FEASIBILITY STUDY

Hampstead

Extension of SR 1643 & SR 1644 from NC 210 to SR 1569 Pender County

Division 3

R-3824

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

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Date

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I. General Description

This preliminary study describes the proposed widening of SR 1643 and the proposed widening and extension of SR 1644 from NC 210 to SR 1569 in Hampstead. The project alignment will follow SR 1643, SR 1644, Holiday Drive, and Godfrey Creek Road and will be built partly on new location as shown on Figure 1. The proposed cross-section is a 2-lane rural shoulder section with a 24-foot (7.3-m) wide pavement, and 8-foot (2.4- m) wide soil shoulders for the entire project length of 2.5 miles (4.0 km.).

The proposed improvements also include construction of a left-turn lane on SR 1643 at NC 210, the minor relocation of Godfrey Creek Road, and widening on SR 1569 at the north project terminus as described below. No widening is required on NC 210.

The proposed right-of-way width for the widening of SR 1643, SR 1644, and SR 1569 is 80 feet (24.4 m). The proposed right-of-way width for the remainder of the project corridor is 100 feet (30.5 m).

No residential or business relocations are anticipated due to this project. The total project cost including construction and right-of-way is estimated to be $ 3,900,000.

This study is the initial step in the planning and design process 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 may require consideration in the planning and design phases.

II. Need for the Project

This project was requested by the Pender County Board of Education and is supported by Cape Fear Community College. The purpose of this project is to provide a connection between NC 210 and SR 1569, thus improving traffic circulation in this area and improving access to a new elementary school on SR 1569.

Development near the west end of the project corridor is mostly single family residential. The remainder of the corridor is mostly undeveloped. SR 1643 and SR 1644 are both 2-lane rural shoulder sections with pavements 20 feet (6.1 m) wide and soil shoulders. The existing right-of-way along SR 1643 and SR 1644 appears to be approximately 60 feet (18.3 m) wide. Holiday Drive, north of SR 1644, and Godfrey Creek Road are non-system, 2-lane, soil roads that have been poorly maintained. A new elementary school is under construction on SR 1569 at the location shown on Figure 1.

The estimated traffic volume in the project corridor for the year 2025 is 2,900 vehicles per day. Based on this volume, the Level of Service (LOS) would be LOS B.

III. Recommendations

It is recommended to widen SR 1643 and widen and extend SR 1644 to SR 1569 in Hampstead. The project alignment will follow SR 1643, SR 1644, Holiday Drive, and Godfrey Creek Road and will be built partly on new location as shown on Figure 1. The proposed cross-section is a 2-lane rural shoulder section with a 24-foot (7.3-m) wide pavement, and 8-foot (2.4-m) wide soil shoulders for the entire project length of 2.5 miles (4.0 km.).

The proposed improvements also include an approximate 800-foot (244-m) long relocation of Godfrey Creek Road to effect a perpendicular intersection with the project roadway. At the south project terminus, SR 1643 would be widened for a length of approximately 600 feet (133 m) to provide a 400-foot (122-m) taper and a 200-foot (61-m) long, 12-foot (3.6-m) wide, left-turn lane onto NC 210. At the north project terminus, SR 1569 would be widened for a length of approximately 1,200 feet (366 m), in order to provide a 200-foot (61-m) long, 12-foot (3.6-m) wide northbound left-turn lane, with tapers both north and south of Godfrey Creek Road. No widening on NC 210 is required.

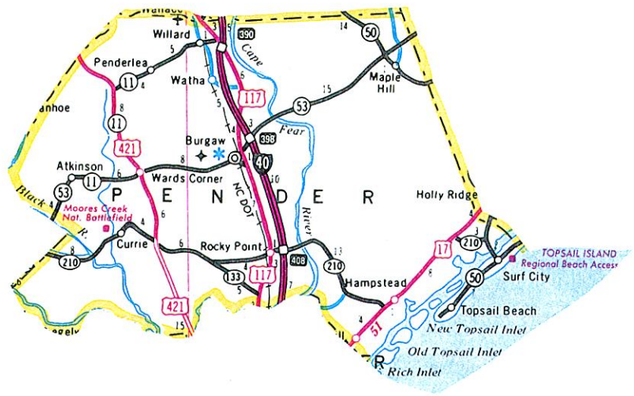
The proposed right-of-way width for the widening SR 1643, SR 1644, and SR 1569 is 80 feet (24.4 m). The proposed right-of-way width for the remainder of the project corridor is 100 feet (30.5 m).

