



D U R H A M
Bicycle & Pedestrian Advisory Commission

Durham Transportation Division ▪ 101 City Hall Plaza ▪ Durham, NC 27701

31 January 2008

Mr. Jamille Robbins
Human Environment Unit
N.C. Department of Transportation
1583 Mail Service Center
Raleigh, NC 27699-1853

Subject: TIP # U-3804, Improvement to Hillandale Road from I-85 to North of Carver Street

Dear Mr. Robbins,

The Bicycle and Pedestrian Advisory Commission of Durham has reviewed the public hearing map for this project. We request that the following comments be entered into the public record and that these concerns be addressed in the project planning and design phases. The comments are as follows:

1. Provide for the full length of the project on both sides of the road 4-foot wide bicycle lanes as required by the Adopted DCHC MPO 2030 Long Range Transportation Plan and the adopted Durham Bicycle Plan. It is noted that 4-foot wide bicycle lanes could be accommodated without increasing the proposed roadway cross section if the proposed travel lanes are narrowed to 11-foot wide.
2. From the beginning of design, include all pedestrian elements in order to provide fully integrated, complete and functional pedestrian facilities. Elements to address in the design now include: curb cuts, traffic control measures, striped crosswalks, stop bars, intersection curb radii, sidewalks and their functional terminations (e.g., no dead ends), and pedestrian-activated signalization. The current NCDOT practice of designing the roadway striping at the end of the project results in an uncoordinated design that is not functional for pedestrians. As providing safe and efficient pedestrian transportation facilities is a priority of this project, it is critical that all pedestrian elements be included from the start of design.
3. Include MUTCD-compliant Share-the-Road signs in both directions for the full length of the project.
4. Eliminate the northbound R turn lane onto Front be eliminated from the project. It does not appear that this turn lane is necessary to improve motor vehicle (MV) capacity, yet the proposed addition of this turn lane will unnecessarily increases pedestrian crossing distance and time, increase motor vehicle turning speeds, and exacerbate turning conflicts between MVs and pedestrians; all decreasing safety for pedestrians, counter to the project scope.
5. Provide fully functional pedestrian crossings for all legs of the Hillandale-Carver intersection.
6. Tighten intersection turn radii from Hillandale to west leg of Carver, to no larger than the proposed radii for east leg of Carver. We note that the east leg of Carver has higher ADT

than the west leg, yet shorter radii, which appears inconsistent and has no significant capacity improvement. To the contrary, the long radii proposed for the west leg of Carver are unnecessarily increase pedestrian crossing distances, MV turning speeds, and potential turning conflicts between MVs and pedestrians.

7. Clarify on the drawings exactly where the bicycle facilities begin and end on Hillandale, in both directions. It appears that sufficient pavement width exists both north of the project limits and south of the project to continue the bike lane striping into the adjoining roadway segments.
8. Show on the plans the locations of all existing crosswalks (including but not limited to south end of project), and tie all new sidewalks into existing (or replacement/relocated) sidewalks, throughout. Several of these existing features are not depicted.
9. Continue proposed new sidewalk on northbound Hillandale at Fawn all the way to the existing driveway, to eliminate proposed dead end.
10. Continue proposed new sidewalk northbound at Carver to existing driveways along both sides of Carver, to eliminate proposed dead ends.
11. Continue new sidewalk northbound across intersection with Cammie. It is unreasonable to lead pedestrians to an intersection but provide no opposite landing or curb cut.
12. Replace existing sidewalk connection from southbound Hillandale into DPS school site north driveway.
13. Verify that the proposed relocation of the Croasdaile dumpster (along southbound Hillandale) will not require service vehicles to block the sidewalk when servicing this private dumpster.
14. Provide sidewalk stubouts to all frontage properties, to facilitate pedestrian access from frontage properties to the public right-of-way sidewalk. Note that providing this connectivity element is a Durham UDO requirement [12.4.1A and 12.4.4C].
15. Construct all driveway connections with curb ramps, to provide continuous concrete sidewalks across the driveways and to eliminate the need for curb and gutter and HC curb cuts on each side of every driveway.
16. Provide a mid-block pedestrian crossing in front of the Durham Public Schools site.

We appreciate the opportunity to provide comments on this project and look forward to a successful project which will greatly improve the safety of bicycling and walking in this part of Durham.

