STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

January 31, 2008

Mr. William Wescott
U. S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

Mr. Stephen Lane
Division of Coastal Management
N. C. Dept. of Env. & Natural Resources
400 Commerce Avenue
Morehead City, NC 28557

Dear Sirs:

Subject: **Nationwide 23 and 33 Permit Application and CAMA Major Development Permit Request** for the proposed replacement of Bridge No. 22 over the Northwest prong of the Newport River on SR 1124, in Carteret County. Federal Aid Project No. BRSTP-1124(4), TIP No. B-4055. Debit $400.00 from WBS Element 33420.1.1

Please find enclosed the CAMA Major Permit (MP) forms, Preconstruction Notification (PCN), adjacent riparian landowner certified mail receipts, NCDWQ Stormwater Permit, permit drawings, and half-size plan sheets for the above referenced project. A Categorical Exclusion (CE) was completed for this project on January 4, 2006 and distributed shortly thereafter. Additional copies are available upon request. The North Carolina Department of Transportation (NCDOT) proposes to replace existing Bridge No. 22 over the Northwest prong of the Newport River on SR 1124, in Carteret County. The project involves replacement of the existing 90-foot structure with a 142-foot bridge at approximately the same location using an off-site detour during construction. The bridge superstructure will be constructed with the use of 33" box beams, and the substructure will consist of 16" concrete piles at each end bent and 20" concrete piles at the interior bent. The existing bridge navigational clearance will be maintained or improved. There will be 22 ft^2 of permanent impacts the Northwest prong of the Newport River and 0.22 acre of permanent impacts to adjacent wetlands. Traffic will be detoured off-site, on surrounding roads, during construction.

Impacts to Waters of the United States

General Description: The project is located in the White Oak River Basin (Hydrologic Unit 03020106). A best usage classification of "C" has been assigned to the Northwest prong of the Newport River [DWQ Index #21-2]. Neither Water Supplies (WS-I: undeveloped watersheds or WS-II: predominately undeveloped watersheds) nor Outstanding Resource Waters (ORW) occur within 1.0 mile (1.6 km) of project study area. The Northwest prong of the Newport River is not designated as a North Carolina Natural or Scenic River, or as a National Wild and Scenic River. Additionally, the Northwest prong of the Newport River is not listed on the Final 2006 303(d) list of impaired waters, nor does it drain into any Section 303(d) waters within 1.0 mile of the project study area.

Permanent Impacts: Wetlands adjacent to the Northwest prong of the Newport River will be impacted by the proposed project. Construction of the proposed project will result in permanent impacts to riverine

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

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

WEBSITE: WWW.NCDOT.ORG

LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

wetlands, including 0.22 acre of fill in 404 wetlands due to roadway and approach fill. Surface water impacts totaling 22 ft^2 will occur as result of interior bent installation.

Utility Impacts: There will be no impacts to jurisdictional resources due to the relocation of utilities. Any utility relocations, adjustments, or mechanized clearing performed by the utility companies shall occur outside of the wetland boundaries. If the utility companies install their proposed facilities by directional bore, then bore pits shall be located outside of wetland boundaries.

Hand Clearing: There will be 0.26 acre of hand clearing in wetlands.

Bridge Demolition

The existing 3-span bridge superstructure consists of prestressed concrete channels. The substructure consists of prestressed concrete caps on timber piles. The bridge will be removed and piles will be pulled piece-by-piece without dropping components into Waters of the United States during construction. Best Management Practices for Bridge Demolition and Removal will be followed to avoid any temporary fill from entering Waters of the United States.

Federally Protected Species

As of January 16, 2008 the US Fish and Wildlife Service (USFWS) lists fourteen federally protected species for Carteret Counties (Table 1). A Biological Conclusion "No Effect" was reached for all species.

Table 1. Federally protected species of Carteret County.

Scientific Name	Common Name	Federal Status	Habitat	Biological Conclusion
Alligator mississippiensis	American alligator	T(S/A)	Yes	N/A
Puma concolor cougar	Eastern cougar	E	Yes	No Effect
Trichechus manatus	West Indian manatee	E	No	No Effect
Chelonia mydas	Green sea turtle	T	No	No Effect
Eretomochelys imbricata	Hawksbill sea turtle	E	No	No Effect
Lepidochelys kempii	Kemp's ridley sea turtle	E	No	No Effect
Dermochelys coriacea	Leatherback sea turtle	E	No	No Effect
Caretta caretta	Loggerhead sea turtle	T	No	No Effect
Charadrius melodus	Piping plover	T	No	No Effect
Picoides borealis	Red-cockaded woodpecker	E	No	No Effect
Sterna dougallii	Roseate tern	E	No	No Effect
Acipenser brevirostrum	Shortnose sturgeon	E	No	No Effect
Lysimachia asperulaefolia	Rough-leaved loosestrife	E	No	No Effect
Amaranthus pumulis	Seabeach amaranth	T	No	No Effect

Effective August 8, 2007, the bald eagle (*Haliaeetus leucocephalus*) was delisted from the Endangered Species Act. A Biological Conclusion is no longer necessary for this species. The bald eagle is protected under the Bald and Golden Eagle Protection Act. No suitable nesting or foraging habitat exists within 660 feet of the project limits.

Avoidance and Minimization

Avoidance examines all appropriate and practicable possibilities of averting impacts to "Waters of the United States". Due to the presence of surface waters and wetlands within the project study area, avoidance of all impacts is not possible. The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional impacts. Minimization measures incorporated as part of the project design included:

- Use of an off-site detour during construction
- Construction of a 51-foot longer bridge
- There will be no deck drains over surface waters on the proposed bridge
- The use of 3:1 fill slopes in jurisdictional areas where practicable

Mitigation

The North Carolina Department of Environment and Natural Resources Ecosystem Enhancement Program (EEP) has assumed responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the unavoidable impacts to 0.22 acre of riverine wetlands. See attached EEP Acceptance Letter dated January 17, 2008.

In-Stream Work Moratorium

As required by the NC Wildlife Resources Commission (NCWRC), a moratorium on in-stream construction activities will be strictly adhered for the dates between and including February 15 and September 30 to protect anadromous fish species. In addition, the Stream Crossing Guidelines for Anadromous Fish Passage will be implemented.

Project Schedule

The review date for this project is April 29, 2008 and the Let Date is June 17, 2008.

Regulatory Approvals

Section 404 Permit: All aspects of this project are being processed by the Federal Highway Administration as a "Categorical Exclusion" in accordance with 23 CFR 771.115(b). The NCDOT requests that a Nationwide Permit 23 authorize these activities. We are also requesting the issuance of a Nationwide Permit 33 for the temporary fill due to the installation of erosion control measures. (72 CFR; 11092-11198, March 12, 2007).

Section 401 Permit: We anticipate 401 General Certification numbers 3701 and 3688 will apply to this project. NCDOT is providing two copies of this application to the North Carolina Department of Environmental and Natural Resources, Division of Water Quality, for their review. NCDOT received a stormwater permit (SW8 060916), dated November 14, 2006, from NCDWQ (attached).

CAMA: NCDOT requests that the proposed work be authorized under a Coastal Area Management Act Major Development Permit. The adjacent riparian landowner certified mail receipts are included with this application and the return receipts will be provided as soon as they are available. Authorization to debit the $400 Permit Application Fee from WBS Element 33420.1.1 is hereby given.

A copy of this application will be posted on the NCDOT website at:
http://www.doh.dot.state.nc.us/preconstruct/pe/neu/permit.html

Thank you for your time and assistance with this project. Please contact M. Worth Calfee at wcalfee@dot.state.nc.us or (919) 715-7225 if you have any questions or need additional information.

Sincerely,

E. L. Lush

for Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

W/attachment

Mr. Brian Wrenn, NCDWQ **(2 Copies)**
Mr. Travis Wilson, NCWRC
Mr. Gary Jordan, USFWS
Mr. Ron Sechler, NMFS
Mr. Michael Street, NCDMF
Mr. Steve Sollod, NCDCM

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Mark Staley, Roadside Environmental
Mr. C. E. Lassiter, P.E., Division 2
Mr. Jay Johnson, Division 2
Mr. Scott McLendon, USACE, Wilmington
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Ms. Beth Harmon, EEP
Mr. Todd Jones, NCDOT External Audit Branch
Mr. Stephen Wade Kirby, P.E., P.G., PDEA

DCM MP-1

APPLICATION for Major Development Permit

(last revised 12/27/06)

North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applicant/ Landowner Information

Business Name NC Department Of Transportation			Project Name (if applicable) B-4055 Carteret County	
Applicant 1: First Name	MI		Last Name	
Applicant 2: First Name	MI		Last Name	
If additional applicants, please attach an additional page(s) with names listed.				
Mailing Address 1548 Mail Service Center			PO Box	City / State
ZIP 27699 1548	Country	Phone No. 919 - 733 - 3141 ext.		FAX No. 919 - 733 - 9794
Street Address *(if different from above)*			City	State / ZIP
Email				

2. Agent/Contractor Information

Business Name				
Agent/ Contractor 1: First Name	MI		Last Name	
Agent/ Contractor 2: First Name	MI		Last Name	
Mailing Address			PO Box	City / State
ZIP		Phone No. 1 - - ext.		Phone No. 2 - - ext.
FAX No.		Contractor #		
Street Address *(if different from above)*			City	State / ZIP
Email				

<Form continues on back>

3. Project Location

County (can be multiple)	Street Address		State Rd. #
Carteret	SR 1124 (Nine Foot Road)		SR 1124
Subdivision Name	City	State	Zip
			-

Phone No.	Lot No.(s) *(if many, attach additional page with list)*
- - ext.	, , , ,
a. In which NC river basin is the project located? White Oak River	b. Name of body of water nearest to proposed project Northwest Prong Newport River
c. Is the water body identified in (b) above, natural or manmade? ☒Natural ☐Manmade ☐Unknown	d. Name the closest major water body to the proposed project site. Newport River
e. Is proposed work within city limits or planning jurisdiction? ☐Yes ☒No	f. If applicable, list the planning jurisdiction or city limit the proposed work falls within.

