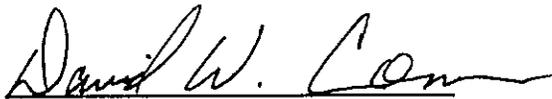


**FEASIBILITY STUDY
(UPDATED)** (see attached
POLIST
R-2243)

**Mocksville
US 601
From US 64 To I-40
Davie County**

R-2243

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



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2/28/96
Date

Mocksville
US 601
From US 64 To I-40
Davie County

R-2243

I. Purpose of Study

A Feasibility Study for upgrading US 601 in Mocksville was completed in September, 1987. The recommendations of that study included widening the existing 2-lane US 601 from US 64 (Wilkesboro Street) to Koontz Road (SR 1404) and widening the existing 4-lane US 601 from Koontz Road to I-40. It was recommended that the roadway be widened to a 5-lane curb-and-gutter facility. At the time of the original study, US 601 was routed along Yadkinville Road from US 64 to Valley Road (old SR 1183).

Since the original Feasibility Study was completed in 1987, Valley Road has been realigned and widened to a 3-lane curb-and-gutter facility. US 601 has been widened to a 3-lane curb-and-gutter facility from Valley Road to Koontz Road and to a 5-lane curb-and-gutter facility from Koontz Road to I-40. US 601 has been re-routed along Valley Road.

It is the purpose of this new study to evaluate the needs of the new roadway to the year 2020 and recommend improvements as deemed appropriate.

II. General Description

This feasibility study describes proposed improvements to US 601 in Mocksville. It is proposed to widen US 601 from US 64 to Koontz Road (SR 1404). The total project length is 1.1 miles (1.8 km). The location of the proposed improvements is shown on Figure 1.

The recommended cross section is a 5-lane, 64-foot (19.5-m) wide (face-to-face), curb-and-gutter section, with 8-foot (2.4-m) wide berms, for the entire project length. The required right-of-way width is 100 feet (30.5 m).

The estimated cost of right-of-way and construction is \$4,300,000 as follows:

Right-of-Way	\$2,500,000
Construction	<u>1,800,000</u>
Total Cost	\$4,300,000

It is anticipated that no businesses, 1 residence, and 10 graves will be relocated as a result of this project.

This study is the initial step in the planning and design process for this project and is not to be considered the product of exhaustive environmental or design investigations. The purpose of this study is to describe the alternative treatments including costs, and identify potential problem areas that deserve consideration in the planning and design phases.

III. Existing Conditions

The studied section of US 601 is classified as a Rural Minor Arterial in the statewide functional classification system and as a Major Thoroughfare in the Mocksville Thoroughfare Plan.

Within the project limits, US 601 is 3-lane, 40-foot (12.2-m) wide (face-to-face), curb-and-gutter section from US 64 to Koontz Road. From Koontz Road to I-40, the roadway is a 5-lane, 64-foot (19.5-m) wide (face-to-face), curb-and-gutter section.

From US 64 to Yadkinville Road, US 601 is not developed at the time of this report. From Yadkinville Road to I-40, US 601 is heavily developed commercially. Development includes motels, restaurants, shopping centers, and a large cemetery. The cemetery includes graves dating back to the mid-1700's and is located along the east side of the roadway approximately 0.5 miles (0.8 km) north of US 64.

This project will provide a continuous north-south, multi-lane facility from I-40 into the inner city. Widening to 5 lanes will open US 601 to development between Yadkinville Road and US 64.

During the period from May 1, 1992 through April 30, 1995, a total of 92 accidents were reported along the studied section of roadway. This resulted in an accident rate of 245.7 accidents per 100 million vehicle miles (Acc/100MVM), compared to a statewide average of 268.7 Acc/100MVM for all urban US routes, in North Carolina, in 1994. No fatalities were reported during this period; however, 36 of the accidents resulted in injuries. The most prevalent accident types were angle (29%), left-turn (22%), and rear-end (18%). The recommended cross section will offer the potential for reduction of these types of accidents.

Current traffic volumes, within the project limits, are estimated to be approximately 8,400 vehicles per day (vpd) between US 64 and Yadkinville Road and 14,800 vpd between Yadkinville Road and Koontz Road. The existing roadway segments are operating at Levels of Service C and E respectively. In the design year (2020), it is anticipated that the roadway segments will experience traffic volumes of approximately 16,800 vpd and 29,300. Without improvements, the Levels of Service will deteriorate to

Levels E and F. With the proposed improvements, the roadway segments should be operating at Levels of Service B and D, in 2020.

IV. Detailed Description

This feasibility study describes proposed improvements to US 601 in Mocksville. It is proposed to widen US 601 from US 64 to Koontz Road (SR 1404). The total project length is 1.1 miles (1.8 km). The location of the proposed improvements is shown on Figure 1.

The recommended cross section is a 5-lane, 64-foot (19.5-m) wide (face-to-face), curb-and-gutter section, with 8-foot (2.4-m) wide berms, for the entire project length. The required right-of-way width is 100 feet (30.5 m).

A new traffic signal should be installed at US 64.

