## NCDOT Congestion Management General Recommendations and Comments for Driveway Permit Reviews

The comments and recommendations contained in this review are subject to the approval of the local District Engineer's Office. The recommendations included in this review are limited to proposed site improvements and approved development improvements; therefore, additional improvements may be necessary from other future developments or from future public roadway projects. Comprehensive network comments and recommendations can be provided separately upon request.

The developer may be required to obtain an approved encroachment agreement covering proposed work within the state right-of-way. If this is the case, the encroachment should be cross-referenced to this review.

As required by the "Policy on Street and Driveway Access to North Carolina Highways," dated July 2003, the applicant is responsible for identifying all right-of-way and/or control-of-access limits and for including this information on all submittals. Failure to accurately disclose R/W and C/A limits could result in the denial or closure of access points.

If this driveway permit request requires a break or modification in control-of-access, an application for the break or modification should be submitted to the Division Engineer for appropriate handling within NCDOT, following the guidelines and procedures of the Right-of-Way Disposal and Control of Access Committee.

If a new or modified median crossover on an existing facility is proposed then the approval or denial is the responsibility of the State Traffic Engineer. If a new or modified median crossover is proposed on an active TIP project then the approval or denial is the responsibility of the NCDOT Highway Design Branch.

If requested driveways for this development are located on a TIP project, the development's access request should be coordinated with the ongoing TIP project. Roadway Design should be advised of any approvals and associated geometric revisions associated with this development. Right-of-way that is identified as necessary to accommodate TIP project should be dedicated.

The proposed development should donate the right-of-way necessary for possible future widening of adjacent public roadways. The site access locations and types should be reevaluated if any adjacent public roadways are widened in the future.

If the proposed development includes a proposed school, NCDOT's Municipal and School Transportation Assistance (MSTA) Group should be contacted to provide comments and recommendations concerning the internal traffic circulation pattern of the school.

All street and driveway entrances onto state system roadways should be controlled with appropriate traffic control devices, including but not limited to, traffic signals, roundabouts, stop, yield, directional, regulatory, and advisory signs and pavement markings. All traffic control devices shall conform to the requirements set forth in the Manual on Uniform Traffic Control Devices.

Due to the anticipated impacts that the additional traffic volumes associated with this development may have on the adjacent traffic facilities and with various other geometric improvements that may occur, multiple signalized intersections may require signal modifications in any project phase to accommodate the additional traffic volume.

Any signal additions, revisions or modifications on the State Highway System necessitated by the development shall be approved by the Regional Traffic Engineer and the Division Traffic Engineer. Design plans and signal installation should be coordinated with the Regional Traffic Engineer, the Division Traffic Engineer, the Signals and Geometrics Section, and appropriate municipality, if applicable.

Consideration should be given to the possible future need for signalization and the associated span poles, controller and pad, and guy wires at all intersections.

Any signing and/or pavement marking revisions/modifications necessitated by the development should be the responsibility of the developer and coordinated with the Division Traffic Engineer. Final pavement marking and signing plans should be submitted to the Division Traffic Engineer for approval prior to the installation of any signs and/or pavement markings.

The comments and recommendations provided are based on the volume assumptions and calculations from the TIA.

The comments and recommendations provided by Congestion Management are based on analysis and evaluation of the capacity and efficiency of the anticipated roadway network.

Any roadway modifications or improvements necessitated by the development should be the responsibility of the developer unless otherwise noted.

If the developer anticipates adding or petitioning for addition to the state system, all roads/streets should be designed and constructed in conformance with the current North Carolina Department of Transportation design and construction guidelines.

Existing laneage on all approaches should be maintained unless otherwise noted.

Cross-access to adjacent properties is strongly encouraged to reduce repetitive trips and provide future alternative routes of ingress/egress.

All "outparcels" or "excluded areas" should be served internally with no additional access onto abutting roadways. The developer should convey this condition in any lease or sell agreements.

Due to, but not limited to, the comments and recommendations from this review of the proposed development, changes in the internal circulation may be necessary to ensure that driver confusion is minimized to the maximum extent possible.

