

North Carolina Department of Cultural Resources

State Historic Preservation Office

David L. S. Brook, Administrator

James B. Hunt Jr., Governor Betty Ray McCain, Secretary Division of Archives and History Jeffrey J. Crow, Director

April 12, 2000

MEMORANDUM

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

FROM: David Brook Deputy State Historic Preservation Officer

SUBJECT: Replace Bridge No. 26 on SR 110 over Lake Tillery, TIP No. B-3355, Montgomery County, ER 99-8411

Thank you for your recent letter transmitting the survey report by Mary Pope Furr concerning the above project.

For purposes of compliance with Section 106 of the National Historic Preservation Act, we concur that the following eligible for the National Register of Historic Places under the criterion cited:

Bridge No. 26 is eligible for listing in the National Register under Criterion C for architecture as a unique form consisting of a deck made of steel I-beams onto which a timber and asphalt deck is laid, wholly different from other bridges constructed at this time. We concur with the boundaries as stated on page 10 of the report.

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.

cc: T. Padgett

bc: Brown/Alperin County RF

ADMINISTRATION ARCHAEOLOGY RESTORATION SURVEY & PLANNING Location 507 N. Blount St., Raleigh NC 421 N. Blount St., Raleigh NC 515 N. Blount St., Raleigh NC 515 N. Blount St., Raleigh NC

Mailing Address

4617 Mail Service Center, Raleigh NC 27699-4617 4619 Mail Service Center, Raleigh NC 27699-4619 4613 Mail Service Center, Raleigh NC 27699-4613 4618 Mail Service Center, Raleigh NC 27699-4618 Telephone/Fax

(919) 733-4763 • 733-8653 (919) 733-7342 • 715-2671 (919) 733-6547 • 715-4801 (919) 733-6545 • 715-4801

HISTORIC ARCHITECTURAL RESOURCES SURVEY REPORT

Replace Bridge No. 26 on SR 1110 over Lake Tillery Montgomery County, North Carolina TIP No. B-3355 State Project No. 8.2550401 Federal Aid No. BRZ-1110(2)

North Carolina Department of Transportation Report Prepared by Mary Pope Furr

February 2000

REPLACE BRIDGE NO. 26 ON SR 1110 OVER LAKE TILLERY MONTGOMERY COUNTY, NORTH CAROLINA TIP NO. B-3355

PROJECT DESCRIPTION

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 26 on SR 1110 over Lake Tillery in Montgomery County with a new structure (Figure 1). Bridge No. 26 is a one-lane bridge built in 1935 and has a sufficiency rating of 22.1 out of 100.

Three alternatives are being evaluated for replacing Bridge No. 26 (Figure 2). They are:

- Alternative One The existing bridge will be replaced with a two-lane bridge on existing alignment. Traffic will be detoured along surrounding roads during construction. The proposed structure will be thirty to thirty-two feet wide, with four-foot paved shoulders for bicycle accommodations on each side. <u>The</u> <u>existing bridge will be removed</u>. The design speed for the new bridge will be 30 mph.
- Alternative Two The existing bridge will be replaced with a two-lane bridge on new alignment north of the existing bridge. Traffic will be maintained on existing alignment during construction. The proposed structure will be thirty to thirtytwo feet wide, with four-foot paved shoulders for bicycle accommodations on each side. A causeway is proposed on the southern approach and the resulting structure will be 450 feet long. The design speed for the new bridge will be 40 mph.
- Alternative Three The existing bridge will be replaced with a two-lane bridge on new alignment north of the existing bridge. Traffic will be maintained on existing alignment during construction. The proposed structure will be thirty to thirty-two feet wide, with four-foot paved shoulders for bicycle accommodations on each side. Causeways are proposed on both the northern and southern approaches and the resulting structure will be 280 feet long. The design speed for the new bridge will be 40 mph.

