

FEASIBILITY STUDY

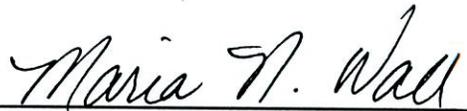
NC 73 Extension

from US 220 to the proposed US 220 Bypass

Richmond County

R-3303

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



Maria N. Wall, P.E.
Highway Planning Engineer



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

3/14/95
Date

FEASIBILITY STUDY

NC 73 Extension

from US 220 to the proposed US 220 Bypass

Richmond County

R-3303

I. GENERAL DESCRIPTION

This is a feasibility study for the extension of NC 73, from US 220, north of Ellerbe, to the proposed US 220 Bypass, in Richmond County (See Figure 1). The project is approximately 2.1 miles (3.4 kilometers) in length. The recommended typical section is a two-lane, 24-foot (7.3-meter) wide roadway with 8-foot (2.4-meter) wide shoulders on a 100-foot (30.5-meter) wide right-of-way with no access control. The estimated cost of the project is \$2,600,000 (\$200,000 for right-of-way and \$2,400,000 for construction).

This study is not a detailed planning/environmental investigation. A feasibility study presents recommended cross-sections for improvements, general corridors of improvements, and estimated costs of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or other observed issues that deserve consideration in the planning and construction stages.

II. NEED FOR PROJECT

The recommended improvements are needed to improve access to the proposed US 220 Bypass from the northwestern part of the county. The existing NC 73 is on the Federal Aid Secondary System, and is classified as a major collector on the Statewide Functional Classification System.

The studied project would begin at the intersection of US 220 and NC 73, north of Ellerbe. The existing NC 73 is a two-lane roadway. US 220 is a two-lane roadway. There are additional left-turn lanes at the intersection of US 220 and NC 73. There is a rest area in the northwest quadrant of this intersection. The project would end near the proposed interchange with the US 220 Bypass. Land use along the recommended corridor is mainly agricultural. TIP Project R-2231,

proposes to construct the US 220 Bypass on new location, from Ellerbe to Emery in Richmond and Montgomery Counties. The proposed cross-section for the US 220 Bypass is a four-lane median-divided freeway with full access control. Preliminary plans for US 220 Bypass propose an interchanges at SR 1452.

The estimated 1994 average daily traffic (ADT) on the NC 73 Extension ranges from 1300 vehicles per day (vpd), near US 220, to 1990 vpd, near the proposed US 220 Bypass. In the design year 2020, the traffic volume is expected to range from 2800 to 4300 vpd, respectively. The NC 73 extension would operate at a level of service (LOS) A in 1994 and a LOS B in the design year 2020.

III. RECOMMENDATIONS

It is recommended that the existing NC 73 be extended on new location from US 220, north of Ellerbe, to SR 1452, a distance of approximately 2.1 miles (3.4 kilometers). When the US 220 Bypass interchange with SR 1452 is constructed, the NC 73 Extension would be realigned to the interchange and the west leg of SR 1452 would be realigned to intersect NC 73 Extension. The recommended typical section for NC 73 is a two-lane, 24-foot (7.3-meter) wide roadway with 8-foot (2.4-meter) wide shoulders on a 100-foot (30.5-meter) wide right-of-way with no access control. All intersecting routes would be at-grade and stop sign-controlled.

The recommended improvements would provide direct access from NC 73 in the northwestern part of the county to the proposed US 220 Bypass.

Minimal utility conflicts are expected.

