadway width is 11 feet. The posted weight limit on this bridge is 17 tons for single vehicles and 24 tons for TTST's. There are no utilities attached to the existing structure, but overhead power lines along the south side of the bridge and telephone lines on the eastside of the bridge. Utility impacts are anticipated to be low.

The current traffic volume of 200 vehicles per day (VPD) is expected to increase to 300 VPD by the year 2030. The projected volume includes one percent truck-tractor semi-trailer (TTST) and two percent dual-tired vehicles (DT). There is no posted speed limit, and therefore 55 miles per hour by statute in the project area. Two school buses cross the bridge daily on their morning and afternoon routes. There were no accidents reported in the vicinity of Bridge No. 38 during a recent three-year period.

III. ALTERNATIVES

A. Project Description

The replacement structure will consist of a bridge approximately 85-foot long. The bridge length is based on preliminary design information and is set by hydraulic requirements. The bridge will be of sufficient width to provide for two 9-foot lanes with a 4 foot offset and a 2 foot offset on each side for hydraulic spread. The roadway grade of the new structure will be approximately the same as the existing grade.

The existing roadway will be widened to 22 feet of pavement to provide two 9-foot lanes. 4-foot shoulders will be provided on each side none of which will be paved in accordance with the current NCDOT Design Policy. This roadway will be designed as a rural local route. This project is being designed using the 2001 AASHTO Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT<400). A design speed exception is required.

B. Reasonable and Feasible Alternatives

One alternative for replacing Bridge No. 38 that was studied in detail is described below.

Alternate 1(Preferred)

Alternate 1 involves replacement of the structure along new alignment to the south of the existing bridge. Improvements to the approach roadways will be required for a distance of approximately 500 feet to the west and 400 feet to the east of the new structure. This alternate will be designed using a design speed of 35 miles per hour. Traffic will be maintained on the existing bridge during construction.

C. Alternatives Eliminated From Further Consideration

The “do-nothing” alternative will eventually necessitate closure of the bridge. This is not acceptable due to the traffic service provided by SR 1330.

“Rehabilitation” of the old bridge is not practical due to its age and deteriorated condition. Components of both the reinforced concrete substructure and the timber and steel substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities.

There is no reasonable offsite detour because SR 1328 is an unpaved road with very poor curvature.

Onsite detours are generally not competitive unless traffic must be maintained and new alignment is not acceptable.

Staged Construction is not feasible for this bridge because the 12-foot deck width and beam configuration will not support removal of a portion and maintenance of traffic on the remaining portion.

D. Preferred Alternative

Bridge No. 38 will be replaced at new location as shown by Alternative 1 in Figure 2. NCDOT Division 11 concurs with the selection of Alternative 1 as the preferred alternative.

IV. ESTIMATED COSTS

The estimated costs, based on 2007 prices, are as follows:

	Alternative 1 Preferred
Structure	\$ 234,000
Roadway Approaches	\$ 221,000
Structure Removal	\$ 22,000
Misc. & Mob.	\$ 81,000
Eng. & Contingencies	\$ 93,000
Total Construction Cost	\$ 651,000
Right-of-way Costs	\$ 50,000
Total Project Cost	\$ 701,000

V. NATURAL ENVIRONMENT

PHYSICAL CHARACTERISTICS

Water Resources

Water resources located within the project study area lie in Subbasin 03-07-02 of the Yadkin River Drainage Basin. There are eight water resources located within the project study area: Saddle Mountain Creek, Mitchell River, one perennial unnamed tributary (UT) to Saddle Mountain Creek, two intermittent UTs to Saddle Mountain Creek, two jurisdictional wetlands, and one reservoir.

The best usage classification of Saddle Mountain Creek and its UTs (DWQ Stream Index # 12-62-5) are assigned a primary water resource classification of "B-TR-ORW". The Mitchell River is designated as DWQ Stream Index # 12-62-(1) and is assigned a primary water resource classification of "B-TR-ORW". Saddle Mountain Creek, and the named streams and their UTs located within 1.0 mi of Bridge No. 38 over Saddle Mountain Creek are classified as High Quality Waters (HQW), Water Supplies (WS-I or WS-II), or Outstanding Resource Waters (ORW). **There are no streams included on North Carolina's 303(d) list located in the project study area.**

A trout moratorium applies (October 15 through April 15) to Saddle Mountain Creek, Mitchell River, and the project study area UTs (Per phone conversation with Marla Chambers North Carolina Wildlife Resources Commission (NCWRC), March 26, 2004). There are no proposed "critical habitats for aquatic species" located within the project study area (Per phone conversation with Dale Suiter United States Fish and Wildlife Service (USFWS), April 29, 2004).

Biotic Resources

There are seven terrestrial communities located within the project study area. Community boundaries within the project study area are generally well defined without a significant transition zone between them. The observed communities consist of (1) pasture, (2) Mesic Mixed Hardwood Forest (Piedmont Subtype), (3) disturbed land, (4) residential, (5) riparian buffer, (6) roadside, and (7) white pine plantation.

JURISDICTIONAL TOPICS

Wetlands and Surface Waters

The Mitchell River, Saddle Mountain Creek and its UTs, the Saddle Mountain Creek reservoir monitored by the NCWRC are considered jurisdictional surface waters under Section 404 of the Clean Water Act (CWA). Based upon the results of the field investigation, the project

study area also contains two jurisdictional wetlands. Saddle Mountain Creek is proposed to be bridged by a permanent structure.

