FEASIBILITY STUDY

US 268 Bypass
Pilot Mountain
From South Key Street to Old US 52
Surry County, R-2640

Prepared by
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I. GENERAL DESCRIPTION

This report covers a preliminary study of the proposed US 268 Bypass of Pilot Mountain. The project extends from South Key Street to Old US 52 and is approximately 1.5 miles in length (see Figures 1 & 2). It is included in the 1990- 1996 Transportation Improvement Program for feasibility study and/or right-of-way protection. It is not currently funded for design, right-of-way acquisition, or construction.

II. PURPOSE OF PROJECT

Existing Route Characteristics

NC 268 is a major east-west route through central Surry County, and it provides a connector between US 52 and the downtown Pilot Mountain area. The existing cross section varies from an 18-foot shoulder section to a 44-foot curb and gutter section. It is classified a major thoroughfare on the Pilot Mountain Thoroughfare Plan which was adopted in February 1984. The proposed bypass is also included in the thoroughfare plan as a major thoroughfare.

The dual function of existing NC 268, providing local access as well as a route through town, results in conflicts between these two diverse uses. The routing of trucks through town is also a concern to local citizens. The provision of a bypass will eliminate the need for trucks to travel through town on existing NC 268, and provide better separation between local and through traffic.

Traffic Volumes, Capacity, and Accident Record

The current traffic volumes range from a low of 3800 vehicles per day (vpd) near SR 1837 to 8,000 vpd near the US 52 interchange. Approximately 2% of this volume is made up of truck tractors with semi-trailers and 5% is dual tired vehicles. The projected traffic volumes on the proposed bypass is 4,000 vpd in 2010. With the current traffic volumes, NC 268 is operating at an acceptable level of service. However; without improvements to the highway, the level of traffic service will soon deteriorate to an unacceptable level as traffic volumes continue to grow. With the proposed bypass, the traffic will be divided so that both the bypass and the existing road should operate at Level of Service C or better throughout the planning period.

During the period from November 1, 1986 through October 31, 1989, a total of 73 accidents were reported on existing NC 268, including 2 fatal accidents and 21 injury accidents. This resulted in an accident rate of 479.0 accidents per 100 million vehicle miles (acc/100mvm), compared to a statewide average of 378.4 acc/100mvm for all urban NC routes over a similar period. The most common accident types were rear-end collisions and accidents involving left turns. The proposed bypass should reduce the

potential for these types of accidents by separating the through traffic from traffic desiring to turn into one of the local businesses. The addition of a center left-turn lane between the proposed bypass and US 52 should also reduce the potential for these types of accidents by providing turning vehicles an area to wait until traffic clears, outside of the through travel lanes.

Need for Project

The NC 268 Bypass of Pilot Mountain is needed to provide a route for through cars and trucks around town, and to relieve the growing problem of congestion on the existing route. The project will also enhance safety for motorists in Pilot Mountain.

III. RECOMMENDATIONS AND COSTS

It is recommended a NC 268 bypass of Pilot Mountain be provided along the alignment shown in Figure 2. The proposed improvement should be a two-lane roadway with sufficient right-of-way to accommodate a multi-lane facility in the future. The recommended cross section initially is a 24-foot paved roadway with 2-foot paved shoulders and total usable 10-foot shoulders. A 100-foot right-of-way is anticipated for the proposed roadway. In order to protect the bypass from deterioration caused by strip commercial development, partial access control, with access only at intersections, is recommended. In addition, it is recommended the existing portion of NC 268 between US 52 and the beginning of the bypass be widened to three lanes. This will provide the much needed increase in capacity on this heavily developed portion of NC 268 and enhance safety for the large number of turning vehicles. It is anticipated a signal will be needed at the junction the proposed bypass and existing NC 268 at the western end of the project. At the grade crossing of the Southern Railway tracks, flashing signals and gates are recommended. A projected traffic volume of 4,000 vpd combined with 2 trains per day results in an exposure index of 8,000, which is well below the criteria of 30,000 utilized for consideration of railroad separations in urban areas.

The estimated costs of this project are as follows:

Construction	$ 2,600,000
Right-of-Way	1,100,000
TOTAL	$ 3,700,000

The construction cost includes engineering and contingencies and the right-of-way cost includes relocation, acquisition, and utility costs.