4. Site Description

a. Total length of shoreline on the tract (ft.)	b. Size of entire tract (sq.ft.)
Length of project = 1003 ft	1003' x 75' (avg footprint width) = 75300 sq ft
c. Size of individual lot(s) *(If many lot sizes, please attach additional page with a list)*	d. Approximate elevation of tract above NHW *(normal high water)* or NWL *(normal water level)* 10 ft ☐NHW or ☒NWL

e. Vegetation on tract
Forested

f. Man-made features and uses now on tract
SR 1124 and bridge No. 22 over the Northwest Prong of the Newport River

g. Identify and describe the existing land uses adjacent to the proposed project site.
None. Wetlands.

h. How does local government zone the tract?	i. Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable) ☐Yes ☐No ☒NA
n/a	

j. Is the proposed activity part of an urban waterfront redevelopment proposal? ☐Yes ☒No

k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy. ☒Yes ☐No ☐NA

If yes, by whom? NCDOT, see CE

l. Is the proposed project located in a National Registered Historic District or does it involve a National Register listed or eligible property? ☐Yes ☒No ☐NA

<Form continues on next page>

m. (i) Are there wetlands on the site? ☒Yes ☐No

(ii) Are there coastal wetlands on the site? ☐Yes ☒No

(iii) If yes to either (i) or (ii) above, has a delineation been conducted? *(Attach documentation, if available)* ☒Yes ☐No

n. Describe existing wastewater treatment facilities.
None.

o. Describe existing drinking water supply source.
n/a

p. Describe existing storm water management or treatment systems.
none

5. Activities and Impacts

a. Will the project be for commercial, public, or private use? ☐Commercial ☒Public/Government ☐Private/Community

b. Give a brief description of purpose, use, and daily operations of the project when complete.
Replace Existing Bridge #22 and Improve Roadway

c. Describe the proposed construction methodology, types of construction equipment to be used during construction, the number of each type of equipment and where it is to be stored.
Replace existing bridge in place. Anticipate crane(s), dump truck(s), motor grader, bulldozer. Do not anticipate having to have equipment in the river in order to construct.

d. List all development activities you propose.

e. Are the proposed activities maintenance of an existing project, new work, or both? New Work

f. What is the approximate total disturbed land area resulting from the proposed project? 2.3 ☐Sq.Ft or ☒Acres

g. Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of? ☒Yes ☐No ☐NA

h. Describe location and type of existing and proposed discharges to waters of the state.
15" stormwater system includes two inlets in shoulder gutter that will outlet to rip rap pad in wetland.

i. Will wastewater or stormwater be discharged into a wetland? ☒Yes ☐No ☐NA

If yes, will this discharged water be of the same salinity as the receiving water? ☒Yes ☐No ☐NA

j. Is there any mitigation proposed? ☐Yes ☒No ☐NA
If yes, attach a mitigation proposal.

<Form continues on back>

6. Additional Information

In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below.

a. A project narrative.

b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguish between work completed and proposed.

c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site.

d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties.

e. The appropriate application fee. Check or money order made payable to DENR.

f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management.

Name USDA Forestry Service 141 East Fisher Ave New Bern, NC 28560
Phone No. (252) 638-5628

Address

Name
Phone No.

Address

Name
Phone No.

Address

g. A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates.
NC DWQ Stormwater Permit
SW8 060916

h. Signed consultant or agent authorization form, if applicable.

i. Wetland delineation, if necessary.

j. A signed AEC hazard notice for projects in oceanfront and inlet areas. *(Must be signed by property owner)*

k. A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A 1-10), if necessary. If the project involves expenditure of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act.

7. Certification and Permission to Enter on Land

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to the conditions and restrictions contained in the permit.

I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date 2.4.08 Print Name Elizabeth L. Lusk

Signature E. L. Lusk

Please indicate application attachments pertaining to your proposed project.

☐DCM MP-2 Excavation and Fill Information
☐DCM MP-3 Upland Development
☐DCM MP-4 Structures Information
☒DCM MP-5 Bridges and Culverts

Form DCM MP-5

BRIDGES and CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. BRIDGES

☐ *This section not applicable*

a. Is the proposed bridge:
☐Commercial ☒Public/Government ☐Private/Community

b. Water body to be crossed by bridge:
Northwest prong of the newport river

c. Type of bridge (construction material):
2 @ 70' Reinforced Concrete box beam

d. Water depth at the proposed crossing at NLW or NWL:
3.4' (EL 2.9')

e. (i) Will proposed bridge replace an existing bridge? ☒Yes ☐No
If yes,
(ii) Length of existing bridge: 90'
(iii) Width of existing bridge: 26.3'
(iv) Navigation clearance underneath existing bridge: 10.8'
(v) Will all, or a part of, the existing bridge be removed?
(Explain) all of existing bridge will be removed

f. (i) Will proposed bridge replace an existing culvert? ☐Yes ☒No
If yes,
(ii) Length of existing culvert: n/a
(iii) Width of existing culvert: n/a
(iv) Height of the top of the existing culvert above the NHW or NWL: n/a
(v) Will all, or a part of, the existing culvert be removed?
(Explain) n/a

g. Length of proposed bridge: 140'

h. Width of proposed bridge: 33'

i. Will the proposed bridge affect existing water flow? ☒Yes ☐No
If yes, explain: Improve flow during flood events, i.e. increase hydraulic conductivity

j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? ☒Yes ☐No
If yes, explain: slighlty increases navigational clearance

k. Navigation clearance underneath proposed bridge: 11.4'

l. Have you contacted the U.S. Coast Guard concerning their approval? ☐Yes ☒No
If yes, explain:

m. Will the proposed bridge cross wetlands containing no navigable waters? ☐Yes ☒No
If yes, explain:

n. Height of proposed bridge above wetlands: 6'

2. CULVERTS

☒ *This section not applicable*

a. Number of culverts proposed:

b. Water body in which the culvert is to be placed:

< Form continues on back>

c. Type of culvert (construction material):

d. (i) Will proposed culvert replace an existing bridge? ☐Yes ☐No

If yes,

(ii) Length of existing bridge:

(iii) Width of existing bridge:

(iv) Navigation clearance underneath existing bridge:

(v) Will all, or a part of, the existing bridge be removed? (Explain)

e. (i) Will proposed culvert replace an existing culvert? ☐Yes ☐No

If yes,

(ii) Length of existing culvert(s):

(iii) Width of existing culvert(s):

(iv) Height of the top of the existing culvert above the NHW or NWL:

(v) Will all, or a part of, the existing culvert be removed? (Explain)

f. Length of proposed culvert:

g. Width of proposed culvert:

h. Height of the top of the proposed culvert above the NHW or NWL.

i. Depth of culvert to be buried below existing bottom contour.

j. Will the proposed culvert affect navigation by reducing or increasing the existing navigable opening? ☐Yes ☐No

If yes, explain:

k. Will the proposed culvert affect existing water flow? ☐Yes ☐No

If yes, explain:

3. EXCAVATION and FILL

☐*This section not applicable*

a. (i) Will the placement of the proposed bridge or culvert require any excavation below the NHW or NWL? ☐Yes ☒No

If yes,

(ii) Avg. length of area to be excavated: n/a

(iii) Avg. width of area to be excavated: n/a

(iv) Avg. depth of area to be excavated: n/a

(v) Amount of material to be excavated in cubic yards: n/a

b. (i) Will the placement of the proposed bridge or culvert require any excavation within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

☐CW ____ ☐SAV ____ ☐SB

☐WL ____ ☒None

(ii) Describe the purpose of the excavation in these areas:

n/a

c. (i) Will the placement of the proposed bridge or culvert require any high-ground excavation? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be excavated: 28'

(iii) Avg. width of area to be excavated: 45'

(iv) Avg. depth of area to be excavated: 4.4'

(v) Amount of material to be excavated in cubic yards: 205'

d. If the placement of the bridge or culvert involves any excavation, please complete the following:

(i) Location of the spoil disposal area: to be determined by contractor

(ii) Dimensions of the spoil disposal area: to be determined by contractor

(iii) Do you claim title to the disposal area? ☒Yes ☐No *(If no, attach a letter granting permission from the owner.)*

(iv) Will the disposal area be available for future maintenance? ☐Yes ☒No

(v) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAVs), other wetlands (WL), or shell bottom (SB)?

☐CW ☐SAV ☐WL ☐SB ☒None

If any boxes are checked, give dimensions if different from (ii) above.

(vi) Does the disposal area include any area below the NHW or NWL? ? ☐Yes ☒No

If yes, give dimensions if different from (ii) above.

e. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item **d** above) to be placed below NHW or NWL? ☐Yes ☒No

If yes,

(ii) Avg. length of area to be filled:

(iii) Avg. width of area to be filled:

(iv) Purpose of fill:

f. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item **d** above) to be placed within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

☐CW ____ ☐SAV ____ ☐SB

☒WL 9583 ☐None

(ii) Describe the purpose of the excavation in these areas:

roadway embankment fill for shoulder widening

g. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item **d** above) to be placed on high-ground? ☐Yes ☒No

If yes,

(ii) Avg. length of area to be filled:

(iii) Avg. width of area to be filled:

(iv) Purpose of fill:

4. GENERAL

a. Will the proposed project require the relocation of any existing utility lines? ☒Yes ☐No

If yes, explain: possible Cable TV, phone, and fiber optic relocations. No impacts to wetlands if relocations are required.

If this portion of the proposed project has already received approval from local authorities, please attach a copy of the approval or certification.

b. Will the proposed project require the construction of any temporary detour structures? ☐Yes ☒No

If yes, explain:

< Form continues on back>

c. Will the proposed project require any work channels? ☐Yes ☒No

If yes, complete Form DCM-MP-2.

d. How will excavated or fill material be kept on site and erosion controlled?

Best Management Practices will be strictly adhered to

e. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)?

heavy road constructing equipment, to be determined by contractor

f. Will wetlands be crossed in transporting equipment to project site? ☐Yes ☒No

If yes, explain steps that will be taken to avoid or minimize environmental impacts.

g. Will the placement of the proposed bridge or culvert require any shoreline stabilization? ☐Yes ☒No

If yes, complete form MP-2, Section 3 for Shoreline Stabilization only.

1-23-08 2.4.08

Date

B-4055

Project Name

Elizabeth L. Lusk Ap

plicant Name

E. L. Lusk Ap

plicant Signature

Office Use Only: Form Version March 05

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: NW 23 and NW 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: _____

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: B-4055 - proposed replacement of Bridge No. 22 over the Northwest prong of the Newport River on SR 1124, in Carteret County.

2. T.I.P. Project Number or State Project Number (NCDOT Only): B-4055

3. Property Identification Number (Tax PIN): N/A

4. Location
   County: Carteret Nearest Town: Newport
   Subdivision name (include phase/lot number): N/A
   Directions to site (include road numbers/names, landmarks, etc.): south on US 70, south of Havelock, turn right onto SR1124 , bridge is approximately 4 miles west of US 70.

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): -76.913979 °N 34.798233 °W

6. Property size (acres): N/A

7. Name of nearest receiving body of water: the Northwest prong of the Newport River

8. River Basin: White Oak
   (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: currently exists a 3-span 91-foot long bridge over the Northwest prong of the Newport River, in a forrested wetland/upland area

10. Describe the overall project in detail, including the type of equipment to be used: replacement of a bridge with a bridge, heavy construction machinery to be used

11. Explain the purpose of the proposed work: To replace a structurally deficient bridge.

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. ACoE NW23 (Action ID 200610541) expires 3-18-07; Jurisdictional determination (Action ID 200411717); NC DWQ Stormwater permit (Permit No. SW8 060916); Project Let Date: June 17, 2008

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: 0.22 acre permanent fill in wetlands due to road and approach construction, 0.26 acre hand clearing in wetlands at construction limits, 0.07 acre of temporary fill in wetlands due to Erosion Control devices

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)
14+50 to 15+75	permanent fill	forested	yes	80	~0.07
17+40 to 21+70	permanent fill	forested	yes	35	~0.15
Total Wetland Impact (acres)					0.22

3. List the total acreage (estimated) of all existing wetlands on the property: 10 acres

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)
n/a						
Total Stream Impact (by length and acreage)						

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)
n/a				
Total Open Water Impact (acres)				

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

Stream Impact (acres):	<0.01
Wetland Impact (acres):	0.22
Open Water Impact (acres):	n/a
Total Impact to Waters of the U.S. (acres)	0.22
Total Stream Impact (linear feet):	n/a

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 existing bridge will be lengthened, an offsite detour will be utilized, 3:1 slopes in wetlands will be used where practicable, and minimum widths were used for structures and approaches.

