



CHIEF'S FILE CABINET

Ronny J. Coleman

Going Green

Here is one for ya. What did they call an environmentalist 100 years ago? It could be a variety of answers, including nature lover. The second question; what do they call an environmentalist today? The answer; activist, attorney, adversary of government and advocate for a different way of life.

At least one aspect of our society has awakened to the fact that the environment is a worthy consideration when it comes to how our communities are developing. And, if you are in the fire prevention business there is a high degree of possibility that in the very near future you are going to meet one of those people who has the green thumb. They are not the least bit interested in the way things used to be but rather are looking for how things ought to be in order to protect the environment.

We shouldn't be entirely shocked by this. For example I can remember from my fire service career what we used to call a hazardous materials incident. It was classified as a "wash down". In other words, if we couldn't see it anymore and if we could flush it into the storm drains or sewer lines then the hazardous materials incident was considered to be over. That has certainly changed. The other day I was walking down a street in a community and saw an opening to a storm drain that was indicative of the significance of that change. There, cast in concrete was a symbol of a fish and words to the effect of what goes in here ends up in the water supply. It warned that if you were caught flushing a hazardous material into the drain you would be fined.

As a result of the increase in environmental concerns there are also things that are going on in our communities that we should be paying attention to from a fire prevention point of view. One of the first of these is this concept that is now being given a name of "sustainable community's". We would like to see all of our communities sustained, so what makes a difference about this concept? Well, for starters what they mean by sustainable community is to cut down on traffic, cut down on the use of energy and to make the communities more of an antithesis of lifestyles and businesses than we have experienced in the last 100 years in the country. The era of urban sprawl may become the newly identified endangered species

If your city has not broached this subject then you probably don't have much interest in this column. But if you are a community that is growing or a community that is redeveloping there is a high degree of possibility that you as a fire marshal are going to be asked to start looking at a whole new way of operating your city's code enforcement program. And for starters, one of the things that are going to be on the drawing board is the fact that they are going to try to mix residential occupancies with business occupancies. We have grown accustomed to the fact that this is not a concept that we are very comfortable with. Most of the fire codes have been aimed with the idea that a business is a business and a residence is a residence and never the twain shall meet.



CHIEF'S FILE CABINET

Ronny J. Coleman

What is driving this phenomenon however is the realization that as our population is graying – (what is with all of these colors coming in) we need to find ways of keeping people close to conveniences such as shopping and basic infrastructure needs. Hence the green environment is recommending that we utilize land differently than we have in the last fifty years.

If you lived in Europe this concept wouldn't affect you at all. I can show you hundreds of towns in European context in which businesses and homes have been mixed for hundreds of years with a minimum amount of impact. But, if you look at the urban sprawl that has impacted most of the western part of the United States this concept is going to be considered somewhat foreign.

What are some of the things that we need to be thinking about? Well – for one thing, sprinklers. Rather than beating our chest and lamenting how much we are going to be disturbed by this phenomenon perhaps this is another opportunity for us to make in-roads on the utilization of sprinkler technology to limit fire problems. What could be better than to have a totally sprinklered set of circumstances even if the land is being used more densely and these occupancies are mixed?

Another thing we need to be prepared for is a whole discussion of fire department access and apparatus size. This may offend some of my operational firefighting friends but quite frankly our apparatus is getting bigger and bigger and more of a liability when it comes to dealing with certain types of construction design guidelines emerging in our communities. I am not about to propose the demise of the triple combination pumper – but I am going to suggest that there are fire departments that may have to start looking at shorter wheel bases, tighter turning radius and other physical features of their apparatus differently than they have in the past.

And, we may have to take an entirely different look at things such as public education and code enforcement. Perhaps in the new green environment people who live in these occupancies will be much more open to assuring that the community is not just sustainable but is also safe.

One of my experiences, that I don't seem to be able to share with a lot of fire prevention types, is hanging around with people who are shaping the development of some of these standards. For example, I have gone to the American Planning Associations Annual Meeting and have participated in a lot of conferences and workshops associated with the Building Owners and Managers Associations (BOMA) and have talked to a lot of architects and land developers over the last ten years. These people have a perspective on what they think is going to happen to our community that is significantly different from those perspectives shared by most of our fire prevention types.



CHIEF'S FILE CABINET

Ronny J. Coleman

Yet, community planning is in it for the most part not considered to be a fire prevention area of expertise. Perhaps it is time for us to start becoming more aware of the planners vocabulary and start examining very, very closely what these new design guidelines will mean for our profession.

Along with this desire to make our communities more compact and denser there are other issues that will emerge. These would include such things as traffic calming, traffic impediment, and other features that put responding fire apparatus into potential compromise. There is a lot of room for us to develop ways of dealing with those issues if we get in on the ground floor during the planning stage.

