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CHESTERFIELD COUNTY
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LANE B. RAMSEY
COUNTY ADMINISTRATOR

MEMORANDUM

TO: The Members of the Chesterfield County Planning Commission

FROM: Thomas E. Jacobson, Director of Planning Tom

DATE: June 5, 2003

SUBJECT: Connectivity Policy

PROPOSED AMENDMENT: The proposed connectivity policy sets forth specific requirements for making connections to or providing stub streets. There are also certain limited instances where connection to stubs streets may be waived. Also, the policy sets forth the desired spacing for the over network of non-frontage type streets. (See Attachment A)

STAFF RECOMMENDATION: Staff will present a graphic presentation on the policy and recommends the Planning Commission set a public hearing on the attached policy in conjunction with the Emergency Access Policy.

OVERVIEW: In conjunction with the recently adopted amendment to the Subdivision Ordinance and the draft Emergency Access Policy, the draft Connectivity Policy will complete the work elements dealing with a comprehensive approach to providing adequate access to residential development. The policy sets forth four broad purposes for street interconnectivity as:

(a) improving public safety response time to residents by providing multiple means of access;
(b) reducing travel time and distance between neighborhoods by providing alternative travel paths;
(c) maintaining an acceptable quality of life in the residential neighborhoods by preventing excessive through traffic on local streets where individual lots have direct access onto the street; and
(d) maintaining the traffic carrying capacity of arterial and collector streets.

CONNECTIONS TO UNDEVELOPED PROPERTY

The policy sets forth four standards that would be utilized primarily at the time of tentative plat review. These standards would require a stub to undeveloped land, unless an evaluation of the adjacent property determines that:

(a) the undeveloped property does not have developable potential at that location; or
(b) a through street is not required or desired at that location; or
(c) the street connection creates a violation of the Planning Commission's Stub Road Policy; or
(d) the connection would provide primary access to property not designated for residential development on the Comprehensive Plan through the subdivision.

The policy will require the subdivider to sign the stub locations advising future homeowners that the extension of that street is planned.

CONNECTIONS TO INFILL DEVELOPMENT

These connections are most frequently addressed through the zoning process though they also arise at the time of tentative plat review. Connections made between existing and infill development is often critical in providing adequate access. It had been the past practice to allow residential development to occur with the belief that future sections or the adjacent property when developed would provide the necessary access. Often these connections are not made and large numbers of lots are only accessible by a single street.

The policy requires streets in new subdivisions to connect to all adjacent stubs unless the resultant local street pattern would create a traffic count that exceeds the Planning Commission's Stub Road Policy or allows a connection to a stub street within a subdivision that complies with access requirements to be waived if:

(a) there are a sufficient number of other stub streets to adequately disperse the traffic and not cause a concentrated use of any one stub street connection; or
(b) the connection to a particular stub will cause a concentrated use at that location; and
(c) may require pedestrian and bicycle paths to be constructed to facilitate traffic between the subdivisions.

INTERNAL CIRCULATION

In very large residential developments internal circulation is often impeded more by design than by site constraints. The lack of cross connections can increase response time and travel distance. The policy will require the subdivision design to facilitate interconnectivity within its limits. The overall street network shall be laid out to facilitate convenient internal travel based upon topographic and environmental constraints. This will not prohibit the extensive use of cul de sacs, but may potentially require some looping and through streets to be integrated into the overall layout. The design community is currently moving in this direction.

STREET SPACING

The final aspect of the policy deals with the overall street network of through streets to facilitate travel through residential areas. The spacing or frequency of the through streets decreases with density. An improved circulation network, designed according to the policy guidelines, will provide more alternatives for traffic movement, reduce traffic loading on arterial streets and avoid the needed development of super streets in excess of four lanes. This will result in the creation of alternative parallel travel paths.

CHESTERFIELD COUNTY
RESIDENTIAL SUBDIVISION CONNECTIVITY POLICY

Draft June 2, 2003

Purpose

The purpose of street interconnectivity shall be to (a) improve public safety response time to residents by providing multiple means of access; (b) reduce travel time and distance between neighborhoods by providing alternative travel paths; (c) maintain an acceptable quality of life in the residential neighborhoods by preventing excessive through traffic on local streets where individual lots have direct access onto the street; and (d) maintain the traffic carrying capacity of arterial and collector streets.

Standards

1. New streets shall be stubbed to undeveloped land unless an evaluation of the adjacent property determines that:
   (a) the undeveloped property at that location has development constraints such as but not limited to, wetlands, topographic features, size, etc;
   (b) a through street is not required or desired at that location;
   (c) the street connection creates a violation of the Planning Commission's Stub Road Policy; or
   (d) the connection would provide sole access to non-residential property .

2. Streets in new subdivisions shall connect to all adjacent stubs unless the resultant local street pattern would create a traffic count that exceeds the Planning Commission's Stub Road Policy. Connection to a stub street within a subdivision that complies with street access requirements as specified in Section 17-76 (h) of the Subdivision Ordinance may be waived if:
   (a) there are a sufficient number of other stub streets to adequately disperse the traffic and not cause a concentrated use of any one stub street connection; or
   (b) the connection to a particular stub will cause a concentrated traffic at that location.

3. Subdivision design shall facilitate interconnectivity within its limits through the layout of the overall street network. The design concept of solely using multiple unconnected cul de sacs shall be evaluated and approved based upon circulation, topographic and environmental constraints.

The following table depicts the desired spacing of through streets to facilitate travel through residential areas. The spacing or frequency of the streets decreases with density so as to provide more alternatives and avoid or reduce the construction of streets in excess of four lanes.

Density	Through Street Spacing *
< 1 du/a	1 1/2 miles in each direction
1.01 – 2 du/a	4,000 to 2,500 feet in each direction **
2.01 – 4 du/a	2,500 to 2,000 feet in each direction **
> 4.01 du/a	Street spacing will be reviewed on a case by case basis

* Through streets include arterial, collector and residential collector streets.
** Spacing between streets decreases proportionally to increase in density.

4. Where street extensions are not required, the subdivider shall construct a system of pedestrian pathways which will facilitate pedestrian travel within and to adjacent development. .

5. The subdivider shall initially install and maintain thorough the life of the project signs(s) on all stub roads. The purpose of such signs shall be to advise the public that the extension of the stub is planned.

Applicability

This policy shall apply to any zoning case filed or any tentative subdivision plat that receives approval after (INSERT DATE). Any property that received zoning or tentative subdivision plat approval prior to the effective date of this policy and has conditions that conflict with provisions of this policy shall be governed by those conditions.

Adopted (INSERT DATE)