McLEAN CITIZENS ASSOCIATION

Resolution regarding proposed Lot "Shape Factor" Ordinance Amendments

November 29, 2006

Whereas, in recent years, numerous subdivisions have been proposed with a number of very irregularly shaped lots as a means of achieving required lot width, required lot area, required road frontage, or a suitable location for a septic field, and thereby increasing the lot yield for the subdivision[1]; and

Whereas, lots of such irregular shape create many problems, affecting such things as yard maintenance, septic field location and maintenance, owner access to all parts of the property, resource protection area and flood plain encroachments, storm water management, etc; and

Whereas, property owners rely on the county to ensure the orderly division of land; and

Whereas, a homeowner may not find out until the closing (when he first sees his survey), or until after he has purchased his property, that what he thought was his yard, in fact, belongs to someone else and is of no practical use to him, or that his neighbor has the right to erect a fence or a children's playhouse directly in front of his house, or that there is a septic tank supporting another property in what he thought was his yard; and

Whereas, allowing the formation of irregularly shaped lots for the purpose of locating a septic field on a remote site can be particularly problematic because: (1) the owner of such a septic field may need an easement over his neighbor's property to get equipment to the field for the purpose of maintenance, (2) problems can arise when a property owner makes an improvement, e.g., a sprinkler system to land that he erroneously believes is his but, in fact, holds a neighbor's septic field, (3) odors from a malfunctioning septic field so located will affect neighbors rather than the owner of the septic field; and

Whereas, the county staff has conducted detailed studies of preliminary plats for 625 lots in 89 proposed subdivisions and determined that the degree of irregularity of shape can be expressed by a simple mathematical formula based on the perimeter and area of the lot; and

---

[1] *See* Peter Whoriskey, *Growth Carves Suburbs into Odd Lots,* Washington Post, Sept. 15, 2003, at A11; *Also see* Alec MacGillis, *Fairfax Acts to Rein in Irregular Lots,* Washington Post, Nov. 15, 2006, at B1.

Whereas, this formula is easily calculated as the perimeter of the lot squared, divided by the contained area (P^2/A), and the formula yields a dimensionless number, the "shape factor" (SF), ranging from ~12.5 for a circle, which has the least perimeter for a given area, and upward; and

Whereas, a shape factor (SF) is designed to prevent the creation of irregularly shaped lots by providing a measurement by which the compactness and degree of regularity of the shape can be evaluated; and

Whereas, the staff studies have defined three options for incorporating the formula and its outcomes into the Zoning Ordinance, the Subdivision Ordinance, and the Public Facilities Manual (PFM):

1. Option A – A "bright line" approach where lots with a shape factor of 35 or less are acceptable and those with one greater than SF 35 are not;

2. Option B – An approach whereby lots with a shape factor (SF) of 35 or less are acceptable *per se* (as in Option A), but lots with an SF of 35-50 may upon sufficient justification be approved by some authority (i.e. either [1] the Director (of Public Works), [2] the Board of Supervisors [via special exception], or [3] the Board of Zoning Appeals [via special permit]), while lots with SF greater than 50 are *per se* not acceptable;

3. Option C – An approach which would incorporate either Option A or Option B, but which would permit exclusion from the shape factor calculation those portions of the lot exclusively dedicated to septic drain fields.

Now therefore, be it resolved, that the McLean Citizens Association endorses and strongly supports the incorporation of shape factor limitations into the Zoning Ordinance, the Subdivision Ordinance, and the Public Facilities Manual (PFM) as a means of limiting the creation of unnecessarily irregular lots; and

Be it further resolved, that the McLean Citizens Association specifically endorses and recommends the adoption of Option B, since it provides adequate provision for <u>reasonable</u> location of septic drainfields; and

Be it further resolved, that the McLean Citizens Association vehemently opposes Option C; and

Be it further resolved, that the McLean Citizens Association recommends that, in any case where location of a septic drain field is invoked as a justification for approval of irregular portions of a lot with a shape factor of 35-50, that this assertion be supported by studies of the entire parcel by a soil scientist licensed to practice in the Commonwealth of Virginia; and

Be it finally resolved, that the McLean Citizens Association recommends that the Board of Zoning Appeals be the authority allowed to approve lot shapes for lots with shape factors of 35-50 to insure that the public receives adequate notice and the ability to participate in the process if necessary.

cc: Fairfax County Planning Commission
Fairfax County Board of Supervisors
Mr. Jeff Blackford
Ms Lorrie Kirst
Mr. John Jennison