

FEASIBILITY STUDY

Williamston

**Extension of SR 1142
from US 13-64 to NC 125
Martin County**

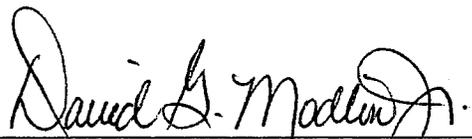
Division 1

R-3826

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



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2/26/98

Date

Williamston

Extension of SR 1142 from US 13-64 to NC 125 Martin County R-3826

I. General Description

This preliminary study describes the proposed extension of SR 1142 from US 13-64 to NC 125 in Williamston. The project location is shown on Figure 1. The recommended cross-section for the extension of SR 1142 is a 2-lane shoulder section with a 28-foot (8.5-m) wide pavement which includes 2-foot (0.6-m) wide paved shoulders. The total project length is 2.5 miles (4.0 km.) which includes approximately 0.4 miles (0.6 km) of widening on SR 1142 south of US 13-64 as described below.

The proposed improvements also include widening of SR 1142 between SR 1182 and US 13-64. The recommended cross-section is a 3-lane shoulder section with a 40-foot (12.2-m) wide pavement which includes 2-foot (0.6-m) wide paved shoulders. This cross-section will match the existing cross-section south of SR 1182.

Also, US 13-64, SR 1420, and NC 125 should be widened to provide additional approach lanes where these roads intersect SR 1142 Extension. Figure 2 is a sketch showing the proposed lane utilization at the US 13-64 intersection, the SR 1420 intersection, and the NC 125 intersection.

A new traffic signal at the US 13-64 intersection and warning beacons and gates where the project road crosses the CSX Railroad are recommended.

The recommended right-of-way width for the widening of SR 1142 south of US 13-64 is 80 feet (24.4 m). The recommended right-of-way width for the extension of SR 1142 on new location is 100 feet (30.5 m).

Three residential and no business relocations are anticipated due to this project. The total project cost including construction and right of way is estimated to be \$6,000,000 as follows:

Right-of-Way	\$ 1,200,000
Construction	<u>4,800,000</u>
Total Cost	\$ 6,000,000

This study is the initial step in the planning and design process and is not the product of exhaustive environmental or design investigations. The purpose of this study is to describe the needs, recommend a treatment including costs, and identify potential problem areas that may require consideration in the planning and design phases.

II. Need for the Project

This project was requested by the Town of Williamston. The purpose of this project is to provide improved traffic circulation in Williamston. The extension of SR 1142 will provide a direct connection between NC 125 and US 13-64, and will provide for improved access to the Eastern North Carolina Agriculture Center now under construction on SR 1142, about 2 miles south of US 13-64.

SR 1142 is a Rural Minor Connector in the North Carolina Statewide Functional Classification System. SR 1142 and SR 1142 Extension are Major Thoroughfares on the Williamston Thoroughfare Plan.

Land use along the project corridor is mostly undeveloped or farm land. There is a metal fabricating plant, convenience store, and several single family residences in the vicinity of the US 13-64 intersection. SR 1420 is moderately developed with single family residences

SR 1142 Extension will cross a single track of the CSX Railroad north of US 13-64 at grade, as shown on Figure 1. There are 4 trains per day reported on this track. The estimated Exposure Index for the proposed crossing is 18,000.

SR 1142 between SR 1182 and US 13-64 is a 2-lane rural shoulder section with a pavement approximately 22 feet (6.7 m) wide with soil shoulders. SR 1420 and NC 125 are both 2-lane shoulder sections with pavements approximately 22 feet (6.7 m) wide with soil shoulders. US 13-64 is a 3-lane shoulder section with a pavement approximately 36 feet (11.0 m) wide with soil shoulders.

Traffic volumes on the project corridor for the years 1997 and 2020 are estimated to be 2,800 vehicles per day (vpd) and 5,600 vehicles per day respectively. Based on these volumes, the Level of Service (LOS) is estimated to be LOS B in 1997 and LOS C in the 2020 design year.

