

FEASIBILITY STUDY

Greenville
SR 1700 (Evans Street)
from SR 1708 to US 264-A Bypass
Pitt County

U-2817

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



Thomas E. Devens, P.E.
Highway Planning Engineer



Mohammed B. Mustafa
Highway Planning Engineer

1/4/93

Date



Whitmel H. Webb, III, P.E.
Head of Feasibility Studies

Greenville
SR 1700 (Evans Street)
from SR 1708 to US 264-A Bypass
Pitt County

U-2817

I. GENERAL DESCRIPTION

This is a feasibility study for the widening of SR 1700 (Evans Street) for 1.9 miles from SR 1708 (Firetower Road) to US 264-A Bypass (Greenville Boulevard) in Greenville (See Figures 1 and 2). This study recommends widening a two-lane shoulder section to a five-lane, 64-foot curb and gutter section with 8-foot berms on 100-foot wide right-of-way. Estimated cost is \$4,300,000 (\$2,000,000 for right-of-way and \$2,300,000 for construction).

A feasibility study presents recommended cross sections for improvements, general alignments of improvements, and estimated cost 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.

This study is not an exhaustive environmental investigation.

II. NEED FOR PROJECT

This project was requested by the City of Greenville in the 1991 Transportation Improvement Program hearings. Evans Street is designated as SR 1700 south of the US 264-A Bypass (Greenville Boulevard), and as SR 1702 north of the bypass (See Figures 1 and 2). SR 1702 is a radial that connects downtown Greenville with the US 264-A Bypass. Evans Street is also a primary approach to Greenville from the residential community of Winterville. Due to development south of US 264-A, traffic volumes on SR 1700 have increased. Widening SR 1700 to five lanes will provide additional traffic capacity and offer continuity of section, while opening the roadway to development. The community of Winterville is rapidly growing, and the widening of SR 1700 will facilitate development.

The studied section of SR 1700 begins at SR 1708 and ends at US 264-A. Within the studied section, SR 1700 is a two-lane shoulder section on 60 feet of right-of-way with no control of access. The southern 1.2 miles consists of 20 feet of pavement with 6-foot unpaved shoulders, and the north 0.7 mile is 32 feet of pavement with 6-foot unpaved shoulders. Land adjacent to Evans Street is mixed between residential development, light industry, and farmland. Several individual driveways and subdivision entrances intersect the studied section. This section of SR 1700 is classified as a Rural Major Collector in the statewide functional classification system, and is classified as a Major Thoroughfare in the 1990 mutually adopted Greenville Thoroughfare Plan. SR 1700 is a Federal Aid Urban route.

North of the project terminus, Evans Street (SR 1702) from US 264-A to downtown Greenville consists of a five-lane, 64-foot curb and gutter section. South of the studied section, SR 1700 is a two-lane shoulder section with 20 feet of pavement and 6-foot unpaved shoulders on 60 feet of right-of-way.

The North Carolina Bicycle Program has determined that no special accommodations for bicycle traffic are necessary.

The 1992 Average Daily Traffic (ADT) is 9,000 vehicles per day (vpd) traveling through the section, with an estimated 17,700 ADT in the design year of 2012. The existing road configuration currently experiences a Level Of Service (LOS) D, and is expected to experience a LOS E in the design year. If SR 1700 is widened to a five-lane curb and gutter section, level of service at current traffic demand should increase to a LOS B rating, with a LOS D expected in the design year.

During the period from January 1, 1989 through December 31, 1991, a total of 84 accidents were reported along the studied portion of SR 1700. This resulted in an accident rate of 592 accidents per 100 million vehicle miles, compared to a statewide average of 305. No fatalities were reported. Most prevalent accident types were rear-end collisions (47%) and turning movements (21%). The recommended cross-section and center left-turn lane should reduce accident rates by providing safer and more efficient turning movements via the sheltered center left-turn lane.

III. RECOMMENDATIONS

It is recommended that the studied section of SR 1700 (Evans Street) be widened to a five-lane, 64-foot curb and gutter section with 8-foot berms on 100-foot wide right-of-way. Total project length is 1.9 miles, beginning at SR 1708 and ending at US 264-A Bypass. The typical section is to contain a center 12-foot left-turn lane with 12-foot inside and outside travel lanes. No control of access is recommended. This five-lane section will provide a continuous multilane roadway through a developing area of Greenville. The project will increase development potential for land adjacent to SR 1700, and ensure future capacity for increased traffic volumes as development occurs.

Widening should be carried out both symmetrically and asymmetrically as desirable to minimize adverse impacts. The existing alignment of the highway should be retained and utilized to the extent possible.

Upgraded traffic signals may be required at the intersections of SR 1700 with SR 1708 and US 264-A.