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.
   EEP will provide 0.22 acres of wetland mitigation. (see attached letter)

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): N/A
   Amount of buffer mitigation requested (square feet): N/A
   Amount of Riparian wetland mitigation requested (acres): 0.22 acres
   Amount of Non-riparian wetland mitigation requested (acres): N/A
   Amount of Coastal wetland mitigation requested (acres): N/A

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. N/A

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.Impervious area will remain approximately the same

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:
An existing bridge is being replaced with a new bridge.

XV. Other Circumstances (Optional):

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

E. P. Luck 2-4-08

Applicant/Agent's Signature **Date**
(Agent's signature is valid only if an authorization letter from the applicant is provided.)

Ecosystem Enhancement PROGRAM

January 17, 2008

Mr. Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

B-4055, Replace Bridge Number 22 on SR 1124 over the Branch Newport River, Carteret County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory riparian wetland mitigation for the subject project. Based on the information supplied by you on January 10, 2008, the impacts are located in CU 03020106 of the White Oak River Basin in the Southern Outer Coastal Plain (SOCP) Eco-Region, and are as follows:

Riparian Wetland: 0.22 acre

During the review of this request, it was noted that this project did not include any wetland or stream impacts in the 2007 Impact Projection Database; however, EEP will provide the requested riparian wetland mitigation. Depending on the availability and projected need of riparian wetland mitigation in this cataloging unit, additional riparian wetland mitigation may be required that was not included in the biennial budget submitted to NCDOT on September 18, 2007.

EEP commits to implementing sufficient compensatory stream mitigation to offset the impacts associated with this project by the end of the MOA Year in which this project is permitted, in accordance with Section X of the Amendment No. 2 to the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, fully executed on March 8, 2007. If the above referenced impact

amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

William D. Gilmore, P.E.
EEP Director

cc: Mr. William Wescott, USACE – Washington
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: B-4055

Stormwater Management Plan

B-4055 – Carteret County, NC

This stormwater management plan is for B-4055 in Carteret County. The project consists of replacing bridge number 22 over Northwest Prong Newport River and approaches on SR 1124.

The proposed bridge will not have deck drains over open water or wetlands. Discharge of stormwater from the bridge will be adjacent to the bridge in the wetland. In order to discharge outside the wetland boundary, a pipe system approximately 450 feet long would have to be constructed. Treatment for discharge from the roadway will be provided in the form of grass swales.

Stormwater from the west approaches to the bridge will be conveyed in grass swales at 2-year velocities less than 2 feet per second. Stormwater from the east approaches sheet flow over the shoulder and fill slopes to natural ground.

Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director
Division of Water Quality

November 14, 2006

Gregory J. Thorpe, Director
NCDOT PDEA Branch
1598 Mail Service Center
Raleigh, NC 27699-1598

Subject: **Stormwater Permit No. SW8 060916**
B-4055 NCSR 1124 Bridge No. 22 over NW Prong of Newport River
Other Stormwater Permit - Linear Public Road / Bridge Project
Carteret County

Dear Mr. Thorpe:

The Wilmington Regional Office received a complete Stormwater Management Permit Application for B-4055 NCSR 1124 Bridge No. 22 over NW Prong of Newport River on September 14, 2006. Staff review of the plans and specifications has determined that the project, as proposed, will comply with the Stormwater Regulations set forth in Title 15A NCAC 2H .1000. We are forwarding Permit No. SW8 060916 dated November 14, 2006, for the construction of the subject project.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within sixty (60) days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, P.O. Drawer 27447, Raleigh, NC 27611-7447. Unless such demands are made this permit shall be final and binding.

If you have any questions, or need additional information concerning this matter, please contact either me or Linda Lewis at (910) 796-7215.

Sincerely,

Edward Beck
Regional Supervisor
Surface Water Protection Section

ENB/arl: S:\WQS\STORMWATER\PERMIT\060916.nov06

cc: Galen Cail, P.E., NCDOT Hydraulics Unit
Carteret County Building Inspections
Division of Coastal Management
Linda Lewis
Wilmington Regional Office
Central Files

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY
STATE STORMWATER MANAGEMENT PERMIT
OTHER PERMIT

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules and Regulations

PERMISSION IS HEREBY GRANTED TO

NCDOT

B-4055 NCSR 1124 Bridge No. 22 over NW Prong of Newport River

Carteret County

FOR THE

construction of a public road / bridge in compliance with the provisions of 15A NCAC 2H .1000 (hereafter referred to as the *"stormwater rules")* and the approved stormwater management plans and specifications, and other supporting data as attached and on file with and approved by the Division of Water Quality and considered a part of this permit.

The Permit shall be effective from the date of issuance until rescinded and shall be subject to the following specific conditions and limitations:

I. DESIGN STANDARDS

1. The runoff from the impervious surfaces has been directed away from surface waters as much as possible.

2. The amount of built-upon area has been minimized as much as possible.

3. Best Management Practices are employed which minimize water quality impacts.

4. Approved plans and specifications for projects covered by this permit are incorporated by reference and are enforceable parts of the permit.

5. Vegetated roadside ditches have 3:1 or flatter side slopes.

II. SCHEDULE OF COMPLIANCE

1. The permittee shall at all times provide adequate erosion control measures in conformance with the approved Erosion Control Plan.

2. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of revised plans and certification in writing to the Director that the changes have been made.

3. The permittee shall submit all information requested by the Director or his representative within the time frame specified in the written information request.

4. The permittee shall submit to the Director and shall have received approval for revised plans, specifications, and calculations prior to construction for the following items:
   a. Major revisions to the approved plans, such as road realignment, deletion of any proposed BMP, changes to the drainage area or scope of the project, etc.
   b. Project name change.
   c. Redesign of, addition to, or deletion of the approved amount of built-upon area, regardless of size.
   d. Alteration of the proposed drainage.

5. The Director may determine that other revisions to the project should require a modification to the permit.

III. GENERAL CONDITIONS

1. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division of Water Quality, in accordance with North Carolina General Statutes 143-215.6A to 143-215.6C.

2. The permit issued shall continue in force and effect until revoked or terminated.

3. The permit may be modified, revoked and reissued or terminated for cause. The filing of a request for a permit modification, revocation and reissuance, or termination does not stay any permit condition.

4. The issuance of this permit does not prohibit the Director from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 15A of the North Carolina Administrative Code, Subchapter 2H.1000; and North Carolina General Statute 143-215.1 et. al.

5. The permit is not transferable to any person or entity except after notice to and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name and incorporate such other requirements as may be necessary. A formal permit request must be submitted to the Division of Water Quality accompanied by the appropriate fee, documentation from both parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits, and may or may not be approved. The permittee is responsible for compliance with the terms and conditions of this permit until such time as the Director approves the transfer.

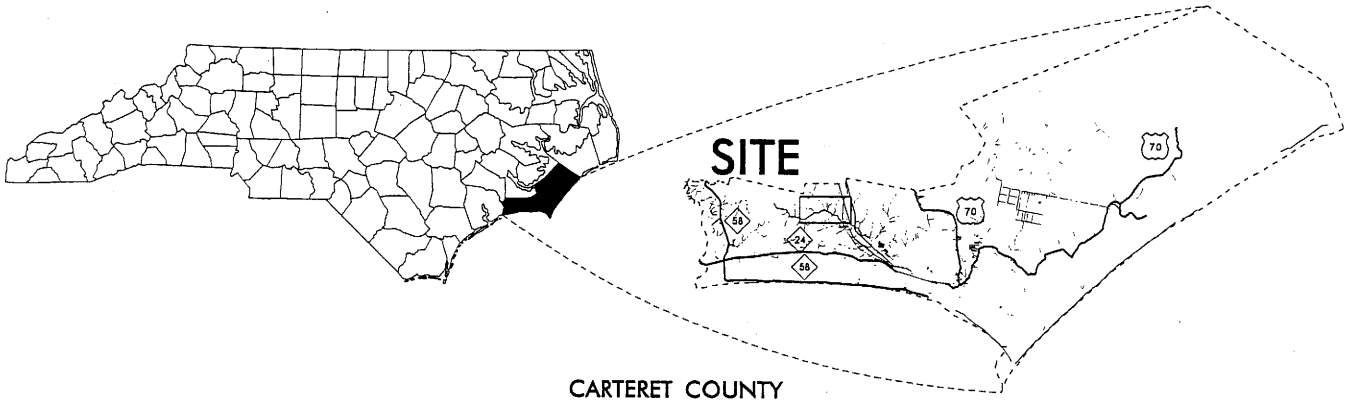
6. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state and federal) which have jurisdiction.

7. The permittee shall notify the Division in writing of any name, ownership or mailing address changes within 30 days.

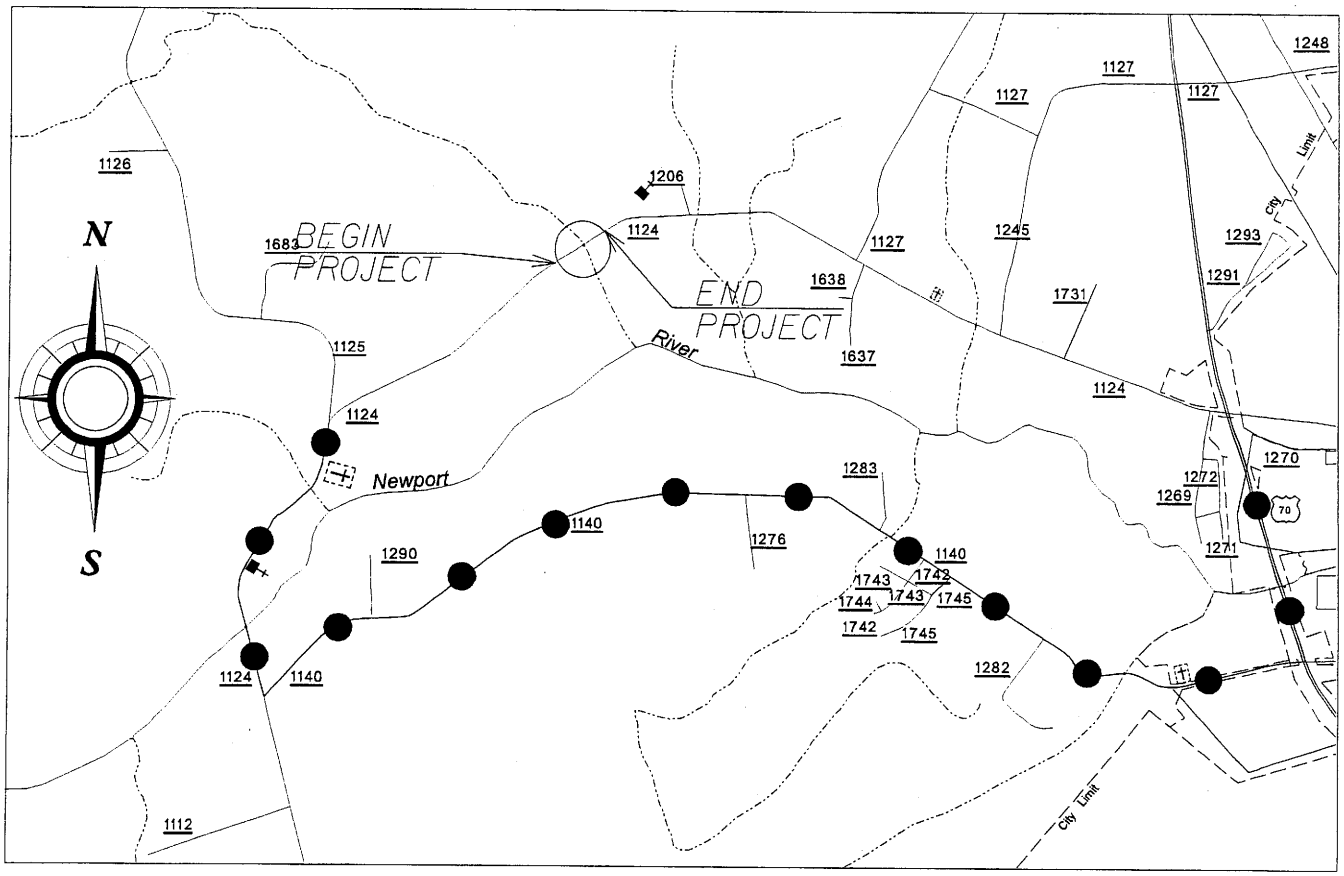
Permit issued this, the 14th day of November 2006