III. Recommendations

It is recommended to extend SR 1142 from US 13-64 to NC 125 in Williamston. The project location is shown on Figure 1. The recommended cross-section for the extension of SR 1142 is a 2-lane shoulder section with a 28-foot (8.5-m) wide pavement which includes 2-foot (0.6-m) wide paved shoulders. The total project length is 2.5 miles (4.0 km.) which includes approximately 0.4 miles (0.6 km) of widening on SR 1142 south of US 13-64 as described below.

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Also, US 13-64, SR 1420, and NC 125 should be widened to provide additional approach lanes where these roads intersect SR 1142 Extension. Figure 2 is a sketch showing the proposed lane utilization at the US 13-64 intersection, the SR 1420 intersection, and the NC 125 intersection.

A new traffic signal at the US 13-64 intersection and warning beacons and gates where the project road crosses the CSX Railroad are recommended and their costs are included in the construction cost estimate.

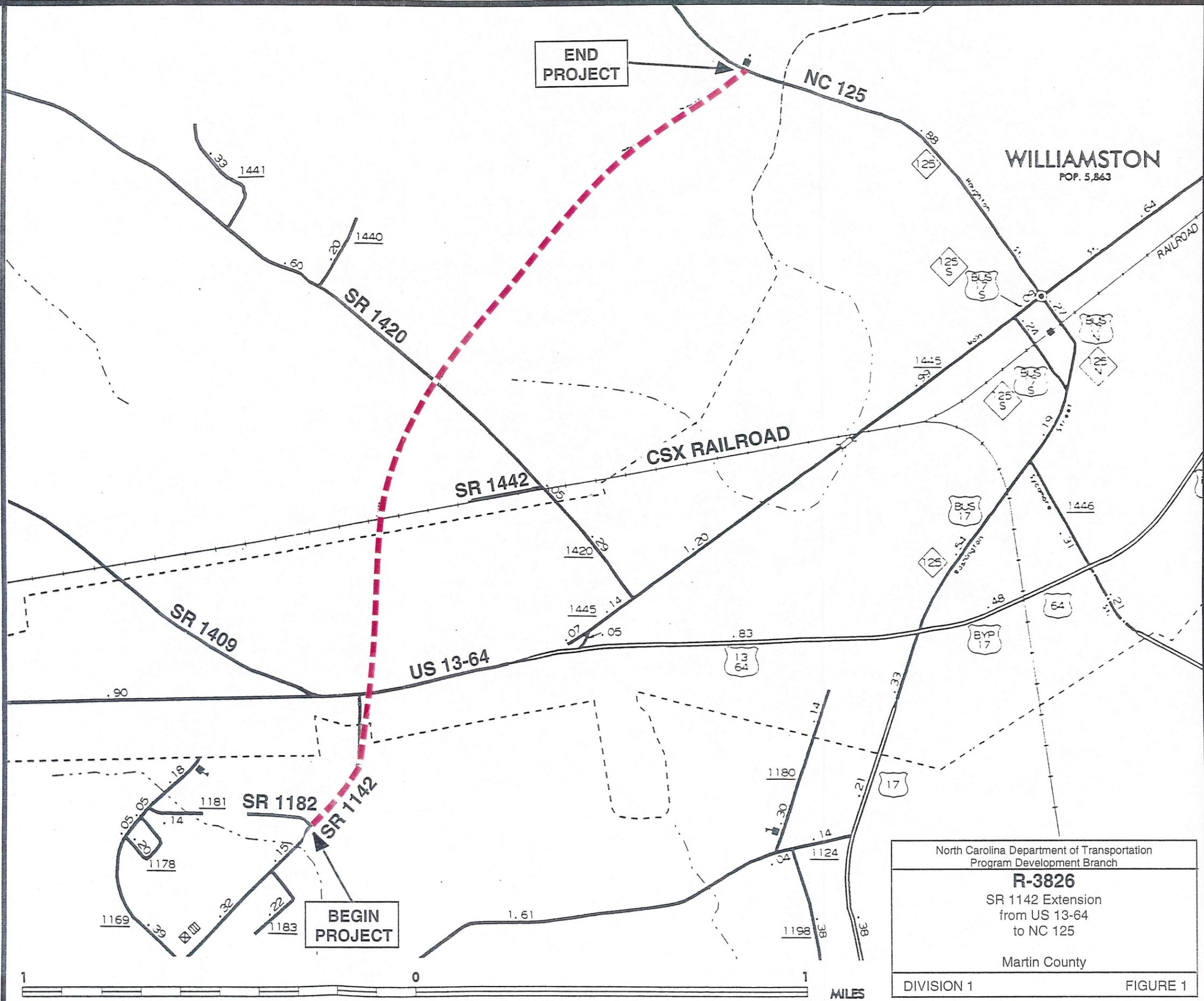
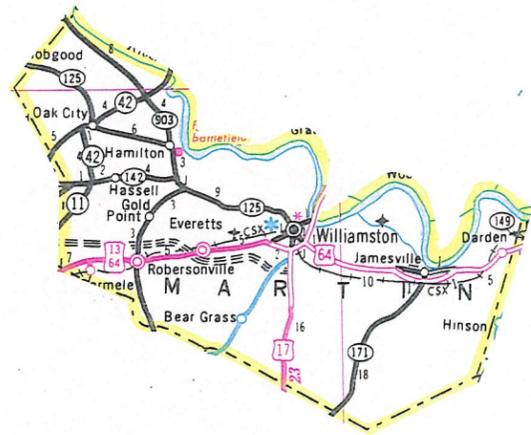
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Construction	<u>4,800,000</u>
Total Cost	\$ 6,000,000