B-3911 Wetland Impacts

Wetland Type	Area Impacts (ft ²)
Floodplain Wetland	0
Seep Wetland	400
Reservoir	0
TOTAL IMPACTS	400

B-3911 Stream Impacts

Stream Name	Linear Impacts (ft)	Area Impacts (ac)
Saddle Mountain Creek	0	0
Mitchell River	0	0
UT1 to Saddle Mountain Creek	0	0
UT2 to Saddle Mountain Creek	0	0
UT3 to Saddle Mountain Creek	0	0
TOTAL IMPACTS	0	0

Bridge No. 38 is a 52 ft long by 12 ft wide structure composed of a timber floor on low steel pony truss superstructure with a reinforced concrete abutment substructure. Bridge demolition will occur by removing the paved surface prior to removal of the bridge structure. The remainder of the timber components will be removed without dropping them into Saddle Mountain Creek. Consequently, there will be no temporary fill resulting from bridge demolition.

Permits

The proposed project is being processed as a Categorical Exclusion (CE) document; consequently, B-3911 will most likely be authorized as an approved CE under nationwide permit (NWP) No. 23. Activities that are authorized under the NWP No. 23 are defined within the permit language as authorized under 33 CFR §330.

Other permits that may apply include the NWP No. 14 (Linear Transportation Projects), General Permit (GC) 198200031 (for NCDOT bridge crossings), or an IP. Additionally, a NWP No. 33 may be required for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The United States Army Corps of Engineers (USACE) holds the final discretion as to what permit will be required to authorize project construction.

In addition to the 404 permit, other required authorizations include the corresponding Section 401 Water Quality Certification (WQC) from the North Carolina Division of Water Quality (NCDWQ). Section 401 of the CWA requires that the state issue or deny a WQC for any

federally permitted or licensed activity that may result in a discharge to “waters of the United States”. A NCDWQ Section 401 Water Quality General Certification for an approved CE (General Certification (GC) 3403) or minor road crossing (GC 3404) may be required prior to the issuance of a Section 404 Permit. Other required 401 certifications may include a GC 3366 for temporary construction access and dewatering.

The project occurs in Surry County, which is a NCWRC designated “trout” county. Since the proposed project is located in a designated “trout” county, the authorization of nationwide permit by the USACE is conditioned upon the concurrence of the NCWRC.

Federally Protected Species

Plants and animals with federal classifications of endangered (E), threatened (T), proposed endangered (PE), and proposed threatened (PT) are protected under the provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. As of May 10, 2007 the USFWS lists three federally protected species for Surry County.

Bog Turtle

Biological Conclusion: No Survey Required

This species is listed as Threatened Due to Similarity of Appearance, and is therefore not protected under Section 7 of the Endangered Species Act. Consequently, no survey is required for this species.

Schweinitz’s sunflower

Biological Conclusion: No Effect

Habitat for Schweinitz’s sunflower within the project study area includes roadsides, woodland openings/edges and other sunny or semi-sunny situations. As of February 23, 2004, a review of the North Carolina Natural Heritage Program (NCNHP) database for rare species and unique habitats revealed no known populations of Schweinitz's sunflower within 1.0 mi of Bridge No. 38 over Saddle Mountain Creek. Surveys have been conducted and a biological conclusion for Schweinitz’s sunflower was determined “No Effect”.

Small-whorled pogonia

Biological Conclusion: No Effect

Habitat for small-whorled pogonia within the project study area includes the mixed mesic hardwood forest. As of February 23, 2004, a review of the NCNHP database for rare species and unique habitats revealed no known populations of small-whorled pogonia within 1.0 mi of Bridge No. 38 over Saddle Mountain Creek. An updated survey for the small-whorled pogonia was performed by NCDOT personnel on April 26, 2007 and no specimens were observed. Therefore, a biological conclusion for small-whorled pogonia was determined “No Effect”.

VI. HUMAN ENVIRONMENT

Section 106 Compliance Guidelines

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

Historic Architecture

The Historic Preservation Office (HPO) reviewed the subject project and determined that surveys are required (see letter dated August 12, 2004). In a letter dated June 22, 2005 HPO concurred that the Devotion Rural Historic District is eligible for the National Register. The bridge is not individually eligible or a contributing element to the district. In the attached concurrence form dated May 2, 2006, it was agreed that the project will have "No Adverse Affect" with conditions that are included in the Project Commitments sheet at the beginning of this document.

Archaeology

The Historic Preservation Office (HPO) reviewed the subject project. There are no known archaeological sites within the proposed project area, and no archaeological investigation needed to be conducted, unless the bridge replacement is on new location (see letter dated June 30, 2004).

Community Impacts

No adverse impact on families or communities is anticipated. Right-of-way acquisition will not be required. No relocatees are expected with implementation of the proposed alternative.

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

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

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impact to prime farmland of all land acquisition and construction projects. All construction will take place along new alignment. Prime and important farmland soils are defined by the Natural Resources Conservation Service (NRCS). According to the Soil Survey for Surry County, four types of soils are present. Of the four, only one, Colvard

soils, are considered prime farmland soils with 0 to 3% slope. The only reasonable alternative will have an impact (approximately 1-acre) at the fringe of a large (several hundred acres) Colvard soil field present in the area.

