STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

JAMES B. HUNT JR.
GOVERNOR

E. NORRIS TOLSON
SECRETARY

March 31, 1998

MEMORANDUM TO: Mr. David Green, Member, Board of Transportation
Mr. W. S. Varnedoe, P.E. Division Engineer, Division 6
Mr. David D. King
Mr. W. H. Webb, P.E.
Mr. J. M. Lynch, P.E. (6) Attention: Roberto Canales, P.E.
Congestion Management Engineer
Mr. J. B. Williamson
Mr. H. F. Vick, P.E. (2)
Mr. R. L. Hill, P.E.
Mr. G. T. Shearin, P.E.
Mr. M. R. Poole, P.E.
Mr. A. L. Avant (2)
Mr. J. D. Lane
Mr. T. A. Peoples, P.E.
Mr. David Smith, P.E.

FROM: David G. Modlin, Ph.D., P.E.
Head of Feasibility Studies

SUBJECT: Feasibility Study # U-3814, Lumberton, SR 2501 (Starlite Drive) Extension from NC 41 (Martin Luther King Jr. Drive) to SR 2202 (Hestertown Road), Robeson County.

Our staff has completed a feasibility study for the subject proposed project. This brief analysis suggests improvements that would be logical if the project were to be funded. A copy of our report is attached for your information.

DGM/joa

Attachment

cc: Mr. L. A. Sanderson, P.E.
Mr. D. R. Morton, P.E.
Mr. Eric J. Lamb, P.E.

FEASIBILITY STUDY

Lumberton

SR 2501 (Starlite Dr.) Extension from NC 41 (Martin Luther King Jr. Dr.) to SR 2202 (Hestertown Rd.) Robeson County

Division 6

U-3814

Prepared by the
Program Development Branch
Division of Highways
N. C. Department of Transportation

Eric J. Lamb, P.E.
Feasibility Studies Engineer

David G. Modlin, Jr., Ph.D., P.E.
Head of Feasibility Studies

2/26/98
Date

Lumberton
SR 2501 (Starlite Dr.) Extension
from NC 41 (Martin Luther King Jr. Dr.)
to SR 2202 (Hestertown Rd.)
Robeson County
U-3814

I. General Description

This feasibility study describes constructing the SR 2501 (Starlite Dr.) Extension, from NC 41 (Martin Luther King Jr. Dr.) to SR 2202 (Hestertown Rd.), a distance of 2.2 miles (3.5 km). The project location is shown as Segment 1 on Figure 1. This project was investigated as a four-lane divided shoulder section and a four-lane divided curb and gutter section.

Alternate 1 - If this project is constructed as a four-lane divided shoulder section on 250 feet (76.2 m) of right-of-way, it is anticipated that there will be three residences and no businesses relocated due to this project. The total cost of this alternate, including construction and right-of-way, is estimated to be $6,900,000.

Alternate 2 - If this project is constructed as a four-lane divided curb and gutter section on 150 feet (45.7 m) of right-of-way, it is anticipated that there will be three residences and no businesses relocated due to this project. The total cost of this alternate, including construction and right-of-way, is estimated to be $6,600,000.

This study is the initial step in the planning and design process for this project and is not the product of exhaustive environmental or design investigations. The purpose of this study is to describe the proposed project including costs, and to identify potential problems that may require consideration in the planning and design phases.

II. Need for Project

The purpose of this project is to provide a new east-west connector on the south side of Lumberton. This project is supported by the Robeson County Board of Commissioners and the City of Lumberton.

This route is not a part of the Lumberton Thoroughfare Plan. This project would replace the proposed Lumberton Southern Loop, which is designated as a proposed major thoroughfare on the Lumberton Thoroughfare Plan.

Alternate 2 - Four-lane divided curb and gutter section

The cross-section for this alternate is a four-lane curb and gutter section, with 12-foot (3.7-m) wide lanes, 10-foot (3.0-m) berms, and a 20-foot (6.1-m) wide raised median on 150 feet (45.7 m) of right-of-way with partial control of access. A new culvert will also be required to cross a branch of Jacob Swamp.

It is anticipated that three residences and no businesses will be relocated due to this alternate. The total cost of this alternate is as follows:

Construction	$ 5,800,000
Right-of-way	$ 800,000
Total Cost	$ 6,600,000

IV. Other Considerations

Partial construction

The cost of building Segment 1 as a two-lane section on multilane right-of-way was also examined. Under Alternate 1, this option would involve building half of the proposed four-lane shoulder section while providing the necessary clearing and earthwork for future additional lanes. The total cost of constructing Alternate 1 as a partial cross-section is as follows:

Construction	$ 3,900,000
Right-of-way	$ 1,200,000
Total Cost	$ 5,100,000

Under Alternate 2, this option would involve constructing the raised median and one lane in each direction, while providing the necessary clearing and earthwork for future additional outside lanes. The total cost of constructing Alternate 2 as a partial cross-section is as follows:

