

# Environmentally Sensitive Development

by Edward T. McMahon

Last year I attended a conference on environmentally sensitive development conducted by the National Association of Home Builders. Most of the speakers were developers interested in building more compact, mixed use, pedestrian friendly communities. Almost to a person the builders complained about the inflexibility of local subdivision standards, particularly excessive residential street standards.

As one builder put it, “the typical code requires us to build roads wide enough to land a 747 on.” Or as another builder

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explained, “too wide streets encourage speeding and are unattractive.” Over-designed roads are also expensive. According to one expert, “over wide streets can add up to \$9,000 to the cost of a house.”

Sitting next to me throughout the conference was a representative of the Chesapeake Bay Foundation, a regional environmental organization devoted to restoring the health of the Chesapeake Bay. After the first complaint from a builder about residential road standards he turned to me and said, “I completely agree with him.” An environmentalist and a developer in complete agreement. This would come as a shock to many people, but the environmentalist quietly explained that less pavement meant less run-off, less sedimentation, and less non-point source pollution. This in turn meant a healthier Chesapeake Bay.

We often hear people say that a healthy economy and healthy environment go hand in hand and yet innovative developers who would protect the environment are often stymied by inflexible regulations. Ironically, when an environmentally sensitive design varies from the letter of the law, developers must often spend time and money arguing for their plan. When the cost and delay are too great, the “by-the-book” project will prevail over innovation, even if it hurts the environment.

Land use regulations need to be flexible enough to allow for innovation. Currently, regulators deal with one issue at a time, as if they existed in a vacuum. A more holistic approach, that looks at the relationship of

all the issues, would prevent some of the defects in the present system. Let’s look at a few examples:

**1. Street Standards** — Do residential streets have to be 36 to 42 feet wide when 24 feet is safer and less costly? Overly wide streets mean more paving, more runoff, and more tree removal. This clearly hurts the environment while increasing development costs. Likewise, regulations should, wherever feasible, permit flexibility in road slope and grade standards. For example, having a shallow slope alongside a 36 foot wide road often means 80 to 90 feet of clearance. Increasing the slope — even slightly — may significantly reduce the number of trees or amount of vegetation that would otherwise have to be cleared, without sacrificing road stabilization. Both the environment and the developer will benefit.

**2. Wetlands** — Is it better to carve up five acres of woodland than to temporarily disturb an acre of wetland? Put another way, does it make sense to destroy a lot of one natural feature to save a little of another? One Maryland developer whose plans called for disturbing 3.5 acres of wetland on a large site was required to clear 7 acres of forest to mitigate for the disturbed wetland. There are clearly better ways to achieve environmental protection.

**3. Parking lots** — Does every parking lot have to be designed for the Christmas Eve overflow crowd, and remain mostly empty 95 percent of the time? If parking lots were designed to meet typical customer flow requirements instead of being over designed for the peak demand hour, adverse impacts on stormwater runoff, soil erosion, wildlife habitats, and non-point source pollution would be reduced. Infrequently used overflow lots could have grass or other porous surfaces.

**4. Stormwater Management** — Do your regulations permit developers to use natural stormwater management systems such as grassy swales or gravel packed trenches? Or do your regulations require



## Visioning:

At the local level, perhaps the best way to identify common ground is through a community visioning process. A vision is an overall image of what a community wants to be and how it wants to look at some point in the future. What most communities that conduct visioning processes find is that there is great unanimity of opinion about what people like and don’t like about growth and development. Unfortunately, they also find that many local zoning codes are road maps for sprawl and environmentally insensitive design.

[Editor’s Note: For more on the visioning process, see Michael Chandler’s “Putting Vision in Our Plan” in PCJ #21 and 22, and Walter Cudnohufsky’s “Dreaming the Future: Community Vision Planning” in PCJ #11.]



## Resources:

The Maryland Office of Planning has developed an outstanding new publication, *Achieving Environmentally Sensitive Design Through Flexible and Innovative Regulations*. Copies of that report are available for \$2.00 from the Maryland Office of Planning, 301 W. Preston Street, Baltimore, MD 21201. Attn: Barbara Wise. Tel: 410-767-4562.

storm sewers, curb and gutters, or other high cost systems in every case? What about retention ponds? Today, they are typically little more than a whole in the ground with a fence around them. Do your regulations give developers the flexibility to design ponds as an amenity, surrounded by vegetation instead of fences? Can channels be curved instead of straight?