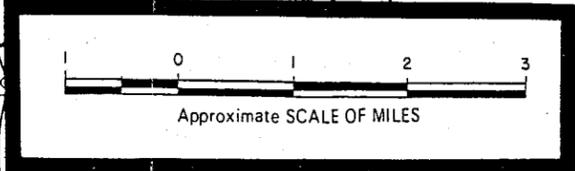
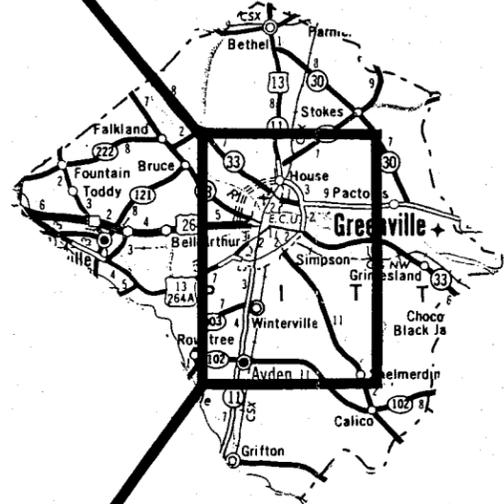
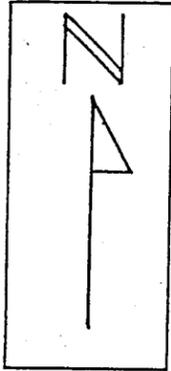
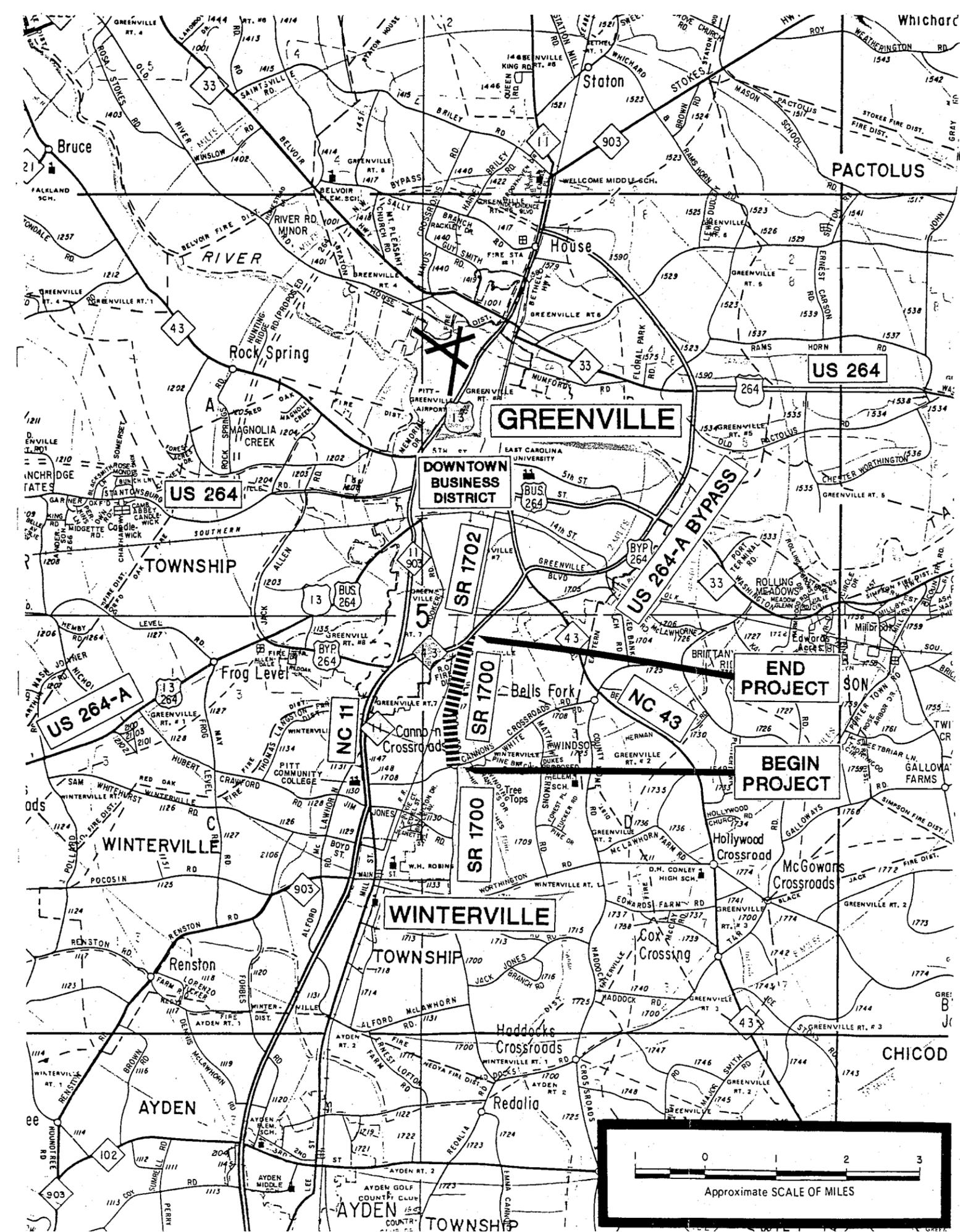
Total project cost is estimated at:

Right-of-Way	\$ 2,000,000
Construction	\$ 2,300,000
Total Project Cost	\$ 4,300,000

Medium utility conflicts are expected, including relocation of water and sewer lines, underground telephone cables, and telephone poles.