Construction	$ 3,800,000
Right-of-way	$ 800,000
Total Cost	$ 4,600,000

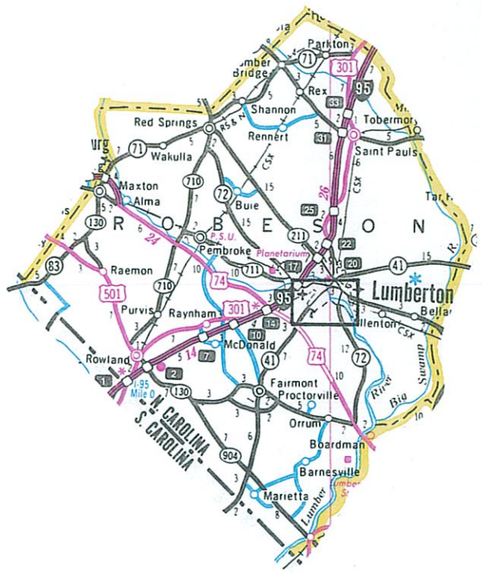
Segment 2

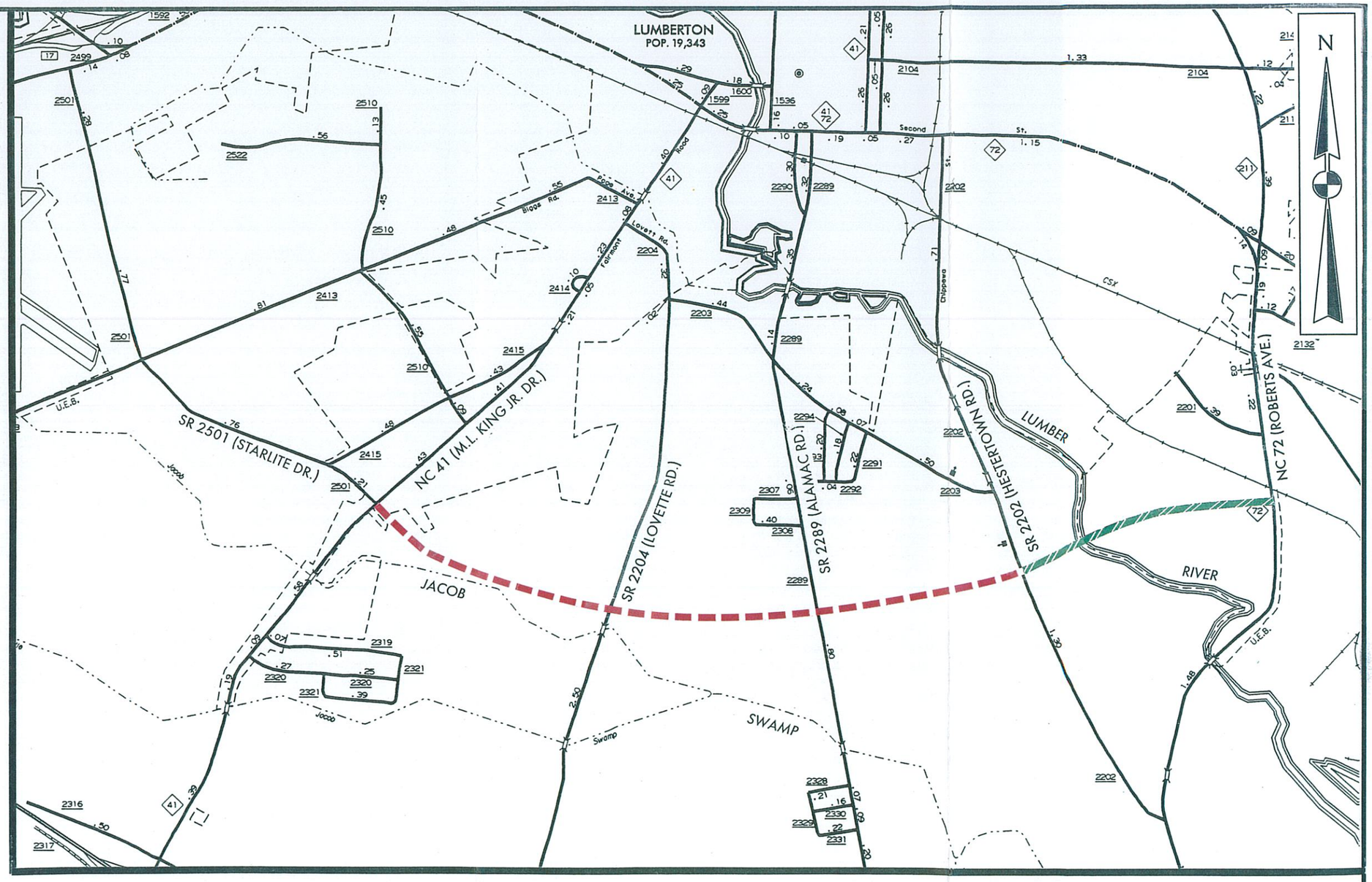
At the request of division personnel, it was also investigated to extend the limits of the project eastward to NC 72 (Roberts Ave.). This segment is 0.9 miles (1.4 km) long and is shown on Figure 1 as Segment 2. This segment will have a major impact upon the wetlands in the area. Dual bridges approximately

Based on maps at the Department of Environment, Health & Natural Resources - Natural Heritage Section, no threatened or endangered species were identified in the project corridor.

This section of Jacob Swamp within the project corridor is a Class C waterway and is classified as a salt water stream. This waterway is part of the Lumber River Basin.

No special accommodation for bicycles is recommended on this project.





1 0 1 MILES

LEGEND

- SEGMENT 1
- SEGMENT 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
PROGRAM DEVELOPMENT BRANCH

U-3814
SR 2501 (STARLITE DR.) EXTENSION
FROM NC 41 (MARTIN LUTHER KING JR. DR.)
TO SR 2202 (HESTERTOWN RD.)
LUMBERTON

DIVISION 6	ROBESON COUNTY	FIGURE 1