PURPOSE OF SURVEY AND REPORT

NCDOT conducted a survey and compiled this report in order to identify historic architectural resources located within the APE as part of the environmental studies performed by NCDOT and documented by a Categorical Exclusion (CE). This report is prepared as a technical appendix to the CE and as part of the documentation of compliance with the National Environmental Policy Act (NEPA) of 1969 and the National Historic Preservation Act (NHPA) of 1966, as amended. Section 106 of the NHPA requires that if a federally funded, licensed, or permitted project has an effect on a property listed in or eligible for the National Register of Historic Places, the Advisory Council on Historic Preservation be given an opportunity to comment. This report is on file at NCDOT and available for review by the public.

METHODOLOGY

NCDOT conducted the survey and prepared this report in accordance with the provisions of Federal Highway Administration (FHWA) Technical Advisory T 6640.8A (Guidance for Preparing and Processing Environmental and Section 4(f) Documents); the Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation (48 FR 44716); 36 CFR Part 800; 36 CFR Part 60; and Survey Procedures and Report Guidelines for Historic Architectural Resources by NCDOT. This survey and report meet the guidelines of NCDOT and the National Park Service. In addition, this report conforms to the expanded requirements for architectural survey reports developed by NCDOT and the North Carolina State Historic Preservation Office (SHPO) dated February 2, 1996.

NCDOT conducted an intensive survey with the following goals: (1) to determine the Area of Potential Effects (APE), defined as the geographic area or areas within which a project may cause changes in the character or use of historic properties, if any such properties exist; (2) to identify all significant resources within the APE; and (3) to evaluate these resources according to the National Register of Historic Places criteria.

The APE for historic architectural resources was delineated by a NCDOT staff architectural historian and reviewed in the field. The APE boundary is shown on the attached map (Figure 3).

The survey methodology consisted of a field survey and background research on the project area. A NCDOT staff architectural historian conducted a field survey on November 3, 1999, by car and on foot. All structures over fifty years of age in the APE were photographed and keyed to an area map.

Background research was conducted at the SHPO and the North Carolina State Library in Raleigh.

SUMMARY FINDINGS OF THE SURVEY

In their letter dated March 25, 1999, SHPO noted that, "Given its [Bridge No. 26] age and location immediately downstream of the Tillery dam, powerhouse, and Norfolk Railroad bridge, we believe it [the bridge] may be part of a small historic district that highlights industrial development in the area." SHPO requested an evaluation of the bridge, with particular view towards a historic district (see appendix). Therefore, on November 3, 1999 two NCDOT architectural historians visited the project area to photograph and evaluate Bridge No. 26 as well as Carolina Power & Light's (CP&L) Tillery dam, powerhouse, and Norfolk Railroad Bridge. This report states that Bridge No. 26 is considered individually eligible for the National Register and is not part of an industrial historic district. The Tillery dam, powerhouse, and Norfolk Railroad Bridge were determined to be indirectly linked to this bridge due to the large distance between these resources and Bridge No. 26, therefore Bridge No. 26 would not be included within an industrial historic district. There are no properties less than fifty years of age within the APE that qualify for the National Register under Criterion Consideration G.¹ In addition, there are no properties listed on either the National Register or State Study List located within the APE for the subject project.

Properties Listed on the National Register or North Carolina State Study List: None

Properties Evaluated and Considered Eligible for the National Register. Bridge No. 26

Criterion Consideration G states that properties less than fifty years of age may be listed on the National Register only if they are of exceptional importance or if they are integral parts of districts eligible for the National Register.

