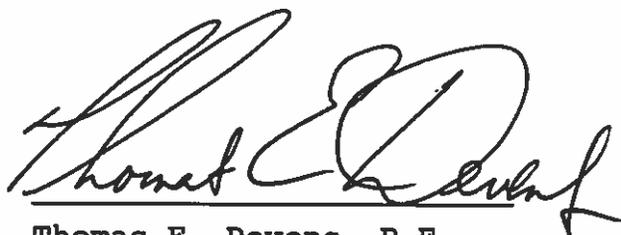


FEASIBILITY STUDY

US 701
from US 421/US 701 (Clinton Bypass) to I-40
Sampson County

R-2819

Prepared by
Program Development Branch
Division of Highways
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9/2/92
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I. GENERAL DESCRIPTION

This is a feasibility study for the widening of US 701 from the US 421/US 701 bypass of Clinton to Interstate 40, a distance of 13.0 miles (See Figure 1). This study recommends widening US 701 from a two-lane highway to a four-lane, median-divided highway. Total cost is estimated at \$26,700,000 (\$14,700,000 for construction and \$12,000,000 for right-of-way).

A feasibility study presents recommended cross sections for improvements, general alignments of improvements, and estimated cost of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or other observed issues which deserve consideration in the planning and construction stages.

This study is not an exhaustive environmental investigation.

II. NEED FOR PROJECT

This project was requested by the Eastern North Carolina Chamber of Commerce in the 1991 Transportation Improvement Program hearings. Project limits are from the intersection of US 421/US 701 (Clinton Bypass) with US 701 Business to the north-side ramps of the US 701 interchange with I-40 (See Figure 1).

US 701 Business is the primary approach to Clinton from Interstate 40. Land use along the highway is primarily agricultural, with clusters of light-density rural residential use. Three schools are located beside the highway. Widening US 701 will increase capacity and safety on the studied section, while improving potential for future development in the adjacent vicinity.

The studied section of US 701 is a two-lane shoulder section with 24 feet of pavement and 10-foot shoulders on 60-80 feet of right-of-way with no control of access. Speed limit is 55 mph. US 701 is classified as a Rural Minor Arterial in the statewide functional classification system, and is a Federal Aid Secondary route.

The North Carolina Bicycle Program has determined that no special accommodations for bicycle traffic are necessary.

The 1992 Average Daily Traffic (ADT) in the studied section ranges from 5,300 to 7,100 vehicles per day (vpd). In 20 years, traffic is predicted to range from 11,900 to 14,500 vpd. Currently, the existing two-lane road configuration experiences a Level Of Service (LOS) C. In the design year, most of US 701 will experience a LOS D, however some portions of US 701 will decrease in service to LOS E. If US 701 is widened to a four-lane, median-divided facility, level of service at current traffic demand should increase to a LOS A rating, with a LOS B expected in the design year.

During the period from January 1, 1989 through December 31, 1991, a total of 92 accidents were reported along the studied portion of US 701. This resulted in an accident rate of 129.6 accidents per 100 million vehicle miles, compared to a statewide average of 176.5. One fatality was reported. Most prevalent accident types were running off the road (42.5%) and rear-end collisions (33%).

III. RECOMMENDATIONS

It is recommended that US 701 be widened to a four-lane, median-divided facility. The recommended typical section consists of two 12-foot lanes with 2-foot inside and 2-foot outside paved shoulders in each direction divided by a 46-foot median. Widening should occur asymmetrically to the existing two-lane highway. A total of 200 feet of right-of-way will be required, with no control of access. From the centerline of existing US 701, the side of widening will require 135 feet of right-of-way, while the existing side will require 65 feet. It is anticipated that the existing pavement will be widened, repaved, and utilized as a traveled way in one direction.

This project begins by extending the US 421/US 701 Clinton Bypass on new location. The extension will merge with existing US 701 approximately 2,500 feet north of the existing intersection of the two highways (See Figure 2). The north terminus of US 701 Business is recommended to be realigned westward to intersect the bypass extension with a 90-degree intersection. Existing US 701 should be widened for 12.2 miles to a four-lane, median-divided facility. Widening may occur on the east or west side. The side of widening may transition from side-to-side to minimize land damages, relocations, wetland involvement, and to improve the alignment. Approximately 0.5 mile south of the south-side ramps of the interchange with I-40, the median-divided section should transition to a 5-lane, 64-foot curb and gutter section with 8-foot berms on 100 feet of right-of-way with no control of access. The 5-lane section should continue across I-40 and terminate at the north-side interchange ramps.

Bridge number 81-395 carries US 701 over Interstate 40. This structure will require widening to accommodate a 64-foot roadway width. The existing bridge has a length of 285 feet, a roadway width of 56 feet, and a sufficiency rating of 95.