Sincerely,



Dan Clever, Chair
Durham Bicycle and Pedestrian Advisory
Commission

cc: Mr. Kenneth Spaulding, N.C. Board of Transportation
Ms. Nina S. Szlosberg, N.C. Board of Transportation
Mr. Mark Ahrendsen, City of Durham, Transportation Division

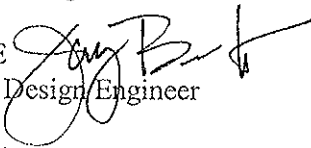


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

MEMO TO: Post Hearing Meeting Attendees

FROM: Jay Bennett, PE
State Roadway Design Engineer 

DATE: March 25, 2008

SUBJECT: Project: 34972.1.1 (U-3804) Durham County
F. A. Project STP-0505(14)
Hillandale Road (SR 1321) From I-85 to North of Carver Street (SR 1407)

Post Hearing Meeting

The post hearing meeting was held in the Structure Design conference room at 10:00am on January 31, 2008, to discuss the comments received from the combined public hearing. The combined public hearing was held on December 4, 2007 at the North Carolina School of Math & Science located at 1219 Broad Street in Durham. Approximately 92 people were in attendance. People attending the public hearing were largely opposed to the 4-lane divided section and requested either a 5-lane undivided section or no improvements at all.

Below is an **executive summary** of the main issues concerning the project, with a more detailed explanation of concerns following.

EXECUTIVE SUMMARY:

- The purpose of this project is to improve congestion through the corridor. Commercial and residential access restrictions will help but are being met with public opposition.
- The I-85 ramp intersections are being constricted by the close proximity of cross streets and adjacent driveways. Again, further restrictions are being met with public opposition.
- Through capacity on Hillandale Road south of I-85 is perceived as a much greater need. There is another TIP project for that segment; however, it has been reduced to bicycle and pedestrian improvements only.
- There has been improvement in congestion since the completion of the I-85 widening project. There is concern that the previous construction has skewed both the accident rate as well as the traffic volumes in this corridor.
- NCDOT's Bicycle and Pedestrian Unit recommends 2' additional outside lane width; however, the City of Durham is requesting 4' striped bike lanes, even at the expense of travel lane width.
- A second Citizen's Informational Workshop will be held this spring in order to provide the additional information requested by the public and show the proposed design changes.

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MAJOR CONCERNS:

A.) 4-LANE DIVIDED VERSES 5-LANE UNDIVIDED

1. NCDOT's Congestion Management Section recommended a 4-lane divided cross section.
2. The City of Durham recommended a 4-lane divided cross section.
3. The nearly unanimous citizen opinion is to change the cross section to a 5-lane undivided section.
4. The Durham Board of Commissioners support the resident's request of a 5-lane section.

B.) PROVIDE FULL MOVEMENT ACCESS TO FRONT STREET

1. Front Street is 300' north of the I-85 ramp intersection.
2. This street accesses numerous businesses and residencies that very strongly oppose any restriction.
3. This street also provides access to Loehmann's Plaza (see below) that opposes this restriction.
4. There is currently only 75' \pm of vehicle storage available.
5. The southbound I-85 ramp signal queue extends beyond this street.
6. Front Street also connects to Carver Street.

C.) PROVIDE FULL MOVEMENT ACCESS AT LOEHMANN PLAZA'S MAIN ENTRANCE

1. The current entrance is 1100' north of the I-85 ramp intersection.
2. Most residents and business owners expressed fear that access restrictions here will negatively affect the facility and the businesses within. Its continued vitality was important to the entire neighborhood.
3. The plaza's attempting a major redevelopment with a more modern look and the addition of a large grocery store, pending a full access entrance with a traffic signal.
4. Existing topography prohibits aligning the entrance with nearby Fawn Avenue, which would provide access to several residential sites; however, the street network also connects to Carver Street.
5. There is a large, undeveloped site at the end of Bertrand Avenue that could add additional traffic; however, Bertrand Avenue is only 700' north of the I-85 ramp intersection.

D.) PROJECT UNNECESSARY

1. The public's perception is that most of the traffic is heading south towards Duke University and Hospital. Most attendees questioned the need to improve this segment since the area south of I-85 will remain a 2-lane, 2-way pattern.
2. The public questioned the stated accident rate, particularly since the widening to a 3-lane section and the end of the I-85 widening project. Perceived safety and capacity are much improved.
3. The public questioned both the stated traffic counts and the projected counts. Both perceived to be too high and may have been affected by the I-85 construction.

