

FEASIBILITY STUDY

2ND SHOT
Draft

Gastonia
SR 2478 (Titman Road)
from Proposed Hudson Boulevard
to NC 279 (New Hope Road)
Gaston County

FS 35-92-003

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

Mohammed B. Mustafa
Highway Planning Engineer

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

FEASIBILITY STUDY

Gastonia
SR 2478 (Titman Road)
from proposed Hudson Boulevard
to NC 279 (New Hope Road)
Gaston County
FS 35-92-003

I. GENERAL DESCRIPTION

This is a feasibility study for the extension of SR 2478 (Titman Road) from the proposed SR 1255 (Hudson Boulevard) to its intersection with NC 279 (New Hope Road) in Gastonia, Gaston County (See Figure 1). This study recommends a 0.8 mile extension on a new location. The recommended typical section is a five-lane, 64-foot face-to-face curb and gutter section, on a 100-foot right-of-way. The estimated cost of the project is \$1,860,000 (\$160,000 for right-of-way and \$1,700,000 for construction).

This study is not a detailed planning/environmental investigation. A feasibility study represents 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 which deserve consideration in the planning and construction stages.

II. NEED FOR PROJECT

This project was requested by the City of Gastonia, and is included on the current Gaston Urban Area Thoroughfare Plan as a proposed major thoroughfare.

The extension of SR 1255 (Hudson Boulevard) to SR 2329 (Redbud Drive), project U-215, will increase traffic volume in the area of study. The SR 2478 (Titman Road) extension will aid travel from southern Gastonia to the east side of Gastonia and US 29-74.

The western terminal of the recommended improvements is located at the proposed SR 1255 (Hudson Boulevard). The proposed section of Hudson Boulevard will be a four-lane divided roadway with a 16-foot raised median. It will connect with SR 2329 (Redbud Drive) which has an interchange on I-85 (See Figure 2).

The eastern terminal of the recommended improvements is located at the signalized intersection of NC 279 (New Hope Road) and SR 2478 (Titman Road).

Existing SR 2478 (Titman Road) consists of a 2-lane, 18-foot pavement section with 4-foot shoulders with no control of access. SR 2478 is classified as an Urban Collector in the Statewide Functional Classification System, and is a part of the Federal Aid Urban System.

Existing NC 279 (New Hope Road) in the project area consists of a five-lane, 64-foot face-to-face curb and gutter section. Right-of-way varies from 60 to 100-feet, with no control of access. NC 279 is classified as an Urban Principal Arterial in the Statewide Functional Classification System, and is a part of the Federal Aid Urban System.

Other projects in the vicinity that will affect this one are included in the 1993-1999 Transportation Improvement Program (TIP). They are the following;

- Project U-215 will extend SR 1255 (Hudson Boulevard) from US 321 (York Road) to NC 279 (New Hope Road) in Gastonia. This will be a 4.5 mile long multi-lane facility on a new location. Right-of-way acquisition is scheduled to begin in 1993 and construction is scheduled to begin in 1994 and continue into 1997.

- Project U-2712 will extend SR 2200 (Cox Road) from Duke Street to Armstrong Park Road in Gastonia. This is a 2.0 mile project consisting of widening existing roadway and constructing multi-lane connectors. Right-of-way acquisition is scheduled to begin in 1996 and construction is scheduled to begin in 1998 and continue into 1999.

Although detailed traffic estimates are unavailable for the area of study at the present time, it is estimated that traffic demand for the completed roadway would be 10,000 vehicles per day (vpd) for the year 2005; the demand is expected to increase to 14,000 vpd by the design year of 2015.

The level of service (LOS) corresponding to the estimated average daily traffic demand is for the year 2005 and for the year 2015.

III. RECOMMENDATIONS

It is recommended that SR 2478 (Titman Road) be extended 0.8 miles on a new location from proposed SR 1255 (Hudson Boulevard) to the intersection of NC 279 (New Hope Road) and existing SR 2478. The recommended typical cross-section is a five-lane, 64-foot face-to-face curb and gutter section. The new roadway is to be constructed on a 100-foot wide right-of-way with no control of access.

The western terminal of the project will join Titman Road and Hudson Boulevard in a "T" intersection. This intersection will be approximately 750 feet east of SR 2446 (Hoffman Road). From there the roadway will run in a northeast direction through wooded terrain for 0.8 miles. The eastern terminal of the project will intersect New Hope Road where the new alignment will meet with the existing Titman Road alignment (See Figure 2).

The estimated cost for the recommend improvements is:

Right-of Way	\$ 160,000
Construction	\$1,700,000
Total Project Cost	\$1,860,000

IV. OTHER COMMENTS AND CONCERNS

It is estimated that this project will not require any residential or business relocations.

