

APPROVED
By Management Review Group
JAN 25 1988
Date _____

US 421-701, Proposed Ramp Addition
at SR 1227 Interchange at Clinton
Sampson County
U-1353M
State Project #9.8030940

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CATEGORICAL EXCLUSION
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

1-29-88
Date



J. M. Greenhill
Manager of Planning and Research Branch, NCDOT

1/25/88
Date



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US 421-701, Proposed Ramp Addition
at SR 1227 Interchange at Clinton
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U-1353M
State Project #9.8030940

Description

This project consists of constructing an off ramp in the southwest quadrant of the partial interchange of US 421-701 and SR 1227 located just outside the southern corporate limits of Clinton. Location of the proposed improvement is shown on Figures 1 and 2. The improvement is proposed to be financed with State funds, but requires Federal Highway Administration's approval since it involves a change in the access control of a federal-aid highway.

Purpose of Project

The interchange on access-controlled US 421-701 at SR 1227 only has diamond ramps east of SR 1227 designed to complement the adjacent flyover interchange at NC 24 to the west. SR 1227 intersects with NC 24 approximately one-third mile to the north of the project location. It carries two lanes of traffic over US 421-701 and currently serves approximately 2000 vehicles per day.

The purposes for adding the proposed ramp are as follows:

(1) Improve Access to Clinton High School

Primary access to the school is provided by the interchange of US 421-701 and NC 24 (west). Directional signs for the school are placed at this interchange. To and from this interchange, school traffic must travel a highly congested section of NC 24 (Sunset Avenue) and utilize SR 1277, SR 1214, and SR 1226, the main entrance to the school. Other access to the school can be provided by the US 421-NC 24 flyover and SR 1227. However, it requires a left hand exit from the west on US 421-701, a movement that slow moving school buses avoid for safety reasons.

(2) Enhance Economic Development

With improved access afforded by the proposed ramp, the potential for industries to locate in the area is greater. According to local officials, the North Carolina National Guard is considering building in this area.

(3) Add Toward Development of Total Interchange

The ultimate goal is to expand the existing half diamond interchange into a full diamond interchange. An interchange allowing all turning movements is a desirable element in providing for simple and safe traffic operation. With the proposed ramp in place, the remaining need is to construct an on ramp in the northwest quadrant of this interchange. This can and should be added at a future date.

Until then, westbound movements from SR 1227 to US 421-701 will be served by the NC 24 connection to US 421-701.

Recommendations and Estimated Costs

Figure 2 shows the recommended approximate configuration for the proposed ramp. The proposed construction will require a break in the US 421-701 control of access but can be contained within the existing right of way with no change to the adjacent SR 1289 service road alignment. It is estimated the new ramp would serve 800 vehicles per day initially, increasing to 1300 vpd in twenty years (see Figure 3).

The total estimated cost for the ramp construction is \$275,000.

Provision of a left turn lane on the SR 1227 approach to NC 24 and upgrading of the existing flashing signal may be required in the future to accommodate additional traffic due to the proposed project. The estimated cost for these improvements is \$75,000.

The sight distance at the new ramp intersection with SR 1227 does not meet AASHTO standards. This should also be investigated during design studies for possible improvement.

Environmental Evaluation

The location and nature of the proposed project should not produce any significant adverse effect on the environment. The proposed ramp construction would benefit the traveling public by providing improved and safer access to the area.