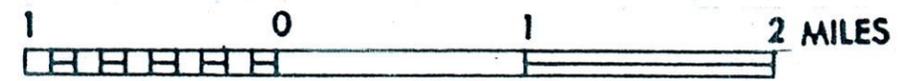
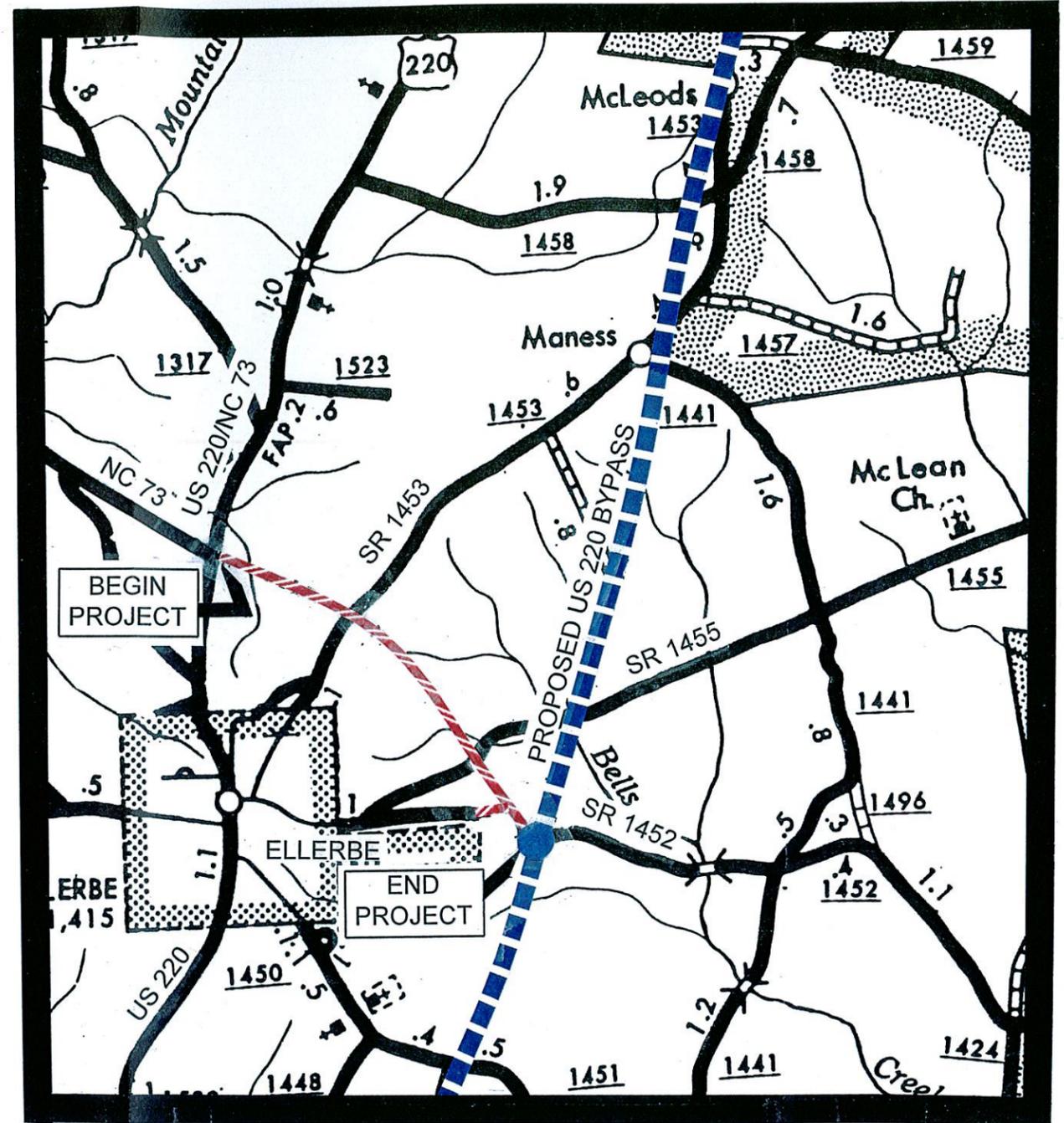
Estimated costs for the NC 73 extension are as follows:

| | |
|---------------|-------------|
| Right-of-Way | \$ 200,000 |
| Construction | \$2,400,000 |
| Project Total | \$2,600,000 |

IV. OTHER COMMENTS AND CONCERNS

It is estimated that this project would not require any relocations.

This project may require a Corps of Engineers Section 404 Permit. A portion of this project bisects wetlands. No historical or architecturally significant sites are known to be impacted.



SCALE

| | |
|------------------------------------|----------|
| FEASIBILITY STUDY UNIT | |
| R-3303 | |
| NC 73 EXTENSION | |
| from US 220/NC 73 north of Ellerbe | |
| to the proposed US 220 Bypass | |
| Richmond County | |
| Division 8 | FIGURE 1 |