#### ATTACHMENT A

## A RESOLUTION ON THE PRELIMINARY DESIGN OF SMITH LEVEL ROAD TIP PROJECT U-2803 Resolution No. 107/2008-09

WHEREAS, widening of Smith Level Road has been part of the local TIP since 1990; and

WHEREAS, the North Carolina Board of Transportation included the project in the 1993-1999 TIP and designated it Project U-2803; and

WHEREAS, in 2006, the Town made a request of the North Carolina Department of Transportation to move ahead with Project U-2803; and

WHEREAS the Carrboro Board of Aldermen has received public comment on the preliminary design as prepared by the North Carolina Department of Transportation.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Board provides the following comments to the North Carolina Department of Transportation:

# SMITH LEVEL ROAD (PROJECT U-2803) CHRONOLOGY 1985 – 2007

DATE	ACTION
1985	NCDOT's Chapel Hill-Carrboro Thoroughfare Plan lists Smith Level Road as a primary arterial in need of widening. The Plan recommends widening the road to a four-lane cross section with a median.
March 13, 1990	Carrboro Board of Aldermen held a public hearing, and adopted the 1990- 1991 Municipal TIP as recommended by the TAB. The second priority among "urban" projects that were requested was to "widen Smith Level Road to five lanes from NC 54 to Rock Haven Road with bikelanes and grade for sidewalks."
Winter 1990	Durham-Chapel Hill-Carrboro MPO listed the project as one of regional significance in the regional 1990-1992 TIP.
April 2, 1991	Carrboro Board of Aldermen held a public hearing, and adopted the 1991- 1992 Municipal TIP as recommended by the TAB and continued to include the Smith Level widening as a second priority.
March 3, 1992	The Carrboro Board of Aldermen held a public hearing, and adopted the 1992- 1993 Municipal TIP with Smith Level Road listed as the number two priority.
June 1992	North Carolina Board of Transportation included the project in the 1993-1999 TIP, and designated the project U-2803.
October 27, 1992	The Carrboro Board of Aldermen held a public hearing, and adopted the 1993- 1994 Carrboro Transportation Improvement Program as recommended by the TAB, with Smith Level Road listed as the number two priority. The widening would be done in accordance with the previously stated requests.
December 11, 1992	NCDOT presented the results of a feasibility study for the Smith Level Road project (U-2803). The study looked at widening the road from the county line to the Morgan Creek Bridge.
April 8, 1993	Town officials met with NCDOT to discuss feasibility study and to reject the proposal that widening should extend to county line/intersection with US 15-501.
April 23, 1993	NCDOT presented an addendum to the feasibility study that clarified that the project, as studied, did not match the town's request. NCDOT, in evaluating projected traffic volumes, had recommended expanding the scope to the county line.
November 23, 1993	The Board of Aldermen held a public hearing, and adopted the 1994-1995 Municipal TIP as recommended by the TAB. The 1994-1995 TIP lists widening Smith Level Road as the number two priority.

- December 14, 1993 Mayor Eleanor G. Kinnaird wrote a letter to Mr. Whitmel Webb of NCDOT requesting that the agency combine the project proposal for Hillsborough Road to include the widening of Old Fayetteville Road from NC 54 northwards to Hillsborough Road.
- June 26, 1995 Governing boards of Chapel Hill and Carrboro jointly adopted a resolution for protecting entranceways, Smith Level among them, and requires each community to exercise plans and policies that will protect the visual character of the road.
- December 4, 1995 NCDOT submitted a letter to the town that presented its finding regarding existing right-of-way along Smith Level Road. The letter also stated that surveys for U-2803 would not be authorized until October 1997 and that completed plans for right-of-way acquisition would be expected in 1999.
- July 7, 1997 A scoping meeting was held on U-2803, which called for widening Smith Level Road to a multi-lane facility between the Morgan Creek Bridge and Rock Haven Road. NCDOT proposed a five-lane section with curb and gutter, accommodations for bicycles and grading for sidewalks. With the exception of Kenneth Withrow, Carrboro Transportation Planner, all attendees supported extending the project to Damascus Church Road and relocating that road's intersection with Smith Level Road in order to allow for better transition.
- January 30, 1998 Representatives of Chapel Hill and Carrboro met with NCDOT representatives to discuss the status of TIP projects. The town representatives noted that the proposal to extend the project beyond Rock Haven Road was incompatible with the rural buffer and joint planning plan/agreement.
- February 2, 1998 Alderman Alex Zaffron submitted a letter to NCDOT Traffic Engineer, J.W. Watkins, reiterating the outcome of the January 30<sup>th</sup> meeting. Agreement was reached between Orange County officials and NCDOT staff that "(1) Smith Level Road would be designed as a five-lane facility from the Morgan Creek bridge to its intersection with Rock Haven Road, and (2) south of Rock Haven Road intersection, Smith Level Road would be reduced to no more than three lanes and tapered down to two lanes prior to its entrance into the University Lake watershed area (i.e. the intersection of Smith Level Road and Ray Road).
- February 13, 1998 J. W. Watkins replied to Alderman Zaffron's correspondence and stated that "it is our understanding that the plan for improvements...will be a five lane, curb and gutter section from Morgan Creek Bridge to Rock Haven Road. South of Rock Haven Road, a three lane section will taper into the existing two lane road in the shortest distance possible for a safe transition."
- February 13, 1998 Mayor Mike Nelson submitted a letter to Governor Jim Hunt requesting his support for Orange County's request, as expressed in Alderman Zaffron's letter of February 3<sup>rd</sup>. A copy of that letter was attached.

#### ATTACHMENT B-3

March 17, 1998 NCDOT submitted a request for information as part of its research on the proposed improvements. The memo also noted that the project was included in the 1998-2004 TIP and that it was scheduled for r/w acquisition in 2000 and construction in 2002.

July 2, 1998 Town staff met with NCDOT staff to discuss the project scope and to recommend that a four-lane, median divided highway was preferable to a five lane section.

August 11, 1998 Town staff submitted a letter to NCDOT providing justification for the fourlane request. NCDOT staff informed the town that until the town adopts a design and defines the width of the road project, NCDOT would not proceed.

November 3, 1998 Transportation Advisory Board met to review possible road designs.

February 25, 1999 Robert W. Morgan, Town Manager, presented a status report to the Board of Aldermen on U-2803.

- April 25, 1999 The Board of Aldermen, during their April 20, 1999 meeting directed staff to, "in cooperation with NCDOT staff, schedule a public meeting to create and present three design alternatives for Smith Level Road are: (1) a two-lane curb and gutter facility with bikelanes and a sidewalk on both sides, (2) a five-lane curb and gutter facility with bikelanes and a sidewalk on both sides, and (3) a four-lane, median divided facility with curb and gutter, bikelanes, and a sidewalk on both sides." A request to schedule this public meeting was forwarded to NCDOT.
- January 6, 2000 Meeting between town officials and NCDOT staff to decide on typical sections that would be presented during a Citizens Informational Workshop. Due to projected traffic volumes, NCDOT did not consider the two-lane option reasonable. The four-lane and five-lane options would be presented at the citizens workshop.
- April 19, 2000 NCDOT presented a Citizens Information Workshop in Room 110 at the Carrboro Town Hall from 4:00 p.m. to 7:00 p.m. Fifteen citizens attended the workshop. Most of the attendees preferred the four-lane section, appreciated the bike/ped facilities and were pleased that the project limits did not continue south of Rock Haven Road.
- May 19, 2000 NCDOT sent a letter to the Town requesting any additional comments on the proposed sections.
- October 25, 2001 The N.C. Department of Transportation held a Pre-Hearing Open House and Formal Public Hearing from 5:00 p.m. to 9:00 p.m. Approximately 50 persons attended the meeting. Most speakers expressed support for the bike/ped facilities, but many speakers questioned the need for the project, expressed concern about impacts of the proposed four-lane roadway, and stated that the project did not address existing problems on Smith Level Road.