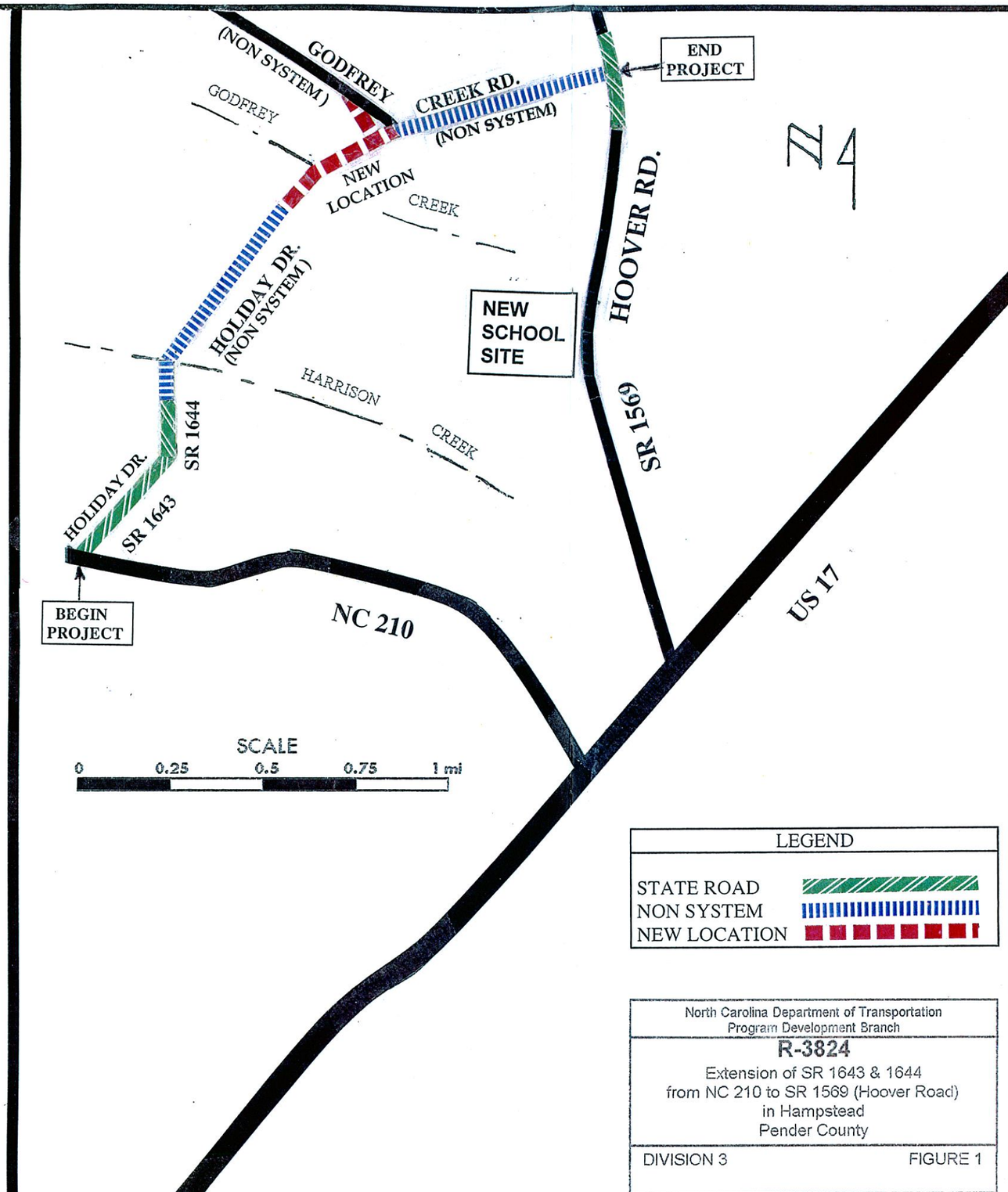
This project is expected to require no residential or business relocations. The total cost including construction and right-of-way is estimated to be $ 3,900,000 as follows:

Right-of-Way	.....	$ 600,000
Construction	.....	3,300,000
Total Cost	.....	$ 3,900,000

IV. Other Comments

An environmental screening was not conducted for this study. Approximately 6 acres of wetlands may be impacted at Harrison and Godfrey Creeks. The cost for wetland mitigation (@ $2,500 per acre) has been included in the above cost estimate. No threatened or endangered species or historic properties were identified in the project corridor.





North Carolina Department of Transportation
Program Development Branch

R-3824

Extension of SR 1643 & 1644
from NC 210 to SR 1569 (Hoover Road)
in Hampstead
Pender County

DIVISION 3 FIGURE 1