

FEASIBILITY STUDY

Asheville

**NC 191 (Brevard Rd.)
from Interstate 26 to Interstate 40
Buncombe County**

Division 13

U-3601



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

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Eric J. Lamb
Feasibility Studies Engineer

A handwritten signature in black ink, appearing to read "David G. Modlin, Jr.". The signature is written in a cursive style and is positioned above a horizontal line.

David G. Modlin, Jr., Ph.D., P.E.
Head of Feasibility Studies

3/7/97
Date

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NC 191 (Brevard Rd.)
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I. General Description

This feasibility study describes widening NC 191 (Brevard Rd.) from Interstate 26 to Interstate 40, a distance of 1.8 miles (2.9 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane curb and gutter section, 68 feet (20.7 m) wide from face-to-face of curbs with 10-foot (3.0-m) berms on 100 feet (30.5 m) of right-of-way with no access control. It is anticipated that there will be no residences and one businesses relocated due to this project. The total cost of the project, including construction and right-of-way, is estimated to be \$5,900,000.

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 reduce congestion within the project limits. This project is supported by the City of Asheville, the Western NC Corridor Association, the Land-of-Sky Regional Council, the Office of the NC Commissioner of Agriculture, the Western North Carolina (WNC) Farmers Market, and the Buncombe County Farm Bureau.

NC 191 is designated as a major thoroughfare in the Asheville Urban Area Thoroughfare Plan and as a minor urban arterial in the North Carolina Statewide Functional Classification System.

Development along the project is a mix of single-family residential property and commercial sites. The Biltmore Estate borders this project on the south side of the roadway from I-26 to the Inanda Baptist Church and is currently undeveloped. There is also a US Postal Service Distribution Center located across from Inanda Baptist Church.

NC 191 is currently a two-lane roadway with a pavement width between 20 feet (6.1 m) and 28 feet (8.5 m) with soil shoulders. South of I-26, NC 191

varies between a four-lane divided facility with a raised concrete median and a five-lane curb and gutter facility. In the vicinity of the WNC Farmers Market and I-40, NC 191 is a five and six-lane shoulder facility.

There are existing signals at the intersections with the I-26 ramps, SR 3431 (Pond Rd.), SR 3600 (WNC Farmers Market Entrance) and both I-40 ramps.

North of the I-40 interchange, TIP Project U-2902 will realign NC 191 on new location to tie into I-240. This project is scheduled for right-of-way acquisition in February 1997 and for construction in October 1998.

This section of NC 191 within the project limits is listed in the Incidental Bicycle and Pedestrian Needs section of the TIP. Construction within the project limits will require wide outside lanes for bicycle accommodations.

The 1996 Average Daily Traffic (ADT) along NC 191 is 12,900 vehicles per day (vpd). For the design year 2020, the estimated traffic volumes on NC 191 will range between 22,200 and 26,200 vpd. Truck traffic is estimated to make up three percent of daily traffic.

Currently NC 191 is operating at Level of Service (LOS) D. If no improvements are made, it is projected that the roadway will operate at LOS F in the design year 2020. If NC 191 is widened to a five-lane curb and gutter section, the facility will operate at LOS B in the current year and at LOS C in the design year 2020.

During the three-year period from March 1993 to February 1996, there were 114 accidents reported on NC 191 within the project limits. There were 89 injuries reported as a result of these accidents, including no fatalities. The accident rate along NC 191 within the project limits is 435.28 accidents per 100 million vehicle miles (acc/100mvm). This compares with the 1994 statewide rate of 282.10 acc/100mvm for two-lane urban NC routes.

III. Recommendations

It is recommended to widen NC 191 (Brevard Rd.) from Interstate 26 to Interstate 40, a distance of 1.8 miles (2.9 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane curb and gutter section, 68 feet (20.7 m) wide from face-to-face of curbs with 10-foot (3.0-m) berms on 100 feet (30.5 m) of right-of-way with no access control. No new right-of-way is anticipated from the Biltmore Estate property, a National Register site.

It is recommended to construct an additional turn lane on the westbound off-ramp from I-40 and on SR 3431 (Pond Rd.) (see Figure 1). It is also

recommended to upgrade the existing traffic signals at SR 3431, SR 3600 (WNC Farmers Market Entrance) and at the eastbound ramp from I-40.