- November 13, 2001 The Board of Aldermen during their meeting heard from citizens regarding concerns about the proposed road design. The Board of Aldermen authorized Mayor Nelson to forward a letter to NCDOT and the Town's legislative delegation requesting additional information and reconsideration of the widening project.
- December 4, 2001 Town officials met with State officials in Raleigh to discuss the project. Those in attendance included Mayor Mike Nelson, Senator Eleanor Kinnaird, Board of Transportation member Doug Galyon, Town Manager Robert Morgan, Deputy State Highway Administrator Len Hill, and Division Engineer Mike Mills. At the close of the meeting, Mr. Galyon said that the State recognizes that Orange County is different and unique and would try to accommodate local desires in every way possible as long as good, safe transportation practices will continue.
- January 7, 2002 Meeting between town officials and NCDOT staff to discuss the comments from the October 25 public hearing and to determine additional actions to be taken by NCDOT staff. Attendees included Mayor Mike Nelson, Alderman Alex Zaffron, Town Manager Robert Morgan, Deputy State Highway Administrator Len Hill, and Division Engineer Mike Mills. It was determined that additional information was needed to address many of the issues and an interim plan of action was developed. The State prepared a written summary of this meeting, entitled the Interim Post Hearing Response
- May 21, 2002, Town staff sent a follow-up letter to the State, noting several additional issues that were discussed at the Post Public Hearing Meeting but were not referenced in the Interim Post Hearing Response.
- August 15, 2002 Meeting between town officials and NCDOT staff to review revised traffic projections and analysis of level of service for intersections and the road corridor.
- August 20, 2002The Carrboro Town Manager, Police Chief, Fire Chief, Deputy Fire Chief and<br/>representatives from the Planning Department meet to discuss the emergency<br/>response and public safety issues related to Smith Level Road.
- October 15, 2002 A joint worksession was held with the Transportation Advisory Board (TAB) to meet with NCDOT staff and review the information that has been compiled. Following the joint worksession, the Board of Aldermen adopted a resolution accepting the report and referring it to Town staff and the TAB for a recommendation within 30 days.
- November 21, 2002 The Transportation Advisory Board adopted a resolution which recommends that the Board of Aldermen reject NCDOT's proposal for widening Smith Level Road to four lanes and also provides additional comments on the project.
- February 11, 2003 The Board of Aldermen discussed the proposed widening of Smith Level Road and reviewed three options identified by Town staff. The Board adopted a

resolution indicating that the Town will propose an alternative to the four-lane design proposed by NCDOT.

- March 18, 2003 The Board of Aldermen adopted a resolution requesting that the N.C. Department of Transportation consider an alternative design for the proposed modifications to Smith Level Road between Morgan Creek and Rock Haven Road.
- June 28, 2004 Meeting between town and county officials, NCDOT staff, and Board Member Doug Galyon to discuss the project. Mr. Galyon requested that NCDOT staff prepare revised traffic projections and analysis of level of service for intersections and the road corridor.
- January 5, 2005 Meeting between town officials, NCDOT staff, and Board Member Doug Galyon to review revised traffic projections and analysis of level of service for intersections and the road corridor. NCDOT proposes an alternative to the four-lane, median divided design.
- April 26, 2005 Board of Alderman adopted a resolution: 1) to accept a three-lane crosssection that includes curb and gutter, bike lanes, and sidewalks on both sides, and 2) that NCDOT be requested to use Moving Ahead funds set aside for Smith Level Road for improvements to Homestead Road.
- May 3, 2005 Carrboro Town Manager sent a letter to Mr. Douglas Galyon, outlining the above resolution.
- June 20, 2006 Residents of south Orange County submit a request to the Board of Aldermen to create a Smith Level Road Task Force.
- August 9, 2006 Carrboro Town Manager sent a letter to Ms. Deborah Barbour, NCDOT Dir. of Preconstruction, requesting TIP Project U-2803 to be completed as soon as possible, given the 2007 opening of the new high school.
- August 15, 2006 The Board of Alderman passed a resolution to accept Chapel Hill's report on the Morgan Creek Trail conceptual plan, and requested that the Carrboro town staff prepare a report on how to accommodate the Carrboro portion of the plan for Board consideration; this may include some treatment relevant to Smith Level Road.
- September 5, 2006 The Board of Aldermen passed a motion to establish the Smith Level Road Task Force.
- September 29, 2006 The Smith Level Task Force convened for its first meeting.
- December 11, 2006 Mr. Galyon replied to the August 9, 2006 request to move forward with TIP Project U-2803, requesting a date be set for a meeting with Town staff and NCDOT staff to discuss.
- February 27, 2007 Town of Carrboro officials and NCDOT staff met to discuss Smith Level road improvements. At the meeting, Mayor Chilton asked NCDOT to investigate a roundabout at the intersection of Smith Level Road and Rock Haven Road.

- March 20, 2007 Mr. Gregory Thorpe, from NCDOT, contacted Mayor Chilton (via letter) to inform the Town that NCDOT would be restarting TIP Project U-2803, specifically the development, environmental and engineering studies for the project. The letter also informed the Town that a scoping meeting for the project is set to be scheduled.
- April 4, 2007 NCDOT sent an updated preliminary design to Town Staff. The design included 3 cross-sections: A) 3-lane curb and gutter facility with 4-ft. bike lanes from Rock Haven to Culbreth; B) 4-lane curb and gutter facility with 4ft. bike lanes from Culbreth to BPW; and C) 4-lane divided facility with median and 4 ft. bike lanes from BPW to project end at bridge over Morgan Creek. The requested roundabout at Rock Haven and Smith Level was also included in the preliminary design.
- April 20, 2007 Town Staff responded to Mr. Thorpe's letter from March 20, 2007.
- May 9, 2007 The project scoping meeting was held at NCDOT, with attendance from Town Staff and NCDOT staff. Staff was informed that the project has been placed on an accelerated schedule that, if all deadlines are met, will allow construction to begin in FY 2011, rather than 2012.
- June 19<sup>,</sup> 2007 Staff presented revised plans for the preliminary design of U-2803 to the Board of Aldermen. The Board generated a list of questions for staff to forward to NCDOT. These were sent to NCDOT in a letter dated July 18, 2007.
- November 5, 2007 NCDOT held a public workshop for the U-2803 project. The workshop was held at Carrboro High School. NCDOT shared the current design and solicited feedback from citizens.
- September 2, 2008 Staff presented to the Board of Aldermen the response from NCDOT to their questions from June 2007.
- December 1, 2008 The Town of Carrboro received the completed Environmental Assessment for U-2803.
- March 9, 2009 NCDOT held a public hearing at Carrboro Elementary for the revised preliminary design.

The foregoing resolution having been submitted to a vote received the following vote and was duly adopted this 19th day of June 2007:

Ayes: Joal Hall Broun, Mark Chilton, Dan Coleman, Jacquelyn Gist, John Herrera, Randee Haven-O'Donnell, Alex Zaffron

Noes: None

Absent or Excused: None

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# **REVIEW OF REVISED PLANS FOR SMITH LEVEL ROAD TRANSPORTATION** IMPROVEMENTS

Transportation improvements to Smith Level Road have been included in the Town's Local Transportation Improvement Program Priority list for many years. Since 2001, the Town has been actively negotiating with NCDOT regarding the cross section and design elements that are to be included in the project. A revised plan has been provided and was presented to the Board of Aldermen on May 15, 2007 and referred to advisory boards and others for comment. A resolution that outlines comments on the revised plan and other actions is provided for the Board's use.

Adena Messenger, the town's Transportation Planner, made the presentation.

Jim Dunlap a NCDOT Congestion Management Engineer, addressed the school's concerns about school buses using the roundabout, stated that roundabouts are safer for pedestrians and motorists, and stated that a signal should not be needed at the school but that this would be reviewed further. He also stated that four lanes are needed from BPW Club Road to N.C. 54 because of projected traffic volumes. He stated that they would not recommend a median opening at Berryhill because of safety concerns.

Steve Brown, Project Manager from Project Management and Environmental Assessment Branch with NCDOT, stated that extension of the Smith Level Road project to Frank Porter Graham is outside the limits of the current project and funding would not be available for that extension. He stated that it might be possible to extend the pedestrian facilities up to Frank Porter Graham.

Tom High urged the Board to think about safety aspects of a wider cross section, the wider aspect of asphalt will appear to be more of a through way, and urged Board to go with smaller cross section.

Heidi Perry encouraged a small cross section.

Lisa Stuckey, a member of the Chapel Hill-Carrboro City School Board, stated that the School Board has not looked at these road improvements and stated concern about kids getting trapped in the middle of the roundabout.

The following resolution was introduced by Alderman Alex Zaffron and duly seconded by Alderman Dan Coleman.

### A RESOLUTION PROVIDING COMMENTS ON THE REVISED DESIGN OF IMPROVEMENTS TO SMITH LEVEL ROAD – PROJECT U-2803 Resolution No. 214/2006-07

WHEREAS, widening of Smith Level Road has been part of the local TIP since 1990; and

WHEREAS, the North Carolina Board of Transportation included the project in the 1993-1999 TIP and designated it Project U-2803; and

WHEREAS, in 2006, the Town made a request of the North Carolina Department of Transportation to move ahead with Project U-2803; and

WHEREAS the Carrboro Board of Aldermen have reviewed the comments from the Transportation Advisory Board, the Smith Level Road Task Force and the Chapel Hill-Carrboro City Schools.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Aldermen provide the following comments to NCDOT:

- 1. That signal and crosswalk markings be included at the roundabout;
- 2. That bikelanes and sidewalks be extended to Frank Porter Graham Elementary School;
- 3. That traffic light sensors be sensitive to bicycles;
- 4. That pedestrian crosswalk buttons be provided;
- 5. That a safe pedestrian crossing be provided at Frank Porter Graham Elementary School to include an island;
- 6. That the roundabout be designed to accommodate new State school bus length requirements;
- 7. That a road design be used to reflect a 35 m.p.h. speed limit with a maximum of 11-foot travel lanes; and
- 8. That through truck traffic be prohibited.

