

BOARD OF ALDERMEN

ITEM NO. D(2)

AGENDA ITEM ABSTRACT

MEETING DATE: October 1, 2002

TITLE: Homestead Road – Review of Alternative Cross Sections

DEPARTMENT: PLANNING	PUBLIC HEARING: YES ___NO__X__
ATTACHMENTS: <ul style="list-style-type: none">A. ResolutionB. ChronologyC. MapD. Illustration of AlternativesE. Discussion of AlternativesF. Memo – Homestead Road Citizens ForumG. Article on Roundabout SafetyH. TAB Recommendation	FOR INFORMATION CONTACT: Dale McKeel – 918-7329

PURPOSE

The N.C. Department of Transportation (NCDOT) has analyzed five alternative cross-sections for the proposed modifications to Homestead Road between High School Road and Airport Road (NC 86).

NCDOT has requested that the Town of Carrboro indicate its preferred alternative(s) and provide comments on the proposed modifications. NCDOT has also requested that the Town indicate whether roundabouts should be considered at major intersections on the corridor. A report has been prepared. A resolution for the Board's adoption has been prepared (Attachment A).

INFORMATION

Homestead Road runs from Old NC 86 near Carrboro to Airport Road (NC 86) in Chapel Hill. The Town of Carrboro has requested modifications to Homestead Road since 1991. At that time, the Town requested that the road be widened to three lanes with bike lanes. Since 1993, the Town of Carrboro has requested that Homestead Road be widened to a 2-lane section with a 16-foot grass median and four-foot bikelanes. A chronology of the project has been prepared (Attachment B).

Modifications to Homestead Road will be done in phases. The first phase is designated as project number U-2805 by NCDOT and extends from High School Road to Airport Road (NC 86) (Attachment C). The 2002-2008 NCDOT Transportation Improvement Program states that right-of-way acquisition for U-2805 will begin in federal fiscal year (FFY) 2003, construction will begin in FFY 2004, and the total estimated cost is \$7.2 million (including \$4 million for right-of-way and \$2.9 million for construction).

Most of project U-2805 is in Chapel Hill's town limits or planning area. However, between Rogers Road and High School Road, the centerline of Homestead Road generally divides Chapel Hill and Carrboro's planning areas. Carrboro's planning area is to the north and west of Homestead Road in this area. Note that at the intersection of High School Road and Homestead Road, Chapel Hill's jurisdiction extends across Homestead Road.

In 1999, NCDOT staff agreed to evaluate five different design alternatives for project U-2805, as follows. Attachment D provides an illustration of each alternative:

Alternative 1: Three-lane curb and gutter facility with bicycle lanes and sidewalks;

Alternative 2: Three-lane facility with paved shoulders for bicycles and sidewalks behind the ditch;

Alternative 3: Four-lane facility with median, curb and gutter, bicycle lanes and sidewalks;

Alternative 4: Four-lane, undivided facility with curb and gutter, bicycle lanes and sidewalks;

Alternative 5: Two-lane facility with median, curb and gutter, bicycle lanes, and sidewalks.

In addition, a sixth alternative has been proposed. Under this alternative, changes would be made only at the intersections and bicycle lanes and sidewalks would not be provided.

Attachment E contains a chart, report, and meeting minutes prepared by NCDOT that compare the alternatives. NCDOT has also analyzed the use of roundabouts at several intersections on Homestead Road.

On May 31, 2000, the Town of Carrboro sponsored a forum for residents and property owners in the vicinity of Homestead Road. Seventeen citizens participated in the forum and were asked to comment on the alternative designs (Attachment F).

DISCUSSION

- NCDOT has determined that each of the alternatives will handle projected motor vehicle use on Homestead Road through the year 2025. NCDOT's report lists the projected cost and positive and negative attributes for each alternative. However, NCDOT has stated that it will not endorse Alternatives 4 or 5 due to safety reasons.
- For the three years ending December 31, 2001, the overall accident rate on this section of Homestead Road was more than twice the statewide average for urban two-lane secondary roads. Approximately 70 percent of the accidents occurred at intersections and 55.6 percent were rear-end type accidents.
- The citizens who participated in the Homestead Road citizens' forum in May 2000 preferred either the three-lane cross-section or the two-lane with median cross-section; none supported the four-lane designs.
- Under NCDOT policies, Carrboro will be responsible for paying 30 percent of the construction cost for new sidewalks constructed within the town limits or extra-territorial jurisdiction area. NCDOT will pay 100 percent of the cost of replacing any existing sidewalk that is removed by the project.

- Policy 4.41 of *Carrboro Vision 2020* states that “As a general policy, established roads should be widened to accommodate bike lanes and sidewalks, but not to provide additional lanes for automobiles.”
- Goal 5.1 of the *Northern Study Area Plan* states that the Town should adopt a policy to encourage shifting rights of way to save distinctive features of the landscape (such as a line of shade trees) wherever feasible. This plan also stresses the need to maintain the scenic character of roadways in the Northern Study Area.
- NCDOT reports that roundabouts at several intersections on Homestead Road would handle projected motor vehicle use as well as other intersection designs while offering safety benefits. The report also states that roundabout design should pay special attention to the needs of the disabled. NCDOT’s report concludes that the Homestead Road project would be a good place to introduce roundabouts to the traveling public. Attachment G is an article on roundabouts by the Insurance Institute for Highway Safety.
- The Transportation Advisory Board (TAB) reviewed the information at their meetings on September 5 and September 19, 2002. Three representatives from NCDOT attended the September 5 meeting and discussed the project and answered questions from TAB members. The TAB’s recommendations are attached (Attachment H).

FISCAL IMPACT

A fiscal impact of moving forward with this project is the cost of sidewalk construction. Under NCDOT policies, Carrboro will be responsible for paying 30 percent of the construction cost for new sidewalks constructed within the town limits or extra-territorial jurisdiction area. NCDOT will pay 100 percent of the cost of replacing any existing sidewalk that is removed by the project.

RECOMMENDATION

The Administration recommends that the Board of Aldermen adopt the attached resolution providing comments on the project to the North Carolina Department of Transportation (Attachment A).