

FEASIBILITY STUDY

Yadkinville
New Connector on New Location
From US 421 to East Main Street (SR 1605)
Yadkin County
R-2923

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

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6/3/93
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I. GENERAL DESCRIPTION

This preliminary study describes a proposed new connector between US 421 and East Main Street (SR 1605) in Yadkinville, Yadkin County. The project location is shown on Figure 1. It is also proposed to construct a new diamond type interchange where the new facility will intersect US 421. The new connector will be a two lane, two way, rural shoulder section with a pavement width 28 feet wide. The estimated total project length is approximately 1.3 miles and the proposed right of way width is 100 feet. It is estimated that there will be six residential and no business relocatees due to this project. The total costs including construction and right of way is estimated to be \$ 8,000,000.

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 this study is to describe the proposed project including costs, and identify potential problems that may require consideration in the planning and design phases.

II. NEED FOR PROJECT

The purpose of this project is to provide a direct north-south connection between US 421 and the industrial development on East Main Street and Shacktown Road (SR 1146). This facility should reduce the traffic and congestion (particularly truck traffic) on State Street (US 601) and on Shacktown Road. This facility is included on the Yadkinville Thoroughfare Plan as a major thoroughfare and it is felt that this project has strong local support.

The Average Daily Traffic (ADT) on this connector is estimated to be 2500 vehicles per day (vpd) initially and 5000 vpd when adjacent land develops. The Level Of Service (LOS) for the connector, initially, is estimated to be level B and when adjacent land has developed it is estimated to be level C.

Land within the proposed corridor is mostly undeveloped, or rural residential (farming). At the southern project terminal there is a cemetery, a county park, and undeveloped land. Near the northern project terminal there is single family residential development and to the west on East Main Street there is a large industrial complex. On Shacktown Road, near the point where this project will cross, there is a large maintenance facility of the Division of Highways, North Carolina Department of Transportation.

III. RECOMMENDATIONS

It is recommended to construct a new connector between US 421 and East Main Street (SR 1605) in Yadkinville, Yadkin County. The project location is shown on Figure 1. It is recommended to construct a new diamond type interchange where the new facility will intersect US 421. The new connector will be a two lane, two way, rural shoulder section with a pavement width 28 feet wide which includes two foot wide paved shoulders on each side. The total usable shoulder width on each side is ten feet. The estimated total project length is approximately 1.3 miles and the proposed right of way width is 100 feet.

It is recommended that the project intersect Shacktown and East Main Street at grade.

It is estimated that there will be six residential and no business relocatees due to this project. The total estimated cost including construction and right of way is \$ 8,000,000 as follows:

Construction	\$ 6,700,000
Right of Way	1,300,000
Total Cost	\$ 8,000,000

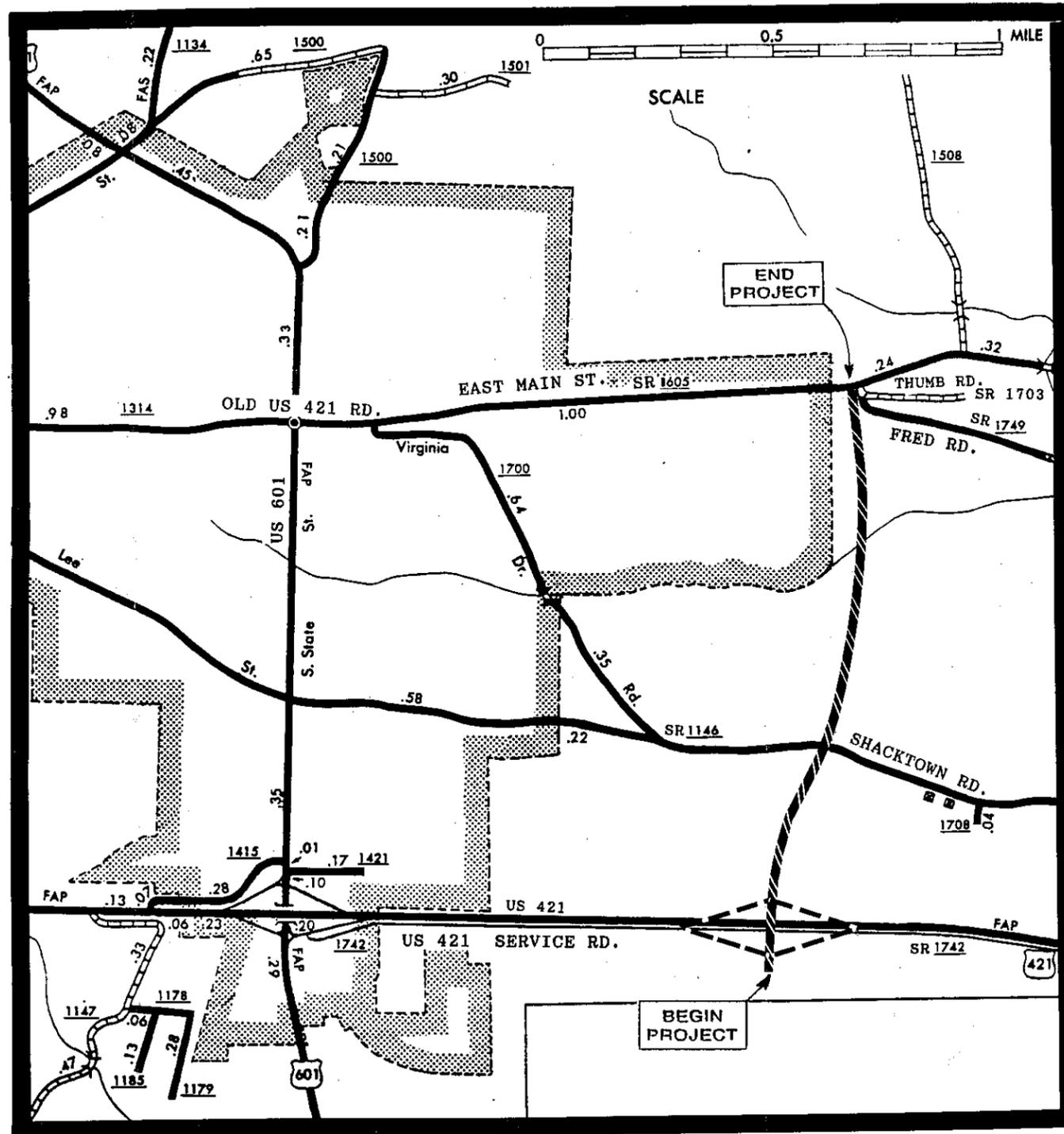
V. OTHER COMMENTS

An environmental screening was not conducted for this study.

Near the southern project terminal, in the northwest quadrant of the proposed interchange, there is a cemetery. If construction for the ramp in this quadrant can be restricted to south of the paved circular drive in the cemetery, it is felt there will likely be no grave relocations required.

Near the southeast quadrant of the proposed interchange there is a county park. The taking of park land can be avoided.

The Division Engineer recommended a four-lane divided facility. Based on the projected traffic volumes and related levels of service it is felt that the proposed two lane facility is adequate. If future traffic growth warrants it, the facility can be widened to a five lane curb and gutter facility within the proposed 100 foot wide right of way.



FEASIBILITY STUDIES UNIT		
FIGURE 1. VICINITY MAP		
NEW ROUTE FROM US 421 TO OLD 421/EAST MAIN ST. (SR 1605)		
YADKIN COUNTY		
R-2923	DIV. 11	FIGURE 1