

FEASIBILITY STUDY

**Plaza Boulevard Extension
from NC 58 (Queen Street)
to NC 11 (Greenville Highway) in Kinston**

Lenoir County

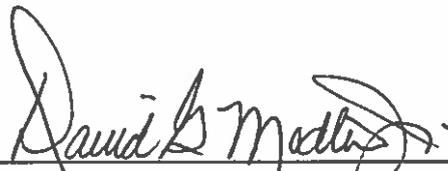
Division 2

FS-9902B

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



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Date

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I. GENERAL DESCRIPTION

This feasibility study evaluates the extension of Plaza Boulevard from NC 58 (Queen Street) to NC 11 (Greenville Highway) in Kinston, Lenoir County (See Figure 1). The project is approximately 1.3 miles (2.1 km) in length.

The studied typical section is a 5-lane, 64-foot (19.5 m) face-to-face, curb and gutter section with 10-foot (3.0 m) wide berms. A 100-foot (30.5 m) wide right-of-way with no control of access is recommended.

Two alternates were evaluated in this study. Alternate 1 extends Plaza Boulevard at NC 58 to NC 11 at SR 1811, utilizing Lee Street and Joyner Drive (See Figure 1). In Alternate 2, the project begins at Plaza Boulevard just west of Boy Scout Boulevard and extends across NC 58, utilizing Pierce Road and Joyner Drive (See Figure 1). Alternate 2 is preferred by the City of Kinston.

The project corridor lies within an area that is partly residential and partly wooded land. It is anticipated that Alternate 1 would require the relocation of 11 residences and 1 business, and Alternate 2 would require the relocation of 13 residences and 2 businesses.

The estimated project costs for the studied alternates are as follows:

	Alternate 1	Alternate 2
Right-of-Way	\$ 2,800,000	\$ 3,200,000
Construction	\$ 7,200,000	\$ 8,400,000
Total	\$10,000,000	\$11,600,000

This study is not a detailed planning/environmental investigation. A feasibility study presents studied cross-sections for improvements, general corridors of improvements, and estimated costs of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or other observed issues that deserve consideration in the planning and construction stages.

II. NEED FOR PROJECT

This project was requested by the City of Kinston and Lenoir County. It is Lenoir County's fifth highest priority project. This project would provide an east-west link across the northern part of Kinston.

Plaza Boulevard Extension is classified as a major thoroughfare on the Kinston Thoroughfare Plan.

The project corridor lies within an area that is partly residential and partly wooded land.

Estimated traffic volume on the proposed Plaza Boulevard Extension in the design year 2020 is approximately 14,300 vehicles per day (vpd). A short section between NC 58 and SR 1746 is projected to have 19,750 vpd. In the design year 2020, the traffic volumes along Plaza Boulevard Extension are anticipated to operate at a level of service (LOS) A.

The CSX Railroad has one (1) track crossing the project corridor. The track carries 4 trains per day at an average speed of 10 mph (16 kmh). The exposure index, a product of the design year traffic and the number of trains per day at this location is 57,200. This index which is above the threshold of 30,000 that warrants a grade separation in an urban area.

III. STUDIED IMPROVEMENTS

It is proposed to extend Plaza Boulevard from NC 58 (Queen Street) to NC 11 (Greenville Highway) in Kinston, Lenoir County (See Figure 1). The studied typical section is a 5-lane, 64-foot (19.5- m) wide face-to-face, curb and gutter section with 10-foot (3.0 m) wide berms. A 100-foot (30.5 m) wide right-of-way with no control of access is recommended.

Two alternates were evaluated in this study. The alternates have a common alignment from Joyner Drive to NC 11. They differ mainly in the location of the western project terminus.

In Alternate 1, the project would begin at NC 58 and utilize existing Lee Street (See Figure 1). Alternate 1 is approximately 1.3 miles (2.1 km) in length. It is anticipated that Alternate 1 would require the relocation of 11 residences and 1 business.

Alternate 2 would begin at Plaza Boulevard just west of Boy Scout Boulevard and extend across NC 58, utilizing existing Pierce Road (See Figure 1). Alternate 2 is approximately 1.6 miles (2.6 km) in length. It is anticipated that Alternate 2 would require the relocation of 13 residences and 2 businesses.

Existing Lee Street, Pierce Road and Joyner Drive are 2-lane roadways. Pierce Road and Joyner Drive are curb and gutter sections with sidewalks on both sides. Widening may be symmetrical and asymmetrical to the existing roadway to minimize right-of-way and construction costs.

A grade separation is recommended at the CSX railroad crossing. The proposed bridge over the railroad track would have a clear roadway width of 64 feet (19.5m) with a 5-foot (1.5-m) sidewalk on one side.

It is recommended to realign the approach of SR 1811 to improve its intersection with NC 11 as shown in Figure 1.