Total project cost is estimated at:

Right-of-Way	\$ 12,000,000
Construction	\$ 14,700,000
Total Project Cost	\$ 26,700,000

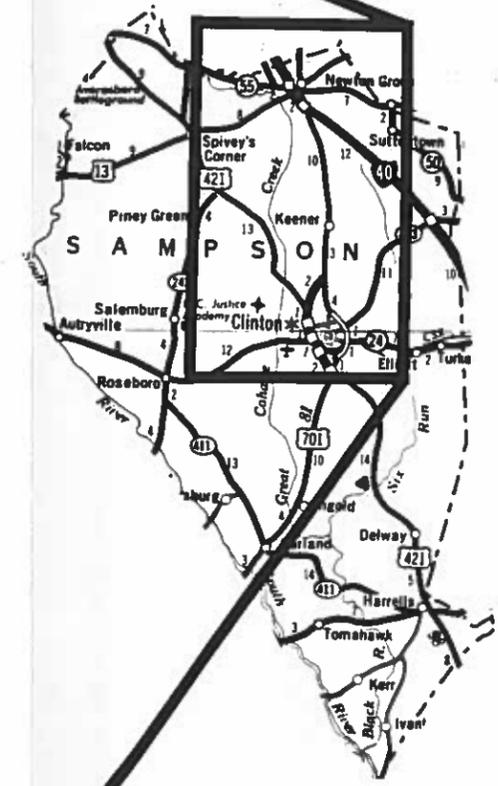
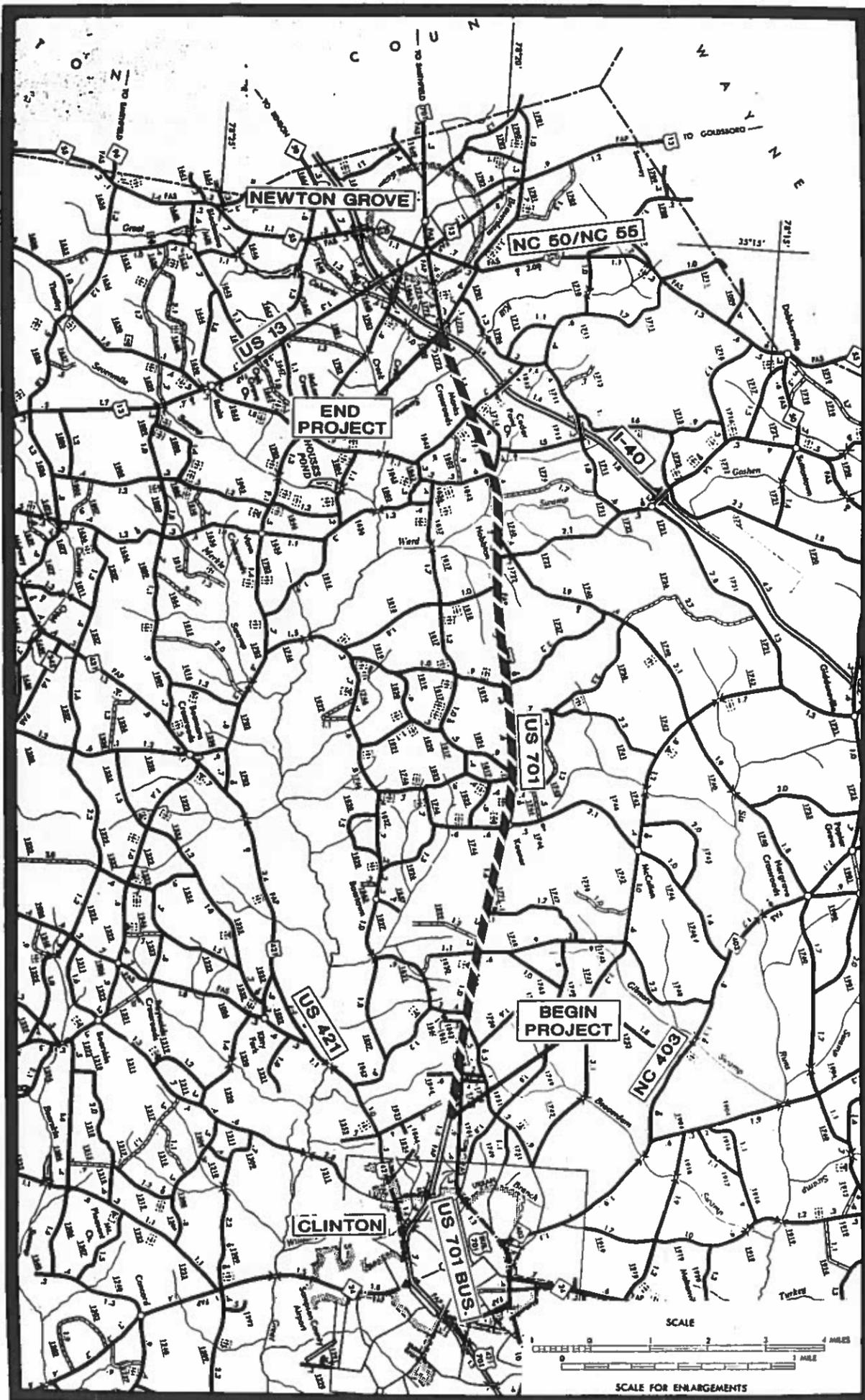
Low utility conflicts are expected.

