FEASIBILITY STUDY

Goldsboro
Royal Avenue (SR 1560)
From Wayne Memorial Drive (SR 1556)
To US 13
Wayne County
U-3427

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

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2/28/96
Date

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I. GENERAL DESCRIPTION

This preliminary study describes the proposed widening of Royal Avenue (SR 1560) from Wayne Memorial Drive (SR 1556) to US 13 in Goldsboro. The project location is shown on Figure 1. The proposed cross-section is a 4-lane, 48-foot (14.6-m) wide pavement, with curb and gutter on the north side only, for a length of approximately 2.7 miles (4.3 km). The required right-of-way width is 65 feet (19.8 m).

One business and 5 residential relocations are anticipated due to this project.

The total cost including construction and right-of-way is estimated to be $ 10,700,000.

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 needs, recommend a treatment including costs, and identify potential problem areas that require consideration in the planning and design phases.

II. NEED FOR PROJECT

The purpose of this project is to increase the capacity and improve the safety of Royal Avenue in Goldsboro. The project was requested by the City of Goldsboro.

Royal Avenue is classified as an Urban Collector in the North Carolina Statewide Functional Classification System, and is a Major Thoroughfare on the Goldsboro Thoroughfare Plan. Land use along the project corridor is a mixture of single family residential and commercial.

Royal Avenue is a two-way, two-lane road with grass shoulders. The single track of the Atlantic and East Carolina Railway is parallel to, and approximately 35 feet (10.7 m) south of, Royal Avenue. Royal Avenue is completely within the railroad right-of-way which extends 100 feet (30.5 m) on both sides of the track centerline.

The intersections with Wayne Memorial Drive, Jefferson Avenue, Spence Avenue, and Berkley Boulevard (US 13) are

controlled with traffic signals. Royal Avenue has been widened at these intersections to provide exclusive left-turn lanes.

Traffic volume estimates for Royal Avenue for the years 1996 and 2020 are 9,200 vehicles per day (vpd) and 20,000 vpd respectively. The Level of Service (LOS) without the proposed improvements is estimated to be LOS D in 1996 and LOS E in 2020. With the proposed improvements the LOS is estimated to be LOS C in 1996 and LOS C in 2020.

During the three year period beginning April 1, 1992, and ending March 31, 1995, there were 82 accidents reported on Royal Avenue within the project limits. This resulted in a total accident rate of 304 accidents per 100 million vehicle miles (ACC/100MVM), compared to the statewide average of 348 ACC/100MVM for all urban secondary routes, in North Carolina, for 1994.

There were no fatal accidents reported, however, 33 accidents resulted in 54 injured persons. The most prevalent type accidents were Rear End (52%), Angle (21%), Left-Turn (12%), and Ran Off Road (6%). The proposed wider cross-section will reduce the potential for these type accidents.

III. RECOMMENDATIONS

It is recommended to widen Royal Avenue (SR 1560) from Wayne Memorial Drive (SR 1556) to US 13 in Goldsboro. The project location is shown on Figure 1. The proposed cross-section is a 4-lane, 48-foot (14.6-m) wide pavement, with curb and gutter and an 8-foot (2.4-m) wide berm on the north side only, for a length of approximately 2.7 miles (4.3 km). The required right-of-way width is 65 feet (19.8 m).

The traffic signals at the intersections with Wayne Memorial Drive, Jefferson Avenue, Spence Avenue, and Berkley Boulevard (US 13) will require minor revisions.

One business and 5 residential relocations are anticipated due to this project. The total cost including construction and right-of-way is estimated to be $ 10,700,000 as follows:

Construction.....	$ 6,900,000
Right-of-Way.....	3,800,000
Total Cost.....	$10,700,000

IV. OTHER COMMENTS

An environmental screening was not conducted for this study. No historic properties or endangered species are anticipated; however, some wetlands will be involved in the vicinity of Stony Creek.

No special bicycle accommodation was identified for this project.

The cost of a sidewalk on the north side of Royal Avenue is estimated to be $ 250,000. This cost is not included in the above project cost. Cost participation by the City for new sidewalks will be based on current NCDOT policy.

During the course of this study, the City of Goldsboro and NCDOT's Statewide Planning Branch pointed out the need to address the off-set between Royal Avenue and Central Heights Road (SR 1709) where these roads intersect US 13 at the east terminal of the project. A possible improvement for this situation is to extend Royal Avenue east of US 13 on an alignment north of, and parallel to, the Atlantic and East Carolina Railway for a distance of approximately 0.3 mile (0.5 km), where it will intersect with Central Heights Road. This extension is shown on Figure 1.

The proposed cross-section for the Royal Avenue extension is a 2-lane rural shoulder section with a pavement 28 feet (8.5 m) wide including full depth paved shoulders 2 feet (0.6 m) wide, on right-of-way 100 feet (30.5 m) wide.

Three residential and no business relocations will be required. The cost for this extension is not included in the above project cost. The total cost including construction and right-of-way is estimated to be $ 1,200,000 as follows:

Construction.....	$ 600,000
Right-of-Way.....	600,000
Total Cost.....	$1,200,000

BEGIN STUDY

END STUDY

SR 1556 - WAYNE MEMORIAL DRIVE

SR 1560 - ROYAL AVENUE

JEFFERSON AVENUE

SPENCE AVENUE

SR 1579 - BERKLEY BOULEVARD

US 13

SR 1709

BYP 70

STONEY CREEK

ZEALY DITCH

CITY LIMIT

RURAL

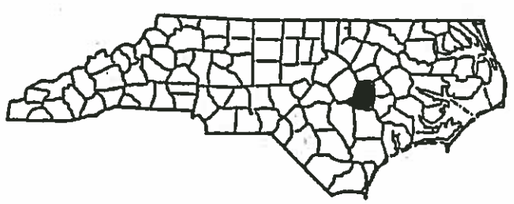
0 2000 4000

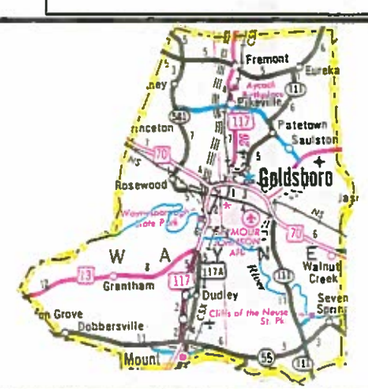
SCALE IN FEET

LEGEND

ROYAL AVENUE WIDENING

ROYAL AVENUE EXTENSION





FEASIBILITY STUDIES UNIT

FIGURE 1. PROJECT LOCATION
SR 1560 (Royal Avenue)
from SR 1556 (Wayne Memorial Drive)
to US 13
GOLDSBORO, WAYNE COUNTY

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