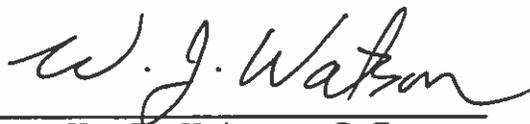


FEASIBILITY STUDY

Fayetteville
Ireland Drive (SR 1219)
From Cumberland Rd. (SR 1141) to Raeford Rd. (US 401)
Cumberland County
U-2811

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



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11/18/92

Date

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I. GENERAL DESCRIPTION

This preliminary study describes proposed improvements to Ireland Drive (SR 1219) in Fayetteville. It is proposed to widen Ireland Drive from Cumberland Road (SR 1141) to Raeford Road (US 401), a distance of approximately 2.1 miles. Please see Figure 1 for the project location. A five lane curb and gutter cross section (64 feet wide from face to face of curbs) is recommended on a 90 foot wide right of way for the entire length.

Between Cumberland Road and Village Drive there is a claimed right of way width of 60 feet. Between Village Drive and Raeford Road the existing right of way width is believed to be 80 feet.

The total estimated cost including construction and right of way is \$5,650,000. It is estimated there will be 6 residences and no businesses relocated due to this project.

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 the study is to describe the problem, recommend a treatment including costs, and identify potential problem areas that require consideration in the planning and design phases.

II. NEED FOR PROJECT

The purpose of this project is to improve the traffic carrying capacity and accident experience of Ireland Drive. The project was requested by the City of Fayetteville.

Ireland Drive is designated a Minor Thoroughfare on the Fayetteville Urban Thoroughfare Plan. Within the study limits it is classified an Urban Collector in the North Carolina Statewide Functional Classification System. Development on Ireland Drive is primarily single family residential from Cumberland Road to Raeford Road with some commercial development, mainly in the vicinity of the Raeford Road intersection, the Village Drive intersection, and the Cumberland Road intersection. There is a large public school complex located approximately one half mile north of Village Drive on the west side of Ireland Drive.

Existing Ireland Drive is a two way, two lane paved road. The pavement width is generally 26 feet wide and there are 6 foot wide grass shoulders. Between Village Drive and Coventry Drive, the pavement on Ireland Drive is approximately 32 feet wide. At Raeford Road, Ireland Drive has been widened to a 5 lane curb and gutter section that is approximately 64 feet wide from face to face of curbs. The intersections with Cumberland Road, Village Drive, and Raeford Road are controlled with traffic signals.

Raeford Road is an 8 lane, two way, 90 foot wide road with curb and gutter. Village Drive is a, two way, 50 foot wide, 4 lane road with curb and gutter. Cumberland Road is generally a 22 foot wide 2 lane paved road that has been widened at the Ireland Drive intersection to provide a left turn lane onto Ireland Drive. There is a project programed to widen Cumberland Road to a multilane curb and gutter section (TIP No. U-2304).

The Average Daily Traffic (ADT) on Ireland Drive, between Cumberland Road and Raeford Road for the years 1992 and 2012 are estimated to be approximately 10,600 vehicles per day (vpd) and 16,000 vpd respectively.

Ireland Drive is currently operating at a Level of Service (LOS) D based on the 1992 peak traffic hour, and by the year 2012 (the design year) will be operating at LOS E. With the proposed improvements, a LOS A will be attained based on 1992 traffic volumes and LOS B will prevail through the design year.

During the period from August 1, 1989 through July 31, 1992 there were 95 accidents reported on Ireland Drive. This resulted in an accident rate of 374 accidents per 100 million vehicle miles (Acc/100MVM), compared to a statewide average of 295.0 Acc/100 MVM for all urban secondary routes during 1991. There were no fatalities reported during the period, but 45 of the accidents resulted in injuries. The most prevalent accident types were rear end (47%), angle (18%), and left-turn (14%). The wider cross section with center turn lane proposed for Ireland Drive will reduce the potential for these types of accidents.

III. RECOMMENDATIONS

It is proposed to widen Ireland Drive from Cumberland Road (SR 1141) to Raeford Road (US 401), a distance of approximately 2.1 miles. Please see Figure 1 for the project location. A five lane curb and gutter cross section (64 feet wide from face to face of curbs) is recommended on a 90 foot wide right of way for the entire length.