E.) EXCESSIVE U-TURN MOVEMENTS

1. It was perceived that too much limitation on access would result in a detrimental amount of U-Turns at signalized intersections.
2. There is also a concern that traffic will reroute through area parking lots instead of using the U-Turn facilities.

F.) EXCESSIVE IMPACTS ALONG PROJECT

1. There were general comments on the size and scale of the project not fitting the "context" of the neighborhood; however, there was limited concern shown for bicycle and pedestrian movements or through traffic not living in the area.
2. There is a strong opposition to the exclusive, southbound right onto Carver Street. Residents want it changed to a shared through-right movement in order to maintain more of the adjacent tree buffer.

G.) ADDITIONAL REQUEST FROM THE CITY

1. The City requests changing the proposed 12' travel lanes to 11' in order to provide 4' striped bicycle lanes.
2. The City requests a roundabout be considered at the Hillandale Road and Carver Street intersection.
3. The City requests a bus pullout be considered near Loehmann's Plaza.
4. The City requests a second public meeting presenting any planned modifications to the project.

RESPONSE:

With the high traffic volumes projected for this project, the divided 4-lane typical section is still preferred by NCDOT for its safety and capacity longevity benefits. NCDOT's Project Development & Environmental Analysis branch will prepare additional information to assist in the public's understanding of this decision at another Citizen's Informational Workshop which will present the following design modifications incorporated into a new map.

To address some of the access concerns of the public and in coordination with property owners, the following access management revisions are being incorporated into the design:

- A full movement median break will be added at Bertland Avenue.
- With the redevelopment of Loehmann Plaza, their main entrance will be relocated directly across from Bertland Avenue to share the median break.
- A Left-over will be added at Fawn Avenue.
- A Left-over will be added at the medical clinic's driveway.
- A Left-over will be added at the School Staff Development Center.
- The southbound right onto Carver Street will be removed and a shared through-right will be used in its place.

The close proximity of Front Street to the I-85 ramp signal is a safety concern. The traffic queuing from the signal will block the Front Street intersection during peak traffic, and there is insufficient storage for northbound traffic wanting to turn left onto Front Street; however, the newly added intersection at Bertland Avenue will provide a mitigating U-Turn for this movement closer to Front Street and an exclusive right turn lane will be added to receive the U-Turn movement.

The proposed median break at Bertland Avenue does not meet minimum spacing requirements from the I-85 ramps; however it was decided to grant an exception in this case. This greatly simplifies traffic movement and access needs to Loehmann Plaza, existing and future development on Bertland Avenue, and the added benefits to the Front Street U-Turn, which should discourage cut through traffic at the shopping center. Moving Loehmann Plaza's main entrance to line up with Bertland Avenue also allows sufficient room to add the left-overs into Fawn Avenue and the medical clinic.

The scope for the TIP project previously proposing to widen Hillandale Road south of I-85 has been changed to bicycle and pedestrian improvements only; however, the traffic volumes on this segment of Hillandale Road along with the traffic volumes entering and exiting I-85 continue to warrant this project.

The intersection of Hillandale Road and Carver Street was reviewed and it was determined that a roundabout would not work in the context of this site. According to NCDOT's policy on bicycle accommodations, NCDOT will provide 14' outside lanes, any additional width will have to be paid for by the requesting municipality (both additional pavement and additional Right of Way). NCDOT will coordinate with the Durham Area Transit Authority to accommodate their needs along this corridor to the extent practical.

If anyone has any questions or comments regarding this information, please contact me or Jason Moore, PE, Project Engineer at (919) 250-4016.

JAB/ajm/bck

cc: Post Hearing Meeting Attendees

Art McMillan, PE	Highway Design
Jay Bennett, PE	Roadway Design
Dewayne Sykes, PE	Roadway Design
Jason Moore, PE	Roadway Design
Bryan Key, PE	Roadway Design
Robert O'Dell	Roadway Design
Jason Hatfield	Roadway Design
Eric Midkiff, PE	Project Development & Environmental Analysis
Drew Joyner, PE	Project Development & Environmental Analysis
Ma'ad Hassan	Project Development & Environmental Analysis
Wesley Brown	Project Development & Environmental Analysis
Jamille Robbins	Project Development & Environmental Analysis-HEU
Mike Stanley, PE	TIP Development
Wally J. Bowman, PE	Division 5
Terry Fox, LG, CPG	Geotechnical Engineering-GeoEnvironmental
Betty Yancey	Right of Way Branch
Cathryn P. Harris	Right of Way Branch
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BenJetta Johnson, PE	Traffic Engineering-Congestion Management