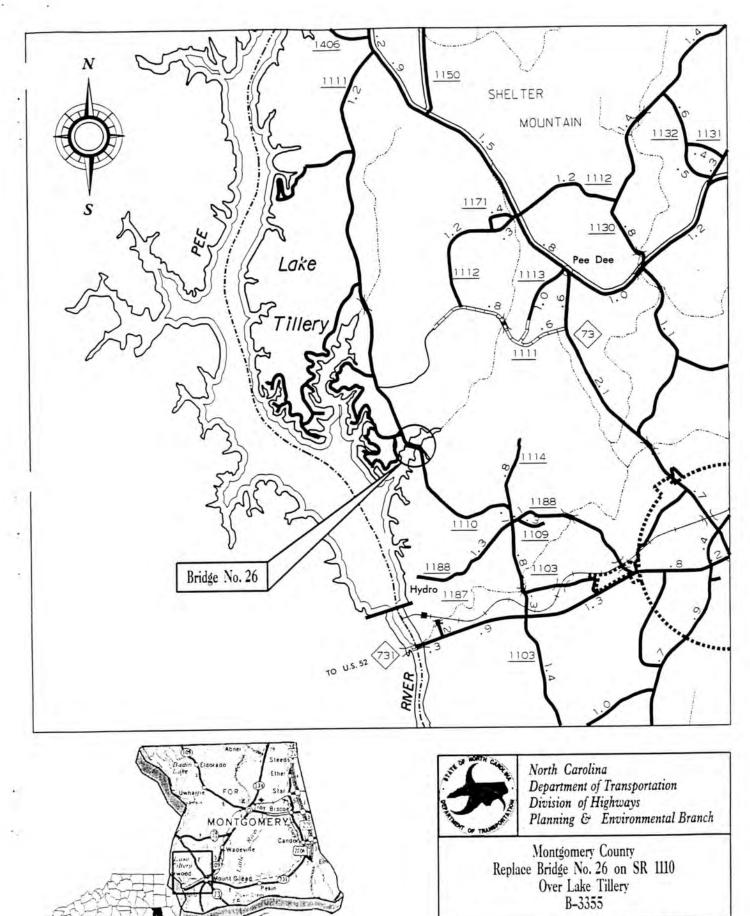
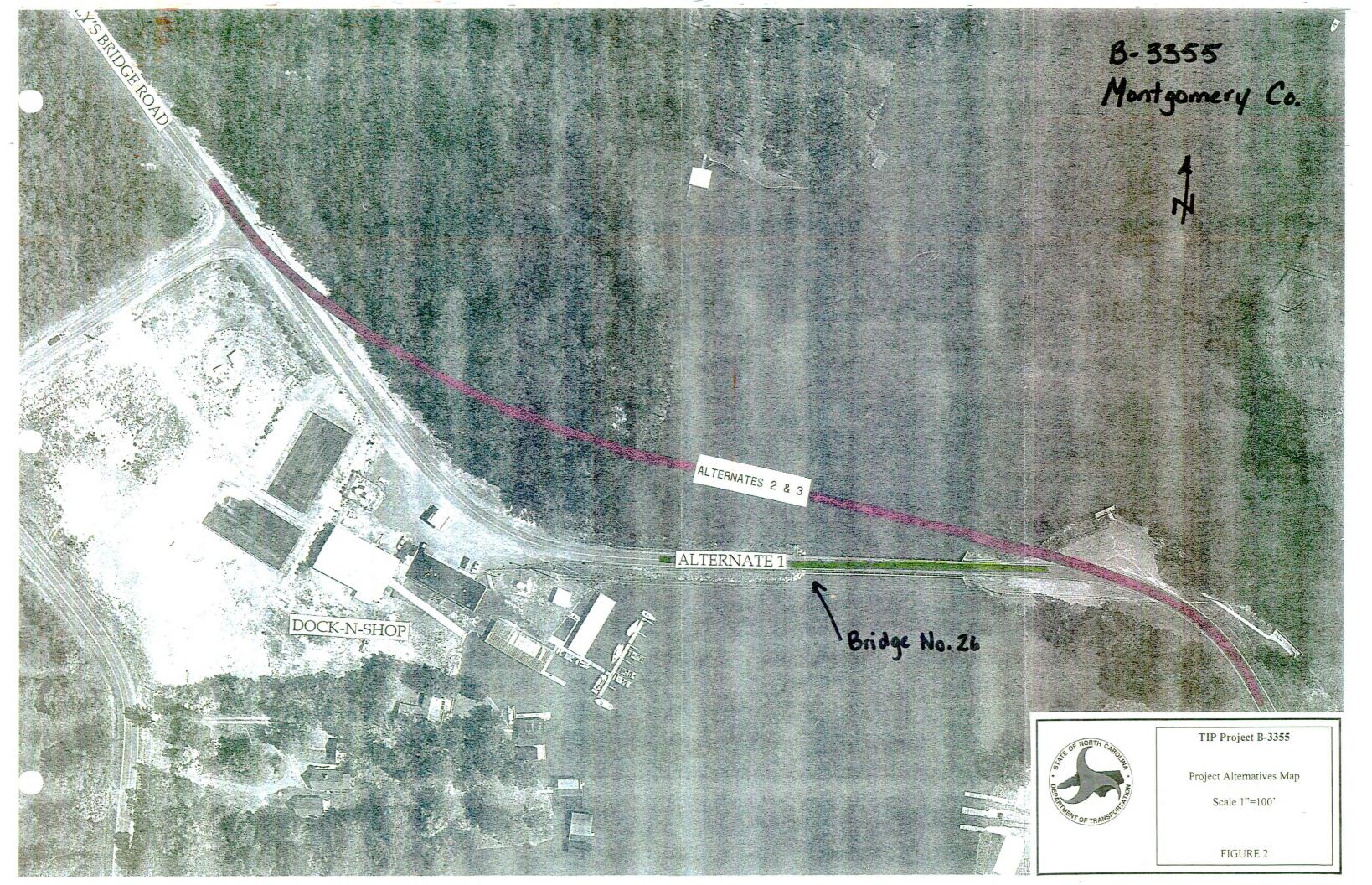