The project will not have a disproportionately high and adverse human health and environmental effect on any minority or low-income population.

Noise & Air Quality

This project is an air quality neutral project in accordance with 40 CFR 93.126. It is not required to be included in the regional emissions analysis (if applicable) and project level CO or PM_{2.5} analyses are not required. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. Therefore, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs. Any burning of vegetation shall be performed in accordance with applicable local laws and regulations of the North Carolina State Implementation Plan (SIP) for air quality compliance with 15 NCAC 2D.0520.

Noise levels may increase during project construction; however, these impacts are not expected to be substantial considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

VII. GENERAL ENVIRONMENTAL EFFECTS

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

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

The proposed project will require right-of-way acquisition or easement from any land protected under Section 4(f) of the Department of Transportation Act of 1966. The impact has been determined to be programmatic Section 4(f) because of an Adverse Affect to the Devotion Historical District.

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

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

VIII. COORDINATION & AGENCY COMMENTS

NCDOT has sought input from the following agencies as a part of the project development: U.S. Army Corps of Engineers (USACOE), NC Department of Natural Resources (NCDENR), U.S. Fish & Wildlife Service, N.C Wildlife Resource Commission, and North Carolina State Historic Preservation Office.

The **USACOE** and **NCDENR** have not reply to the inquiry.

The **N.C. Wildlife Resource Commission** and **U.S. Fish & Wildlife Service** in standardized letters provided a request that they prefer any replacement structure to be a spanning structure.

Response: Hydraulics Unit recommends replacing a bridge with a bridge.

The **N.C. Division of Water Quality** had no special concerns for this project.

IX. PUBLIC INVOLVEMENT

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

X. CONCLUSION

On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project. The project is therefore considered to be a federal "Categorical Exclusion" due to its limited scope and lack of substantial environmental consequences.

NORTH CAROLINA DIVISION
 FINAL NATIONWIDE SECTION 4(f) EVALUATION AND APPROVAL
 FOR FEDERALLY-AIDED HIGHWAY PROJECTS WITH MINOR INVOLVEMENTS WITH
 HISTORIC SITES

F. A. PROJECT BRZ-1330(5)

W.B.S. No. 33346

TIP No. B-3911

Description: Bridge No. 38 on SR 1330 (Haystack Rd) over Saddle Mountain Creek was built in 1923. Bridge No, 38 is scheduled to be replaced on new alignment to the south of the existing bridge. This aged pony truss bridge is considered as functionally obsolete due to deck geometry appraisal of 2 out of 9. Bridge No. 38 is located in the Devotion Rural Historic District, which is eligible for the National Register under Criterion C for architecture & under Criterion A for social history & recreation.

- | | <u>Yes</u> | <u>No</u> |
|---|--------------------------|--------------------------|
| 1. Is the proposed project designed to improve the operational characteristics, safety, and/or physical condition of the existing highway facility on essentially the same alignment? | <u> x </u> | <input type="checkbox"/> |
| 2. Is the project on new location? | <input type="checkbox"/> | <u> x </u> |
| 3. Is the historic site adjacent to the existing highway? | <u> x </u> | <input type="checkbox"/> |
| 4. Does the project require the removal or alteration of historic buildings, structures, or objects? | <input type="checkbox"/> | <u> x </u> |
| 5. Does the project disturb or remove archaeological resources which are important to preserve in place rather than to recover for archaeological research? | <input type="checkbox"/> | <u> x </u> |
| 6. a. Is the impact on the Section 4(f) site considered minor (i.e. no effect, no adverse effect)? | <u> x </u> | <input type="checkbox"/> |
| b. If the project is determined to have "no adverse effect" on the historic site, does the Advisory Council on | <input type="checkbox"/> | <u> x </u> |

Historic Preservation object to the determination of "no adverse effect"?

7. Has the SHPO agreed, in writing, with the assessment of impacts and the proposed mitigation?
8. Does the project require the preparation of an EIS?

ALTERNATIVES CONSIDERED AND FOUND NOT TO BE PRUDENT AND FEASIBLE

The following alternatives were evaluated and found not to be feasible and prudent:

1. Do nothing

2. Does the "do nothing" alternative:

- | | <u>Yes</u> | <u>No</u> |
|---|--------------------------|-------------------------------------|
| (a) correct capacity deficiencies? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| or (b) correct existing safety hazards? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| or (c) correct deteriorated conditions? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| and (d) create a cost or impact of extraordinary measure? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

2. Improve the highway without using the adjacent historic site

- | | <u>Yes</u> | <u>No</u> |
|---|-------------------------------------|--------------------------|
| (a) Have minor alignment shifts, changes in standards, use of retaining walls, etc., or traffic management measures been evaluated? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b) The items in 2(a) would result in: (circle, as appropriate) | | |
| (i) substantial adverse environmental impacts | | |
| or (ii) substantial increased costs | | |
| or (iii) unique engineering, transportation, maintenance, or safety problems | | |
| or (iv) substantial social, environmental, or economic impacts | | |

or (v) a project which does not meet the need

or (vi) impacts, costs, or problems which are of extraordinary magnitude

3. Build an improved facility on new location without using the historic site.

(a) An alternate on new location would result in: (circle, as appropriate)

(i) a project which does not solve the existing problems

or (ii) substantial social, environmental, or economic impacts

or (iii) a substantial increase in project cost or engineering difficulties

and (iv) such impacts, costs, or difficulties of truly unusual or unique or extraordinary magnitude