The foregoing resolution having been submitted to a vote received the following vote and was duly adopted this 19th day of June 2007:

Ayes: Mark Chilton, Dan Coleman, Jacquelyn Gist, John Herrera, Randee Haven-O'Donnell, Alex Zaffron

Noes: Joal Hall Broun

Absent or Excused: None

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# FINAL REPORT FROM THE SMITH LEVEL ROAD TASK FORCE

The Smith Level Road Task Force has completed its data collection and analysis and is ready to present its final report. Resolutions A and B, attached, have been prepared and would formalize receipt of the final report by the Board of Aldermen, and which lists possible follow up actions.

Terri Buckner, Chair of the Smith Level Road T.F., made the presentation. She stated that the Task Force made the following recommendations:

- Reduce the speed limit on the southern section of Smith Level Road to 35 m.p.h.
- Examine the possibility of eliminating one of the two turn lanes and one of the merge lanes at the entrance of Smith Level Road coming off 15-501
- Impose truck restrictions on the section of Smith Level Road between Damascus Church Road and South Greensboro Street
- Examine the possibility of narrowing the traffic lanes by 6" on the section of the road between Rock haven and 15-501
- Request the NCDOT conduct a traffic and feasibility study at Damascus Church Road and Smith Level Road
- Enforce speed limits



# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT Secretary

August 13, 2008

Ms. Adena Messinger Transportation Planner Town of Carrboro 301 West Main Street Carrboro, North Carolina 27510

RE: Smith Level Road Improvement Project TIP Project No. U-2803

Dear Ms. Messinger:

Thank you for your continued participation in the planning process for this project. Please find below the North Carolina Department of Transportation's (NCDOT) response to comments offered by the Town of Carrboro's Board of Aldermen in Resolution No. 214/2006-2007, adopted by the Board on June 19, 2007 and transmitted to NCDOT in July 2007. The project is proceeding through the planning and preliminary design process and NCDOT offers the following responses to the numbered comments presented in the resolution:

1. Comment: Include signal and crosswalk markings at the roundabout.

**Response:** Pedestrian accommodations will be included in the design of the roundabout. Crosswalk markings will be installed where appropriate pedestrian facilities are present or constructed as part of the project at this intersection. A crosswalk will not be installed if pedestrian facilities (sidewalk or pedestrian trail) do not exist or are not constructed during this project on both ends of the crosswalk. If a pedestrian facility is constructed at a later date, the roundabout will be designed to easily incorporate a marked crossing at that time.

Pedestrian signals are not warranted and have not been shown to improve pedestrian safety at a single-lane roundabout nor are they necessary to comply with the Americans with Disabilities Act at a single-lane roundabout. Therefore, pedestrian signals will not be included in the design of this intersection.

2. Comment: Extend bike lanes and sidewalks to Frank Porter Graham Elementary School.

**Response:** TIP project U-2803 is currently programmed and scoped to end at Bridge Number 88 over Morgan Creek, to the south of Frank Porter Graham School. Extending the project limits to the north across Morgan Creek would require substantial reprogramming of the project, including a change in the environmental permitting currently required for the

#### Ms. Adena Messinger Page 2 August 13, 2008

project. Currently, in response to discussions between the Town and NCDOT, the project schedule is being expedited to complete the planning and design phases of the project as quickly as possible. To avoid substantial project delays, NCDOT recommends maintaining the current project limits.

3. Comment: Traffic light sensors on the project should be sensitive to bicycles.

**Response:** Bicycle detection loops will be installed in the same manner as is being done for the Chapel Hill-Carrboro signal system upgrade project (U-4704). As with the signal system project, the municipality will request the installation, and will be expected to pay the difference in cost between the standard loop detection layout and the one including bicycle detection loops.

4. Comment: Provide pedestrian crosswalk buttons.

**Response:** Pedestrian crosswalk buttons will be provided at all signalized intersections on the project.

5. Comment: Provide a safe pedestrian crossing at Frank Porter Graham Elementary School to include an island.

**Response:** Please see Response # 2. Frank Porter Graham Elementary is outside the current project limits.

6. Comment: The roundabout should be designed to accommodate new State school bus length requirements.

**Response:** The roundabout will be designed with the most current information on vehicle lengths that is available.

7. Comment: Use a road design that reflects a 35 m.p.h. speed limit with a maximum of 11-foot travel lanes.

**Response:** Smith Level Road may be posted/signed to reflect a 35 mph speed limit along the project. Currently, inside travel lanes and turn lanes are designed with an 11-foot width. However, for safety reasons, a 12-foot lane width is recommended for outside lanes adjacent to dedicated bicycle lanes.

8. Comment: Prohibit through truck traffic on Smith Level Road.

**Response:** Requests from both the Town of Carrboro and the Town of Chapel Hill to prohibit thru trucks on the Smith Level Road corridor have also been received by NCDOT Highway Division 7. This request is currently under review by NCDOT District 1 and Division 7 Staff.

#### Ms. Adena Messinger Page 3 August 13, 2008

Thank you again for your interest in the Smith Level Road Improvement Project. If you have any questions, please contact me at 919-733-7844, ext. 235, or by e-mail at <u>slbrown@dot.state.nc.us</u>.

Sincerely,

Steve L. Brown, P.E. Project Planning Engineer

cc: Mike Mills, PE, NCDOT Division Engineer Brenda Moore, NCDOT Roadway Design

Comment Date	Name	Organization	Address	Phone	E-mail	Comment Method	Comment Summary
18-Jul-07	Board of Aldermen	Town of Carrboro	301 W. Main Street, Carrboro, NC 27510	919-918-7329		mail	Town of Carrboro Resolution No. 214/2006-07 (including Town review of design concept, comments from the Carrboro Transportation Advisory Board, Smith Level <u>Road</u> <u>Task Force, and Chapel Hill-Carrboro School:</u> 1) That signal and crosswalk markings be included at the roundabout; 2) Extend bikelanes and sidewalks to Frank Porter Graham School - north of project limits; 3) Install traffic light sensors that are sensitive to bicycles; 4) Provide pedestrian crosswalk buttons; 5) Include a safe pedestrian crossing at Frank Porter Graham School, including an island; 6) Design the roundabout at Rock Haven Road to accomodate new State school bus lenght specifications; 7) Road design should reflect a 35 mph speed limit with max. of 11-foot wide travel lanes; 8) Prohibit through truck traffic on Smith Level Road.
27-Jul-07	David Joseph	Resident - Southern Village	111 Glade Street, Chapel Hill, NC 27516	919-960-4892	dandsjoseph@bellsouth.net	e-mail	Inquired about potential connection of Glen haven Drive from Southern Village to Smith Level Road. David Bonk of Chapel Hill responded - no current plans to extend.
28-Jun-07	Tom High	Carrboro Resident - Activist		919-929-0754	bthigh@aol.com	e-mail	Objects to projects mainly on the basis of pedestrian safety. Has sent letter to Carrboro Town Council, written an editorial in the Carrboro Citizen Newspaper, collected petition signatures against the project, and generated an online petition against the project at <u>www.ipetitions.com/petition/SmithLevelRdU-</u> 2803/signatures.html.
10-Oct-07	Wayne Pein	Citizen - Bicycle advocate			wpein@nc.rr.com	e-mail	Smith Level Road is too steep for bicycle lanes, general bicycle safety concerns on the project. Include two research papers on the subject.
20-Oct-07	Adrian Hands	Carrboro Resident			aeh@akc.org	e-mail	Requested maps of the proposed improvements - SB provided electronic workshop maps to Hands after the CIW in November 2007.
3-Nov-07	Venitah Sanders	Chapel Hill resident	606 Coolidge St. , Chapel Hill, NC 27516			CIW	Mostly concerned with the South Columbia St. project, which is near her house, but would like to be notified when Smith Level is ready for construction.

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U-2803 - Smith Level Road Recent Project Comment Summary