And the vocabulary for the design of these new sustainable communities is undergoing a change also. Check out the following terms:

Accessory Dwelling Unit - An accessory living unit (also known as granny flats, in-law quarters, garage apartment, carriage house, and secondary dwelling units) is a one-bedroom or studio unit that provides independent living accommodations for one or more persons. It can be “attached” (structurally connected to a single-family residence) or “detached” (a separate structure from the main house or not attached to the main residence). The ADU is only permitted as the second story of a garage and must have its own separate entrance from the main structure.

Activity Centers - Designated areas of primary activity within the community, intended to serve as focal points for the areas of the community within which they are located. The uses that each of the Activity Centers may contain will vary depending upon the characteristics and needs of the area in which they are located.

Adaptive Reuse - The redevelopment of existing older or abandoned structures for new development opportunities. These activities provide for the revitalization and redevelopment of older urban areas by providing new uses for existing structures (e.g., residential loft units in former warehouse buildings).

Affordable housing - Housing capable of being purchased or rented by a household with very low, low, or moderate income. Housing is considered affordable when a household pays less than 30 percent of its gross monthly income (GMI) for housing, including utilities.

Buffer - Open spaces, landscaped areas, used to physically separate or screen one use, roadway or highway, or property from another so as to visually shield or block noise, lights, or other nuisances.

Buffer Zone - The installation of plant materials, fencing, or landforms (or a combination of these measures) between two or more properties which inhibits visibility and/or mitigates the transmission of noise, dust, lights, and other nuisances from one property to another.



CHIEF'S FILE CABINET

Ronny J. Coleman

Building Envelope - The three dimensional space within which the principal use is permitted to be built on a lot which is defined by maximum height regulation, lot coverage, yard setbacks and landscape setbacks.

Build-To Lines - Building facades must be 0-5 feet from the street side property lines where build-to lines are drawn. Awnings and architectural features may project beyond the build-to lines. Recessed arcades and trellises are encouraged.

Business Park - An employment park that meets the needs of converging industrial and office needs; has a multi-use nature; and possesses a de-emphasized industrial character due their higher quality architectural design and building flexibility. Business parks may also contain high-technology businesses; research laboratories; prototype development, assembly, and fabrication; and warehouse distribution facilities; incubator space for emerging companies; and headquarters offices.

Cluster - A development design technique that concentrates building and/or lots in specific areas on a site to allow the remaining land to be used for common open space and/or preservation of environmentally sensitive site features.

Compact Development - A focused layout of development land that shapes growth in a manner that preserves the region's natural environment, livability, and sense of community by directing growth to well-defined contiguous areas; protecting open lands and natural resources; and delivering public facilities and services more effectively.

Congestion Management Plan (CMP) - A plan, required by law to be adopted by cities and counties, to control and/or reduce the cumulative regional traffic impacts of development. The plan employs growth management techniques, including traffic level of service requirements, standards for public transit, trip reduction programs involving transportation systems management and jobs/housing balance strategies, and capital improvement programming.

Connectivity - Describes how well various transportation facilities are connected or interconnected, including the frequency (how far apart) and quality (size and efficiency) of those connections.

Eco-Industrial Park (EIP) - A community of manufacturing and service businesses seeking enhanced environmental and economic performance through collaboration in managing environmental and resource issues including energy, water, and materials.

Floor-Area-Ratio (FAR) - The ratio of the gross building square footage permitted on a lot to the net square footage of the lot. For example, on a lot with 10,000 net square feet of land area, an FAR of 1.00 will allow 10,000 square feet of gross square feet of building floor area to be built, regardless of the



CHIEF'S FILE CABINET

Ronny J. Coleman

number of stories in the building (e.g., 5,000 square feet per floor on two floors or 10,000 square feet on one floor). On the same lot, an FAR of 0.50 would allow 5,000 square feet of floor area and an FAR of 0.25 would allow 2,500 square feet.

Green Building - Environmentally sensitive design and construction practices which conserve natural resources such as energy, building materials, water, soil and air quality, producing broad economic, community and environmental benefits.

Grid Street System - A grid-like pattern of streets that may be modified for topography and natural features (known as Modified Street Grid). A grid street allows for an even dispersal of traffic; excellent directional orientation; and, a street hierarchy with end blocks for through traffic.

Gross Density and Net Density - The number of dwelling units per acre before the acreage dedicated for roads, open space, and other public uses has been subtracted from the acreage of the entire development site. Net density is the number of dwelling units per acre after all the dedicated areas have been subtracted.

The list of terms used to describe the “greening” of the development design process goes on for a lot more terms than we have space to provide here in the AHJ. What I am suggesting is that fire prevention bureaus get more involved in this process for two reasons. The first is to have an impact on the planning process by introducing our needs into the equation. The second is to be able to identify the trends and patterns in this process that can and will have an impact upon the operational side of the department in the future.

So once again, going back to our opening in this article, what will they call an environmentalist in the future? If the answer to that question is planner, policy maker or politician then we better be ready to read from the playbook and put the interest of the fire service into proper perspective by being the same: a planner, a policy maker and yes, even a more politically aware advocate of fire and life safety.