MINIMIZATION OF HARM

	<u>Yes</u>	<u>No</u>
1. The project includes all possible planning to minimize harm necessary to preserve the historic integrity of the site.	<u>x</u>	<input type="checkbox"/>
2. Measures to minimize harm have been agreed to, in accordance with 36 CFR Part 800, by the FHWA, the SHPO, and as appropriate, the ACHP.	<u>x</u>	<input type="checkbox"/>
3. Specific measures to minimize harm are described as follows: <ul style="list-style-type: none">• Use a 1-bar metal rail• Use a straight wall parapet• Use native dark-colored stone for rip rap		

COORDINATION

The proposed project has been coordinated with the following (attach correspondence):

- | | |
|--|----------------|
| a. State Historic Preservation Officer | see attachment |
| b. Advisory Council on Historic Preservation | n/a |
| c. Property owner | n/a |
| d. Local/State/Federal Agencies | FHWA |
| e. US Coast Guard | n/a |
- (for bridges requiring bridge permits)

SUMMARY AND APPROVAL

The project meets all criteria included in the programmatic 4(f) evaluation approved on December 23, 1986.

All required alternatives have been evaluated and the findings made are clearly applicable to this project. There are no feasible and prudent alternatives to the use of the historic site.

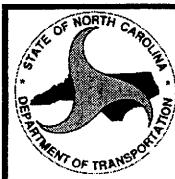
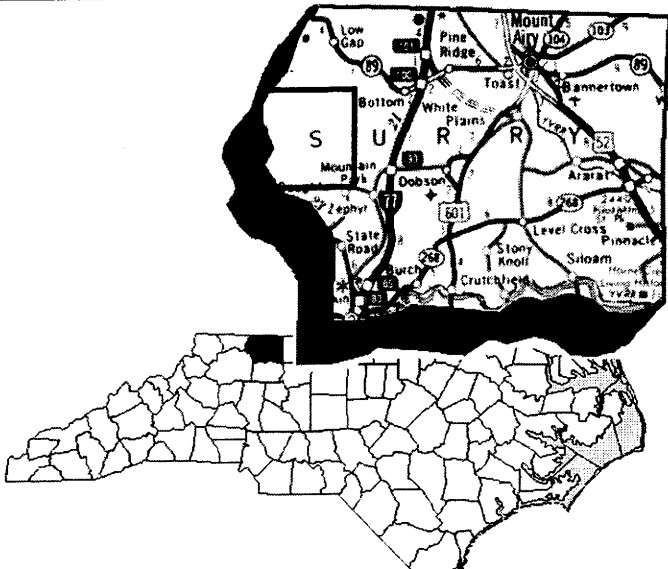
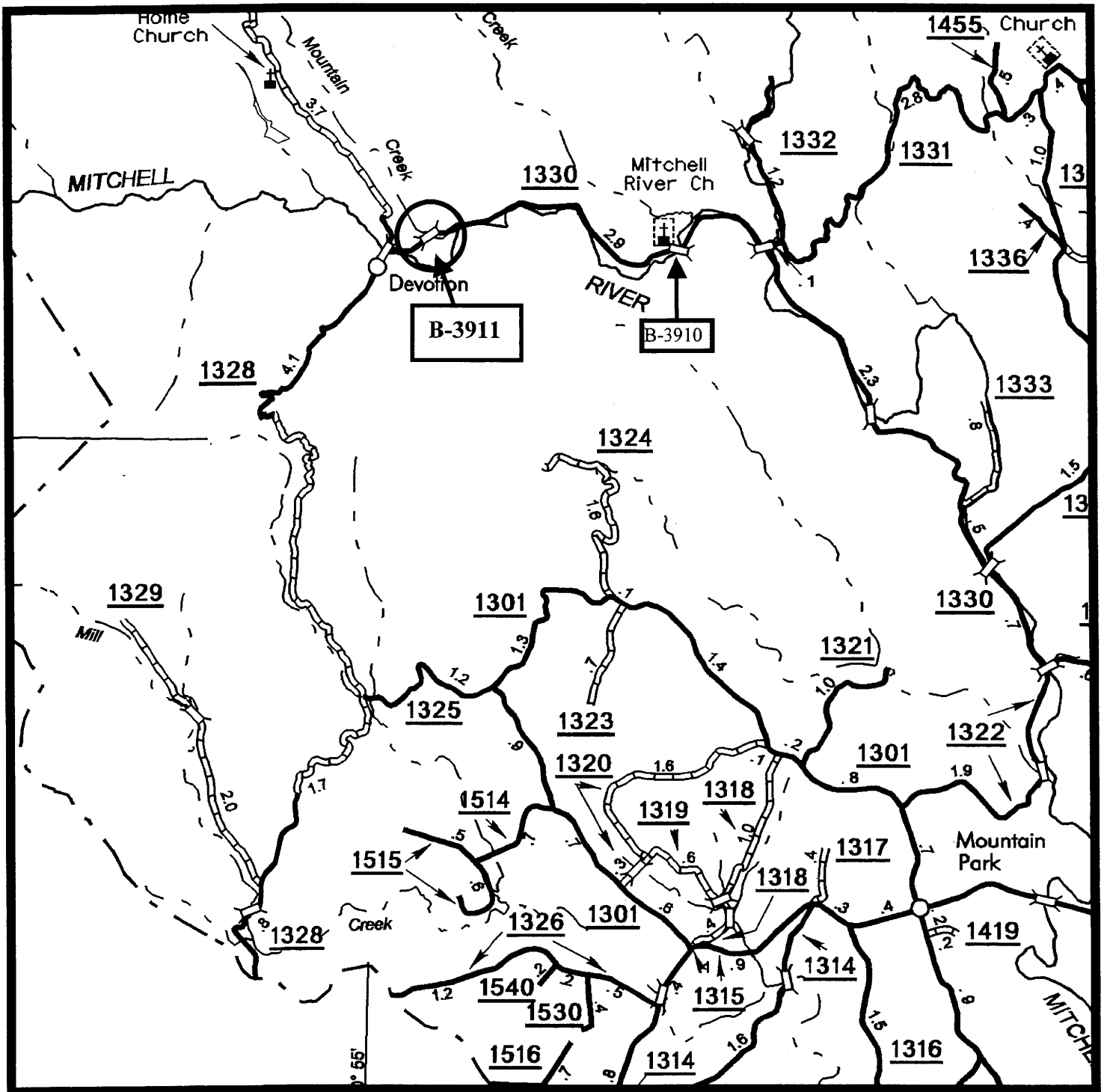
The project includes all possible planning to minimize harm, and the measures to minimize harm will be incorporated in the project.

