

**FEASIBILITY STUDY**

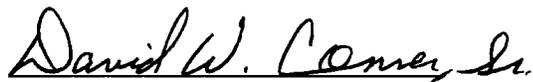
**Elizabeth City**

**New Route  
from Oak Stump Road (SR 1145)  
to Halstead Boulevard (SR 1152)  
Pasquotank County**

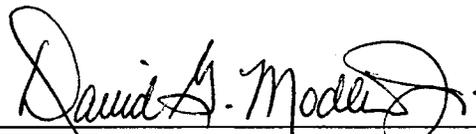
**Division 1**

**U-3805**

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



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U-3805

New Route  
from Oak Stump Road (SR 1145)  
to Halstead Boulevard (SR 1152)  
Elizabeth City, Pasquotank County

Division 1

### I. General Description

This report describes a studied new route from Oak Stump Road (SR 1145) to Halstead Boulevard (SR 1152), in Elizabeth City. The project location is shown on Figure 1.

The studied cross section is a 28-foot (8.5-m) wide (face-to-face), curb-and-gutter section with 10-foot (3.0-m) wide berms from Oak Stump Road to the southwest end of existing Rich Boulevard (a non system city street). The alignment would entail widening the westernmost 700 feet (213.4 m) of existing Ranch Drive (SR 1190) and with construction on new location from that point to Rich Boulevard.

The new route would be approximately 0.9 miles (1.4 km) long. The recommended right-of-way width is 100 feet (30.5 m).

It is anticipated that there would not be any residences or businesses relocated as a result of this project.

The total cost of the project, including construction and right-of-way, is estimated to be \$2,665,000 as follows:

Right-of-way	\$ 465,000
Construction	2,200,000
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Total	\$2,665,000

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 proposed project including costs, and to identify potential problems that may require consideration in the planning and design phases.

## II. Need for Project

The purpose of this project is to provide for direct access from Halstead Boulevard (SR 1152) to Oak Stump Road (SR 1145) and to provide a direct route from the eastern portion of Elizabeth City to Northeastern High School. This route should also alleviate some of the traffic contributing to the congestion of the US 17-Oak Stump Road intersection.

This project was requested by the City of Elizabeth City; however, it is not currently on the Elizabeth City Thoroughfare Plan.

Oak Stump Road is generally a 2-lane rural shoulder section with a 24-foot (7.3-m) wide pavement and soil shoulders, in a rural setting. Primary development along the roadway is residential with the exception of Northeastern High School which is located on the west side of the roadway at approximately 0.2 miles (0.3 km) south of US 17. The roadway has been widened, at the school, to 3 lanes, to facilitate ingress and egress. Access to the school is via the US 17 intersection.

Ranch Drive (SR 1190) is a 2-lane rural section with a 22-foot (6.7-m) wide pavement and soil shoulders. It extends eastward, from Oak Stump Road, for a distance of approximately 0.3 miles (0.5 km) and dead-ends. The roadway is developed residentially along its north side with no development on the south side.

Existing Rich Boulevard (a non-system city street) is a dead-end, 2-lane, 28-foot (8.5-m) wide (face-to-face) curb-and-gutter section. It is located approximately 0.6 miles (1.0 km) south of US 17 Business and currently extends approximately 0.1 miles (0.2 km) in a southwesterly direction from Halstead Boulevard. The roadway is heavily developed with automotive service type businesses.

Halstead Boulevard is a 5-lane, 64-foot (19.5-m) wide (face-to-face) curb-and-gutter section. It is quickly becoming heavily developed commercially on both sides. It serves as a major route into Elizabeth City from the south.

It is estimated that if the new route were constructed now, it would have traffic volumes of approximately 7,500 vehicles per day (vpd). It is further estimated that the design year (2020) traffic volumes would be approximately 5,300 vpd. The decrease in volumes is based on the assumption that the Selby Road Connector, which is included on the Elizabeth City Thoroughfare Plan, will be constructed within the design life of this project. The Selby Road Connector will be located approximately 0.9 miles (1.4 km) south of this project and will connect Oak Stump Road to Body Road (SR 1139).

Based on the above traffic volumes, it is estimated that this studied roadway would operate at a Level of Service D, or better, initially, and at Level C in the design year.

### III. Detailed Description of Project

This report describes a studied new route from Oak Stump Road (SR 1145) to Halstead Boulevard (SR 1152), in Elizabeth City. The project location is shown on Figure 1 and is described in detail as follows:

1. Widen existing Ranch Drive (SR 1190) from Oak Stump Road to approximately 700 feet (213.4 m) east of Oak Stump Road.
2. Construction on new location from Ranch Drive at approximately 700 feet (213.4 m) east of Oak Stump Road to existing Rich Boulevard (a non system city street).
3. Construct a 50-foot (15.2-m) radius cul-de-sac on Ranch Drive at approximately 800 feet (243.8 m) east of Oak Stump Road.
4. Construct a new connector with a 26-foot wide (7.9-m) pavement and 4-foot (1.2-m) wide soil shoulders, from existing Ranch Drive to the new roadway
5. Construct a new bridge over Knobbs Creek. The new bridge should be approximately 170 feet (51.8 m) long and should have a clear deck width of 30 feet (9.1 m).
6. Install new traffic signals at Oak Stump Road and at Halstead Boulevard.