Comment Date	Name	Organization	Address	Phone	E-mail	Comment Method	Comment Summary
5-Nov-07	Richard Ambrose	Chapel Hill Resident	210 Glade St., Chapel Hill, NC 27516			CIW	Concerned about child pedestrian safety across Smith Level Road and to Culbreth Middle School. Requests crosswalks, sidewalks and/or pedestrian lanes.
5-Nov-07	Andrew Greene	Chapel Hill Resident	103 Unnin Place, Chapel Hill, NC 27516			CIW	Likes the project and appreciates the bike lanes.
5-Nov-07	Wendy Tanson	Chapel Hill resident	200 Nutree Lane, Chapel Hill, NC 27516			CIW	In favor of the project. Suggests a crosswalk at Woodcrest Drive and Smith Level Road and a reduced speed limit along the corridor.
5-Nov-07	Nancy Park	Chapel Hill Resident	500 Yorktown Dr., Chapel Hill, NC 27516			CIW	Requests that a walkway or bike path be extended to the southernmost end of Smith Level Road, where it meets US 15-501to facilitate bicycle/pedestrian/non-vehicle traffic.
5-Nov-07	Patrick Mortrell	Chapel Hill resident	408 Morgan Creek Road, Chapel Hill, NC	919-933-0729	ptmortell@aol.com	CIW	Suggests that to address safety concerns/fatalities near Carrboro High School. Not in favor of bicycle lanes. Would prefer that improvements address the entire length of Smith Level Road with focus on the southern end.
5-Nov-07	Charles Burns	Chapel Hill resident	1915 Damascus Church Road, Chapel Hill, NC			CIW	Extend 3 lane section to Damascus Church Road to address additional traffic from North Chatham County development. Add right turn lane at Culbreth Road.
5-Nov-07	Rosemarie and Joseph Gulla	Carrboro resident	201 Orchard Lane, Carrboro, NC (Berryhill neighborhood)			CIW	Consider highest priority to be sidewalk into downtown Carrboro. Consider transitions from 3 lanes to 2 lanes and 4 lanes to 3 lanes to be dangerous.
5-Nov-07	Carol Barrow	Chapel Hill resident	617 Yorktown Drive, Chapel Hill, NC 27516 (Heritage Hills)			CIW	Suggests a multi-use path along Rock Haven Road south of Carrboro High School to the Heritage Hills neighborhood.
5-Nov-07	Heather Hoffman	Carrboro resident	105 Weatherill Pointe, Carrboro, NC 27510			CIW	Prefers that road widening be put off until the decrease traffic effect of walking paths along Morgan Creek. Wants to reduce number of vehicles on the road, and favors walkways over roads.
5-Nov-07	Tom Irvin	Carrboro resident	100 Gateridge Place, Carrboro, NC 27510 Berryhill HOA			CIW	Expressed urgent need for sidewalks from Willow Oak to the Frank Porter Graham School. Requests that this portion of the project be moved up ASAP for child pedestrian safety.

Comment Date	Name	Organization	Address	Phone	E-mail	Comment Method	Comment Summary
5-Nov-07	L.E. Brester	Chapel Hill resident	441 Northside Drive, Chapel Hill, NC 27516			CIW	Extend the project to Damascus Church Road. Add a roundabout to the intersection of Damascus Road and Smith Level Road. In favor of a bike path on the Berryhill neighborhood side of Smith Level Road only. Proposed Chapel Hill greenway will provide adequate bicycle facilities south of Carrboro. Concerned with grade of bicycle paths. Ensure that bike and pedestrian improvements encompass school properties on Smith Level Road. Add right hand trun laneonto Culbreth Road. Consider adding 2 turn lanes from BPW Club Road onto Smith Level Road traveling north.
5-Nov-07	Senator Ellie Kinnaird	State Senator	207 W. Poplar Avenue, Carrborro, NC 27510			CIW	Against 4-lane section with a median. In favor of two travel lanes, turn lane, bike lanes and sidewalks.
5-Nov-07	Elizabeth Neely	Chapel Hill resident/NCDOT employee				CIW	Background information on the project would have been helpful at the CIW, specifically on project delays. Also, would be helpful to have the ability to submit comments on line electronically. Questions if NCDOT can purchase right- of-way land in advance of project approval.
5-Nov-07	Steve Jackson	Chapel Hill resident	104 Antler Point Road, Chapel Hill, NC			CIW	Full scope of the proposed improvements may not be needed, but roundabout is a needed addition.
5-Nov-07	Linda Levitch/Andrew Olshan	Citizen				CIW	Strongly support bike lanes and sidewalks on Smith Level. Do not support median divided segment. Against blocking off a northbound turn movement from Willow Oak onto Smith Level Road due to traffic backups in the Berryhill neighborhood during rush hours.
5-Nov-07	Jan Symond	Chapel Hill resident	103 Culbreth Road, #309, Chapel Hill, NC 27516			CIW	In favor of sidewalks on Culbreth Road for senior citizens and congestion relief on Culbreth Road.
5-Nov-07	Bill Armstrong	Carrboro resident	105 Antler Point Road, Carrboro			CIW	Against widening Smith Level Road to 4 lanes. Against the proposed roundabout at Rock Haven. Replace the traffic light at Rock Haven Road that only operates during school peak traffic hours. Rplace the traffic light at the Frank Porter Graham School.

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Comment Date	Name	Organization	Address	Phone	E-mail	Comment Method	Comment Summary
5-Nov-07	Adrian Hands	Carrboro resident	200 Purple Leaf Place, Carrboro, NC 27510			CIW	Concerned with bicycle safety between Carrboro and Damascus Church Road. Sprcifically, the steep grades on Smith level Road and safety of bike lanes on these grades. Requests cross section drawings of typical sections. SB provided electronic workshop maps to Hands after the CIW in November 2007.
5-Nov-07	R.J. & Lisa Vaccarelli	Carrboro resident	608 Manor Ridge Road. Carrboro, NC			CIW	Oppose widening Smith Level Road - wider roads will attract more traffic. In favor of adding sidewalks to Frank Porter Graham or downtown Carrboro. Oppose the median divided section removing the northbound turn from Willow Oak Lane to Smith Level Road - will cause traffic problems in the Berryhill neighborhood.
5-Nov-07	Patrick Condreau	Carrboro resident	101 Misty Pines Place, Carrboro, NC			CIW	Concerned with the elimination of the northbound turn movement from Willow Oak Lane to Smith Level Road. Concerned with child safety on a four lane divided section.
5-Nov-07	Jason Henning	Carrboro resident	107 Juniper Court, Carrboro, NC			CIW	States that there is strong opposition to a 4-lane divided section and support for sidewalks. Does not understand what problem is being solved by widening the road, does not address the root cause of congestion.
5-Nov-07	Helen Frady	Carrboro resident	310 Ray Road			CIW	Roundabout and four lane section are not a good choice for bicycles and pedestrians.
5-Nov-07	Amy Ryan	Chapel Hill resident	209 Adams Way, Chapel Hill, NC 27516			CIW	Strongly prefer a signal light at Rock Haven and Smith Level Road. In favor of bike lanes. Request a protective curt between bike lanes and the roadway. Currently, dangerous left turn s are being made from Smith Level Road into driveways on the east side near Rock haven Road.
5-Nov-07	Heidi Регту	Carrboro resident	407 Robert Hunt, Carrboro, NC 27510			CIW	In favor of the proposed roundabout, sidewalks, bike lanes and greenway connection(?). Opposed to a four lane section

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Comment Date	Name	Organization	Address	Phone	E-mail	Comment Method	Comment Summary
5-Nov-07	Gregory Dito	Carrboro resident	103 River Creek Place, Carrboro, NC 27510			CIW	Eliminating northbound left turn movement from Willow Oak Lane onto Smith Level Road will increase Berryhill neighborhood traffic on BPW Club Road. AM backups on Smith level road due to right turns into Frank Porter Graham School and onto NC 54 to the north of the proposed project.
8-Nov-07	Terri Buckner	Carrboro resident				e-mail	Heritage Hills neighborhood listserv e-mail delivered by Gary Glover - PDEA HEU - e-mail opposing project and directing residents to online petition by Tom High against the project.
8-Nov-07	Thomas B. Cole	Carrboro resident	105 Misty Pines Place, Carrboro, NC 27510			mail	Eliminating northbound left turn movement from Willow Oak Lane onto Smith Level Road will increase Berryhill neighborhood traffic on BPW Club Road. Request a signal at this intersection of dedicated turn lane.
19-Nov-07	Sandra Cianciolo	Carrboro resident	105 Misty Pines Place, Carrboro, NC 27510 (Вептуhill)			mail	Concerned with the speed limit on Smith level Road. Concerned with traffic and increased traffic on Smith Level Road due to proposed widening, the effects of a 4-lane section, and elimination of the left turn from neighborhood onto Smith Level Road.
5-Nov-07	Wayne Pein	Citizen - Bicycle advocate			wpein@nc.rr.com	e-mail	Please forward comments to other planners and designers on the project.
7-Nov-07	Laura Morgan	Carrboro resident	311 Rossburn Way, Carrboro, NC 27510 (Kent Woodlands)		skip2rita@hotmail.com	e-mail	In favor of the proposed widening, sidewalks and bike lanes. Concerned with sidewalk access to Carrboro High School and Frank Porter Graham School.
7-Nov-07	Reg Morgan	Carrboro resident	311 Rossburn Way, Carrboro, NC 27510 (Kent Woodlands)		reg.morgan@prucarolinas.com	e-mail	In favor of proposed project. Previously supported NCDOT recommendation on project U-3306 - Weaver Dairy Road.
10-Nov-07	Lynn Long	Carrboro resident			longhaven@mindspring.com	e-mail	Concerned that the roundabout be sized to accommodate truck traffic on Smith Level Road. Also has questions on the functionality of roundabouts.
16-Nov-07	Tom High	Carrboro Resident - Activist		919-929-0754	<u>bthigh@aol.com</u>	e-mail	Forwarded e-mail from Douglas Galyon - NC Board of Transportation - from Mr.High, written on 11/02/07 - same substantitive comments as above.