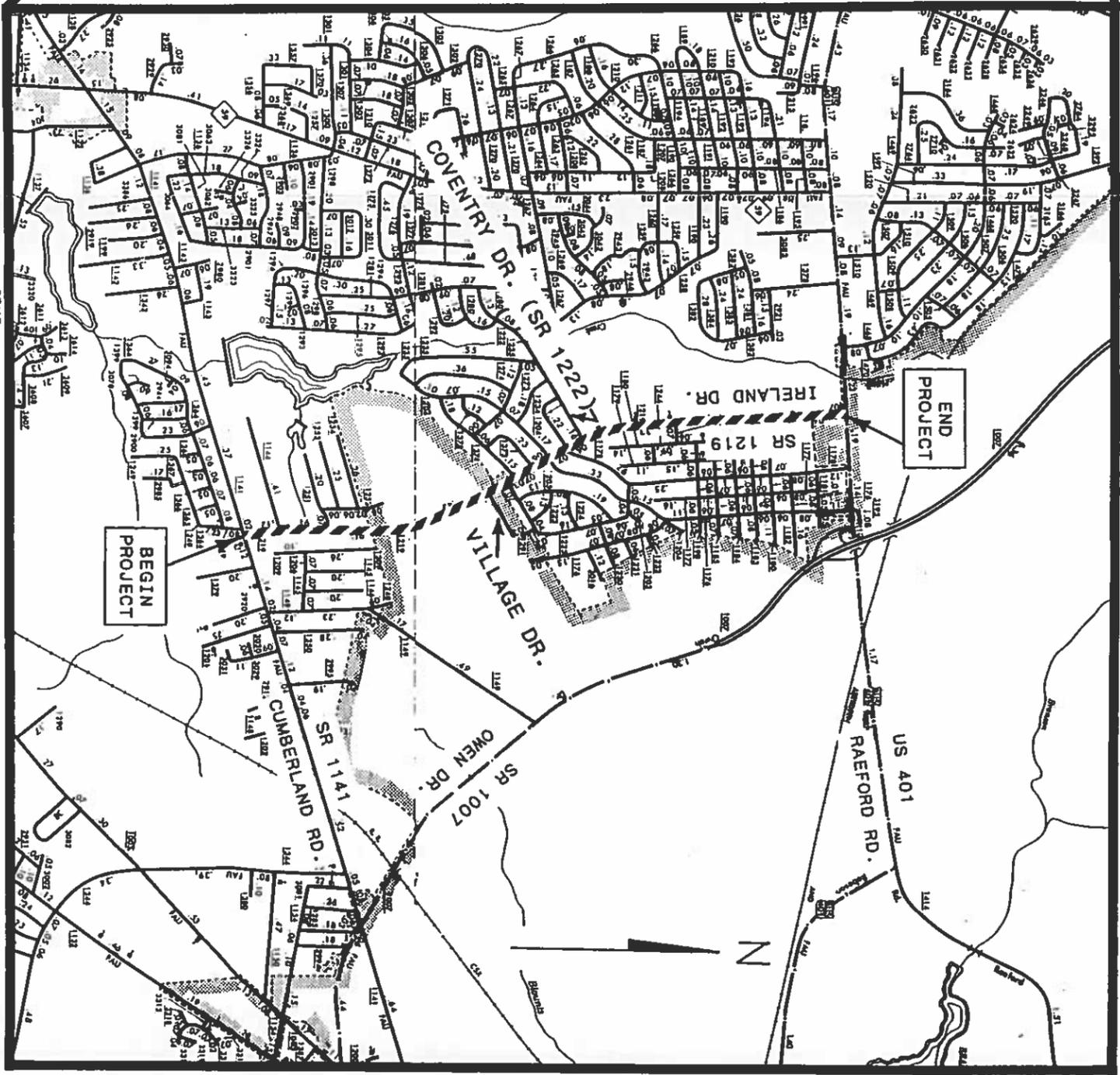
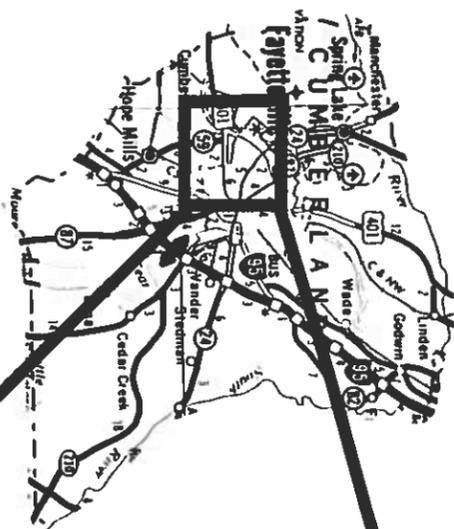
Minor revisions to the traffic signals at Cumberland Road and Village Drive will be required.

It is estimated there will be 6 residences and no businesses relocated due to this project. The total estimated cost including construction and right of way is \$5,650,000 as follows:

Construction	\$ 2,750,000
Right of Way	2,900,000
Total Cost	5,650,000

V. OTHER COMMENTS

An environmental screening was not conducted for this study.



SCALE

FEASIBILITY STUDIES UNIT

FIGURE 1. LOCATION MAP

IRELAND DR. (SR 1219)
FROM CUMBERLAND RD. (SR 1141)
TO US 401

FAYETTEVILLE, CUMBERLAND CO.

U-2811 DIV. 6 FIGURE 1