All appropriate coordination has been successfully completed with local and state agencies.

Approved:

8/9/07 William T. Harkin
Date RM Manager, Planning & Environmental Branch, NCDOT

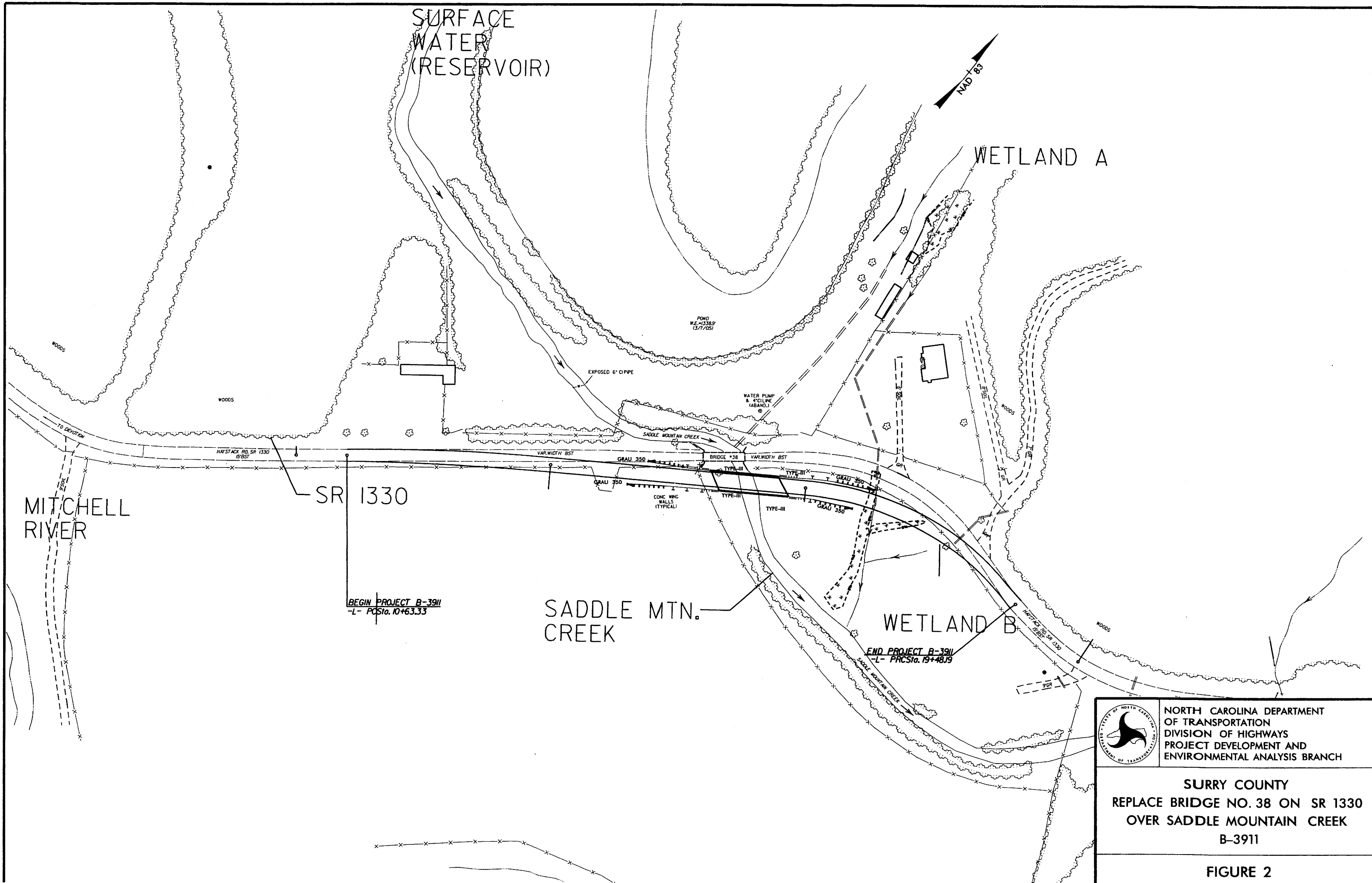
8/9/07 Tom D. R...
Date for Division Administrator, FHWA