U-2803 - Smith Level Road Recent Project Comment Summary

Comment Date	Name	Organization	Address	Phone	E-mail	Comment Method	Comment Summary
30-Nov-07	Wes Shuttleworth and Terese Johnson	Carrboro Residents	206 Nuttree Lane, Chapel Hill, NC 27516 P.O Box 16009, Chapel Hill, NC 27516-6009 (Kent Woodlands)	919-942-9988	wshuttle@us.ibm.com	e-mail	Do not support road widening to four lanes, support widening to three lanes. Are against the three to four lane transition area and recommend eliminating that and funding additional sidewalks and bike paths. Strongly support sidewalks and bike lanes.
3-Dec-07	Unknown	Unknown	420 Meadowlark Lane, Raleigh, NC 27601			mail	Anonymous mailing - cut out of CIW ad with derogatory comments.
4-Dec-07	Unknown	Unknown	4900 Proctor Court, Raleigh, NC 27606			mail	Anonymous mailing - cut out of CIW ad with derogatory comments.
4-Dec-07	Adrian Hands	Carrboro Resident			aeh@akc.org	e-mail	E-mail acknowleding receipt of public hearing maps.
14-Dec-07	Tom High	Carrboro Resident - Activist		919-929-0754	bthigh@aol.com	e-mail	Mr. High writes to update SB on online petition against project - see updated petition and signatures in comment package.
15-Dec-07	Randy Dodd	Carrboro Planning Staff		919-918-7326	rdodd@townofcarrboro.org	e-mail	Forwarded message from Cindy Camacho - Earthtech, follow up from interview with Planning staff. Expressed concern with project stormwater treatment and states that the receiving water for stromwater on this project is on the 303(d) impaired waters list. Suggests early involvement of Highway Stormwater program.
17-Dec-07	Bill Pressley	Chapel Hill resident	101 Ray Road Chapel Hill, NC	919-942-5210 (home) 919-801-6183 (cell)		phone	Inquiry about paving of Ray Road. Inquiry answered by Chuck Edwards - Division 7.
7-Feb-08	Carol Barrow	Chapel Hill resident	617 Yorktown Drive, Chapel Hill, NC 27516 (Heritage Hills)	919-781-3100 (office)		in person	SB met with Carol Barrow - she had the following comments/requests: 1) Requests a multi use path along Smith Level Road from Heritage Hills into Carrboro City Limits 2) Is willing to enter NCDOT's Adopt a Highway program for that same length of Smith Level Road; 3) Requests bus service to the Heritage Hills neighborhood; and 4) reduced speed limit in Heritage Hills neighborhood to 15 mph.

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STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RECEIVED Division of Highways

APR 2 3 2008

Preconstruction Project Development and Environmental Analysis Branch

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT SECRETARY

MEMO TO:	Art McMillan, PE	Linwood Stone, PE
	Dewayne Sykes, PE	Steven L. Brown, PE
	Mike Mills, PE	James H. Dunlop, PE
	Brenda Moore, PE	Erin Hendee, PE
	Eric Midkiff, PE	Jamille Robbins, PE
	Drew Joyner, PE	
FROM:	Jay Bennett, PE	
	State Roadway Design Engineer	
DATE:	April 18, 2008	
	Breiset 24960 1 1 (LL 2802) Orange Count	х Хил
SUBJECT:	Project 34860.1.1 (U-2803) Orange Count SR 1919 (Smith Level Road) from Rock H over Morgan Creek	

#### Post Workshop Meeting

A Citizens Informational Workshop was held on November 5, 2007 at the Carrboro High School in Carrboro. Approximately 69 citizens and NCDOT staff attended the workshop and 27 written comments were received from the public.

### Executive Summary

The project involves the widening of the existing 2-lane Smith Level Road (SR 1919) to multilanes from South of Rock Haven Road to Bridge No. 88 over Morgan Creek. The project is located within the municipal boundary of the Town of Carrboro. Environmental documents and preliminary plans were formerly produced for the project in 2001, and a Public Hearing was held in the same year. Based on public and town comments, NCDOT is re-starting the planning process to update previously studied alternatives and study an additional alternative for improving the road.

### **Topics for Discussion**

A wide variety of comments both written and oral were received at the Citizens Informational Workshop. The major concerns and comments made by the public were as follows:

1. Response to the Town of Carrboro's June 19, 2007 Resolution providing comments on the revised design of improvements to Smith Level Road – Project U-2803 (See Attachment)

TELEPHONE: 919-250-4016 FAX: 919-250-4036

WEBSITE: WWW.NCDOT.ORG/DOH

Page 2 Attendees April 11, 2008

- 2. Request to allow left turns from Willow Oak Lane onto northbound Smith Level Road.
- 3. Opposition to the 4-lane divided section from BPW Club Drive to Bridge No. 88 over Morgan Creek.
- 4. Concerns that the northbound grade is too steep for bicycle lanes. (Downgrade ranging from 6.7% to 7.8% for approximately .3 mile at the end of the project). Request that exclusive bicycle lanes be eliminated and that 15-foot wide outside lanes be specified instead.
- 5. Concerns regarding driveway access and pedestrian/bicycle safety at the proposed roundabout at Rock Haven Road.
- 6. Request to extend the sidewalk along Culbreth Road to the Culbreth Middle School.
- 7. Request for an exclusive right turn lane onto Culbreth Road.

### Post Hearing Resolutions

A Post Workshop Meeting was held in the Roadway Design Conference Room on March 28, 2008. The public's comments from the Citizens Informational Workshop were discussed. The following resolutions were developed for the issues involved in this project:

1. **Issue:** Response to the Town of Carrboro's June 19, 2007 Resolution providing comments on the revised design of improvements to Smith Level Road – Project U-2803

Action: Steven L. Brown of PDEA will prepare a response to the Town's resolution.

2. **Issue:** Request to allow left turns from Willow Oak Lane onto northbound Smith Level Road.

Action: To allow for the safe and efficient flow of traffic along SR 1919 (Smith Level Road) no left turn movements will be allowed from Willow Oak Lane onto Smith Level Road.

3. **Issue:** Opposition to the 4-lane divided section from BPW Club Drive to Bridge No. 88 over Morgan Creek.

**Action:** Based on the results of a capacity analysis that was performed using projected future traffic volumes, a 4-lane divided roadway sections is warranted in order to enhance mobility and roadway safety.

4. **Issue:** Concerns that the northbound grade is too steep for bicycle lanes. (Downgrade ranging from 6.7% to 7.8% for approximately .3 mile at the end of the project). Request that exclusive bicycle lanes be eliminated and that 15-foot wide outside lanes be specified instead.

Page 3 Attendees April 11, 2008

Action: The exclusive bicycle lanes were added to the project at the request of the Town of Carrboro and the design is similar to the existing bicycle network throughout the town. It was decided that the exclusive bicycle lanes will be maintained on both sides of the Smith Level Road within the limits of the project.

5. **Issue:** Concerns regarding driveway access and pedestrian/bicycle safety at the proposed roundabout at Rock Haven Road.

Action: Research has shown that roundabouts are safer for both bicyclists and pedestrians than traditional intersections. Bicyclists will have the choice of proceeding through the roundabout as a vehicle or a pedestrian. The bicycle lanes will be terminated in advance of the roundabout to encourage cyclists to mix with vehicular traffic. To accommodate bicyclists who prefer not to use the circulatory roadway, a widened sidewalk with suitable on and off ramps will be provided. Driveway access will be allowed within the roundabout. The shared driveway will be maintained for the Boyce and McKnight properties. The driveway access into the Roberson property will be relocated as far north as practicable to move the driveway out of the roundabout flare.

6. **Issue:** Request to extend the sidewalk along Culbreth Road to the Culbreth Middle School.

Action: The Culbreth Middle School is outside of the U-2803 project limits and beyond the scope of this project; therefore extending the sidewalk to the Middle School will not be incorporated into this project. The proposed sidewalk will extend from -Y4- (SR 1994 Culbreth Road) Sta. 13+83 to Sta. 17+50.

7. **Issue:** Request for an exclusive right turn lane onto Culbreth Road.

Action: A capacity analysis has shown that the roadway will function adequately without an exclusive right turn lane onto Culbreth Road; therefore it was decided to leave the current design unchanged.

With assistance from Roadway Design, Jamille Robbins will reply to all Workshop comments as needed. If anyone has any questions or comments regarding this information, please contact me or Brenda Moore, PE at (919) 250-4016.

