



STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

PERDUE

May 20, 2009

2-sided
(Post on web)

Debbie Barbour, P.E., Director of Preconstruction

FROM: Kevin Lacy, P.E., State Traffic Engineer

SUBJECT: Locating Curb Ramps

Crosswalks and stopbars are critical to pedestrians and motorists as curb ramps (wheelchair cuts) are to disabled pedestrians as required by the ADA (Americans with Disabilities Act). While each provides direction for a particular group, they work collectively to provide increased safety and mobility to everyone using our highways. Determining the location of each prior to construction will help mitigate potential misplacement of curb ramps and crosswalks during construction.

It has come to our attention there have been situations where curb ramps were not properly installed in relation to the stopbars or crosswalks. However, preconstruction does not produce a plan that includes an exact or approximate location of curb ramps. The curb ramps are typically constructed first in conjunction with the curb and gutter and sidewalk, which occurs well in advance of the installation of the stopbars and crosswalks. This problem was addressed in an August 27, 2001 memorandum from Richard Mullinax, PE, who discussed this issue and offered guidelines to correct the problem. Unfortunately the problem still exists, which necessitates adjustments having to be made in the field once the roadway and markings are constructed. In addition, the problem increases at non-signalized intersections that later become signalized.

For these reasons, I asked a committee to investigate some solutions to resolve these issues. A meeting was held on March 5, 2009 to address the best method for identifying curb ramp locations and attempt to mitigate potential conflicts between the plans, construction and the contractor. In the discussion were representatives from the following sections- ITS and Signals, Signing and Delineation, Roadway Design, Construction, Work Zone Traffic Control, Congestion Management, and Division 9 Traffic Operations.

The committee concluded the incorrect locations can be attributed to issues such as poor contractor communications, cluttered drawings, and stage construction. The committee suggested the problem could be resolved if the curb ramps are stationed on the plans, communicated at the field inspection meetings and during construction.

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GARNER, NORTH CAROLINA 27699-1561

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LOCATION:
NCDOT-TRANSPORTATION MOBILITY AND SAFETY DIVISION
750 N. GREENFIELD PARKWAY
GARNER, NORTH CAROLINA 27529

cc: MAY 29 2009

NEW

COVERING

MOORE

MOORE

MUMFORD

STEPHENSON

PREPARE REPLY FOR SIGNATURE

F.Y.I.

REVIEW/DISCUSS WITH

STOKES

HOUSER

GOODNIGHT

SPEER

GOVINDAS

WALLS

TAYLOR

BEVERLY

HARRIS

PERDUE

SIGNATURE

DESIGN BRANCH

MAY 26 2009

Rdy

Str

Hyd

L&S

Staff

Exe

Sec

ELIOT A. CONFORTI

Secretary

FYI

Take appropriate Action

Prepare reply for

AMS

In an attempt to mitigate future misplacement of curb ramps, the following measures are proposed:

- 1) The curb ramps will be shown and stationed on the Pavement Marking Plans (PMP) provided by the Signing and Delineation Unit. The Signal Design Section will provide the Signing and Delineation Unit stopbar locations for signalized intersections in advance of the Final Design Field Inspection (FDFI) or Combined Field Inspection (CFI), whichever is applicable.
- 2) The Signing and Delineation Unit will show the curb ramp symbol on the PMP and not use Roadway Design's "WCR" acronym. This will insure stopbar and crosswalk pavement markings are located correctly with the curb ramps.
- 3) Upon request, the Signal Design Section will assist the Signing and Delineation Unit in reviewing curb ramps at non-signalized locations to line up with crosswalks that may be added if the intersection is ever signalized in the future.
- 4) Roadway Design will continue to show the curb ramp symbol "WCR" on their plans for quantity, while the Work Zone Traffic Control and Roadway Design Section will place a note on their plans to the contractor to see the PMP for the curb ramp stationing. Any changes to those locations and quantities would be provided by the Signing and Delineation Unit and revised on the Roadway Design plan prior to turn-in.
- 5) The Resident Engineer needs to make the Contractor aware of curb ramp issues during the Pre-Construction Conference and at the appropriate monthly meetings. Once the Resident Engineer is aware when the curb and gutter construction will begin, ensure the Contractor has located curb ramps according to the PMP.

If in agreement, the above measures will be implemented on projects beginning with October 15, 2009 Let.

If you have any questions for comments please advise.

JKL/cbh

cc:

Terry R. Gibson, P.E., State Highway Administrator
Division Engineers

Jon Nance, P.E., Chief Engineer

Ron King, P.E., State Signing and Delineation Engineer

Greg Fuller, P.E., State ITS and Signals Engineer

Jay Bennett, P.E., State Roadway Design Engineer

Art McMillan, P.E., State Highway Design Engineer

Buddy Murr, P.E., State Signals Engineer

Stuart Bourne, P.E., State Traffic Management Engineer

Ron Hancock, P.E., State Construction Engineer

Committee Members