It is anticipated that no residences and one businesses will be relocated due to the project. The total cost of the project is as follows:

Construction.....	\$ 4,400,000
Right-of-way.....	\$ 1,500,000
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Total Cost	\$ 5,900,000

IV. Alternates

The cost of constructing this project as a four-lane divided curb and gutter section with a raised median was also investigated. This would involve 12-foot (3.7-m) inside lanes and 14-foot (4.3-m) outside lanes with a 16-foot (4.9-m) raised concrete or landscaped median. The total cost of this option is as follows:

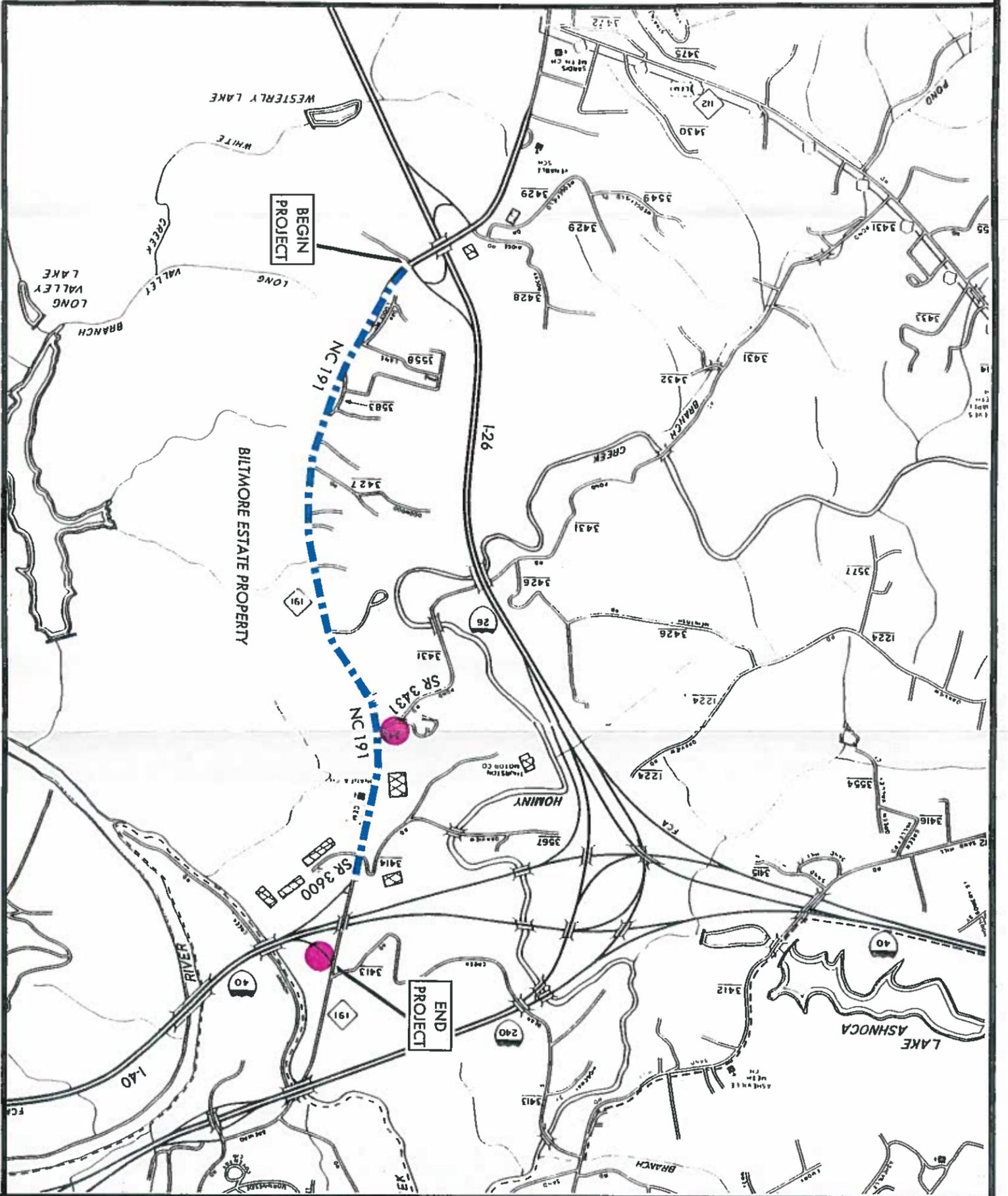
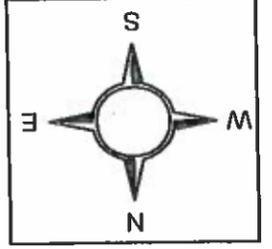
Construction.....	\$ 5,700,000
Right-of-way.....	\$ 1,500,000
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Total Cost	\$ 7,200,000

V. Other Comments

Improvements to the existing retaining wall at the cemetery of Inanda Baptist Church will be required as a part of this project. The cost of these improvements is included in the estimates above.

An environmental screening was not conducted for this study. However, no impacts to historic properties or wetlands are anticipated.

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.



LEGEND	
	PROPOSED FIVE-LANE SECTION
	PROPOSED ADDITIONAL TURN LANE

NC DEPARTMENT OF TRANSPORTATION
FEASIBILITY STUDIES UNIT

U-3601
NC 191 (BREVARD RD.)
FROM I-26 TO I-40
ASHEVILLE

DIVISION 13 | **BUNCOMBE COUNTY** | **FIGURE 1**