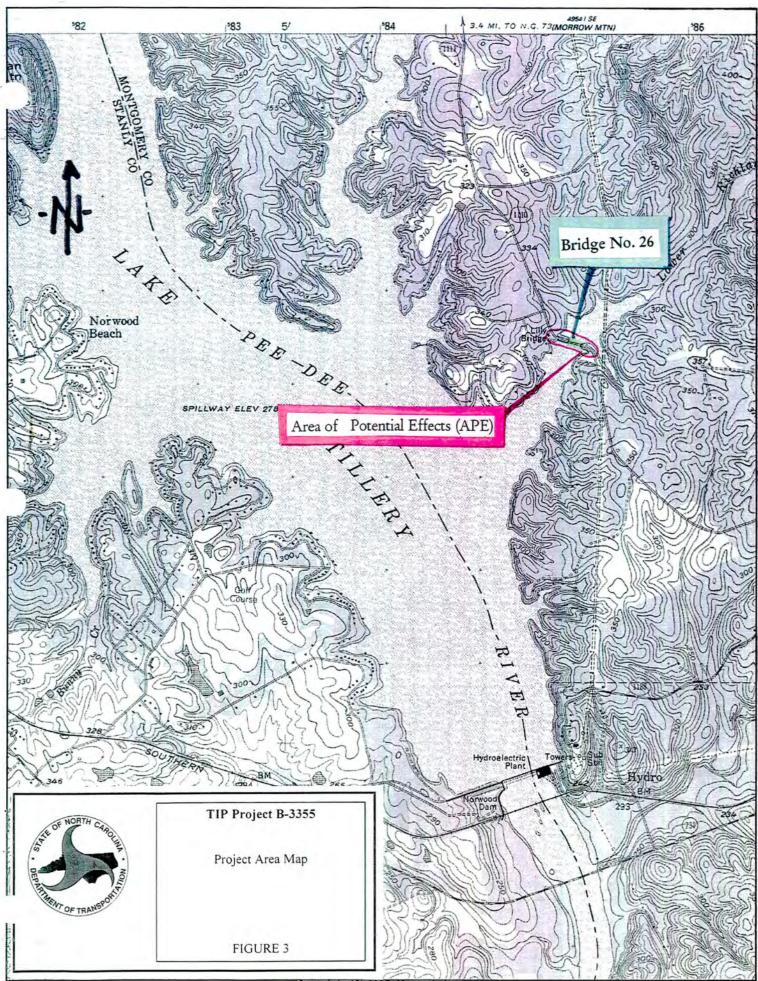