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

**SURRY COUNTY
REPLACE BRIDGE NO. 38 ON SR 1330
OVER SADDLE MOUNTAIN CREEK
B-3911**

Figure 1

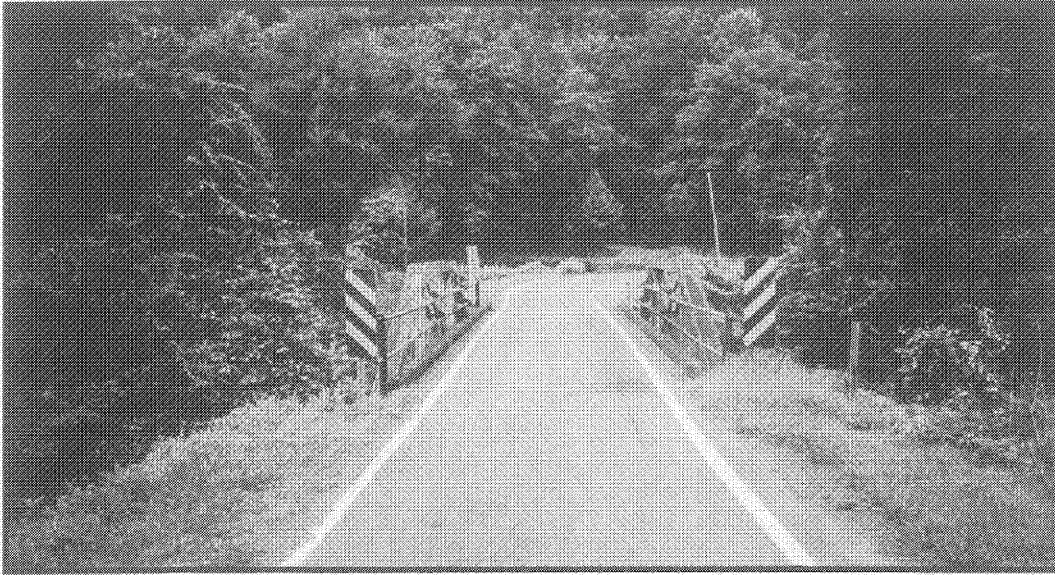


NORTH CAROLINA DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PROJECT DEVELOPMENT AND
 ENVIRONMENTAL ANALYSIS BRANCH

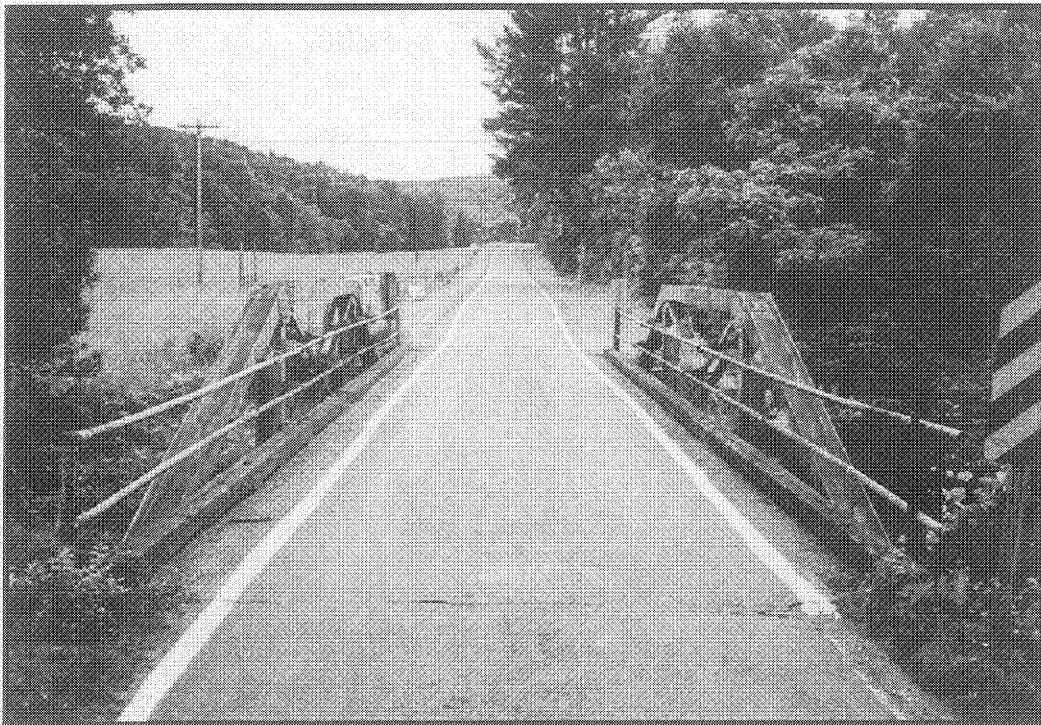
SURRY COUNTY
REPLACE BRIDGE NO. 38 ON SR 1330
OVER SADDLE MOUNTAIN CREEK
B-3911

FIGURE 2

B-3911 Surry County Figure 3



Facing East



Facing West

B-3911 Surry County Figure 4



Looking North



Looking South



North Carolina Department of Cultural Resources
State Historic Preservation Office

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

Division of Historical Resources
David L. S. Brook, Director

June 30, 2004

MEMORANDUM

TO: Gregory J. Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: David Brook *David Brook*
Deputy State Historic Preservation Officer

SUBJECT: Replacement of bridge 38 on SR 1330 over Saddle Mountain Creek, B-3911,
Surry County, ER04-1294

Thank you for your memorandum of April 29, 2004, concerning the scoping meeting for the above project.