The studied cross section is a 28-foot (8.5-m) wide (face-to-face), curb-and-gutter section with 10-foot (3.0-m) wide berms.

The new route would be approximately 0.9 miles (1.4 km) long. The recommended right-of-way width is 100 feet (30.5 m).

It is anticipated that there would not be any residences or businesses relocated as a result of this project.

The total cost of the project, including construction and right-of-way, is estimated to be \$2,665,000 as follows:

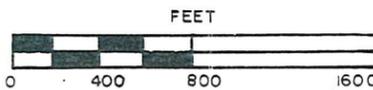
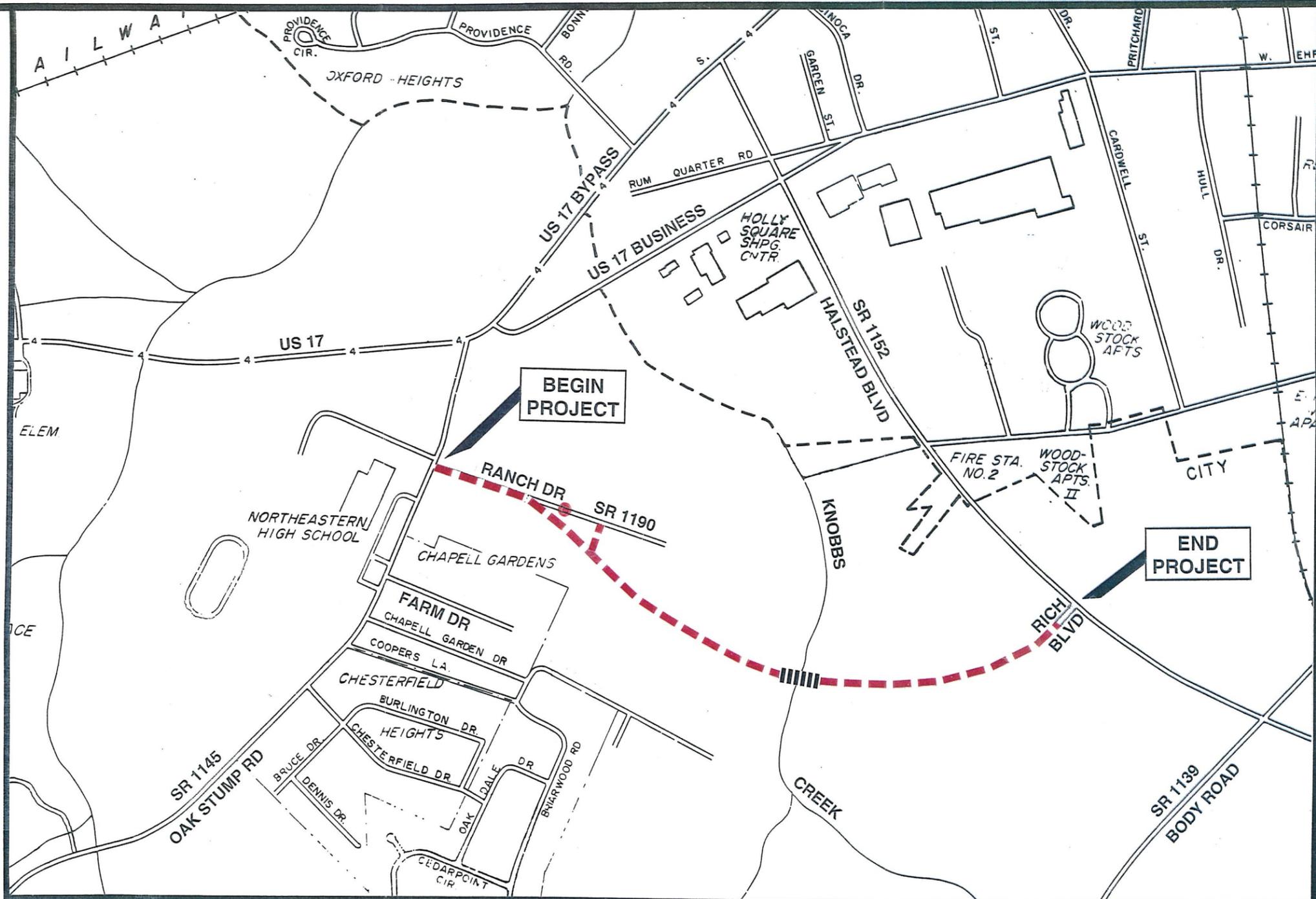
Right-of-way	\$ 465,000
Construction	2,200,000
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Total	\$2,665,000

#### **IV. Other Comments**

An environmental screening was not conducted for this study. However, it is anticipated that approximately 0.5 acres of wetlands would be affected by this project. A cost for wetlands mitigation is included in the estimated costs for this project.

Based on maps at the Department of Environment, Health & Natural Resources - Natural Heritage Section, no threatened or endangered species were identified in the project corridor.

The NCDOT Bicycle Program has not identified this segment of roadway as having a need for special accommodations for bicycles.



North Carolina Department of Transportation  
Program Development Branch

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to Halstead Boulevard

Elizabeth City, Pasquotank County

DIVISION 1 FIGURE 1