Figure 1





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PROPERTY INVENTORY AND EVALUATIONS

Properties Evaluated and Considered Eligible for the National Register.

Bridge No. 26

Location.

Bridge No. 26 carries SR 1110 over a finger of Lake Tillery that is fed by Lower Richland Creek. The bridge is approximately 2 miles northeast of CP&L's Tillery's hydroelectric powerplant.

Description.

Built in 1935 by CP&L, Bridge No. 26 consists of a steel I-beam and timber deck structure set atop a reinforced concrete post and beam substructure. The bridge has seven spans and a total structural length of 213 feet. Tubular steel bridge rails are 41 inches in height and flank the bridge's narrow roadway width of 16.8 feet. Steel outriggers are bolted to the bridge rail at regular intervals and connect to the steel diaphragm underneath the bridge floor, adding needed stability. The bridge is unique in its design and engineering and unlike other bridges on the state system because it was not constructed by the state highway commission. The bridge serves one-way traffic and has an estimated life span of sixteen years if current conditions persist.

Background Information.

CP&L constructed Bridge No. 26 seven years after completion of the Tillery hydroelectric power plant. CP&L began construction of a dam and a powerhouse across the Pee Dee River in 1926 between Montgomery and Stanly counties. After World War One, the demand for electricity had increased rapidly in the state and CP&L's general manager (and later president), Paul Allen Tillery, responded by approving construction of two large hydroelectric power plants, Tillery and the Walter's Plant in Haywood County. Tillery's motto was power precedes progress, and he proclaimed that "[t]he modern power company must and does build new plants in anticipation of future demands and need of the community it serves."² The purpose of this plant was to provide electrical service to the Sandhills area and points east of Charlotte. Originally the dam, powerhouse and lake were named after the local community of Norwood, but they were renamed Tillery after CP&L's president's sudden death in 1933.

The 1935 construction of Bridge No. 26 by CP&L served the utilitarian function of carrying SR 1110 across this finger of the newly created lake. However, by the 1950s this area was a spot for local boaters and fishermen to launch recreational boats and the bridge took on a pivotal role, carrying traffic between the local bait shop on the west side of the bridge and the boat launch on the east side. Today, the land around the bridge is owned and monitored by CP&L in conjunction with the North Carolina

² Jack Riley, Carolina Power & Light Company, 1908-1958, (Raleigh: Edwards & Broughton Company, 1958), 191.

Wildlife Resources Commission and Bridge No. 26 is owned and maintained by NCDOT.

Evaluation.

Bridge No. 26 is not eligible for the National Register under Criterion A (event). To be eligible for significance under Criterion A the property must retain integrity and must be associated with a specific event marking an important moment in American history or a pattern of events or historic trend that made a significant contribution to the development of a community. Furthermore, the property must have existed at the time and be documented to be associated with the events. Finally, the property's specific association must be important as well.³ While the Tillery Hydroelectric power plant is an example of a property which is associated with the development of hydroelectric power in North Carolina, Bridge No. 26 is not functionally related to the plant. In addition, the construction of Bridge No. 26 did not make a significant contribution to the development of a community. Therefore, the structure is not eligible for the National Register under Criterion A.

Bridge No. 26 is **not eligible** for the National Register under Criterion B (person). For a property to be eligible for significance under Criterion B, it must retain integrity and 1) be associated the lives of persons significant in our past, i.e., individuals whose activities are demonstrably important within a local, state, or national historic context; 2) be normally associated with a person's productive life, reflecting the time period when she achieved significance; and 3) should be compared to other associated properties to identify those that best represent the person's historic contributions. Furthermore, a property is not eligible if its only justification for significance is that it was owned or used by a person who is or was a member of an identifiable profession, class or social or ethnic group.⁴

There are no persons of national, state, or local significance associated with the Bridge No. 26.