There are no recorded archaeological sites within the proposed project area. If the replacement is to be located along the existing alignment, it is unlikely that significant archaeological resources will be affected and no investigation is recommended. If, however, the replacement is to be in a new location or if road re-alignment is included, please forward a map to this office indicating the location of the new alignment and the area of potential effect (APE) so we may evaluate the potential effects of the replacement upon archaeological resources.

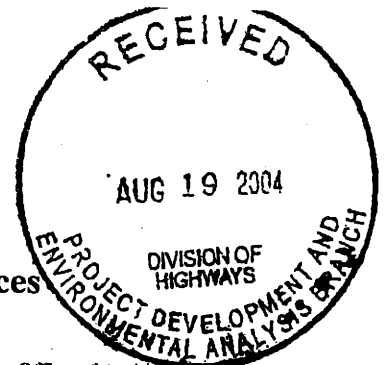
The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

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

cc: Matt Wilkerson, NCDOT

www.hpo.dcr.state.nc.us

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



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

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

Office of Archives and History
Division of Historical Resources
David Brook, Director

August 12, 2004

MEMORANDUM

*With copy
No. 1000000*

TO: Gregory Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
NCDOT Division of Highways

FROM: Peter B. Sandbeck *PBS for Peter Sandbeck*

SUBJECT: 2004 Bridge Projects, including B-3492, B-4408, B-4409, B-4410, B-4446, B-4466, B-4469, B-4518, B-4545, B-4573, B-4631, B-4423, B-4424, B-4454, B-4520, B-4538, B-4540, B-4548, B-4549, B-4567, B-4578, B-4648, B-4664, B-4665, B-4504, B-4560, B-4587, B-4618, B-4644, B-4649, B-4651, B-4658, B-4671, B-3624, B-3819, B-3911, B-4404, B-4552, B-4613, B-4646, B-4675, B-3169, B-3606, B-3802, B-3803, B-3804, B-4523, B-4524, B-4525, B-4526, Multi-county, ER 04-1280-ER 04-1330

On July 28, 2004, Sarah McBride, our preservation specialist for transportation projects, met with the North Carolina Department of Transportation (NCDOT) staff for a meeting of the minds concerning the above projects. We reported on our available information on historic architectural and archaeological surveys and resources along with our recommendations. NCDOT provided project descriptions, area photographs, and aerial photographs at the meeting.

Based on our review of the photographs and the information discussed at the meeting, we have included our comments for each bridge project on a spreadsheet attached to this letter. These comments are provided for each project as proposed.

If an archaeological survey is requested on the spreadsheet, a separate memorandum from the Office of State Archaeology, explaining whether a general survey is required or if the survey is predicated upon an off-site detour or new location, is attached.

Having provided this information, we look forward to receipt of either a Categorical Exclusion or Environmental Assessment which indicates how NCDOT addressed our comments.

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.

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

Thank you for your cooperation and considerations. If you have any questions concerning the above comment, please 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.