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

for Alan W. Klimek, P.E., Director
Division of Water Quality
By Authority of the Environmental Management Commission



CARTERET COUNTY



LEGEND ●—●—● *Studied Detour Route*

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

CARTERET COUNTY

PROJECT: B-4055

BRIDGE NO. 22 OVER BRANCH OF NEWPORT RIVER AND APPROACHES ON SR 1124

Permit Drawing
Sheet 1 of 9

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	CROATAN NATIONAL FOREST UNITED STATES OF AMERICA	USDA FORESTRY SEREVICE 141 EAST FISHER AVE NEW BERN, NC 28560

NCDOT

DIVISION OF HIGHWAYS
CARTERET COUNTY
PROJECT: 33420.1.1 (B-4055)
BRIDGE NO. 22 OVER
BRANCH OF NEWPORT RIVER
AND APPROACHES ON SR 1124

Permit Drawing
Sheet 2 of 9

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 Clearing 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	14+00/21+75 -L-	BRIDGE	0.22				0.26					
TOTALS:			0.22				0.26					

* 0.07 acres of Temporary Fill in Wetlands in Hand Clearing Area for Erosion Control Measures

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CARTERET COUNTY
WBS - 33420.1.1 (B-4055)

Permit Drawing
Sheet 3 of 9

ATN Revised 3/31/05

Januarv-08

09/08/99

TIP PROJECT: B-4055

See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

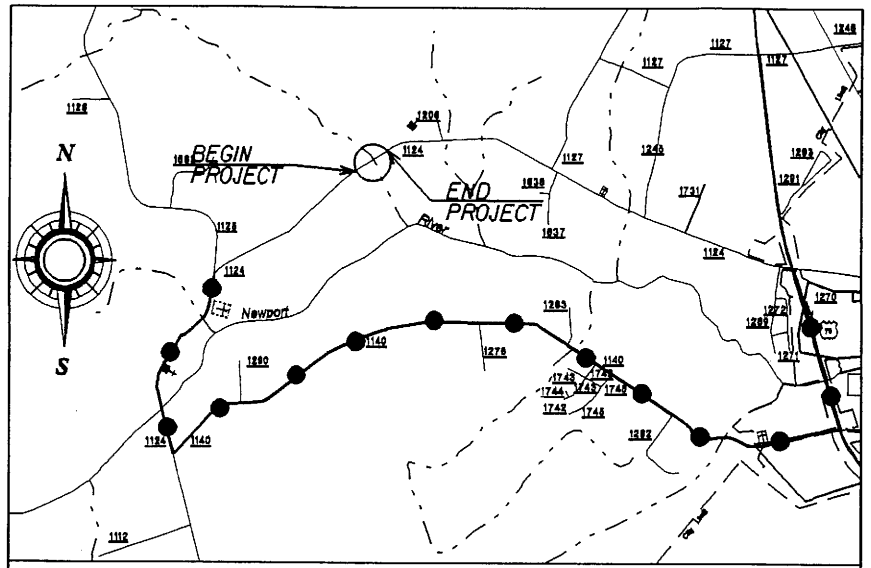
CARTERET COUNTY

LOCATION: BRIDGE NO. 22 OVER BRANCH OF NEWPORT RIVER ON SR 1124

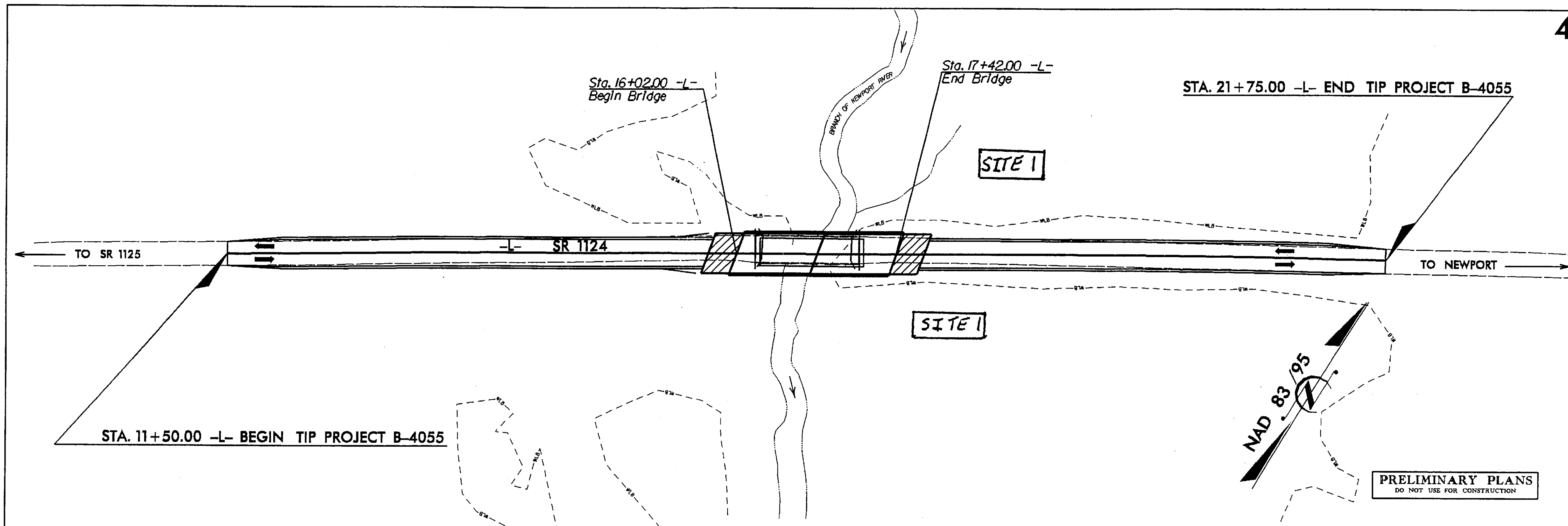
TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE, AND PAVING

STATE	STATE PROJECT REFERENCE NO.		SHEET NO.	TOTAL SHEETS
N.C.	B-4055		1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION		
33420.1.1	BRSTP-1124(4)	P.E.		

Permit Drawing
Sheet 4 of 9



VICINITY MAP — LEGEND —●—●—●— Studied Detour Route



THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.

NCDOT CONTACT: CATHY HOUSER, P.E., PROJECT ENGINEER - ROADWAY DESIGN

"CLEARING ON THIS PROJECT SHALL BE ESTABLISHED BY METHOD III"

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2007 = 3750
ADT 2030 = 7000
DHV = 10 %
D = 60 %
T = 3 % *
V = 60 MPH
FUNC. CLASS = RURAL MAJOR COLLECTOR
* TTST 1 % DUAL 2 %

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4055	= 0.167 mi.
LENGTH STRUCTURE TIP PROJECT B-4055	= 0.027 mi.
TOTAL LENGTH TIP PROJECT B-4055	= 0.194 mi.

Prepared in the Office of:
WANG ENGINEERING COMPANY, INC.
CARY, N.C.
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: July 21, 2006

LETTING DATE: November 20, 2007

GREG S. PURVIS, P. E.
PROJECT ENGINEER

SCOTT L. KENNEDY
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

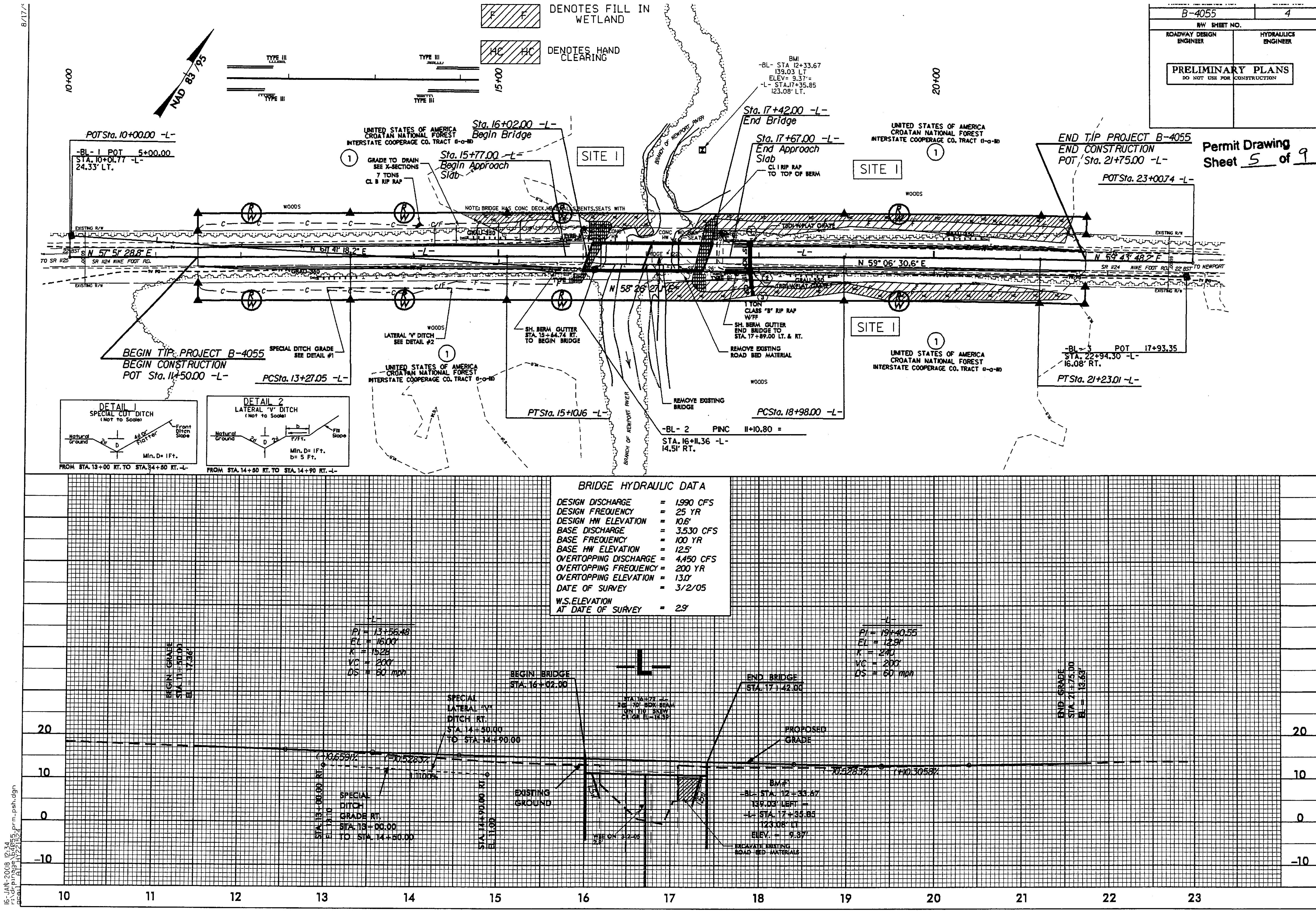
P.E.
STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR DATE