IV. OTHER COMMENTS AND CONCERNS

An ecological screening was not conducted for this study. A preliminary historical screening did not identify any sites on or eligible for the National Register of Historic Places. One business relocation is expected.

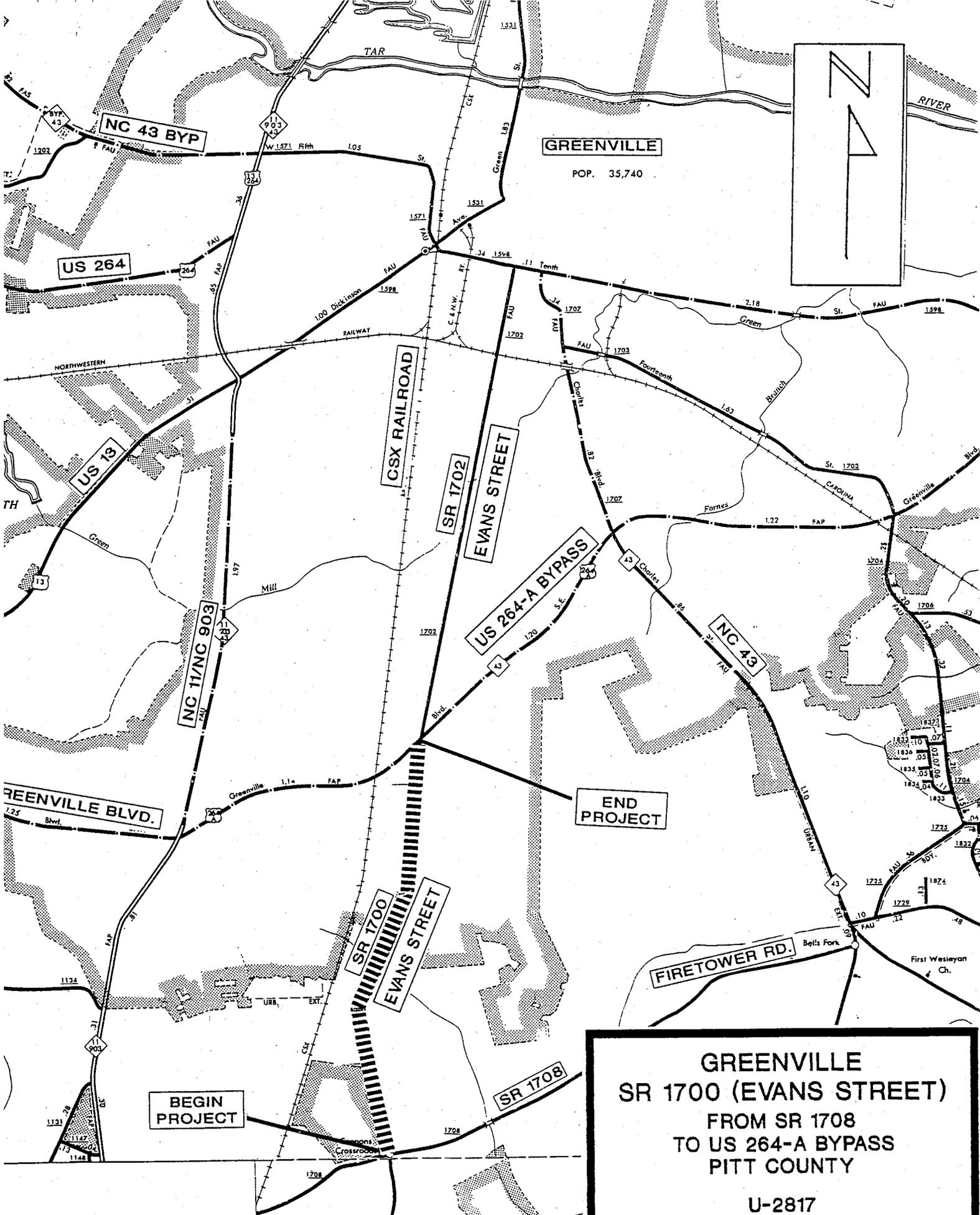


GREENVILLE
SR 1700 (EVANS STREET)
FROM SR 1708
TO US 264-A BYPASS
PITT COUNTY

U-2817

JULY 1992

FIGURE 1



GREENVILLE
SR 1700 (EVANS STREET)
FROM SR 1708
TO US 264-A BYPASS
PITT COUNTY
 U-2817

JULY 1992

FIGURE 2