PBS:w

Attachments

1 Spreadsheet

16 Memos

cc: Matt Wilkerson, NCDOT
Mary Pope Furr

	TIP	BRIDGE	COUNTY	DIVISION	BUILT	PDE	Architecture	Archaeology	
ER04	1314	B-3492	580056	McDOWELL	13	1962	Hancock	Yes	No
ER04	1285	B-4408	030265	ANSON	10	1961	Hancock	No	No
ER04	1286	B-4409	030308	ANSON	10	1922	Hancock	No	No
ER04	1287	B-4410	030307	ANSON	10	1931	Hancock	Yes	No
ER04	1301	B-4446	100227	BUNCOMBE	13	1956	Hancock	No	No
ER04	1290	B-4466	210004	CLAY	14	1952	Hancock	No	No
ER04	1291	B-4469	220219	CLEVELAND	12	1952	Hancock	No	No
ER04	1287	B-4518	350110	GASTON	12	1962	Hancock	No	No
ER04	1307	B-4545	440072	HENDERSON	14	1963	Hancock	No	No
ER04	1300	B-4573	540183	LINCOLN	12	1965	Hancock	No	No
ER04	1306	B-4631	800526	RUTHERFORD	13	1970	Hancock	No	No
ER04	1329	B-4423	060067	BEAUFORT	2	1965	Capps	No	No
ER04	1323	B-4424	060068	BEAUFORT	2	1966	Capps	No	No
ER04	1302	B-4454	150043	CARTERET	2	1963	Capps	No	No
ER04	1292	B-4520	360032	GATES	1	1952	Capps	Yes	No
ER04	1280	B-4538	410025	HALIFAX	4	1965	Capps	No	No
ER04	1281	B-4540	410142	HALIFAX	4	1962	Capps	Yes	Yes
ER04	1308	B-4548	450002	HERTFORD	1	1960	Capps	No	Yes
ER04	1309	B-4549	450042	HERTFORD	1	1960	Capps	Yes	Yes
ER04	1299	B-4567	530069	LENOIR	2	1971	Capps	Yes	Yes
ER04	1298	B-4578	570008	MARTIN	1	1974	Capps	No	No
ER04	1325	B-4648	880017	TYRRELL	1	1977	Capps	No	No
ER04	1317	B-4664	920025	WARREN	5	1957	Capps	Yes	Yes
ER04	1318	B-4665	920036	WARREN	5	1955	Capps	No	Yes
ER04	1325	B-4504	320052	EDGECOMBE	4	1964	Johnson	No	Yes
ER04	1312	B-4560	500102	JOHNSTON	4	1956	Johnson	Yes	Yes
ER04	1297	B-4587	630082	NASH	4	1961	Johnson	No	Yes
ER04	1325	B-4618	770445	ROBESON	6	1955	Johnson	Yes	No
ER04	1284	B-4644	830057	STANLY	10	1961	Johnson	No	No
ER04	1324	B-4649	890377	UNION	10	1962	Johnson	No	No
ER04	1323	B-4651	890251	UNION	10	1957	Johnson	No	No
ER04	1315	B-4658	910345	WAKE	5	1960	Johnson	No	No
ER04	1313	B-4671	950035	WAYNE	4	1961	Johnson	No	Yes
ER04	1327	B-3624	130190	CALDWELL	11	1981	Pipkin	No	No
ER04	1328	B-3819	130184	CALDWELL	11	1962	Pipkin	No	No
ER04	1320	B-3911	850038	SURRY	11	1923	Pipkin	Yes	No
ER04	1286	B-4404	000102	ALAMANCE	7	1968	Pipkin	Yes	No
ER04	1310	B-4552	480100	IREDELL	12	1963	Pipkin	Yes	No
ER04	1295	B-4613	750415	RANDOLPH	8	1959	Pipkin	No	Yes
ER04	1294	B-4646	850132	SURRY	11	1962	Pipkin	Yes	No
ER04	1311	B-4675	960034	WILKES	11	1960	Pipkin	No	No
ER04	1293	B-3169	310158	DURHAM	5	1960	Williams	Yes	No
ER04	1303	B-3606	040070	ASHE	11	1963	Williams	Yes	No
ER04	1282	B-3802	040229	ASHE	11	1960	Williams	No	No
ER04	1301	B-3803	040334	ASHE	11	1966	Williams	Yes	No
ER04	1283	B-3804	040296	ASHE	11	1964	Williams	Yes	No
ER04	1319	B-4523	380164	GRANVILLE	5	1955	Williams	No	Yes
ER04	1320	B-4524	380193	GRANVILLE	5	1956	Williams	No	Yes
ER04	1321	B-4525	380133	GRANVILLE	5	1960	Williams	No	Yes
ER04	1322	B-4526	380200	GRANVILLE	5	1957	Williams	No	Yes

Federal Aid # BRZ-1330(5)

TIP # B-3911

County: Surry

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: **Replace Bridge No. 38 on SR 1330 over Saddle Mountain Creek**

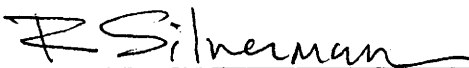
On **May 02, 2006** representatives of

- North Carolina Department of Transportation (NCDOT)
- Federal Highway Administration (FHWA)
- North Carolina State Historic Preservation Office (HPO)
- Other

Reviewed the subject project and agreed

- There are no effects on the National Register-listed property/properties located within the project's area of potential effect and listed on the reverse.
- There are no effects on the National Register-eligible property/properties located within the project's area of potential effect and listed on the reverse.
- There is an effect on the National Register-listed property/properties located within the project's area of potential effect. The property/properties and the effect(s) are listed on the reverse.
- There is an effect on the National Register-eligible property/properties located within the project's area of potential effect. The property/properties and effect(s) are listed on the reverse.

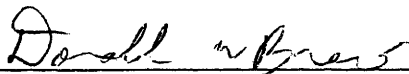
Signed:



05-02-2006

Representative, NCDOT

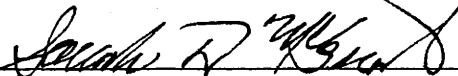
Date



5-2-06

FHWA, for the Division Administrator, or other Federal Agency

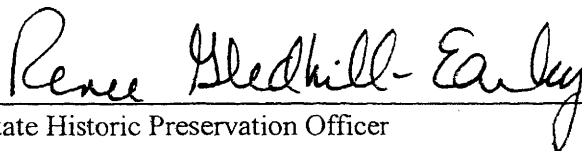
Date



5-2-06

Representative, HPO

Date



5-2-06

State Historic Preservation Officer

Date

Federal Aid # BRZ-1330(5)

TIP # B-3911

County: Surry

Properties within the area of potential effect for which there is no effect. Indicate if property is National Register-listed (NR) or determined eligible (DE).

Properties within the area of potential effect for which there is an effect. Indicate property status (NR or DE) and describe the effect.

NO ADVERSE EFFECT TO
DEVOTION RURAL HISTORIC DISTRICT (DE)

- 1- BAR METAL RAIL
- STRAIGHT WALL PARAPET
- USE NATIVE, DARK-COLORED STONE FOR RIP RAP

Reason(s) why the effect is not adverse (if applicable).

ENV. COMMITMENTS

Initialed: NCDOT RLS FHWA DB HPO SDM