CONTRACT:

10-MAY-2006 08:01
s:\engrcoord\projects\galen\b-4055\design\b4055_rdy_tsh.dgn
gcail AT HY221524


B-4055
4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
Permit Drawing Sheet 5 of 9
DENOTES FILL IN WETLAND
DENOTES HAND CLEARING
NAD 83/95
10+00
15+00
20+00
TYPE III
BMI
-BL- STA 12+33.67
139.03 LT
ELEV= 9.37'=
-L- STA.17+35.85
123.08' LT.
POT Sta. 10+00.00 -L-
-BL- 1 POT 5+00.00
STA. 10+01.77 -L-
24.33' LT.
UNITED STATES OF AMERICA
CROATAN NATIONAL FOREST
INTERSTATE COOPERAGE CO. TRACT (I-a-III)
GRADE TO DRAIN SEE X-SECTIONS
7 TONS CL B RIP RAP
Sta. 16+02.00 -L-
Begin Bridge
Sta. 15+77.00 -L-
Begin Approach Slab
SITE 1
Sta. 17+42.00 -L-
End Bridge
Sta. 17+67.00 -L-
End Approach Slab
CL I RIP RAP TO TOP OF BERM
BRANCH OF NEWPORT RIVER
END TIP PROJECT B-4055
END CONSTRUCTION
POT Sta. 21+75.00 -L-
POT Sta. 23+00.74 -L-
WOODS
NOTE: BRIDGE HAS CONC DECK, HEADWALLS, BENTS, SEATS WITH
EXISTING R/W
N 57° 51' 28.8" E
N 61° 41' 18.2" E
N 59° 06' 30.6" E
N 59° 43' 48.2" E
N 58° 26' 27.1" E
TO SR 1125
SR 1124 NINE FOOT RD.
22' BST
TO NEWPORT
GRAU 350
TBDI W/FLAT GRATE
CONC HW
BRIDGE #22
1 TON CLASS "B" RIP RAP W/FF
SH. BERM GUTTER STA. 15+64.74 RT. TO BEGIN BRIDGE
SH. BERM GUTTER END BRIDGE TO STA. 17+89.00 LT. & RT.
REMOVE EXISTING ROAD BED MATERIAL
REMOVE EXISTING BRIDGE
LATERAL 'V' DITCH SEE DETAIL #2
SPECIAL DITCH GRADE SEE DETAIL #1
BEGIN TIP PROJECT B-4055
BEGIN CONSTRUCTION
POT Sta. 11+50.00 -L-
PC Sta. 13+27.05 -L-
PT Sta. 15+10.16 -L-
PC Sta. 18+98.00 -L-
-BL- 2 PINC 11+10.80 =
STA. 16+11.36 -L-
14.51' RT.
-BL- 3 POT 17+93.35
STA. 22+94.30 -L-
16.08' RT.
PT Sta. 21+23.01 -L-
DETAIL 1
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground
Front Ditch Slope
4:1 or Flatter
Min. D= 1Ft.
FROM STA. 13+00 RT. TO STA. 14+50 RT. -L-
DETAIL 2
LATERAL 'V' DITCH
(Not to Scale)
Fill Slope
Min. D= 1Ft.
b= 5 Ft.
FROM STA. 14+50 RT. TO STA. 14+90 RT. -L-
BRIDGE HYDRAULIC DATA
DESIGN DISCHARGE = 1,990 CFS
DESIGN FREQUENCY = 25 YR
DESIGN HW ELEVATION = 10.6'
BASE DISCHARGE = 3,530 CFS
BASE FREQUENCY = 100 YR
BASE HW ELEVATION = 12.5'
OVERTOPPING DISCHARGE = 4,450 CFS
OVERTOPPING FREQUENCY = 200 YR
OVERTOPPING ELEVATION = 13.0'
DATE OF SURVEY = 3/2/05
W.S. ELEVATION AT DATE OF SURVEY = 2.9'
-L-
PI = 13+56.48
EL = 16.00'
K = 15.28
VC = 200'
DS = 60 mph
PI = 19+40.55
EL = 12.91'
K = 240
VC = 200'
DS = 60 mph
BEGIN GRADE STA. 11+50.00 EL = 17.36'
END GRADE STA. 21+75.00 EL = 13.63'
BEGIN BRIDGE STA. 16+02.00
END BRIDGE STA. 17+42.00
SPECIAL LATERAL "V" DITCH RT. STA. 14+50.00 TO STA. 14+90.00
SPECIAL DITCH GRADE RT. STA. 13+00.00 TO STA. 14+50.00
STA. 13+00.00 RT. EL. 13.10
STA. 14+90.00 RT. EL. 11.00
(+)0.6591%
(-)0.5283%
(+)0.3058%
1.1100%
PROPOSED GRADE
EXISTING GROUND
WSE ON 3-2-05 2.9'
EXCAVATE EXISTING ROAD BED MATERIALS
BM#1
-BL- STA. 12+33.67
139.03' LEFT =
-L- STA. 17+35.85
123.08' LT
ELEV. = 9.37'
20
10
0
-10
10
11
12
13
14
15
16
17
18
19
20
21
22
23
16-JAN-2008 12:34
r:\drainage\b4055_prm_psh.dgn

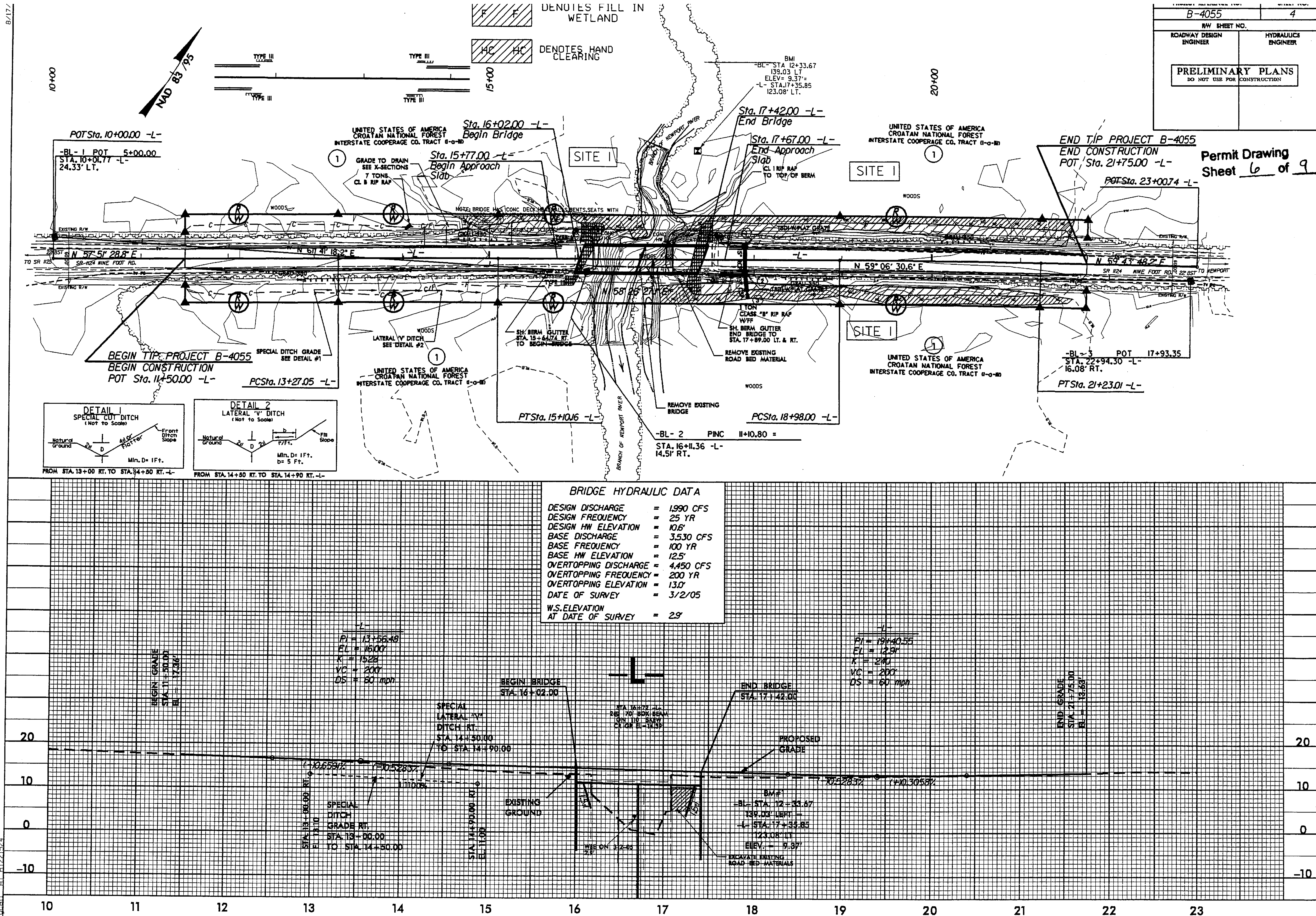
B-4055 | 4

R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Permit Drawing
Sheet 6 of 9