Twelve business and 89 residential relocations are expected, including two churches. Three cemeteries will be affected.

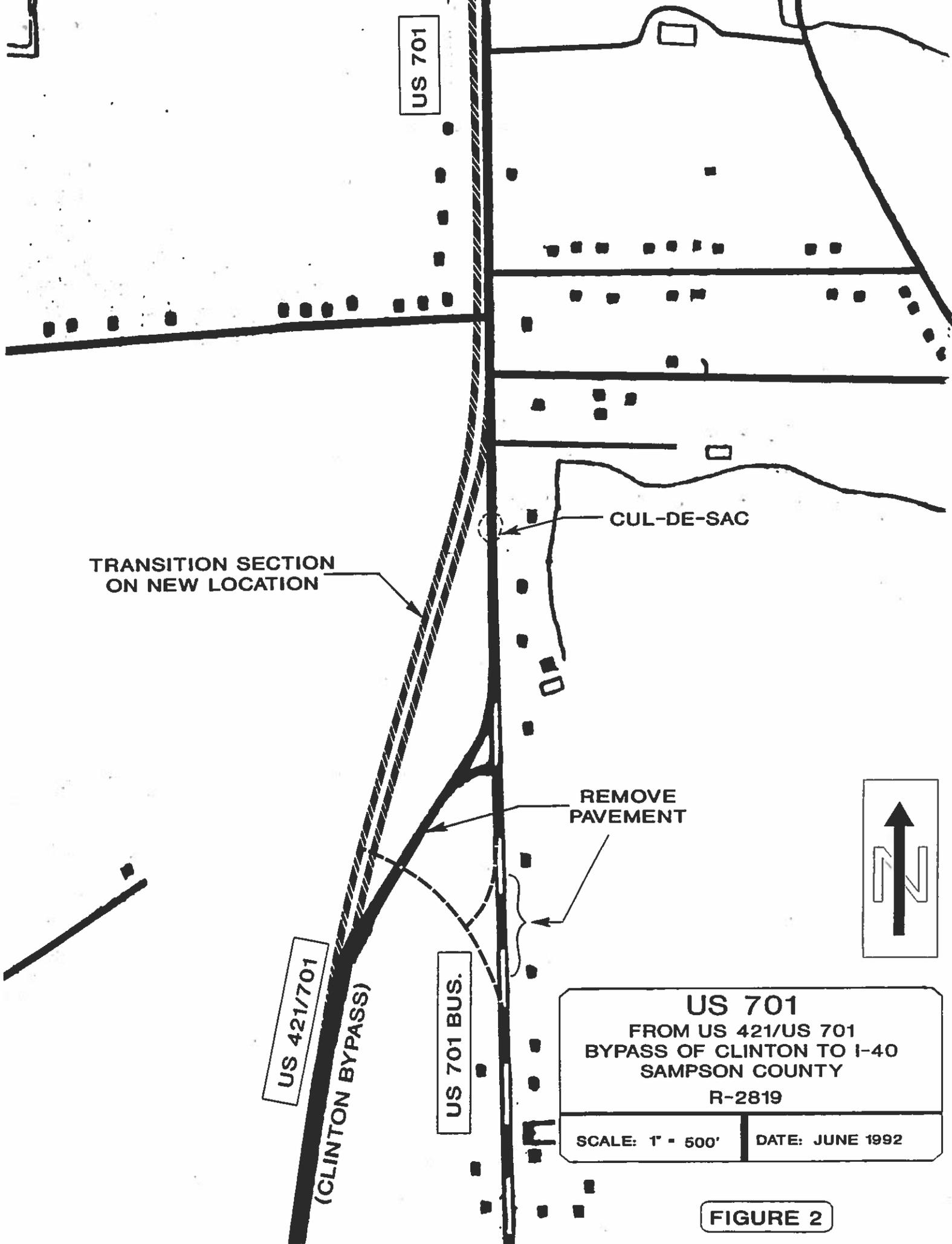
IV. OTHER COMMENTS AND CONCERNS

An ecological screening was not conducted for this study. However, the widening of US 701 may require placing fill in wetlands near the north end of the project. A Corps of Engineers Section 404 Permit may be required.

A preliminary historical screening did not identify any sites on or eligible for the National Register of Historic Places.



US 701
 FROM US 421/US701
 BYPASS OF CLINTON TO I-40
 SAMPSON COUNTY
R-2819
 DATE: JUNE 1992 | FIGURE 1



US 701

TRANSITION SECTION
ON NEW LOCATION

CUL-DE-SAC

REMOVE
PAVEMENT

US 421/701

(CLINTON BYPASS)

US 701 BUS.

US 701	
FROM US 421/US 701 BYPASS OF CLINTON TO I-40 SAMPSON COUNTY	
R-2819	
SCALE: 1" = 500'	DATE: JUNE 1992

FIGURE 2