

Everywhere, cities must confront the need for higher density. But how is this to be accomplished without undue reliance on high-energy buildings? How is this to be accomplished without losing contact with nature? Future growth can either carry us further from nature or reconnect us, depending on how we direct it. One answer that is applicable to places of density everywhere is to introduce boundaries for development derived from the rhythms of sunlight, a time-rich basis for sustainable design.

The Value of Boundaries

People are generally of two minds about boundaries. The idea of boundaries suggests unwanted confinement, unnecessary obstacles that must be overcome in order to express one's own desires. And yet, thoughtfully drawn boundaries can protect us from the impact of poor, or even greedy, individual choices. Unbounded freedom often results in excessive and even unconscionable behavior that restricts freedom in the long run. Whichever way boundaries are perceived, much depends on whether they are self-imposed or at least understood and accepted.

When people decide to impose boundaries on themselves, it is usually to allow freedom in other, preferred, areas. The medieval builders of Carcassonne la Cité, France, purposely confined life behind massive walls to gain protection from outside armed attack. Likewise, a farmer in rural New York State has built a wooden fence to allow livestock the freedom to graze without having them wander off onto the neighbor's property. Cities often impose boundaries for the common good as, for example, zoning envelopes that define building mass on a site.

When people lived in such rural places as Ashtabula, Ohio, buildings were sited for reasons having to do with climate and convenience. Farmers clustered and even linked their house to barns and other outbuildings for protection from the deep snows



Boundaries: (Top) The double walls of Carcassonne, France.
(Photo by Mary Knowles.)
(Bottom) A rail fence in rural New York.



and bitter cold. Villagers sited their houses separately, each one free on its own large lot. But urban conditions have led to less independent action. Zoning policies now set the boundaries of development for the common good.

STANDARD ZONING PRACTICES

Today, building boundaries are usually set in American cities by zoning policy using one of two different methods. The first estab-