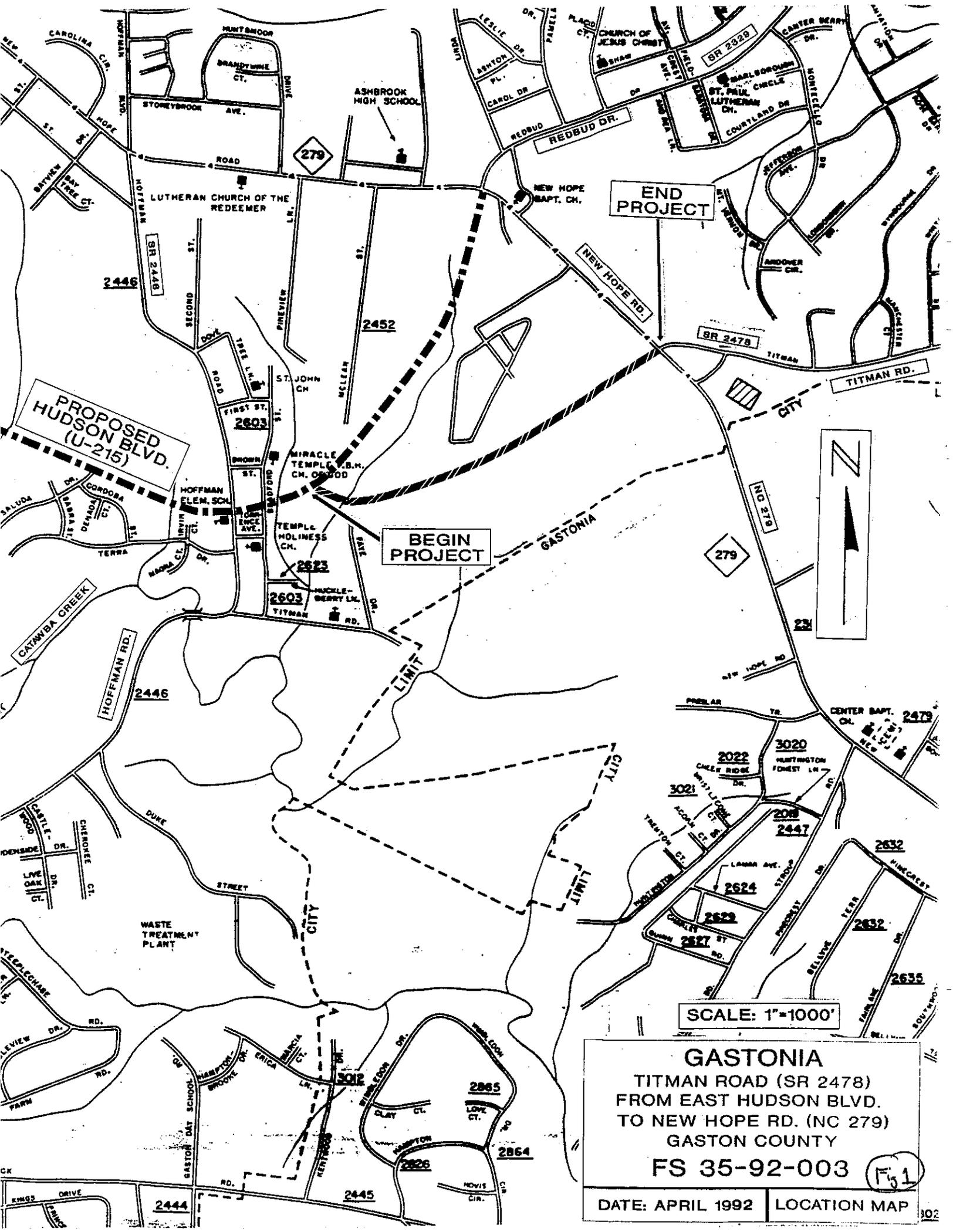
This report is written without the benefit of an environmental screening. However, no significant environmental problems are anticipated.

V. ALTERNATIVES STUDIED BUT NOT RECOMMENDED

Consideration was given to widening SR 2478 (Titman Road) to a three-lane, 40-foot face-to-face curb and gutter section for the 0.8 miles of the studied section, but was not recommended. Projected future traffic volumes will require a roadway with the capability to support a higher traffic volume.