Adequate horizontal and vertical sight distances should be reserved at all proposed entrances. Foliage that interferes with sight distance should be cut back to protect lines of sight. The District Engineer should determine if all drainage facilities are adequate. Curb cuts and curb ramps should be constructed in conformance with the "Guidelines for Curb Cuts and Ramps for Disabled Persons," if applicable.

Adequate right-of-way for widening and sight distance triangles should be reserved.

The recommended turn lane storages and lane distances provided by Congestion Management are the minimum recommended full storage lengths prior to lane tapers. All widening and turn lanes should also include appropriate transitional and deceleration tapers. Recommended turn lane and transitional treatments are shown on pages 78 and 79 of the "Policy on Street and Driveway Access to North Carolina Highways," dated July 2003, and the Roadway Design Manual.

For state highway system roads without a median, opposite side driveways should be aligned to prevent the operational and safety problems caused by offset driveways. When it is necessary to offset driveways or streets, spacing should conform to pages 40-42 of the "Policy on Street and Driveway Access to North Carolina Highways," dated July 2003.

Any additional development, either within this site or adjacent to this site, that intends on using this development's access will require an updated driveway permit and re-evaluation of geometric and traffic control needs.

## **Common Acronyms Used in Congestion Management Reports**

AADT	Average Annual Daily Traffic	MPO	Metropolitan Planning Organization
AASHTO	5,	MSTA	NCDOT Municipal and School
	and Transportation Officials		Transportation Assistance Program
ADT	Average Daily Traffic	MUTCD	FHWA Manual on Uniform Traffic
Alt	Alternate		Control Devices
Ave	Avenue	NB	Northbound
Blvd	Boulevard	NCAC	North Carolina Administrative Code
BOT	Board of Transportation	NCDOT	North Carolina Department of
Bus	Business		Transportation
Вур	Bypass	NCMUTCD	North Carolina Supplement to the MUTCD
C/A	Control of Access	NHS	
CA	Control of Access		National Highway System
CL	Center Line	PDEA	Project Development & Environmental Analysis
CO	Certificate of Occupancy	PE	Professional Engineer
CTP	Comprehensive Transportation Plan	r ∟ Pkwy	Parkway
DENR	Department of Environmental and	PUD	Planned Unit Development
	Natural Resources	R/W	-
DOC	Department of Commerce		Right-of-Way
Dr	Drive	Rd	Road
DTE	Division Traffic Engineer	ROW	Right-of-Way
EA	Environmental Assessment (document)	RPO	Rural Planning Organization
EB	Eastbound	RTE	Regional Traffic Engineer
EMS	Emergency Medical Services	RTL	Right-Turn Lane
Ext	Extension	S&G	Signals and Geometrics
EOP	Edge of Pavement	SB	Southbound
FAQ	Frequently Asked Questions	SF	Square Feet
FBL	Frontage Boundary Line	SFDU	Single Family Dwelling Units (Homes)
FHWA	Federal Highway Administration	SHC	Strategic Highway Corridor
FS	Feasibility Study	SPUI	Single-Point Urban Interchange
Ft	Feet/Foot	SR	Secondary Route
GFA	Gross Floor Area (in Trip Generation)	St	Street
GLA	Gross Leasable Area (in Trip Gen.)	TM&SD	Transportation Mobility and Safety
GRA	Gross Rentable Area (in Trip Gen.)		Division of NCDOT
GS	General Statute	TIA	Traffic Impact Analysis or Traffic
HCM	TRB Highway Capacity Manual		Impact Assessment (aka TIS)
HCS		TIP	Transportation Improvement Program
	Highway Capacity Software	TIS	Traffic Impact Study (aka TIA)
lchg	Interchange	TND	Traditional Neighborhood Development
Int	Intersection	TPB	Transportation Planning Branch
ITE	Institute of Transportation Engineers	TRB	Transportation Research Board
ITS	Intelligent Transportation System	TWLTL	Two-Way Left-Turn Lane
LOS	Level of Service	VFP	Vehicle Fueling Positions (used in
LTL	Left-Turn Lane		Gas Station Trip Generation)
LUC	Land Use Code (in relation to ITE Trip	VPD	Vehicles Per Day
	Generation Manual)	VPH	Vehicles Per Hour
MPH	Miles Per Hour	WB	Westbound
2008-04-01 NCDOT Congestion Management Driveway Permit Review General Comments Page 3 of 3			