BLM/rck Attachment

ATTACHMENT E -(



# NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

# **SR 1919 (SMITH LEVEL ROAD)** From south of Rock Haven Road to Bridge No. 88 over Morgan Creek

WBS Number 34860.1.1 TIP PROJECT NO. U-2803

> Carrbor• • range County

# Design Public Hearing

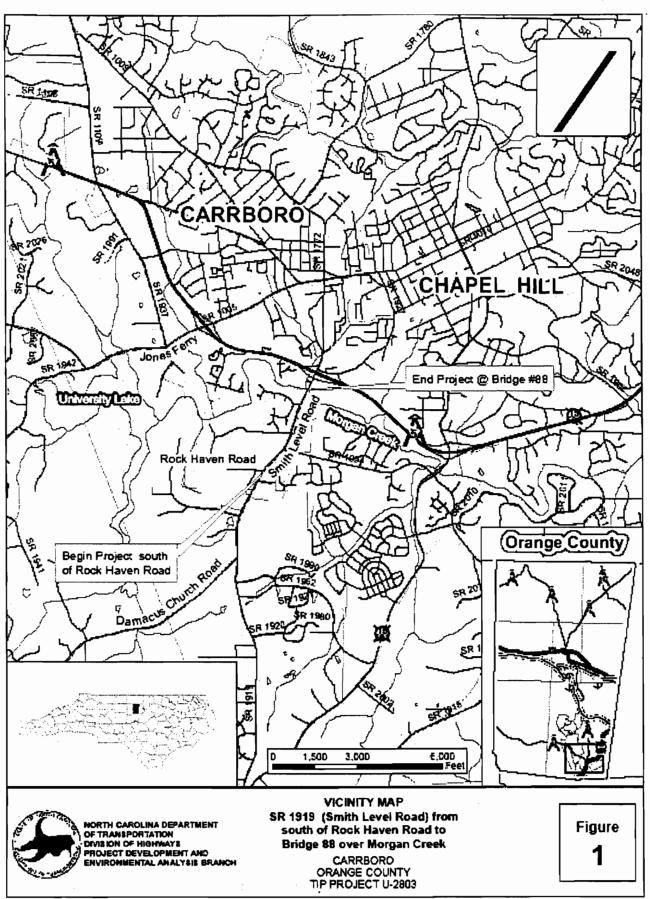
# Informal Open House 4:30 p.m. – 6:30 p.m. Formal Presentation 7:00 p.m.

Carrboro Elementary School 400 Shelton Street Carrboro, NC 27510

March 9, 2009

225 copies of this document were produced at a total cost of \$153.





#### PURPOSE OF AND NEED FOR THE PROJECT

The purpose of the project is to improve traffic capacity, bicycle and pedestrian access, and improve vehicle, pedestrian and bicycle safety.

The proposed project is intended to address the following bulleted deficiencies or needs of existing Smith Level Road:

### <u>Capacity Deficiencies</u>

Capacity is a term used to express the maximum rate in one hour at which people or vehicles can reasonably expect to pass through a point on a roadway during a given time period under the prevailing roadway and traffic conditions. The level of service (LOS) of a roadway is a measure of its traffic carrying ability. Levels of service range from LOS A to F. Level of Service A represents unrestricted maneuverability and operating speeds. Level of service B represents reduced maneuverability and normal operating speeds close to the speed limit. Level of service C represents restricted maneuverability and the posted speed limit is maintained. Level of service D represents severely restricted maneuvering and unstable, low operating speeds. Level of service E represents operating conditions at or near the capacity level. Breakdown conditions are characterized by stop and go travel; this occurs at level of service F. Traffic capacity is analyzed below along the mainline of Smith Level Road and at individual intersections along the project. Analysis was performed for both a No-Build (Do Nothing) Scenario and a Build (Project Implementation) Scenario.

#### 1. Mainline Analysis

**2005 No-Build Scenario** Projected mainline volumes along SR 1919 (Smith Level Road) in the project area range from 7,700 vehicles per day south of Rock Haven Road to 18,800 vehicles per day north of Public Works/School Driveway in 2005. Capacity analysis results indicate that the existing two-lane undivided facility is expected to operate at LOS C in the 2005 No-Build Scenario.

**<u>2030 No-Build Scenario</u>** Mainline volumes along SR 1919 (Smith Level Road) in the project area are expected to range from 13,500 vehicles per day south of Rock Haven Road to 24,100 north of Public Works/School Driveway in the 2030. Capacity analysis results indicate that the existing two-lane undivided facility is expected to operate at LOS E in the 2030 No-Build Scenario.

**2030 Build Scenario** Projected mainline volumes along SR 1919 (Smith Level Road) in the project area range from 13,500 vehicles per day south of Rock Haven Road to 24,100 vehicles per day north of Public Works/School Driveway in the 2030 Build Scenario. Capacity analysis results indicate that the proposed facility is expected to operate at LOS D in the 2030 Build Scenario. A portion of the facility near SR 1967 (BPW Club Drive) is projected to operate at a LOS F.

#### 2. Intersection Analysis

The intersections along the project were also analyzed to determine projected levels of service for years 2005 and 2030 for the No-Build condition as well as the 2030 Build condition. The results of the analyses indicate that some intersections are failing now as well as in the year 2030 with the No-Build condition. In the year 2030 Build condition, all intersections are operating at a higher and acceptable level of service. **Table 1** below displays the levels of service for the 2005 and 2030 No-Build scenarios as well as the 2030 Build scenario.

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Intersection	No Buil	d	-	Build			
	Movement		2005	2030	Movement		2030
SR 1919 (Smith Level Road) at Rock Haven Road		LR	D	C <sup>1</sup>	Signalized	gnalized	
	NB	LT	A	7			
SR 1919 (Smith Level Road) at The Villages Apartments		LR	D	F	EB	LR	С
Entrance	NB	LT	A	Α	NB	L	В
SR 1919 (Smith Level Road) at SR 1994 (Culbreth Road)	Signalized		в	с	Signalized		с
SR 1919 (Smith Level Road) at SR 1967 (BPW Club Drive)	Signalized		B	с	Signalized		с
	EB	L	F	F			
SR 1919 (Smith Level Road) at Willow Oak Lane		R ·	C	E	EB	R	В
	NB	L	в	С			
SR 1919 (Smith Level Road) at Public Works Drive/School Driveway	Signaliz	zed	C	D	Signalized		В

#### **Table 1: Intersection Levels of Service**

<sup>1</sup> Signalized in 2030 No-Build Scenario.

#### 3. Roundabout Analysis

A roundabout is proposed at the intersection of Rock Haven Road and SR 1919 (Smith Level Road). Analysis of a roundabout, including consideration of traffic impact from Carrboro High School, was performed for this project.

Roundabouts are circular intersections. Roundabouts reduce traffic conflicts (for example, left turns) that are frequent causes of crashes at traditional intersections.

Unlike a traffic circle or a rotary, a roundabout's incoming traffic yields to the circulating traffic

1--5

For roundabouts, two measures of effectiveness are usually used, volume to capacity ratio (v/c) and vehicle average delay. Average delay is calculated on a scale to provide a Level of Service (LOS) A to F. Typically, a value of .85 for v/c (meaning that the volume is at 85% of the theoretical capacity of the roundabout) is used, even if the LOS is acceptable. In addition to an overall intersection LOS, these measures are calculated for each approach of a single-lane roundabout. For signalized intersections, calculations are also provided for each individual movement. Generally, the worst LOS or v/c controls the intersection operation.

A roundabout at SR 1919 (Smith Level Road) and Rock Haven Road will work adequately through the 2030 forecast year for TIP project U-2803 with an 800 student high school. Although the v/c ratio is expected to be above the recommended maximum of 0.85 during the AM peak school period, it will still be below 1.00, and operations during this peak period will still be acceptable. If built, occasional minor capacity problems may occur due to unusual spikes in peak hour traffic volumes. The proposed roundabout will not work adequately once the high school is expanded to 1,200 students. Unless Smith Level Road is widened to accommodate a multi-lane roundabout, a traffic signal should be installed in its place if the school is expanded.

#### <u>Access and Safety Analysis</u>

There is a need along the proposed project to improve access and safety for vehicles, pedestrians and bicyclists on SR 1919 (Smith Level Road).

#### 1. Vehicle Safety

There were 13 reported crashes along this segment of SR 1919 (Smith Level Road) from February 1, 2004 through January 31, 2007. From the crash analysis, there do not appear to be any identifiable crash patterns or obvious safety hazards on this 0.809 mile segment of SR 1919 (Smith Level Road). The overall crash rate for this segment is 116.98 crashes per 100 Million Vehicle Miles Traveled (MVMT), which is below the Statewide Crash Rate of 396.74 MVMT for similar facilities. However, there are several inherent safety advantages to the proposed improvements to SR 1919 (Smith Level Road).

Statewide crash rates demonstrate that a 4-lane divided highway (Proposed Section C) is statistically safer than either a 2-lane undivided roadway or a 3-lane undivided roadway.

Of the 13 reported crashes on the segment in the study period, over 50% of the reported crashes (7) were rear-end type crashes. The addition of a center turn lane on Section A of the project will enable left turn movements along this section of SR 1919

(Smith Level Road) to be made out of the flow of through traffic, thus decreasing the likelihood of rear-end collisions.

The proposed roundabout at the intersection of SR 1919 (Smith Level Road) and Rock Haven Road at the southern end of the project will act as a traffic calming device, reducing vehicle speeds in the project area and likely improving overall safety on the project. Studies have shown that when compared with traditional intersections, roundabouts have been found to significantly reduce total crashes, injuries, and fatalities.

#### 2. Pedestrian and Bicycle Access and Safety

Bicycle and pedestrian facilities are currently inadequate or nonexistent along the project. Sidewalks exist at various locations along the project and bicycle travelers currently share a standard width lane with motor vehicles. Bicycle and pedestrian travel is expected to be significant in the area, based on commuting patterns, community makeup and the presence of multiple public schools within the project area. Additionally, a portion of SR 1919 (Smith Level Road) is part of the designated NC Bicycle Route 2 – Mountains to Sea.