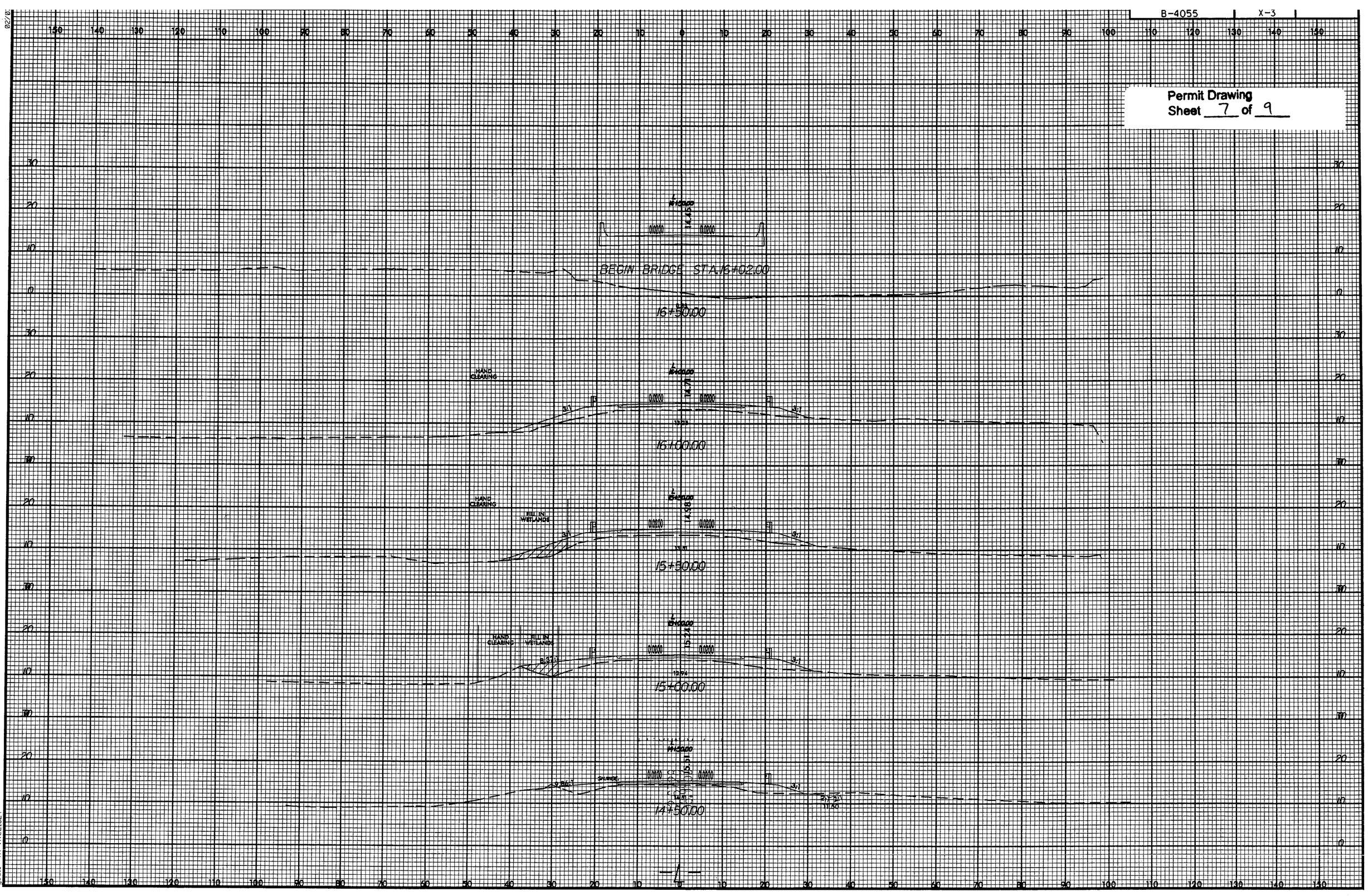


BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	1,990 CFS
DESIGN FREQUENCY	=	25 YR
DESIGN HW ELEVATION	=	10.6'
BASE DISCHARGE	=	3,530 CFS
BASE FREQUENCY	=	100 YR
BASE HW ELEVATION	=	12.5'
OVERTOPPING DISCHARGE	=	4,450 CFS
OVERTOPPING FREQUENCY	=	200 YR
OVERTOPPING ELEVATION	=	13.0'
DATE OF SURVEY	=	3/2/05
W.S. ELEVATION AT DATE OF SURVEY	=	2.9'

B-4055 X-3

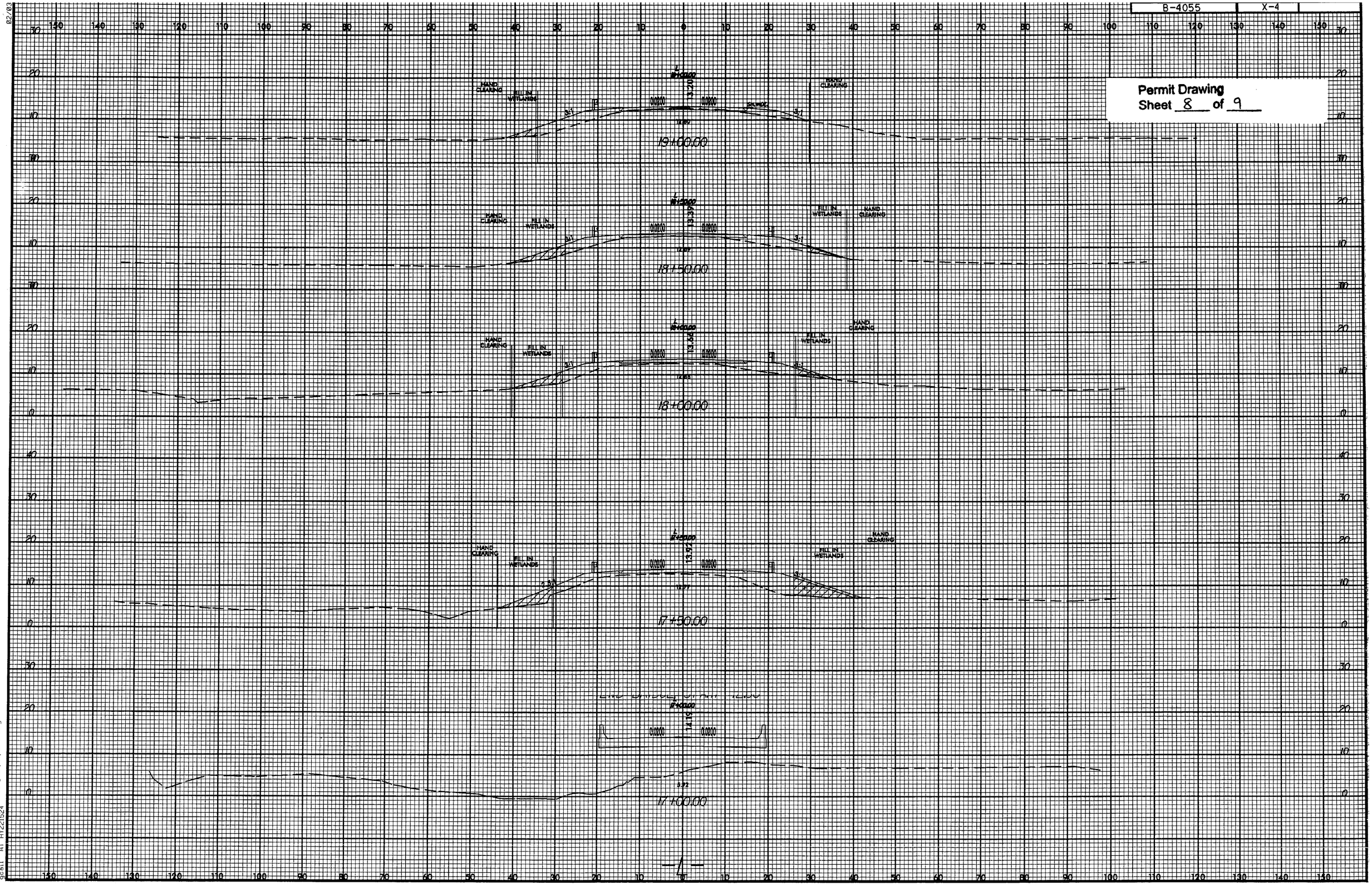
Permit Drawing
Sheet 7 of 9



02/03

B-4055 | X-4

Permit Drawing
Sheet 8 of 9



22-JAN-2008 08:12
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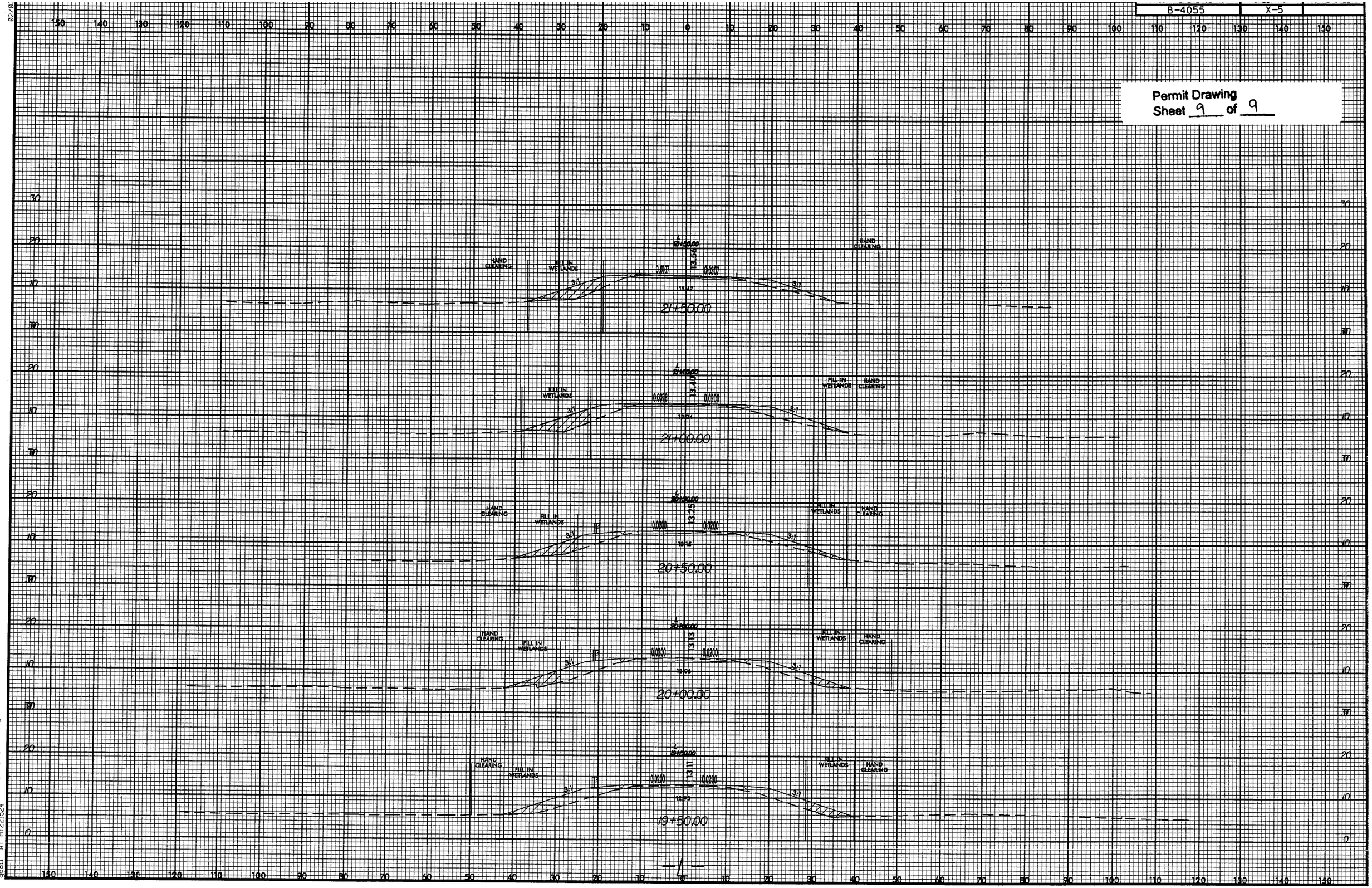
B-4055	X-5	