IV. ENVIRONMENTAL EFFECTS

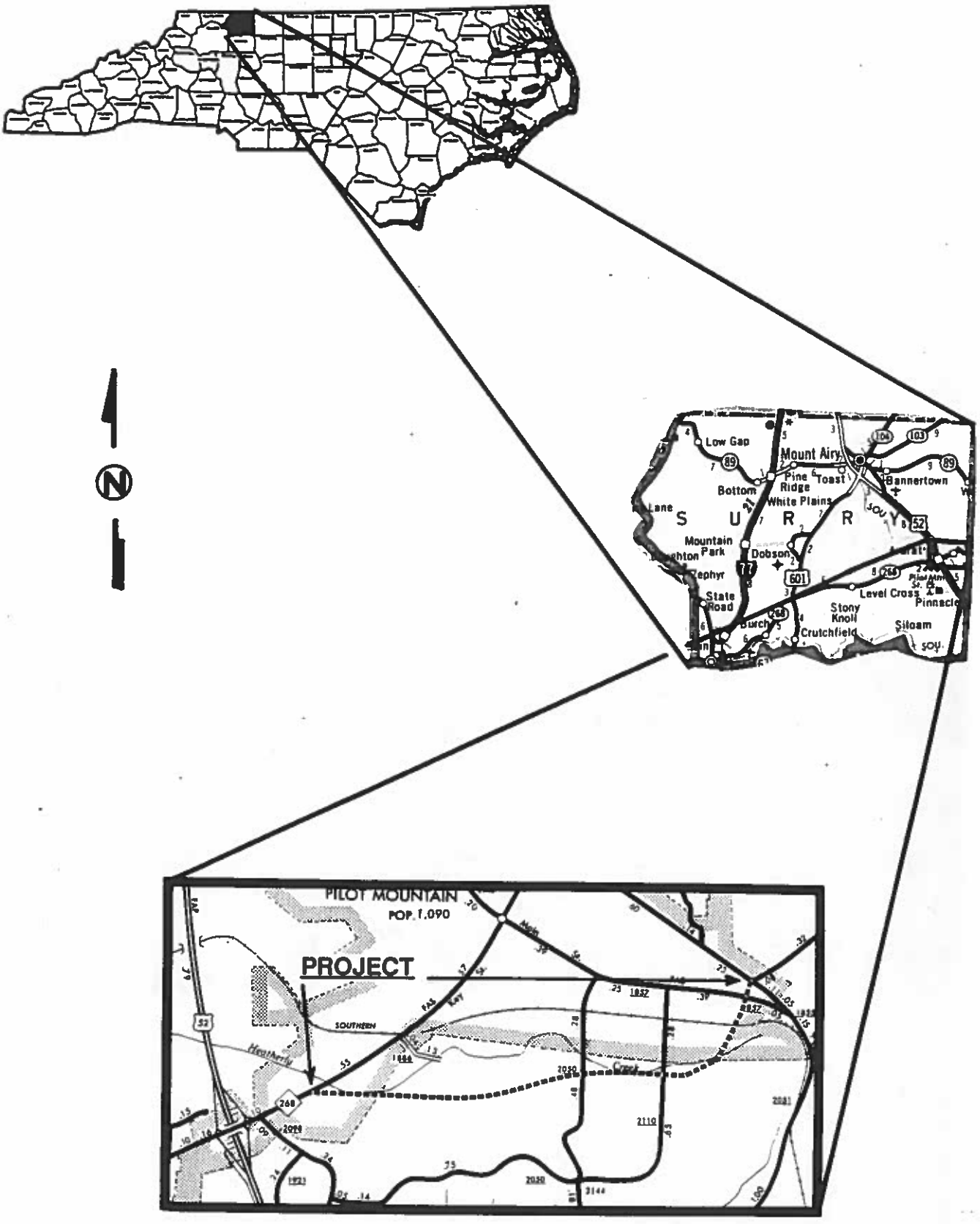
The implementation of the proposed project is not expected to result in any significant impact on the environment. The project will require the relocation of an estimated 5 residences. The project will also result in increased noise levels for development near the proposed roadway.

Other impacts will be primarily related to the actual construction of the proposed roadway. These include minor erosion and siltation and increased noise levels from construction machinery.

V. FUTURE ACTIVITIES

If the project is to be implemented at a future date, all feasible alternatives and their associated impacts will need to be evaluated in a planning/environmental document prior to that time, and a decision made as to the most appropriate improvement.