**5. Zoning** — Is your zoning flexible enough to protect open space and natural features? Local comprehensive plans almost always express the goal of preserving community open space, but the typical large lot zoning ordinance often does just the opposite. For example, 100 three acre lots on a

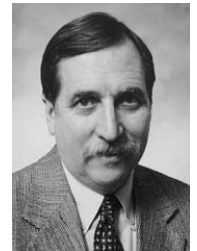
300 acre site will eradicate all open space and natural features. On the other hand, 100 one acre lots on a portion of the site will preserve 200 acres of open space while requiring less grading, fewer roads, and shorter sewage lines. Zoning ordinances need to be flexible enough to allow for clustering and other environmentally sensitive design techniques.

Clearly planners, elected officials, developers, environmentalists, and the general public have more in common than is generally recognized.  "Visioning"

A growing number of communities recognize that there are alternatives to sprawl that are more attractive, efficient, profitable,

and environmentally sensitive than the typical cookie-cutter development pattern. We need to encourage these innovations and facilitate creative developers who want to design ecologically. ♦

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## On-Line Comments

"Edward McMahon's article is articulate and appropriate. Too long have the forces of development been pitted against the friends of the environment when common sense could save hundreds of hours of meetings and an untold cost in litigation.

How resource consuming it is to build a road two semi tractor trailers can pass when it is the occasional compact car and a bicycle with a trailer that must share the road.

This kind of visioning will lead to a greater United States and world."

— *Michael Omogrosso, Eugene, Oregon*

"As a planner, I agree with the holistic approach, but I believe the 'whole' must be whether we are building livable and sustainable communities, or just more developments for the next generation to escape from. ... I have [also] struggled with the 'flexibility' issue throughout my career as a planner, and keep running up against the question of who is being granted this regulatory flexibility? I have always thought (modestly) that I would be able to administer land development regulations much more sensibly if I had more flexibility. But I have never been sure that others would be as judicious. Flexibility can also allow decisions to be more politicized, and in the end, worse."

— *William G. Carroll, Baltimore, Maryland*

"The key to Ed McMahon's article is indeed the visioning process and from my experience there is unfortunately little ecological insight brought to bear in such dialogues for many reasons. There must be interaction and dialogue among developers, planners, community members and leaders — and innovation should be encouraged, but there are instances where environmental sensitivity does not allow for compromise."

— *William Budd, Pullman, Washington*

"I am a CPA. I am also an environmentalist. Unlike some of my radical friends, however, I am not likely to chain myself to a bulldozer. The bulk of my clients are construction contractors or builders. Most of them are also environmentalists — to a point.

Life as we know it requires development. Even my radical friends live in houses built by developers and drive to the protest sites on roads built by contractors. One of the essential keys to affordable development is cooperation between developers and preservationists. As Ed makes clear in this article, we can all benefit from reasonable, rational, principled compromise."

— *Jim Hudspeth, Olalla, Washington*

"[P]eople have a tendency to forget why all the "inflexible" standards were adopted by City Councils (not planners) in the first place.

These standards were adopted because people did not like what was being built, substandard roads too narrow to allow emergency and

service vehicle by, sidewalks so people could be safe from cars and flooding streets, inadequate parking which overflowed into neighborhoods, flooding of adjacent properties and so on (think back and you can recreate this list for yourself). They are inflexible standards because that makes it EASY to administer. Flexibility requires more staff which is one thing the City Councils did NOT want to spend money on."

— *Ray Quay, Phoenix, Arizona*

"In Grand Rapids we formed a committee under the auspices of the Greater Grand Rapids Home Builders to address these issues, and others. The Land Development Environmental Task Force has membership from local communities, our regional environmental advocacy group, the Michigan Department of Natural Resources, the county road commission and drain commissions, Michigan United Conservation Clubs, local planners and consultants, engineers, and the head of our local nature conservancy.

We have produced a 'Residential Development Checklist for Environmental Concerns,' ... documents on "Considerations for Open Space Communities," and a pamphlet on land preservation techniques. A committee of the Task Force has also been working on guidelines for 'compact, livable communities' and 'living neighborhoods.' These guidelines stress many of the elements noted in the article. ... For information readers can contact me at (616) 336-7750"

— *Steve Langworthy, Grand Rapids, Michigan*