The proposed project will provide continuous sidewalks along the length of the project, as well as striped bicycle lanes along the full length of the project.

This action will provide safer pedestrian and bicycle interaction with vehicle traffic and increase the viability and overall safety of pedestrian and bicycle travel in the area. Providing safe pedestrian and bicycle accommodations is consistent with local transportation plans and state transportation policy

#### IMPORTANCE OF SMITH LEVEL ROAD

SR 1919 (Smith Level Road) is designated as a minor arterial in the North Carolina Statewide Functional Classification System. The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) 2030 Long Range Transportation Plan of 2007 identifies SR 1919 (Smith Level Road) as an Urban Principal Arterial-Other SR 1338 in the North Carolina Statewide Functional Classification System.

The 2030 Long-Range Transportation Plan (LRTP) is the guide for major transportation projects in the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) area. The DCHC-MPO area covers Durham County and the urbanized portions of Orange and Chatham Counties. The plan recommends major transportation projects, policies and strategies designed to maintain existing transportation systems and serve the region's future travel needs. The LRTP is also designed to support land use and air guality goals for the urban area.

The Long Range Transportation Plan (LRTP) identifies Smith Level Road as an "Urban Principal Arterial-Other" in the NCDOT Functional Classification System. The proposed project is in conformance with the LRTP.

#### PURPOSE OF PUBLIC HEARING

Today's hearing is an important step in the North Carolina Department of Transportation's (NCDOT) procedure for making you, the public, a part of the project development process. The purpose of the hearing is to obtain public input on the design of the proposed project.

Planning and environmental studies on the highway project are provided in the environmental report – <u>State Environmental Assessment/Finding of No Significant</u> <u>Impact (SEA/FONSI)</u>. Copies of this report and today's hearing map displaying the location and design of the project have been available for the last 30 days for public review at the Town of Carrboro, 301 W. Main Street, Carrboro, 27510. The map is also available online at:

www.ncdot.org/doh/preconstruct/highway/roadway/hearingmaps by county.

#### YOUR PARTICIPATION

Now that the opportunity is here, you are encouraged to participate by making your comments and/or questions a part of the public record. This may be done by having them recorded at the Formal Public Hearing or by writing them on the attached comment sheet. Several representatives of the North Carolina Department of Transportation are present. They will be happy to talk with you, explain the design to you and answer your questions. You may write your comments or questions on the comment sheet and leave it with one of the representatives or mail them by April 9th, 2009 to the following address:

Mr. Ed Lewis NCDOT - Human Environment Unit 1598 Mail Service Center Raleigh, NC 27699-1598 Email: <u>elewis@ncdot.gov</u>

Everyone present is urged to participate in the proceedings. It is important, however, that THE OPINIONS OF ALL INDIVIDUALS BE RESPECTED REGARDLESS OF HOW DIVERGENT THEY MAY BE FROM YOUR OWN. Accordingly, debates, as such, are out of place at public hearings. Also, the public hearing is not to be used as a POPULAR REFERENDUM to determine the location and/or design by a majority vote of those present.

#### WHAT IS DONE WITH THE INPUT?



A **post-hearing meeting** will be conducted after the comment period has ended. NCDOT staff representing Planning, Design, Traffic, Division, Right of Way, Congestion Management and others who play a role in the development of a project will attend this meeting. The project will also be reviewed with federal

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agencies such as the US Army Corps of Engineers (USACE) and the US Fish and Wildlife Service as well as state agencies such as the NC Department of Environment and Natural Resources. When appropriate, local government officials will attend.

All spoken and written issues are discussed at this meeting. Most issues are resolved at the post-hearing meeting. The NCDOT considers safety, costs, traffic service, social impacts and public comments in making decisions. Complex issues may require additional study and may be reviewed by higher management, Board of Transportation Members and/or the Secretary of Transportation.

Minutes of the post-hearing meeting are prepared and a summary is available to the public. You may request this document on the attached comment sheet.

#### WHAT HAPPENS NEXT

After the post-hearing meeting, preliminary roadway designs will be refined and will include efforts to further reduce environmental impacts. Further studies and surveys will be conducted on the preliminary findings collected from the initial studies, such as hazardous materials, historic and archaeological sites, and access to residences and businesses.

#### PROJECT DESCRIPTION

The North Carolina Department of Transportation (NCDOT) proposes improvements to Smith Level Road from south of Rock Haven Road to Bridge No.88 over Morgan Creek (see **Figure 1**). The project is 0.809 miles in length. Transportation improvements include widening the facility to a three-lane roadway from south of Rock Haven Road to Culbreth School Road, constructing a roundabout at the intersection of Smith Level Road and Rock Haven Road, widening the facility to 3 to 4-lanes between Culbreth School Road and BPW Club Road, and widening the facility to a 4-lane median divided roadway from BPW Club Road to the project's northern terminus at Bridge No. 88 over Morgan Creek.

#### DESCRIPTION OF ALTERNATIVES

The alternatives considered for this project consist of "no build", and build alternatives for the SR 1919 (Smith Level Road) improvements.

#### A. <u>No-Build</u>

The "no build" alternative consists of doing nothing to the existing facilities. If improvements are not made to SR 1919 (Smith Level Road), the facility will be unable to accommodate the future traffic. With no improvements, the mainline of SR 1919 (Smith Level Road) will operate at a LOS E by the year 2030 and intersections on the project will operate as low as a LOS F by the year 2030. Additionally, the No-Build alternative does not improve pedestrian and bicycle access or safety in the project area. Therefore, the "no-build" alternative has been dropped from further consideration. The "no-build" alternative does, however, provide a basis for comparison of other alternatives.

#### B. SR 1919 (Smith Level Road) Improvement Alternatives

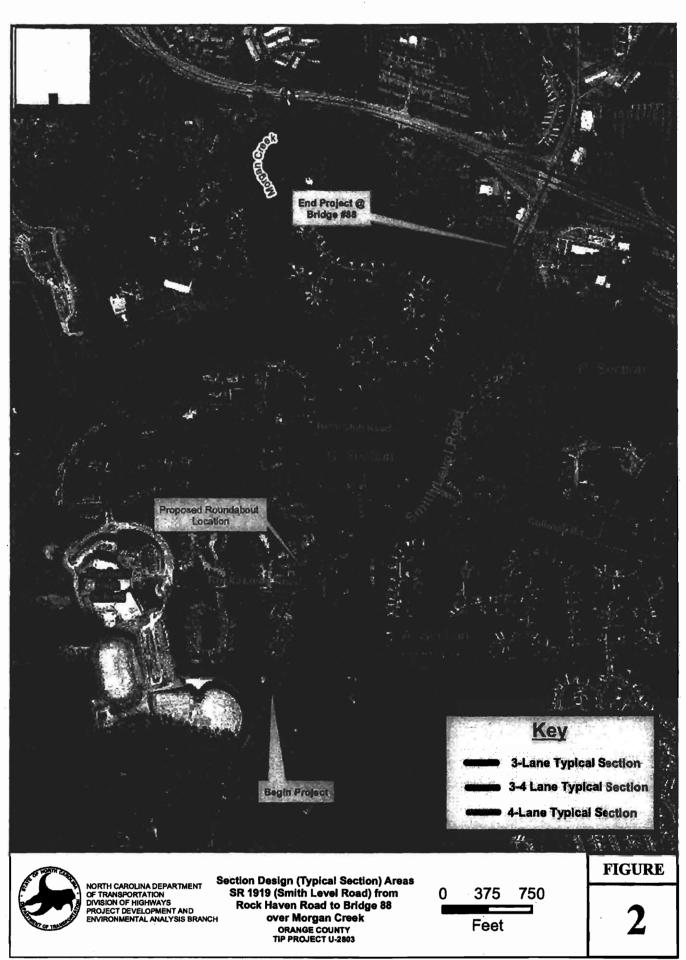
#### 1. Alternative 1 (Combined Typical Section Alternative)

Alternative 1 improves Smith Level Road to a 3-lane/4-lane cross section with a roundabout at the intersection of Smith Level Road with Rock Haven Road. Roundabout intersections are designed to allow continuous flow through an intersection by allowing yielding right-hand movements for each approach. All traffic must travel in a circular pattern through the intersection until reaching its desired exit point. Roundabouts are designed to operate at low speeds and therefore are limited in overall capacity. Dual lane roundabouts operate the same way as single lane roundabouts but have an increased overall capacity when compared to single lane roundabouts.

Sidewalks and bicycle lanes will be installed throughout the length of the project. This alternative will: 1) Section A: Widen the southern section of Smith Level Road from Rock Haven Road to Culbreth Road to three-lanes, 2) Section B: Widen the central section of Smith Level Road between Culbreth Road and BPW Club Road to 3-4 lanes. This will be a transition area between the 3-lane and 4-lane sections, with multiple turn lanes beginning and ending, and 3) Section C: Widen the northern section of Smith Level Road between Morgan Creek and BPW Club Road to a four-lane, median divided, curb and gutter facility.

Please see Figure 2 for a depiction of the typical section areas of this alternative and Figure 3 for the typical sections for Alternative 1.

