

FEASIBILITY STUDY

Roanoke Rapids & Weldon

New Service Road Parallel to I-95
from NC 125 to US 158

Halifax County

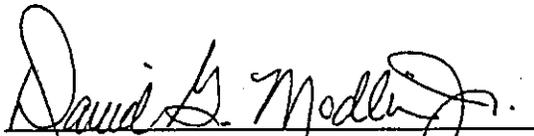
Division 4

R-3822

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I. General Description

This preliminary study describes a new service road parallel to I-95 in Halifax County. The project location is shown on Figure 1. The studied cross-section is a 2-lane shoulder section with a 28-foot (8.5-m) wide pavement including 2-foot (0.6-m) wide full-depth paved shoulders. The recommended right-of-way width for this section is 100 feet (30.5 m). Locations both east and west of I-95 were studied. Alternate No. 1, east of I-95, begins at SR 1698/SR 1692 and ends with a T-intersection at Country Club Road (SR 1641). The total length of Alternate No. 1 is approximately 1.9 miles (3.1 km). Alternate No. 2, west of I-95, begins at the intersection of NC 125 and SR 1627 and ends with a signalized T-intersection at US 158. The total length of Alternate No. 2 is approximately 2.2 miles (3.5 km). The location of the studied corridors is shown on Figure 1.

Alternate No. 1 is estimated to require no residential or business relocations. For Alternate No. 1, the total project cost including construction and right-of-way is estimated to be \$3,500,000 as follows:

Right-of-Way	\$ 650,000
Construction	<u>2,850,000</u>
Total	\$ 3,500,000

Alternate No. 2 is estimated to require 1 residential and 2 business relocations. For Alternate No. 2, the total project cost including construction and right-of-way is estimated to be \$7,400,000 as follows:

Right-of-Way	\$ 4,100,000
Construction	<u>3,300,000</u>
Total	\$ 7,400,000

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, and identify potential problem areas that may require consideration in the planning and design phases.

II. Need for the Project

The purpose of this project is to encourage industrial and commercial development within the vicinity of the project corridor. The project was requested by the City of Roanoke Rapids and the Town of Weldon. The studied corridor is not on the Roanoke Rapids Thoroughfare Plan.

Land in the project corridor, both east and west of I-95, is mostly undeveloped. US 158 at the I-95 interchange is heavily developed with commercial properties. NC 125 at the I-95 interchange is relatively undeveloped. A commercial development is now under construction in the northwest quadrant.

The proposed US 158 Bypass (TIP #R-2581) is shown on Figure 1 and will require an interchange with I-95 approximately 1 mile (1.6 km) south of existing US 158.

Traffic volume estimates for Alternate No. 1, for the years 1997 and 2025 are 3,800 vehicles per day (vpd) and 5,400 vpd respectively. The Level of Service is estimated to be LOS B in 1997 and LOS C in 2025.

Traffic volume estimates for Alternate No. 2, for the years 1997 and 2025 are 5,000 vehicles per day (vpd) and 7,000 vpd respectively. The Level of Service is estimated to be LOS C in 1997 and LOS C in 2025.

III. Discussion of Alternatives

This project was requested by the City of Roanoke Rapids and the Town of Weldon. The Town of Weldon supports Alternate No. 1, the east-side location, and the City of Roanoke Rapids supports Alternate No. 2, the west-side location.

Either alternative would require a reinforced concrete box culvert at Chockoyotte Creek, and either alternative would impact approximately 3 acres of wetland at Chockoyotte Creek.

The estimated construction cost of Alternate No. 1 is \$450,000 less than the estimated construction cost for Alternate No. 2. The difference in construction cost is directly related to the difference in length of the alternatives.

The estimated right-of-way cost of Alternate No. 1 is \$3,450,000 less than the estimated right-of-way cost for Alternate No. 2. This is due to the more expensive property required at both project termini for Alternate 2. At the south

terminus of Alternate No. 2, there is a 0.3 mile segment that passes through a proposed commercial development. This segment is estimated to cost \$750,000. If this right-of-way is donated by the developer the total right-of-way cost for Alternate No. 2 will be reduced accordingly. At the north terminus of Alternate No. 2, there is a 0.4 mile segment estimated to cost \$2,500,000. In this segment there are one residential and two commercial relocations. During the course of this study consideration was given to tying the new service road into the existing service road which serves a motel. This existing service road ties into the southbound on-ramp from US 158 to I-95. Due to the estimated design year traffic volume of 7,000 vehicles per day on the Alternate No. 2 service road, it is not recommended to tie into the on-ramp.

There were no historic properties identified in the corridor for Alternate No. 1. Near the north terminus for Alternate No. 2, there is a residential property that is considered eligible for the National Register of Historic Places. The alignment for Alternate No. 2 avoids this property. Also, immediately south of the south terminus for Alternate No. 2, the Garner Farm is on the National Register of Historic Places.

IV. Other Comments

An environmental screening was not conducted for this study. Some wetlands will be involved as noted above. No endangered species or recreational lands were identified in the project corridor.