Bridge No. 26 is **eligible** for the National Register under Criterion C (Design/Construction) for its significance in architecture.

For a property to be eligible under this criterion, it must retain integrity and either 1) embody distinctive characteristics of a type, period, or method of construction; 2) represent the work of a master; 3) possess high artistic value; or 4) represent a significant and distinguishable entity whose components may lack individual distinction.⁵

Bridge No. 26 is unique in its design and engineering and unlike other bridges on the state system because it was not constructed by the state highway commission. The majority of bridges built during the early twentieth century were reinforced concrete structures built on slab or t-beam frames and supported by large, reinforced concrete piers. Bridge No. 26 has a deck made of steel I-beams onto which a timber and asphalt deck is laid. These materials and their application are wholly different from the popular slab and t-beam frames built by the State Highway Commission. In

³ National Park Service, National Register Bulletin 15 (Washington, D.C.: Department of the Interior, 1991), 12.

⁺ Ibid., 15.

^{*} Ibid., 17.

addition, the tubular bridge rails are an uncommon element, having escaped an upgrade to the safety-tested "Jersey Barrier" walls. Despite the addition of steel outriggers by NCDOT in the late twentieth century, Bridge No. 26 possesses integrity of location, design, setting, materials, workmanship, feeling and association and is eligible for the National Register under Criterion C.

Bridge No. 26 is **not eligible** for the National Register under Criterion D (Information Potential).

For a property to be eligible under Criterion D, it must meet two requirements: 1) the property must have, or have had, information to contribute to our understanding of human history or prehistory, and 2) the information must be considered important.⁶

The architectural and engineering components of Bridge No. 26 are not likely to yield information important in the history of building technology.

Boundary.

The National Register Boundary for Bridge No. 26 has been drawn according to the guidelines of National Register Bulletin 21, "Defining Boundaries for National Register Properties." The National Register Boundary for Bridge No. 26 is simply the footprint of the structure.

The historic boundary for Bridge No. 26 is delineated on the preliminary design sheet for the project area (Figure 9).

National Register Boundary Justification.

The National Register Boundary for Bridge No. 26 is limited to the footprint of the structure because only the bridge (and not the approach roadway) is eligible for the National Register.

. Ibid., 21.