Permit Drawing
Sheet 9 of 9



5/14/99

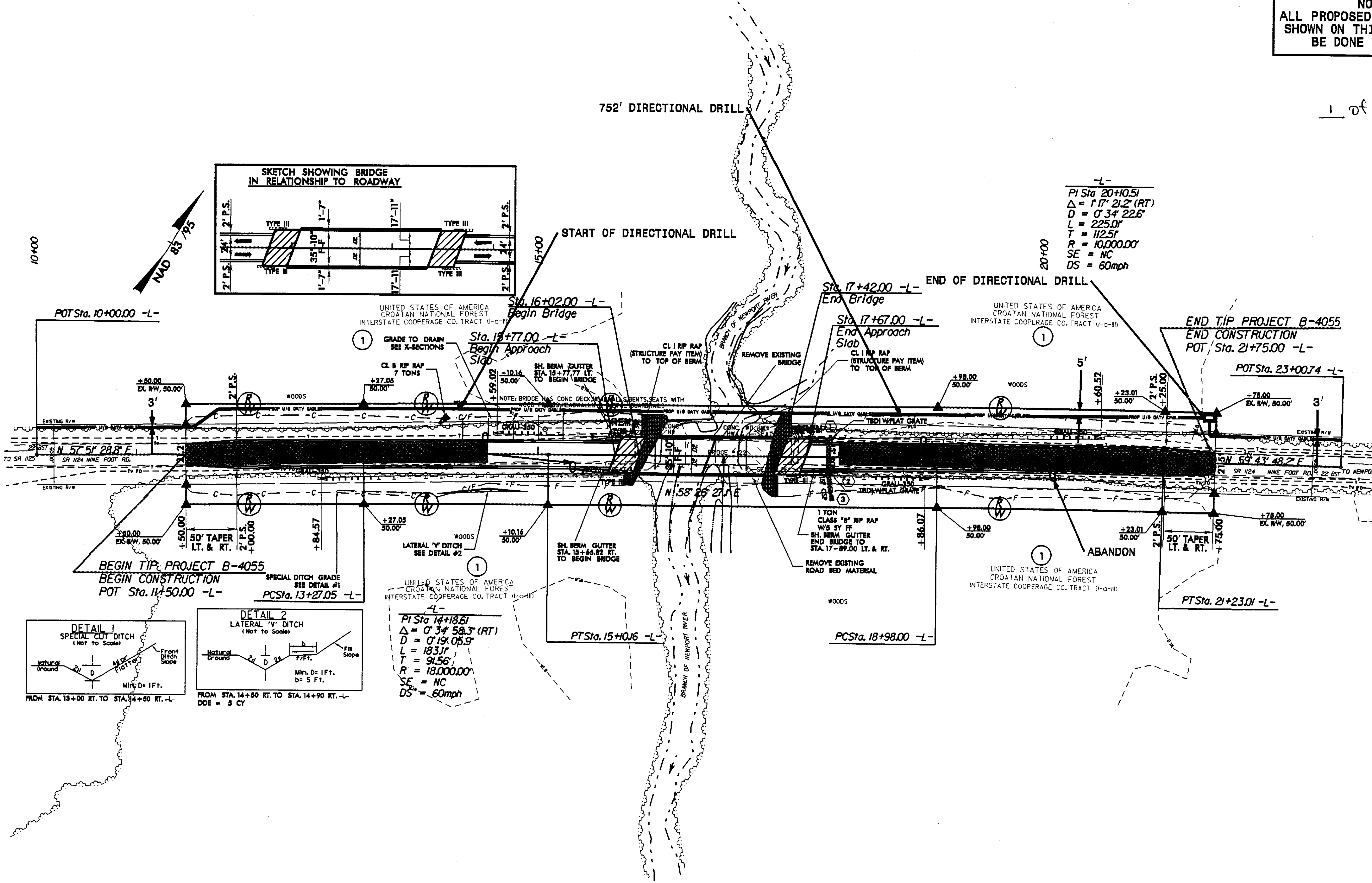
JANUARY 29, 2008

PROJECT REFERENCE NO.	SHEET NO.
B-4055	U0-2

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

1 of 1

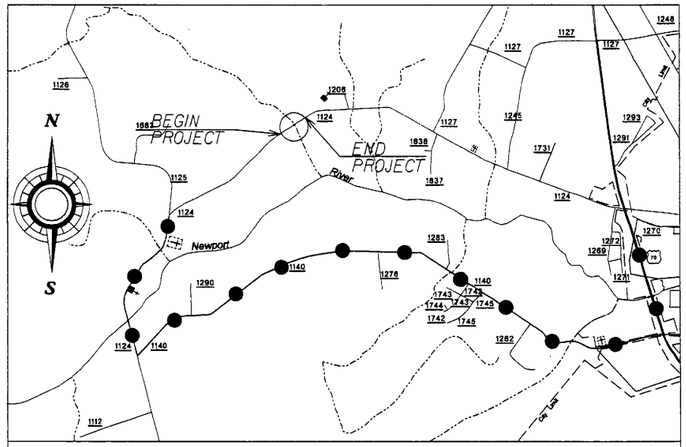


29-JAN-2008 14:28
tilities\Rdy_Ut\Proj\b4055_ut_04_uo2_psh.dgn
$$$$USERNAME$$$$

TIP PROJECT: B-4055

CONTRACT:

See Sheet 1-A For Index of Sheets



VICINITY MAP

LEGEND *Studied Detour Route*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CARTERET COUNTY

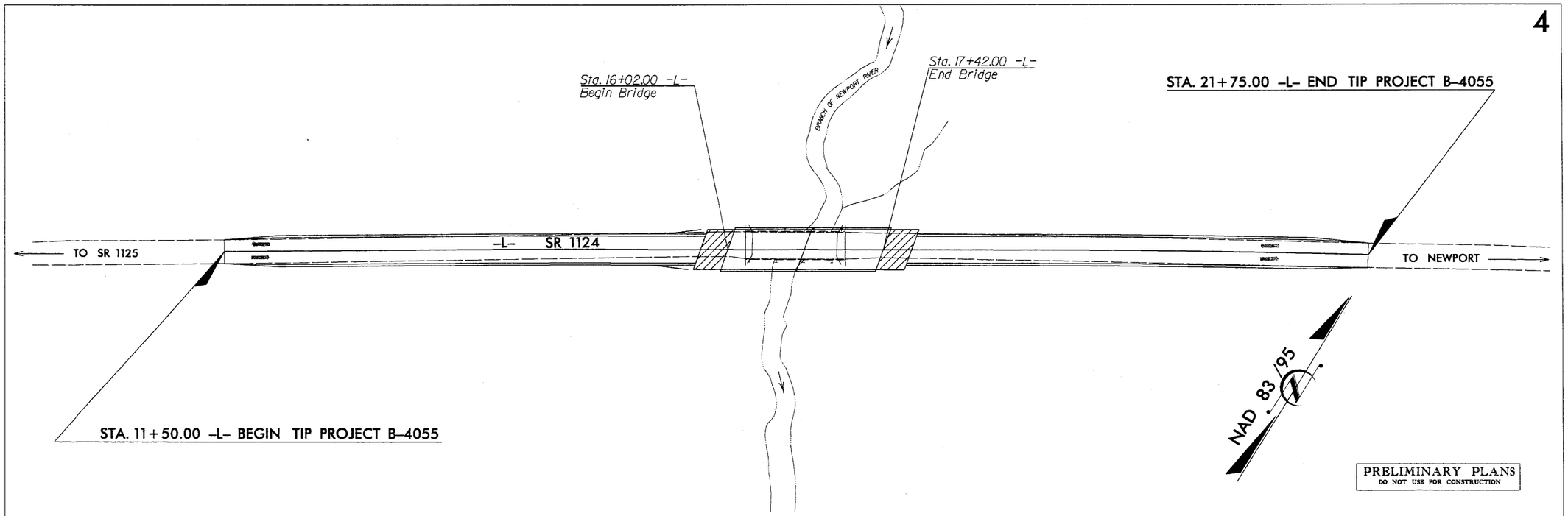
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4055	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
33420.1.1	BRSTP-1124(4)	P.E.
33420.2.1	BRSTP-1124(4)	R/W

LOCATION: BRIDGE NO. 22 OVER BRANCH OF NEWPORT RIVER ON SR 1124

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

4



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.

NCDOT CONTACT: CATHY HOUSER, P.E., PROJECT ENGINEER - ROADWAY DESIGN

"CLEARING ON THIS PROJECT SHALL BE ESTABLISHED BY METHOD III"

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2007 = 3750
ADT 2030 = 7000
DHV = 10 %
D = 60 %
T = 3 % *
V = 60 MPH
FUNC. CLASS = RURAL MAJOR COLLECTOR
* TTST 1 % DUAL 2 %

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4055	=	0.167 mi.
LENGTH STRUCTURE TIP PROJECT B-4055	=	0.027 mi.
TOTAL LENGTH TIP PROJECT B-4055	=	0.194 mi.

Prepared in the Office of:
WANG ENGINEERING COMPANY, INC.
CARY, N.C.
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: July 21, 2006

LETTING DATE: November 20, 2007

JAMES SJ WANG, P.E.
PROJECT ENGINEER

SCOTT L. KENNEDY
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE DESIGN ENGINEER *P.E.*

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR *DATE*

PROJECT REFERENCE NO.	SHEET NO.
B-4055	1-B

*S.U.E = SUBSURFACE UTILITY ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL SYMBOLS

ROADS & RELATED ITEMS

Edge of Pavement
Curb
Prop. Slope Stakes Cut — C
Prop. Slope Stakes Fill — F
Prop. Woven Wire Fence
Prop. Chain Link Fence
Prop. Barbed Wire Fence
Prop. Wheelchair Ramp — WCR
Curb Cut for Future Wheelchair Ramp — CCFR
Exist. Guardrail
Prop. Guardrail
Equality Symbol
Pavement Removal

RIGHT OF WAY

Baseline Control Point
Existing Right of Way Marker
Exist. Right of Way Line w/Marker
Prop. Right of Way Line with Proposed R/W Marker (Iron Pin & Cap)
Prop. Right of Way Line with Proposed (Concrete or Granite) R/W Marker
Exist. Control of Access Line — CA
Prop. Control of Access Line — CA
Exist. Easement Line — E
Prop. Temp. Construction Easement Line — E
Prop. Temp. Drainage Easement Line — TDE
Prop. Perm. Drainage Easement Line — PDE

HYDROLOGY

Stream or Body of Water
River Basin Buffer — RBB
Flow Arrow
Disappearing Stream
Spring
Swamp Marsh
Shoreline
Falls, Rapids
Prop Lateral, Tail, Head Ditches — FLOW

STRUCTURES

MAJOR
Bridge, Tunnel, or Box Culvert — CONC
Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR
Head & End Wall — CONC HW
Pipe Culvert
Footbridge
Drainage Boxes — CB
Paved Ditch Gutter