RBD/plr

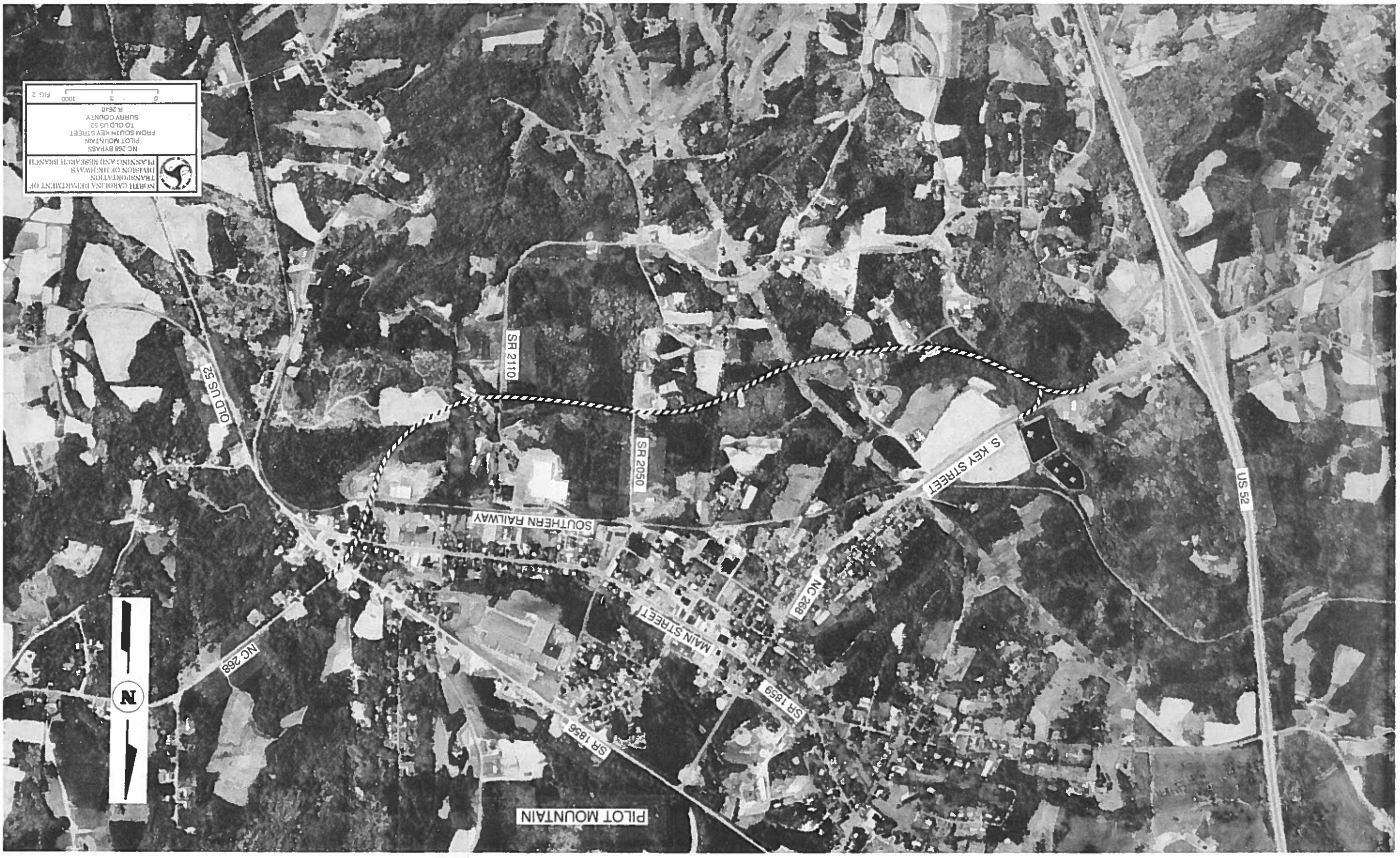


NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANNING AND RESEARCH BRANCH

NC 268 BYPASS
PILOT MOUNTAIN
FROM SOUTH KEY STREET TO OLD US 52
SURRY COUNTY, R-2640

0 mile 1/2

FIG. 1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NC 268 BYPASS
PILOT MOUNTAIN
FROM SOUTH KEY STREET
TO OLD US 52
SURRY COUNTY
R 2640
FIG 2
0
1
1000
OLD US 52
SR 2110
SR 2050
SOUTHERN RAILWAY
S. KEY STREET
US 52
NC 268
MAIN STREET
SR 1859
SR 1856
PILOT MOUNTAIN
N