IV. Other Comments

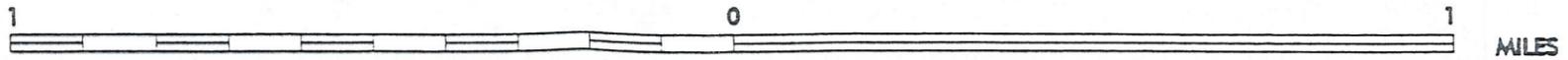
An environmental screening was not conducted for this study. Approximately 3 acres of wetlands will be encountered near the north project terminus. The cost for wetland mitigation has not been included in the above cost estimate. No threatened or endangered species or historic properties were identified in the project corridor.

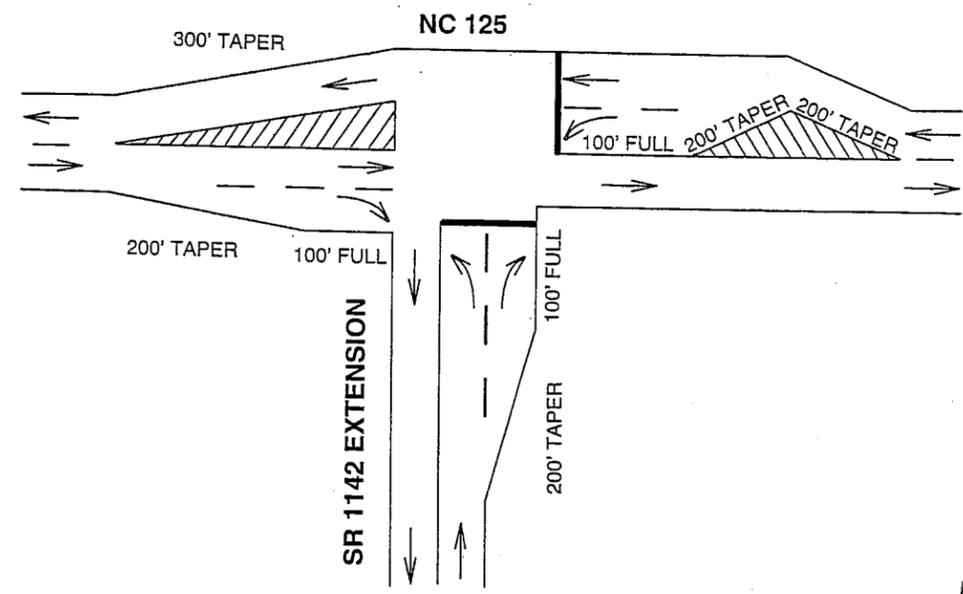


END PROJECT

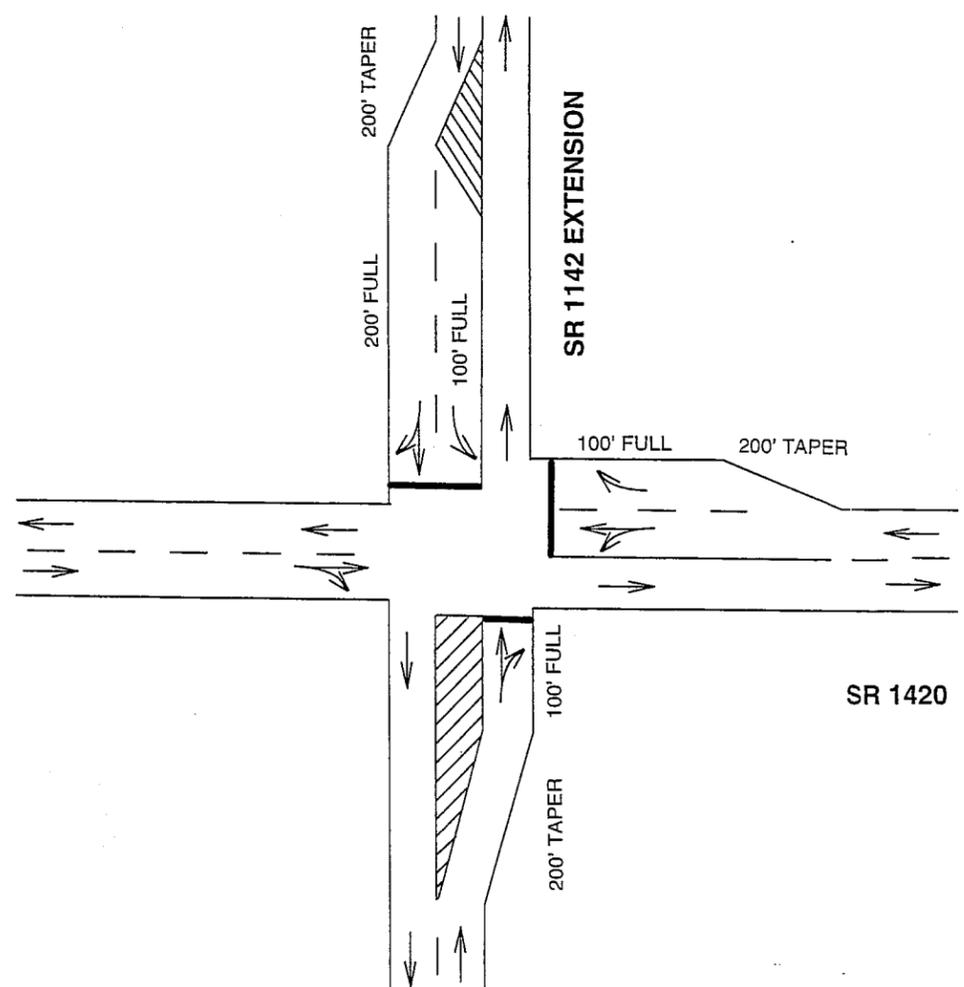
BEGIN PROJECT

North Carolina Department of Transportation
 Program Development Branch
R-3826
 SR 1142 Extension
 from US 13-64
 to NC 125
 Martin County
 DIVISION 1 FIGURE 1