UTILITIES

Exist. Pole
Exist. Power Pole
Prop. Power Pole
Exist. Telephone Pole
Prop. Telephone Pole
Exist. Joint Use Pole
Prop. Joint Use Pole
Telephone Pedestal — T
U/G Telephone Cable Hand Hold — HH
Cable TV Pedestal — C
U/G TV Cable Hand Hold — HH
U/G Power Cable Hand Hold — HH
Hydrant
Satellite Dish
Exist. Water Valve
Sewer Clean Out
Power Manhole — P
Telephone Booth
Cellular Telephone Tower
Water Manhole — W
Light Pole
H-Frame Pole
Power Line Tower
Pole with Base
Gas Valve
Gas Meter
Telephone Manhole — T
Power Transformer
Sanitary Sewer Manhole
Storm Sewer Manhole — S
Tank; Water, Gas, Oil
Water Tank With Legs
Traffic Signal Junction Box — S
Fiber Optic Splice Box — F
Television or Radio Tower
Utility Power Line Connects to Traffic Signal Lines Cut Into the Pavement — TS — TS

Recorded Water Line — W — W
Designated Water Line (S.U.E.*) — W — W
Sanitary Sewer — SS — SS
Recorded Sanitary Sewer Force Main — FSS — FSS
Designated Sanitary Sewer Force Main(S.U.E.*) — FSS — FSS
Recorded Gas Line — G — G
Designated Gas Line (S.U.E.*) — G — G
Storm Sewer — S — S
Recorded Power Line — P — P
Designated Power Line (S.U.E.*) — P — P
Recorded Telephone Cable — T — T
Designated Telephone Cable (S.U.E.*) — T — T
Recorded U/G Telephone Conduit — TC — TC
Designated U/G Telephone Conduit (S.U.E.*) — TC — TC
Unknown Utility (S.U.E.*) — ?UTL — ?UTL
Recorded Television Cable — TV — TV
Designated Television Cable (S.U.E.*) — TV — TV
Recorded Fiber Optics Cable — FO — FO
Designated Fiber Optics Cable (S.U.E.*) — FO — FO
Exist. Water Meter
U/G Test Hole (S.U.E.*) — ATTUR
Abandoned According to U/G Record — E.O.I.
End of Information

BOUNDARIES & PROPERTIES

State Line
County Line
Township Line
City Line
Reservation Line
Property Line
Property Line Symbol — PL
Exist. Iron Pin — EIP
Property Corner
Property Monument — ECM
Property Number — 123
Parcel Number — 6
Fence Line — WW & ISBW
Existing Wetland Boundaries — WLB
High Quality Wetland Boundary — HQ WLB
Medium Quality Wetland Boundaries — MQ WLB
Low Quality Wetland Boundaries — LQ WLB
Proposed Wetland Boundaries — WLB
Existing Endangered Animal Boundaries — EAB
Existing Endangered Plant Boundaries — EPB

BUILDINGS & OTHER CULTURE

Buildings
Foundations
Area Outline
Gate
Gas Pump Vent or U/G Tank Cap
Church
School
Park
Cemetery
Dam
Sign — S
Well — W
Small Mine
Swimming Pool

TOPOGRAPHY

Loose Surface
Hard Surface
Change in Road Surface
Curb
Right of Way Symbol — R/W
Guard Post — GP
Paved Walk
Bridge
Box Culvert or Tunnel
Ferry
Culvert
Footbridge
Trail, Footpath
Light House

VEGETATION

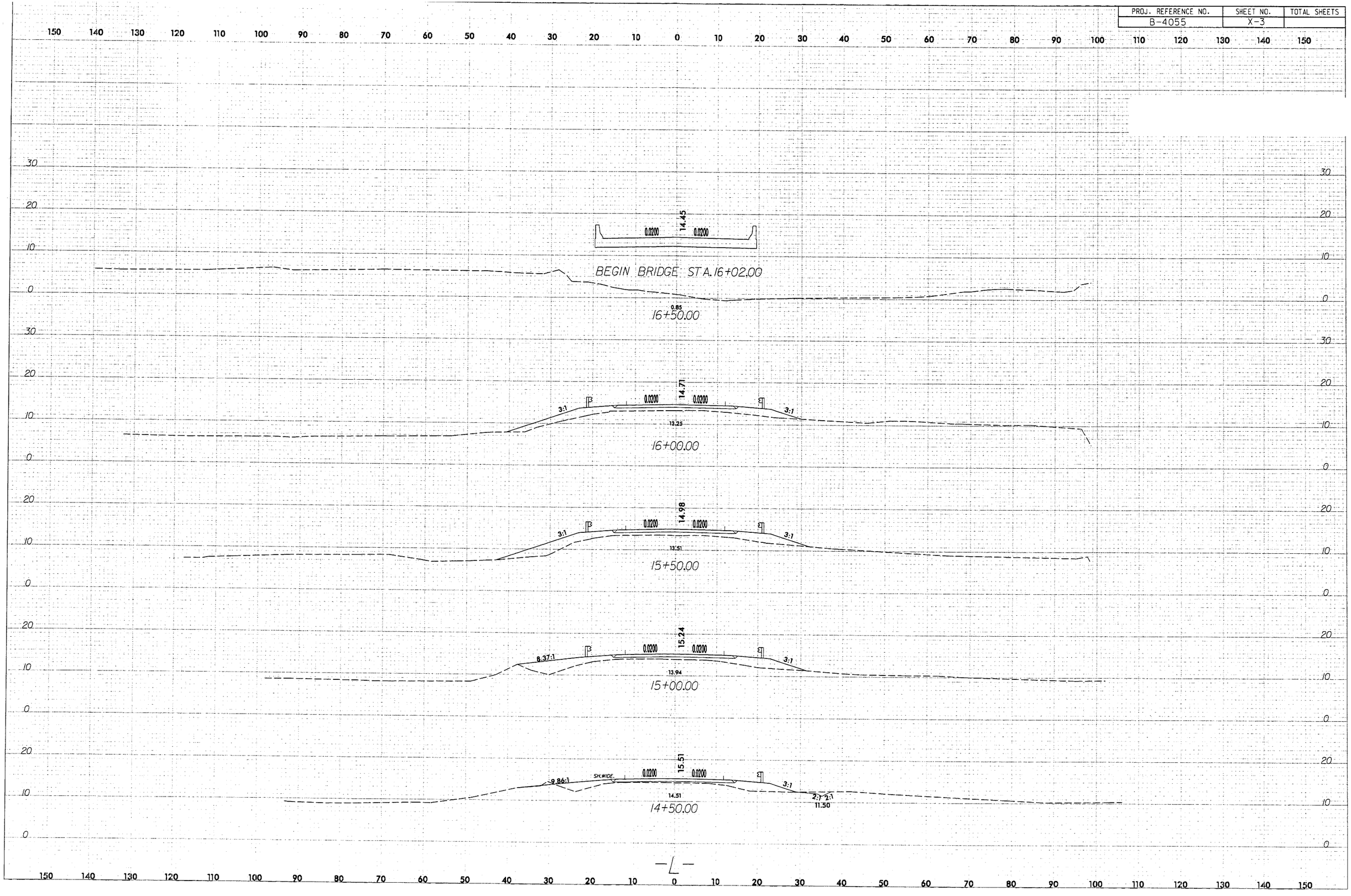
Single Tree
Single Shrub
Hedge
Woods Line
Orchard
Vineyard — VINEYARD

RAILROADS

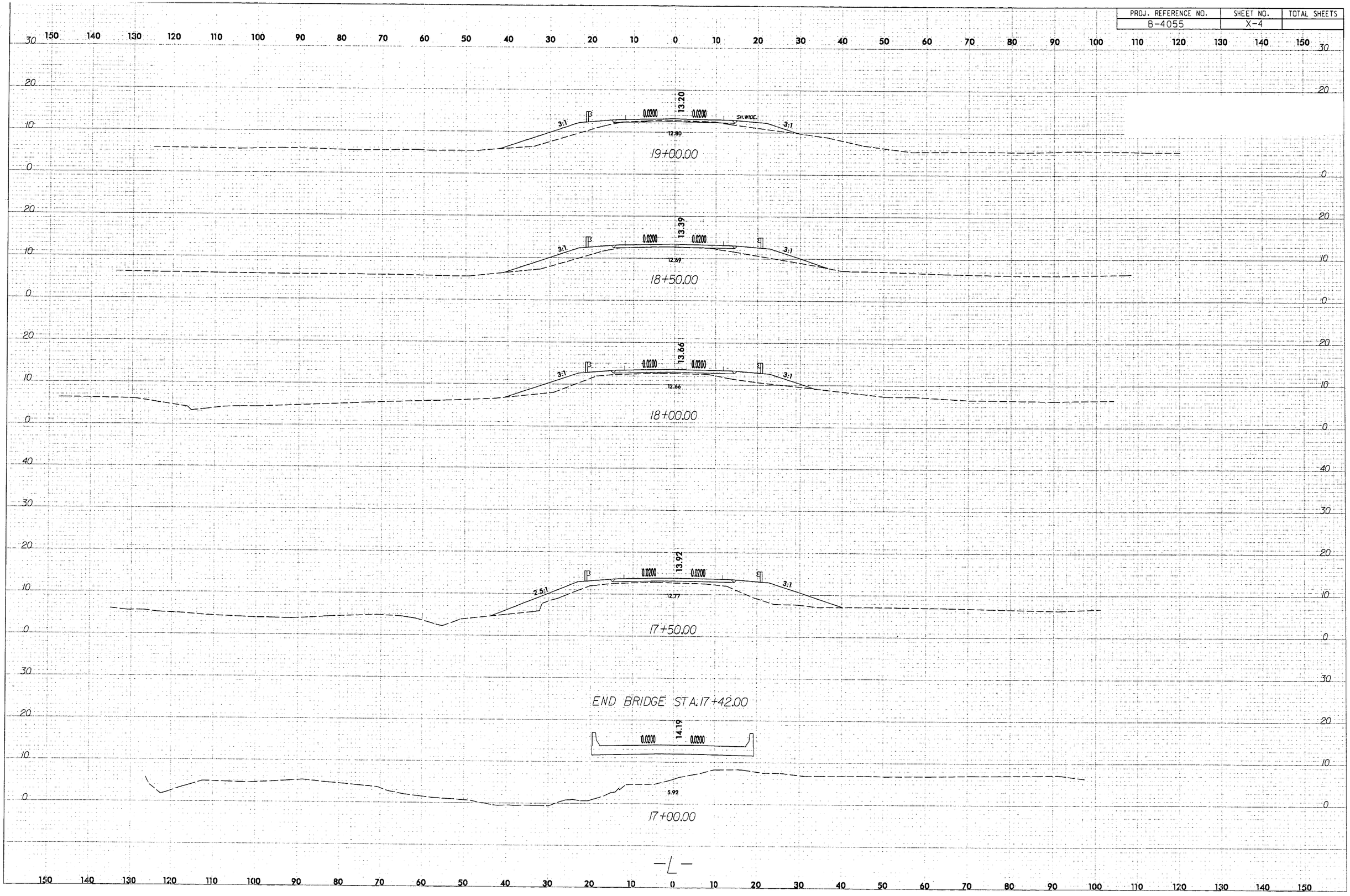
Standard Gauge — CSX TRANSPORTATION
RR Signal Milepost — MILEPOST 35
Switch — SWITCH

revised 02/02/00

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
B-4055	X-3	



PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
B-4055	X-4	



PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
B-4055	X-5