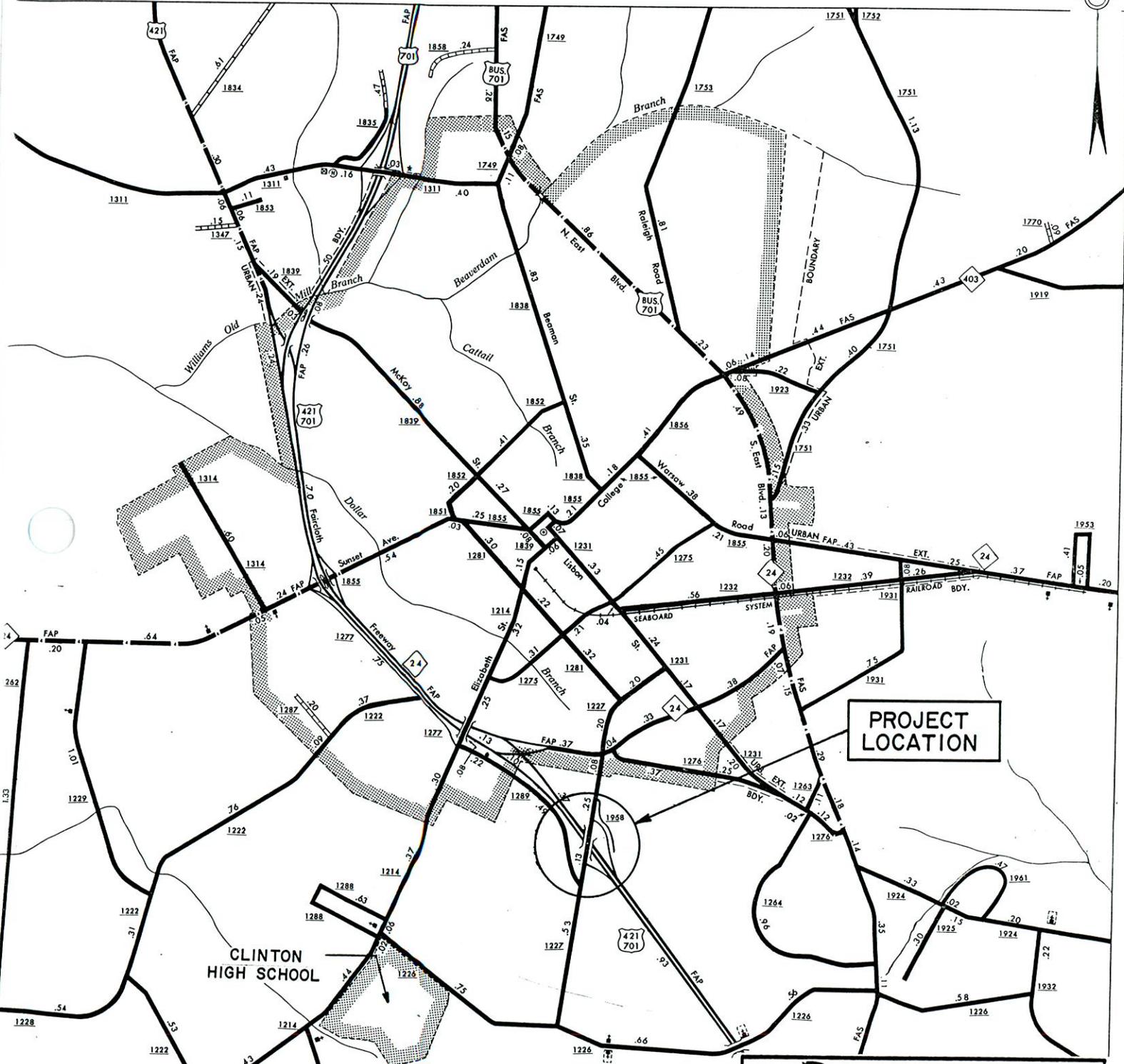
The improvement, to be confined within the existing right of way, will not affect any sites of vegetative or wildlife value, historical or archaeological significance and wetlands.

Construction of this project may incur some erosion and siltation. Standard erosion control methods will be used to minimize this effect.

The anticipated traffic using the new ramp would not be of such magnitude to significantly increase the noise level in the area. Noise levels could increase during construction but will be temporary. This evaluation completes the noise assessment requirements and thus no further noise reports are necessary.

Also due to minor traffic volumes, the project should have no significant impact on air quality. It is located within the Sandhills Region. The ambient air quality for Sampson County has been determined to be in compliance with the National Ambient Air Quality Standards. Since this project is located in an area where the State Implementation Plan (SIP) does not contain any transportation control measures, it is not subject to the conformity procedures of 23 CFR 770. If vegetation is disposed of by burning, all burning shall be done in accordance with applicable local laws and regulations of the SIP.

RGD/rm



CLINTON
HIGH SCHOOL

Piney Ridge

PROJECT
LOCATION

CLINTON
POP. 7,552

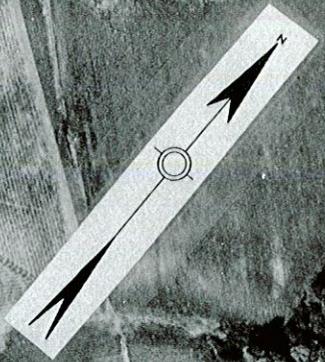


NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
DIVISION OF HIGHWAYS
PLANNING AND RESEARCH BRANCH

US 421 - 701, PROPOSED RAMP ADDITION
AT SR 1227 INTERCHANGE
SAMPSON COUNTY

12/87 0 mile 1/2 FIG. 1

SR 1214



US 421 - 701

NC 24

SR 1289

SR 1227

PROPOSED RAMP

FIGURE 2
0 ft. 400