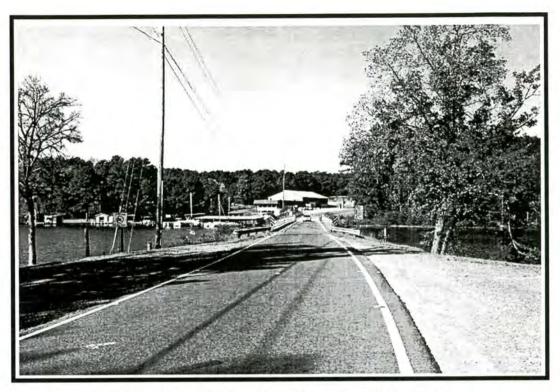


Figure 4 - View of Bridge No. 26 from SR 1110, looking west

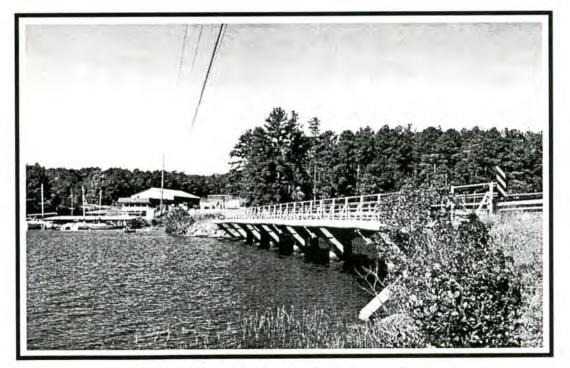


Figure 5 - View of Bridge No. 26, southern elevation



Figure 6 - View of Bridge No. 26, roadway and bridge railing



Figure 7 - View of Bridge No. 26, bridge railing

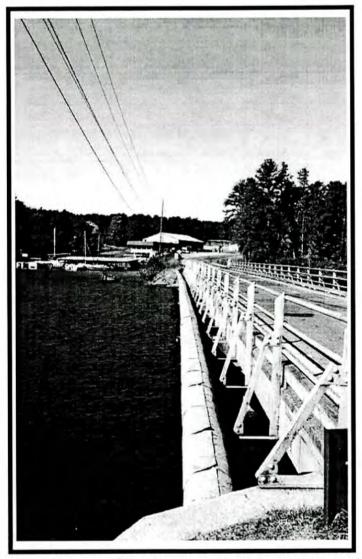
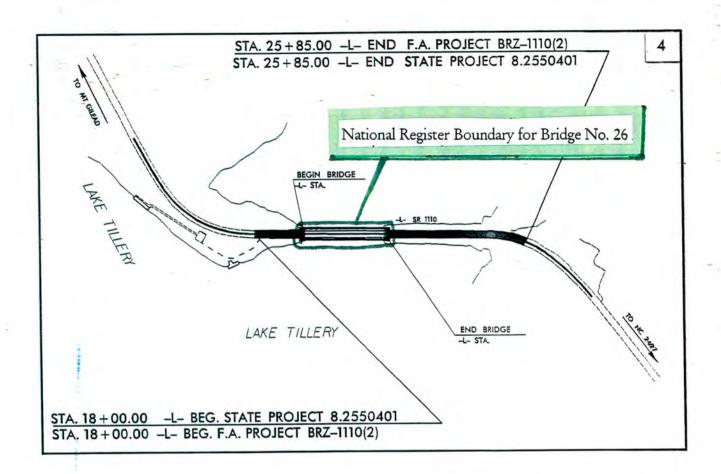
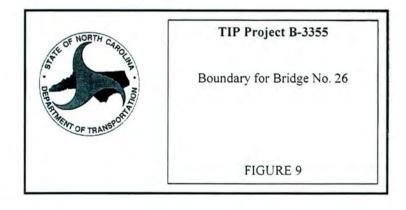


Figure 8 - View of Bridge No. 26, steel outriggers and waterline

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APPENDIX

NCDOT Survey Report for B-3355 Mary Pope Furr // February 2000



North Carolina Department of Cultural Resources

James B. Hunt Jr., Governor Betty Ray McCain, Secretary

Division of Archives and History Jeffrey J. Crow, Director

March 25, 1999

MEMORANDUM

TO:

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

FROM:

David Brook Deputy State Historic Preservation Officer

SUBJECT: Bridge No. 26 on SR 1110 over Lake Tillery, Montgomery County, B-3355, Federal Aid Project BRZ-1110(2), State Project 8.2550401, ER 99-8411

Thank you for your memorandum of March 8, 1999, concerning the above project.

We have checked our maps and files and determined that the subject bridge was built in 1935. Given its age and location immediately downstream of the Tillery dam, powerhouse, and Norfolk Railroad bridge, we believe it may be part of a small historic district that highlights industrial development in the area. An evaluation of the potential historic district is recommended.

There are no known archaeological sites within the proposed project area. Based on our present knowledge of the area, it is unlikely that any archaeological resources which may be eligible for inclusion in the National Register of Historic Places will be affected by the project construction. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

DB:slw

cc: N. Graf -B. Church T. Padgett HISTORIC ARCHITECTURAL RESOURCES SURVEY REPORT

Replace Bridge No. 26 on SR 1110 over Lake Tillery Montgomery County, North Carolina TIP No. B-3355 State Project No. 8.2550401 Federal Aid No. BRZ-1110(2)



North Carolina Department of Transportation Report Prepared by Mary Pope Furr

February 2000

Man To

Principal Investigator Historic Architecture Section North Carolina Department of Transportation

Barbara Church

Barbara Church, Supervisor Historic Architecture Section North Carolina Department of Transportation

2.17.2000

Date

2/17/2000 Date