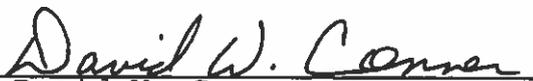


FEASIBILITY STUDY

Oxford  
SR 1602 (Henderson Street)  
From Existing Curb and Gutter  
to Halifax Street  
Granville County  
U-3323

Prepared by  
Program Development Branch  
Division of Highways  
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I. GENERAL DESCRIPTION

This preliminary study describes alternates for improvements to SR 1602 (Henderson Street) in Oxford. Please see Figure 1 for the project location. The alternates evaluated are as follows:

Alternate 1 - Alternate 1 is the widening of SR 1602 (Henderson Street), from approximately 350 feet (106.7 m) east of Kingsbury Street to Halifax Street. The total cost for Alternate 1, including right-of-way and construction, is estimated to be \$ 1,300,000.

Alternate 2 - Alternate 2 is the widening of SR 1602 (Henderson Street), from approximately 350 feet (106.7 m) east of Kingsbury Street to the Service Road (SR 1602) at I-85. The total cost for Alternate 2, including right-of-way and construction, is estimated to be \$ 2,000,000.

Alternate 3 - Alternate 3 is the widening of SR 1602 (Henderson Street), from Raleigh Street to the Service Road (SR 1602) at I-85. The total cost for Alternate 3, including right-of-way and construction, is estimated to be \$ 2,900,000.

None of the three studied alternates will appreciably improve the Level of Service and each will require from 6 to 9 residential relocations.

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 the study is to describe the problem, recommend a treatment including costs, and identify potential problem areas that deserve consideration in the planning and design phases.

II. EXISTING CONDITIONS

The purpose of this project is to improve the traffic carrying capacity on Henderson Street.

Henderson Street is designated a minor thoroughfare on the Oxford Thoroughfare Plan. It is classified as an Urban Collector in the North Carolina Statewide Functional Classification System.

Development on Henderson Street, from Raleigh Street to Halifax Street, is heavy residential development. From Halifax Street to I-85 the area is undeveloped woodlands, with the exception of one residence located in the southeast corner of the intersection of Henderson Street and Halifax Street.

Existing Henderson Street, from Raleigh Street to approximately 350 feet (106.7 m) east of Kingsbury Street, is a two-lane, 24-foot (7.3-m) wide (face-to-face) curb and gutter section with sidewalks on both sides of the roadway. From approximately 350 feet (106.7 m) east of Kingsbury Street to I-85, the existing cross section is a two-lane shoulder section approximately 20 feet (6.1 m) wide from edge-of-pavement to edge-of-pavement, with 4-foot (1.2-m) wide soil shoulders. The existing right-of-way width is thought to be 60 feet (18.3 m).

The Average Daily Traffic (ADT) on Henderson Street within the project terminals is 1,750 vehicles per day (vpd) in 1994. The design year (2015) volume is projected to be 2,740 vpd.

The Level Of Service (LOS) within the project terminals is estimated to currently be at a level B. With the studied improvements, the LOS is expected to remain at a level B through the design year. Without the studied improvements, the LOS is expected to reach a level C by the design year (2015).

During the period from April 1, 1991, through March 31, 1994, there were only 2 accidents reported on Henderson Street with no injuries.

### III. STUDIED ALTERNATES

Alternate 1 - Alternate 1 is the widening of SR 1602 (Henderson Street), from approximately 350 feet (106.7 m) east of Kingsbury Street to Halifax Street. The studied cross section is a 3-lane, curb and gutter section, 40 feet (12.2 m) wide from face-to-face of curbs with 8-foot (2.4-m) wide berms and includes 1 travel lane in each direction and a center turn lane. This alternate would be constructed on 70 feet (21.3 m) of right-of-way. It is anticipated that there will be 6 residential relocations and no business relocations as a result of this alternate. The estimated cost of this alternate including right-of-way and construction is \$ 1,300,000 as follows:

Construction Cost	\$ 400,000
Right-of-Way Cost	900,000
Total Cost	\$ 1,300,000

Alternate 2 - Alternate 2 is the widening of SR 1602 (Henderson Street), from approximately 350 feet (106.7 m) east of Kingsbury Street to the Service Road (SR 1602) at I-85. The studied cross section is a 3-lane, curb and gutter section, 40 feet (12.2 m) wide from face-to-face of curbs with 8-foot (2.4-m) wide berms and includes 1 travel lane in each direction and a center turn lane. This alternate would be constructed on 70 feet (21.3 m) of right-of-way from Kingsbury Street to Halifax Street and a 100-foot (30.5-m) wide right-of-way from Halifax Street to the Service Road. It is anticipated that there will be 7 residential relocations and no business relocations as a result of this alternate. The estimated cost of this alternate including right-of-way and construction is \$ 2,000,000 as follows:

Construction Cost	\$ 900,000
Right-of-Way Cost	1,100,000
Total Cost	\$ 2,000,000

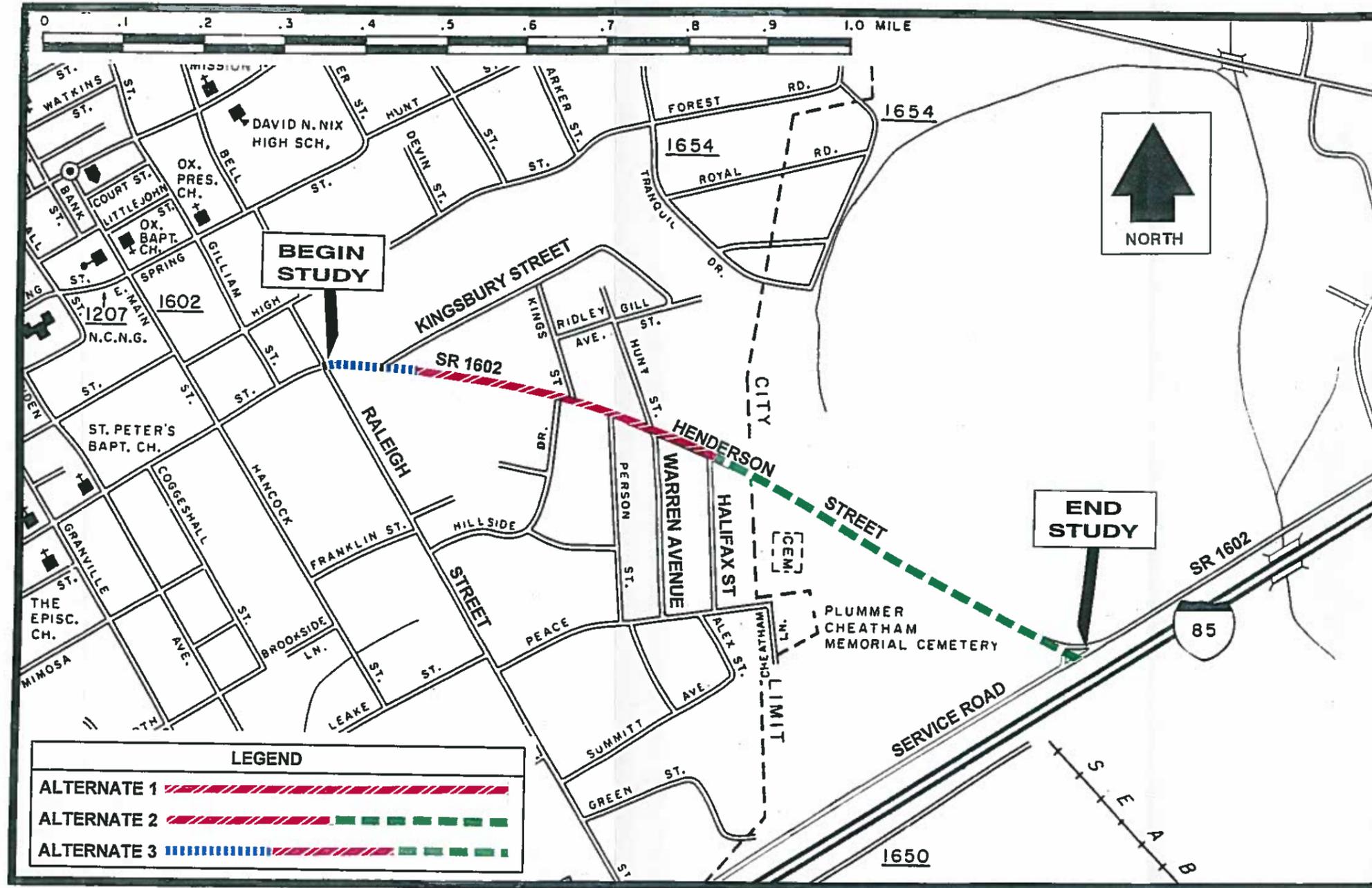
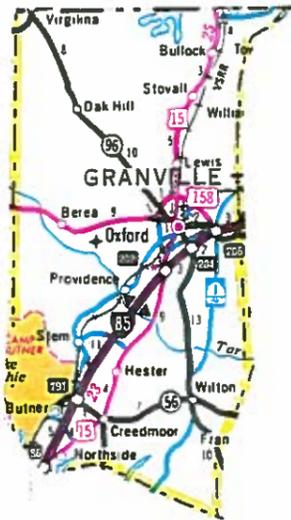
Alternate 3 - Alternate 3 is the widening of SR 1602 (Henderson Street), from Raleigh Street to the Service Road (SR 1602) at I-85. The studied cross section is a 3-lane, curb and gutter section, 40 feet (12.2 m) wide from face-to-face of curbs with 8-foot (2.4-m) wide berms and includes 1 travel lane in each direction and a center turn lane. This alternate would be constructed on 70 feet (21.3 m) of right-of-way from Raleigh Street to Halifax Street and a 100-foot (30.5-m) wide right-of-way from Halifax Street to the Service Road. It is anticipated that there will be 9 residential relocations and no business relocations as a result of this alternate. The estimated cost of this alternate including right-of-way and construction is \$ 2,900,000 as follows:

Construction Cost	\$ 1,000,000
Right-of-Way Cost	1,900,000
Total Cost	\$ 2,900,000

#### IV. OTHER COMMENTS

An environmental screening was not done for this study; however, no wetlands or historical properties are anticipated to be found within the study terminals.

No special accommodations for bicycles are recommended on this project.



**FEASIBILITY STUDIES UNIT**

**U-3323**

**OXFORD**

**SR 1602 (HENDERSON STREET)**

**FROM RALEIGH STREET**

**TO SERVICE ROAD AT I-85**

**GRANVILLE COUNTY**

**DIVISION 5** **FIGURE 1**