The estimated project costs for the studied alternates are as follows:

	Alternate 1	Alternate 2
Right-of-Way	\$ 2,800,000	\$ 3,200,000
Construction	\$ 7,200,000	\$ 8,400,000
Total	\$10,000,000	\$11,600,000

A transportation benefit analysis was also completed for this project. For the period between 1999 and design year 2020, it is estimated that the total transportation benefits for the project are \$40,060,000 with an average of \$1,900,000 per year. The total benefits include accident cost savings, time cost savings, and operating cost savings.

IV. OTHER COMMENTS AND CONCERNS

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

No historical or architecturally significant sites have been identified in the project corridor.

No recommendation for bicycle accommodations was received from the NCDOT Office of Bicycle and Pedestrian Transportation.

SEGMENT 1: ALTERNATE B



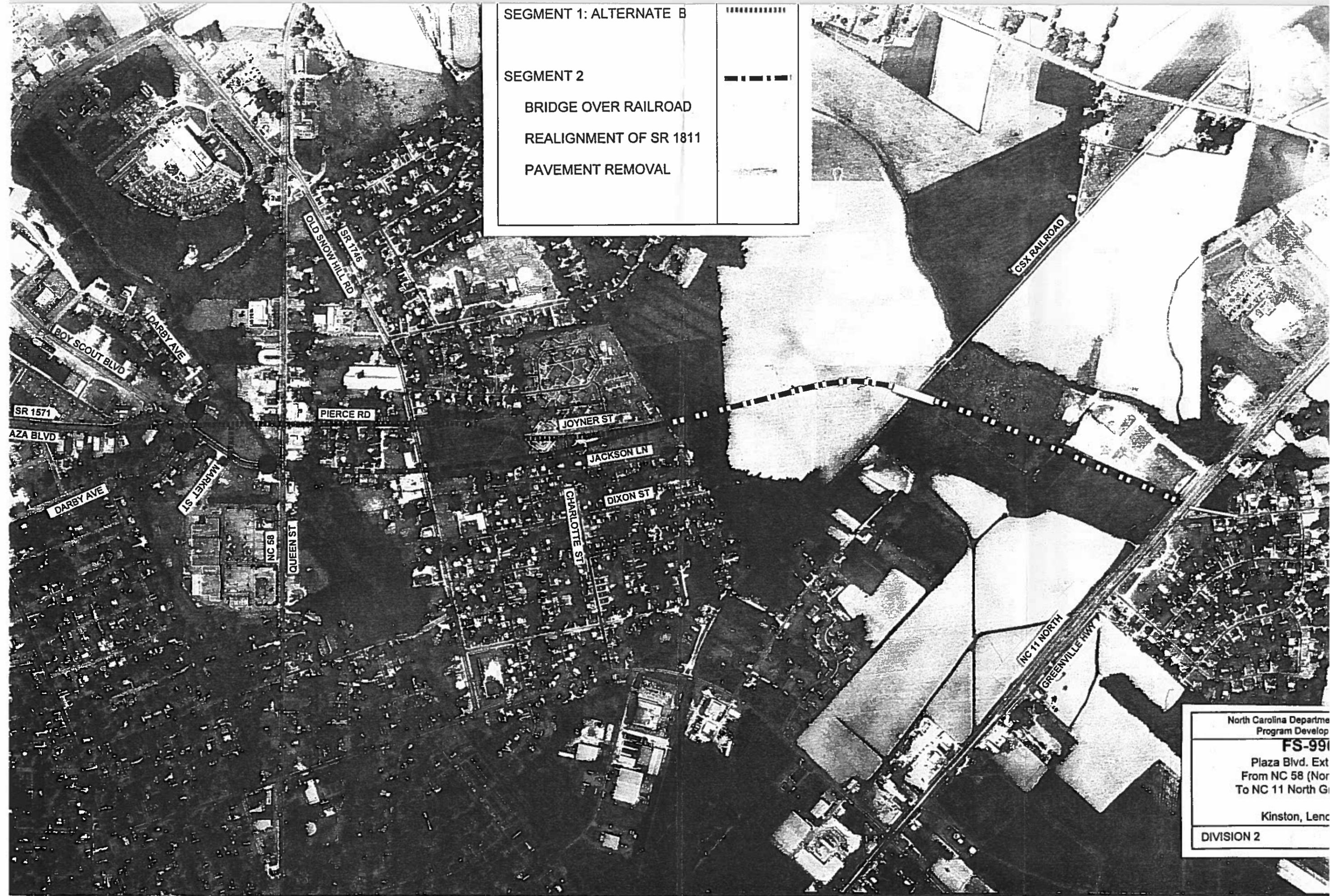
SEGMENT 2



BRIDGE OVER RAILROAD

REALIGNMENT OF SR 1811

PAVEMENT REMOVAL



North Carolina Department of Transportation
Program Development

FS-991

Plaza Blvd. Ext.
From NC 58 (North)
To NC 11 North (South)

Kinston, Lenoir County

DIVISION 2