The estimated cost for the alternative is:

Right-of-Way	\$ 160,000
Construction	\$1,250,000
Project Cost	\$1,410,000



PROPOSED HUDSON BLVD. (U-215)

END PROJECT

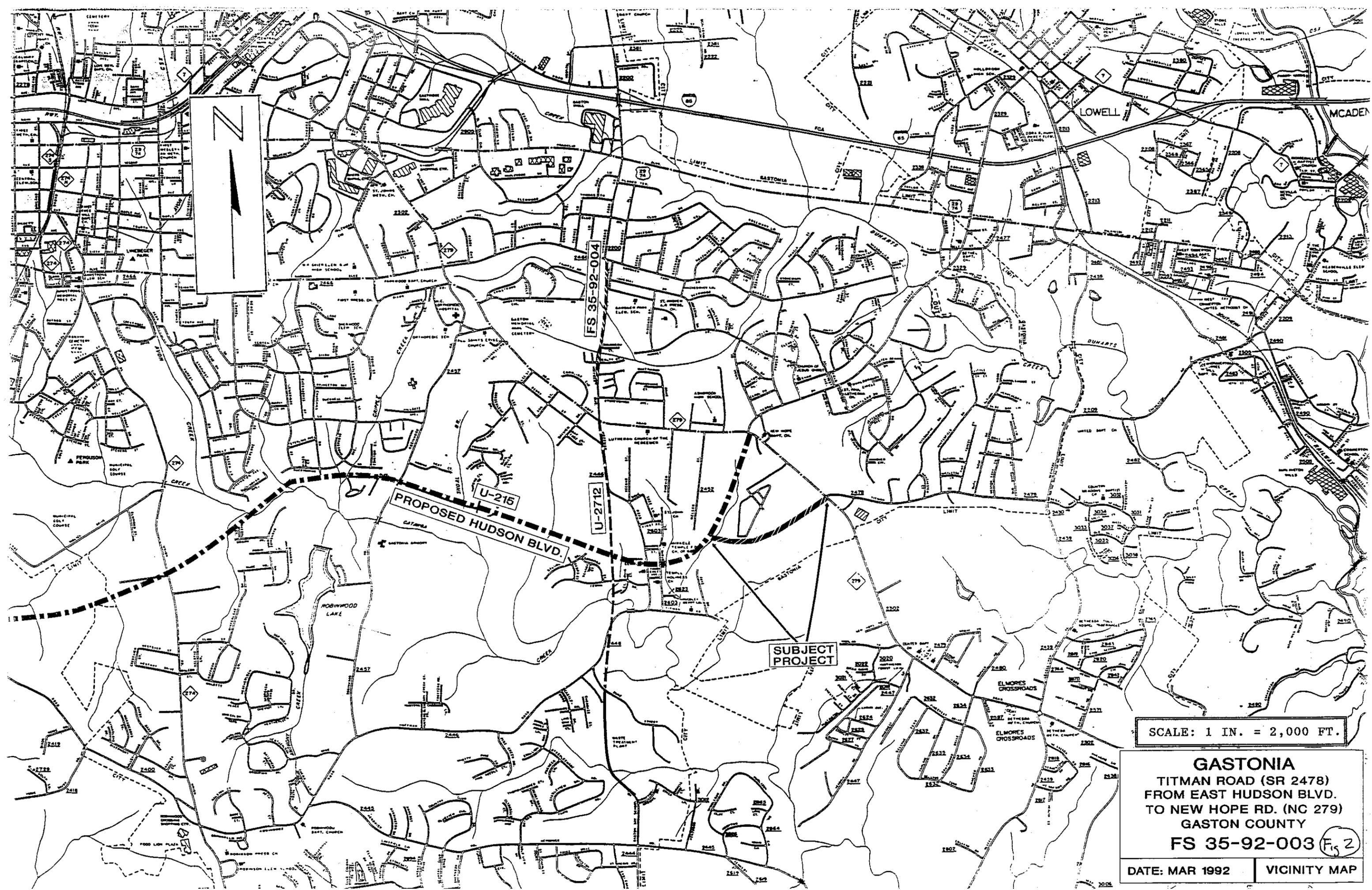
BEGIN PROJECT

SCALE: 1"=1000'

GASTONIA
 TITMAN ROAD (SR 2478)
 FROM EAST HUDSON BLVD.
 TO NEW HOPE RD. (NC 279)
 GASTON COUNTY
 FS 35-92-003

(Fig 1)

DATE: APRIL 1992 LOCATION MAP



SCALE: 1 IN. = 2,000 FT.

GASTONIA
TITMAN ROAD (SR 2478)
FROM EAST HUDSON BLVD.
TO NEW HOPE RD. (NC 279)
GASTON COUNTY
FS 35-92-003 (Fig 2)

DATE: MAR 1992 | VICINITY MAP