

FEASIBILITY STUDY

NC-33 (Washington Highway)  
From US 264 Bypass to SR 1726  
Greenville, Pitt County  
R-2251

Prepared by  
Planning and Research Branch  
Division of Highways  
N. C. Department of Transportation

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The subject portion of NC 33 is being studied to determine what improvements may be needed and for possible right-of-way protection. This report provides a brief, initial analysis of possible improvements. The project is not currently funded.

### I. GENERAL DESCRIPTION

The portion of NC 33 (Washington Highway) studied in this report is located on the east side of Greenville in Pitt County (See Figure 1). The project runs from US 264 Bypass to SR 1726, a distance of 1.7 miles. The studied improvement is a five lane, 64-foot, face to face of curbs, curb and gutter cross section.

### II. EXISTING CONDITIONS

The existing roadway consists of a 22-foot pavement with 8-foot unpaved shoulders. Existing right-of-way is 60 feet wide. Horizontal alignment is fair with one 3° curve, one 4° curve and two 5° curves. Vertical alignment is good with no grade exceeding 3 percent.

There are three locations along the project where additional lanes have been constructed. At the beginning of the project, from US 264 Bypass to River Bluff Road, NC 33 has been widened to a five lane, 64-foot, curb and gutter roadway. On the western approach to Oxford Road, an additional lane has been constructed with curb and gutter. This lane is used as a right turn lane into Oxford Road. The curb and gutter is not sufficiently set back from the existing center line to be used when the project is widened to five lanes. In the vicinity of Fox Haven Road and Port Terminal Road, a third lane has been added to provide left turn lanes into both of these roads and into the businesses just west of Port Terminal Road.

The speed limit on NC 33 is 45 mph throughout the project length. Just east of project the speed limit increases to 55 mph. The only traffic signal on the project is located at the US 264 Bypass intersection.

Overhead power lines were observed primarily along the northern side of NC 33 from River Bluff Road to SR 1726. Between River Bluff Road and US 264 Bypass these lines shift to the south side of the project. Telephone cables were observed both overhead and underground along both sides of the project.

There is a double barrel concrete culvert that carries Hardee Creek under NC 33. Each barrel is approximately 9 feet by 12 feet in size. This culvert will need to be extended to carry a wider roadway.

The portion of the project from US 264 Bypass to just beyond River Bluff Road is developed commercially. The remainder of the project is bordered primarily by residential development and open land with scattered commercial and institutional usage. The Saint Pauls Pentecostal Holiness Church is located on the north side of the project near River Bluff Road and two cemeteries are located near the eastern terminal of the project at SR 1726. Pinewood Memorial Park is located on the south side of the project and Homestead Memorial Gardens is located on the north side.

### III. PURPOSE OF PROJECT

Washington Highway is designated a major thoroughfare in the Greenville Thoroughfare Plan and functions as a major radial route into Greenville from the east. The current traffic volumes range from a high of 16,500 vehicles per day (vpd) near US 264 Bypass to a low of 10,800 vpd near SR 1726. These volumes are projected to increase to 32,800 vpd and 21,500 vpd respectively by the year 2007. These volumes exceed the capacity of the existing two lane roadway. The provision of additional lanes will alleviate congestion in this rapidly developing area of Greenville.

This project has received strong local support.

### IV. RECOMMENDED IMPROVEMENTS

It is recommended that NC 33 be widened to a five lane, 64-foot, face to face of curbs, curb and gutter roadway from River Bluff Road (where the existing five lane cross section ends) to SR 1726. Acquisition of a 90-foot right-of-way plus construction easements in specific locations will be needed to contain the proposed construction. The recommended cross section is in agreement with the Thoroughfare Plan. Both the City of Greenville and the Division Engineer are also in agreement with the recommended cross section.

The alignment for the proposed improvement should be generally symmetrical about the existing centerline. Slight alignment shifts should be made in each of the curves that are greater than 3° to improve the alignment of the roadway. A slight alignment shift may also be required at the site of the first court house of Pitt County (see Figure 2) to avoid any damage to this historic site.

The estimated cost of the recommended improvements \$3,950,000 including \$1,900,000 for construction and \$2,050,000 for right-of-way. The construction costs include engineering and contingencies and the right-of-way costs include relocation and utility costs.

The construction cost estimates, furnished by the Roadway Design Unit, were based on aerial photography and contour maps. Right-of-way estimates were furnished by the Right-of-Way Branch following a field review.

## V. ALTERNATIVES

There are no feasible alternatives to the widening of NC 33. If a four lane cross section were built, drivers desiring to turn left into side streets and driveways would have to slow down and possibly stop in the left lane which is normally used for higher speed vehicles. This would reduce the capacity and the safety of the roadway especially in the future where the roadside becomes fully developed and traffic volumes increase. Therefore a five lane cross-section with a center left-turn lane was selected as the recommended improvement.

## VI. POSSIBLE ENVIRONMENTAL IMPACTS

The greatest impact associated with the proposed widening of NC 33 is the expected relocation of homes and businesses. It is anticipated that 4 residences and 2 businesses will be displaced by the project.