The estimated cost of right-of-way and construction is \$4,300,000 as follows:

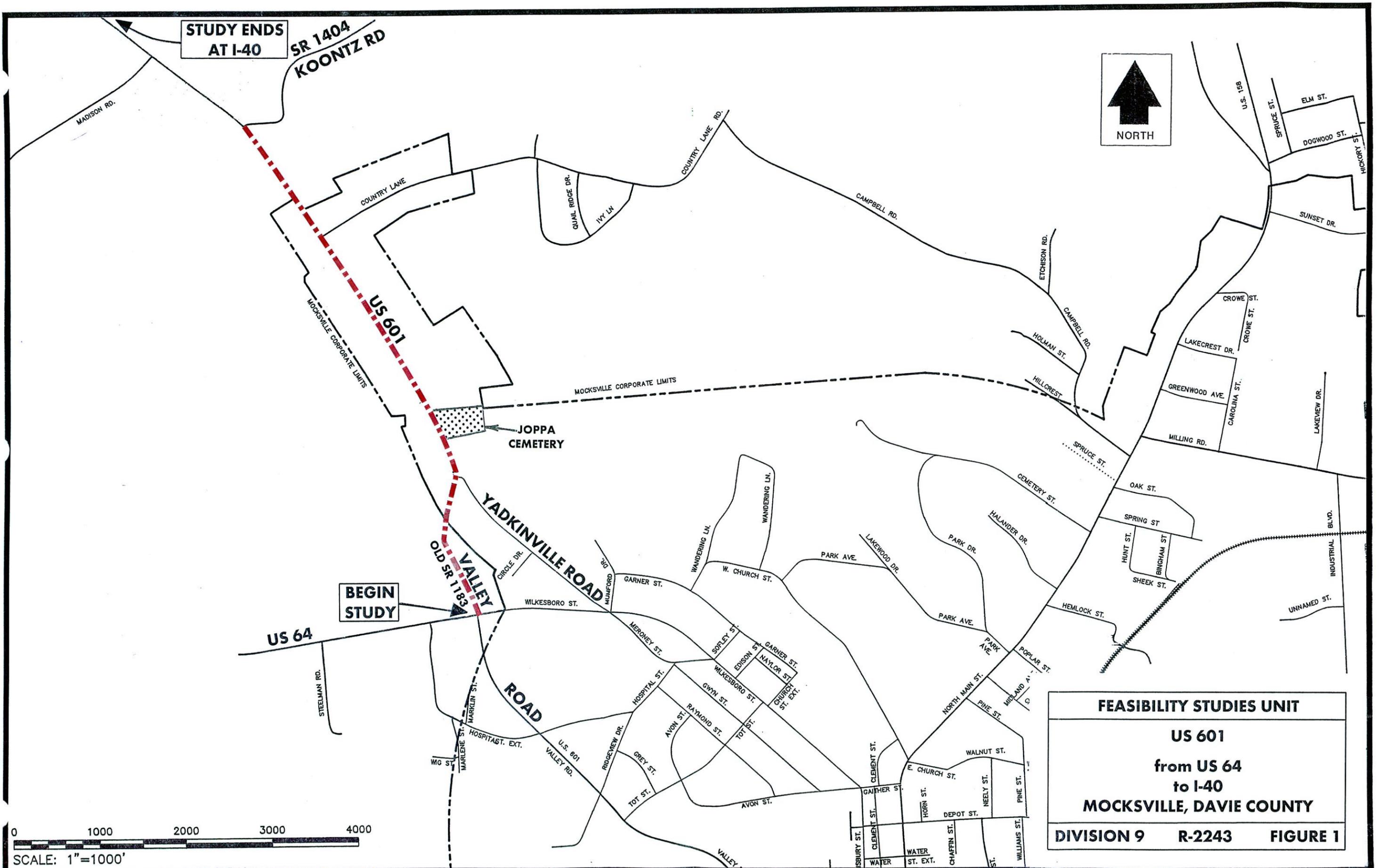
Right-of-Way	\$2,500,000
Construction	<u>1,800,000</u>
Total Cost	\$4,300,000

It is anticipated that no businesses, 1 residence, and 10 graves will be relocated as a result of this project.

V. Other Comments

The cemetery located along the eastern side of US 601 (Joppa Cemetery) is one of the oldest and most historic cemeteries in Davie County and is listed on the National Register of Historic Places. However, the cemetery as it presently exists, consists of two distinct parts (an old part and a new addition). The old, historic part of the cemetery is enclosed by the remains of a stone wall and lies behind the new addition. It is the opinion of the Preservation Specialist that the boundaries of the historic Joppa Cemetery are determined by the stone wall and that the new addition near US 601 is not included within the boundaries. Therefore, the historic Joppa Cemetery is outside of the area of potential effect of this project.

An environmental screening was not conducted for this study.



STUDY ENDS
AT I-40

SR 1404
KOONTZ RD



BEGIN
STUDY

FEASIBILITY STUDIES UNIT
US 601
from US 64
to I-40
MOCKSVILLE, DAVIE COUNTY
DIVISION 9 R-2243 FIGURE 1

0 1000 2000 3000 4000
SCALE: 1"=1000'