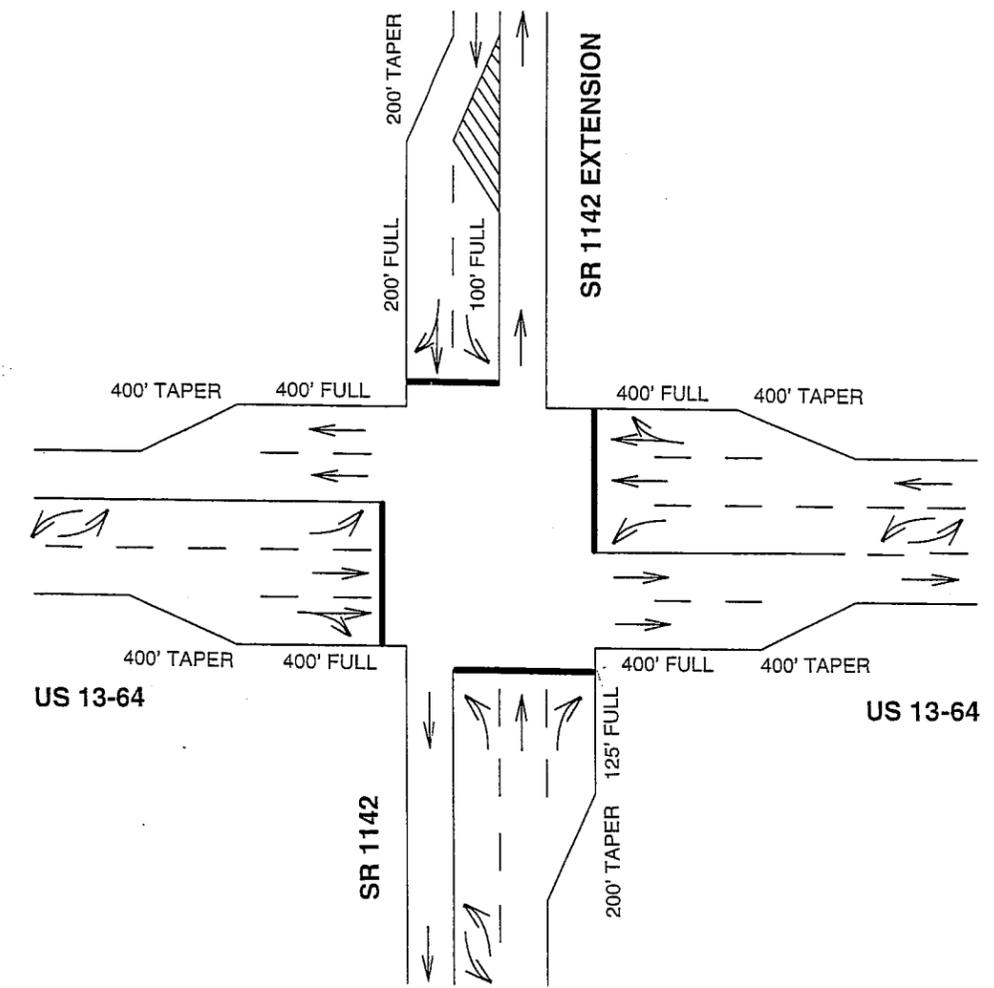
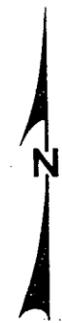




SR 1142 EXTENSION AND NC 125



SR 1142 EXTENSION AND SR 1420



SR 1142 EXTENSION AND US 13-64

NOT TO SCALE

North Carolina Department of Transportation Program Development Branch	
R-3826 LANE CONFIGURATIONS AT INTERSECTIONS	
Martin County	
DIVISION 1	FIGURE 2