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#### 2. Alternative 2 (4-Lane Typical Section Alternative)

Alternative 2 improves Smith Level Road to a 4-lane median divided, curb and gutter facility throughout the project length. This alternative widens SR 1919 (Smith Level Road) to a four-lane curb and gutter facility divided by a 17.5-foot wide curbed median. Sidewalks and bicycle lanes are included in this alternate.

This alternative was considered because it provides increased and adequate traffic capacity for the corridor in the design year, impacts are minimal and it provides safe traffic operations by controlling the turning movements along the project at median openings.

This alternative was previously studied and recommended as the preferred alternative in a State Environmental Assessment and Finding of No Significant Impact (EA/FONSI) prepared by NCDOT in 2001. Comments on this alternative from the public and the Town of Carrboro subsequent to the public hearing indicated significant opposition to this alternative.

Please see Figure 3 for the typical section for Alternative 2.

#### 3. Alternative 3 (3-Lane Typical Section Alternative)

Alternative 3 improves Smith Level Road to a 3-lane curb and gutter facility throughout the project length. This alternative widens SR 1919 (Smith Level Road) to a three-lane curb and gutter facility, inserting a middle turn lane along the project. This alternative was considered because the impacts are minimal and it provides safer traffic operations by allowing through traffic to flow while left turn movements exit the flow of through traffic while waiting to turn. However, this alternative does not improve the traffic capacity of the roadway to an acceptable level in the project design year.

Please see Figure 3 for the typical section for Alternative 3.

#### C. Comparison of SR 1919 (Smith Level Road) Improvement Alternatives

Table 2 presents a comparison of the transportation improvement alternatives.

Resource	Alternative 1	Alternative 2	Alternative 3
Railroad Crossings	0	0	0
Schools	0	0	0
Recreational Areas and Parks	0	0	0
Churches	0	0	0
Cemeteries	0	0	0
Major Utility Crossings	0	0	0
National Register Eligible Properties	0	. 0	0
Archaeological Sites	0	0	0
Federally-Listed Species within Corridor	0	0	0
100-Year Floodplain Crossings	0	0	0
Prime Farmland	0	0	0
Residential Relocations	0	0	0
Business Relocations	0	0	0
Hazardous Material Sites	0	0	0
Wetland Impacts	0 acres	0 acres	0 acres
Stream Crossings	0	0.	0
Stream Impacts	196 lf	196 lf	122 lf
Terrestrial Natural Community Impacts			
- Maintained/Disturbed	7.82 acres	6.38 acres	6.56 acres
- Mixed Pine Hardwood	5.61 acres	4.83 acres	4.56 acres
Substantial Noise Impacts	0	0	0
Water Supply Watershed Protected Areas	0	0	0
Wildlife Refuges and Game Lands	0	0	0
Section 4(f) Impacts (Historic)	0	0	0
Low Income Population Impacts	Low	Low	Low
Minority Population Impacts	Low	Low	Low
Construction Cost	\$ 4,350,000	\$5.600.000	\$ 3,750,000
Utility Cost	\$ 568,140	\$ 576,250	\$ 430,080
Right-of-Way Cost	\$ 2,255,000	\$2.885.000	\$ 2,265,000
Total Cost	\$ 7,173,140	\$ 9,061,250	\$ 6,445,080

 Table 2: Comparison of Improvement Alternatives

#### D. <u>Recommended Alternative</u>

Alternative 1 is the recommended alternative because it provides improvements to SR 1919 (Smith Level Road) without significant impacts to the surrounding human and natural environment. Alternative 1 provides increased capacity on SR 1919 (Smith Level Road), improves pedestrian and bicycle access by providing sidewalks and bicycle lanes, and improves vehicle, pedestrian, and bicycle safety, while minimizing impacts to the community setting and natural environment.

Alternative 1 will incorporate three different typical sections to reflect the transition on the project from lower traffic volumes and a rural setting to the south of the project area to higher traffic volumes and a more urban area to the north of the project.

Alternative 1 also provides a roundabout at the southern end of the project, which will function as a traffic calming device for traffic entering Carrboro from the south, as well as traffic from Carrboro High School onto SR 1919 (Smith Level Road).

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Additionally, Alternative 1 provides sidewalks and bicycle lanes throughout the project, including along SR 1919 (Smith Level Road) and limited portions of cross streets of Smith Level Road in the project area

#### PROJECT INFORMATION

Length: 0.8 mile

**Design Speed**: 50 mph

Typical Section: Varies (See Figure)

Right of Way: About 100 Feet

Access Control: None

Tentative Schedule:

The tentative schedule is shown below. A number of factors can affect a project schedule, so schedules are subject to change.

Right-of-way Acquisition – July 2009 Construction – January 2011

Estimated

Cost:

 Right of Way:
 \$2,255,000

 Construction:
 \$4,350,000

 Total:
 \$6,605,000

For more information on how a road gets built, please go to:

http://www.ncdot.gov/construction/roadbuilt/

#### RIGHT-OF-WAY PROCEDURES

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After decisions are made regarding the final design, the proposed right-of-way limits will be staked in the ground. If you are an affected property owner, a Right-of-Way Agent will contact you and arrange a meeting. The agent will explain the plans and advise you as to how the project will affect you. The agent will inform you of your rights as a property owner. If permanent right-of-way is required, professionals who are familiar with real estate values will evaluate or appraise your property. The evaluations or appraisals will be reviewed for completeness and accuracy and then the Right-of-Way Agent will make a written offer to you. The current market value of the property at its highest and best use when appraised will be offered as compensation. The Department of Transportation must:

- 1. Treat all owners and tenants equally.
- 2. Fully explain the owner's rights.
- 3. Pay just compensation in exchange for property rights.
- 4. Furnish relocation advisory assistance.

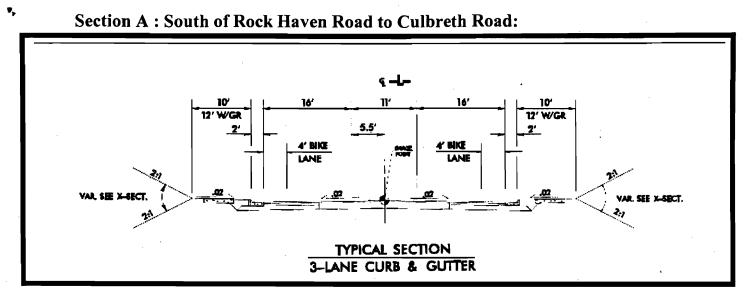
#### RELOCATION ASSISTANCE

If you are a relocatee, that is, if your residence or business is to be acquired as part of the project, additional assistance in the form of advice and compensation is available. You will also be provided with assistance on locations of comparable housing and/or commercial establishments, moving procedures, and moving aid. Moving expenses may be paid for you. Additional monetary compensation is available to help homeowners cope with mortgage increases, increased value of comparable homes, closing costs, etc. A similar program is available to assist business owners. The Right-of-Way Agent can explain this assistance in greater detail.

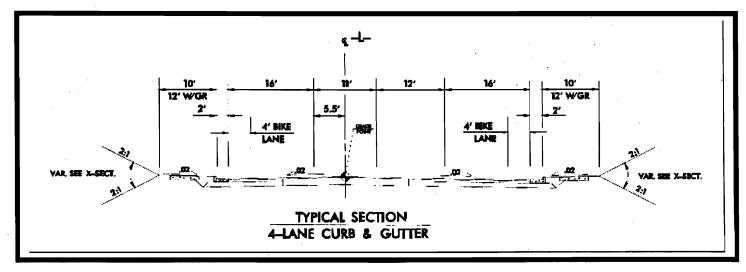
# NOTE: PAMPHLETS SUMMARIZING RIGHT OF WAY AND RELOCATION PROCEDURES ARE AVAILABLE AT THE SIGN-IN TABLE.

# FIGURE 3: PROPOSED TYPICAL SECTIONS

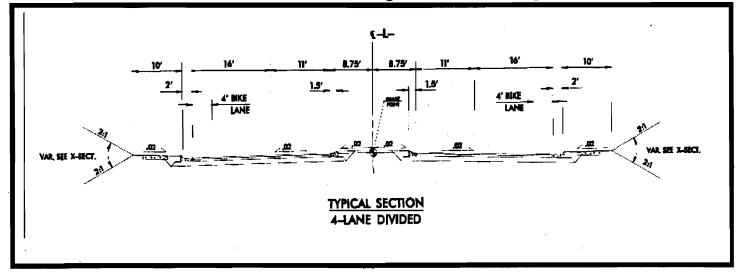
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Section C: From BPW Club Road to Bridge No. 88 over Morgan Creek:



## **COMMENT SHEET**

SR 1919 (Smith Level Road)

Design Public Hearing

TIP No. U-2803

**Orange County** 

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NAME:

**ADDRESS:** 

**COMMENTS AND/OR QUESTIONS:** 

Comments may be mailed by April 9, 2009 to:

Mr. Ed Lewis NCDOT - Human Environment Unit 1598 Mail Service Center Raleigh, NC 27699-1598 Phone: (919) 431-6585 FAX: (919) 434-2001 Email: <u>elewis@ncdot.gov</u>