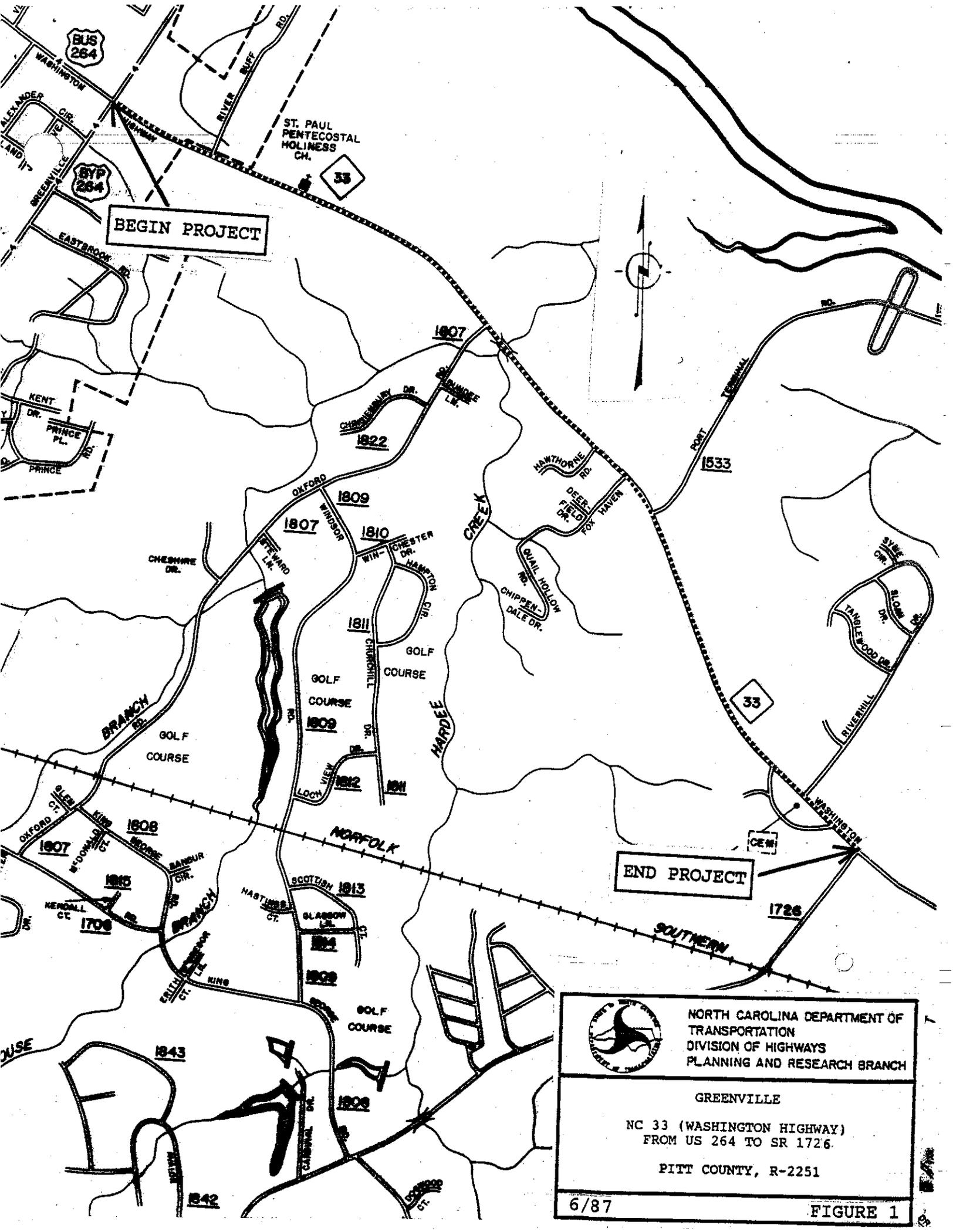
The lengthening of the culvert at Hardee Creek may require a section 404 permit from the U. S. Army Corps of Engineers prior to construction.

The site of the first Pitt County Court House on the north side of NC 33 near Oxford Road is possibly a significant archaeological site. The significance of this site and the effect of the use of any land from this site would have to be investigated by our staff Archaeologist and coordinated with the NC Department of Cultural Resources. If the site is determined to be eligible for the National Register of Historic Places, the project will have to be processed under Section 106 of National Historic Preservation Act.

## VII. 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 final decision made as to the most appropriate improvement.

RBD/rm



BEGIN PROJECT

END PROJECT



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

GREENVILLE

NC 33 (WASHINGTON HIGHWAY)  
FROM US 264 TO SR 1726.

PITT COUNTY, R-2251

6/87

FIGURE 1




 NORTH CAROLINA DEPARTMENT OF  
 TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PLANNING AND RESEARCH BRANCH  
 GREENVILLE  
 NC 33 (WASHINGTON HIGHWAY)  
 FROM US 244 TO SR 1176  
 PITT COUNTY, E-225L  
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